

토마토

TOEFL

iBT

READING

**토마토**  
**TOEFL**  
**iBT**  
**READING**

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**First Published**

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✱ 본 교재의 독창적인 내용에 대한 일체의 무단 전재, 모방은 법률로 금지되어 있습니다.

✱ 파본은 교환하여 드립니다.



2008년부터 국내 TOEFL시험이 iBT형식으로 전면 전환되면서 이제 TOEFL iBT는 TOEFL성적표가 필요한 모든 토플러들에게 유일한 가능성이 되었습니다. 쉽지 않은 시험 접수 방식, 부담스러운 수험료, 시험장에 도착해서 입실하기까지의 까다로운 절차, 총 4시간 이상 소요되는 긴 테스트 시간 등 모든 면들이 iBT시험을 까다롭고 접근이 쉽지 않은 시험으로 만들고 있습니다. 게다가 말하기와 쓰기 섹션이 필수로 추가되면서 토플러들의 부담감은 한층 가중되고 있는 실정입니다.

리딩과 리스닝의 경우 기존의 시험에 비해 지문의 길이가 두 배 이상 길어지고 단편적인 정보뿐만 아니라 지문 전체를 종합적으로 이해했는지 확인하는 유형들이 새롭게 추가된 것을 가장 큰 특징으로 꼽을 수 있습니다. 분명 보다 정확하게 해당 실력을 가늠할 수 있다는 긍정적인 측면도 있지만 이런 부담스러운 지문 길이와 새로운 문제 유형들은 수험자들에게 큰 고민거리가 되고 있습니다.

복잡한 문제 유형 정리조차 쉽지 않은 상황에서 토마토 토플 시리즈는 토플러들의 시행착오를 최소화하는 최적화된 토플 가이드가 되고자 합니다. 토마토 TOEFL READING은 ETS가 제시하는 문제 유형을 철저하게 따르면서 실제 적용이 가능한 문제유형별 해법을 일목요연하게 제시할 뿐 아니라 충분히 실전 적용해 볼 수 있는 양질의 문제를 총 20회분 이상 다양한 케이스별로 엄선하여 실었습니다.

토마토 TOEFL 시리즈를 통해 모든 토플러들이 TOEFL 고득점이라는 고지에 안착하는 기쁨을 누리시기를 기원합니다.

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유형 훈련으로 문제 유형을 익힌 후 다양한 주제를 다루보는 테마 훈련으로 발전 학습합니다.  
학습 능력을 최적화시킬 수 있는 다음의 코너 구성을 따라가며 학습하세요.

### By Theme Types

6



# scheduler

토마토 TOEFL Reading은 기본 25일 구성을 취하고 있으므로 이러한 기본 구성을 따라가는 것이 이상적이지만  
개인의 수준이나 상황에 따라 다음과 같은 변형 플랜을 이용할 수도 있습니다.

day  
12

12일 집중 완성

문제 풀이 중심으로 학습 일정을 단축하고자 하는 경우

시험이 얼마 남지 않았을 경우 문제 풀이 중심으로 학습할 수 있는 변형 플랜입니다. 쉬는 날 없이  
12일 연속으로 학습해야 하고 이 집중 플랜대로 학습할 경우 하루 학습 시간은 평균 5~6시간 이상  
으로 추정되므로 일일 학습 시간을 확보하는 것이 중요합니다.

Day		
1 <sup>st</sup> day 01 diagnostic test 풀이 및 현재 상태 점검	2 <sup>nd</sup> day 02 vocab 유형 day 03 fact 유형	3 <sup>rd</sup> day 04 insertion 유형 day 05 review test i (앞의 3가지 유형 복습)
4 <sup>th</sup> day 06 reference 유형 day 07 simplification 유형	5 <sup>th</sup> day 08 summary 유형 day 09 review test ii (앞의 6가지 유형 복습)	6 <sup>th</sup> day 10 inference 유형 day 11 rhetorical 유형
7 <sup>th</sup> day 12 table 유형 day 13 review test iii (전 유형 복습)	8 <sup>th</sup> day 14 arts day 15 history day 16 America day 17 economy	9 <sup>th</sup> day 18 Earth day 19 life day 20 matter day 21 human
10 <sup>th</sup> review test iv (전체 테마 복습) actual test i	11 <sup>th</sup> actual test ii	12 <sup>th</sup> actual test iii

좀 더 여유 있게 학습하고자 하는 경우

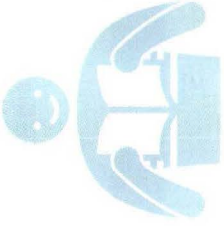
처음 iBT토플을 접하는 경우나 책의 모든 내용을 빠짐없이 마스터하고자 할 때 사용할 수 있는  
변형 플랜으로 주 5일 학습하고 이틀은 쉬는 구성입니다.

Week	Day				
1 <sup>st</sup> week	1 <sup>st</sup> day 01 diagnostic test	2 <sup>nd</sup> day 02 P. 34 ~ P. 43	3 <sup>rd</sup> day 02 P. 44 ~ P. 53	4 <sup>th</sup> day 03 P. 54 ~ P. 63	5 <sup>th</sup> day 03 P. 64 ~ P. 73
2 <sup>nd</sup> week	6 <sup>th</sup> day 04 P. 74 ~ P. 83	7 <sup>th</sup> day 04 P. 84 ~ P. 93	8 <sup>th</sup> day 05 review test i	9 <sup>th</sup> day 06 P. 106 ~ P. 115	10 <sup>th</sup> day 06 P. 116 ~ P. 125
3 <sup>rd</sup> week	11 <sup>th</sup> day 07 P. 126 ~ P. 137	12 <sup>th</sup> day 07 P. 138 ~ P. 149	13 <sup>th</sup> day 08 P. 150 ~ P. 159	14 <sup>th</sup> day 08 P. 160 ~ P. 169	15 <sup>th</sup> day 09 review test ii
4 <sup>th</sup> week	16 <sup>th</sup> day 10 P. 186 ~ P. 195	17 <sup>th</sup> day 10 P. 196 ~ P. 205	18 <sup>th</sup> day 11 P. 206 ~ P. 215	19 <sup>th</sup> day 11 P. 216 ~ P. 225	20 <sup>th</sup> day 12 P. 226 ~ P. 235
5 <sup>th</sup> week	21 <sup>st</sup> day 12 P. 236 ~ P. 245	22 <sup>nd</sup> day 13 review test iii	23 <sup>rd</sup> day 14 arts	24 <sup>th</sup> day 15 history	25 <sup>th</sup> day 16 America
6 <sup>th</sup> week	26 <sup>th</sup> day 17 economy	27 <sup>th</sup> day 18 Earth	28 <sup>th</sup> day 19 life	29 <sup>th</sup> day 20 matter	30 <sup>th</sup> day 21 human
7 <sup>th</sup> week	31 <sup>st</sup> day 22 review test iv	32 <sup>nd</sup> day 23 actual test i	33 <sup>rd</sup> day 24 actual test ii	34 <sup>th</sup> day 25 actual test iii	35 <sup>th</sup> 여휴 복습*

\* word brush-up과 테마편 smart source에 정리된 theme vocab을 중심으로 다시 복습해 줍니다.

# about iBT TOEFL

2005년 9월부터 시행된 iBT(Internet based test)는 인터넷을 통해 치러지며 PBT고득점자도 실제 영어사용 능력은 만족스럽지 못하다는 종래의 단점을 보완하기 위해 말하기, 쓰기가 새로 추가된 것을 가장 큰 특징으로 합니다.



## iBT TOEFL 기본 정보

### 1. 시험의 구성

- ① 시험 영역: Reading, Listening, Speaking, Writing 총 4영역을 필수로 테스트한다.
- ② 진행 순서: Reading(60~100분) → Listening(60~90분) → 휴식(10분)  
→ Speaking(20분) → Writing(50분)로 총 약 4시간 소요
- ③ 점수 범위: 각 영역 0~30점으로 총점 0~120점

### 2. 응시 정보

- ① 응시료: \$170
- ② 등록 방법: [www.ets.org](http://www.ets.org) 혹은 <http://www.toeflkorea.or.kr>에서 온라인 등록
- ③ 시험 장소: 전국 ETS 지정 시험 센터
- ④ 시험 일자 및 횟수: 토요일과 일요일 중 하루에 시행되며 대부분 한 달에 3~4회, 년 30~40회 시행된다.
- ⑤ 입실 시간: 9시 30분
- ⑥ 수험 준비물: 신분증(여권, 주민등록증, 운전면허증 중 택 1)
- ⑦ 성적 확인: 응시일로부터 15일 이후(주말, 공휴일 제외)에 온라인으로 성적 확인이 가능하며  
우편 발송에는 4~5주가 소요된다.
- ⑧ 성적 유효기간: 2년
- ⑨ 수험장 유의 사항: 등록 번호에 따라 자신의 고사장을 확인하고, 이동하는 시간을 고려하여 입실 시간보다  
너찍하게 고사장에 도착하도록 한다.

## iBT TOEFL 영역별 구성

	지문 구성	문제 유형	문항수
Reading	기본 700자 길이 지문 3개 구성 part 1(지문 1) → part 2(지문 2,3) → 더미 지문이 있을 경우(지문 4,5)	총 9개 유형	지문당 12~14문항, 기본 총 36 ~ 42문항 으로 가변적임
Listening	1set는 3분 길이 대화문 하나와 4~6분 길 이 강의문 두 개로 구성되며 기본 2set가 나오고 더미가 있을 경우 총 3set가 등장	총 7개 유형	대화문 5문항, 강의문 6문항으로 기본 총 34문항
Speaking	독립형 문제 2개 통합형 문제 4개	총 6개 유형	총 6문항
Writing	통합형 문제 1개(20분) 독립형 문제 1개(30분)	총 2개 유형	총 2문항

## iBT TOEFL FAQ

### • 시험을 취소하거나 날짜를 변경하려면 어떻게 하나요?

ETS 토플 시험 등록 사이트에서 로그인하여 등록을 취소하거나 시험 날짜를 변경할 수 있다. 시험 일자 변경은 시험일로 부터 최소 3일전에 해야 하며 취소시 시험 비용 \$170 중 \$85만 환불된다. 날짜 변경 비용은 \$50이다.

### • 더미세트란 무엇인가요?

ETS에서 응시자들의 수준 평가와 문제 수준을 테스트하기 위해 만들어진 문제로 알려진 더미는 리딩이나 리스닝 중 한 영역에서 한 세트가 더 나오는 것을 말하며 푸는 동안 무엇이 더미인지 확실히 알 수는 없지만 마지막 세트에 나오는 경우가 많다. 일반적으로 더미는 점수에 포함되지 않는다는 의견이 지배적이다.

### • 시험볼 때 청소년은 어떤 신분증을 가져가야 하나요?

우리나라에서는 유효 여권, 주민등록증, 운전면허증 중 하나가 신분증으로 이용 가능하지만 신분증이 없는 학생(미성년자)의 경우 시험 당일 Letter of ID와 학생증을 함께 지참해야 한다. Letter of ID의 발급은 <http://www.toeflkorea.or.kr>에서 받을 수 있다.

### • 등록번호를 잊어버렸을때는 어떻게 확인하나요?

ETS 토플 접수 사이트에 로그인 한 후 '나의 시험(My Test) → 주문보기(View Orders)'로 이동하면 신청한 시험에 대한 정보들을 확인할 수 있다.

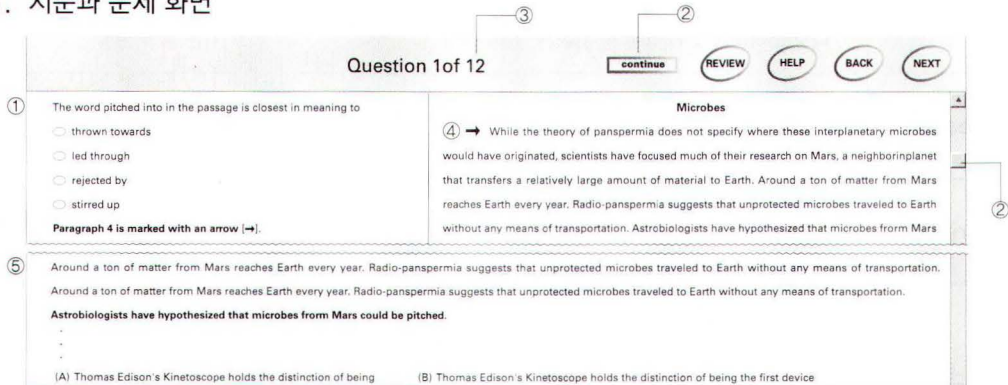
# about iBT reading

iBT로 시행되는 시험인만큼 실제 시험 화면에 익숙해지는 것이 중요합니다.

주요 구성과 문제풀이시 저작 tip을 살펴봅니다.

## iBT reading의 화면 구성

### 1. 지문과 문제 화면



- ① 지문과 문제는 2단 구성으로 오른쪽에 지문, 왼쪽에 문제가 하나씩 순차적으로 등장한다.
- ② 새 지문이 등장하면 우선 ②번으로 표시된 우측의 스크롤바를 지문 끝까지 내리고 상단의 **continue** 버튼을 클릭해야 비로소 왼쪽에 문제가 한 문제씩 나타난다.
- ③ 리딩의 경우 지문 세트마다 문제수가 다르므로 지문이 등장하면 3번 영역에 뜬 총 문항수를 확인한다.
- ④ 문제에 해당 단락이 있는 경우 지문은 자동으로 해당 단락 부분으로 이동하고 해당 단락은 →로 표시된다.
- ⑤ 지문의 최종 문제인 summary 유형의 경우 지문 없이 1단으로 표시되고 중간에 지문을 확인하고 싶으면 **VIEW TEXT** 버튼을 눌러 확인할 수 있다.

### 2. 자신이 체크한 답지 확인

<div> <div>REVIEW</div> <div>HELP</div> <div>BACK</div> <div>NEXT</div> </div>			
Number	Number	Guess	Status
1	The word squander in the passage is closest in meaning to		Correct
2	The word none in the passage refers to		Not Answered
3	In paragraph 1, the author explains the concept of energy		Not Answered
4	According to the passage, the classification of organisms as		Not Answered

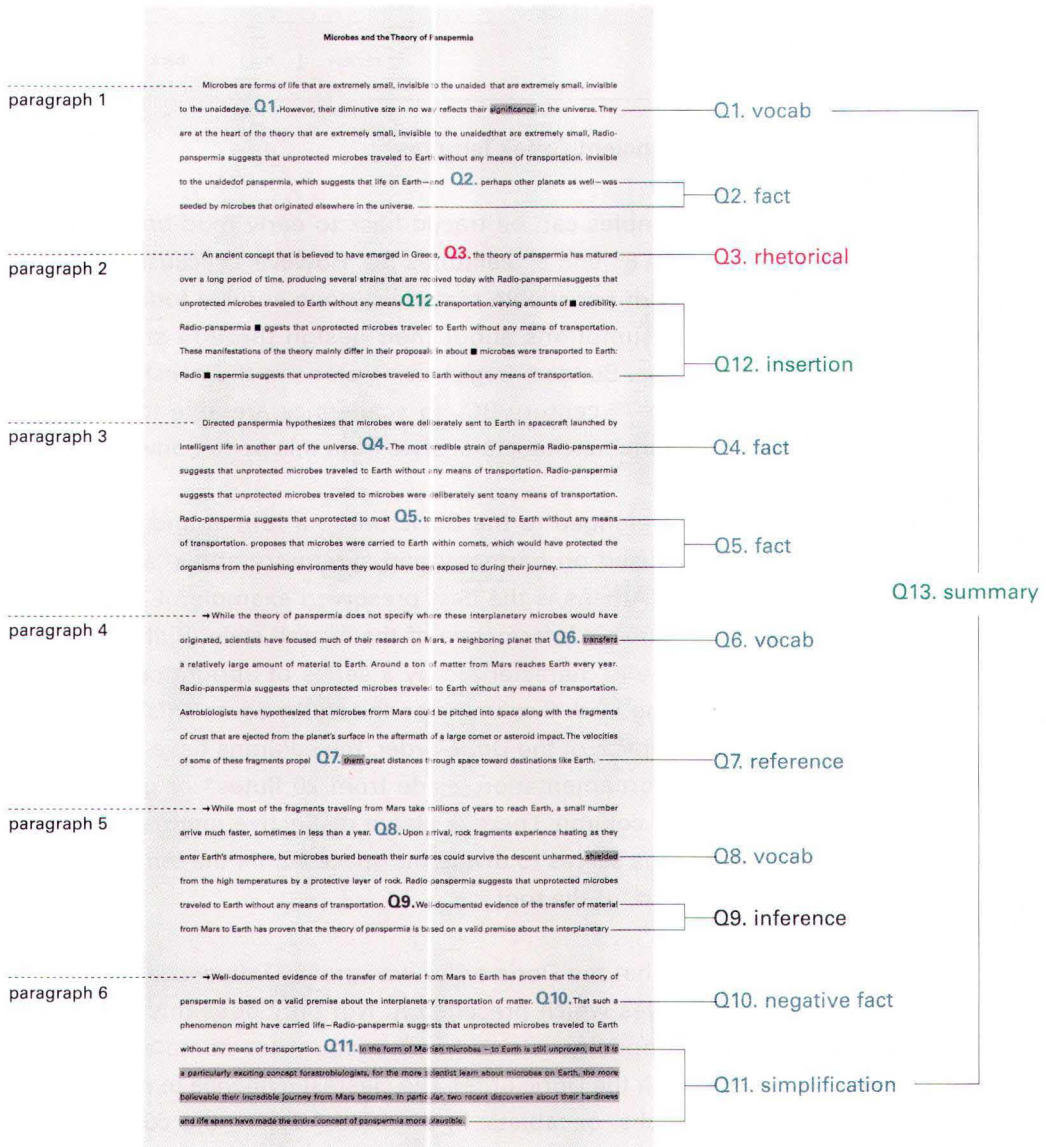
문제 풀이 중에 **REVIEW** 버튼을 누르면 자신이 체크한 답지 현황을 볼 수 있는 위의 화면이 뜨기 때문에 빠뜨린 문제를 체크할 수 있다.

### 4. 우측 상단의 아이콘 사용

- NEXT** **BACK** 한 지문 내에서는 문제 간에 자동 이동하지 않으므로 이 버튼을 이용하여 앞뒤 문제로 이동
- VIEW TEXT** summary나 table유형에만 나타나며 지문 전체를 다시 확인하고 싶을 때 사용
- REVIEW** 자신이 체크한 답지 현황을 확인하고 싶을 때 사용

# iBT reading 문제 유형 지도

아래는 6단락 구성에, 13문항이 출제된 샘플 지문의 예를 한 눈에 볼 수 있도록 구조화한 것이다.  
각 문제 유형이 어떤 식으로 분포하는지 살펴보자.



● 단편 정보 확인 문제 ● 유추 문제 ● 의도 확인 문제 ● 종합적 이해 문제

\* 총 13문제 중 어휘나 단락 내 특정 부분의 내용만 이해하면 맞출 수 있는 단편 정보 확인 문제가 9문제로 대부분을 차지하고 유추하거나 말의 기능적인 이해도를 확인하는 유형이 각각 1문제, 단락 전체에 대한 종합적 이해가 필요한 유형 1문제와 지문 전체에 대한 종합적인 이해가 필요한 문제가 마지막에 하나 출제된다.

# day 01 diagnostic test

## TOEFL Reading passage

review | help | back | next

passage 1>

### Ancient Greek Temples

- 1 → The origin of Greek temples can be traced back to early mud-brick and wooden structures built in the 8<sup>th</sup> and 9<sup>th</sup> centuries BC. However, because these temples were constructed from perishable materials, none survive today, and historians can only make assumptions about their design through studying floor plans and buried remains. Builders began using stone in the construction of Greek temples around the 7<sup>th</sup> century BC, so academics are able to make definitive observations about their architectural style from this period onwards.
- 2 The first stone temples belonged to the Doric order, a formal and simple architectural style which focused on harmony and symmetry above all else. The Temple of Hephaestus in Athens is the best preserved example of a Doric temple, and studying its features is informative of the overall style. Built in the mid-5<sup>th</sup> century BC, the temple is characterized by a series of upright columns which wrap around the building, with 6 columns on the North-South axis and 12 on the East-West axis. As is typical of the Doric order, the columns have neither a base nor any conspicuous ornamentation, aside from 20 flutes\* or grooves which run up and down each column. There is also a distinctive internal Doric colonnade. This row of columns serves to divide the space within the temple, as well as to provide extra support for the roof.
- 3 → Most historians agree that the Doric order was greatly influenced by the wooden and mud-brick temples which preceded it. Not only does this theory explain the emphasis on simplicity, it also helps account for some specific design features associated with the Doric order. The clearest evidence to support this is the presence of triglyphs, or tablets, in the frieze\* above the columns. These triglyphs are vertically channeled to look like roughly cut logs. Moreover, they are placed at regular intervals directly above the columns, so they are believed to represent wooden beams that would have rested on the support columns in a timber construction.
- 4 → By the 6<sup>th</sup> century BC, a new architectural style, known as the Ionic order, was beginning to develop in Asia Minor. The name Ionic derives from the town where the style first originated, Ionia, which was a Greek colony in modern-day



Turkey. Whereas the Doric order stressed utility and simplicity, Ionic temples are comparatively ornate, with emphasis on form as well as function. The most eye-catching elements of Ionic temples are the highly ornate friezes above the columns, typically covered in paintings and sculpture depicting gods and other mythical creatures. The Temple of Artemis, for example, was adorned by a highly ornate series of sculptures featuring Amazonian warriors. Like Doric temples, Ionic temples also have fluted columns which support the roof of the structure. However, Ionic columns have an attractive spiral scroll capital at their top, and they sit on a base. Ionic columns are also typically more slender and contain more fluting than Doric columns, all of which serves to give them an elongated appearance.

5 The Ionic order later led to the development of an even more detailed and ornate architectural style known as the Corinthian order, and while this later style became highly influential on Roman and Renaissance architects, it was seldom actually used in the design of Greek temples. **A** Even Ionic temples were relatively uncommon outside Asia Minor, with Doric temples remaining by far the most common style in mainland Greece and Greece's Italian colonies.

6 → **B** But the attractive ornamentations of the Ionic order did begin to influence the design of later Doric temples. **C** For instance, the Parthenon, which is considered to be the finest example of Doric architecture, contains many important Ionic elements, including ornate sculptures of gods on its friezes. **D** This example reflects the fact that, at the time, the distinction between Ionic and Doric was very fluid. The conception of Doric and Ionic as distinct architectural styles is something which has been imposed by historians who look back on the period, but the primary concern of Ancient Greek architects and builders was far more pragmatic. They simply aimed to make the temples as attractive and functional as possible.

**flute\*** [architecture] a decorative cut that runs vertically down the shaft of a column

**frieze\*** an ornamental covering along the top of a wall

1. According to paragraph 1, why are there no definitive conclusions about the earliest Greek temples?
  - (A) The first temples left behind no remains for historians to study.
  - (B) The stone used in early temples has been reduced to rubble.
  - (C) There is little archaeological evidence still in existence.
  - (D) Most academics have chosen to focus on later architecture.

**Paragraph 1 is marked with an arrow [→].**

2. The word **conspicuous** in the passage is closest in meaning to

- Ⓐ detailed
- Ⓑ noticeable
- Ⓒ interesting
- Ⓓ deliberate

3. According to paragraph 3, triglyphs are incorporated into the design of some temples to

- Ⓐ redistribute weight
- Ⓑ support the columns
- Ⓒ represent deities
- Ⓓ symbolize timber beams

**Paragraph 3 is marked with an arrow [→].**

4. The word **this** in the passage refers to

- Ⓐ Doric order
- Ⓑ theory
- Ⓒ design
- Ⓓ simplicity

5. The word **intervals** in the passage is closest in meaning to

- Ⓐ spaces
- Ⓑ reminders
- Ⓒ balances
- Ⓓ degrees



6. According to paragraph 4, what is the effect of the extra fluting on Ionic columns?

- Ⓐ It gives the columns more strength.
- Ⓑ It differentiates them from Doric columns.
- Ⓒ It makes the columns look taller.
- Ⓓ It provides an eye-catching feature.

**Paragraph 4 is marked with an arrow [→].**

7. The phrase *adorned by* in the passage is closest in meaning to

- Ⓐ recognized as
- Ⓑ switched to
- Ⓒ renowned for
- Ⓓ decorated with

8. Which of the sentences below best expresses the essential information in the highlighted sentence in the passage? *Incorrect* choices change the meaning in important ways or leave out essential information.

- Ⓐ The Ionic order was followed by the highly ornate Corinthian order, which influenced later architecture greatly but was not used much in Greek temple design.
- Ⓑ The Corinthian order, a Roman architectural style that was popular in Greece at the time, actually shares many similar design features and elements with the Ionic order.
- Ⓒ Roman and renaissance architects later redesigned many Ionic temples, transforming them into the more ornate Corinthian style.
- Ⓓ The ornamentation of some Ionic temples copied the highly ornamental design of Corinthian temples built previously in ancient Rome.

9. Why does the author mention the Parthenon in paragraph 6?

- Ⓐ To illustrate what the classical features of Doric temples looked like
- Ⓑ To show how aspects of both styles could be incorporated into designs
- Ⓒ To provide a well-known example of a Corinthian temple
- Ⓓ To exemplify the type of ornamentation normally used in Ionic temples

**Paragraph 6 is marked with an arrow [→].**

10. What can be inferred about the people who built temples in ancient Greece?

- Ⓐ They had a very rigid approach to temple design.
- Ⓑ They favored pragmatic Doric temples over more ornate designs.
- Ⓒ They considered appearance more important than functionality.
- Ⓓ They did not strictly follow architectural doctrines.

11. Look at the four squares [■] that indicate where the following sentence could be added to the passage.

**In fact, a large degree of similarity and overlap existed between the two orders.**

Where would the sentence best fit?

Click on a square [■] to add the sentence to the passage.



12. **Directions:** An introductory sentence for a brief summary of the passage is below. Complete the summary by selecting the THREE answer choices that express the most important ideas in the passage. Some sentences do not belong in the summary because they express ideas that are not presented in the passage or are minor ideas in the passage. *This question is worth 2 points.*

**By studying ancient remains, historians have determined a great deal about the architectural styles used to build stone temples in Ancient Greece.**

- 
- 
- 

#### Answer Choices

- |   |   |
|---|---|
| <p>(A) The earliest wooden and earthen Greek temples have not survived, but their influence is clear in some of the design features in later stone temples.</p>     | <p>(B) The Doric order was the first and most common form of stone temple, and its most striking characteristics were its sense of balance.</p>                     |
| <p>(C) Ionic temples included a number of unique features not used in Doric temples, including fluted columns, decorative triglyphs, and an internal colonnade.</p> | <p>(D) The Ionic order emerged in the provinces as a new, more ornate style which, though not as popular, greatly influenced the design of later Doric temples.</p> |
| <p>(E) The Corinthian order was an extremely elaborate and ornamental style that had a major impact on renaissance architecture.</p>                                | <p>(F) Towards the end of the period, tastes changed and the Ionic order became more popular than the Doric order among architects and builders.</p>                |

Drag your answer choices to the spaces where they belong. To remove an answer choice, click on it. To review the passage, click **View Text**.

passage 2&gt;

**Presidential Reactions to the Great Depression**

1 The stock market plunge of 1929 in the United States signaled the start of what is perhaps considered the worst global recession ever experienced. **A** America's Great Depression was felt far beyond the nation's borders, as product prices fell and demand for raw materials plummeted. **B** The United States government's response to the crisis during these years was headed by two presidents: Herbert Hoover from 1929 to 1933 and Franklin D. Roosevelt for the remainder. **C** Each leader pursued different policies in his attempts to help the country recover, with Hoover's generally regarded as less successful than those of Roosevelt. **D**

2 → Hoover's presidency was only in its eighth month when the stock market crashed on October 29, 1929. From the beginning, Hoover proved reluctant to implement federal legislation in response to the economic crisis. Instead, he lobbied businesses and state and local governments to take voluntary actions to stabilize workers' wages and increase spending on assistance programs. Early on, these policies seemed to produce some success, as by the spring of 1930 the economy gave signs of a rebound, and Hoover declared that the crisis was over. However, the full extent of the Great Depression had yet to be experienced. Later in 1930, lack of consumer spending coupled with serious farm losses due to drought led to a downward spiral of bank failures, falling wages, and unemployment.

3 → Though many of Hoover's policies generated small benefits, there are two that historians and economists point to as contributors to the disastrous effects of the Depression. In 1930, he enacted the Smoot-Hawley Tariff Act, which called for increased tariffs on imported merchandise. Hoover's aim was to protect American jobs and businesses by promoting the consumption of domestic products, but the Act instead sparked retaliatory measures in other countries, which smothered global trade and spread America's economic crisis around the world. Hoover is also blamed for doing nothing to prevent panicked Americans from withdrawing their savings from the banks and causing their collapse. As a result, 5,100 banks failed between 1930 and 1932. In response to the emergency, Hoover accepted that central government should play a more important role, and he loaned millions of dollars to banks and other institutions that were in trouble. But by this stage it was regarded as too little, too late. With much of the public judging Hoover personally responsible for the Depression, he was easily defeated in the election of 1932 by Franklin Roosevelt.

4 → Faced with a 25% national unemployment rate and the threat of continued



bank failures, Roosevelt took immediate action upon his inauguration. He declared a “bank holiday” to prevent further withdrawal of funds while he attempted to reassure the public. Legislatively, he followed the lead from Hoover’s later reforms, and greatly increased spending on the crisis. He quickly began to enact his New Deal, which instituted several new federal agencies charged with creating jobs and regulating the U.S. economic system. The Civilian Conservation Corps hired workers for local rural projects; the Tennessee Valley Authority used large amounts of federal money to construct dams and pursue other major public works; the Securities and Exchange Commission introduced federal regulation of Wall Street; and numerous relief agencies provided resources for farmers, the unemployed, and the homeless.

- 5 → With the New Deal producing visible results, Roosevelt continued to extend it after 1935. Among the major innovations of the so-called Second New Deal were the Social Security program, which administered monetary aid to the elderly and other disadvantaged citizens, and the Works Progress Administration, whose several integrated agencies employed millions in projects ranging in scope from construction to history and the arts. By the end of 1936, though still relatively high, the country’s unemployment rate had been cut in half, and industry showed signs of recovery. These positive outcomes earned Roosevelt a reelection victory in 1936, and his continuing popularity saw him elected to an unprecedented total of four terms in office.
- 6 → It is overly simplistic to judge Hoover’s presidency as a total failure and Roosevelt’s a complete success. In fact, many New Deal programs actually built on those that had been initiated under Hoover. Moreover, some economists argue that America’s final recovery from the Great Depression owed more to spending on the military effort in World War II than to Roosevelt’s federal policies. Yet, it is generally agreed that Roosevelt’s strong leadership helped guide the country through the worst economic crisis in its history.

1. The word **plunge** in the passage is closest in meaning to

- (A) release
- (B) speculation
- (C) rush
- (D) drop

2. According to paragraph 2, what action was Hoover against?
- Ⓐ Calling on consumers to increase spending to help the economy
  - Ⓑ Taking action to prevent another stock market crash
  - Ⓒ Declaring an end to the Great Depression prematurely
  - Ⓓ Setting mandatory rules for businesses and local governments

**Paragraph 2 is marked with an arrow [→].**

3. The author mentions the Smoot-Hawley Tariff Act in paragraph 3 to
- Ⓐ explain the cause of the bank failures of the early 1930s
  - Ⓑ name the most famous piece of legislation enacted under Hoover
  - Ⓒ discuss the importance of tariffs in America's economy
  - Ⓓ illustrate what is considered to be one of Hoover's mistakes

**Paragraph 3 is marked with an arrow [→].**

4. Which of the sentences below best expresses the essential information in the highlighted sentence in the passage? *Incorrect* choices change the meaning in important ways or leave out essential information.

- Ⓐ The purpose of the act was to encourage Americans to purchase domestically produced merchandise in place of foreign-made goods.
- Ⓑ Hoover's act was meant to alleviate the recession, but it actually started an international trade war that made the situation worse.
- Ⓒ Other countries responded to the act by raising tariffs on their imports, and the result was a worsening of the Great Depression.
- Ⓓ Hoover's act was intended to create more jobs in America to counter increased competition from companies abroad during the Depression.

5. The word *their* in the passage refers to

- Ⓐ countries
- Ⓑ Americans
- Ⓒ savings
- Ⓓ banks



6. According to paragraph 3 and paragraph 4, the purpose of Roosevelt's "bank holiday" was to

- Ⓐ encourage the public to deposit money
- Ⓑ prevent additional banks from failing
- Ⓒ show that he was different from Hoover
- Ⓓ cancel the Smoot-Hawley Tariff Act

**Paragraph 3 and paragraph 4 are marked with arrows [→].**

7. What can be inferred from paragraph 4 about Roosevelt's response to the crisis?

- Ⓐ The agencies that he established operated under tight regulation from central government.
- Ⓑ The reforms significantly increased the federal government's role in the national economy.
- Ⓒ The legislation that he introduced mainly removed restrictions placed on businesses.
- Ⓓ The changes had a bigger impact on the rural economy than on the urban economy.

**Paragraph 4 is marked with an arrow [→].**

8. The word administered in the passage is closest in meaning to

- Ⓐ limited
- Ⓑ gave
- Ⓒ legalized
- Ⓓ fixed

9. In paragraph 5, the author describes the success of Roosevelt's policies by

- Ⓐ citing a change in the unemployment rate
- Ⓑ describing the Works Progress Administration
- Ⓒ criticizing the programs of the Second New Deal
- Ⓓ giving examples of the public works carried out

**Paragraph 5 is marked with an arrow [→].**

10. The phrase **built on** in the passage is closest in meaning to

- Ⓐ expanded
- Ⓑ resolved
- Ⓒ settled
- Ⓓ imitated

11. According to paragraph 6, all of the following are recognized as aiding in the recovery from the Great Depression EXCEPT

- Ⓐ Roosevelt's attempts to keep America out of the War
- Ⓑ the economic changes caused by World War II
- Ⓒ programs first implemented under Hoover
- Ⓓ the able guidance provided by Roosevelt

**Paragraph 6 is marked with an arrow [→].**

12. Look at the four squares [■] that indicate where the following sentence could be added to the passage.

**In most countries, including America, the effects of the Depression continued to be felt until the buildup to World War II began to stimulate industrial activity once again.**

Where would the sentence best fit?

Click on a square [■] to add the sentence to the passage.



13. **Directions:** Complete the table by matching the statements below. Select the appropriate phrases from the answer choices and match them to the president to which they relate. TWO of the answer choices will NOT be used. ***This question is worth 4 points.***

Drag your answer choices to the spaces where they belong. To remove an answer choice, click on it. To review the passage, click **View Text**.

### Answer Choices

- |   |           |
|---|-----------|
| Ⓐ closed banks briefly to inhibit withdrawals                     | Hoover    |
| Ⓑ has been accused of allowing many banks to fail                 | •         |
| Ⓒ was single-handedly responsible for ending the Great Depression | •         |
| Ⓓ served only one term in office                                  | •         |
| Ⓔ created numerous federal programs in response to the Depression | •         |
| Ⓕ preferred that organizations pursued voluntary measures         | Roosevelt |
| Ⓖ is blamed for causing the 1929 stock market crash               | •         |
| Ⓗ believed the Depression was over in 1930                        | •         |
| Ⓘ introduced more government regulation of the economy            | •         |

passage 3&gt;

**Laser**

1 In 1917, Albert Einstein theorized that it would be possible to have power over the properties of light. He believed that, rather than being multicolored and diffuse, which are the properties normally associated with light, light could instead be harnessed as a monochromatic\*, unified, and directional beam. What Einstein was proposing was a laser—a beam of light that emits parallel waves of photons, or light particles. Several teams across the globe began conducting research and developed prototypes based on Einstein's theory, and the first actual working model of the laser was made by Thomas Maiman in 1960.

2 → In order to understand how Maiman's laser operated, we need to look at how regular light is produced at the atomic level. For a variety of reasons, atoms can reach a state of excitation. Once energized, they need to release their energy and one way in which they do this is through the emission of photons, thereby producing visible light. An excited atom is similar to a bow that is being stretched by an archer. After the bow has been stretched as far as it will go, it shoots its arrow and relaxes. Likewise, an atom becomes very excited before releasing a photon wave and producing light, and then returning to a relaxed state.

3 → It is also important to note that excited atoms can be influenced by the behavior of the atoms around them. An excited atom which is in close proximity to another in a similar state of excitation will release its photon to join the second atom. The photon wave of the second atom is then released in the form of an identical second energy wave that travels parallel to the first photon's wave. **A** The second photon's wave, in turn, then stimulates the identical release of another atom, and so on. **B** This creates a chain reaction which encourages other excited atoms to release their photons in the same direction and at the same intensity. **C** Under normal circumstances, there are actually numerous chain reactions occurring simultaneously, sending out millions of photon waves in different directions. **D** However, lasers function by manipulating this phenomenon, coordinating and unifying the photon release of the atoms so that the photon waves all go in the same direction.

4 → This can be achieved through a process known as "stimulated emission." First conceived by Einstein, stimulated emission begins with the pumping of a lasing medium to artificially excite the atoms. Pumping occurs via highly intense flashes of light or electrical charges from an external source, creating a large number of high-energy atoms. Two mirrors are placed at either end of the laser



cavity so that the photon waves are reflected backwards and forwards. This brings them into contact with more and more excited atoms within the active medium, stimulating the identical emission of many more photons. To prevent the photon waves from bouncing between the two mirrors indefinitely, though, one of the mirrors is “half-silvered,” meaning that it allows a small fraction of the light to pass through. The parallel photon waves which escape through the “half-silvered” end of the laser produce a compact and coherent beam of light. This laser light can then be targeted at a specific point and adjusted in terms of both intensity and color.

- 5 → Because of their unique properties, lasers opened up a number of possibilities for scientists. At first, they were used for fairly simple tasks, such as scanning barcodes at supermarkets. But now, with the continuing refinement of the technology, lasers are used for such complex matters as igniting fusion reactions in isotopes of hydrogen at research facilities.
- 6 → Different types of lasers have distinct properties and applications. Solid-state lasers, which usually have a metal medium, produce a high power output. This makes them ideal for cutting and welding applications. Liquid lasers, on the other hand, are quite easily adaptable in terms of both intensity and color, and this “tunability” means that they are particularly useful in performing lasing tasks which require sensitivity, including many simple medical procedures. Gas is the best medium for producing powerful continuous wave lasers — lasers that emit light constantly instead of in short pulses. Finally, semiconductor lasers are the most compact type. They are typically built into larger components to perform functions such as writing for laser printers.

**monochromatic\*** single-colored

1. The word **prototypes** in the passage is closest in meaning to
  - (A) facilities
  - (B) productions
  - (C) schemes
  - (D) models
2. The word **this** in the passage refers to
  - (A) to reach a state of excitation
  - (B) to become energized
  - (C) to release their energy
  - (D) to produce visible light

3. In paragraph 2, why does the author mention a bow and arrow?

- Ⓐ To discuss a correlation between sports and science
- Ⓑ To explain how an invention was conceived
- Ⓒ To show the contrast between two different ideas
- Ⓓ To give an easy illustration of a complex concept

**Paragraph 2 is marked with an arrow [→].**

4. According to paragraph 3, an atom's photon emission can be affected by

- Ⓐ photon waves created by similar atoms
- Ⓑ its elemental composition
- Ⓒ activities at a sub-atomic level
- Ⓓ its proximity to ultrasonic waves

**Paragraph 3 is marked with an arrow [→].**

5. The word manipulating in the passage is closest in meaning to

- Ⓐ deducing
- Ⓑ observing
- Ⓒ controlling
- Ⓓ exercising

6. According to paragraph 4, why is a lasing medium subjected to highly intense flashes of light or electrical charges?

- Ⓐ To provide an intense source of heat
- Ⓑ To delay photon emission as long as possible
- Ⓒ To generate a collection of energized atoms
- Ⓓ To allow the laser light to be adjusted more easily

**Paragraph 4 is marked with an arrow [→].**



7. According to paragraph 4, what can be inferred about the mirrors at either end of the laser cavity?

- Ⓐ They greatly amplify the strength of the photon waves.
- Ⓑ They let light from outside pass into the cavity.
- Ⓒ They limit the intensity of the light beam.
- Ⓓ They allow the light to be widely spread.

**Paragraph 4 is marked with an arrow [→].**

8. The word **compact** in the passage is closest in meaning to

- Ⓐ logical
- Ⓑ delicate
- Ⓒ solid
- Ⓓ visual

9. In paragraph 5, the author says that the practical application of lasers

- Ⓐ is involved mainly in achieving simple everyday tasks
- Ⓑ has diversified thanks to technical advances
- Ⓒ was initially limited to government initiatives
- Ⓓ will improve when scientists refine the technology

**Paragraph 5 is marked with an arrow [→].**

10. Which of the sentences below best expresses the essential information in the highlighted sentence in the passage? *Incorrect* choices change the meaning in important ways or leave out essential information.

- Ⓐ The intensity and color of liquid lasers can be adjusted, which makes them useful for doing precise tasks.
- Ⓑ Liquid lasers have been adapted and harnessed by medical researchers for several specialized applications.
- Ⓒ Liquid lasers are considered to be more sensitive to the influence of external factors than other types of laser.
- Ⓓ There are many characteristics, particularly in terms of intensity and color, that liquid lasers share with other types of laser.

11. According to paragraph 6, why do the various types of lasers have distinct properties?

- Ⓐ They vary in terms of beam intensity.
- Ⓑ They utilize different lasing media.
- Ⓒ They exercise varying degrees of influence over light.
- Ⓓ They are applied in different contexts.

**Paragraph 6 is marked with an arrow [→].**

12. Look at the four squares [■] that indicate where the following sentence could be added to the passage.

**That is the reason that light from a regular bulb is scattered and diffuse.**

Where would the sentence best fit?

Click on a square [■] to add the sentence to the passage.



13. **Directions:** An introductory sentence for a brief summary of the passage is below. Complete the summary by selecting the **THREE** answer choices that express the most important ideas in the passage. Some sentences do not belong in the summary because they express ideas that are not presented in the passage or are minor ideas in the passage. ***This question is worth 2 points.***

**Lasers allow for light's properties to be precisely directed, producing a unified and directional beam.**

- 
- 
- 

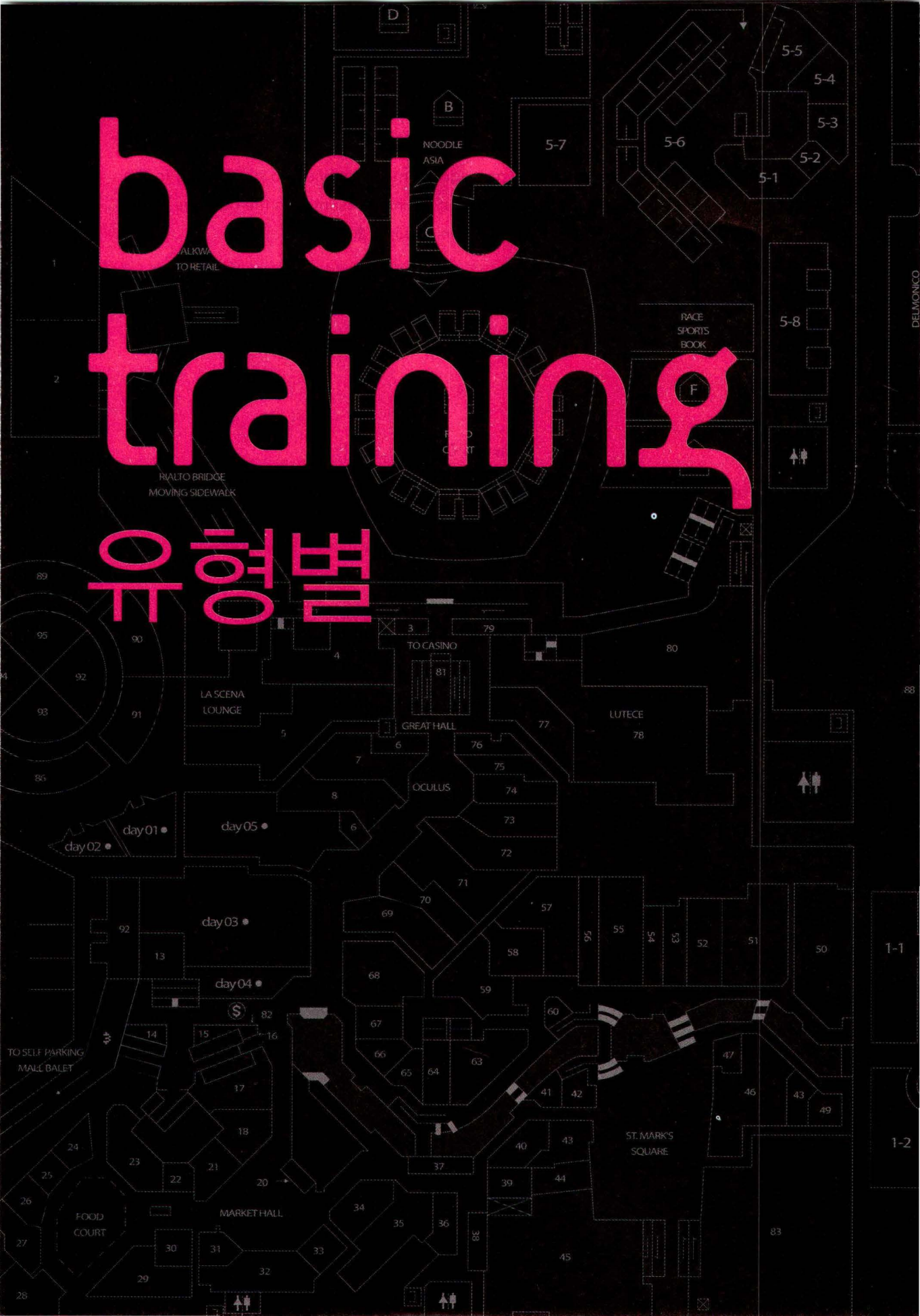
#### Answer Choices

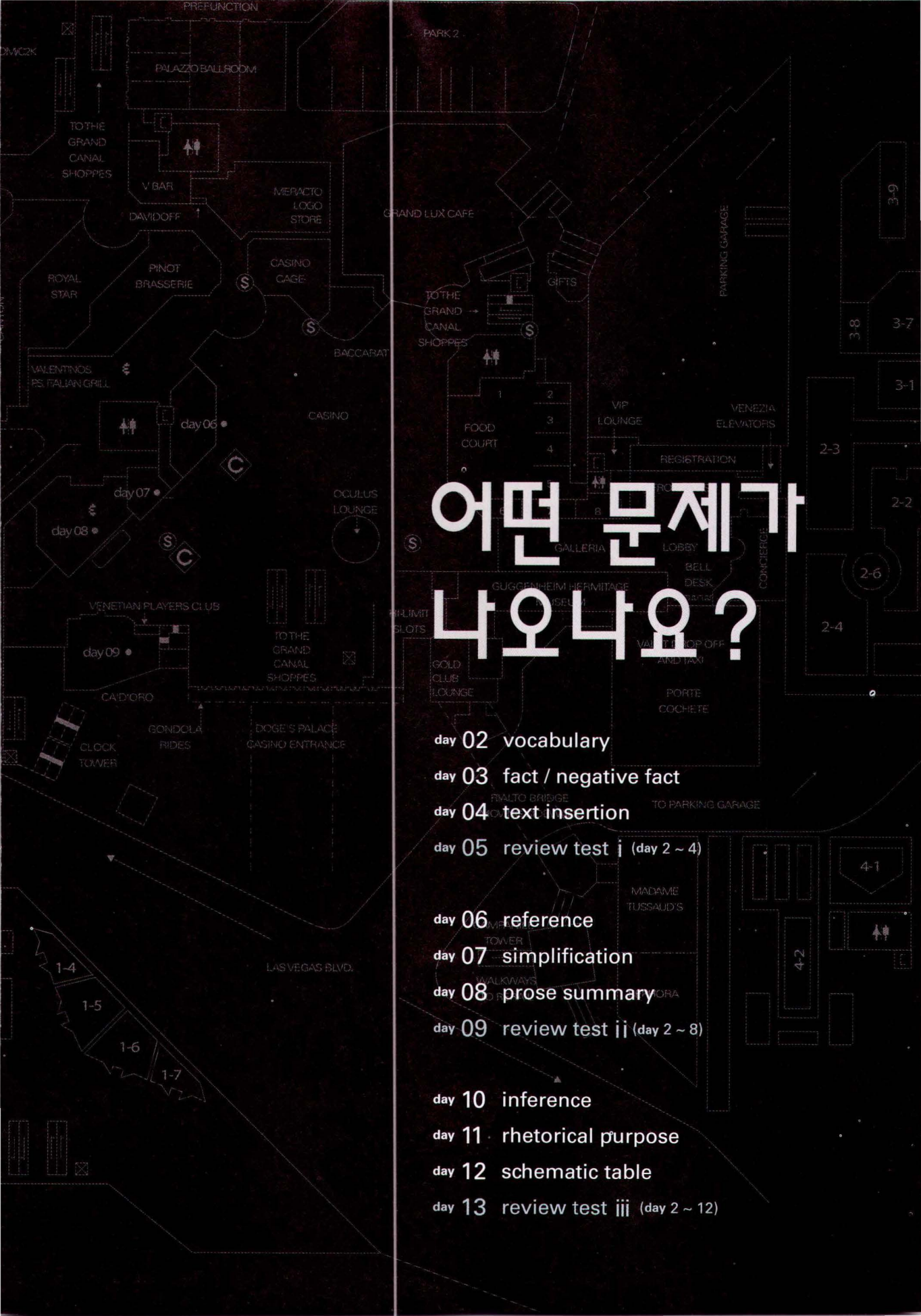
- |   |  |
|---|--|
| <p>Ⓐ Excited atoms cannot be affected by photon waves from similar atoms unless they are in a controlled environment.</p> | <p>Ⓑ Through the use of artificial pumping, a concentrated lasing medium and mirrors, lasers are able to direct photon emission.</p> |
| <p>Ⓒ Einstein was the physicist who originally developed the theory of "stimulated emission."</p>                         | <p>Ⓓ Lasers work by stimulating the coordinated emission of photons from a collection of atoms.</p>                                  |
| <p>Ⓔ Of all the types of lasers, semiconductors are the most widely used in commerce and industry.</p>                    | <p>Ⓕ Different types of lasers have distinct properties and, accordingly, various practical applications.</p>                        |

Drag your answer choices to the spaces where they belong. To remove an answer choice, click on it. To review the passage, click **View Text**.

# basic training

## 유형별





# 어떤 문제가 나오나요?

day 02 vocabulary

day 03 fact / negative fact

day 04 text insertion

day 05 review test i (day 2 ~ 4)

day 06 reference

day 07 simplification

day 08 prose summary

day 09 review test ii (day 2 ~ 8)

day 10 inference

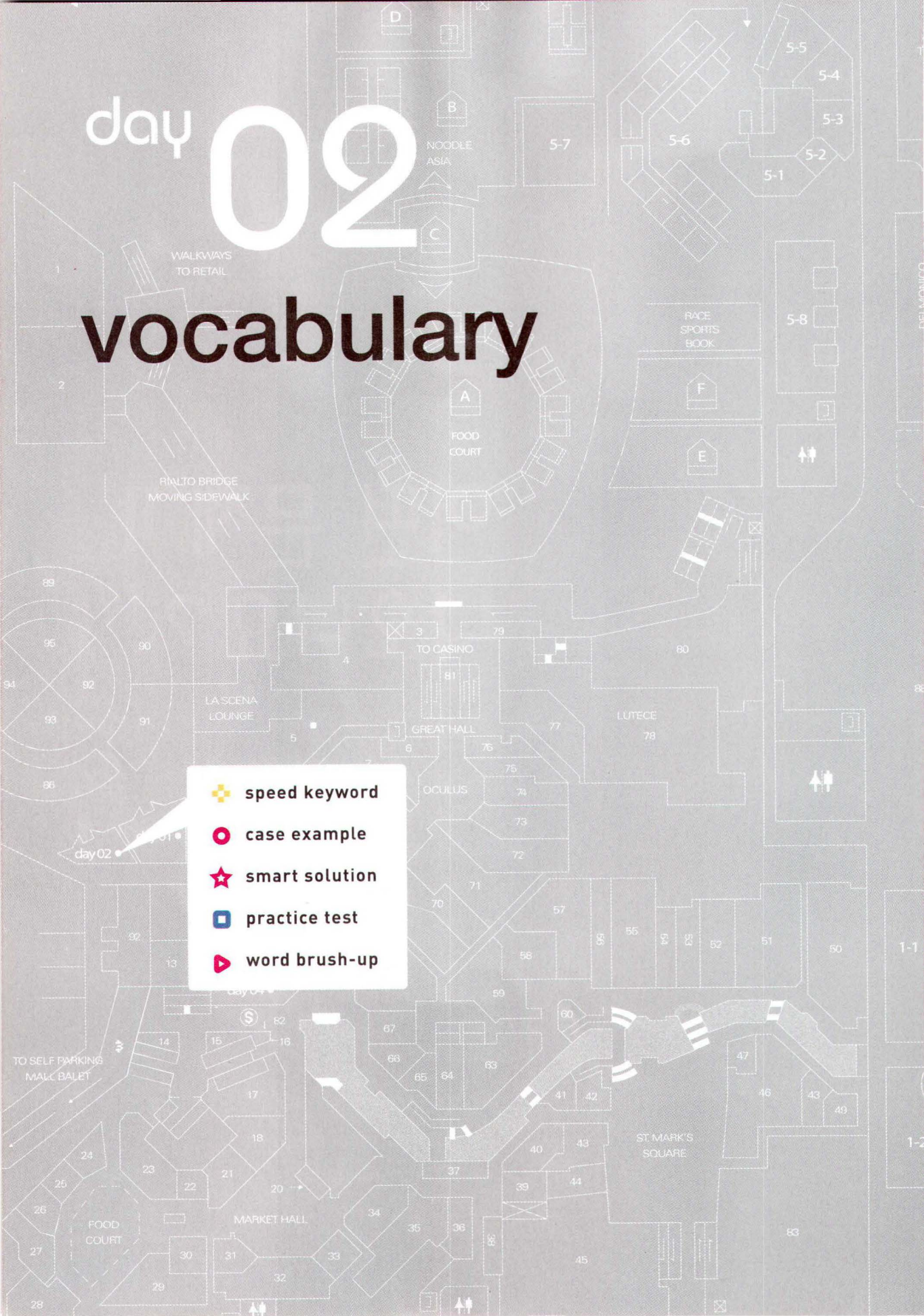
day 11 rhetorical purpose

day 12 schematic table

day 13 review test iii (day 2 ~ 12)

day 02

# vocabulary



 speed keyword

 case example

 smart solution

 practice test

 word brush-up

+ speed

keyword



## vocab문제는 대체어 ▼ 찾기다.

프랑스 소설가 구스타프 플로베르(Gustave Flaubert)는 '하나의 대상을 나타내는 데는 단 하나의 적합한 단어 밖에 없다'고 말했지만 일상 속에서 똑같은 대상이나 행동을 표현하는 방식이 결코 한 가지는 아니다. 토플의 어휘 문제는 지문 속에 주어진 어휘와 의미상 가장 유사한 선택지를 고르는 것으로 어휘의 '대체 가능성'을 이용한다고 할 수 있다.

한 지문당 3~5개가 출제되며 전체 문항수의 약 1/3까지 차지할 수 있는 비중 높은 문제유형이므로 평소 동의어 중심으로 토플 어휘를 많이 암기해 두면 비교적 쉽게 해결할 수 있다. 단일 어휘뿐만 아니라 어구도 종종 등장하며 기본적인 질문의 구성은 다음과 같다.

The word  in the passage is closest in meaning to ...

The phrase  in the passage is closest in meaning to ...



## case example

### 대표 문제

Read the passage and answer the questions.

#### TOEFL Reading passage

review | help | back | next

"Potholes" are ephemeral bodies of water that can stretch anywhere from several meters to a few millimeters in depth. They typically accommodate an amazing and rich variety of animal and plant life, but they are prone to wild, sudden fluctuations, particularly if they are relatively shallow. For example, in hot and dry weather, the water in potholes can reach scorching temperatures, before completely evaporating, leaving all but the hardiest organisms unable to survive.

**Case 1** The word **ephemeral** in the passage is closest in meaning to

- (A) short-lived
- (B) valuable
- (C) wide
- (D) irregular

**Case 2** The word **accommodate** in the passage is closest in meaning to

- (A) contain
- (B) oversee
- (C) expose
- (D) attract

**Case 3** The phrase **are prone to** in the passage is closest in meaning to

- (A) are represented by
- (B) tend to experience
- (C) are able to
- (D) have to reflect

answer 1. (A) 2. (A) 3. (B)



## Case 분석

### ❶ 전형적인 토플용 어휘

Case 1의 경우 일상 구어에서는 잘 사용하지 않는 전형적인 토플용 어휘이다. 곤충이나 풀 등 하루살이 생물체가 등장하는 생물 테마 지문에서 자주 볼 수 있는 단어로 예문에서는 pothole의 금방 사라지는 속성을 표현하고 있다. 전형적인 토플용 어휘의 경우 따로 리스트를 만들어 동의어 중심으로 암기하는 것이 가장 효과적인 해결 방법이다.

**e.g.** sporadic, intermittent, occasional 간헐적인

cardinal, principal, chief 주요한

dwindle, diminish, decrease 감소하다

### ❷ 다양한 의미로 사용되는 기본 어휘

동사 accommodate는 한 번쯤 본 적이 있는 기본 단어이고 문맥상 의미도 대략 파악이 되지만 막상 비슷한 어휘를 선택지에서 꼭 집어내려고 하면 결코 쉽지 않다. 기본 어휘의 경우 우리말의 사전적 의미를 그대로 적용시키면 오히려 답을 찾기 쉽지 않는데 일반적으로 알고 있는 '숙박시키다'와 해당 문맥에서의 뜻인 '포함하다' 사이에는 큰 차이가 느껴지기 때문이다. 지금과 같은 기본 어휘의 경우 정답 후보 선택지를 지문 속에 대입해 문맥이 가장 잘 통하는 것을 고르는 것이 좋다.

### ❸ 구 형태의 표현

다양한 모양의 구 형태 표현도 가끔 등장한다. 역시 정답 가능성이 있는 선택지 후보를 문맥 속에 대입하여 의미가 가장 매끄러운 것을 선택하도록 한다. 구의 경우 완전히 숙어로 고정된 표현뿐만 아니라 맥락에 맞게 적절한 해석을 하여 이와 대체할 수 있는 표현을 찾는 경우도 등장한다.

**e.g.** shed light on → clarify ~을 밝히다

cope with → take care of ~을 처리하다

suffer paralysis → can not move 몸이 마비되다

## 출제 의도

### ❶ 한 어휘의 다양한 의미를 알고 있는지 확인한다.

대부분의 단어는 하나 이상의 의미를 가지고 있기 때문에 단어의 다양한 의미 중 문맥에 맞는 의미를 매칭할 수 있는지 알아본다.

### ❷ 지문의 문맥을 이해하고 있는지 확인한다.

ETS측은 테스트할 어휘 리스트를 따로 가지고 있는 것이 아니라 해당 지문의 이해에 중요한 어휘 아이템을 그때 그때 뽑아서 문제화한다고 밝힌 바 있다. 즉 지문을 전체적으로 이해하기 위해 중요한 역할을 하는 어휘 중심으로 출제된다는 말이다.

### ❸ 일상어와는 다른 academic word를 알고 있는지 확인한다.

미국 대학의 교양 과정 수준 교재에 등장하는 단어를 어느 정도 이해할 수 있을지 미리 측정해 본다.



## smart solution

**vocab**유형에서 오답을 최소화하기 위해서는 어휘량을 늘리는 것이 가장 중요하지만 기본 어휘를 깊이 있게 아는 것도 매우 중요하다. 초보자라면 일단 토플용 어휘를 양적으로 많이 암기하는데 주력하고 고급자의 경우 기본 어휘의 다양한 사용에 세심한 주의를 기울이는 것이 좋다.

### ● 사전적 의미를 우선한다.

문맥 속에서의 단어의 쓰임을 아는 것이 중요하지만 일차적으로는 단어의 사전적 의미를 우선시하여 유사어를 골라내야 한다. 특히 풀이 시간이 부족한 수험자의 경우 어휘 문제에서 일일이 문맥을 파악하고 있기 보다는 주어진 단어와 선택지를 일대일로 비교하여 재빨리 답을 선택하는 것이 좋다. 만약 처음 보는 생소한 어휘가 문제로 등장했거나 선택지와의 비교만으로는 유사어를 찾아낼 수 없을 때는 일단 다음 문제로 넘어가고 지문 전체의 문맥이 좀 더 파악된 후에 풀어본다.

### ● 문맥적 단서를 활용한다.

전혀 모르는 단어가 등장했을 경우 주변 단서를 통해 유추하는 수밖에 없다. 가장 일반적인 방법은 해당 단락의 핵심 내용과 일치하는 선택지를 고르는 것이고, 불가피하게 단락 전체를 읽을 시간이 없다면 해당 문장의 특별한 논리 구조를 통해 힌트를 얻을 수도 있다. 이 외에도 동격, 부연, 예시 단서 등의 구문적 특징을 최대한 이용하도록 한다.

#### ① 내용적 일치 여부 확인

앞선 case example의 지문을 다시 보면서 활용 단서들을 살펴보자.

“Potholes” are ephemeral bodies of water that can stretch anywhere from several meters to a few millimeters in depth. They typically accommodate an amazing and rich variety of animal and plant life, **but they are prone to wild, sudden fluctuations**, particularly if they are relatively shallow. For example, in hot and dry weather, the water in potholes can reach scorching temperatures, **before completely evaporating**, leaving all but the hardiest organisms unable to survive.

핵심 유추 단서 1  
핵심 유추 단서 2

해당 단락에 의하면 pothole은 일종의 물웅덩이로 특히 얇은 웅덩이일 경우 갑작스러운 변화를 보일 수 있으며 결국 완전히 증발하는 속성을 가지고 있다는 것을 알 수 있다. 따라서 이런 전체 내용과 가장 어울리며 ephemeral을 대체할 수 있는 pothole의 수식어로는 short-lived가 가장 적합하다.

#### ② 논리 구조 단서

문장이 구조상 병렬, 양보, 대조, 인과 등의 관계를 가지고 있을 때 문장의 구조적 관계를 통해 질문의 대상이 된 어휘의 의미에 대한 힌트를 얻을 수 있다.

- 병렬 Many animals possess surprising intelligence **and** some of them can communicate with other organisms in sophisticated ways.

많은 동물들이 놀라운 정도의 지능을 가지고 있고 그들 중 몇몇은 다른 생물체들과 정교한 방식으로 의사소통한다.

접속사 **and**에 주목하면 앞부분에 등장한 '동물의 지능이 놀랍다'는 내용과 대응될 수 있는 내용이 **and** 뒷부분에 이어져야 한다는 것을 알 수 있다. 따라서 'in sophisticated ways'는 발달되고 정교한 방식이라는 것을 짐작할 수 있다.

- 양보 Old remnants of Greek pottery are still very helpful, **even when** not entirely intact.

오래된 그리스 도자기의 잔해들은 전혀 손상되지 않은 것은 아니지만 여전히 매우 유용하다.

**even when**을 통해 콤마 앞뒤의 내용이 서로 양보의 관계에 있음을 알 수 있으므로 앞부분의 **very helpful**이 **intact**의 의미를 '손상되지 않고 보존된(= undamaged)'의 의미로 유추할 수 있게 도와 준다.

- 대조 Where **once** there was an apparent distinction between liberal education and vocational education, the line between the two has **now** become blurred.

한 때 인문교육과 직업교육 사이에 뚜렷한 차이가 있었지만 이 둘 사이의 경계는 현재 모호해졌다.

**once**와 **now**를 통해 예전과 지금이 대조를 이루는 구조라는 것을 알 수 있으므로 현재 경계가 모호해졌다는 내용을 통해 예전에는 구분이 '분명했음(= evident)'을 알 수 있다.

- 인과 All of Octavian's domestic enemies had been defeated, **so** he severed ties with Marc Antony and began raising his own army.

옥타비아의 모든 국내의 적들은 싸움에 패배했으므로 그는 마크 안토니아와의 관계를 끊고 자신의 군대를 양성하기 시작했다.

접속사 **so**를 통해 앞뒤의 절이 인과관계에 있다는 것을 알 수 있다. 앞의 내용은 '옥타비아왕이 모든 국내의 적을 패배시켰다'는 내용이므로 싸움에 이긴 왕이 선택할 수 있는 행동을 생각해 보면 **sever ties**의 의미를 유추할 수 있다. 다른 협력자와의 '관계를 끊었다'가 그 뜻으로 적당하다.

### ③ 부연 설명 단서

수식하는 관계사절이나 분사구가 문제 어휘 뒤에 등장할 경우 이들이 어휘의 의미를 보충 설명해 준다.

- Their relationship is based on the mutual benefits (which) they provide **each other**.

그들의 관계는 그들이 서로서로 제공하는 상호 이익에 따라 형성되었다.

관계사절의 **each other**가 **mutual**의 의미를 보충 설명해 준다.

### ④ 예시 단서

**such as**나 **like** 뒤에 예가 이어질 경우 나열된 예를 통해 문제 어휘의 의미를 유추할 수 있다.

- It is a legal requirement that royalties be paid whenever a replica is made of Egyptian antiquities **such as the pyramids or the Sphinx**.

피라미드나 �핑크스 같은 이집트 유물을 모사할 경우 로열티를 지불하는 것이 법적으로 필수사항이다.

## ● 선택지의 특징을 숙지한다.

선택지는 문제화된 어휘보다 한 단계 쉬운 표현으로 출제되며, 주어진 단어와 대체할 수 있는 단어를 찾는 것이 과제이므로 모든 선택지는 지문의 해당 위치에 넣었을 때 문법적으로 문제가 없는 단어들이라는 데 주의한다.



## practice test\_level 1



>> Read paragraphs 1 to 15 and identify the expression that is closest in meaning to the highlighted word or phrase in each paragraph.

### 1

One of the most important concepts in genetics is the dominance relationship. Initially discovered by 19<sup>th</sup> century scientist Gregor Mendel, the dominance relationship determines which variants of a particular gene, or alleles, are recessive and which are dominant. Blue eyes, for instance, are a recessive allele in humans, whilst brown eyes are dominant.

- (A) Deliberately
- (B) Originally
- (C) Instantly
- (D) Supposedly

### 2

Perhaps the characteristic of cuckoos that intrigues birdwatchers most is the manner in which they breed. Known as "brood parasites," adult female cuckoos lay their eggs in the birds' nests of other species. Assuming the eggs to be their own, the unwitting nest owners then take the responsibility for the cuckoos' young.

- (A) deceives
- (B) escapes
- (C) confuses
- (D) fascinates

### 3

European explorers first made contact with the inhabitants of Rapa Nui in the early 18<sup>th</sup> century. Upon their arrival, they were struck by the presence of a number of enormous monolithic statues, known as moai. Contemporary observers speculated about how the apparently primitive island inhabitants could have carved and erected such massive structures.

- (A) surmised
- (B) doubted
- (C) learned
- (D) misunderstood



## 4

Although astronomers are not able to see dark matter, they can infer its presence. This is because dark matter has a visible gravitational effect on other bodies in space. In fact, after probing the Milky Way, many astronomers believe that the majority of matter in the universe is actually dark matter.

- |                 |                 |
|-----------------|-----------------|
| (A) discovering | (B) approaching |
| (C) confirming  | (D) examining   |

## 5

Operating without the benefit of a large or well-funded civil service, Athenian Democracy eventually became unable to cope with the demands of the citizenry. Moreover, as the playwright Aristophanes and other social commentators noted, corruption was also a growing problem, with rich and powerful men often using their wealth to bribe followers.

- |                 |            |
|-----------------|------------|
| (A) collaborate | (B) handle |
| (C) supply      | (D) resist |

## 6

While bacteria are able to reproduce of their own accord, viruses lack this ability. Instead a virus invades a host cell, and then uses this cell's reproductive machinery to make copies of itself. After breaking free of the initial host, the virus and its duplicates then search for new cells to exploit.

- |              |                         |
|--------------|-------------------------|
| (A) back up  | (B) make allowances for |
| (C) push out | (D) take advantage of   |

## 7

The Waldorf educational system is based on the assumption that children are inherently curious and imaginative. It provides a radical alternative to traditional educational values, promoting a curriculum and teaching style that emphasizes creativity and innovation over conformity. At a Waldorf school, children are the instigator in every aspect of their learning.

- |                  |                |
|------------------|----------------|
| (A) incomparably | (B) habitually |
| (C) innately     | (D) reasonably |

8<sup>■</sup>

The works of Chaucer, England's most celebrated medieval author, are well-preserved. One aspect of his literature that has given rise to considerable debate is the pronunciation of certain syllables. It is agreed that medieval pronunciation varied greatly from modern English, but the extent of this difference remains uncertain.

- (A) increased                      (B) caused
- (C) regenerated                (D) defended

9<sup>■</sup>

Societies that lack written language often provide historians with a meager amount of primary source material. Therefore, academics often have to rely on other methods to develop an understanding of the culture's background. One key resource is oral history—the stories and traditions passed down through generations by word of mouth.

- (A) very small                    (B) dubious
- (C) quite adequate              (D) full

10<sup>■</sup>

One of the most influential movements in 20<sup>th</sup> century art is Cubism. Best embodied by the works of Pablo Picasso, Cubist paintings are characterized by a broken down, jigsaw-like appearance. The style is designed to depict objects from a variety of viewpoints, provoking thought on the part of the viewer.

- (A) representing                (B) retaining
- (C) clinging                      (D) arousing

11<sup>■</sup>

Man-made substances such as CFCs are known to release ozone-depleting chemicals, like chlorine and bromine, into the atmosphere. Since the most vulnerable part of the ozone lies above the South Pole, due to atmospheric conditions common in the Antarctic spring, a harmful "hole" developed over this area during the 20<sup>th</sup> century.

- (A) ancient                        (B) weak
- (C) dangerous                  (D) bright



## 12

Inertia describes the resistance objects have towards any change in their state of motion; unless another force acts upon it, stationary matter remains stationary, while moving matter keeps moving. It requires substantial force, for instance, to shift a static object, because you have to **compensate** for the friction that counteracts movement.

- (A) implement                      (B) withdraw  
(C) offset                          (D) facilitate

## 13

A number of drawbacks to the use of geothermal power have been discovered. Most importantly, the construction of geothermal power stations can destabilize the surrounding land. Moreover, some doubt that geothermal power is truly renewable. This conjecture is supported by evidence suggesting that continued use of a geothermal location may cause depletion.

- (A) establishment                  (B) extent  
(C) hypothesis                      (D) scheme

## 14

Most animal species compete amongst themselves for territory and sustenance. However, animals that practice cooperative breeding work together to care for and protect their brood. They **forage** for the whole group, pool their resources, and join together to stave off enemies and predators. This helps them to develop an important sense of unity.

- (A) make shelter                      (B) guard the habitat  
(C) tend the young                    (D) seek food

## 15

Japanese wood-block printers used a similar technique to their Chinese counterparts. To **fabricate** a print, a piece of paper outlining some text or an image was bonded to a plank of wood. The wood around the outside of the paper was then cut away, forming a template that could be dipped in ink.

- (A) produce                          (B) decorate  
(C) cover                              (D) constitute



## practice test\_level 2



>> Read passages 1 to 4 and answer the following questions for each.

### 1

In the 1820s and 1830s, inventors began to realize the potential marketability that captured and stored images. The earliest camera models, however, required hours of exposure time, rendering them completely impractical. It is in this regard that the daguerreotype—named after its creator, Louis Daguerre—gained its comparative advantage. Daguerre began working on his camera in the early 1830s, having postulated that it would be possible to reproduce an image by exposing it to photo-sensitive silver halide. By 1839, Daguerre finalized his invention and released the daguerreotype. Requiring only a few minutes of exposure, the model was able to create a one-off, accurate duplication of an image, which meant that it was an advancement on all its predecessors.

Realizing the clear commercial potential, inventors and entrepreneurs such as Samuel Morse and Richard Beard introduced the daguerreotype to Britain and the United States, and there was soon a proliferation in the usage of daguerreotype cameras across the advanced world. Family portraits had historically been the preserve of the wealthy classes who could afford to pay expert artists, but, as it was a relatively inexpensive procedure, the daguerreotype allowed ordinary people to create their own portraits for the first time. The daguerreotype soon faded from public consciousness, however, as it was superseded by superior technology. Daguerreotype cameras could produce just a single copy of an image, so they quickly became obsolete in the late 1840s when inventions like the calotype and collodion process, which made reproducible negatives, were commercialized.

1-1. The word postulated in the passage is closest in meaning to

- (A) poised
- (B) hypothesized
- (C) rejected
- (D) imitated

1-2. The word proliferation in the passage is closest in meaning to

- (A) major review
- (B) sudden increase
- (C) large excess
- (D) rapid decline

The change from a hunter-gatherer to a sedentary lifestyle was arguably the crucial point in the evolution of societies. It was what allowed the development not only of large-scale agriculture, but also of specialization in key aspects of modern life, such as politics, healthcare, education and so on. By necessity, hunter-gatherer societies remain relatively unsophisticated because the vast majority of individuals are preoccupied with the tasks of finding food and surviving. In a sedentary society, the tasks of feeding and defending that society are assigned to certain people, freeing up others to specialize in nonessential fields.

This shift in lifestyles occurred first in the Fertile Crescent of the Middle East around 10,000 years ago. From there, it quickly spread across Asia and Europe, and into Africa, fundamentally changing these regions. Termed the “Neolithic Revolution” by archaeologists, this event was at the very least analogous with the Industrial Revolution that transformed Western societies in the 19<sup>th</sup> century in terms of its long-term social and economic impact. Interestingly, however, recent findings indicate that the change was not beneficial in the short-term. A comparison between the bones of hunter-gatherers and early sedentary peoples found that the hunter-gatherers were in fact better nourished. It is likely, then, that life in early sedentary societies was arduous. Researchers believe that early agricultural practices probably produced insufficient quantities of food. Moreover, they recognize that because settlement encouraged a higher birthrate, there were many more young mouths to feed, and this would have exacerbated the problem of food supply.

2-1. The word **unsophisticated** in the passage is closest in meaning to

- (A) poor
- (B) ordinary
- (C) open
- (D) simple

2-2. The phrase **analogous with** in the passage is closest in meaning to

- (A) occupied with
- (B) similar to
- (C) resulting in
- (D) responsible for

### 3

The desertification of the American southwest, comprising Oklahoma, Nebraska, Texas, and Kansas, is mostly a result of human activities. While the climate has become somewhat drier and hotter in the past few centuries, the agricultural practices of Native Americans and European settlers are far more culpable for the degradation of the environment there. The Pueblo peoples, for instance, were responsible for the deforestation of their habitat as they cleared away wooded areas to collect building materials and make room for agriculture. But, compared to the problems caused by modern settlers, the activities of Native Americans had relatively little impact. When European settlers arrived in the 19<sup>th</sup> century, the entire region was largely covered in grasses. In the last couple of centuries, overgrazing by cattle has ensured that the southwest is no longer suitable for farming. In addition, irrigation systems brought in to help prevent the loss of vegetation have inadvertently contributed to the problem, robbing nearby streams and underground aquifers of water and drying out the region even more.

To make matters worse, the widespread use of irrigation has led to soil salinization as well, with salt left on top of the soil once the water has evaporated. As a result, the land is now unable to sustain almost all types of plants. Only the most resilient plant life has been capable of adjusting to the desertification of the environment. Having developed special adaptations that help them to thrive in spite of the lack of nutrients in the soil, the near absence of water and the extreme heat, a few well-known species like the Joshua tree, saltbush, sagebrush, and burroweed still inhabit this area.

3-1. The word **inadvertently** in the passage is closest in meaning to

- (A) improperly
- (B) unintentionally
- (C) disruptively
- (D) indisputably

3-2. The word **resilient** in the passage is closest in meaning to

- (A) fast growing
- (B) easy to root
- (C) soil enriching
- (D) quick to recover



Psychologically, it has been proven over a number of different studies and experiments that the most effective way to memorize material is to study it regularly over a long period of time. The so-called “spacing effect,” whereby information is presented at intervals spread out over time, allows subjects to perform well in tests of free recall, cued-recall, and recognition. In stark contrast, “cramming”—the term used to describe last-minute study—is not as valuable. Using this method of memorization, most people perform poorly on recall and recognition tests even a short time after their intensive period of study. Moreover, cramming imparts very little information that actually stays in the medium- or long-term memory, whereas spaced presentation helps subjects store key details over a much longer time span.

Another aspect that may assist with memorization is the status of the task or action being committed to memory; as a rule of thumb, an incomplete task or action is easier to recall than a completed one. This phenomenon, which has been dubbed the “Zeigarnik effect” after the Russian Psychologist who initially studied it, can be explained by the anxiety people feel when a story or issue remains open-ended. Motivated by the need for closure, people find it easier to recall events that lack a definitive conclusion. Although Zeigarnik’s initial studies corresponded to people’s memory of mundane events and information, not material that they were explicitly attempting to commit to memory, there is plenty of evidence to suggest that the effect could provide benefits for deliberate memorization as well.

4–1. The word **imparts** in the passage is closest in meaning to

- (A) trades
- (B) gives
- (C) exposes
- (D) means

4–2. The phrase **as a rule of thumb** in the passage is closest in meaning to

- (A) most of all
- (B) by rights
- (C) as a consequence
- (D) in general



## practice test\_level3



>> Read passages 1 and 2 and answer the following questions for each.

1

### Florida's Wetlands

Until the end of the nineteenth century, Florida's Everglades covered the state with four million acres of wetland. Comprising a fertile ecosystem that sustained vast amounts of animal and plant life, this area was a haven for biodiversity. However, decades of drainage projects have eradicated much of this region and introduced major changes to Florida's remaining Everglades. For example, many species of wading birds are thought to be verging on extinction. Neither have humans escaped the negative repercussions of their own activities here. Draining the wetlands has pumped too much water into surrounding estuaries\*, forcing saltwater into the underground reservoirs from which cities and towns draw their water.

In light of the consequences of wetland destruction, state and national officials have recently made a commitment to restore as much of the Everglades as possible. It is hoped that restoration efforts will succeed in replicating the natural flow of water in the remaining wetlands, creating both a stable environment for native animals and plants and a sustainable water supply for the state. The plan to restore the Everglades is based on cooperative research carried out by ecologists, hydrologists, and engineers from local, tribal, and federal agencies. In 1999, their Comprehensive Everglades Restoration Plan(CERP) was submitted to Congress, where it received approval in the year 2000.

Under CERP, some of the structures that were constructed in the Everglades will be removed. For instance, more than 240 miles of canals and levees will be torn down to clear obstacles that hinder the natural flow of water. Towards the same end, segments of roads will be rebuilt as bridges. Excess water collected after the implementation of these changes will be stored in man-made reservoirs and will be used to help replenish the natural system when necessary.

Many are hopeful about the success of CERP, but others have their reservations. The restoration project is so massive that it is difficult to predict exactly how CERP



will affect the Everglades. For instance, some biologists are concerned about how the removal of existing canals in the Everglades will impact the fish populations that survive there during droughts. Such criticisms are understandable considering the **magnitude** of the plan, but the complexity of the restoration project is inevitable considering the damage that has been done to Florida's ecosystem.

**estuaries\*** zones along the coastline where freshwater and saltwater mix

1-1. The phrase **verging on** in the passage is closest in meaning to

- Ⓐ attacking
- Ⓑ engaging
- Ⓒ converting
- Ⓓ facing

1-2. The phrase **carried out** in the passage is closest in meaning to

- Ⓐ conducted
- Ⓑ planned
- Ⓒ transported
- Ⓓ cooperated

1-3. The word **replenish** in the passage is closest in meaning to

- Ⓐ fill
- Ⓑ vanish
- Ⓒ return
- Ⓓ create

1-4. The word **magnitude** in the passage is closest in meaning to

- Ⓐ design
- Ⓑ scale
- Ⓒ expansion
- Ⓓ lure

## Bridging Two Continents

Throughout the 20<sup>th</sup> century, mounting fossil evidence began to suggest that there was a time in the Earth's past when the fifty-five-mile gap between Russia and Alaska was bridged by a landmass. The discovery of a continental shelf between the two landmasses also helped to lend weight to the theory that Asia and North America were once connected by land, as, if sea levels were lower in the past, this shelf would have been exposed. Later studies of the submerged shelf under Bering Strait, known as Beringia, revealed evidence of thriving ecosystems from the past, confirming that the theoretical Bering land bridge was in fact real. The current understanding is that Beringia was submerged when the last Pleistocene ice age ended, following the warming of the climate and the associated rise in sea levels.

There is some uncertainty about the habitats that covered Beringia's flat terrain, but scientists suspect that the subcontinent's ecology changed over long periods of time, for fossil evidence indicates that the climate of the landmass was not static. At one time, the land may have been ecologically rich with wooded regions in the south transitioning to tundra in the north. The treeless plains of the land bridge were likely inhabited by caribou, reindeer, mammoths, bison, and horses. During warmer periods, Beringia may have been forested with poplar, spruce, and birch trees.

Significantly, Beringia created the land bridge that was responsible for the animal and human migrations from Russia to Canada and the United States. Beringia served as a bridge for deer populations that entered North America around 25 million years ago. Ten million years after that, mastodons and gomphotheres, large animals of African origin, crossed over Beringia and made their initial appearance in North America. In addition to introducing many species to North America, the Bering land bridge enabled movement of indigenous American species into Eurasia, including horses and camels.

More recently, migrations across Beringia ushered large mammals like mammoths, bison, sheep, and oxen into North America, and even tiny rodents like voles and lemmings made their way across the bridge into the Western hemisphere. Before the land bridge closed for the last time around 11,000 years ago, humans also made their way across the long-established migration route from Asia to North America.



2-1. The phrase lend weight to in the passage is closest in meaning to

- Ⓐ borrow ideas from
- Ⓑ give hope to
- Ⓒ provide support for
- Ⓓ remove the burden of

2-2. The word static in the passage is closest in meaning to

- Ⓐ informative
- Ⓑ temperate
- Ⓒ measurable
- Ⓓ constant

2-3. The word indigenous in the passage is closest in meaning to

- Ⓐ bountiful
- Ⓑ native
- Ⓒ mammalian
- Ⓓ persistent

2-4. The word ushered in the passage is closest in meaning to

- Ⓐ followed
- Ⓑ located
- Ⓒ divided
- Ⓓ directed

# word brush-up

▪ Choose one that is closest in meaning to the shaded word or phrase.

01 breed during the summer months

- (A) reproduce (B) rest  
(C) feed (D) return

02 an unwitting contributor to the environmental problem

- (A) undivided  
(B) unfaithful  
(C) inconsequential  
(D) inadvertent

03 encourage conformity in society

- (A) participation (B) compliance  
(C) openness (D) tolerance

04 remain stationary

- (A) responsible (B) undercover  
(C) motionless (D) vigorous

05 counteract the impact of global warming

- (A) offset (B) calculate  
(C) address (D) evaluate

06 booming property prices

- (A) reiterating (B) varying  
(C) escalating (D) challenging

07 may supersede the automobile one day

- (A) enjoy success from  
(B) give some support to  
(C) become equal with  
(D) take the place of

08 an obsolete piece of machinery

- (A) essential (B) state-of-the-art  
(C) out of date (D) obscure

09 a relatively mundane job

- (A) stimulating (B) permanent  
(C) ordinary (D) enjoyable

10 stave off attacks from predators

- (A) defend against (B) hold by  
(C) beware of (D) abide by



- 11 Before astronauts can travel to Mars, they will need to be prepared for the surroundings they will face there. Unfortunately, it is impossible for scientists to **replicate** those exact conditions on Earth.
- (A) infer (B) repeat (C) suspend (D) consider
- 12 According to Keynes, the government should play a central role in the economy. He advocated the implementation of a **comprehensive** social security network for all citizens.
- (A) characteristic (B) relative (C) functional (D) wide-ranging
- 13 Looting can **render** an archaeological site almost worthless. Not only do looters remove valuable objects, they also cause physical damage to the rest of the remains.
- (A) involve (B) make (C) declare (D) deem
- 14 According to the theory, humans are instinctively competitive and self-centered. Rather than **pooling** resources to ensure that everyone survives, people are much more likely to look out for themselves exclusively.
- (A) developing (B) sharing (C) enhancing (D) collating
- 15 Scientists are optimistic about the benefits genetic modification can bring to crop farming. However, some environmental groups have **reservations**.
- (A) protests (B) demonstrations (C) conditions (D) doubts

answer 01 (A) 02 (D) 03 (B) 04 (C) 05 (A) 06 (C) 07 (D) 08 (C) 09 (C) 10 (A)  
11 (B) 12 (D) 13 (B) 14 (B) 15 (D)

day 03

# fact / negative fact

✚ speed keyword

● case example

★ smart solution

▣ practice test

▶ word brush-up



+ speed

# keyword

## fact문제는 대조와 일치 ▾ 다.

**fact**유형은 지문에 언급된 내용과 동일한 내용을, **negative fact**유형은 지문의 내용과 다른 것을 답으로 찾아야 한다는 차이점이 있지만 지문과 선택지를 대조하여 서로 일치하는지 여부를 확인해야 한다는 점에서 똑같은 풀이 원리를 가지고 있다.

지문당 **fact**유형은 3~5개, **negative fact**유형은 0~1개 정도가 출제되는 빈도 높은 유형으로 특히 **fact**유형의 경우 지문 전체가 아닌 한 두 단락 내에 포함된 단편적인 정보를 묻는 경우가 많으므로 비교적 쉬운 유형에 속한다. 기본적인 질문지의 구성은 다음과 같다.

According to paragraph [ ], 의문문 ...?

According to paragraph [ ], which of the following is NOT true ...?



## case example

### 대표 문제

Read the passage and answer the questions.

#### TOEFL Reading passage

review | help | back | next

The Minoan civilization was a Bronze Age culture that is believed to have thrived on the island of Crete from around 2700 to 1450 BC. Reaching so far back into antiquity, it is impossible to verify an exact timeline of the Minoan. However, using remains of Minoan pottery, as well as other archaeological evidence found at ancient palace sites, researchers have been able to trace the general development of Minoan society.

The earliest known pottery was largely functional. Hand-made, as opposed to later works that were created with the help of a pottery wheel, these pieces were fashioned into rough jar and cup shapes. They tended to have simple, linear patterns, and they were often a dull red or brown color.

**Case 1** Fact According to paragraph 1, the ruins at Minoan palace sites are used to

- (A) verify the location of the first human settlements on Crete
- (B) compare common pottery with expensive works owned by the wealthy
- (C) help sketch a rough chronology of ancient Minoan culture
- (D) illustrate common themes in Minoan art and architecture

**Case 2** Negative Fact According to paragraph 2, which of the following is NOT true about early Minoan pottery?

- (A) It had an unsophisticated design.
- (B) It was fashioned using a mechanical wheel.
- (C) It had a reputation for being practical.
- (D) It was molded into uneven shapes.

answer 1. (C) 2. (B)

## Case 분석

### ① Fact

Case 1의 경우 미노아 궁전 유적지의 사용 목적에 해당하는 내용을 지문에서 찾아 선택지에서 일치하는 내용을 고르는 문제이다. fact문제는 철저하게 지문에 주어진 내용에 근거하고 있기 때문에 근거가 되는 지문 단락의 위치를 밝혀 주는 어구인 **according to ~**가 질문지에 들어가게 되며 대부분 한 두 단락이 문제 풀이의 근거 단락으로 제시된다. 다만 지금처럼 질문이 문장완성형일 경우 선택지는 질문에 이어지는 모양을 하고 있다.

e.g. 일반의문문 질문지: For what purpose are the ruins at Minoan palace sites used?

문장완성형 질문지: The ruins at Minoan palace sites are used to + 선택지

### ② Negative Fact

Case 2의 경우 미노아 도자기의 특징이 아닌 것을 고르는 문제로 지문과 대립되는 내용의 선택지를 찾으면 된다. fact 유형과 마찬가지로 한 두 단락 내에 해당 정보가 들어있을 때가 많지만 가끔은 지문 전체에서 일치하는 내용을 찾아가며 선택지와 대조해야 하는 경우도 출제된다. negative fact유형은 질문지 속에 **not**이나 **except** 등의 단어가 대문자로 들어가 있으므로 쉽게 유형 식별이 가능하다.

e.g. According to paragraph , which of the following is NOT true ...?

According to paragraph , all of the following ~ EXCEPT ...

## 출제 의도

### ① 지문에 대한 기본 이해도를 확인한다.

일반적으로 모든 리딩 테스트에서 기본적으로 확인하는 부분이다. 다만 토플의 fact유형이 일반 리딩 테스트 문제와 다른 점은 토플 지문은 길이가 700자 정도로 상당히 길기 때문에 매 문제마다 참조할 한 두 개의 해당 단락을 정해 주고 이 단락 내에서의 핵심적인 내용이나 중요 개념을 이해했는지 질문한다는 것이다.

### ② 속뜻을 이해하고 다양한 방식으로 표현할 수 있는지 확인한다.

대부분의 정답에서는 지문의 표현이 다른 방식으로 paraphrasing된다. 속뜻을 모른 채 기계적으로 지문과 선택지의 유사한 단어를 대조해서 답을 찾는 것을 방지하기 위해서이다.



## smart solution



**fact**유형 문제 풀이시 가장 중요한 능력은 질문하는 내용에 해당하는 부분을 재빨리 찾아 지문에 주어진 정보와 일치하는 답을 골라내는 순발력이다. 반면 **negative fact**유형의 경우 정보가 흩어져 있어 지문과 선택지를 하나씩 비교해 가며 일치 여부를 확인해야 하므로 상대적으로 긴 시간 안배가 필요하다.

### 질문에서 키워드부터 파악한다.

**fact/negative fact** 문제 유형은 질문하는 내용에 관계된 정보가 단락 내 어디에 위치해 있는지부터 찾아야 한다. 일단 질문의 내용을 정확히 파악한 후, 질문에서 키워드를 정하고 이 키워드를 길잡이 삼아 지문을 **scanning**하면서 키워드가 등장하는 부분을 찾아간다. 대부분 키워드 주변에 질문하는 내용의 답이 등장하므로 쉽게 정답을 찾을 수 있다.

#### Step 1 질문에서 키워드 선택

According to paragraph 1, **키워드** **the ruins at Minoan palace sites** are used to

#### Step 2 지문에서 키워드 등장 부분 찾기

The Minoan civilization was a Bronze Age culture that is believed to have thrived on the island of Crete from around 2700 to 1450 BC. Reaching so far back into antiquity, it is impossible to construct an exact timeline of the Minoan. However, using **키워드** **remains of Minoan pottery**, as well as other archaeological evidence found at ancient palace sites, researchers have been able to trace the general development of Minoan society.

질문의 ruins에 해당하는 표현은 지문에서 remains로 볼 수 있으므로 remains of Minoan pottery를 질문의 해당 키워드와 일치하는 내용으로 볼 수 있다.

#### Step 3 키워드 주변부에서 핵심정보 찾기

However, using **키워드** **remains of Minoan pottery**, as well as other archaeological evidence found at ancient palace sites, researchers have been able to trace the general development of Minoan society.

as well as 이하는 삽입절이므로 문장의 핵심은 밑줄 친 부분에 나타나고 있다. '연구자들이 (유물을 이용해) 미노아 사회의 전반적인 발전상을 추적해 볼 수 있었다'는 내용이 바로 질문의 답에 해당한다.



## ● paraphrasing에 익숙해진다.

선택지에서는 보통 지문에 나온 것과 똑같은 표현은 사용되지 않는다. 따라서 같은 단어나 표현이 나올 것으로 기대하지 말고, 다른 표현으로 되어 있지만 같은 의미를 지닌 내용을 찾을 수 있어야 한다. 앞선 case example에 등장한 paraphrasing전후의 표현을 서로 비교해 보자.

case example 본문 1단락	Case 1 정답 선택지
<sup>1)</sup> trace the general development of Minoan society	Ⓒ <sup>1)</sup> help sketch a rough chronology of ancient Minoan culture
case example 본문 2단락	Case 2 내용 일치 선택지
<sup>2)</sup> simple, linear patterns, and they were often a <sup>2)</sup> dull red or brown color	Ⓐ <sup>2)</sup> unsophisticated design
largely <sup>3)</sup> functional	Ⓒ reputation for being <sup>3)</sup> practical
<sup>4)</sup> fashioned into rough jar and cup shapes	Ⓓ <sup>4)</sup> molded into uneven shapes

<sup>1)</sup>의 경우 문장 전체가 paraphrasing된 경우이다.

<sup>2)</sup>의 경우 simple, dull이라는 표현을 종합하면 한 단어로는 unsophisticated로 표현할 수 있다.

<sup>3)</sup>의 경우 동의어를 이용한 paraphrasing이다.

<sup>4)</sup>의 경우 rough와 uneven, fashioned into와 molded into를 서로 대응하는 표현으로 볼 수 있으며 단어와 구가 각각 paraphrasing되었다.

## ● 대표 오답 유형과 정답의 특징을 숙지한다.

### ❶ fact유형의 정답과 오답 특징

대부분의 선택지에서는 지문 속에서 사용된 단어나 표현이 반복되지만 정답은 다른 표현으로 paraphrasing되는 경우가 대부분이다. 다시 앞선 Case 1의 경우를 살펴보자.

e.g. Ⓐ verify the location of the first human settlements on Crete 지문에 언급된 단어 반복

Ⓑ compare common pottery with expensive works owned by the wealthy

지문에 언급된 단어 반복

Ⓒ help sketch a rough chronology of ancient Minoan culture paraphrasing된 정답

Ⓓ illustrate common themes in Minoan art and architecture

Minoan이 반복되지만 지문에 언급되지 않은 내용

### ❷ negative fact유형의 정답 특징

이 유형의 경우 지문에서 언급된 내용이지만 내용적으로 질문과 상반되는 선택지가 정답으로 등장하는 경우가 많다. 초기 미노아 도자기의 특징이 아닌 것을 고르는 Case 2 문제를 다시 생각해 보자.

e.g. Hand-made, as opposed to later works that were created with the help of a pottery wheel, these pieces were fashioned into rough jar and cup shapes.

→ negative fact Ⓑ It was fashioned using a mechanical wheel.

Ⓑ는 later works의 특징으로 해당 시기의 pottery 특징과는 관련이 없다. 흔히 지문 중간에 혼동할 수 있는 내용들이 삽입되므로 주의한다.



## practice test\_level 1



>> Read paragraphs 1 to 8 and answer the following question for each.

### 1

The Erie Canal, which stretched 363 miles, from the Hudson River to Lake Erie in upstate New York, was a massive undertaking. It was first proposed in 1699 as a way of linking the eastern seaboard with the western interior of the country. However, the costs associated with the proposal were initially considered prohibitive. Several influential businessmen and politicians, including New York senator DeWitt Clinton, strongly supported the proposal, and lobbied for it in the early 1800s. Eventually, the federal government agreed to pledge \$7 million to the construction project in 1817.

According to the paragraph, there was initially opposition to the canal proposal because

- (A) Its benefits were deemed insignificant.
- (B) It was regarded as too expensive to build.
- (C) Its size was considered impractical.
- (D) It was seen as benefiting only rich businessmen.

### 2

A massive change occurred in the way that music was composed and played in the Romantic Period, from 1820 to 1910. Rather than being dependent on finance from patrons or employers, musicians were more independent. This gave them the opportunity to be more creative, so musical themes became more personal and emotional. Musicians also began experimenting with new techniques, developing more complex harmonies and rhythms in their compositions. Some even used new instruments like the clarinet and the piccolo to create totally new sounds.

According to the paragraph, music in the Romantic Period was characterized by all of the following EXCEPT

- (A) larger financial rewards for musicians
- (B) more emphasis on artistic freedom
- (C) the development of different techniques
- (D) experimentation with new instruments

### 3

Polychlorinated biphenyls(PCBs) are organic compounds that were once used in industrial products such as paints and adhesives. However, open use of PCBs has been banned since the 1970s, when it became clear that they had adverse environmental effects, particularly on wildlife populations. The compounds are toxic to many animal species, including birds, fish and mammals. PCBs also take an exceptionally long time to degrade, so they are still a significant air and water pollutant. Fishing is still restricted in the Great Lakes district, for instance, because of the risk that contamination could be passed to humans.

According to the paragraph, on top of their toxicity, why else are PCBs considered harmful to the environment?

- (A) Because they contaminate soil
- (B) Because they contribute to global warming
- (C) Because they break down very slowly
- (D) Because they degrade organic matter

### 4

Scientists have proposed numerous theories to explain the sudden extinction of most of the animal and plant life on Earth at the end of the Cretaceous Period 65 million years ago. The most convincing explanation is the impact event theory, which suggests that an asteroid struck the Earth. This theory accounts for the massive Chicxulub Crater in Mexico, where the asteroid is believed to have made impact. As further evidence, sedimentary layers all over the world dated to this time have very high concentrations of iridium. This is an element commonly found in asteroids and meteorites, but very rare in the Earth's crust.

According to the paragraph, what evidence is there to support the theory that an asteroid struck the Earth?

- (A) The presence of a large impact crater
- (B) The detection of massive asteroids near the Earth
- (C) The discovery of fossils in sedimentary rock layers
- (D) The concentration of iridium in the asteroids and meteorites



## 5

Calorie restriction, which forms the basis of many commercially-packaged diets, is an effective way of improving health and physical condition. By carefully limiting their intake of food and eating healthily, people are able to lower their cholesterol and blood pressure, thereby reducing the risk of heart disease. In addition, calorie restriction helps to lower glucose, which is one of the main causes of diabetes. It is also believed that following a strict dietary regimen can slow the aging process, extending people's maximum life expectancies by several years.

All of the following are mentioned in the paragraph as benefits of lowering calorie intake EXCEPT

- Ⓐ A reduced risk of diabetes
- Ⓑ A healthier cardio-vascular system
- Ⓒ Improvement in the immune system
- Ⓓ Deceleration in the effects of aging

## 6

Lithostratigraphy involves the observation of rock layers to determine a geological timeline for particular formations. Vertical strata provide the most basic information, as generally the layer at the bottom of a sequence is the oldest, and the layer at the top is the youngest. This is because sediments settle on existing rock, progressively forming layers on top of it. However, erosion, volcanic activity and other geological forces can cause deformities in the stratification. Therefore, in order to fully understand the history of these rock formations, geologists also need to examine the lateral changes in rock deposition.

According to the paragraph, lateral changes in rock formations need to be studied because

- Ⓐ rock formations do not always contain sediments
- Ⓑ lateral layers can provide information about sequence
- Ⓒ geological activity can disturb vertical layers
- Ⓓ vertical changes may not always be visible

## 7

The southwest of the United States has an arid climate barely suitable for agriculture, even with today's modern technology. However, the area's original inhabitants, the Puebloan people, managed to successfully grow crops such as corn, beans and squash. They were able to do this because they had a sophisticated irrigation system, with a network of dams channeling water from melting snow in the mountains. Eventually, around AD 1300, they abandoned the southwest and traveled north. Historians speculate that this sudden migration was a result of conditions becoming too hot and dry for them to sustain their way of life.

According to the paragraph, the Puebloan people were probably forced to move by

- (A) the worsening climatic conditions
- (B) problems with their irrigation infrastructure
- (C) a clash with a modern society
- (D) blights affecting their staple crops

## 8

One of the most interesting features of all the various species of trout is their unique coloration. Some trout are silvery-grey, others are a deep brown, and others still are characterized by a pinkish tinge, particularly on their underside. The different hues and markings provide no clues as to the fish's subspecies, however, as trout that are the same species can actually look very different. Instead, the coloration is a form of camouflage that can actually change when the fish changes habitat. The different colorations and patterns are particularly useful in that they provide observers with an indication of what region the trout live in and whether they are acclimatized to an ocean or river environment. In general, wild trout also have more colorful bodies and more distinctive markings than their purpose-bred counterparts, probably reflecting the fact that they are at greater risk from natural predators in water, and so have greater need to disguise themselves.

According to the paragraph, why are wild trout more distinctively colored than trout bred by humans for fishing?

- (A) They have to be highly camouflaged in order to avoid predation.
- (B) They are affected by a more extreme ocean environment.
- (C) They interbreed with other species to produce distinctive offspring.
- (D) They tend to live longer so have more time to develop deep colors.





## practice test\_level 2



>> Read passages 1 to 4 and answer the following questions for each.

### 1

The epipelagic zone extends from the ocean's surface to a modest depth of 200 meters. Sunlight warms the water in the upper epipelagic zone and wind activates currents that circulate warm water throughout the zone, causing the temperature of the epipelagic zone to be consistently mild. Teeming with life, this shallow, sunlit region supports an array of organisms. Bountiful plant life translates to an abundance of food for other organisms, so this zone has by far the highest concentration of fish species. In fact, approximately 90 percent of marine life is confined to this region.

Below the epipelagic zone lies the mesopelagic zone, which drops to 1 kilometer below the surface. The sunlight is so dim here that plants cannot convert it into energy through photosynthesis, and without this vital sustenance they are unable to survive. The absence of plant life diminishes the amount of food available in this zone. In spite of this, the mesopelagic zone still contains a number of fish species, such as cuttlefish, squids and swordfish which often rise up into the epipelagic zone to feed on prey there. Deeper still, in the bathypelagic zones, only a few fish species are known to exist. These hardy individuals survive mainly by feeding on detritus, the waste material of living organisms, which falls from zones above.

- 1-1. According to paragraph 1, the epipelagic zone has a consistent temperature due to the
- (A) abundance of life found there
  - (B) movement of ocean currents
  - (C) sunlight at the ocean's surface
  - (D) strong winds of ocean storms
- 1-2. In paragraph 2, the author says that some species are able to survive below the mesopelagic zone by
- (A) converting dim sunlight into energy
  - (B) preying on fish species near the surface
  - (C) feeding on deep-sea plants
  - (D) consuming organic debris



The first verified account of powered flight was in 1903, when the Wright brothers, Orville and Wilbur, tested their aircraft successfully. The Wrights faced stiff competition from engineers and inventors all over the world who were working on rival airplane prototypes. In the preceding years interest in mechanical flight had increased greatly after it had become possible to produce powerful but light-weight motors. However, the appeal of taking to the skies was not a recent phenomenon. Historically, there were folktales and legends about the possibility of manned flight in a variety of cultures, and tangible steps had also been taken in previous centuries with the development of hot air balloons and small-scale gliders.

The Wright brothers and other early developers of powered aircraft took their cues from nature. They studied the physiology of birds to work out how to incorporate its finely evolved features into their designs, and the key to their inventions was the imitation of the shape of a bird's wing, which is known as an airfoil. If viewed in cross-section, both the wing of a bird and the wing of an airplane have the same rounded front edge and the same tapering back edge. The upper surface of the airfoil is slightly arched, making it longer than the bottom surface. This distinctive shape is ideal for creating an aerodynamic force perpendicular to the direction that the object is moving towards. Therefore, as birds and airplanes move horizontally, their airfoils push air at a right-angle to this direction, directly down into the ground. This vertical force is what provides them with the lift that is necessary to successfully take off and fly.

2-1. According to paragraph 1, what promoted awareness of the potential for powered flight?

- (A) Improvements in glider prototypes
- (B) The development of light-weight building materials
- (C) Technical advances in motors
- (D) The invention of hot air balloons and other aircraft

2-2. All of the following are mentioned in paragraph 2 as characteristics of an airfoil EXCEPT

- (A) a rounded front edge
- (B) a back edge that tapers
- (C) a curved upper surface
- (D) a textured lower surface

### 3

The design of Roman theaters was based very closely on the Greek blueprint that had been established around 550 BC. Like their Greek counterparts, Roman theaters were semi-circular and, on average, they were also roughly the same size, with space for around 15,000 audience members. The Romans' main alterations were the addition of a narrow stage at the front of the theater, and incorporation of a semi-circular orchestra at the base of this stage. Greek orchestras were fully circular, and they were used as an important acting area at the front, but in Roman theater, this space was generally reserved for the audience.

Not only did Roman theaters subscribe closely to Greek theater design, the content of their plays was also very similar. In fact, the earliest Roman playwrights borrowed so heavily from renowned New Comedy writers of Greece that their originality has come into question, and some consider them to be mere translators rather than true authors. As the central dramatist of New Comedy, the Greek playwright Menander was often imitated by Roman writers such as Plautus and Terence. Roman playwrights took plots, stock characters, scenes, and proper names directly from the plays of Hellenistic Greeks, and many of their works are in fact direct adaptations of plays by Menander or other New Comedy playwrights. However, since there were significant differences between ancient Greece and Rome in terms of social and moral standards, the playwrights did exercise some creativity in the way that they modified the play to fit in with Roman ideals and sensibilities.

3-1. According to paragraph 1, which of the following statements about the similarities between Roman and Greek theater design is NOT true?

- (A) The general shape of the theater was the same.
- (B) Each had a similar overall seating capacity.
- (C) They both included a narrow stage for actors.
- (D) An orchestra was incorporated near the front in both.

3-2. According to paragraph 2, Plautus and Terence were

- (A) collaborators of the famous New Comedy playwright Menander
- (B) the original creators of the style of New Comedy
- (C) authors who inspired the early Roman playwrights
- (D) Roman imitators of Greek playwrights such as Menander



Barrier islands are marine depositions of sands and sediments found offshore. They most often occur in long, narrow chains that run parallel to the coastline of major landmasses. As a general rule, the body of water running between barrier islands and the mainland is extremely shallow and sheltered. In addition to these unique physical characteristics, researchers have also concluded that barrier islands are not currently forming anywhere in the world. These distinct factors have given rise to a theory that glaciers played a major part in the formation of these islands.

According to this theory, the ocean was probably at least eighty-five meters lower during the last Pleistocene ice age than it is today. Large amounts of ocean water were retained in glacial ice in both northern and southern zones. When the climate began warming at the end of this period, much of the ice would have melted, raising the sea level and flooding many landward areas.

In coastal areas, which would have been most impacted by this development, scientists assume beach ridges would have existed. This is because at the intersection of ocean and land, the action of waves and wind has a tendency to build high mounds of sand and sediments parallel to the water. Beach ridges can be incredibly stable, and it is assumed that they would have been able to withstand the expansion of the oceans that occurred when the glaciers melted. As the lower-lying inland areas were submerged by the rising water levels, the beach ridges would have been slowly transformed into barrier islands not connected to the mainland.

4-1. According to paragraph 1, which of the following statements about barrier islands is NOT correct?

- (A) They are found parallel to the seaboard of a landmass.
- (B) They are located in warm coastal areas.
- (C) They are comprised of offshore sedimentary deposits.
- (D) They are formed into long and narrow strips.

4-2. In paragraphs 2 and 3, the author states that barrier islands form when

- (A) strong ocean currents deposit sediments and sand out at sea
- (B) ice age glaciers melt and the expanding oceans flood pre-existing beach ridges
- (C) rising sea levels almost submerge islands that have formed offshore
- (D) global warming increases the impact of wind and waves on beach ridges



## practice test\_level 3



>> Read passages 1 and 2 and answer the following questions for each.

1

### The Construction of Roman Roads

An important legacy of the vast Roman Empire was the development of a reliable transportation infrastructure across Europe. For the Romans, the primary motive behind the development of the road network was the need to efficiently dispatch military units to the distant corners of the Empire. However, the construction of Roman roads had the added benefit of serving as transportation routes for traveling citizens, as well as initiating an era of expansion that increased political, commercial, and intellectual activity. More than 85,000 kilometers of road were laid, and many of the roads survived for centuries. In fact, the original roads can still be seen in places where diligent upkeep has preserved these remnants of the civilization. A testament to their quality, some of the Romans' ancient bridges are actually still in use.

To transport the military along the fastest possible routes, Roman roads followed a straight course. Straight roads were easier to plan than curving roads. Furthermore, by having roads that radiated in straight lines outward from the capital, as opposed to roads that connected minor villages, the Roman Empire curtailed the possibility of organized resistance among outlying provinces. This preference for straight roads was often taken to extreme lengths, and Roman architects designed engineering solutions to overcome any terrain, constructing causeways over swamps and rivers, carving roads into sheer rock, and ascending mountains. Eventually, though, the Romans recognized that they were sacrificing some utility with their insistence on perfectly straight roads and began to make allowances for natural barriers.

It is believed that the Romans learned their road-building techniques from the Etruscans, an ancient Italian civilization that predated the Roman Empire. For the most part, though, our understanding of Roman road construction is based on analyses of surviving Roman roads. By examining the composition of these roads, it has been possible to determine how builders created them. First, an architect and a team of agrimensores—surveyors specially trained in mathematics, in particular geometry—appraised the surrounding land and determined the exact route.



Using rods to mark the boundaries of the road, the surveyors plotted a precise blueprint to guide the rest of the road builders. After the plan had been set down, the labor-intensive construction process would begin. The duty fell most heavily on the soldiers who used the roads, though slaves and criminals were also exploited as forced laborers. They dug a meter or more into the ground, until they reached bedrock or another firm layer that would support the road. Next, the ditch was filled with layers of local materials, including stones, gravel, sand, and, in urban centers, concrete and flat stones. This ingenious design helped to provide drainage and ensure stability, and it goes a long way to explaining the impressive durability of Roman roads.

- 1-1. According to paragraph 1, what was the main purpose of Roman roads?
- (A) To foster intellectual growth
  - (B) To serve as a transport route for traveling citizens
  - (C) To facilitate military activity
  - (D) To promote commercial trade
- 1-2. All of the following are mentioned in paragraph 2 as reasons why straight roads were beneficial EXCEPT
- (A) the speed with which the military could travel
  - (B) the efficiency with which natural obstacles could be overcome
  - (C) the ease with which routes could be planned
  - (D) the prevention of rebellion in rural provinces
- 1-3. In paragraph 3, the author states that modern study of ancient Roman roads focuses on
- (A) examination of Roman architectural records
  - (B) physical observations of some of the remaining Roman roads
  - (C) analyses of roads built by the Etruscan civilization
  - (D) careful geometric calculations carried out by specialists
- 1-4. According to paragraph 3, who was mainly responsible for the construction of Roman roads?
- (A) Teams of specialists who possessed skills relevant to road construction
  - (B) Corps of forced laborers like slaves
  - (C) Groups of prisoners who were used as involuntary workers
  - (D) Members of the empire's armed forces

## Two Utilitarian Crops: Cotton and the Gourd

When we think of cultivated crops, it is usually those that produce food that come to mind, such as corn, rice, and wheat. However, there are other plants which are prized for their utilitarian, rather than nutritional uses. Cotton and the gourd are two such crops, both of which were domesticated very early in the history of human agriculture. Though neither functions as a necessity for survival, they have each played vital roles in civilizations all over the world.

As it is today, cotton was used in ancient times primarily in the production of fabrics for clothing. Processing cotton for this purpose involves separating the fibers from the sticky seeds that grow within them, spinning—literally twisting—groups of individual fibers together to create strong, lengthy threads or yarn, and finally weaving the spun fiber into sheets of lightweight cloth. From the Middle East, cotton cultivation spread to Europe in medieval times, where heavy sheep’s wool had been the only material available for clothing production. In addition, it was a crucial commercial product in the civilizations of Central and South America before the arrival of European explorers. Later, inventions during the Industrial Revolution allowed for the mass production of textile products. This greatly increased demand for the product, so much so that the cotton industry became the powerhouse of the American south. Cotton remains an important American export to this day, with countries such as China, India, Pakistan, Brazil, and some African nations also profiting from the cultivation of this utilitarian crop.

Like cotton, the gourd was one of the earliest plants to be domesticated by humans. Scholars cite Africa sometime after 10,000 BC as a likely point of origin for the domesticated gourd, from where it was dispersed by unknown means both to South America and east into Asia. There is evidence of gourd cultivation stretching from Peru to Mexico by 7,000 BC, and the crop had reached what is now the southeastern United States by 1,000 BC.

Unlike other utilitarian crops, some gourds are actually harvested as a food source, though these are certainly a minority. The more common functions of gourds are varied. Their bowled shapes lend them naturally to use as food vessels and water bottles, but throughout history they have also been employed as musical instruments, fishing net floats, toys, calendars, and even primitive surgical materials. While gourds are still used in traditional ways in some parts of the world today, their



purpose in contemporary America is mainly artistic. Craftspeople use gourd shells to create masks, carvings, musical instruments, and much more, and gourd art has become a recognized form of folk art in some places. Though such gourds may no longer be fulfilling a truly utilitarian function, they highlight the versatility of this ancient crop.

- 2-1. According to paragraph 2, which of the following is NOT mentioned as being one of the steps involved in processing cotton?
- (A) Weaving thread or yarn into cloth
  - (B) Removing any seed residue from the fibers
  - (C) Twisting the fibers to make them softer
  - (D) Combining fibers into long strands
- 2-2. According to paragraph 2, the Industrial Revolution impacted the global cotton industry by
- (A) increasing the amount of cotton that could be utilized
  - (B) providing more efficient ways to transport textile products
  - (C) limiting the supply of cotton in the American colonies
  - (D) introducing machinery that made cotton cultivation obsolete
- 2-3. What does the author state about gourd domestication in paragraph 3?
- (A) Ancient Africans introduced it to ancient Asians.
  - (B) It probably first appeared in South America.
  - (C) No one knows how it spread from Africa.
  - (D) Its cultivation predates that of cotton.
- 2-4. All of the following are mentioned as uses of gourds EXCEPT
- (A) food storage
  - (B) shipping vessels
  - (C) medical implements
  - (D) material for creative works

# word brush-up

▪ Choose one that is closest in meaning to the shaded word or phrase.

01 limestone **sediments**

- (A) elements      (B) bases
- (C) deposits      (D) extracts

06 **diminish** the amount of oxygen

- (A) reduce      (B) pollute
- (C) measure      (D) fill

02 a training **regimen**

- (A) division      (B) routine
- (C) exercise      (D) prescription

07 a **tangible** benefit

- (A) vague      (B) recent
- (C) supposed      (D) substantial

03 the **arid** regional climate

- (A) airy      (B) erratic
- (C) horrid      (D) dry

08 provide organisms with **sustenance**

- (A) defense      (B) nourishment
- (C) support      (D) intelligence

04 **are acclimatized to** the heat

- (A) become adjusted to
- (B) take action over
- (C) give rise to
- (D) suffer from

09 a **perpendicular** line

- (A) vertical
- (B) obvious
- (C) faint
- (D) parallel

05 **teeming with** marine animals

- (A) preoccupied with
- (B) suitable for
- (C) packed with
- (D) designed for

10 **upkeep** of the palace

- (A) restoration
- (B) remodeling
- (C) construction
- (D) maintenance



- 11 Some cities such as London have invested in sophisticated equipment to protect against floods. However, in many developing countries, the cost of installing flood defense systems is considered **prohibitive**.
- (A) quite reasonable (B) highly corrupt  
(C) totally preventable (D) too expensive
- 12 If barley is not stored properly, it begins to **decompose** after a few days. But as long as it is kept in a hermetically sealed container, it can last for up to 8 years.
- (A) buckle (B) degrade (C) regenerate (D) spread
- 13 A lot of medieval English writers borrowed their stories and ideas from Scandinavian literature. Beowulf, for instance, which many consider the greatest work of medieval English literature, was an **adaptation** of an old Viking tale.
- (A) revised copy (B) innovative idea (C) replica (D) sequel
- 14 Some of the more modern cities in previous European colonies reflect a more organized and coordinated approach to urban planning. In these cities, suburban streets **radiate** from a central park or square.
- (A) build up (B) meet (C) spread out (D) signify
- 15 Story-telling was crucial in oral tradition, and good story-tellers were revered and respected. A story-teller was measured by his or her ability to **weave together** different aspects and produce a cohesive and entertaining narrative.
- (A) reveal (B) unite (C) cooperate (D) leave

answer 01 (C) 02 (B) 03 (D) 04 (A) 05 (C) 06 (A) 07 (D) 08 (B) 09 (A) 10 (D)  
11 (D) 12 (B) 13 (A) 14 (C) 15 (B)

day 04

# text insertion

✚ speed keyword

● case example

★ smart solution

▣ practice test

▶ word brush-up

+ speed

keyword



## insertion문제는

문장 순서

▼ 맞추기이다.

2, 4, 6, ( ), 10

이와 같은 수열이 주어졌을 때 괄호 안에 들어갈 숫자를 예상하는 것은 어렵지 않다. 숫자가 일정한 규칙성을 가지고 흘러가기 때문이다. 개별 문장이 하나의 단락으로 구축되는 원리도 바로 이런 논리적 흐름에 근거하고 있다.

**text insertion**문제는 이런 문장 간의 논리적 순서를 파악하고 있는지 테스트하는 유형으로 삽입할 문장이 들어가기에 적당한 한 곳을 지문에 표시된 4개의 [■] 박스 중에서 고르면 된다. 다섯 문장으로 구성된 한 단락이 주어지므로 단락 내에서의 논리적 흐름과 일관성(**coherence**)을 잘 이해해야 한다. 실제 시험에서는 삽입 문장을 [■] 위치에 계속 넣어 볼 수 있으므로 정답 후보를 원하는 곳에 넣어 앞뒤 문장 모두와의 연결을 쉽게 확인할 수 있다.

지문당 평균 한 문제씩 출제되며 제일 마지막 문제 바로 앞에 위치한다. 질문은 한 가지 형태로 항상 다음과 같이 나타나며 삽입 문장만 교체된다.

Look at the four squares [■] that indicate where the following sentence can be added to the passage.

삽입 문장

Where would the sentence best fit?

## case example



### 대표 문제

Read each passage and answer the questions.

#### TOEFL Reading passage

review | help | back | next

Feminist advocates have argued at length that a few linguistic conventions perpetuate male dominance in society. **A**Traditionally, for instance, the masculine singular pronoun “he” might refer to a person generically. **B**Moreover, the word “man” has frequently been used in relation to all people, not just males. **C**Instead, feminists say that people should be compelled to use gender-neutral terms wherever possible.**D**

**Case 1** Look at the four squares [■] that indicate where the following sentence can be added to the passage.

**This is due to the fact that such practices subconsciously assert the cultural primacy of males.**

Where would the sentence best fit? \_\_\_\_\_

#### TOEFL Reading passage

review | help | back | next

**A**There are several ways that city planners can combat the problems associated with the “urban heat island effect.” **B**Most obviously, the inclusion of more green-belts in cities helps to regulate the overall climate, as plants and trees are known to have a distinct cooling effect. **C**In many cities around the world, former industrial and commercial sites are being converted into park land to help mitigate the urban heat island effect.**D**

**Case 2** Look at the four squares [■] that indicate where the following sentence can be added to the passage.

**Furthermore, by using reflective construction materials, it is possible for urban planners to ensure that heat and sunlight is reflected away from city buildings.**

Where would the sentence best fit? \_\_\_\_\_

answer 1. Ⓐ 2. Ⓓ

## ❶ 지시어 힌트가 주어진 경우

Case 1의 경우 삽입 문장에 지시어인 **such**가 주어진 경우다. 다수의 삽입 문장에 **this, that, such, they** 등의 지시어나 대명사가 사용되는 경우가 많은데, 이런 경우 지시어가 가리키는 대상이 무엇인지 생각해 보고 일단 지시대상이 속한 문장 바로 뒤에 삽입문을 위치시켜 앞뒤 문장과의 논리 관계를 짚어본다. 지금과 같은 경우 **such practices**는 **a few linguistic conventions**를 가리키므로 **A**에 위치할 확률이 가장 커지게 된다. 뒷문장들에는 **such practices**의 구체적인 예로 1) he와 2) man의 사용을 들고 있으므로 전체적인 흐름상으로도 무리가 없다. 영어식 사고에서는 **general idea → specific idea**로 이동하는 것이 자연스러우므로 항상 전제가 먼저 나오고 그 예가 다음에 등장한다.

## ❷ 연결어 힌트가 주어진 경우

Case 2의 경우 삽입 문장에 연결어 **furthermore**가 주어진 경우다. **furthermore**는 '게다가'의 의미로 앞의 내용에 어떤 속성을 덧붙이는 역할을 하므로 그 앞에 이미 한 가지 이상의 연관된 속성이 언급되어 있어야 한다. 지금의 경우 삽입 문장은 "반사성 건축 자재 사용"이라는 도시 열섬현상을 저지하는 방법 중 하나를 언급하고 있으므로 "In many cities ~" 이하에 나타난 녹지대 이용이라는 열섬현상 저지방법의 예시 뒤에 위치하는 것이 가장 적당하다.

# 출제 의도

## ❶ 지문 내 문장 간의 논리를 파악하고 읽었는지 확인한다.

제대로 쓰여진 글일 경우 반드시 한 문장과 이어지는 문장 사이에는 논리적 필연성과 일관성이 존재하는데 ETS측은 수험자가 이런 논리적 흐름을 제대로 이해하며 읽었는지를 테스트한다. 대부분 한 단락 내에서의 흐름을 잘 이해했는지 테스트하지만 단락 간의 흐름을 확인해야 하는 경우도 있다. 그런 경우에는 박스가 아래와 같은 모양으로 배치된다.

**Tip** 박스의 위치는 한 단락 내에 한정되어 있는 경우가 대부분이지만 때로 두 단락에 걸쳐 있는 경우도 있다. 이 때 삽입 문장이 **C**에 위치할 경우 단락과 단락 간의 연결이 부드러운지를 확인해야 한다.

[단락 1] sentence 1

**A** sentence 2

**B** sentence 3

**C**

[단락 2] sentence 4

**D** sentence 5

## ❸ 문장 간의 연결에 중요한 역할을 하는 지시어와 접속사 등의 쓰임을 잘 알고 있는지 확인한다.

지시어의 경우 성, 수, 격 등을 제대로 파악해야 지시대상을 정확하게 알 수 있고, 문장 전환 접속사는 용례별 쓰임을 알고 있어야 문장 전환시 흐름을 무리 없이 따라갈 수 있으므로 이 유형을 통해 지시어와 접속사를 정확하게 사용할 수 있는지 알아본다.

## smart solution



insertion유형은 지문의 마지막 문제 바로 전에 등장하고, 풀이 소요 시간이 긴 유형에 속하므로 시간 단축이 문제 풀이에 핵심적인 요소다. 따라서 모든 문장의 의미를 하나씩 파악하며 삽입 문장의 위치를 찾으려고 하다 보면 시간이 부족한 경우가 대부분이므로 반드시 풀이 순서를 정해 놓고 이 순서에 따라 푸는 연습을 해 두어야 한다. 다음 문제를 보면서 풀이 순서를 연습해 보자.

### 풀이 순서를 정해 놓고 훈련한다.

**A** Sometimes new animals upset the ecological balance in an ecosystem because they transport deadly diseases which can spread to other species. **B** American grey squirrels that were introduced to the United Kingdom, for example, carry a deadly pox virus which has the potential to wipe out the native red squirrel population. **C** Such incidents lend further weight to the argument that natural ecosystems need to be protected and sheltered from invading species. **D**

Similarly, honeycreepers native to the Hawaiian islands are under threat from avian malaria carried by introduced bird species.

**Step 1** 삽입 문장을 차근히 읽으면서 힌트가 있는지 살펴본다.

**힌트 요소인 접속사** Similarly, honeycreepers native to the Hawaiian islands are under threat from avian malaria carried by introduced bird species.

마찬가지로 하와이섬의 토착새인 꿀먹이새는 외래종 조류에 의해 운반되어 온 조류 말라리아의 위협을 받고 있다.

볼드의 삽입 문장을 차근히 읽으며 내용을 파악하고 힌트요소를 찾아보면 문두의 접속사 similarly를 쉽게 발견할 수 있다.

**Step 2** 삽입 문장의 힌트가 의미하는 것을 해독한다.

similarly는 앞에서 언급된 내용과 유사한 예나 사실을 덧붙이는 역할을 하는 접속사이고, 삽입 문장은 토착종이 외래종에 의해 위협받는 예이므로 이와 유사한 예가 등장한 문장을 지문에서 찾아야 한다.

**Step 3** 힌트가 의미하는 바에 따라 지문 내 적당한 연결 문장을 찾는다.

**B** 첫 번째 사례 등장 American grey squirrels that were introduced to the United Kingdom, for example, carry a deadly pox virus which has the potential to wipe out the native red squirrel population. **C**

두 번째 사례 이어짐 ~



미국 회색 다람쥐가 영국 붉은 다람쥐를 위협한다는 내용을 담은 **B** 이하의 문장은 외래종이 토착종을 위협하고 있음을 보여주는 첫 번째 예로 볼 수 있다. 따라서 삽입 문장은 두 번째 사례로써 이 첫 번째 사례 뒤인 **C**에 위치하게 된다.

## ● 후보 위치에 넣어 앞뒤 문장과의 연결을 확인한다.

**B** American grey squirrels that were introduced to the United Kingdom, for example, carry a deadly pox virus which has the potential to wipe out the native red squirrel population.

**C** Similarly, honeycreepers native to the Hawaiian islands are under threat from avian malaria carried by introduced bird species. Such incidents lend further weight to the argument that natural ecosystems need to be protected and sheltered from invading species. **D**

삽입 문장 뒤의 **such incidents**는 앞에 등장한 다람쥐와 조류의 사례를 가리킨다고 볼 수 있으므로 삽입 문장 앞의 문장뿐만 아니라 뒤에 이어지는 문장과의 자연스럽게 연결됨을 확인할 수 있다.

## ● 지시어의 쓰임을 숙지한다.

지시어란 각종 대명사뿐만 아니라 **this, that, both, all**, 수사 등 앞 문장에 지시 대상을 가지는 모든 경우를 포괄한다. 지시어 힌트가 있을 경우 일단 지시 대상이 들어 있는 문장 바로 뒤에 위치시키는 것을 고려해야 하지만 원칙적으로는 지시 대상 뒤라면 어디에도 위치할 수 있으므로 뒤의 문장과의 연결을 반드시 확인해야 한다.

## ● 연결어의 쓰임을 숙지한다.

접속사나 접속사구를 중심으로 앞뒤 맥락에 신호어 역할을 하는 연결어를 잘 알아둔다. 특히 동사에서 인과나 순서의 관계가 드러나는 경우도 있으므로 주의한다.

- 내용의 전환: **in contrast / on the other hand** 반면에  
**on the contrary** 그렇기는커녕 **however / but** 하지만
- 내용의 부연 설명, 추가 정보 제시: **similarly** 마찬가지로  
**furthermore** 게다가 / **in other words** 바꿔 말하면
- 구체적 사례 제시: **for example / for instance** 예를 들면
- 인과적 결과 제시: **therefore / so / as a result** 그래서  
**A follows B / A is preceded by B** A가 B다음에 따라오다
- 단계상의 최종 결론: **finally / consequently** 결과적으로



## practice test\_level 1



>> For paragraphs 1 to 8, look at the four squares [■] that indicate where the sentence below could be added.

1▪

Large-scale agriculture is responsible for a number of environmental problems. In particular, slash-and-burn deforestation has contributed to higher levels of carbon dioxide in the atmosphere. As well as contaminating the air, agriculture has also caused significant pollution in waterways through the irrigation of farmlands. Runoff from crops and fields carries pesticides, fertilizers, and sediments into the surrounding water supply. ■ In fact, research shows that contaminants from agricultural sources are the primary pollutants lowering the water quality of rivers and streams. ■ The polluted water can even have harmful effects on human populations. ■ Methemoglobinemia, a life-threatening disease affecting infants, has been linked to water containing high concentrations of nitrate from farming fertilizers like manure. ■

**For example, some agricultural byproducts found in drinking water have been shown to cause fatal illnesses.**

Where would the sentence best fit?

2▪

The narwhal's most distinguishing physical feature, however, is a long horn-like tusk. The tusk is, in fact, a tooth that protrudes from the top of its mouth. Interestingly, it is one of only two teeth that the narwhal has, and both of them grow from the upper jaw. ■ In most males, the left tooth develops into a tusk that can extend as much as 10 feet from the narwhal's body. ■ This hollow tooth spirals as it grows in a counterclockwise direction, eventually forming a knotted tusk. ■ In rare situations, both of the narwhal's teeth will erupt from the upper lip, resulting in two tusks. ■ While nearly all males grow a tusk, only 3 percent of females develop an extruding tooth. In addition, for the small minority of female narwhal's that develop this appendage, theirs is usually much smaller and thinner than the male versions.

**Such an abnormality happens so infrequently that information about it is difficult to verify.**

Where would the sentence best fit?

### 3

Middens are typically beaver-dam-shaped structures as large as four feet across. The walls of the midden, or outside shell, are formed by a heap of natural and synthetic materials. Inside is a system of tunnels and chambers used for resting and storing food. **A**In order to stabilize the structure, the pack rat urinates on the midden debris. **B**Once the urine is secreted and dries, it crystallizes into a deep, reddish-brown viscous coating called amberat. **C**Amberat is a powerful glue-like gummy substance that is capable of holding the materials together, providing the pack rat with a secure home to shelter it from both the elements and predators like bobcats and snakes. **D**Middens do not collapse under most circumstances, though they are still vulnerable if there is heavy rain or other extreme weather. However, the fact that they are generally built in arid, rocky locations ensures that they usually remain safely intact.

**Having evolved to live in the desert, pack rats consume little water so their urine is particularly thick.**

Where would the sentence best fit?

### 4

Cassatt's association with the Impressionists evolved her previous style and subject matter. She abandoned the colorful costume genre depictions of her colleagues in favor of scenes from contemporary life, creating art in a much simpler, more straightforward approach. Her most popular works are drawn from this period. **A**Cassatt painted a series of tenderly observed, yet largely unsentimental scenes of mothers and their children. **B**There is a direct, emotionless clarity in these paintings. **C**Cassatt shunned professional models and chose to use local women instead, dressing them in Parisian gowns. **D**At the time she painted the aptly named, "Mother and Child" in 1905, she was at the pinnacle of her success. She drew on her many years of experience, working with ease and assurance and capturing the varying effects of light she had cultivated since her time with the Impressionists.

**She felt they were much more natural and less affected by an audience.**

Where would the sentence best fit?



## 5

Despite its mostly unremarkable characteristics, the Northern Spotted Owl found itself in the center of a struggle between environmentalists and the logging industry in the 1990s due to its habitat. **A** This bird of prey occupies a very confined range of the North American continent, making its home in large tracts of old-growth forest in the Pacific Northwest, a region stretching along the coast from northern California to the southernmost part of British Columbia. **B** In the summer of 1990, the Northern Spotted Owl was listed as threatened under the Endangered Species Act, and all logging operations in national forests in the region were halted. **C** Loss of old-growth forest was seen as the primary cause of an alarming decrease in the population of the owls. **D** Thousands of jobs in the industry were lost as a result, and the timber market experienced a drop in supply and subsequent price increases.

**Logging interests have traditionally been strong here because of the immense size of the native tree species.**

Where would the sentence best fit?

## 6

At around three months, infants can anticipate coming events. They will begin to see that a pattern of events is connected, and expect the second event after they experience the first event. For example, they may learn that when they see a bottle, they expect to be fed, or they may pull up their knees when placed on a changing table. **A** By the end of the fourth month, they can follow objects with their eyes as long as they are within the focal point region, which is approximately eight inches away from the infant's face. **B** They have developed keener vision and their brains have begun what is known as sensory integration. **C** They will invariably touch, grab, shake, hold, or try to eat everything they come into contact with, contributing to their sense of being an individual and distinguishing between foreign objects and themselves. **D**

**They begin to learn using all their five senses and can combine them together.**

Where would the sentence best fit?

## 7

The Ancient Pueblo Peoples of the American Southwest are best known for their so-called “cliff palaces.” **A** The structures were nestled into cave openings on the side of cliffs as much as 1,000-feet above the ground. **B** The most famous sites are located in Mesa Verde National Park, which contains the remains of over 600 cliff-dwellings. **C** It is important to note, however, that the Ancient Pueblo Peoples did not always live in the cliffs. **D** According to archaeologists, they only stayed in the cliff-dwellings for around 100 years. Prior to that, they had lived in underground pit-houses on top of the mesa, which is where they returned again after migrating from the caves. No one knows for sure why they relocated to the cliffs, or what forced them to move back out again so soon afterwards. Historians have hypothesized that these movements may have been forced by tribal wars, climatic changes, or fluctuations in the availability of water.

**In fact, their tribal name derives from the Spanish word pueblo, meaning village, which settlers used to describe these large dwellings.**

Where would the sentence best fit?

## 8

Nowadays, it is an established scientific truth that fossils can provide us with information about the history of life on Earth. However, this was not always the case. Suggestions that fossils were the remains of ancient life forms had been made since at least Ancient Greek times, but they were anathema to dominant religious ideas, and so, were not accepted as orthodox thinking. **A** Instead, a wide array of other explanations was developed to account for the appearance of fossils. **B** Popular legends held that fossils were religious or mythical symbols left behind by a higher being. **C** Scientists developed sophisticated arguments to downplay the significance of fossils, too. **D** As late as the 17<sup>th</sup> century, influential British academic Robert Plot postulated that, like stalactites, fossils were natural phenomena caused by mineral deposits, and that their resemblance to living organisms was a mere coincidence. By the 18th century, though, most scientists agreed that fossils were the remnants of animal and plant life.

**A common case was when shellfish fossils found across Europe were said to be imprints of the Devil's Toenail.**

Where would the sentence best fit?





## practice test\_level 2



>> For passages 1 to 4, look at the two sets of four squares [■] that indicate where the sentences below could be added.

### 1 ■ ■

In spite of its newfound political independence from Britain, America still lacked its own distinct cultural identity in its early days. The Hudson River School, which came to prominence in the first half of the 19<sup>th</sup> century, was the first major movement that began to express America's artistic independence from Europe. **A** Although still influenced by Romanticism in the Old World, as evidenced by the very realistic and detailed style, Hudson River School works differed in important ways. **B** Most significantly, in an attempt to convey the sense of wilderness in the American West, the artworks depicted massively vast and intensely rugged landscapes. **C** Most of the works juxtaposed nature with manmade structures and objects, signifying the peaceful coexistence of man and his environment in the New World. **D**

Thomas Cole, who had immigrated to the United States from England in 1818 as a young man, is credited with pioneering the movement. **E** Impressed by the amazing range of hues and vivid scenery in his adopted homeland, his paintings of the Catskill Mountains in upstate New York were the first manifestation of the distinctive new style. **F** However, it was his work as a mentor and teacher, not artist, for which he is best remembered. **G** The so-called second generation of Hudson River School artists, including Frederic Church and Sandford Gifford, benefited from his tuition and guidance. **H** This new cohort of artists was extremely prolific, and the movement became highly influential in the latter half of the 19<sup>th</sup> century.

- 1-1. **In combining these two elements, the movement managed to capture the most unique aspects of American society.**

Where would this sentence best fit from **A** to **D**?

- 1-2. **The landscapes that Cole painted earned him acclaim within the artistic community.**

Where would this sentence best fit from **E** to **H**?



**A** It was not until the early 1920s that anyone attempted to actually calculate the weather. **B** The scientist who pioneered this method was Lewis Fry Richardson, a British mathematician and physicist. **C** He developed a mathematical model, based on the laws of physics, to work out how atmospheric conditions would change. **D** The forecasts he developed were far from accurate, as the model he used simply did not account for enough variables. Moreover, Richardson's predictions were worthless, since it took him days to run through the list of complicated equations before reaching a conclusion, by which time the weather conditions he was attempting to predict had already passed. Nevertheless, his principles became the foundation of modern forecasting. These days, meteorologists use supercomputers that allow them to incorporate far more variables and produce much more accurate forecasts.

However, a degree of uncertainty remains associated with forecasting because these models still rely on approximations. This is largely because, as eminent American mathematician and meteorologist Dr. Edward Lorenz observed, scientists cannot predict the state of the atmosphere with full confidence. **E** The atmosphere is comprised of gases, which move about in a fluid and non-linear manner that simply cannot be calculated in advance. **F** Moreover, even modern forecasting is subject to technological limitations that restrict the certainty with which forecasts can be made. **G** Instead, meteorologists need to work with the data that they can easily access to produce forecasts that are as accurate as possible. **H**

- 2-1. **Meteorologists in the early 20<sup>th</sup> century would make predictions about the weather based on observed data and historical precedents.**

Where would this sentence best fit from **A** to **D**?

- 2-2. **It is impractical, for instance, to observe every single part of the atmosphere over a large body of water.**

Where would this sentence best fit from **E** to **H**?

### 3

A crucial aspect of natural selection is whether an individual possesses traits that will allow it to survive to maturity and become a viable mate. Most individuals inherit the dominant traits within the species, but a few individuals in each generation evolve special mutations. Often, these mutations prove a hindrance in the species' natural environment. The mutation then increases the individual's likelihood of dying prematurely, and precludes its chances of reproducing. **A** Therefore, individuals with disadvantageous mutations have little chance of passing their genes on. **B**

On the other hand, mutations can also be beneficial to an individual. **C** In these cases, the adapted individual is likely to survive until the age when it is capable of reproducing, and the mutation is then likely to be passed on hereditarily. **D** Such beneficial adaptations become more and more common in the species, and eventually, once enough generations have passed, they become a dominant characteristic.

A good illustration of this process is in the development of antibiotic resistance in bacteria populations. **E** When people develop infections, a course of antibiotics is prescribed to kill the bacteria. **F** While most of the bacteria are destroyed, they reproduce in such huge numbers that, inevitably, a small but significant percentage of the population still survives. **G** These individuals make it through to reproductive maturity, meaning that they pass on their antibiotic-resistant genes to future generations. **H** In contrast, the maladapted individuals would mostly be wiped out by the antibiotics, and their contribution to the gene pool would be severely weakened.

- 3-1. **The adaptation may help it to survive changes in its habitat, or to develop a competitive advantage over other members of the species.**

Where would this sentence best fit from **A** to **D**?

- 3-2. **This is because some of the bacteria develop genetic mutations which make them resistant to antibiotics.**

Where would this sentence best fit from **E** to **H**?



A fossil fuel buried deep in the ground, oil is a finite resource that experts concur is fast running out. Greenhouse gas emissions from rampant oil consumption are having a devastating impact on the environment, too. **A**Currently, over 10 percent of global carbon dioxide emissions are caused by gasoline combustion in car engines, and motorists in the United States alone are collectively responsible for nearly half of this.

**B**This is the main reason why many scientists and politicians around the world have begun to promote the production and use of bio-fuels as an alternative to our reliance on oil. **C**There is also hope that, because bio-fuels are renewable, they can also help ensure greater stability in fuel prices. **D**Some proponents even predict that the widespread use of bio-fuels may help to reduce global competition for resources such as oil and other fossil fuels.

In spite of these apparent advantages, however, many remain skeptical about the benefits of switching to bio-fuels. In particular, there are fears that, as farmers switch to more lucrative fuel crops such as corn, worldwide prices for rice, grain and other basic foods will increase massively. **E**The transition to a select few crops could also have a devastating impact on worldwide crop diversity. **F**In addition, environmental opponents point to dwindling water supplies as yet another reason to be wary of the move towards bio-fuels. **G**Modern production methods used in growing and producing bio-fuels consume a lot more water than the traditional refining process for fossil fuels. **H**With more and more regions switching to bio-fuel farming, it could exacerbate the growing water management crisis.

- 4-1. **Bio-fuels, however, are far more environmentally-friendly, releasing 60 to 80 percent less carbon dioxide into the atmosphere when burned.**

Where would this sentence best fit from **A** to **D**?

- 4-2. **Such variety is regarded as essential for ensuring that plant species are able to survive in case of climate change or disease.**

Where would this sentence best fit from **E** to **H**?



## practice test\_level 3



>> For passages 1 and 2, look at the three sets of four squares [■] that indicate where the sentences below could be added.

1 ■■■■

### An artificial reef

An artificial reef is a man-made underwater structure created as a habitat for marine life to assist in promoting the productivity of the ecosystem. There are a wide variety of materials that are suitably long-lived, stable and environmentally safe, that can be used as artificial reefs, such as steel or concrete. These include deliberately-sunken full-sized ships, tires, cars, aircraft, demolition wrecks, military tanks and oil rigs. **A** Once the structure is in place, a live-bottom reef community can form because it provides a hard substrate for invertebrates like corals and sponges to attach and colonize.

**B** The term "artificial reef" may be misleading because there is actually nothing artificial about the marine ecosystem around the man-made structure. **C** Many organisms inhabit and thrive in these locations. **D** When the artificial reef is properly designed, placed and constructed with an adequate amount of stable and durable substrate, it can be just as productive as a natural hard-bottom reef habitat. Calculating the lifespan of these artificial reef environments based on the variety of materials used in their construction, they can remain functional from anywhere between several decades to a few centuries.

Artificial reef sites range from small areas to some that can be a square mile in size. **E** The choice of the site for a reef program can be a complex process. **F** It is largely dependent on support from recreational users, researchers and fishermen, who object to the use of parts of the ocean floor that feature unusual geological formations or interesting plant or animal life. **G** Within the United States alone, artificial reef programs have become fairly widespread. **H** Currently, artificial reefs have been installed from South Carolina to the warm waters off the Texan coast.

The production of artificial reefs has provided people with several important benefits. **I** In particular, the reefs are useful in aquaculture because they are built in



very specific locales, allowing fish farmers to direct where the schools of fish live and monitor their development easily. **J**In addition, artificial reefs also ensure the presence of organic bio-filters, which are important in helping to clean up fish farms. **K**Finally, the reefs are beneficial because they allow large structures to be recycled, saving on valuable landfill space. **L**Old vessels and equipment that would otherwise have been discarded can now serve a whole new purpose at the bottom of the ocean.

- 1-1. **They are scrubbed clean, and potentially toxic or dangerous elements are removed.**

Where would the sentence best fit from **A** to **D**?

- 1-2. **As a result, the reefs tend to be located on flat and rather featureless sand bottoms.**

Where would the sentence best fit from **E** to **H**?

- 1-3. **Barnacles, mussels, and other shellfish that inhabit typical reef environments dispose of the debris of feed waste and fish excreta.**

Where would the sentence best fit from **I** to **L**?

## Two dinosaur extinction theories

There is little doubt that something of catastrophic proportions had to have occurred to wipe out the dinosaurs 65 million years ago. **A** However, there is considerable controversy over what might have caused this event, which is commonly known as the Cretaceous-Tertiary(K-T) extinction. **B** The two most widely accepted explanations of the extinction event are the asteroid impact theory and the volcano-greenhouse theory. **C**

Nobel-prizewinning physicist Luis Alvarez, and his son, Walter, were the first to propose the asteroid impact theory in 1980. **D** They postulated that a huge asteroid, approximately 10 kilometers in diameter, crossed into the Earth's atmosphere and slammed into its surface, emitting a heat wave that incinerated everything within a large radius. It would also have triggered a variety of disasters including massive fires, volcanic eruptions, tsunamis, and severe storms. Debris and dust would have been scattered widely, changing the chemical makeup of the atmosphere and blocking out sunlight for at least a few months.

**E** The aftermath of the asteroid impact paints a grim picture, with many life forms, including the once mighty dinosaurs, unable to adapt to the new conditions. **F** Oxygen levels would have dramatically decreased, killing many land and ocean species. **G** Plants would have wilted away, having no sunlight to generate photosynthesis for their nourishment, and without plants, the animals dependent on them for sustenance would also perish due to starvation. **H**

The second theory for the extinction of dinosaurs was offered by scientist Dewey McLean. The Volcano Greenhouse Gas theory claims that massive volcanic eruptions from the volatile Deccan traps, an igneous region of India, were what caused the K-T extinction event. **I** McLean's findings are based on the discovery of lava flows from the Deccan traps at the geological K-T boundary, which have been dated to approximately 65 million years ago. **J**

According to McLean's theory, intense volcanic activity filled the atmosphere with unprecedented quantities of carbon dioxide, leading to an extreme greenhouse effect. **K** This would have caused eggs and vulnerable embryos to overheat and die, and made species become sterile. **L** Plankton in the sea would have been killed, disrupting the important food chain that all animals need to survive. Moreover, the lack of oxygen would have suffocated many animals, causing them to die out.



- 2-1. **A plethora of theories have been suggested over the years, with varying degrees of plausibility.**

Where would the sentence best fit from **A** to **D**?

- 2-2. **Following the loss of these herbivores, carnivores would also starve and eventually die out.**

Where would the sentence best fit from **E** to **H**?

- 2-3. **That is, the sun's radiation would have been able to enter Earth's atmosphere but not escape, resulting in a lethal increase in temperature and a huge drop in oxygen levels.**

Where would the sentence best fit from **I** to **L**?

# word brush-up

▪ Choose one that is closest in meaning to the shaded word or phrase.

01 left intact after the storm

- (A) delicate (B) ruined  
(C) symbolic (D) undamaged

02 tend to shun hard work

- (A) blame (B) enjoy  
(C) repeat (D) avoid

03 nestled into the hillside

- (A) layered with (B) situated on  
(C) looking over (D) sitting behind

04 calculate all the possible outcomes

- (A) reconsider (B) achieve  
(C) predict (D) resist

05 the members of the council concurred

- (A) took another option  
(B) hesitated for a moment  
(C) were of the same mind  
(D) disagreed with the idea

06 the influence of the Greeks dwindled

- (A) exaggerated (B) shifted  
(C) expanded (D) declined

07 are wary of a sudden change

- (A) cautious about  
(B) tired from  
(C) committed to  
(D) recovering after

08 waste is incinerated

- (A) cleared away (B) turned over  
(C) gathered up (D) burned up

09 90 percent of the population perished

- (A) united (B) died  
(C) contributed (D) thrived

10 plants begin to wilt

- (A) wither (B) mature  
(C) diversify (D) bloom



- 11 The Far East was known to contain vast quantities of exotic goods. This was why many European traders tried to cultivate strong relationships with Eastern merchants.
- (A) confirm (B) develop (C) deny (D) maintain
- 12 The German scientist Ferdinand Braun is credited with the invention of the cathode ray tube. Employing focused electron beams which allowed users to display images, Braun's device made it possible for scientists to observe matter at a sub-atomic level.
- (A) is honored at (B) is recognized for (C) is impressed by (D) is charged with
- 13 Different types of reptiles are able to draw on a wide array of defense mechanisms. One of the most well-known is camouflage, whereby reptiles use their coloration and skin pattern to blend into their natural environs.
- (A) function as (B) cope with (C) rely on (D) mold from
- 14 It is believed that the Pacific Islands were originally colonized in waves by settlers originating from Southeast Asia. By around 1000 AD, this migration had spread right across to Hawaii.
- (A) forsaken (B) traveled (C) exploited (D) inhabited
- 15 Obviously, the stronger the typhoon, the more destructive it is likely to be when it makes landfall. However, the precise amount of damage it causes is subject to a number of important factors.
- (A) focusing on (B) exposed to (C) apt to (D) influenced by

answer 01 (D) 02 (D) 03 (B) 04 (C) 05 (C) 06 (D) 07 (A) 08 (D) 09 (B) 10 (A)  
11 (B) 12 (B) 13 (C) 14 (D) 15 (D)

TOEFL Reading passage

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passage 1>

The City Beautiful Movement

- 1 By the end of the nineteenth century, metropolitan centers in the U.S. had experienced a vast influx of rural citizens and immigrants. Combined with a lack of comprehensive urban planning, this meant America's major cities were in disrepair. Tenement districts were widespread, crime rates skyrocketed, and economic development was slowed.
- 2 → In response to this, a school of architects, engineers, and city planners cultivated what became known as the City Beautiful movement. **A**Its aim was to rejuvenate and inspire urban areas through the construction of grand buildings and the implementation of classical designs. **B**The 1893 World's Columbian Exposition in Chicago, which over the course of six months drew more than 27 million patrons, is considered the first manifestation of the City Beautiful movement. **C**People were excited by the possibilities they had seen at this exhibition, and the subsequent popularity of the movement led to urban renewal projects in several U.S. cities, most notably Washington, D.C., and Chicago itself. **D**
- 3 → The plan for Washington, D.C., was originally formulated in 1791. As a national capital, Washington was designed to resemble other major metropolises of the day. French city planner Pierre Charles L'Enfant devised the city's layout, which followed the conventions of the Baroque style then in fashion. Broad avenues would lead to and from major monuments, and the emphasis would be on the central Mall, where important government buildings were built. Some aspects of L'Enfant's plan were carried out, but many were not, and in the following decades, as the city expanded and its population grew, the intentions of the original plan were overlooked. By 1900 Washington was experiencing the same problems of poverty and crime that plagued America's other urban centers.
- 4 → Inspired by the potential demonstrated at the World's Columbian Exposition, Congress decided in 1901 to undertake the remodeling of Washington, D.C. A commission was formed and its work focused not on the entire city, but rather its core: the Mall. Essentially, the members chose to further



implement L'Enfant's original vision. The center of the diamond-shaped Mall was cleared and made into a massive green space, surrounded by the symbols of the nation's power such as the White House, Congress, and impressive monuments to the past. Those in charge of the project sincerely believed that the beauty they were creating would give Washington a special place among the world's elite cities, as well as **uplift** its more unsavory areas. Unfortunately, their work did nothing to concretely address the needs of the city's impoverished districts and their poor.

5 The city of Chicago grew at an even faster pace than Washington during the 1800s. **A**In the 50 years after 1840, its population exploded from 4,000 to 1 million residents. **B**This extreme growth directly contributed to the city's dilemmas of overcrowding, pollution, and poverty in the second half of the century. **C**In 1871, the Great Chicago Fire destroyed a full third of the city, decimating its business district and furthering the decline of its national and international reputation. **D**

6 → Although Chicago had witnessed the birth of the City Beautiful movement in 1893 with the World's Columbian Exposition, it was not until 1909 that the city began to benefit from the innovations introduced there. In that year *the Plan of Chicago* was published, which stands as the first comprehensive outline drafted for an American city. Central to the plan was the development of green spaces, including cleanup of the lakefront areas and construction of public parks throughout the city. Efficient street systems were constructed that linked neighborhoods together, along with alternative modes of transportation. City officials erected monumental buildings that housed museums, envisioned skyscrapers for the new business district, and embarked on other public works designed to better living conditions for all residents. Chicago's dedication to responsible planning continues to the present day though it has evolved beyond the City Beautiful ideals in modern times.

7 → The popularity of the City Beautiful movement rapidly waned following World War I. Its opponents had always claimed that its emphasis on grand buildings and public spaces was too costly and that it actually did nothing to help the lower classes, ignoring their needs rather than alleviating them. However, the movement's legacy remains evident in the classical-style buildings that still stand in many cities and its influence on urban planning in the twentieth century.

1. The word **influx** in the passage is closest in meaning to

- |             |                |
|-------------|----------------|
| (A) income  | (B) population |
| (C) arrival | (D) influence  |

2. According to paragraph 2, the 1893 World's Columbian Exposition was significant because it

- (A) showcased the comprehensive urban renewal program carried out in Chicago
- (B) was the earliest expression of the principles of the City Beautiful movement
- (C) brought city planners, builders and architects together to discuss city design
- (D) led to the development of an international City Beautiful movement

**Paragraph 2 is marked with an arrow [→].**

3. According to paragraph 3 and paragraph 4, what characterized the remodeling of Washington begun in 1901?

- (A) Changes to L'Enfant's plan
- (B) The shaping of the Mall into a diamond
- (C) A return to the initial design ideas for the city
- (D) The construction of monuments throughout the city

**Paragraph 3 and paragraph 4 are marked with arrows [→].**

4. The word uplift in the passage is closest in meaning to

- (A) enlarge
- (B) remove
- (C) improve
- (D) design

5. All of the following are mentioned in paragraph 6 as elements outlined in *the Plan of Chicago* EXCEPT

- (A) grand structures for cultural and business uses
- (B) the addition of neighborhoods along the lake
- (C) improvements in residential districts
- (D) an array of transport initiatives

**Paragraph 6 is marked with an arrow [→].**

6. The phrase embarked on in the passage is closest in meaning to

- (A) demonstrated
- (B) deliberated on
- (C) undertook
- (D) conjured up



7. The word **waned** in the passage is closest in meaning to
- Ⓐ faded
  - Ⓑ submitted
  - Ⓒ aged
  - Ⓓ changed
8. According to paragraph 7, some people felt the City Beautiful movement
- Ⓐ should have focused more on small towns than large cities
  - Ⓑ led to overcrowding by constructing too many buildings
  - Ⓒ contributed to a lack of resources during World War I
  - Ⓓ was incapable of impacting the lives of poor people

**Paragraph 7 is marked with an arrow [→].**

9. Look at the four squares [■] that indicate where the following sentence could be added to paragraph 2.

**It included a 600-acre rebuilt sector of the city featuring enormous, white stucco buildings, statues, and green spaces.**

Where would the sentence best fit?

Click on a square [■] to add the sentence to paragraph 2.

10. Look at the four squares [■] that indicate where the following sentence could be added to paragraph 5.

**Ironically, it was this tragic event that enabled Chicago to rebound and rethink the layout of its massive metropolis.**

Where would the sentence best fit?

Click on a square [■] to add the sentence to paragraph 5.

passage 2&gt;

**Microbes and the Theory of Panspermia**

1 Microbes are forms of life that are extremely small and invisible to the unaided eye. However, their diminutive size in no way reflects their significance in the universe. They are at the heart of the theory of panspermia, which suggests that life on Earth—and perhaps other planets as well—was seeded by microbes that originated elsewhere in the universe.

2 → The theory of panspermia, an ancient concept that is believed to have emerged in Greece, has matured over a long period of time, producing several strains that are received today with varying amounts of credibility. **A** These manifestations of the theory differ in their proposals about how microbes were transported to Earth. Radio-panspermia suggests that unprotected microbes traveled to Earth without any means of transportation. **B** Directed panspermia hypothesizes that microbes were deliberately sent to Earth in spacecraft launched by intelligent life in another part of the universe. **C** The most credible strain of panspermia proposes that microbes were carried to Earth within comets, which would have protected the organisms from the punishing environments they would have been exposed to during their journey. **D**

3 While the theory of panspermia does not specify where these interplanetary microbes would have originated, scientists have focused much of their research on Mars, a neighboring planet that transfers a relatively large amount of material to Earth. Around a ton of matter from Mars reaches Earth every year. Astrobiologists have hypothesized that microbes from Mars could be pitched into space along with the fragments of crust that are ejected from the planet's surface in the aftermath of a large comet or asteroid impact. The velocities of some of these fragments propel them great distances through space toward destinations like Earth. While most of the fragments traveling from Mars take millions of years to reach Earth, a small number arrive much faster, sometimes in less than a year. Upon arrival, rock fragments experience heating as they enter Earth's atmosphere, but microbes buried beneath their surfaces could survive the descent unharmed, shielded from the high temperatures by a protective layer of rock.

4 → It is now well-known that meteorites originating from Mars strike the Earth once a month on average which provides clear evidence of the transfer of material from Mars to Earth. This proves that the theory of panspermia is based on a valid premise about the interplanetary transportation of matter. That such a phenomenon might have carried life—in the form of Martian microbes—to



Earth is still unproven, but it is a particularly exciting concept for astrobiologists. The more scientists learn about microbes on Earth, the more believable their incredible journey from Mars becomes. In particular, two recent discoveries about their hardiness and life spans have made the entire concept of panspermia more plausible.

5 → Inhabiting the harshest environments on Earth, microbes thrive in conditions that are lethal to other organisms. Within rocks, volcanoes, deserts, and even nuclear reactors, microbes have defied the hostility of harsh habitats and earned the name "extremophiles"—a term that refers to their ability to survive in environments that are intolerable to most other forms of terrestrial life. Habitats may be categorized as "extreme" based on a variety of factors, including pH level, temperature, radiation, vacuum, pressure, and lack of nutrients. The existence of microbial life in such inhospitable environments provides astrobiologists with reason to believe that the environment of outer space may not be too adverse for these extremophiles to endure.

6 **A**Because of the vast distances between bodies in space, one of the most troubling aspects of the theory of panspermia was—until recently—the amount of time it would take for life forms to travel from even Earth's closest neighbors. **B**For most life forms, journeys of these lengths would not be survivable. **C**In a state of suspended animation—alive, but with feeding and reproductive functions inactive—the oldest terrestrial microbes have survived for 250 million years. **D**Their great longevity, combined with the fact that microbes have been found in virtually every seemingly uninhabitable environment on Earth, has led scientists to conclude that the theory of panspermia is more sensible than it was once believed to be.

- The word diminutive in the passage is closest in meaning to
  - available
  - measurable
  - tiny
  - familiar
- According to paragraph 2, microbes would most likely have traveled through space
  - naked and without any assistance
  - in spacecraft launched by other life forms
  - by riding inside comets
  - on radio waves from other parts of the universe

Paragraph 2 is marked with an arrow [→].

3. The phrase pitched into in the passage is closest in meaning to
- Ⓐ thrown towards
  - Ⓑ led through
  - Ⓒ rejected by
  - Ⓓ stirred up
4. In paragraph 4, the author states that the theory of panspermia has a valid basis because
- Ⓐ microbes originating from Mars have been discovered on Earth
  - Ⓑ there is proof that matter can be transported from one planet to another
  - Ⓒ astrobiologists have found microbes originating from Earth in outer space
  - Ⓓ meteorites striking the Earth have been found to contain alien microbes

**Paragraph 4 is marked with an arrow [→].**

5. The word plausible in the passage is closest in meaning to
- Ⓐ conceivable
  - Ⓑ functional
  - Ⓒ diverse
  - Ⓓ supportive
6. The word hostility in the passage is closest in meaning to
- Ⓐ modification
  - Ⓑ unfriendliness
  - Ⓒ adaptation
  - Ⓓ shortage
7. According to paragraph 5, the hardiness of microbes in unforgiving environments indicates that
- Ⓐ they may be the most prevalent life form on the planet
  - Ⓑ outer space may not be too harsh an environment for them to survive in
  - Ⓒ they have adapted to tolerate life on this planet only
  - Ⓓ they must have originated from a more extreme planet

**Paragraph 5 is marked with an arrow [→].**



8. The word **virtually** in the passage is closest in meaning to

- (A) independently
- (B) completely
- (C) practically
- (D) unbelievably

9. Look at the four squares [■] that indicate where the following sentence could be added to paragraph 2.

**However, due to a lack of evidence, neither one of these theories is widely accepted.**

Where would the sentence best fit?

Click on a square [■] to add the sentence to paragraph 2.

10. Look at the four squares [■] that indicate where the following sentence could be added to paragraph 6.

**For microbes, however, even voyages of millions of years may be possible because, as scientists have discovered, the lengths of their life spans are almost incomprehensible.**

Where would the sentence best fit?

Click on a square [■] to add the sentence to paragraph 6.

passage 3&gt;

**The Formation of the Continents**

1 One of the most conspicuous features of the Earth is the unevenness of its surface. **A**Some parts of the planet's surface stretch far above sea level, with Mount Everest at 8,840 meters the highest point. **B**However, other parts lie much lower, with the lowest point at Challenger Deep some 11,034 meters below sea level. **C**How does modern science explain the patchy and uneven makeup of the planet's surface? **D**Geologists are able to make sense of it by looking at the way the outer layers of the Earth are composed.

2 → The Earth's surface is part of the lithosphere, the outermost layer of the Earth which comprises the crust, including the surface that we stand on, and part of the upper mantle. The lithosphere is believed to be as thick as 185 miles in some places, although exact figures are impossible to determine. Below the lithosphere is the asthenosphere, the layer which makes up most of the upper mantle, and it runs from around 60 to 450 miles below the surface. Both the lithosphere and asthenosphere are composed of solid rock and metals. The asthenosphere is mostly made up of heavier metals like iron and magnesium while the lithosphere includes a larger proportion of low density materials, such as quartz and limestone.

3 → **A**While the lighter lithosphere is rigid and brittle, the denser asthenosphere is much more ductile as a consequence of the significant additional heat and pressure placed on matter closer to the Earth's core. **B**The effect of all this heat and pressure is that the asthenosphere is plastic and soft, in much the same way that wax near the hot flame of a candle's wick becomes more supple. **C**Conversely, the lithosphere is further from the core, so it is not subjected to the same extremely hot conditions. **D**It remains solid and brittle, like the hard wax at the base of a candle.

4 → Not only do the heat and pressure closer to the Earth's core make the material of the asthenosphere softer, they also make it flow. Driven by radioactivity deep in the center of the Earth, magma—superheated rock and metal—rises upwards from the lower mantle. As it nears the surface, it cools and is forced to flow in different directions under the solid matter in the lithosphere, forming powerful convection currents that run around the edge of the asthenosphere. Even though the lithosphere itself is solid, it is carried by these currents acting below it, like a piece of wood floating in a river.

5 → Accordingly, the tectonic plates—brittle plates of solid material in the



lithosphere—drift on these currents. Geologists estimate that the plates only move at a rate of around 10 centimeters per year, though over thousands and millions of years this movement can have a significant impact on the Earth's surface and the way the continents appear. Floating tectonic plates inevitably collide, and at contact points, either ridges can form as both plates are pushed up, or one plate can slide over another. This is the process that forms most of the world's mountain ranges. These sites are generally the main areas where earthquakes and other volcanic activity occur, too.

- 6 → The most important factor in what distinguishes surface on land from surface under water, however, is the difference in the composition of the tectonic plates in the lithosphere. Some are made up mostly of granite, quartz and other comparatively light and low density rocks. These lighter plates are what form continental crust. Oceanic crust, on the other hand, is predominantly formed by plates of basalt, which contains a lot of heavy magnesium and iron. Oceanic crust is almost as dense as the rock in the asthenosphere, so it is nowhere near as buoyant as continental crust. Just as balsa wood floats higher in water than much denser pine wood, continental crust floats higher on the asthenosphere than oceanic crust. Consequently, water fills in the lowest lying areas on the surface of the Earth, meaning that the heavier oceanic crust is submerged, whereas most of the lighter continental crust lies above sea level.

1. The phrase **make sense of** in the passage is closest in meaning to
  - (A) interpret
  - (B) add up
  - (C) eliminate
  - (D) feel for
  
2. All of the following are mentioned in the paragraphs 2 and 3 about the lithosphere EXCEPT
  - (A) It is the layer directly above the asthenosphere.
  - (B) It contains a flowing current of superheated materials.
  - (C) It is fairly brittle in its composition.
  - (D) It includes part of the upper mantle and the crust.

**Paragraph 2 and paragraph 3 are marked with arrows [→].**

3. The word ductile in the passage is closest in meaning to

- Ⓐ sweltering
- Ⓑ flexible
- Ⓒ firm
- Ⓓ explosive

4. According to paragraph 4, the heat and pressure experienced in the asthenosphere cause material to

- Ⓐ be converted into radioactive matter
- Ⓑ turn into liquid form
- Ⓒ grow increasingly brittle
- Ⓓ become plastic and mobile

**Paragraph 4 is marked with an arrow [→].**

5. The word collide in the passage is closest in meaning to

- Ⓐ clash
- Ⓑ arise
- Ⓒ circulate
- Ⓓ originate

6. In paragraph 5, the author states that floating tectonic plates

- Ⓐ move too slowly to impact on the Earth's surface
- Ⓑ drift faster now than they did in the past
- Ⓒ seldom reach points of contact with each other
- Ⓓ create important geological and geographical features

**Paragraph 5 is marked with an arrow [→].**

7. The word comparatively in the passage is closest in meaning to

- Ⓐ exclusively
- Ⓑ relatively
- Ⓒ frequently
- Ⓓ strikingly



8. According to paragraph 6, why is continental crust mostly above sea level?

- (A) It has been pushed up by plates underneath.
- (B) It floats higher on the asthenosphere.
- (C) It is light enough to float on the water.
- (D) It lies on top of denser oceanic crust.

**Paragraph 6 is marked with an arrow [→].**

9. Look at the four squares [■] that indicate where the following sentence could be added to paragraph 1.

**Moreover, the world's landmass is largely divided into 7 huge continents, with the other two-thirds of the surface completely submerged under water.**

Where would the sentence best fit?

Click on a square [■] to add the sentence to paragraph 1.

10. Look at the four squares [■] that indicate where the following sentence could be added to paragraph 3.

**Even 50 miles below the surface of the planet, temperatures are as high as 1,000 degrees Fahrenheit, and pressures reach nearly 200,000 pounds per square inch.**

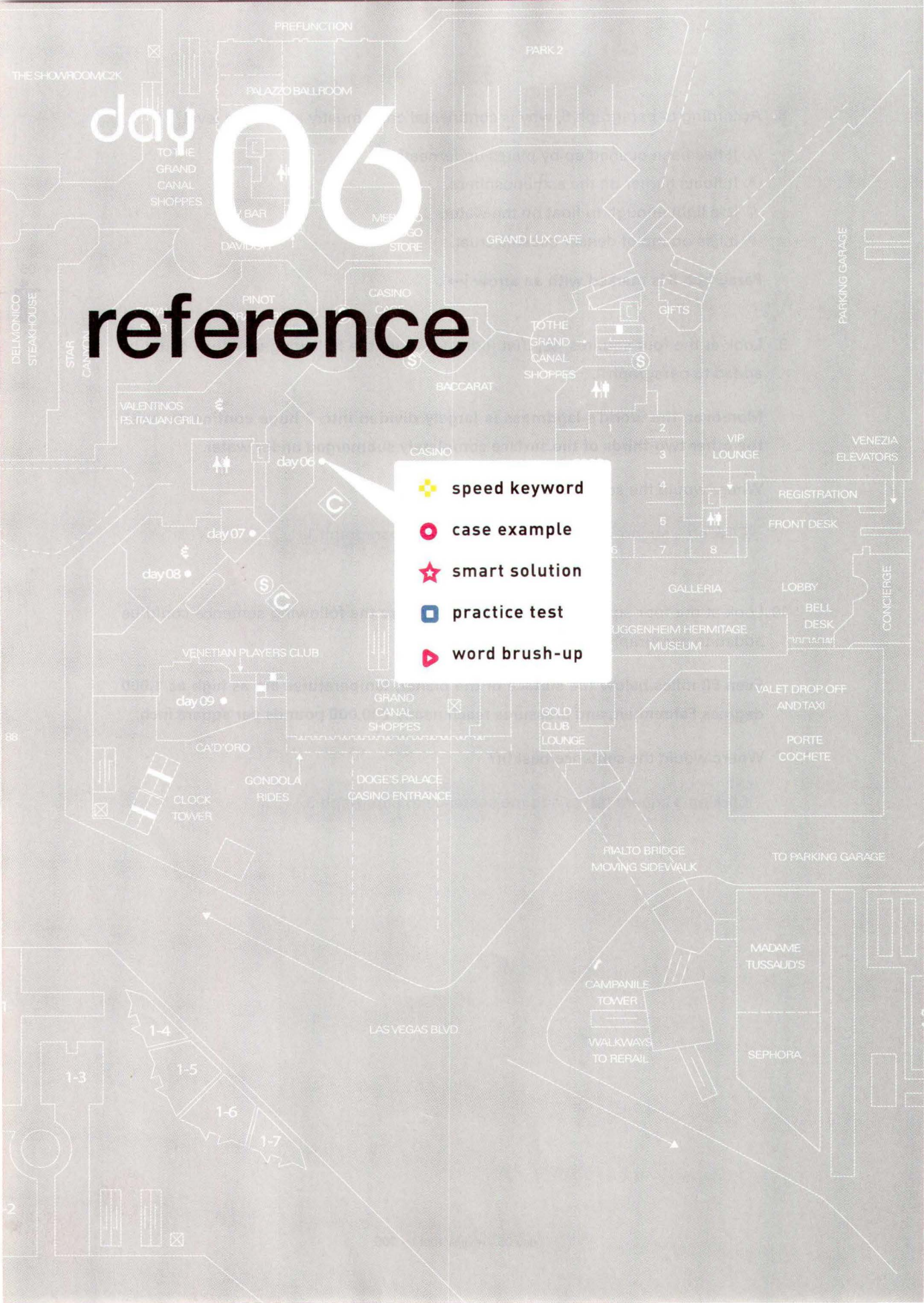
Where would the sentence best fit?

Click on a square [■] to add the sentence to paragraph 3.

# day 06

## reference

- ✚ speed keyword
- case example
- ★ smart solution
- ▣ practice test
- ▶ word brush-up






 speed

keyword

# reference문제는 **지시 대상** ▼ 찾기다.

지문에 표시된 지시어가 가리키는 지시 대상을 찾는 문제로 지시 대상은 단일 명사, 구, 문장 전체로 다양하고, 지시어 역시 지시대명사뿐만 아니라 다양한 형태로 등장한다. 가장 쉬운 문제 유형에 속하므로 절대 틀리지 않는다는 각오로 문제에 임하고 재빨리 문제를 해결하여 시간을 절약하도록 한다.

매 지문마다 평균 한 문제씩 출제된다. 문제는 지시어의 형태에 따라 다음의 둘 중 한 가지 모양을 취한다.

The word  in the passage refers to ...

The phrase  in the passage refers to ...



## case example

### 대표 문제

Read each passage and answer the questions.

#### TOEFL Reading passage

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Photosynthesis is the process by which plants and bacteria produce the sustenance they need in order to live. This complex phenomenon involves the conversion of light energy derived from the sun into chemical energy. When light energy acts on the carbon dioxide and water that plants draw in from the atmosphere and soil, it causes a reaction that alters their chemical composition. One product of this reaction is the creation of carbohydrates, including glucose and starch. Another is the release of oxygen. Animal life on the planet relies on both of these products for survival. Oxygen is essential for animal respiration, while the carbohydrates stored in plants provide the basis of the food chain upon which all animal organisms depend.

**Case 1** The word **their** in the passage refers to

- Ⓐ plants and bacteria
- Ⓑ carbon dioxide and water
- Ⓒ atmosphere and soil
- Ⓓ glucose and starch

**Case 2** The word **Another** in the passage refers to

- Ⓐ conversion of light energy
- Ⓑ chemical composition
- Ⓒ creation of carbohydrates
- Ⓓ product of this reaction

Cliffs are large, vertical rock faces commonly found in mountain ranges, on coastlines and in river valleys. Many cliffs are formed either by the impact of waves or flowing rivers, or through a sudden landslide caused by geological activity. However, glacial ice has created some of the largest cliff faces on Earth, including Mount Thor on Baffin Island, which features a vertical drop of over 1,250 meters.



**Case 3** The word which in the passage refers to

- (A) Earth                      (B) glacial ice  
(C) Mount Thor              (D) Baffin Island

answer 1. (B) 2. (D) 3. (C)

## Case 분석

### ❶ 지시대명사 지시어

Case 1은 가장 일반적인 reference 유형으로 지시대명사가 지시어로 등장한 경우이다. 모든 지시대명사가 등장하지만 특히 사람과 사물을 모두 아우르는 **they, their, them**이 자주 등장하며 **it / its**도 빈출하는 지시어이다.

### ❷ 부정대명사 지시어

Case 2의 경우 부정대명사 **another**가 지시어로 등장했다. 이렇게 앞과 뒤구를 이루는 대명사의 경우 앞쪽에서 짝이 되는 대명사를 찾아 그 주변을 살펴보면 답을 쉽게 찾을 수 있다. 지금의 경우 짝이 되는 단어는 바로 앞 문장의 **one**이므로 그 뒤에 따라온 **product of this reaction**이 답이 된다.

### ❸ 관계대명사 지시어

Case 3은 관계대명사가 지시어로 등장한 경우이다. 관계대명사의 경우, 지시 대상은 바로 선행사가 되는데 선행사와 관계대명사 사이에 부사구 등의 삽입구가 끼어 있는 경우가 많으므로 선행사와 혼동하지 않도록 주의한다.

However, glacial ice has created some of the largest cliff faces on Earth, including **Mount Thor** 삽입구 **on Baffin Island, which features a vertical drop of over 1,250 meters.**



지시어가 가리키는 대상이 무엇인지 짚고 넘어가는 것은 올바른 지문 이해에 필수적인 요소이다. 단지 지시대명사에 한정시키지 말고, 이미 한 번 언급된 대상을 가리키는 기능이 있는 단어나 구라면 모두 지시어로 등장할 가능성이 있으므로 이에 주의하여 문제 해결 포인트를 알아보자.

## 지시어가 있는 문장이나 바로 그 앞 문장부터 살핀다.

지시어란 기본적으로 앞에서 이미 언급되었던 사항을 다시 받는 역할을 하는 것이므로 지시 대상은 지시어 앞쪽에 위치하는 것이 일반적이다. 따라서 지시어가 있는 문장과 지시어가 포함된 바로 앞 문장을 우선적으로 살피면서 의미상 통하는 대상이 무엇인지 찾아야 한다.

### ❶ 지시 대상이 지시어가 있는 문장 내에 위치하는 경우

- 지시어가 있는 문장이 **접속사로 연결된 복문일** 경우 지시 대상이 그 문장 내에 있을 확률이 높다.

**복문을 구성하는 접속사** When light energy acts on the **지시 대상** carbon dioxide and water that plants draw in from the atmosphere and soil, it causes a reaction that alters their chemical composition.

빛에너지가 식물이 대기와 토양으로부터 빨아들인 이산화탄소와 물에 작용하게 되면 빛에너지는 그것들의 화학적 구성을 변화시키는 반응을 유발시킨다.

- 관계대명사의 경우 **선행사가 지시 대상**이 되므로 항상 같은 문장 내에 위치할 수밖에 없다.

However, glacial ice has created some of the largest cliff faces on Earth, including **지시 대상이자 선행사** Mount Thor on Baffin Island, which features a vertical drop of over 1,250 meters.

하지만 빙하가 지구에 가장 거대한 절벽 전면을 만들었고 배핀섬의 쏘어산이 여기에 포함되는데 이는 고도 1,250미터 이상의 절벽을 특징으로 한다.

### ❷ 지시 대상이 바로 앞 문장에 위치하는 경우

아래와 같이 서로 덂구를 이루며 독립적인 문장을 구성하는 **부정대명사가 지시어로** 등장할 경우 바로 앞 문장에 지시 대상이 위치하는 경우가 많다.

**덂구를 이루는 부정대명사** One **지시 대상** product of this reaction is the creation of carbohydrates, including glucose and starch. Another is the release of oxygen.

이러한 반응의 산물 중 하나는 포도당과 전분을 포함하는 탄수화물의 생성이다. 또 다른 것은 산소의 방출이다.



## ● 다양한 지시어의 쓰임을 확인해 둔다.

일반적으로 지시대명사가 문제의 지시어로 가장 빈번하게 출제되지만 다양한 부정대명사와 지시형용사도 명사와 구를 이루어 자주 등장한다. 따라서 평소 확실하지 않았던 다양한 지시어의 쓰임을 확인해 두어야 한다.

### ❶ 댕구를 이루는 부정대명사 / 부정형용사

서로 댕구를 이루는 부정대명사나 부정형용사의 경우 댕구를 이루는 앞의 대명사 또는 형용사 부근에 지시 대상이 위치하게 되므로 일단 댕구를 이루는 앞쪽의 지시어를 찾는 것이 중요하다.

- some / others 일부(의) / 나머지
- one / another 하나(의) / 또 다른 하나(의)
- the former / the latter 전자(의) / 후자(의)

### ❷ 다양한 부정대명사

다음의 부정사들은 명사처럼 독립적으로 사용될 수도 있고 뒤에 “of them”과 함께 오기도 한다.

- all 모두, some 약간은
- neither (둘 중) 어떤 것도 아닌, either (둘 중) 어떤 것이든
- both 둘 다, each 각각

### ❸ 지시형용사, 정관사

정관사 the 역시 앞에서 이미 언급된 대상을 받으므로 명사와 함께 지시어로 등장할 수 있음에 주의한다.

- this, these 이러한: this influence, these influences
- that, those 그러한: that problem, those problems
- such 그러한, the 그 ~: such options, the conclusion

## ● 지시어 주변의 다른 단어와의 관계를 고려한다.

지시 대상을 지시어의 자리에 대입했을 때 앞 뒤의 단어들과 자연스럽게 이어져야 하므로 지시어 주변의 단어는 정오를 가리는 좋은 단서가 된다. 예를 들어 **their low birth rate**에서 **their**는 반드시 생물이 되며 **it sends the signal to notify fellows**와 같은 문장에서도 **it**은 뒤의 동사 **notify**의 행위주체가 되어야 하므로 생물체로 간주할 수 있다.

## ● 대표 오답 유형을 숙지한다.

### ❶ 지시어와 멀리 떨어져 있는 선택지는 오답일 확률이 높다.

선택지에는 모두 성, 수, 격이 일치하는 보기가 등장하기 때문에 성, 수, 격의 일치로 오답을 가려낼 수는 없지만 두 문장 이상 떨어진 곳에 위치한 단어나 구가 선택지로 등장할 경우 오답인 경우가 많다.

### ❷ 선택지를 지시어 대신에 대입했을 때 어색한 선택지는 오답으로 소거한다.

서로 혼동되는 두 개의 정답 후보가 있을 경우 지시어의 자리에 대입하여 문맥상 더 어울리는 것을 고른다.



## practice test\_level 1



>> Read paragraphs 1 to 15 and identify what the highlighted part in each paragraph refers to.

### 1

Modernist poetry arose in the early 20<sup>th</sup> century. Coinciding with the onset of the First World War, it was in many ways a reaction to the ornate style and idealistic nature of 19<sup>th</sup> century romanticism. Among its earliest proponents were some hugely influential literary figures, including Ezra Pound and T. S. Elliot.

- (A) modernist poetry
- (B) First World War
- (C) idealistic nature
- (D) romanticism

### 2

The most distinctive feature of Jackson Pollock's work is his use of liquid paints. He originally learnt the paint pouring method from Mexican artist David Alfeiro Siqueres at a special workshop. However, Pollock took this idea further. He developed his own distinctive drip technique that required more viscous paint.

- (A) use of liquid paints
- (B) paint pouring method
- (C) special workshop
- (D) drip technique

### 3

The dragon dance is one of the most important cultural traditions in China. These performances, which are generally conducted to celebrate important occasions, require the participation of several skilled dancers. Positioned at various places along the spine of the dragon, they represent its movements through lifts, dips, thrusts and sweeps.

- (A) traditions
- (B) performances
- (C) occasions
- (D) dancers

4.

The works of Shakespeare and other English Renaissance playwrights are now admired as great literature. However, these plays were written solely to appeal to their contemporary audience. As it was the main form of entertainment for ordinary people at the time, the theater was not regarded as a venue for high art.

- (A) literature
- (B) audience
- (C) theater
- (D) art

5.

The scientific community has recently observed an alarming decline in global amphibian populations. While there is no general consensus about what caused this, many experts believe that habitat destruction is to blame. Amphibians are dependent on a delicate balance of water and land throughout their life-cycle, so they are vulnerable to habitat losses.

- (A) alarming decline
- (B) general consensus
- (C) habitat destruction
- (D) delicate balance

6.

Broadly defined, symbiosis is the long-term interaction of two distinct life forms. For both organisms involved, these interactions are often mutually beneficial, as in the relationship between flowers and bees. However, some can also be harmful. Parasitic relationships, in which one organism benefits at its hosts' expense, are also symbiotic.

- (A) life forms
- (B) organisms
- (C) interactions
- (D) parasitic relationships

7.

In high altitude zones, only a few plant species are able to survive because of the extreme climate. These regions are affected by droughts during summers, so alpine plants need special adaptations like deep root structures and different cushion shapes. These allow them to draw up and retain moisture more easily.

- (A) alpine plants
- (B) special adaptations
- (C) root structures
- (D) cushion shapes



8

A few insect species display bioluminescence in their larval form, and in this phase they are commonly known as glowworms. The best-known one is the fire-fly, which can be found throughout the world. Fire-flies emit a yellow-green glow which scientists believe serves to warn predators of their toxicity.

- (A) species
- (B) bioluminescence
- (C) form
- (D) phase

9

Different types of salt come in a wide variety of shades and colors. The degree of transparency that the salt possesses largely depends on the size of the individual salt crystallites. In general, the smaller they are, the more opaque the substance will appear, because light tends to reflect off the grain boundaries.

- (A) types
- (B) shades
- (C) crystallites
- (D) boundaries

10

In order to understand how magnetism works, it is important to realize that all electrons are slightly magnetic. In the majority of substances, however, the magnetic forces cancel each other out because the alignment of the electrons is random. What magnets do is unify it, ensuring that the magnetic forces work cooperatively.

- (A) how magnetism works
- (B) majority of substances
- (C) magnetic force
- (D) alignment of the electrons

11

When inventors developed high-powered microscopes in the early 20<sup>th</sup> century, it allowed scientists to observe matter at an atomic level. However, the conclusions they drew about the role of atoms were not without historical precedent. In fact, thousands of years ago, Leucippus and Democritus were the first to raise this point.

- (A) inventors
- (B) scientists
- (C) conclusions
- (D) atoms

12▪

The soil cycle begins when a geological event forces new rock to the surface, generally through volcanic activity. This porous igneous rock quickly absorbs rainwater which provides small quantities of nutrient-bearing organic material from surrounding areas. After a short time, the rock is able to support plant life.

- Ⓐ soil cycle
- Ⓑ volcanic activity
- Ⓒ igneous rock
- Ⓓ rainwater

13▪

Written at the close of the 18<sup>th</sup> century, Adam Smith's *The Wealth of Nations* is considered a seminal work. It remains enormously influential for modern thinkers on political economy. Above all, Smith emphasized the importance of the free market, arguing that it alone could ensure the efficient distribution of goods and wealth.

- Ⓐ *The Wealth of Nations*
- Ⓑ seminal work
- Ⓒ political economy
- Ⓓ free market

14▪

Normative influence can be defined as behavior motivated by the desire to fit in with the group. Psychologists have conducted numerous experiments to show how this process works. In each, it was proven that most people go out of their way to avoid standing out or contradicting the others in the group.

- Ⓐ behavior
- Ⓑ group
- Ⓒ experiment
- Ⓓ process

15▪

The feminist movement's origins can be traced back to the mid-19<sup>th</sup> century, when the male-dominated leadership of western societies oppressed the rights of women. This period saw the establishment of women's suffrage groups across America and Europe, whose primary role was to advocate for women's right to vote and thus become equal participants in civil society.

- Ⓐ feminist movement
- Ⓑ male-dominated leadership
- Ⓒ suffrage groups
- Ⓓ equal participants





## practice test\_level 2



>> Read passages 1 to 4 and answer the following questions for each.

### 1

Unlike their European counterparts, in American dance emphasizes moving smoothly, keeping one's feet close to the ground, and even scuffing or stamping. The music and dances are often livelier and simpler, and more of the pleasure from the dancers is extracted from forceful release movements, especially in swinging, which is common in all these dances. The most common formation of traditional American dances is the "contra" line, which has lines of men facing lines of women. One of the most popular styles adopted in the Southern states is the Country Dance, which is predominantly a figure dance with couples forming figures as they maneuver on the dance floor. Some common formations they create with their dancing and interweaving paths are circles, stars, or waves. These movements are synchronized to country music and are upbeat, with steps performed with a hint of a bounce on the feet.

In recent times, Latin American dances have also gained in popularity in many parts of the country. Dances like the salsa, the rumba, the cha-cha-cha and many others are widely known and appreciated. Just as importantly, though, the distinctive sensuality and flair of these dances has begun to rub off on other forms of dance. These two factors combined represent a major transformation in American dance. They clearly reflect the growing influence of Latin America on mainstream American culture, which has been facilitated by increased immigration from countries such as Mexico, Puerto Rico and Cuba.

1-1. The word they in paragraph 1 refers to

- (A) lines
- (B) couples
- (C) figures
- (D) formations

1-2. The word which in paragraph 2 refers to

- (A) major transformation
- (B) American dance
- (C) growing influence
- (D) mainstream American culture

## 2

One of the key characteristics of sheep is their hardiness and endurance. Some other domestic animals, in particular cattle, are relatively sensitive to changes in their habitat. Sheep, on the other hand, have the capacity to adapt to different weather conditions. Accordingly, except in the case of infant lambs, they are generally able to survive large and unseasonable fluctuations in temperature. A few breeds even have the ability to adjust their metabolism significantly, an attribute which helps them to keep a fairly constant body temperature no matter how hot or cold the prevailing climate is. On top of **this trait**, all sheep have an inbuilt feature that allows them to greatly vary their daily water intake depending on its availability. They can also make changes to their diet if necessary. As a result of these factors, they are able to live and thrive in temperate forests, deserts, and virtually every climate in between.

Looking at a list of the largest national producers of sheep, one can see how truly versatile these animals are, for they fulfill essential economic roles in places all over the planet, in far-flung countries such as China, New Zealand, and Argentina. The reason for **their** global economic importance is partly due to the fact that domestic sheep are one of the most ancient kinds of livestock to be raised by humans. A second factor is that they yield many products, such as milk, cheese, wool, sheepskin, and meat. This variety ensures that farmers can be confident of receiving a good return on their investment.

2-1. The phrase **this trait** in paragraph 1 refers to

- Ⓐ capacity to adapt to different weather conditions
- Ⓑ large and unseasonable fluctuations in temperature
- Ⓒ ability to adjust their metabolism
- Ⓓ attribute which helps them to keep a fairly constant body temperature

2-2. The word **their** in paragraph 2 refers to

- Ⓐ national producers
- Ⓑ countries
- Ⓒ domestic sheep
- Ⓓ livestock



### 3

Scientists across the world have devoted a great deal of attention to understanding how and why mammoths became extinct. There has also been a great deal of speculation and analysis as to why, out of 26 elephantoidea species to have existed at some point in history, only two remain. Some have hypothesized that the extinct species were hunted and wiped out by man, an argument which is partially supported by fossilized mammoth bones found with charring, embedded projectile objects, and butcher marks. Others, however, doubt the extent to which primitive humans would have been able to achieve this feat, and they look to other factors to explain the species' disappearance. The main hypothesis they put forward is that changes in the mammoths' habitat forced them into extinction.

According to this theory, mammoths were ideally suited for the frigid climates of the last ice age. Special adaptations, including their huge bulk and thick fur, were so beneficial that they enabled mammoths to disperse and inhabit many niches across the continents. However, this advantage took the opposite turn in the face of radical changes to their environments later on. Having become overspecialized, they were unable to adjust to these, and died out gradually. This theory also helps to explain why only the direct descendants of the African and Indian elephants among the wider elephantoidea family managed to survive. It is known that these species possessed both specialized and general characteristics enabling them to make adaptations to an ever-changing environment.

3-1. The word **them** in paragraph 1 refers to

- (A) species
- (B) changes
- (C) mammoths
- (D) climates

3-2. The word **these** in paragraph 2 refers to

- (A) special adaptations
- (B) niches
- (C) continents
- (D) radical changes

The fifth stage of the sleep cycle is known as REM, which stands for “rapid eye movement.” This is when dreaming occurs, and it consists of about 20 percent of sleep overall, beginning about 70 to 90 minutes after one falls asleep. The previous four cycles are grouped into one sub-stage of sleep called NREM or “non-rapid eye movement” because they have similar physiological states that do not vary in comparison to the shift that occurs in REM. The brain and body become active during the REM stage, with blood pressure and heart rate increasing. Two distinctive states are experienced during REM sleep, the phasic state and the tonic state, which exhibit important differences. The former is intermittent and is characterized by rapid eye movements and muscle twitches, whereas the latter is more persistent and includes muscle inhibition.

Researchers still do not fully comprehend the function of REM sleep and dreaming. The most popular theory is known as the Ontogenetic Hypothesis, and it suggests that REM sleep aids in brain development. Young animals, including humans, have high amounts of REM sleep during the period that the central nervous system forms mature neural connections. This activity-development function reveals that REM sleep is a necessary mechanism for the stimulation of brain growth. Recent data showed that when REM sleep was removed from infant animals during that critical time period, immaturity of the central nervous system was prolonged, and it was more vulnerable to the effects of abnormal sensory input because the synaptic arrangement necessary for brain development was hindered.

4-1. The phrase **The former** in paragraph 1 refers to

- Ⓐ shift
- Ⓑ REM sleep
- Ⓒ phasic state
- Ⓓ tonic state

4-2. The word **it** in paragraph 2 refers to

- Ⓐ brain growth
- Ⓑ critical time period
- Ⓒ central nervous system
- Ⓓ synaptic arrangement





## practice test\_level3



>> Read passages 1 and 2 and answer the following questions for each.

1

### Circadian Rhythms

Much of the activity of life on Earth is governed by organisms' innate circadian rhythms. The term for these phenomena is taken from Latin words meaning "approximately one day," as they correspond roughly to the planet's 24-hour cycle of day and night. In mammals, circadian rhythms are determined by a kind of internal clock, which in turn is guided by zeitgebers, external signals that synchronize the clock with environmental cycles. Common zeitgebers include temperature, social interplay, and light. Such cues prepare organisms for periodic changes in their environment, dictating their sleeping and eating patterns and moderating biological functions like hormone production, body temperature, and cell regeneration, all with the purpose of increasing their chances of survival.

The effect of light, the most important and common zeitgeber, on circadian rhythms has been widely researched. Scientists have discovered that mammals possess special photoresponsive retinal cells that transmit information about ambient light from the eye to the suprachiasmatic nucleus, a part of the brain that houses the biological clock. The information is interpreted within this organ and then passed along to structures responsible for hormone production and body temperature. One such structure is the pineal gland, a pea-sized body at the center of the brain that produces the hormone melatonin, believed to control cycles of sleep and activity. By influencing the production of melatonin in the bodies of mammals, light perception directly regulates their daily rhythms. In diurnal vertebrates, greater intensities of environmental light correspond to higher levels of activity, while those that are nocturnal experience the opposite relationship.

In many species of bat, the effect of light on circadian rhythms plays an survival essential role, timing these mammals' active periods so that they coincide with the peaks in insect abundance that occur at dusk and dawn. In other words, light aligns the animals' circadian rhythms in a way that maximizes their chances of finding food, while at the same time discouraging them from wasting energy hunting during

periods when food sources are difficult to access. The circadian rhythms of bats are so sensitive to light, in fact, that one brief, dull flash of light can reset an individual's entire cycle of sleep and activity.

1-1. The word **they** in paragraph 1 refers to

- Ⓐ organisms
- Ⓑ phenomena
- Ⓒ words
- Ⓓ mammals

1-2. The phrase **this organ** in paragraph 2 refers to

- Ⓐ the eye
- Ⓑ the suprachiasmatic nucleus
- Ⓒ the brain
- Ⓓ the pineal gland

1-3. The word **those** in paragraph 2 refers to

- Ⓐ rhythms
- Ⓑ vertebrates
- Ⓒ intensities
- Ⓓ levels

1-4. The word **them** in paragraph 3 refers to

- Ⓐ peaks in insect abundance
- Ⓑ animals
- Ⓒ circadian rhythms
- Ⓓ food sources



## Government Intervention

From the very beginnings of the American nation, there have been those strongly opposed to any government role in the country's economy. The founders of the American colonies and the nation they established were deeply influenced by the tyranny and injustices of the European empires from which they had fled for the New World. In their view, the Old World monarchies exercised far too much control over the lives of ordinary citizens. The American colonialists wanted to base their new system on democratic ideals, distancing themselves from these political precedents. The same principles guided their beliefs on economics. The prevailing ideology was termed *laissez faire*, a French phrase meaning "leave it alone." Private enterprise, the theory went, should be allowed to act and evolve on its own, free from the meddling of government.

By the close of the nineteenth century, the system of *laissez faire* had led to some negative consequences. Permitted to grow unchecked, the largest industries had amassed significant power. Because they used this power first and foremost to increase their profits, businesses implemented policies that harmed both their consumers and workers. The federal and state governments decided to intervene, introducing a number of laws that curbed the power of big business, safeguarded consumers, and protected workers' rights.

In the 1930s, the American economy faced a new challenge—the Great Depression. *Laissez faire* management alone had no chance of solving the financial crisis gripping the nation. Instead, it was Franklin Roosevelt and his bold New Deal—a major set of reforms to key parts of the economy—that slowed the downturn and began to produce improvements. This package introduced numerous programs and agencies aimed at creating jobs, stabilizing prices, and restoring public confidence in the economy.

As time progressed, government regulation of the economy increased, despite tenacious resistance from some thinkers. Once more, the changes safeguarded the interests of the general public against those of money-driven big business. For example, recent initiatives have focused on protection of the environment. In the 1960s and 1970s, concern among citizens and environmental organizations over the effects of industrial pollution and unfettered resource extraction led to the creation of the Environmental Protection Agency and the passage of laws limiting industry's access to sensitive materials and ecosystems.



- 2-1. The phrase these political precedents in paragraph 1 refers to
- Ⓐ Old World monarchies
  - Ⓑ American colonialists
  - Ⓒ democratic ideals
  - Ⓓ same principles
- 2-2. The word they in paragraph 2 refers to
- Ⓐ consequences
  - Ⓑ businesses
  - Ⓒ consumers and workers
  - Ⓓ governments
- 2-3. The phrase This package in paragraph 3 refers to
- Ⓐ Great Depression
  - Ⓑ *laissez faire* management
  - Ⓒ financial crisis
  - Ⓓ New Deal
- 2-4. The word those in the paragraph 4 refers to
- Ⓐ thinkers
  - Ⓑ changes
  - Ⓒ interests
  - Ⓓ initiatives

# word brush-up

▪ Choose one that is closest in meaning to the shaded word or phrase.

01 coincide with the period

- (A) begin after
- (B) correspond to
- (C) leave behind
- (D) go beyond

02 a viscous substance

- (A) acidic
- (B) foul
- (C) weak
- (D) sticky

03 a venue for the performance

- (A) path
- (B) place
- (C) review
- (D) detail

04 thrust the object away

- (A) push                      (B) give
- (C) pack                      (D) blow

05 a random orientation

- (A) simple                      (B) typical
- (C) blurry                      (D) arbitrary

06 provide a precedent

- (A) gift
- (B) idea
- (C) example
- (D) reason

07 a relatively porous rock

- (A) fragile
- (B) spongy
- (C) heavy
- (D) damp

08 steps synchronized to the beat

- (A) examined
- (B) tuned
- (C) matched
- (D) switched

09 rub off on people's attitudes

- (A) criticize                      (B) influence
- (C) interpret                      (D) manage

10 fluctuations in temperature

- (A) variations                      (B) decreases
- (C) regulations                      (D) trends








- 11 Shamans first emerged in Northern Asia and Mongolia. They were, and in many places, still are respected as spiritual **figures** possessing great wisdom and power.
- (A) items (B) dignitaries (C) features (D) ideals
- 12 Towards the end of the Republic, most ordinary citizens regarded the ruling classes as being completely out of touch with their concerns. In a bid to **distance themselves from** this legacy, Roman emperors deliberately cultivated a populist image, putting on festivals and games for the masses.
- (A) reserve judgment on (B) stop expanding on  
(C) avoid being connected with (D) continue being reminded of
- 13 Traditionally, scientists had believed that only humans possessed the ability to use complex tools. They assumed this was a **feat** that primates and other animals were incapable of, at least to any degree of sophistication.
- (A) need (B) accomplishment (C) item (D) characteristic
- 14 Although most American citizens accepted the presence of slavery in the early 19<sup>th</sup> century, many objected to it on moral grounds. Several individuals even **went out of their way** to help runaway slaves, providing them with financial support and shelter.
- (A) established their own method (B) formed a movement  
(C) made a special effort (D) led a campaign
- 15 Karl Marx's *Das Kapital* is considered a **seminal** work on political economy. It has helped to inspire revolutions in countries around the world, and its contents remain controversial to this day.
- (A) divisive (B) extremely useful  
(C) scientific (D) highly influential

answer 01 (B) 02 (D) 03 (B) 04 (A) 05 (D) 06 (C) 07 (B) 08 (C) 09 (B) 10 (A)

11 (B) 12 (C) 13 (B) 14 (C) 15 (D)

# simplification

-  speed keyword
-  case example
-  smart solution
-  practice test
-  word brush-up

+ speed



# keyword

## simplification문제는

문장의 재구성 ▼ 이다.

**sentence simplification**문제는 지문에 음영으로 처리된 문장에서 핵심 정보(**essential information**)만을 뽑아 보다 간결한 문장으로 재구성한 선택지 중 가장 잘된 것을 고르는 문제이다. 이를 위해서는 일차적으로 주어진 문장의 복잡한 문장 구조를 파악하고, 핵심 정보만을 뽑아 간결한 다른 표현으로 재진술(**restatement**)할 수 있는 능력이 요구된다.

매 지문마다 평균 한 문제씩 등장하며 질문지는 항상 다음과 같은 형태를 취한다. 지시문에 오답의 조건이 제시되어 있으므로 주의 깊게 읽어보자.

Which of the sentences below best expresses the essential information in the highlighted sentence in the passage?  
*Incorrect* choices change the meaning in important ways or leave out essential information.



## case example

### 대표 문제

Read the passage and answer the question.

#### TOEFL Reading passage

review | help | back | next

It is widely assumed that, at any location, the sun is at its highest point in the sky at noon. But strictly speaking this is incorrect, as the precise “highest point” differs slightly for each specific longitude. Instead, the world is divided up into 24 different longitudinal time zones, where the “standard time” in each differs from its neighbors by one hour. The reason daily life operates according to standard time zones is that it would be incredibly complicated and impractical for every place on Earth to keep its own specific time, and so localized times are only used by scientists for the purpose of observing particular astronomical phenomena.

Which of the following best expresses the essential information in the highlighted sentence? *Incorrect* answer choices change the meaning in important ways or leave out essential information.

- Ⓐ It is a lot more practical and straightforward to use standard time zones for daily life rather than specific localized times.
- Ⓑ Localized times are generally only employed by astronomers, while everyone else uses standard time zones to avoid confusion and complexity.
- Ⓒ Certain astronomical phenomena are difficult for scientists in slightly different locations to track unless they use particular localized times.
- Ⓓ Except in the field of astronomy, everybody operates according to standard time zones rather than using particular times for each individual location.

answer Ⓑ

## Case 분석

case example에서 볼 수 있듯이 지문에 주어지는 문장은 음영으로 처리되며 보통 30~50단어 분량 내외의 한 문장으로 이루어져 있는 반면 선택지는 15단어 분량의 문장으로 축약된다는 것을 알 수 있다. 일차적으로 지문에 주어진 음영 문장을 살펴보자.

The reason daily life operates according to standard time zones is that it would be incredibly complicated and impractical for every place on Earth to keep its own specific time, and so localized times are only used by scientists for the purpose of observing particular astronomical phenomena.

일상이 표준시에 의해 운영되는 이유는 지구상의 모든 곳에서 그곳의 특정 시간을 지키는 것이 매우 복잡하고 비실용적일 것이기 때문이며 그래서 지역시는 과학자들이 특수한 천문학적 현상을 관찰하는 목적으로만 사용된다.

문장을 살펴보면 지역시(localized time)와 표준시(standard time)를 서로 비교하면서 '일상적으로는 편리성 때문에 표준시가 사용되며 지역시는 천문학적 현상 관찰의 목적으로만 사용된다'는 것이 내용의 골자임을 알 수 있다. 이런 내용을 빠짐없이 가장 잘 표현한 선택지는 (B)로 볼 수 있다.

Localized times are generally only employed by astronomers, **대조 구문 구성** while everyone else uses standard time zones to avoid confusion and complexity.

지역시는 일반적으로 천문학자들만 사용하는 반면 그 밖의 모든 사람들은 혼란과 복잡함을 피하기 위해 표준시를 사용한다.

지역시와 표준시를 서로 대비하고 있으므로 while구문을 사용하여 문장을 재구성한 것에 주의한다.

## 출제 의도

### ❶ 복잡한 문장의 의미를 제대로 파악할 수 있는지 확인한다.

문장 재구성용으로 지문 속에 주어지는 문장은 대부분 특수한 구문이 포함되어 있거나 중·복문으로 복잡한 구조를 띄고 있는 것이 특징이다. 따라서 수험자들이 이런 복잡한 구조의 문장을 제대로 이해하고 핵심 정보를 뽑아낼 수 있는지 확인한다.

### ❷ 다른 표현으로 재진술할 수 있는지 확인한다.

음영문장에서 핵심 정보를 정리했다고 하더라도 이를 다른 표현으로 적절하게 표현할 수 있어야 문제를 풀 수 있다. 이 유형에서는 재구성 후 문장의 길이가 반정도로 줄어든게 되므로 단지 어휘나 구를 단편적으로 paraphrasing하는 것이 아니라 문장 전체를 재진술(restatement)할 수 있어야 하고 이런 능력을 갖추고 있는지 테스트한다.



## smart solution

**simplification**문제는 단지 음영문장의 내용과 일치하는 선택지를 고르는 것이 아니다. 오답의 경우에도 지문에 주어진 음영문장의 내용 일부를 포함하고 있는 경우가 많으므로 어떤 선택지가 문장의 요지를 더 잘 담고 있는지를 판단하는 훈련에 중점을 두어야 하며 원래 문장의 반 정도 길이로 재구성하는 연습을 병행해야 한다.

### 순서에 따라 훈련한다.

**simplification**유형의 풀이 순서를 정리하면 다음과 같다.

**Step 1** 지문 속 주어진 문장을 차근히 읽고 핵심 정보를 파악한다.

문장이 복잡해질수록 그 문장에는 다양한 **idea**들이 담기게 되는데 이 다양한 **idea** 중에서 핵심 **idea**가 무엇이고 생략할 수 있는 부가 **idea**는 무엇인지 선별해 낼 수 있어야 한다. 일반적으로 관계절, 동격, 예시에 담긴 내용은 부가 정보로 볼 수 있지만 우리말로 정확하게 해석한 후 핵심 정보를 골라내는 것이 가장 좋다.

**Step 2** 선택지를 하나씩 살피면서 가장 근접한 내용을 선택한다.

선택지를 읽으면서 마음 속에 정리한 핵심 정보와 가장 근접한 선택지를 고른다.

**Step 3** 애매한 정답 후보가 있을 경우 어떤 것을 핵심 정보로 담는 것이 좋을지 판단한다.

애매한 정답 후보들은 대부분 담고 있는 핵심 정보에서 약간의 차이를 보인다. 정답 후보들을 서로 비교하면서 어떤 내용이 더 핵심 정보로 적합할지 고민해 정답을 결정한다.

### 구문상의 단서를 이용한다.

이 유형에서 문제 풀이의 관건은 주어진 문장을 정확하게 해석하여 핵심 정보를 파악하는 일이다. 구문적 단서를 활용한 문장 전환 방식을 훈련해 둔다.

**❶ The problem is that ~**

One potential **problem is that** employers may **feel threatened** by the introduction of a comprehensive performance evaluation system.

가능성 있는 하나의 문제점은 포괄적 성과 평가 시스템의 도입으로 고용자들이 위협을 느낄 수 있다는 것이다.

→ Bringing in a new performance review system might make workers **uncomfortable**.

새로운 성과 평가 시스템의 도입은 직원들을 불편하게 만들 것이다.

‘The problem is that ~’은 흔히 문제점을 제기할 때 쓰는 구문이므로 문제점이 핵심 내용으로 요약될 수 있다.



## ② whereas

Many younger students prefer to acquire knowledge through kinesthetic learning, meaning that they physically carry out activities, **whereas** older people are often more accustomed to verbal learning.

많은 어린 학생들의 경우 신체적으로 행동을 수행하는 동작을 통한 학습을 선호하지만 나이가 든 사람들은 대부분 말로 배우는 것에 더 익숙해져 있다.

→ The young learn through physical activities **but** the old get knowledge through words.

어린 사람들은 신체활동을 통해 배우지만 나이 든 사람은 말을 통해 지식을 얻는다.

**whereas**는 대조할 때 사용되는 접속사이므로 비교 대상의 상반되는 특징만을 뽑아 한 문장으로 요약하면 된다. meaning ~이하는 kinesthetic learning을 부연 설명하는 부가 정보로 볼 수 있으므로 요약문에서는 삭제해도 좋다.

## ③ reasoning that ~

Many scientists initially believed that the recent global warming trend was a natural phenomenon, **reasoning that** human activities could not possibly be substantial enough to impact on the atmospheric conditions of the entire planet.

처음에는 많은 과학자들이 인간의 활동이 전 지구적인 대기 조건에 중대한 영향을 미칠 가능성은 없기 때문에 최근 지구온난화 움직임이 자연스러운 현상이라고 생각했다.

→ Scientists thought global warming was natural **because** they assumed humans could not cause that much damage. 과학자들은 인간이 그다지 심한 손상을 입힐 수는 없으므로 지구온난화가 자연스러운 것이라 생각했다.

**reasoning that** ~은 '~라는 근거로'라는 의미로 이유를 나타내는 문장으로 재구성될 수 있다. 주장과 그 근거를 드러내는 문장으로 요약하면 된다.

## ● 대표 오답 유형을 숙지한다.

매초에 문제의 지시문에서 "Incorrect choices change the meaning in important ways or leave out essential information. 오답은 의미를 중요한 방식으로 바꾸거나 핵심 정보를 누락시킨다."고 한 점에 주목해야 한다. 앞선 case example의 오답 선택지를 통해 위의 두 가지 사항을 확인해 보자.

### ❶ 주어진 문장의 내용과 다른 문장

Ⓒ Certain astronomical phenomena are difficult for scientists in slightly different locations to track unless they use particular localized times. → unless 앞의 내용은 지문에서 언급되지 않았음

### ❷ 주어진 문장에서 핵심 정보가 누락된 문장

Ⓐ It is a lot more practical and straightforward to use standard time zones for daily life rather than specific localized times. → 지역시의 천문학적 목적으로의 사용 내용이 누락됨

Ⓓ Except in the field of astronomy, everybody operates according to standard time zones rather than using particular times for each individual location. → 정답에 근접하나 표준시 사용 이유가 누락됨



## practice test\_level 1



>> Read paragraphs 1 to 8 and choose the sentence that best expresses the essential information in the highlighted sentence in each passage. *Incorrect* choices change the meaning in important ways or leave out essential information.

### 1

Recent research suggests that genetics may play a more important role in the aging process than was previously assumed. Belgian scientists isolated an “aging gene” in recent tests, and their preliminary findings indicate that its specific makeup may be a key factor in determining an organism’s life span.

- (A) Belgian scientists are planning to explore the idea that a special “aging gene” might contribute to the aging process.
- (B) According to recent scientific findings, an organism’s life span is affected by changes in its genetic structure over time.
- (C) Belgian researchers have succeeded in manipulating the “aging gene” that is known to play a part in determining an individual’s life span.
- (D) A recent discovery by Belgian researchers suggests that the composition of a specific gene may significantly impact on the aging process.

### 2

There was severe overcrowding and pollution in cities, most famously in Manchester, in the north of England, where Britain’s booming textile industry was centered. These urban areas were initially ill-equipped to handle such a massive influx of people, and living conditions were barely tolerable. Moreover, industrial laborers, who had been attracted to these cities by the promise of employment in factories, had to put up with working conditions that were almost too unpleasant to bear.

- (A) Factory owners failed to keep promises that they had made to their workers about employment conditions.
- (B) Workers drawn to the cities for the purpose of working in factory jobs faced terrible conditions.
- (C) City workers often complained because the environment inside the factories was too unpleasant.
- (D) Even though factory work was hard and uncomfortable, people still came to the cities to secure these types of jobs.

### 3

Except for in the case of short-term weather systems, like thunderstorms, the movement of the wind does not simply flow down the gradient, as it is also influenced by the Earth's rotation. Accordingly, winds flow around high and low pressure areas; in the Northern Hemisphere, they are deflected to the right, and in the Southern Hemisphere, to the left.

- Ⓐ Short-term weather systems like thunderstorms help to demonstrate the process whereby air flows down the pressure gradient.
- Ⓑ The rotating force of the Earth is actually what causes air to flow down the pressure gradient, and this phenomenon produces wind.
- Ⓒ The planet's rotation affects the wind so, aside from in a few minor weather events, air does not flow directly.
- Ⓓ The effect of the pressure gradient can be enhanced by the Earth's rotation, resulting in strong winds and thunderstorms.



### 4

It was not until 1987 that the Theban Mapping Project, an organization surveying sites in the Valley of the Kings in Egypt, located the entrance of the Ramses' tomb and began excavations. Rather than the minor tomb described by the nineteenth-century archaeologist, they actually found a family mausoleum housing a lot of paintings and objects, as well as the remains of Ramses II's many sons.

- Ⓐ When archaeologists opened the tomb, they were surprised to discover that it was the tomb of Ramses II's sons.
- Ⓑ The tomb of Ramses II's sons was, in essence, the opposite of the tomb of their father, for it was filled with artifacts.
- Ⓒ Once thought to be insignificant, the tomb surprisingly held many artifacts and turned out to be the burial place of the sons of Ramses II.
- Ⓓ Before the Theban Mapping Project opened the tomb, they expected that it would be a small, unimportant excavation.

## 5

The innovation of the pendulum in the mid-1600s enabled the creation of the popular “long-case” clocks, later known as “grandfather” clocks. Originally, pendulum clocks had simply been hung on walls with no extra ornamentation. Towards the end of the seventeenth century, however, the English innovation of the wooden case was added, most likely to keep dust away from the delicate internal mechanisms, as well as to improve the appearance by concealing some of the larger apparatus.

- Ⓐ Some of the larger elements that made up early English clocks were unsightly, so wooden cases were developed to hide them from view.
- Ⓑ The English began to create cases for their clocks in the late 1700s, both for artistic reasons and to protect the clock itself.
- Ⓒ Wooden cases were one of the most important innovations in seventeenth-century clockmaking, and were an art in their own right.
- Ⓓ Before clocks were covered with cases in the late 1700s, many were ruined by dust that interfered with the mechanical components.

## 6

There was essentially a “mortality revolution” in the eighteenth century. Developed nations experienced drops in death rates during this period, when, because of the Industrial Revolution, European nations witnessed the introduction of many new and beneficial technologies that raised standards of living and essentially overcame famine and epidemics. As a result of this phenomenon, the population of the world climbed, reaching a billion people in the year 1802.

- Ⓐ Many nations developed as a result of the Industrial Revolution, which produced a great deal of new technology.
- Ⓑ Global death rates fell because European countries overcame famine and epidemics by raising the standard of living.
- Ⓒ In developed countries, the Industrial Revolution lowered death rates because technology conquered famine and disease and improved people’s lives.
- Ⓓ An increased standard of living and steady death rates spurred the onset of the Industrial Revolution and its technological advances.

## 7

In 1972, psychologist Richard Bootzin introduced a new method—the stimulus control approach—which was designed to re-associate the bed and bedroom with sleep. Bootzin theorized that when the timing of bedtime and the setting of the bedroom become associated with repeated unsuccessful attempts to sleep, then as time passes on, they become cues that maintain the insomnia. The stimulus control method achieves its goal of positive associations by curtailing sleep-incompatible activities in the bedroom. In doing so, it helps individuals to establish a consistent sleep-wake schedule.

- (A) Bootzin maintained if sufferers link unsuccessful sleep attempts with their bedroom environment, then they will experience some relief from insomnia.
- (B) Bootzin hypothesized that insomniacs continue to suffer because they associate unsuccessful sleep attempts with their sleeping habit and bedroom environment.
- (C) Bootzin's assumptions were that insomnia stems from the timing of one's nightly routine and bedroom setup, leading to repeated unsuccessful sleep attempts.
- (D) Bootzin's theory explains that if treatment is sought early on, insomnia sufferers will begin to link their bedroom environment to sleep and find rest.

## 8

In the 19<sup>th</sup> century, James D. Forbes designed the first pendulum-based seismoscope to detect and measure earthquakes. Unfortunately, a major limiting factor of Forbes's accessory was the friction of the pencil on the paper, so the seismoscope had limited sensitivity. The device recognized just two earthquakes that occurred during the time of its use whilst failing to register several dozen other local earthquakes. Even though this and other early experiments with seismoscopes were somewhat unsuccessful, they provided future scientists with a base of knowledge that would lead to the development of sophisticated equipment capable of observing even the most minute ground motions.

- (A) The pendulum seismoscope represented an important advancement that eventually developed into the sensitive equipment used today.
- (B) Early seismographs were mostly unsuccessful, and, unfortunately, provided future generations with little information about the history of earthquakes.
- (C) Later scientists learned from earlier, unsuccessful seismoscopes and were able to improve upon them, creating equipment responsive to minor vibrations.
- (D) Modern seismoscopes are far more successful than their earlier counterparts and can easily detect even the tiniest ground movements.





## practice test\_level 2



>> Read passages 1 to 4 and answer the following questions.

### 1

Taxonomy, one of the oldest and most basic processes of defining a species, examines organisms' morphology—that is, their physical structure. This process holds that animals or plants sharing certain similar or identical physical forms are of the same species. While morphological differentiation has been employed for centuries, and can be useful in formulating general judgments on the relationships between different populations, it is fundamentally flawed. Studies have shown that individuals belonging to genetically different species can share similar physical forms, while members of closely related populations may exhibit different morphologies, so categorizations based solely on such physical features cannot provide a proper answer to what defines a species.

Another commonly used method is the classification of organisms according to sexual reproductive ability. If two organisms can mate to produce offspring, this definition states that they belong to the same species. Although mostly practical when describing large, complex life forms, the main problem with this approach is that it disregards the many organisms that reproduce asexually. Even when dealing with common plants and animals, the definition presents certain problems. When dealing with two populations isolated by immense distances, it is often impossible to determine whether they would be naturally capable of producing offspring, simply because they would almost certainly never encounter each other in the wild without the assistance of human researchers. Sometimes, too, members of two different species can successfully mate to create an entirely new species, but this species is itself infertile. These situations put serious limitations on any definition of species based on reproductive ability.



- 1-1. Which of the sentences below best expresses the essential information in the highlighted sentence in paragraph 1? *Incorrect* choices change the meaning in important ways or leave out essential information.
- (A) It is proven that physically-based classifications can be inaccurate because genetically dissimilar species might look similar, and similar species might look different.
  - (B) Studies indicate that species that are genetically related tend to exhibit most of the same morphological features.
  - (C) Although it is unusual, species that exhibit different morphologies can in fact be similar in terms of their genetic composition.
  - (D) When defining a species, it is important to look at its genetic makeup as well as its physical attributes before categorizing it in comparison with other animals.
- 1-2. Which of the sentences below best expresses the essential information in the highlighted sentence in paragraph 2? *Incorrect* choices change the meaning in important ways or leave out essential information.
- (A) Researchers have managed to observe organisms from two distant populations successfully come together to produce offspring.
  - (B) In some studies, the mating of members of two different species is due more to human intervention than natural conditions.
  - (C) It is sometimes impossible for researchers to know whether two separated populations would be able to interbreed in the wild.
  - (D) Since many organisms live in isolated habitats, they are not capable of producing offspring with members of other populations.

Rice has functioned as the primary staple crop of civilizations throughout Asia and the rest of the world for thousands of years, evidenced by the fact that the word for “food” in many languages is the same as the word for “rice.” Cultivation of this crop is possible in a variety of environments, as long as temperatures are not too extreme and abundant water resources are available. In most regions, however, wet-cultivation methods are the most commonly practiced.

In wet-rice cultivation, seedlings are sprouted in special nursery beds before being individually transplanted to paddies—fields submerged in roughly two to six inches of water. Paddies are typically located near natural sources of water such as rivers or marshes, although it is possible to construct them on hillsides if adequate irrigation systems are in place. Among the benefits of wet-rice cultivation is that the plants develop faster than they would if grown in drier soils, enabling the harvest of two or three crops each year. In addition, the water delivers large amounts of nutrient-rich soil to the paddy, lessening the need for artificial fertilizers.

Yet wet cultivation of rice is not without its disadvantages. For one thing, it can be difficult to maintain proper water levels within paddies. Flooding events cause rivers to overflow, inundating crops and destroying them; on the other hand, periods of drought may drain paddies and inhibit the rice from growing properly. Construction of irrigation systems is therefore necessary to ensure paddies are not deprived of water, which, along with the processes of transplanting seedlings, plowing paddies, and harvesting the crops, makes wet-rice cultivation extremely labor-intensive.



- 2-1. Which of the sentences below best expresses the essential information in the highlighted sentence in paragraph 1? *Incorrect* choices change the meaning in important ways or leave out essential information.
- (A) For thousands of years, rice has been an essential staple crop and is known by many names in languages all over the world.
  - (B) That many languages use the same word for “rice” and “food” can be attributed to the crop’s long and international history as an essential dietary staple.
  - (C) Millennia ago people cultivated the first rice crops that would eventually become staple food sources for civilizations all over the globe.
  - (D) Rice is an important staple crop in most Asian cultures, where the word “rice” is often used to refer to food in general.
- 2-2. Which of the sentences below best expresses the essential information in the highlighted sentence in paragraph 3? *Incorrect* choices change the meaning in important ways or leave out essential information.
- (A) Creating the irrigation systems to water the rice, in addition to transplanting, plowing, and harvesting the crops, makes wet cultivation a demanding process.
  - (B) Wet cultivation of rice is very time-intensive, for entire irrigation systems must be developed and constructed, or the paddies will lack adequate water.
  - (C) Because wet-rice cultivation requires numerous difficult processes, such as plowing, harvesting, and transplanting seedlings, it is extremely difficult.
  - (D) Building irrigation systems, transplanting seedlings, plowing paddies, and harvesting the crops are all necessary steps in the process of wet-rice cultivation.

### 3

In sharp contrast to the present day, ancient Greek and Roman actors rarely wore any make-up at all—despite the fact that they were often required to perform the roles of several different characters in the same play. Rather than applying new make-up constantly, actors found it much easier to wear oversized masks in order to signal the many character changes in each play. Every mask had to have certain features—eyes, ears, nose, and so on—and only a certain amount of variation in the depiction of each of these features was possible, so, in order to make character changes more obvious, masks used bright, vibrant colors. As well as providing all of the clues the theatergoer would need to determine who was who on stage, these colorful masks were also aesthetically appealing.

Although the practice was not common in Greece, Roman actors also needed to wear special robes and wigs to convey important information about their characters, because the noise generated by spectators during the theatrical production was so loud that actors could not be sure their lines would be heard clearly in the theater. For instance, a young man would be shown wearing a black wig and a purple robe, whereas a gray wig, or a white robe, signified an old man. Since all actors in early Roman theater productions were male, female characters wore yellow robes. Finally, actors wore yellow tassels when portraying gods. These clues helped to communicate clearly who each character was and what was going on in the play, regardless of how rowdy the audience was being.



3-1. Which of the sentences below best expresses the essential information in the highlighted sentence in paragraph 1? *Incorrect* choices change the meaning in important ways or leave out essential information.

- (A) Once a mask was made, its features could not be altered, but colorful paints could be applied to make character changes more obvious.
- (B) Variations in facial features, including the eyes, ears and nose, could emphasize the differences between the various characters in the play.
- (C) Masks tended to be colorful because there were limited changes that could be made to facial features to help different characters stand out.
- (D) All of the masks tended to be colorful, but it was not possible to make changes to important features like the eyes, nose, mouth and so on.

3-2. Which of the sentences below best expresses the essential information in the highlighted sentence in paragraph 2? *Incorrect* choices change the meaning in important ways or leave out essential information.

- (A) In Rome but not Greece, the audience noise was often too great for actors to be heard, so they wore robes and wigs to convey meaning.
- (B) When actors wore robes and wigs, they were sometimes unable to hear others' lines because of the crowd noise.
- (C) Noisy audiences were a major problem at Roman plays, and they often prevented actors from being able to deliver their lines.
- (D) A practice that started in Greece was for actors to wear wigs and robes while on stage, especially if the audience was noisy.

In spite of their fearsome reputation, recent developments indicate that wasps can be used to assist human endeavors in many fields. For instance, agricultural researchers have discovered that the inclusion of wasps in stored grain products may reduce the need for chemical pesticides to control infestations by stored-grain pests. When pests such as grain borers and weevils invade stored grain, they often deposit their eggs inside grain kernels, where they are difficult to detect during product inspections, and as a result the contaminated kernels can end up being processed into flour. But wasps that prey on grain pests are ideal for controlling infestations in stored grain because they have an impressive ability to recognize which kernels contain pest larvae. They are able to destroy the larvae, ensuring that the affected kernels are easily separated.

Outside the realm of agriculture, wasps are being trained for rather unconventional use as biological sensors. By associating certain odors with food rewards, scientists have been able to train wasps to sense and respond to specific scents. In experimental trials, for example, five trained wasps held in a small, ventilated container successfully recognized and reacted to the presence of a chemical generated by an agriculturally destructive fungus. This sensory ability means that wasps have great potential in the field of biotechnology. Already, they have been used to recognize chemical scents linked to certain explosives, and to medical conditions like lung cancer and stomach ulcers, and it is expected that in the future they may even be able to recognize the scent of dead bodies and aid in locating murder victims or disaster victims.

- 4-1. Which of the sentences below best expresses the essential information in the highlighted sentence in paragraph 1? *Incorrect* choices change the meaning in important ways or leave out essential information.
- Ⓐ Processed flour can contain impurities caused by pest eggs that are laid inside grain kernels, thus escaping traditional inspection methods.
  - Ⓑ It is possible to remove most of the insect eggs from grain kernels by conducting product inspections before processing them into flour.
  - Ⓒ While most borers and weevils are discovered during inspections, some manage to escape and get processed with the flour.
  - Ⓓ Insect pests like grain borers and weevils can invade stored grain, and this is a problem because it degrades the quality of the flour.
- 4-2. Which of the sentences below best expresses the essential information in the highlighted sentence in paragraph 2? *Incorrect* choices change the meaning in important ways or leave out essential information.
- Ⓐ In the future, wasps may be used to detect a wide variety of scents: explosives, medical conditions, and even the victims of crimes or disasters.
  - Ⓑ If wasps can learn to recognize the scent associated with medical conditions, they may be able to help prevent disasters.
  - Ⓒ Currently, wasps are capable of detecting some explosives and medical conditions, and someday they may be able to aid in the recovery of victims' bodies.
  - Ⓓ Though they are not always detectable to humans, scents associated with a wide variety of situations may indicate the presence of explosives, medical ailments, or victims.



## practice test\_level 3



>> Read passages 1 and 2 and answer the following questions.

### 1

#### Martha Graham

Martha Graham is universally regarded as being the most influential person in the development of modern dance, but she did not actually begin dancing until relatively late in her life. She joined the legendary Ruth St. Denis's company to gain experience and training, leaving after seven years to forge her career in New York. During her time in New York, Graham took a teaching position at the Eastman School of Music where, freed from the pressures of performing for an audience, Graham boldly experimented with her art form and began molding a style that would depart from all previous incarnations of modern dance.

As a dancer and choreographer, Graham was guided by the studies of her father, an early psychologist who was curious about the ways people use their bodies. Graham's father used movement as a diagnostic tool to help him with his work on nervous disorders. Following his belief that movement cannot lie, Graham sought to use her body to express her deepest self in an honest and meaningful way, noting that the kind of fluid and graceful movement that characterized styles such as ballet was incomplete; it had no connection to humanity's more violent and passionate instincts. Using movement, Graham focused on the aspects of humanity that were essentially absent in other forms of dance. Trembling, convulsing, and falling were types of movements that Graham employed in her performances to convey strong emotions, expressing themes that had never before been explored in dance.

Physically, Martha Graham's dancing technique was based on her belief that movement originated in the tension of contracted muscles and took shape as the muscles were relaxed. Following this principle, she practiced a method of breathing and muscle control called "contraction and release." This technique caused Graham and her dancers to appear angular and rigid to audiences that were accustomed to seeing more traditional dancers with styles that were graceful and continuous. Many perceived Graham's departure from the conventions of dance as ugly, but, in spite of this initial resistance to her new style, audiences and critics quickly came to appreciate the innovation that Graham constantly brought to modern dance.



- 1-1. Which of the sentences below best expresses the essential information in the highlighted sentence in paragraph 1? *Incorrect* choices change the meaning in important ways or leave out essential information.
- (A) Graham had been a teacher at a prestigious music school in New York before she began devising a brand new incarnation of modern dance.
  - (B) Graham felt pressured performing for an audience that expected her to innovate and experiment all the time, so she took up a teaching job instead.
  - (C) As an instructor at New York's Eastman School of Music and away from the pressures of performing, Graham could explore totally new dance styles.
  - (D) When Graham studied at the Eastman School of Music in New York, she started experimenting with a variety of different dances.
- 1-2. Which of the sentences below best expresses the essential information in the highlighted sentence in paragraph 2? *Incorrect* choices change the meaning in important ways or leave out essential information.
- (A) Wanting dance to sincerely reflect humanity, Graham used her body to express energy and aggression as well as grace.
  - (B) According to Graham, who wanted to express her inner self through dancing, there is very little connection between ballet and the base instincts that rule human behavior.
  - (C) As a counterpoint to the violence encountered in life, Graham's dance style sought to emphasize the elegant and refined above all else.
  - (D) Graham believed that neither the passion nor grace of human movement was adequately captured by traditional dancing styles.
- 1-3. Which of the sentences below best expresses the essential information in the highlighted sentence in paragraph 3? *Incorrect* choices change the meaning in important ways or leave out essential information.
- (A) Audiences and critics who first witnessed Graham's new modern dance style reacted negatively to the innovative choreography she employed.
  - (B) Graham decided that she did not want to follow the established conventions of modern dance, so she created a new style of dance.
  - (C) Although people initially disliked Graham's unique style, they soon changed their attitudes and recognized the value of her work.
  - (D) While Graham was certainly an experimental and consistent choreographer, audiences and critics were unable to see past the "ugliness" of her style.

## Experimental and Descriptive Methods in Psychology

The science of psychology, which studies the mental processes of humans and animals, has historically preferred to use the experimental method to gain information on a given issue. There are many reasons why this method is beneficial to scientific inquiries, foremost being the level of control that experiments offer researchers. By exercising tight control over all variables in an experiment, not only is it possible to precisely describe relationships of cause and effect, but also, assuming that standardized procedures fundamental to the experimental method are adopted, it means that experiments can easily be repeated by different researchers, increasing the validity of the findings.

Although sound in its theoretical basis, the experimental method is not without its flaws when it comes to practical application. Most importantly, experiments do not always provide accurate results or observation because they are, by their very nature, artificial. The psychologist engineers every aspect of the situation to eliminate any unwanted variables from the study, and there is always the possibility that what occurs in such an artificial environment might differ from what takes place in real-life situations. Moreover, some psychologists argue that it is unrealistic to expect all variables in an experiment to be accounted for and controlled. Undetected factors can influence the dependent variable and thus distort the findings about the cause-and-effect relationship.

Researchers concerned with the drawbacks of experiments may turn to the descriptive method to carry out their psychological studies. This method can also be used to isolate certain potential relationships, but it has the advantage of not requiring the control of variables, which is so central to experiments. This allows researchers not only to save time, but also to conduct their research in a more realistic and natural context. One manifestation of the descriptive method popular among psychologists is the case study, which typically involves the long-term observation and analysis of a single person or small group. Positive aspects of case studies are that they highlight individual variations in behavior, rather than focusing on what is assumed to be the norm, and that they enable researchers to gain a large volume of information on the subjects. However, case studies are criticized because their findings are usually based more on the interpretation of the researcher than on objective criteria, and any conclusions drawn cannot be applied to the general public.



- 2-1. Which of the sentences below best expresses the essential information in the highlighted sentence in paragraph 1? *Incorrect* choices change the meaning in important ways or leave out essential information.
- (A) Despite difficulty in exercising control over variables, it is possible to repeat the experiment several times to find out what causes the behavior.
  - (B) Controlling experimental variables allows psychologists to describe cause-and-effect relationships and, if done properly, verify results through repetition.
  - (C) Results are regarded as more valid if the right experimental processes are followed and the relationship of cause and effect is supported by evidence.
  - (D) It is important to tightly control the variables in an experiment to ensure a precise relationship of cause and effect, which is essential to the experimental method.
- 2-2. Which of the sentences below best expresses the essential information in the highlighted sentence in paragraph 2? *Incorrect* choices change the meaning in important ways or leave out essential information.
- (A) Even though it might make the environment seem somewhat artificial, psychologists still need to engineer all parts of their experiments.
  - (B) There are **unwanted variables** in every experiment that **cannot be eliminated**, and they can **end up distorting** the results.
  - (C) Because the environment is so tightly controlled for the experiment, it creates an unreal situation that might stimulate unnatural behavior.
  - (D) Real-life situations differ greatly from the artificial conditions created in experiments, so it is sometimes hard to predict what will occur.
- 2-3. Which of the sentences below best expresses the essential information in the highlighted sentence in paragraph 3? *Incorrect* choices change the meaning in important ways or leave out essential information.
- (A) Case studies have been used to contradict accepted ideas of what behaviors are deemed normal.
  - (B) Two key advantages from conducting case studies are that they allow for individuality and they help to generate extensive stores of data.
  - (C) By focusing on a small number of subjects for a great length of time, huge amounts of information are gathered.
  - (D) The case study is seen as the best psychological tool for gaining information, due to its ability to closely analyze an individual.

# word brush-up

▪ Choose one that is closest in meaning to the shaded word or phrase.

01 **deflect** attention

- (A) turn aside    (B) point to  
(C) take up    (D) give back

06 **distort** a person's words

- (A) repeat    (B) misrepresent  
(C) ignore    (D) conceal

02 **incompatible with** the theory

- (A) identical with  
(B) unfamiliar with  
(C) consistent with  
(D) incongruous with

07 conduct an **inquiry**

- (A) investigation  
(B) affair  
(C) interview  
(D) arrangement

03 use **vibrant** colors

- (A) diverse    (B) faint  
(C) brilliant    (D) dark

08 **hold** that mechanical failure was to blame

- (A) embrace    (B) maintain  
(C) prove    (D) concede

04 **endeavor** to implement the policy

- (A) review    (B) attempt  
(C) urge    (D) decide

09 one **manifestation** of this change

- (A) instance    (B) ramification  
(C) notice    (D) demonstration

05 start **convulsing** violently

- (A) reacting    (B) attacking  
(C) shaking    (D) damaging

10 a **consistent** stream of customers

- (A) steady    (B) satisfied  
(C) dependent    (D) unusual



- 11 Inuits, the native inhabitants of Alaska, Greenland and Northern Canada, have traditionally constructed igloos out of ice during winter. Surprisingly sturdy and comfortable, igloos are able to **house** as many as 20 people at one time.
- (A) domesticate      (B) hold up      (C) accommodate      (D) take on
- 12 Consumer waste causes considerable damage to the environment, as the synthetic materials used for most packaged products take so long to biodegrade. But scientists in Britain think they may be able to **engineer** a solution to this problem.
- (A) require      (B) borrow      (C) design      (D) infer
- 13 In underwater eruptions, superheated material spews out into the ocean, where the frigid water eventually forces it to cool down and **contract**.
- (A) solidify      (B) shrink      (C) crack      (D) adapt
- 14 Using sophisticated technology, scientists have been able to **locate** the source of the problem at the Chernobyl nuclear plant. It appears as if reactor number 4 exploded due to overheating.
- (A) trace      (B) position      (C) eliminate      (D) presume
- 15 Few **appreciated** Nabokov's earlier works at the time they were published. It was not until he rose to prominence towards the end of his life that his earliest novels were reassessed by literary critics.
- (A) recognized the value of      (B) expressed their gratitude for  
(C) paid any attention to      (D) took encouragement from

**answer** 01 (A) 02 (D) 03 (C) 04 (B) 05 (C) 06 (B) 07 (A) 08 (B) 09 (D) 10 (A)  
11 (C) 12 (C) 13 (B) 14 (A) 15 (A)

day 08

# prose summary

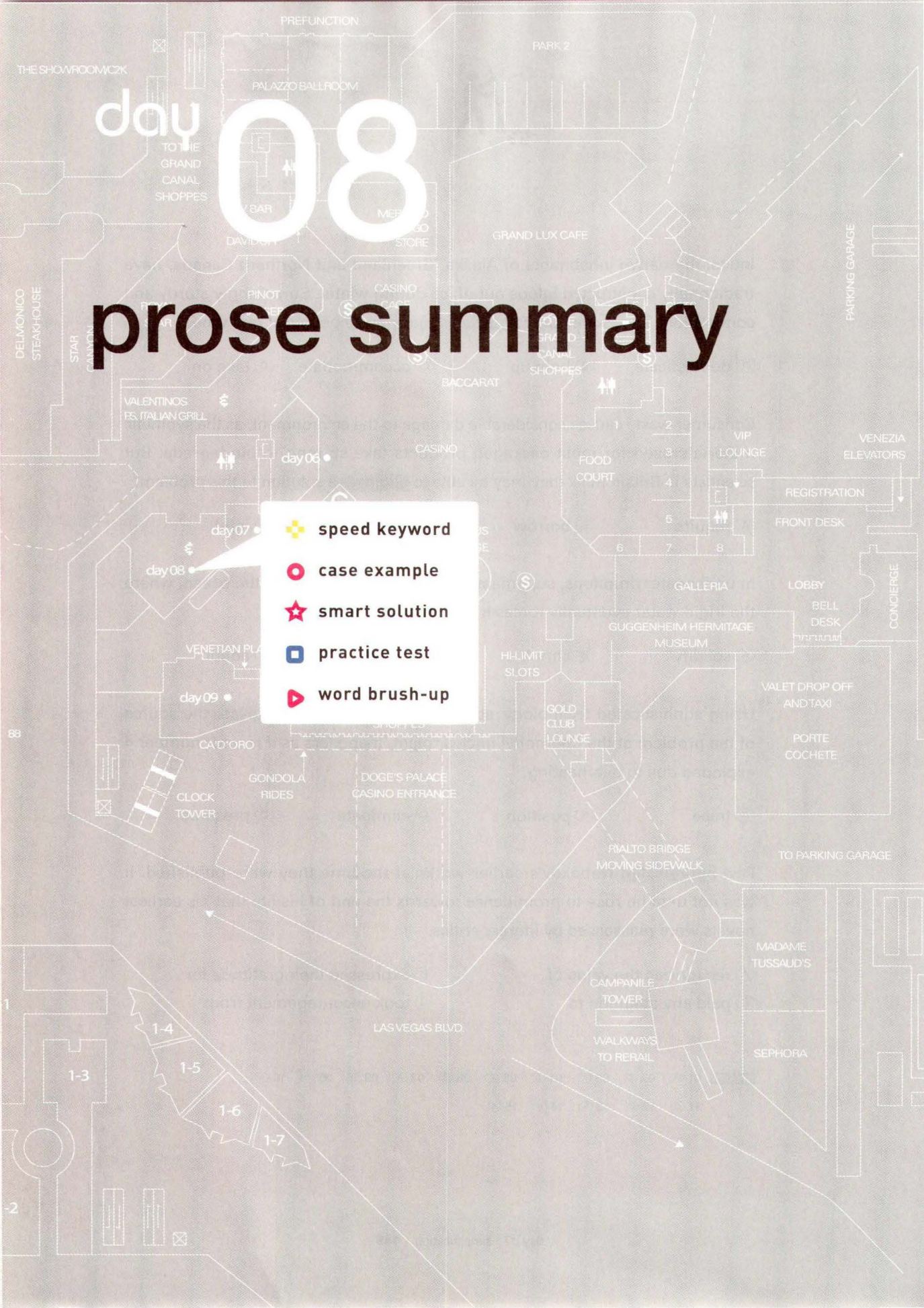
✚ speed keyword

● case example

★ smart solution

▣ practice test

▶ word brush-up



+ speed

keyword



## summary문제는

지문의 재구성 ▼ 이다.

앞 장에서 학습한 **simplification**유형을 한 문장의 핵심 정보를 뽑아 간략화하는 '문장의 재구성'이라고 한다면 **summary**유형은 지문 전체의 핵심 정보를 뽑아 요약하는 '지문의 재구성'이라고 할 수 있다. 서론에 해당하는 도입문장과 선택지 6개가 주어지고 선택지 중 요약문에 포함시키기에 적합한 문장 3개를 선택하면 된다.

**summary**유형은 **schematic table**유형과 교차로 지문의 마지막 문제로 등장하며 고른 정답의 개수에 따라 각각 2점부터 0점까지 차등적으로 점수가 매겨진다. (정답 3개: 2점 / 2개: 1점) 질문의 형태는 항상 아래와 같고 지문 전체를 요약한 한 문장의 도입문(**introductory sentence**)이 그 아래에 주어진다는 것을 눈 여겨 보자.

매 지문마다 평균 한 문제씩 등장하며 질문지는 항상 다음과 같은 형태를 취한다. 지시문에 오답 유형이 제시되어 있으므로 주의 깊게 읽어보자.

**Directions:** An introductory sentence for a brief summary of the passage is provided below. Complete the summary by selecting the **THREE** answer choices that express the most important ideas in the passage. Some answer choices do not belong in the summary because they express ideas that are not presented in the passage or are minor ideas in the passage. ***This question is worth 2 points.***

Introductory Sentence



## case example

### 대표 문제

Read the passage and answer the question.

#### TOEFL Reading passage

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#### Crop rotation

Two millennia ago, farmers had begun to realize that continuously cultivating the same crop on the same plot of land inevitably resulted in diminished soil fertility and dwindling yields. Eventually, this inefficiency meant that the land had to be left vacant to allow for soil regeneration. In order to overcome this problem, farmers in the Roman Empire established a system of seasonal crop rotation, which then spread throughout the known world. Under this system, different types of crops were grown on a revolving basis. Once farmers had established the best sequence and timing of these rotations, they were able to cultivate the land all-year-round, hugely improving overall productivity.

Crop rotation was effective because it helped keep soils balanced and healthy. Farming the same type of crop depleted the soil of particular nutrients, leaving it less fertile for future cycles. However, under the crop rotation system, different plants could help to replace certain nutrients that had been removed from the soil. This left it replenished and able to support future crop cycles. Moreover, farmers could control the spread of pathogens and pests in the soil by using crop rotation. This benefit occurred because pests and pathogens specialize in attacking certain plant species. Therefore, when new crops were planted, they were unable to establish a significant long-term presence.

Crop rotation remained the dominant farming method for several centuries, until the use of synthesized fertilizers became widespread in developed countries in the 20<sup>th</sup> century. Because fertilizers could artificially replenish soils, most farmers stopped rotating crops and began specializing in one high yield species. However, many now realize that monoculture farming can lead to catastrophic crop failures and environmental problems. Accordingly, there is a growing movement back towards traditional crop rotation.

**Directions:** An introductory sentence for a brief summary of the passage is provided below. Complete the summary by selecting the **THREE** answer choices that express the most important ideas in the passage. Some answer choices do not belong in the summary because they express ideas that are not presented in the passage or are minor ideas in the passage. ***This question is worth 2 points.***

**Around 2,000 years ago, farmers began rotating crop species, rather than repeatedly cultivating the same crop, in order to improve farming productivity.**

- 
- 
- 

- Ⓐ The crop rotation system originated in the Roman Empire before spreading to many other parts of the globe.
- Ⓑ One of the main reasons the crop rotation system was effective was that it eliminated barren periods, allowing for continuous agricultural production.
- Ⓒ Crop rotation keeps the soil fertile by preventing both nutrient depletion and the spread of diseases and pests.
- Ⓓ By rotating crops on a seasonal basis, farmers were able to grow crops that were better suited to the prevailing climatic conditions.
- Ⓔ With artificial fertilizers widely available, many farmers abandoned crop rotation so as to focus on one lucrative crop, but this approach is considered unsustainable.
- Ⓕ Owing to crop failures and other environmental problems, farmers began searching for alternatives to the crop rotation method in the twentieth century.

answer Ⓑ, Ⓒ, Ⓔ

## Case 분석

주어진 지문을 읽고 가장 핵심적인 정보를 선택지 중에서 골라 • 표시 옆에 끌어다 놓는 형식이라는 것을 알 수 있다. 6개의 선택지와 3개의 • 표시가 등장하여 3개의 정답을 고르는 문제로 출제되며 이때 정답의 배열 순서에는 신경을 쓰지 않아도 된다. 주어진 direction을 주의 깊게 살펴보면 도입문과 잘 연결되는 지문의 핵심 포인트(the most important ideas)를 선택지 중에서 골라야 한다는 사실과, 지문에 없는 내용(not presented in the passage)이나 덜 중요한 내용(minor ideas)을 담고 있는 것은 오답이 됨을 알 수 있다.

해당 지문은 농업에서의 윤작(crop rotation)에 대한 내용을 담고 있는데 지문은 윤작을 시작하게 된 경위와 그 장점, 최근의 동향에 대해 다루고 있으므로 이를 가장 잘 대변하는 선택지는 윤작의 시작 이유를 서술한 Ⓑ와 그 장점을 다룬 Ⓒ, 화학 비료를 사용했다가 문제를 느껴 다시 윤작으로 돌아가고 있다는 최근의 동향을 다룬 Ⓔ가 된다.

## smart solution



**summary**문제는 배점이 높은 만큼 지문 전체를 이해해야 풀 수 있는 난이도 높은 문제로, 문제 풀이 소요 시간은 가장 긴 반면 마지막 문제로 등장하기 때문에 항상 시간이 부족한 상태에서 문제를 풀게 된다는 단점이 있다. 하지만 고득점을 노린다면 결코 놓칠 수 없는 문제이므로 아래의 전략을 이용하여 집중적으로 풀이 훈련을 해보자.

### 도입문을 활용한다.

단순히 몇 개의 선택지에서 핵심 정보를 고르게 하는 것이 아니라 도입문을 따로 주고 있다는 사실에 주목해야 한다. 가장 짧게 지문 전체의 내용을 대변하는 것이 제목이라면 도입문은 지문 전체를 '한 문장'으로 요약한 것이다. 이 한 문장 요약에는 필연적으로 지문 전체의 개요가 녹아들게 되므로 골라야 할 선택지의 내용은 지문의 **main idea**인 동시에 도입문에서 추상적으로 드러난 내용을 구체화시킨 **supporting detail**이 된다는 것을 알 수 있다. 앞선 **case example**의 도입문을 다시 보자.

Around 2,000 years ago, farmers began rotating crop species, rather than repeatedly cultivating the same crop, in order to **improve farming productivity**.

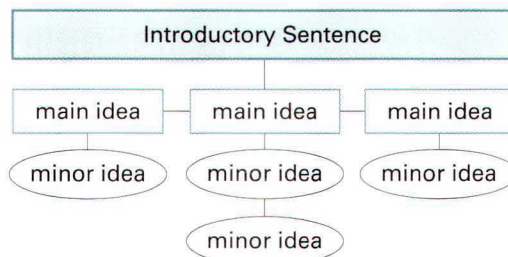
2,000여 년 전 농부들은 **농업생산성을 향상시키기 위해** 계속 같은 작물종을 심지 않고 윤작하기 시작했다.

이 도입문에 추가 설명을 보충하여 확장시킬 수 있는 부분은 바로 "농업생산성의 향상 방식"에 대한 내용이라는 것을 알 수 있다. 즉 어떤 식으로 윤작이 농업생산성을 향상시켰는지를 구체화시킨 선택지가 답이 될 확률이 높다는 말이다.

일반적으로 영어 **summary**를 할 경우 원래 지문 길이의 4분의 1로 줄이는 것이 가장 적당하다고 보는데 토플의 **summary**도 기본적으로 이러한 원칙에 따르기 때문에 700자 가량의 지문에서 서너 가지의 핵심포인트를 뽑도록 하는 것이다. 이미 서론 역할을 할 만한 도입문은 주므로 그 나머지 내용을 구성할 3개의 **main idea**를 선택한다고 생각하면 된다.

### 선택지 간의 비중도를 잘 관찰한다.

영어 지문은 하나의 핵심 주제를 축으로 계속 세부적인 디테일을 덧붙여가는 식으로 완성된다. 따라서 **main idea**와 세부 디테일인 **minor idea**간의 위계(hierarchy)가 확실한 아래와 같은 구조를 취하게 된다. 따라서 선택지를 잘 비교해 보면 내용의 비중이 현저히 다른 선택지가 눈에 띄는 경우가 있다. 어떤 선택지는 **main idea**를 다루고 있는데 반해 어떤 선택지는 그 하위 디테일에 해당하는 **minor idea**를 다루고 있기 때문이다.



앞선 대표 문제의 첫 번째 단락에서 이런 구조가 잘 드러나는데 똑같이 첫 번째 단락에 대한 내용을 다루고 있는 다음 두 개의 선택지를 비교해 보자.

**단락의 Minor Idea** (A) The crop rotation system originated in the Roman Empire before spreading to many other parts of the globe.

윤작 시스템은 로마 제국에서 유래하여 세계의 여러 지역으로 확산되었다.

**단락의 Main Idea** (B) One of the main reasons the crop rotation system was effective was that it eliminated barren periods, allowing for continuous agricultural production.

윤작 시스템이 효과적이었던 주요 이유 중 하나는 휴지기를 없애고 지속적인 농작물 생산이 가능하도록 해주었기 때문이다.

이 두 선택지를 비교해 보면 선택지 (A)의 정보가 (B)에 비해 상대적으로 덜 중요한 정보임을 알 수 있다. 특히 지문에 대한 이해가 부족할 경우 이렇게 선택지를 잘 비교하면서 어떤 선택지의 비중이 다른지 관찰해 보면 의외로 쉽게 오답을 소개할 수 있는 경우가 생긴다. 비중이란 항상 상대적이기 때문이다.

08



## ● 지문의 몇 군데에 드러난 단서를 종합한다.

요약문의 특성상 지문 중 특정한 한 문장이 단순히 다른 표현으로 paraphrasing되는 것이 아니라는 사실에 주의할 필요가 있다. 물론 지문 중에서 핵심 문장이라고 부를 수 있는 것들이 따로 있기는 하지만 정답 선택지는 몇 군데에 흩어져 있는 이 핵심 문장 단서들을 종합하여(synthesize) 새로운 문장으로 구성된다. 다시 앞선 case example, 정답 (C)의 경우를 생각해 보자. 윤작의 두 가지 이로운 점을 설명하는 이 정답 문장은 지문에서 두 군데 이상의 단서를 종합해 이를 한 문장으로 구성한 것임을 알 수 있다.

Crop rotation was effective because it helped keep soils balanced and healthy. Farming the same type of crop depleted the soil of particular nutrients, leaving it less fertile for future cycles. **첫 번째 이로운 점: 영양분 소모 예방.** However, under the crop rotation system, different plants could help to replace certain nutrients that had been removed from the soil. This left it replenished and able to support future crop cycles. Moreover, **두 번째 이로운 점: 질병 확산 저지.** farmers could control the spread of pathogens and pests in the soil by using crop rotation. This benefit occurred because pests and pathogens specialize in attacking certain plant species. Therefore, when new crops were planted, they were unable to establish a significant long-term presence.

→ (C) Crop rotation keeps the soil fertile by preventing both nutrient depletion and the spread of diseases and pests.

윤작은 영양분의 소모와 질병의 확산을 막아서 토지를 윤택하게 유지시킨다.



## practice test\_level 1



>> An introductory sentence for a brief summary is provided below passages 1 to 4. Complete the summary by selecting the TWO answer choices that express the most important ideas in each passage. Some sentences do not belong in the summary because they express ideas that are not presented in the passage or are minor ideas in the passage.

### 1

The American system of manufacturing was developed in the early 1800s. There is general agreement that the War Department was the driving force behind the development. Around this time, the Department was aiming to reduce costs on the manufacture, maintenance and repair of the armory, and so it encouraged innovators to develop a more efficient methodology. As such, the American system sought to make machine parts interchangeable. This meant that, in the event of a mechanical problem, a single part of the machine could be replaced easily rather than having to be sent back to the manufacturer for repair.

Interchangeability was achieved through the use of templates and machine tools to make parts that were identical in size and shape. The work of molding the templates and cutting out the pieces needed to be done by trained and experienced factory machinists. On the other hand, the assembly of the smaller components became relatively simple work under this regimen, and it could now be easily undertaken at a separate location by unskilled laborers. This division of labor ultimately allowed manufacturers to save money on production, as the wages for unskilled assembly workers were considerably less than those of the semi-skilled workers who were capable of operating the machines.

**Driven by the War Department, a more efficient system of manufacturing was developed in America in the early 19<sup>th</sup> century.**

- (A) The system made parts interchangeable, meaning that it was no longer necessary to return or exchange a machine in the event of a malfunction.
- (B) The American system of manufacturing was initially used in the armory, but industrialists soon realized it could be applied elsewhere.
- (C) There is ongoing debate over who first developed the American system of manufacturing, with many inventors claiming to have made the breakthrough.
- (D) Manufacturers were able to reduce their costs because the new process allowed them to separate production and assembly.

Prior to 1936, it was assumed that the Earth's core was comprised of liquid, but a discovery by Danish seismologist Inge Lehmann changed that. She noted that seismic waves were faintly deflected from inside the core—something which would be impossible if it were entirely liquid—and concluded that there must be a solid mass in the center. Her idea about the existence of an inner core of solid material that was distinct from the liquid outer core gradually gained acceptance in the scientific community, and it is now universally recognized.

Still, little is known for certain about the inner core because our understanding of it is, by necessity, based on "assumptions." However, using what they know about the makeup of our planet and the physical properties of elements in our solar system, scientists have been able to deduce that the inner core is largely composed of an iron-nickel alloy. There is also some consensus about the temperature and pressure exerted there, with temperatures estimated to reach 6,000 degrees Celsius, and pressures as high as 360 GPa.

On the other hand, there is ongoing debate about the dynamics of the inner core. One of the major points of dispute is the discovery that, depending on where in the inner core seismic waves are directed, they are reflected and transmitted in different directions and speeds. Some researchers believe that the unpredictability of these waves can be explained by super-rotation. They theorize that the inner core, which is not rigidly connected to the outer core or the upper layers, actually rotates at a faster rate than the Earth itself does. However, this is still very much an issue of contention among seismologists.

**Having determined the presence of the inner core decades ago, scientists have been able to make some assumptions about its nature.**

- Ⓐ Seismologists are fairly certain that part of the outer core of the Earth is comprised of liquid.
- Ⓑ It is widely believed that the solid inner core is made up of nickel-iron alloy, and exposed to extreme temperatures and pressures.
- Ⓒ Certain researchers speculate that the inner core may spin on its axis slightly faster than the planet does.
- Ⓓ By examining the deflection from seismic waves, scientists are able to closely track the movements of the Earth's inner core.



### 3

With the prospect of fossil fuels running out, and the growing threat of global warming caused by pollution, scientists and politicians are increasingly looking towards alternate forms of energy. One possibility that is increasingly gaining credibility is the use of oceans to extract energy. The oceans are an as yet untapped energy resource, but given their size and the amount of energy stored within them, there is considerable optimism about the potential benefit of utilizing them.

One of the main ways in which the oceans can be harnessed is through wave energy. This method works by getting the power of the waves to drive a turbine, generating energy for storage. The primary advantage of wave energy is that the equipment needed to produce it is cheap to build and maintain. However, it does have some drawbacks, most notably because it is relatively unstable—when the surf is large, the waves will produce lots of energy, but on a flat day, they will produce hardly any.

The tides are another aspect of the oceans that can be used as a source of energy. Tidal power works in a way that is very similar to how hydroelectric dams in rivers operate: a large barrage with turbines is built across the inlet to generate energy from the changing tides. Scientists deem tidal power to be an excellent alternate energy source because such a huge volume of water is transferred during a tidal change, and because these changes are largely steady and predictable. However, tidal barrages can also have a negative impact on the rich ecosystems that surround inlets, so there is some opposition to this approach from environmental groups.

**The ocean is potentially an alternative to non-renewable fossil fuels as a source of energy.**

- Ⓐ It is possible to generate energy inexpensively through wave power, but this approach cannot be relied on to produce a steady supply of electricity.
- Ⓑ It is considered that the main disadvantage of investing in wave power is that it will produce little energy on days when the surf is flat.
- Ⓒ Despite the environmental drawbacks, researchers are considering exploiting the enormous and reliable energy potential of tidal forces.
- Ⓓ In order to generate electricity from the tides, scientists may relocate hydroelectric equipment used in river dams to the barrages at inlets by the ocean.

By the latter half of the 19<sup>th</sup> century, manufacturing had become the cornerstone of American industry and commerce. But, in spite of their economic importance, factories were often run in a very disorganized manner. For the most part, factory operations simply adopted “rule-of-thumb” operations, whereby habits and systems became entrenched over time. Essentially, employees would learn how to do procedures from their more experienced colleagues on the job, copying methods and techniques born out of individual trial-and-error rather than “reliable data.” It was not until F.W. Taylor, a mechanical engineer from Philadelphia, began introducing his ideas about systematizing these processes in the early 1890s that this haphazard approach to factory management began to change.

Taylor was the pioneer of an approach that he would later dub “scientific management.” The way he saw it, rather than allowing employees to determine how to do the work for themselves, management should analyze each task performed in the factory. That way they could make sure that every step in the manufacturing process was handled as efficiently as possible. Taylor also believed that management needed to be more scientific in their handling of staffing issues. He felt that all employees should be carefully selected, properly trained and strictly supervised to ensure that they perform their tasks competently. According to Taylor, there should also be a stricter division between managers and employees on the factory floor. Most significantly, he thought that employees should simply carry out instructions handed down by their managers, and with no authority to devise their own methods. Although in our modern world Taylor’s ideas would be considered overly strict, at the time they were revolutionary and they helped to achieve much greater efficiency in industrial operations.

**The establishment of a scientific approach to industrial operations made factories much more economical than they had previously been.**

- Ⓐ Most historians agree that manufacturing had become the most important aspect of the entire domestic economy by the end of the 19<sup>th</sup> century.
- Ⓑ In the late 1800s, factory employees usually had to pick up skills on the job, often just following their coworkers’ ingrained practices.
- Ⓒ Taylor transformed factory management, advocating that all tasks be analyzed methodically and that employees perform them according to precise specifications.
- Ⓓ Taylor’s ideas were based on the belief that employees, who were responsible for carrying out the factory tasks, would be able to devise more effective work methods.





## practice test\_level 2



>> Read passages 1 and 2 and answer the following questions for each.

### 1

The origins of our solar system are still a source of great debate among scientists, but it seems that a stellar explosion, or supernova, caused a burst of radiation that resulted in the shrinkage and heating up of a cosmic cloud. This created the framework for the planets in our solar system. These planets can be divided into two distinctly different categories depending on their inherent qualities and location—terrestrial and Jovian.

Terrestrials and Jovians contrast in a number of ways. The Jovian planets—Jupiter, Saturn, Uranus, and Neptune—are much larger in size and contain far greater masses. Furthermore, the terrestrials are mostly rocky in composition, with slow rotation rates and weak magnetic fields relative to the Jovian worlds. Because the Jovians, or outer planets, are all further away from the Sun than the terrestrials, their chemical compositions are somewhat different. This contrast may account for their differences in mass, diameter, and density compared to the terrestrials, or inner planets.

Forming in the cool, outer reaches of the solar system, the Jovians have similar atmospheres to each other, with a layer of hydrogen and helium above a thick layer of liquid hydrogen. On the other hand, the terrestrial planets formed in hotter material and have strikingly different atmospheres to each other. Mercury exists in a near-vacuum, while Venus's atmosphere is a dense inferno of carbon dioxide. Only Earth has oxygen in its atmosphere, while Mars possesses a very thin atmosphere of carbon dioxide.

Beyond the outermost Jovian planet, Neptune, lies the small, mysterious world of Pluto, which does not fit into either of the planetary families. It has more in common with the moons of Jovian planets than either Jovians themselves or terrestrials, both in terms of composition and size. Nowadays, scientists do not even classify Pluto as a planet, instead considering it to be a dwarf planet or a member of the "Kuiper Belt," a class of solar system objects that reside beyond the Jovian worlds and do not satisfy the criteria to be considered planets.

1-1. The word **their** in the passage refers to

- Ⓐ magnetic fields
- Ⓑ Jovians
- Ⓒ terrestrials
- Ⓓ chemical compositions

1-2. **Directions:** An introductory sentence for a brief summary of the passage is provided below. Complete the summary by selecting the **THREE** answer choices that express the most important ideas in the passage. Some sentences do not belong in the summary because they express ideas that are not presented in the passage or are minor ideas in the passage.

**Our solar system's planets can be divided into groups depending on their inherent characteristics.**

- Ⓐ The chemical composition of Jovian and terrestrial planets was probably decided by a supernova explosion.
- Ⓑ Jovian planets can be distinguished from terrestrials due to their greater size and mass, as well as differences in makeup and rotation rates.
- Ⓒ Earth and Mars differ from other terrestrial planets in that they contain deposits of oxygen in their atmospheres.
- Ⓓ Terrestrial planets are very different to each other in terms of atmosphere, whereas Jovians are all hydrogen-helium gas giants.
- Ⓔ There are bodies within our solar system, notably Pluto, which due to their make-up cannot be considered either Jovian or terrestrial.



Mimicry is the resemblance of one organism to another, often for the purpose of self-preservation. Examples of defensive mimicry abound in the order Lepidoptera, a large taxonomic group made up of insects such as butterflies and moths.

Assuming the appearance of an unpalatable, toxic, or dangerous animal is one method some mimics use to deceive predators into assuming they are undesirable prey. The ash borer is an example of this type of mimic, its black and yellow coloration and long antennae bearing a cautionary similarity to the paper wasp. Even though the ash borer cannot sting, its resemblance to this more dangerous insect causes some predators to shy away. Another species involved in protective mimicry is the plain tiger butterfly, though, unlike the ash borer, the plain tiger butterfly is a model rather than a mimic. Due to its bad taste, many predators consider it unappealing. It excretes a foul-tasting liquid when attacked, which often compels the attacker to abort its assault. Endowed with this defense, the plain tiger has become a model species for a number of other butterflies that lack their own means of repelling predators. Mimics like the Indian fritillary and the danaid eggfly rely on coloration that makes it very difficult to distinguish these imposters from the plain tiger.

Some lepidopterans actually imitate the behavior, not just the appearance, of their model species. Metalmark moths do just that. They are preyed upon by jumping spiders, predators that identify their prey by analyzing visual cues such as size, shape, and symmetry. By posing a certain way, metalmark moths can cause jumping spiders to misidentify them as rivals of the same species. Jerky movements reminiscent of a jumping spider's mannerisms reinforce the deception. Fooled by the display, a jumping spider may hesitate before attacking, affording the metalmark moth an increased chance of escape. In some moth species, mimicry is a survival strategy essential during the larval stage, when moths exist as slow-moving and nearly defenseless caterpillars. The larvae of the elephant hawk moth have the ability to contract their trunk into a shape like a snake's head, complete with patches of coloration that resemble eyes. The caterpillar then twitches its body to mime the movement of a snake.

2-1. The word **them** in the passage refers to

- Ⓐ jumping spiders
- Ⓑ visual cues
- Ⓒ metalmark moths
- Ⓓ jerky movements

2-2. **Directions:** An introductory sentence for a brief summary of the passage is provided below. Complete the summary by selecting the **THREE** answer choices that express the most important ideas in the passage. Some sentences do not belong in the summary because they express ideas that are not presented in the passage or are minor ideas in the passage.

**Many Lepidoptera species that lack a natural defensive ability mimic other organisms as a survival tactic.**

- Ⓐ The plain tiger butterfly is a good model for other Lepidopterans because it emits a foul-tasting liquid when attacked, so many predators find it unappealing.
- Ⓑ Species that act as models for other organisms to mimic have been observed to attack the very insects that are imitating them.
- Ⓒ Mimics like the ash borer and Indian fritillary have evolved coloration patterns that closely resemble species that predators know to be dangerous or poisonous.
- Ⓓ The metalmark moth exemplifies species that ward off attackers by copying the behaviors of threatening organisms, actually mimicking its main predator, the jumping spider.
- Ⓔ It is even possible for some Lepidopterans to use mimicry while in larval form, imitating the look and mannerisms of more dangerous organisms.





## practice test\_level 3



>> Read passages 1 and 2 and answer the following questions for each.

1

### Inventing the Telescope

In 1608, Hans Lippershey, a lens maker of German origin and Dutch citizenship, submitted a patent application for “a certain device by means of which all things at a very great distance can be seen as if they were nearby,” and it is this record from the government of Zeeland, a province in the Netherlands, that contains the first reference to the invention of the telescope. Several others claimed to have also invented the telescope, but, because Lippershey was the first to publicize his creation, he is generally credited as the original inventor. Lippershey’s device was extremely simple, nothing more than one convex and one concave lens in a tube. With this basic instrument, objects could be magnified to four or five times their original size.

Soon after the designs for Lippershey’s telescope were distributed throughout Europe, Galileo obtained the specifications and began working on improvements. It was his work on the telescope that made the tool famous. In addition to improving the magnification of the telescope, Galileo brought the device to the field of astronomy and was the first person to use it to gaze at the stars.

In the following year, Johannes Kepler, contemplating Galileo’s design, hypothesized that an additional convex lens would improve the instrument. The problem was that a telescope with this design would generate an inverted image. Consequently, Kepler’s suggestion was initially overlooked, but the idea spread after 1630, when a German scientist named Scheiner used this telescope design for astronomical observation. Having realized that, for looking into space, it did not matter if the image was inverted, he noticed that the images it produced were superior to those enabled by telescopes with only one convex lens.

In the next decade, people began increasing the magnification of telescopes by lengthening them. Original Galilean telescopes were, on average, about one and a half meters long, but in the 1650s they were increased to lengths of four and a half to six meters. In the year 1656, a seven-meter-long telescope was made. For decades, telescope designs underwent further changes that increased their magnification by marginal increments, but it was not until the seventeenth century that any significant improvements were made. Up until this time, astronomers had only used refracting

telescopes—designs that used the same principle as Lippershey’s original telescope, employing a lens to collect light from a distant source and focus it.

In the second half of the seventeenth century, the renowned scientist Isaac Newton began investigating optics. Through his experiments, he demonstrated that different colors bend through a lens at different angles. Newton recognized that this meant there was a notable flaw in the design of refracting telescopes. Because each color bends at a different angle, the lenses of refracting telescopes cannot focus all colors into a single point. This causes distortions in the images produced by refracting telescopes. Newton set to work on a solution, creating a new type of telescope that used a mirror instead of a lens to collect and focus light.

1–1. The word marginal in the passage is closest in meaning to

- Ⓐ average
- Ⓑ rising
- Ⓒ measurable
- Ⓓ minor

1–2. **Directions:** An introductory sentence for a brief summary of the passage is provided below. Complete the summary by selecting the THREE answer choices that express the most important ideas in the passage. Some sentences do not belong in the summary because they express ideas that are not presented in the passage or are minor ideas in the passage.

**In the century after its invention, the telescope underwent some major improvements at the hands of several different scientists.**

- Ⓐ No one is sure who invented the first telescope because several people claimed it as their own, but Hans Lippershey is given credit as the inventor.
- Ⓑ The first telescope was a refracting telescope that used a convex lens and a concave lens to gather and focus light from faraway objects.
- Ⓒ Although the inclusion of another convex lens created an inverted image, it increased the telescope’s magnifying power and served the purposes of astronomers.
- Ⓓ Galileo had always been interested in observing the stars, so he had been working on developing a primitive telescope prior to the release of Lippershey’s invention.
- Ⓔ When Isaac Newton realized that different colors refracted at different angles, he created a reflecting telescope that prevented distortions by using a mirror instead of a lens.
- Ⓕ In spite of evidence to the contrary, there was a common misconception in the 17th century that it was possible to make refracting telescopes more powerful by lengthening them.



## Weakly Electric Fish

The oceans and freshwater rivers of South America and Africa contain species of fish that are capable of producing electric fields. In general, electric fish can be classified into two groups: strongly electric fish and weakly electric fish. With the ability to stun its prey and generate single pulses of as much as 600 volts, the electric eel falls into the category of strongly electric fish. Lesser known, weakly electric fish produce electric fields for very different reasons.

Weakly electric fish are generally both electrogenetic and electroreceptive, meaning that they can both generate and detect electric fields. They are able to do so using unique body parts composed of modified muscle or nerve cells that have evolved to serve just such a purpose. Inside the organ which creates electric fields, electrocytes—the cells that generate electric currents—are aligned in two to five rows, an arrangement that is similar to a series of connected batteries, and when these electrocytes receive signals from the brain, they “fire” and create what is known as an electric organ discharge, or EOD.

Weakly electric fish use their EODs to help them detect nearby objects in their environment, a process known as electrolocation. An example of a species that uses electric fields in this way is the black ghost knifefish, which employs a three-step process that is characteristic of the way many weakly electric fish make use of electrolocation to gather information about their surroundings. First, the electric organ of the knifefish emits electric charges that create a field around the body of the fish. Second, objects in the immediate vicinity of the fish disrupt the field; depending on the electrical conductivity of the object, the electric current will either circumvent or pass through it. Third, the fish senses disturbances in its electric field using electroreceptors on its body surface. There are 15,000 electroreceptors covering the black ghost knifefish, each one a specialized organ that can detect changes in voltage along the skin. Through this process, weakly electric fish use their electric fields to determine the size, shape, conductivity, and distance of objects around them.

The other way that weakly electric fish use their EODs is for communication with other fish. Most basically, the type of EOD that is emitted gives clues about the particular species generating the charge. For example, the longtail knifefish emits frequencies between 50 and 150 Hz, while the black ghost knifefish emits frequencies between 750 and 1,250 Hz. Another type of information coded in an EOD may be the gender of the fish that is transmitting the signal. In longtail knifefish, females have higher frequencies than males, and in a similar species, males and females emit

pulses with different structures. It is even possible for weakly electric fish to establish hierarchical relationships through their EODs. Brown ghost knifefish, for instance, use short, low-frequency pulses to indicate aggression and longer, high-frequency chirps to suggest submission. What is more, most fish are able to intentionally change the frequency of their EODs, giving them the potential to deliver a great deal of information to other electroreceptive fish.

2-1. All of the following are mentioned in paragraph 4 as information that can be conveyed through EODs EXCEPT

- (A) the species of the transmitting fish
- (B) the gender of the transmitting fish
- (C) the rank of the transmitting fish
- (D) the location of the transmitting fish

2-2. **Directions:** An introductory sentence for a brief summary of the passage is provided below. Complete the summary by selecting the THREE answer choices that express the most important ideas in the passage. Some sentences do not belong in the summary because they express ideas that are not presented in the passage or are minor ideas in the passage.

**Within the broader category of electric fish, those that are weakly electric are the lesser-known variety, and they use their EODs differently than strongly electric fish.**

- (A) The electric eel is the best-known weakly electric fish, and unlike other species, it uses its electric fields to stun prey.
- (B) Using specific organs that have evolved over time, weakly electric fish can emit electric fields and sense those emitted by others.
- (C) The electric field that surrounds the body of a weakly electric fish, combined with its special skin, allows it to gather information about its environment.
- (D) The longtail knightfish sends out frequencies of around 50 to 150 Hz, which is considerably weaker than the EOD of some other fish species.
- (E) One of the key features of weakly electric fish is their ability to use electrical signals to pick up important information from nearby fish.
- (F) Electroreceptive fish use EODs to establish hierarchies among species, producing different types of pulses to indicate aggression and submission.



# word brush-up

▪ Choose one that is closest in meaning to the shaded word or phrase.

01 a technological **breakthrough**

- (A) advance (B) problem  
(C) tool (D) skill

02 **mold** clay into various forms

- (A) break (B) shape  
(C) measure (D) cast

03 a point of **contention**

- (A) intent (B) debate  
(C) attraction (D) reference

04 an **alternate** to fossil fuels

- (A) access to  
(B) advantage of  
(C) substitute for  
(D) reliance on

05 **is deemed** unnecessary

- (A) is made  
(B) is rendered  
(C) is considered  
(D) is kept

06 a **haphazard** inventory control system

- (A) disorganized (B) risky  
(C) reoccurring (D) harmful

07 **contemplate** the wider consequences

- (A) design (B) ponder  
(C) conduct (D) forget

08 **invert** the object on the canvas

- (A) sort (B) throw  
(C) request (D) overturn

09 give civil servants annual pay **increments**

- (A) documents (B) increases  
(C) awards (D) incentives

10 **circumvent** the new regulations

- (A) ask for  
(B) get around  
(C) object to  
(D) learn about



- 11 Researchers have been able to make some assumptions about the construction of Greek theaters. For instance, it is known that construction work was usually **undertaken** on hillsides, where architects could make use of the natural slope.
- (A) resumed (B) moved away (C) supported (D) carried out
- 12 Solar power works by **harnessing** the energy from sunlight and converting it into usable electricity. During this conversion process, some of the energy is lost.
- (A) employing (B) strengthening (C) leaning on (D) bending over
- 13 The Civil War ended when the South surrendered. The effect of the North's victory was to extend the **reach** of the federal government's authority on the affairs of the individual states.
- (A) force (B) location (C) approach (D) scope
- 14 When people suffer from a mental illness, they often take on a different public persona to deflect away attention. In fact, sometimes individuals who suffer from depression **assume** the facade of a contented, happy person in order to hide their true state.
- (A) consume (B) commence (C) fake (D) suppose
- 15 Strictly speaking, many of the "uncontacted peoples" in the Amazon do not live in total isolation from the outside world. They are, for instance, known to communicate and trade with larger tribes in the **vicinity**.
- (A) advanced world (B) distant lands  
(C) surrounding area (D) recent past

answer 01 (A) 02 (B) 03 (B) 04 (C) 05 (C) 06 (A) 07 (B) 08 (D) 09 (B) 10 (B)

11 (D) 12 (A) 13 (D) 14 (C) 15 (C)

passage 1>

### The Composition and Uses of Lichens

1 A prime example of a symbiotic relationship can be seen in lichens. These creatures are composed of a fungal partner and a photosynthetic partner—usually algae or cyanobacteria—that together form the external and internal portions of a lichen, an organism whose successful maintenance of a symbiotic relationship between fungi and algae allows it to flourish almost anywhere.

2 → The external body of a lichen—the vegetative tissue known as the thallus—is formed by the fungal component. Because the fungus forms the visual characteristics of a lichen, species of lichen are named according to the fungal partner, not the photosynthetic partner. There are an estimated 13,500 to 17,000 species of lichen. While the fungal species forming lichen partnerships are quite numerous, there are far fewer varieties of photosynthetic partners. The same species of photosynthetic partner will frequently occur in several different lichen species.

3 → Lichens feature a variety of shapes and textures, depending on the fungus, and this variety makes it possible to roughly classify them into three categories. The first category, which contains low-growing, crust-like lichens, is known as crustose lichens. They can be found on surfaces like tree bark and rock faces, where they may either form a layer that protrudes from the surface they cover, or be ingrained within the surface. Foliose lichens—the second category of lichen—are greenish-gray leafy organisms that are often found in shady places. They also grow on bare rock and tree bark, but, unlike crustose lichens, they do not form crust-like layers that lie flat against the surface. The final category of lichen contains fruticose lichens, the most developed of the three types. Fruticose lichens often feature shrub-like forms with branches that are similar in configuration to the branches of plants.

4 As the external component of the lichen partnership, the fungus has an important protective role. Although the fungus may perform some mineral gathering functions, its main purpose is to prevent the photosynthetic partner from drying out. ▮ Inside the thallus, sheltered by the fungal component, the photosynthetic partner is responsible for supplying the lichen with nutrition,

using energy obtained through photosynthesis. **B** Through this cooperation, both partners are able to survive as one in extreme conditions where neither could exist alone.

5 **C** Some of the characteristics of lichens make them particularly beneficial to humans. **D** One function for which lichens are appreciated is their ability to indicate air pollution. Because it is known that high concentrations of pollutants in the air are likely to kill lichens, scientists are able to gauge air pollution in particular regions by carefully monitoring the health of lichens that live in the area.

6 → In addition to serving as indicators for air pollution, lichens are also beneficial to humans for use in a dating method known as lichenometry. Because each lichen species grows at a constant, slow rate—ranging between half a millimeter per year to 500 millimeters a year—it is possible to establish the length of time a lichen has been growing on a rock surface. This information is useful for determining the dates of natural disasters like earthquakes, which cause avalanches and overturn many fresh rock surfaces. As soon as new rock surfaces are exposed, lichens begin to colonize them. Therefore, by examining the size of individual lichen growths, scientists are able to calculate their ages, which provide them with an estimate for the ages of rock surfaces up to 10,000 years old. However, on older rock surfaces, lichen growths are often poorly preserved and unsuitable for use in dating.

7 → One of the most important benefits of lichens is their use in medicine. Cultures all over the world have exploited lichens for their healing properties, using them as cures for jaundice, rabies, and coughing. Most beneficial of all is the use of lichens in antibiotic ointments. It is believed that approximately fifty percent of lichen species possess antibiotic qualities. Lichens have been used for medicinal purposes in the Pacific Islands, New Zealand, China, Russia, and on every continent except Australia. Recently, lichens have even been used as deodorants and herbal dyes.

1. The word it in the passage refers to

- (A) fungal partner
- (B) photosynthetic partner
- (C) lichen
- (D) symbiotic relationship



2. According to paragraph 2, why are lichens named after the fungal component of their composition?

- Ⓐ Because the same photosynthetic partner is used in every lichen
- Ⓑ Because some lichens do not have a photosynthetic partner
- Ⓒ Because there are too many varieties of photosynthetic partners
- Ⓓ Because the fungal component determines the lichen's physical appearance

**Paragraph 2 is marked with an arrow [→].**

3. In paragraph 3, the author says that foliose lichens

- Ⓐ form crust-like layers flat against rocks or tree bark
- Ⓑ may be ingrained within the surface they cover
- Ⓒ tend to develop away from sunlit areas
- Ⓓ are the most advanced lichen life forms

**Paragraph 3 is marked with an arrow [→].**

4. The word configuration in the passage is closest in meaning to

- Ⓐ arrangement
- Ⓑ material
- Ⓒ texture
- Ⓓ size

5. The word sheltered in the passage is closest in meaning to

- Ⓐ blocked
- Ⓑ mobilized
- Ⓒ inhibited
- Ⓓ protected

6. Which of the sentences below best expresses the essential information in the highlighted sentence in the passage? *Incorrect* choices change the meaning in important ways or leave out essential information.

- Ⓐ Lichens are killed by high levels of air pollution, so scientists use them as sensitive indicators of air quality.
- Ⓑ Scientists have done research which proves that lichens are killed by high concentrations of air pollutants.
- Ⓒ It is possible to determine important information about lichen colonies by monitoring levels of air pollution in the region.
- Ⓓ Since lichens are sensitive to air quality, they tend to live in areas that are relatively free of air pollutants.

7. According to paragraph 6, lichens' remarkably constant rate of growth makes them useful for

- Ⓐ determining the rate at which colonies spread
- Ⓑ estimating the timeframe of geological changes in an area
- Ⓒ dating significant climate changes throughout history
- Ⓓ finding out how natural disasters impact on specific regions

**Paragraph 6 is marked with an arrow [→].**

8. The word *properties* in the passage is closest in meaning to

- Ⓐ provisions
- Ⓑ capabilities
- Ⓒ territories
- Ⓓ principles

9. All of the following are mentioned in paragraph 7 as possible applications of lichens EXCEPT

- Ⓐ an antibiotic in medications
- Ⓑ a pigment in herbal dyes
- Ⓒ a remedy for coughing
- Ⓓ a fragrance in perfumes

**Paragraph 7 is marked with an arrow [→].**

10. Look at the four squares [■] that indicate where the following sentence could be added to the passage.

**To accomplish this task, the fungus essentially encloses the algae or cyanobacteria, reducing its exposure to the sun.**

Where would the sentence best fit?

Click on a square [■] to add the sentence to the passage.

11. **Directions:** An introductory sentence for a brief summary of the passage is provided below. Complete the summary by selecting the THREE answer choices that express the most important ideas in the passage. Some sentences do not belong in the summary because they express ideas that are not presented in the passage or are minor ideas in the passage. *This question is worth 2 points.*

**The symbiotic composition of lichens allows them to flourish and thus be used by humans for a variety of beneficial uses.**

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#### Answer Choices

- |  |   |
|--|---|
| <p>(A) There are at least 13,500 species of lichens, and they are classified according to the appearance of the photosynthetic partner.</p>                | <p>(B) A lichen may appear to be a single organism, but it is actually the result of a mutually beneficial partnership between a fungal and a photosynthetic component.</p> |
| <p>(C) Each lichen species belongs to one of three broad categories, including crutose, foliose, and fruticose, of which fruticose is the most common.</p> | <p>(D) Certain characteristics of lichens make them ideal for gauging the quality of air and approximating the dates of significant natural events.</p>                     |
| <p>(E) Many cultures have discovered that the healing properties of lichens cure a variety of ailments.</p>  | <p>(F) Lichens grow very slowly, with some species averaging half a millimeter per year.</p>  |

Drag your answer choices to the spaces where they belong. To remove an answer choice, click on it. To review the passage, click **View Text**.

passage 2&gt;

**The Relevance of Glaciers**

- 1 Glaciology is a branch of science devoted to the study of ice, especially in its glacial form. The benefits of studying glaciers may not be popularly appreciated, but glaciology is an important field because it provides the scientific community with abundant information about how humans have influenced the global environment and how we should prepare for the consequences of future climatic changes.
- 2 → Locked in the solid depths of ancient glaciers lie specific accounts of the climatic and atmospheric changes that have taken place on Earth over thousands of years. This information can be accessed by scientists through the extraction of ice cores—cylindrical samples of ice obtained by drilling vertically downward into a glacier. Because an ice core is composed of numerous accumulated layers of snow and ice, scientists can decode a detailed chronicle of past atmospheric and climatic conditions by measuring the presence of certain particles contained in the different layers. In this way, each layer provides scientists with a snapshot of the conditions that existed at the time of its formation.
- 3 Researchers studying the effects of human activities on the planet have found glacial ice cores particularly helpful as they chart global atmospheric changes that appear to correspond with specific circumstances in human history. Using ice cores from Greenland glaciers, scientists measured historical changes in atmospheric lead concentrations and discovered that major increases occurred in time periods that witnessed a heightened use of lead by humans, such as during the Industrial Revolution, and when lead became a common additive in gasoline. Because these studies showed that atmospheric concentrations of lead, which is known to be particularly hazardous to humans, have risen by a factor of 200 over natural levels, they contributed to the decision to phase out the use of leaded gasoline in recent times.
- 4 Ice cores also provide information about historical climate trends—another issue relevant to scientists concerned about human impact on the planet. Analysis of dust concentrations and hydrogen and oxygen isotopes in ice cores drilled from glaciers in the Himalayan Mountains demonstrates that Earth's climate has been warming up for the past 1,000 years, with its temperature rising most sharply in the twentieth century. Some scientists interpret this as an indication that human activity is at least partly responsible for the current global warming trend.

09



- 5 → In addition to ice cores, glaciers possess another means of providing scientists with information about alterations in the planet's climate. In an extensive mapping project, NASA surveyed glaciers in Antarctica and Greenland to determine the sizes of these polar ice sheets and the changes they have experienced during the past decade. Combining satellite imaging and airborne mapping gathered over several years, NASA scientists determined that the edges of the glaciers have been thinning. According to computer models, this is a sign of a warming climate.
- 6 → As the consequences of continued global warming loom in the distance, scientists have begun to consider the repercussions that glacial melting will have on peoples around the world. **A** There are many catastrophic events predicted to accompany the melting of glaciers. **B** For example, glaciers are the sole sources of water for Ecuador, Bolivia, and Peru during their dry seasons, so these countries would be especially vulnerable to the effects of increased glacial melting. **C** Over the past thirty years, glaciers in the Peruvian Andes have been shrinking, losing approximately a quarter of their surface area. **D** Traditionally, seasonal melting of these glaciers was of no concern to local populations because water that was lost during the dry season was replaced by rains during the wet season. Unfortunately, this is no longer the case, as the glaciers are melting too fast to be fully replenished. Unless something is done to alleviate the problem, it seems likely that Peruvian communities will face water shortages in the near future. For scientists in countries that rely almost exclusively on glaciers for their fresh water, understanding and preparing for the future effects of the glacial changes already underway is critical to maintaining their way of life.

1. The word abundant in the passage is closest in meaning to
  - (A) capable
  - (B) plentiful
  - (C) rare
  - (D) precise
2. According to paragraph 2, which of the following is correct about the term ice cores?
  - (A) They are glaciers that are easily accessible to scientists.
  - (B) They are cylindrical tools used by scientists to drill into glaciers.
  - (C) They are sections of ice removed from within a glacier.
  - (D) They are layers of frozen soil that have accumulated beneath glaciers.

Paragraph 2 is marked with an arrow [→].

3. The word **chronicle** in the passage is closest in meaning to

- Ⓐ core
- Ⓑ estimate
- Ⓒ sample
- Ⓓ record

4. The word **they** in the passage refers to

- Ⓐ researchers
- Ⓑ activities
- Ⓒ ice cores
- Ⓓ changes

5. Which of the sentences below best expresses the essential information in the highlighted sentence in the passage? *Incorrect* choices change the meaning in important ways or leave out essential information.

- Ⓐ Unfortunately, the Industrial Revolution is believed to have initiated a period of increased lead pollution in Earth's atmosphere.
- Ⓑ Historically, human activities such as industrial development, and the use of leaded gasoline resulted in increases of lead in the atmosphere.
- Ⓒ Ice cores from Greenland showed that increases in concentrations of lead in the atmosphere corresponded to historical increases in humans' use of the substance.
- Ⓓ Based on their analysis of ice cores extracted from glaciers in Greenland, scientists have determined that lead concentrations in Earth's atmosphere have steadily risen.

6. The word **indication** in the passage is closest in meaning to

- Ⓐ signal
- Ⓑ point
- Ⓒ theory
- Ⓓ approach



7. According to paragraph 5, scientists have discovered the extent of polar ice melting over the past decade by

- Ⓐ observing changes in sea level around polar regions
- Ⓑ examining overhead images of polar glaciers
- Ⓒ analyzing ice cores from Greenland and Antarctica
- Ⓓ gauging polar temperatures on a regular basis

**Paragraph 5 is marked with an arrow [→].**

8. The word repercussions in the passage is closest in meaning to

- Ⓐ impacts
- Ⓑ difficulties
- Ⓒ examinations
- Ⓓ renewals

9. According to paragraph 6, during parts of the year, Ecuador, Bolivia, and Peru

- Ⓐ experience dangerous glacial floods
- Ⓑ exclusively rely on glacier melt for water
- Ⓒ experience major water shortages
- Ⓓ are vulnerable to catastrophic weather events

**Paragraph 6 is marked with an arrow [→].**

10. Look at the four squares [■] that indicate where the following sentence could be added to the passage.

**Among them, the danger of water scarcity weighs heavily on the minds of nations that rely on glaciers as their primary sources of water.**

Where would the sentence best fit?

Click on a square [■] to add the sentence to the passage.

11. **Directions:** An introductory sentence for a brief summary of the passage is provided below. Complete the summary by selecting the THREE answer choices that express the most important ideas in the passage. Some sentences do not belong in the summary because they express ideas that are not presented in the passage or are minor ideas in the passage. *This question is worth 2 points.*

**Glaciers possess scientific relevance by providing information about humanity's influence on global conditions and as a result, suggesting possible future trends.**

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#### Answer Choices

- |   |   |
|---|---|
| <p>(A) Ice cores removed from the Himalayan mountains indicate that global temperatures have been rising for 1,000 years, with the twentieth century showing the highest peak.</p> <p>(C) Ice cores can link changes in the concentrations of atmospheric particles, such as lead, to documented human pursuits.</p> <p>(E) If glacial melting continues to increase, some countries—for example, Ecuador, Bolivia, and Peru—could face devastating ecological and humanitarian crises.</p> | <p>(B) Although ice cores provide information about long-term climate changes, they are also very sensitive to atmospheric changes and can be rendered useless by excessive air pollution.</p> <p>(D) Analysis of ice cores and maps of glaciers in Antarctica and Greenland suggest that the current global warming trend may be partly due to human activities.</p> <p>(F) Scientists have discovered that glaciers contain vast stores of fresh water, so it is possible that they will someday be used as sources of water.</p> |
|---|---|

Drag your answer choices to the spaces where they belong. To remove an answer choice, click on it. To review the passage, click **View Text**.



passage 3&gt;

**Crop Diversity and Seed Banks**

- 1 Concern about extinction—the permanent loss of a species—motivates a wide variety of people to take action to protect animal species at risk of dying out. Baby seals, tigers, and whales are just a few examples of species that have numerous advocates striving to guard them against extinction. Animal protection and animal rights are familiar themes associated with the field of environmental activism. Certainly, endangered animals suffer no lack of support. For endangered plants, however, the situation is quite different; they are championed by few.
- 2 → Surprisingly, some of the most endangered plants are species that, up until recently, were used by humans as staple food crops. Threatened by current shortsighted farming techniques, crop diversity has shrunk dramatically because, in order to maximize productivity, farmers have elected to focus on a handful of high-yield crops that can be harvested efficiently. At one time, the number of plant species used by humans to meet their nutritional requirements numbered above 7,000. Now, it hovers around 150. Even more dramatic is the Food and Agriculture Organization's claim that humans actually rely on just twelve species of plants for most of their food.
- 3 → A single food crop (such as wheat, for instance) generally contains several species, which may be further divided into hundreds of varieties, but these varieties are quickly disappearing. Examples of losses in crop diversity have been documented worldwide: Ninety-five percent of the 8,000 apple varieties that grew in the United States around 1900 have been lost. Eighty percent of the corn varieties grown in Mexico in 1930 have vanished. Ninety percent of the 10,000 wheat varieties cultivated in China in 1949 are no longer used.
- 4 → Those who promote the protection of endangered plants caution that the permanent loss of plant species represents a devastating threat to humanity, for crop diversity is a factor that ensures the continuation of certain beneficial natural processes in ecosystems—the cycling of nutrients, management of pests, rehabilitation of soil, and maintenance of water quality. Additionally, crop diversity is crucial because it provides the necessary gene pool to supply crops with a variety of traits, which are adapted to a variety of conditions. Heightened uniformity in agriculture leaves crops increasingly vulnerable to climate changes and invasive species. For example, in 1970, more than half the corn grown in the U.S.—all of it grown from just one seed type—was destroyed by the invasion of a fungus well suited to attack that particular variety of corn. Clearly, there is an

urgent need to preserve the planet's irreplaceable crop diversity before it is lost completely.

5 Efforts to safeguard crop diversity often involve seed banks—facilities that house collections of seeds for the purpose of protecting genetic diversity. There are approximately 1,400 seed banks currently in existence, but the long-term effectiveness of many is at risk due to political instability and natural disasters that threaten their security and result in poor maintenance. **A** However, Norway has a plan to change all of that. **B**

6 The government of Norway has designed a massive seed repository to hold representatives of all the known varieties of domesticated plants on Earth the culmination of 10,000 years of human agriculture. **C** The purpose of the vault, which will be capable of storing 2 million seeds, is not only to preserve crop diversity from the reduction caused by modern agriculture, but also to protect the planet's agricultural diversity from major disasters like nuclear war, climate change, and rising sea levels events with the potential to transform the Earth and cripple human agriculture. **D** A seed bank of this magnitude would make it possible for humanity to rebuild its agricultural capacity in the wake of a global catastrophe.

7 → Carved into a mountain on an island just 1,000 kilometers from the North Pole, the Norwegian seed bank will take advantage of the Arctic permafrost to maintain the seeds at around -18 degrees Celsius. Frozen at this temperature, they could remain viable for 100 years. In addition to providing for long-term storage, the facility will be constructed to withstand severe disasters, featuring concrete walls a meter thick, airlocks, and blast-proof doors. All of these precautions will ensure that the crop diversity necessary to support human populations will survive, should humanity ever need to reseed the Earth.

1. The word **championed** in the passage is closest in meaning to

- (A) defended
- (B) appreciated
- (C) understood
- (D) controlled



2. According to paragraph 2, why has **crop diversity** decreased?

- Ⓐ Because few people are concerned with the plight of endangered plants
- Ⓑ Because modern farming uses just a few crops that are highly productive
- Ⓒ Because the nutritional requirements of humans have changed
- Ⓓ Because fewer people are involved in the practice of farming

**Paragraph 2 is marked with an arrow [→].**

3. According to paragraph 3, scientific observations from various locations have shown that

- Ⓐ the number of varieties among key crop species worldwide is dwindling
- Ⓑ crop yields have been declining for many years throughout the world
- Ⓒ the problems associated with crops have spread from America to the rest of the world
- Ⓓ primary crops like corn and wheat have diffused into a huge number of varieties

**Paragraph 3 is marked with an arrow [→].**

4. Which of the sentences below best expresses the essential information in the highlighted sentence in the passage? *Incorrect* choices change the meaning in important ways or leave out essential information.

- Ⓐ Endangered plants benefit humans and other ecosystem members by cycling nutrients, managing pests, rehabilitating soil, and maintaining water quality.
- Ⓑ According to some, endangered plants must be protected because their loss may lead to the decrease of crop diversity.
- Ⓒ Advocates of endangered plants warn that if more species die out, humanity will lose the important ecological contributions of crop diversity.
- Ⓓ Crop diversity is responsible for protecting endangered species and for sustaining a variety of beneficial environmental processes.

5. The word **vulnerable** in the passage is closest in meaning to
- (A) tolerable
  - (B) susceptible
  - (C) liable
  - (D) amenable
6. According to paragraph 4, what caused the loss of half of the U.S. corn crop in 1970?
- (A) A disease that made seeds unable to sprout
  - (B) A breakdown in natural ecosystem processes
  - (C) The effects of a large-scale climate change
  - (D) The single variety's weakness to a parasite

**Paragraph 4 is marked with an arrow [→].**

7. The word **many** in the passage refers to
- (A) efforts
  - (B) seed banks
  - (C) facilities
  - (D) seeds
8. The word **cripple** in the passage is closest in meaning to
- (A) increase
  - (B) disable
  - (C) transmit
  - (D) alter



9. According to paragraph 7, the Norwegian seed bank will use the Arctic environment to

- Ⓐ protect the seeds from nuclear radiation
- Ⓑ shield the seeds from weathering or erosion
- Ⓒ insulate the seeds during times of war
- Ⓓ preserve the seeds during extended storage

**Paragraph 7 is marked with an arrow [→].**

10. Look at the four squares [■] that indicate where the following sentence could be added to the passage.

**Because of these and other difficulties, most seed banks do not fulfill the need for a durable, permanent gene bank.**

Where would the sentence best fit?

Click on a square [■] to add the sentence to the passage.

11. **Directions:** An introductory sentence for a brief summary of the passage is provided below. Complete the summary by selecting the **THREE** answer choices that express the most important ideas in the passage. Some sentences do not belong in the summary because they express ideas that are not presented in the passage or are minor ideas in the passage. ***This question is worth 2 points.***

**The planet's vital crop diversity is at risk, so reliable seed banks are extremely important.**

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### Answer Choices

- |   |   |
|---|---|
| <p>(A) In general, people are mainly interested in protecting endangered animals from extinction and have paid little attention to the loss of crop diversity.</p> <p>(C) A varied gene pool is important for human agriculture as well as for the general health of the environment.</p> <p>(E) Several decades ago, all U.S. corn was grown from one seed type, so over half the crop was ruined when it was exposed to an invasive fungus.</p> | <p>(B) Maximizing agricultural productivity has resulted in the loss of crop diversity, and all over the world vast numbers of crop varieties have disappeared.</p> <p>(D) With approximately 1,400 seed banks already in existence and several others planned, crop diversity should be secure for centuries to come.</p> <p>(F) Norway's planned seed bank will guarantee the preservation of the planet's crop diversity for many years, no matter what disasters may befall humanity.</p> |
|---|---|

Drag your answer choices to the spaces where they belong. To remove an answer choice, click on it. To review the passage, click **View Text**.



# day 10

## inference

✚ speed keyword

● case example

★ smart solution

▣ practice test

▶ word brush-up

day 10 ●

day 11 ●

day 12 ●

day 13 ●

+ speed

keyword



## inference문제는

99%의 정답

▼ 찾는다.

지문에 주어진 근거 문장을 통해 직접적으로 명시되지 않은 사실을 도출해 내는 유형이다. **fact**유형이 질문과 관련된 문장 **A**를 찾아 표현만 **paraphrasing** 하는 것이라면 **inference**유형은 근거 문장 **A**를 찾아 **B**라는 새로운 내용을 수험자의 머릿속에서 추론해야 하므로 근거 문장은 정답 정보의 매개체 역할만 할 뿐 그대로 답이 되지 않는다. 또한 추론된 사실은 사실 정보가 아니므로 절대적인 정답 기준을 적용하기보다는 선택지에서 상대적으로 더 가능성이 높은 것을 선택한다는 마음으로 문제를 푸는 것이 좋다.

지문당 0~3문제 출제되며 질문에 동사 **infer**가 등장하므로 쉽게 **inference** 유형임을 알아차릴 수 있다. 질문지의 구성은 다음과 같으며, 지문 전체의 정보를 통해 추론하는 경우와 한두 단락 내에서 추론하는 두 가지 경우가 있다.

Which of the following can be inferred from paragraph X about   ?

What can be inferred from the passage about   ?



## case example

### 대표 문제

Read each passage and answer the following question.

#### Case 1

##### TOEFL Reading passage

review | help | back | next

The ocean's appearance is largely determined by the way light impacts on water. When water is hit by light, it absorbs most of the light rays, and reflects some back. Because of water's unique properties, it is able to absorb long wavelength light, which appears red, orange or yellow in the color spectrum, much more strongly than short wavelength light, which appears blue. Therefore, since water reflects short wavelength light, it takes on a pure blue color. But in reality in the vast oceans, the reflected light from the water interacts with other reflected sunlight from sand, mud, and algae, giving the ocean its distinctive color.

What can be inferred from the passage about the vast ocean's color?

- (A) It contains pigments from right across the color spectrum.
- (B) It is not pure blue in its appearance.
- (C) It is unaffected by changes in sunlight intensity.
- (D) It is a deep hue due to its huge volume.

#### Case 2

##### TOEFL Reading passage

review | help | back | next

The period from 1918 to 1929, between the end of the Great War and the start of the Great Depression, is often referred to in American history as the Jazz Age. The Jazz Age is so-called not only because the popular musical genre emerged during this period, but also because of what the particular characteristics of this musical style represented. Above all, the Jazz Age was characterized by increased social liberty. In particular, young people began to challenge traditional social values, and the conservative consensus over issues such as sexuality and individuality no longer held.

What can be inferred from the passage about jazz music?

- Ⓐ It emerged out of America's experiences in the Great War.
- Ⓑ It was the most popular musical genre of the period.
- Ⓒ It broke many of the old conventions of music.
- Ⓓ It encouraged many people to cherish social relationships.

answer 1. Ⓑ 2. Ⓒ

## Case 분석

### ❶ 하나의 근거 문장을 통해 단순 추론하는 경우

inference 유형은 추론의 대상이 한 단락이나 지문 전체를 아우르는 광범위한 것으로 주어지는 경우가 많지만 Case 1의 경우처럼 질문에서 보다 구체적인 추론 대상이 주어지는 경우도 있다. 이 경우 지문을 빠르게 scanning하면서 추론 대상이 등장하는 부분을 찾으면 된다.

Case 1의 경우 바다에 대해 다루는 지문으로 추론 대상이 '넓은 바다의 색깔(vast ocean's color)'로 주어져 있으므로 넓은 바다(vast ocean)와 연관된 내용이 등장하는 부분을 찾아보면 마지막 부분에 추론의 근거가 되는 문장이 등장함을 알 수 있다.

**근거 문장** But in reality in the vast oceans, the reflected light from the water interacts with other reflected sunlight from sand, mud, and algae, giving the ocean its distinctive color.

그러나 실제로 넓은 바다에서는 물의 반사광이 모래, 진흙, 조류에서 반사된 태양광과 섞여 바다에 고유한 색깔을 띄게 한다.

→ **추론 문장** Ⓑ It is not pure blue in its appearance. 완전히 푸른색으로 나타나지는 않는다.

### ❷ 단서를 종합하여 추론해야 하는 경우

반면 Jazz Age를 다루고 있는 Case 2의 경우 추론의 대상이 jazz music으로 주어졌는데 jazz music이 등장하는 부분을 찾아보면 지문에 직접적으로 등장하지 않는다는 것을 알 수 있다.

**근거 단서 1** The Jazz Age is so-called not only because the popular musical genre emerged during this period, but also because of what the particular characteristics of this musical style represented. Above all, the Jazz Age was characterized by **근거 단서 2** increased social liberty. In particular, young people **근거 단서 3** began to challenge traditional social values, and the conservative consensus over issues such as sexuality and individuality no longer held.

재즈에이지는 단지 그 인기 있는 음악 장르가 이 시기에 나타났기 때문이 아니라 이 음악 장르의 특성이 대변하는 것 때문에 붙여진 이름이다. 무엇보다 재즈에이지는 사회적 자유의 증진으로 특징 지을 수 있다. 특히 젊은 사람들은 전통적인 사회 가치에 도전했고 섹슈얼리티나 개인성 같은 문제에 대한 전통적인 합의는 더 이상 유효하지 않았다.

→ **추론 문장** Ⓒ It broke many of the old conventions of music. 이전 음악의 수많은 전통을 깼다.

Case 1의 경우와 달리 지문에서 jazz music이라는 단어가 직접적으로 등장하지 않지만 문맥을 통해 the popular musical genre와 this musical style이 곧 jazz music을 가리킴을 알 수 있다. 근거 단서 1을 통해 jazz music이 Jazz Age에 영향을 미쳤다는 것을 알 수 있고 근거 단서 2와 3을 통해 Jazz Age의 특징이 드러나므로 jazz music의 특징은 곧 Ⓒ가 되는 것이다. 추론 문제에서는 이렇게 추론 대상과 지문 전체 토픽의 관계를 우선적으로 밝혀야만 논리적인 추론이 가능한 경우가 많다.



사실 정보 확인 문제와 달리 수험자의 머릿속에서 추론의 과정을 거치게 되므로 단일한 전략을 구사하기 힘들고 개인의 논리적인 사고력이 전제되어야 하는 어려운 문제 유형이다. 하지만 추론 유형 역시 일반 상식이 아닌 지문에 제시된 사실 정보에 한정해 생각하면 되므로 스펀디하게 추론의 근거 문장들을 찾고 적절한 방식으로 결론을 이끌어내는 훈련에 초점을 맞추어 보자.

## 선택지를 먼저 볼 수도 있다.

추론의 대상이 광범위하게 주어질수록 선택지를 먼저 보는 것이 유리하다. 추론의 대상이 광범위하면 지문의 어느 한 부분만을 선택적으로 찾아 읽을 수 없고 최소한 해당 단락 전체를 읽어야 하기 때문이다. 따라서 시간이 촉박할 경우나 대강의 지문 이해가 된 상태에서 inference유형이 출제된다면 선택지를 먼저 읽으며 오답으로 예상되는 것을 소거하는 것이 좋다. 이미 알고 있는 정보와 관련된 정보가 선택지로 등장할 수도 있기 때문이다. 대표적인 오답의 특징은 다음과 같다. 대표 문제 Case 2의 오답들을 예로 살펴보자.

### ❶ 지나친 일반화로 논리적으로 비약된 선택지

추론 문제에서 자주 등장하는 오답 유형 중 하나이다. 일반화의 오류를 피하기 위해서는 근거 문장에서 한 단계 이상 넘어 추론하지 않는 것이 안전하다.

Case 2 ㉠ It emerged out of America's experiences in the Great War.

제 1차 세계 대전이 끝나는 시점에 재즈 음악이 등장했다고 언급되었을 뿐 이 둘 사이에 어떤 연관 관계가 있는지는 지문 내용을 통해 추론할 수 없다.

### ❷ 지문에서 추론 근거를 찾을 수 없는 선택지

추론 문제에서 가장 주의해야 하는 오답 유형이다. 아무리 지문의 방향과 유사한 내용을 담고 있다고 하더라도 지문에서 정답의 근거 문장을 댈 수 있어야 한다.

Case 2 ㉢ It was the most popular musical genre of the period.

재즈 음악이 그 시대의 인기있는 음악이라는 말은 나오지만 가장 인기 있었다는 근거는 등장하지 않았으므로 오답이다.

☞ 모든 유형을 막론하고 최상급이나 only 등의 극단적인 표현이 들어가는 것은 정답이 아닌 경우가 대부분이다.

### ❸ 지문내용과 상반된 선택지

추론 유형이 아니더라도 자주 등장하는 오답 유형 중 하나이다. 단어나 표현 일부만 바뀔 수 있으므로 주의한다.

Case 2 ㉤ It encouraged many people to cherish social relationships.

재즈 음악을 대변하는 재즈시대는 개인성에 대한 전통적인 합의를 더 이상 지키지 않았다고 했으므로 사회적 관계를 중요하게 생각했다는 것은 지문 내용과 상반된다.

## ○ 다양한 추론의 경우를 확인해 둔다.

추론할 수 있는 근거 문장의 예는 몇 가지로 정리할 수 없을 정도로 다양하지만 시험에 자주 등장하는 유형은 다음과 같다. 추론은 근거 문장을 재진술하거나 paraphrasing하는 것이 아니라는 점을 염두에 두면서 비교급, 시간 관계나 수량 등이 언급되는 부분에 주목한다.

### ❶ 구체적 예를 종합하여 일반화하는 경우

Research on human memory indicates that people are able to recall recent events more easily than episodes that occurred long ago. ... they can also remember specific details more clearly if the events occur in a familiar setting. 인간의 기억에 대한 연구는 사람들이 예전의 것보다 최근의 사건을 보다 쉽게 기억할 수 있음을 알려준다. ... 사람들은 익숙한 환경에서 발생한 사건일 경우 구체적인 세부사항을 더 명확하게 기억할 수도 있다.

**추론 가능한 사실** Human memory is affected by time and environment.

인간의 기억은 시간과 환경의 영향을 받는다.

specific한 내용에서 general한 결론을 도출해 내는 경우이다.

### ❷ 비교 대상이 등장할 경우

• Mars's terrain is **more rugged than** that of Earth, characterized as it is by deep craters, steep cliffs, and large rocky outcrops.

화성의 표면은 지구보다 거칠고 깊은 분화구와 가파른 낭떠러지 그리고 노출된 거대한 바위 등이 특징이다.

**추론 가능한 사실** The land on Earth is **less craggy** than that on Mars. 지구의 표면은 화성보다 덜 울퉁불퉁하다.

• **Unlike** the ancient Mayan civilization, the Inca Empire did not have any formal writing system, although this did not prevent the development of remarkably sophisticated cultural and political spheres. 고대 마야 문명과는 달리 잉카 제국은 공식적인 문자 체계가 없었지만 이것이 고도로 정교한 문화적 정치적 측면에서의 발달을 저지하지는 않았다.

**추론 가능한 사실** The Mayans had a formal writing system. 마야 제국은 공식적인 문자 체계가 있었다.

두 개의 비교축을 전제로 하는 비교급은 분명한 추론 결과를 얻을 수 있는 부분으로 비교 대상을 서로 뒤집어 생각하면 결론을 도출할 수 있다.

### ❸ 시간 관계가 등장할 경우

It was **not until** the 11<sup>th</sup> century that the Chinese began using gunpowder in warfare, even though the discovery of gunpowder had been made around two centuries earlier.

화약은 이미 약 2세기 전에 발견되었지만, 중국이 전쟁에서 화약을 사용하기 시작한 것은 11세기가 되어서였다.

**추론 가능한 사실** Before the 11<sup>th</sup> century, the Chinese did not use gunpowder in weapons.

중국은 11세기 전에는 무기에서 화약을 사용하지 않았다.

시간 관계, 수량 등이 등장하는 경우 역시 간단한 추론을 거치면 표면적으로 드러나지 않은 내용을 도출해 낼 수 있다.





## practice test\_level 1



>> Read paragraphs 1 to 8 and answer the following question for each.

### 1

There were several traditional roofing designs, but gabled roofs were the most prevalent. Their triangular shape allowed precipitation to easily run off, preventing snow from accumulating on the roof and rain from leaking inside. Builders relied on whatever materials were readily available to fashion roofs. Sawed lumber roofs were the most desirable, but the cost of purchasing sawed lumber often prevented builders from obtaining that material. Cedar was more commonly used, and its strength and natural resistance to rot made it easy to work with. However, if neither sawed lumber and cedar timber were available, twigs, branches, and straw provided an adequate substitute in forming the frame of the roof.

What can be inferred from the paragraph about cedar?

- (A) It was too expensive for most settlers to obtain.
- (B) It was an essential material in traditional roofing designs.
- (C) It was less expensive to get hold of than certain types of wood.
- (D) It was seldom available as a roofing material for builders.

### 2

The origin of ancient Rome's theatrical tradition is difficult to determine, as there is little surviving text to guide scholars in the study of early Roman drama. What is just as surprising, however, is that the beginnings of their dramatic tradition were apparently also lost to the ancient Romans themselves. In the first century AD, investigations were being launched into how and when Roman theatre began. However, long before these inquiries began, most evidence and information pertaining to the origins of the theatre had already disappeared. All modern scholars can do to glean an idea of early Roman drama is look at the theatrical traditions of two cultures that significantly influenced the development of Roman culture.

It can be inferred from the paragraph that Romans of the first century AD

- (A) were no longer producing works of drama
- (B) did not anticipate the needs of future historians
- (C) discovered information about early Roman theatre
- (D) were interested in the foundations of their culture

### 3

Animals that live in the Arctic have evolved key adaptations that allow them to survive in such extreme conditions, and these unique features make them very different from their relatives that live in more temperate climates. One example is the narwhal, a whale whose adaptations to its icy environment have given it a very different appearance from that of other whales and dolphins. Most obviously, narwhals possess a long, thin tusk that protrudes from their upper jaw. This tusk allows the narwhal to probe for fluctuations in water temperature and salinity, and find relatively warm areas in the frigid Arctic waters. The populations are concentrated in an area of the planet that is home to very few kinds of whales. In fact, there are only two other whale species that spend their entire lives in the Arctic.

According to paragraph above, what can be inferred about the other two species of whales that live in the Arctic?

- (A) They are closely related to the narwhal.
- (B) They look similar to their warm-water relatives.
- (C) They are not able to live there all-year-round.
- (D) They have special adaptations to their habitat.

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### 4

Researchers expect that studies of mussel glue may one day yield the knowledge to construct adhesives that will revolutionize current medical practices. A durable, nontoxic adhesive that could bind wet surfaces would be immeasurably practical in surgery and dentistry, possibly becoming an essential operating-room tool. Current dental and medical bonding agents, including cyanoacrylate adhesives, are inferior in comparison to the potential presented by mussel glue. Although they work fairly well in a variety of conditions, they also tend to cause skin irritation and produce heat, which means that they can impact negatively on patient comfort. The medical community is anxiously anticipating the development of superior glues based on information obtained from studies of mussel adhesive.

What does the author imply about the medical community in the paragraph?

- (A) It wants to benefit financially from the research on mussel adhesive.
- (B) It understands the potential represented by the substance mussels use as glue.
- (C) It is actively involved in the research being conducted on mussels.
- (D) It is working to develop glues based on substances other than mussel adhesive.

## 5

Slash-and-burn agriculture, whereby forests are razed to make way for crop fields, leads to a number of troubling environmental consequences, not least of which is soil erosion. When large areas of vegetation are cleared away, the root systems that provided soil stability are removed. Moreover, the tree cover that protected the ground is lost, leaving the land exposed to the elements. Periods of drought, increased rainfall, strong winds or frost can variously impact on the loose soil, eroding the land much more quickly. The layer of soil at the surface, which is the most vulnerable to these changes, is also the most valuable. It is the layer which is rich in nutrients that plants need to grow and thrive. Therefore, once this topsoil has been eroded and washed away, fields rapidly lose their ability to support crops.

According to the paragraph, which of the following can be inferred about the slash-and-burn approach?

- (A) It is agriculturally productive but it damages the environment.
- (B) It is unable to completely remove tree root systems from the soil.
- (C) It is counterproductive because it produces dwindling yields.
- (D) It is only successful in areas that have a rich topsoil.

## 6

Lithography was invented in 1798 by a man named Alois Senefelder. It was devised as a way to mass-create posters, and reached its peak in popularity during the 1890s in Paris, when artists like Bonnard and Toulouse-Lautrec used it to design posters for cabarets and revues. Senefelder first designed this process using a smooth piece of limestone, drawing an image on it by using an oil-based substance, like a pastel. Acid was used to burn the image onto the surface, and then gum Arabic, which was a water-soluble solution, was applied. The gum Arabic stuck to the non-oily surface and sealed it from the ink that would later be applied. During the printing process, water adhered to the gum Arabic surfaces and avoided the oily parts, while the oily ink used for printing reacted in the opposite manner.

According to paragraph, what most likely happens when ink is applied to limestone in Senefelder's method?

- (A) It clings to the oil-based substance and separates from the gum Arabic portions.
- (B) It reacts with the acid and becomes absorbed into the limestone.
- (C) It sticks to the water-soluble sections and is repelled from the waxy surfaces.
- (D) It seals in the water that has been applied to the gum Arabic segments.

## 7

A Japanese researcher announced in 2002 that he planned to create a theme park for woolly mammoths that his team would resurrect and clone from frozen DNA. This would result from gathering sperm, frozen in fossilized mammoth specimens found in Siberia, and impregnating a modern-day elephant to create a hybrid species. It is widely anticipated that mammoths and elephants are genetically similar enough for cross-breeding to occur, and if these efforts were successful, it would be possible to manipulate reproduction. Scientists believe that they will be able to breed pure mammoths within a few generations. Although this may sound like a complex and far-fetched idea, plans for the park are already underway, with a Russian scientist having worked on cultivating a suitable location for more than a decade already.

What can be inferred from the paragraph about the woolly mammoths the scientists hope to house at the park in the future?

- (A) They will resemble prehistoric mammoths but be genetically dissimilar.
- (B) They will no longer have any DNA that comes from elephants.
- (C) They will possess adaptations to survive in today's warmer climate.
- (D) They will be equally comprised of mammoth and elephant genes.



## 8

Scientists estimate that there are four times the number of severe tornadoes in the U.S. as there are in any other continent. The main reason for this is the particular geography of North America. Uniquely, there is no major mountain chain that runs along the continent's east-west axis, so no major topographical obstacles exist to block the flow of air from the north and south. As a result, cool air currents from the north can clash directly with warm and humid air from the south, which has picked up moisture from the Gulf of Mexico. This can lead to the creation of huge storms, known as supercells, which provide the strong and continuous updraft needed to spawn tornadoes.

Based on the information in the paragraph, what can be deduced about continents other than North America?

- (A) They experience tornadoes occasionally but not severe ones.
- (B) They are not surrounded by warm seas that produce humid air.
- (C) They usually have geological obstacles going across their latitudinal axes.
- (D) They contain few geographical barriers that influence the flow of air.



## practice test\_level 2



>> Read passages 1 to 4 and answer the following questions for each.

### 1

The government in Tenochtitlan, which consisted of the Emperor and the courts, was without doubt the core of the Aztec Empire. But the Aztec Empire was ethnically diverse, incorporating a wide array of different tribal groups and peoples. The Empire was comprised of a number of different city-states and small fiefdoms, usually headed by a local ruler known as a tlatoani. The central government demanded tribute from the provinces, but the majority of taxes went to the tlatoani. Accordingly, it was the tlatoani, not the central government, that played the more important role in people's daily lives. They were responsible for spending money on civic works and making most of the important decisions.

This arrangement was in some ways beneficial for provincial people. It provided them with a degree of autonomy, but it still allowed them access to the lucrative trade networks that were facilitated by the Empire. However, the system was open to manipulation. For instance, some tlatoani would demand higher taxes from local people on the pretext that it was needed for the Empire. But, at the same time, they were often extracting bribes and concessions from Empire officials in exchange for agreeing to keep the peace.

1-1. Based on the information in paragraph 1, what can be inferred about the central Aztec government?

- (A) It didn't have difficulty collecting taxes from provinces.
- (B) It fell apart and was replaced by a number of separate kingdoms.
- (C) It became increasingly powerful over the course of time.
- (D) It exerted only limited influence over provincial peoples.

1-2. In paragraph 2, the author implies that the Aztec system of governance

- (A) was an obstacle to trade between different parts of the Empire
- (B) forced provincial rulers to raise taxes for local people
- (C) could be exploited by local leaders at the expense of ordinary people
- (D) allowed provincial peoples to participate in international trade

After generations of insects have been exposed to a particular pesticide, that population develops a natural resistance because of artificial selection. Pesticide-resistant individuals are able to survive applications of the chemicals, and this means that they are more likely to pass on their DNA to future generations. Over time, the entire population becomes resistant to the pesticide. For example, in several places including India, Pakistan, and Central America in the 1950s and 1960s, major anti-malaria campaigns were launched. These regions were sprayed with Dichloro-Diphenyl-Trichloroethane(DDT), in order to kill mosquitoes that transmit malaria, a potentially deadly disease. Although initially successful, the treatment was soon rendered ineffective and local mosquito populations continued to thrive.

This inherent drawback in using pesticides can cause crop farmers to fall into what is known as the pesticide trap. Once they see that pesticide is not having as much impact as it did initially, they begin to apply larger and more frequent doses to their crops. They end up spending increasing amounts of money for less and less reward. To make matters worse, most pesticide compounds break down very slowly, so they can remain in the air, water and soil for months or even years afterwards. Continued or heavy use of pesticides only exacerbates this problem. Pesticides are also indiscriminate killers, so they can exterminate the natural predator insects in the ecosystem, too. Since they reproduce less often and in far smaller numbers than pests do, predator populations cannot build up resistance to pesticides. This factor contributes to the overall problem.



2-1. It can be inferred from paragraph 1 that the anti-malaria programs of the 1950s and 1960s failed because

- (A) the insects had already been exposed to several pesticides
- (B) the mosquito populations became immune to the effects of DDT
- (C) mosquitoes from neighboring areas could still transmit malaria
- (D) the initial applications of DDT were not intensive enough

2-2. Based on the information in paragraph 2, it can be inferred that the tendency of pesticides to eradicate insects indiscriminately is a problem because

- (A) it reduces overall biological diversity when other insects are killed
- (B) it helps the pest population to thrive by wiping out natural predators
- (C) it disturbs the ecosystem by killing the insects that animal species prey on
- (D) it impacts on the life-cycle of larger predators within the ecosystem

### 3

The peculiar characteristics of Venus meant that it was misunderstood for much of human history. One of Venus' most curious characteristics is that it appears for roughly equal lengths of time in the morning sky and in the evening sky. And, since to the naked eye Venus glints like a star, most ancient sky-watchers thought they were seeing two distinct celestial bodies: a morning star, and a separate evening star. In the 6<sup>th</sup> century, the famous Greek physicist and mathematician Pythagoras finally deduced that the morning and evening stars were in fact one body. Building on this observation, he concluded that Venus orbited our Earth, much like our moon does, and his ideas became the basis of a scientific consensus that lasted for several centuries.

In fact, it was not until the early 1600s that Italian scientist Galileo challenged this perception. Using a very primitive telescope, Galileo was able to detect minor changes in the appearance of Venus at different points in time. He discovered that it went through various phases, from a full circle to a slim crescent shape. From this, he concluded that Venus had to be orbiting the sun, and not the Earth.

Up until this point, it had been assumed that the Earth was at the center of all life and matter. But Galileo's discovery that Venus orbited the sun played an important part in revolutionizing the way scientists thought about the universe. Astronomers then followed in the footsteps of Galileo, observing and collecting data not just about Venus, but about our entire solar system, our galaxy, and the universe beyond.

3-1. According to the information in paragraphs 1 and 2, what can be inferred about astronomers in the ancient world?

- (A) They only had very primitive telescopes.
- (B) They seldom challenged the consensus.
- (C) They did not use telescopic equipment.
- (D) They did not use scientific methods.

3-2. In paragraph 3, the author implies that Galileo's observations were

- (A) incompatible with the previous understanding of how the universe operated
- (B) based on a scientific method that had never been used before
- (C) revolutionary in that they revealed how the galaxy was made up
- (D) founded on the idea that Earth was at the epicenter of everything

One of the most extreme forms of hibernation is freeze tolerance. In the depths of winter, a few are able to endure ice forming within their own bodies. For a normal animal, the formation of internal ice would block the flow of oxygen, halt the animal's metabolism, destroy its cells, cause massive internal lesions, and dehydrate its body. However, animals with freeze tolerance, such as the wood frog and painted turtle, survive because of a number of special adaptations.

Like other animals that go into hibernation during the winter, animals with freeze tolerance undergo major physiological changes in preparation for the change of season. In particular, these animals start to accumulate high concentrations of glucose in their bodies. Glucose is a chemical compound which is resistant to freezing, so it provides vital insulation for the animals' cells. It means that even when the external parts of the organs are frozen, the insides of the cells are still protected and can remain healthy and strong.

Just as importantly, these animals can control the freezing process. They actually have an inbuilt function that triggers the internal freezing before the outside temperature drops below zero degrees. It is safer to start the process when the weather is warmer, because it provides the animals with the opportunity to alter their metabolism gradually, and prepare their bodies for dealing with internal ice formation.

- 4-1. According to paragraph 1, it can be inferred that the internal formation of ice
- (A) is something that hibernating animals must be able to adapt to
  - (B) poses extreme risks even for animals with freeze tolerance
  - (C) would almost certainly be fatal to a maladapted animal species
  - (D) is prevented by a number of physiological factors in most animals
- 4-2. Based on the information in paragraphs 2 and 3, what can be inferred about animals with freeze tolerance?
- (A) Their metabolic systems are not always able to make the necessary adjustments.
  - (B) They are unable to cope with sudden rises and drops in temperature during winter.
  - (C) Their health can be adversely affected by the changes in their metabolism.
  - (D) They are vulnerable if winter sets in before their bodies have started adjusting.



## practice test\_level3



>> Read passages 1 and 2 and answer the following questions for each.

### 1

#### Finding Diamonds

It takes a powerful geologic event to transport diamonds, buried deep in the molten mantle of the earth, to the surface where they can be discovered and collected by humans. In fact, there are only two known types of magma that originate at depths sufficient to capture and carry diamonds to the earth's surface: kimberlite and lamproite. Although they both form accessible diamond deposits, there are key differences between the two.

Almost all diamond mines are located at the top of a kimberlite pipe, the subterranean carrot-shaped structure created during an expansion of kimberlite magma. As the magma rises, it has only a mild corrosive impact on the crust around it, so the breadth of the pipe increases only slightly. This is what gives the pipes their distinctive form. They have only been found in areas where the crust is of a certain age, and the majority of them are believed to have formed between 70 and 150 million years ago, though some are much older. The first kimberlite mine was founded in the town of Kimberley, South Africa. The consistently large yields and high grade of diamonds found there spurred a search for other kimberlite deposits, but unfortunately, for every 200 kimberlite pipes, only one contains a high enough concentration of diamonds to make extraction worthwhile for prospectors.

Like kimberlite, lamproite magma begins its upward journey from depths greater than 150 kilometers and carries with it, in addition to other minerals and materials, diamonds. However, lamproite pipes are slightly different from kimberlite pipes in that they are more corrosive on the surrounding rock as they expand vertically. Though these pipes can be quite ancient, some appear to have formed much more recently than those made of kimberlite, with the youngest just 55,000 years old.

For decades, it was believed that lamproite pipes did not contain economically feasible deposits of diamonds. Their gems were either too few or of such a low quality that mining did not represent a profitable enterprise. However, in 1979, researchers chanced upon the Argyle pipe in Western Australia. The world's first lamproite mine opened on the site in 1985, and it has since become the largest source of diamonds by volume, producing an astounding seven tons a year.

1-1. It can be inferred from paragraph 2 that most kimberlite pipes

- (A) have already had their diamonds removed
- (B) are of interest to amateur gem collectors
- (C) do not contain any traces of diamonds
- (D) have not led to the creation of mines

1-2. In paragraph 2 and 3, the author implies that lamproite pipes

- (A) are approximately the same age as kimberlite pipes
- (B) create a wider channel in the crust than kimberlite pipes
- (C) start from deeper in the Earth's mantle than kimberlite pipes
- (D) consist of the same minerals as kimberlite pipes

1-3. What can be inferred from paragraph 4 about diamond-mining companies prior to 1979?

- (A) They competed over exploitation rights to the Argyle mine.
- (B) They were not engaged in operations in Australia.
- (C) They mined diamonds of an inferior quality to today's companies.
- (D) They were not interested in searching for lamproite pipes.



## Megafauna Extinctions in North America

Paleontologists know from remains uncovered across North America that megafauna—large animal life—like woolly mammoths, mastodons, bison, and giant sloths once existed there. Fossil evidence suggests, though, that almost all of these species suddenly died out about 13,000 years ago. Several theories have developed as to what prompted this massive ecological change.

One idea is that megafauna became extinct because of climate changes brought about by the end of the Pleistocene ice ages. Temperatures rose dramatically then, melting away the glacial ice which covered much of the continent. Many plant species would have died out or moved further north because of the changing climate. The shortage of plants would have meant many large herbivores starved, and without herbivorous animals to prey on, large carnivores could not have survived either. This theory is also strengthened by paleontological records indicating that megafauna in Eurasia must have befallen a similar fate.

However, the theory fails to explain why megafauna species had survived previous climate changes which were just as severe, and many academics, like ecologist Paul Martin, use this as evidence to explain that overkilling by humans must have been responsible for the extinctions. According to this theory, megafauna species would have been unaccustomed to human contact, and that would have made them easy prey for ruthless human hunters. The cornerstone of this argument is the timing of human arrival on the continent, which archaeologists presumed was around 13,500 ago, just 500 years before the megafauna extinctions. But subsequent discoveries have contradicted this key fact. Sites recently found in Chile suggest that current estimates placing this event at 13,500 years ago may actually be far too conservative, casting doubt on the entire overkilling hypothesis.

Yet another theory is that megafauna were decimated by disease. Extrapolating from the phenomenon of “fatal contact,” as exemplified by the introduced diseases that wiped out Native American human populations, this theory supposes that people and their domestic animals brought new diseases with them as they moved onto the continent. With no natural immunity, all native animal life would have been affected by the foreign pathogens. Megafauna species had long life cycles and reproduced infrequently, which would have left them incapable of adapting and surviving. However, as compelling as this explanation is on paper, there is not yet any fossil evidence to back it up.

- 2-1. According to paragraph 2, what can be inferred about megafauna in Eurasia?
- Ⓐ They were affected by changes occurring in North America.
  - Ⓑ There are no reliable paleontological records for the region.
  - Ⓒ They also died out at the end of the Pleistocene period.
  - Ⓓ Climate change probably played no part in their extinction.
- 2-2. Based on the information in paragraph 3, what might the remains recently found in Chile indicate?
- Ⓐ Humans probably existed in the Americas before most species of megafauna.
  - Ⓑ Large animal species in North America may have died out earlier than experts supposed.
  - Ⓒ Megafauna were not as unfamiliar with human hunters as previously thought.
  - Ⓓ Human hunters did not hunt megafauna species in North America.
- 2-3. According to paragraph 4, what can be inferred about the theory that megafauna died out because of introduced diseases?
- Ⓐ It has not been supported by any leading academics.
  - Ⓑ It is not as popular as the other two theories.
  - Ⓒ It is based on conjecture rather than hard evidence.
  - Ⓓ It is the hypothesis that the author finds most compelling.



# word brush-up

▪ Choose one that is closest in meaning to the shaded word or phrase.

01 run off the land

- (A) pass (B) flow  
(C) flee (D) manage

06 underway since last year

- (A) on guard (B) in progress  
(C) on account (D) under control

02 pertain to Native American tribes

- (A) come under  
(B) turn to  
(C) be remembered as  
(D) be relevant to

07 raze the village

- (A) destroy  
(B) defend  
(C) enhance  
(D) construct

03 protrudes from the forehead

- (A) drops down (B) hangs  
(C) sticks out (D) starts

08 the breadth of the road

- (A) width (B) length  
(C) incline (D) route

04 exacerbate the tense relations

- (A) relieve (B) worsen  
(C) observe (D) settle

09 an astounding discovery

- (A) creative (B) prospective  
(C) uncertain (D) amazing

05 the gradual erosion of traditional values

- (A) wearing down  
(B) understanding  
(C) building up  
(D) changing

10 decimated by the attack

- (A) devastated  
(B) affected  
(C) induced  
(D) imperiled



- 11 In some areas, metalwork was not widespread and workable stones were hard to come by. Generally, in these places, people **fashioned** weapons, utensils and jewelry out of animal bone and wood.
- (A) owned (B) devised (C) altered (D) decorated
- 12 As far as astronomers are aware, at least 63 moons **orbit** Jupiter. Wider in diameter than the planet Mercury, Ganymede is the largest such moon.
- (A) encounter (B) comprise (C) follow (D) circle
- 13 Armed conflict was responsible for a very low proportion of Native American casualties. The main reason Native Americans died in such huge numbers was that they did not have natural **resistance** to the diseases brought across by the Europeans.
- (A) treatment (B) tolerance (C) alleviation (D) response
- 14 Initially, claims from scientists about the impact of human activities on the global climate were considered **far-fetched**. But gradually, the scientific community and the general public have begun to accept the notion.
- (A) distant (B) implausible (C) obtainable (D) unworthy
- 15 Male lion cubs use playfighting as a way to prepare for the territorial battles they will contest as adults. When it wants to initiate a playfight, a cub will jump on or mouth another so as to **prompt** a reaction.
- (A) undertake (B) accelerate (C) imitate (D) provoke

answer 01 (B) 02 (D) 03 (C) 04 (B) 05 (A) 06 (B) 07 (A) 08 (A) 09 (D) 10 (A)

11 (B) 12 (D) 13 (B) 14 (B) 15 (D)

day 11

# rhetorical purpose

- 
- speed keyword
  - case example
  - smart solution
  - practice test
  - word brush-up

+ speed

keyword



## rhetical purpose문제는

부분의 기능 ▾ 파악이다.

저자는 글을 쓸 때 글의 각 부분을 일정한 의도를 가지고 구성, 배치한다. 이렇게 저자의 의도가 녹아있는 지문의 각 부분이 글 전체에서 어떤 기능을 하고 있는지를 밝히는 것이 수사학적 의도 문제이다. **fact**문제가 지문에 제시된 내용에 대해 질문하는 것이라면 수사학적 의도 문제는 제시된 내용이 왜 그 곳에 위치하고 있는지를 알아내는 것인데 이를 파악하기 위해서는 지문의 전체 맥락을 따라가면서 각 부분이 주변 문장과 맺고 있는 관계를 살피는 것이 중요하다.

이 유형은 지문당 0-2개가 출제되며 상황에 따라 다양한 질문 형태를 취하지만 전형적인 질문 형태는 아래와 같다. 질문의 대상은 주로 단어나 구이며 지문에서 그대로 가지고 올 경우 **vocab**나 **reference** 유형처럼 지문에 음영 처리하여 질문 대상의 위치를 쉽게 찾을 수 있도록 해 준다.

Why does the author mention           ?

How does the author discuss ~?



## case example

### 대표 문제

Read each passage and answer the questions.

#### Case 1

##### TOEFL Reading passage

review | help | back | next

Avant-garde films often feature fragmented narratives, a mixture of shot ranges, and stylized editing. As this indicates, avant-garde film-makers are mainly preoccupied with aesthetic and artistic concerns, much like modernists in other artistic fields. However, avant-garde films differ from other forms of modernist art in that they are actually designed for a mass audience. Modernist writers, musicians and painters generally disdain popular appeal, and their primary concern is that their work is appreciated within elite circles.

Why does the author mention modernist writers, musicians and painters?

- Ⓐ To demonstrate an important commonality between two different art forms
- Ⓑ To illustrate the original inspiration for some techniques used in film-making
- Ⓒ To contrast their goals with those of most avant-garde film-makers
- Ⓓ To explain why avant-garde films are not considered high art in elite circles

#### Case 2

##### TOEFL Reading passage

review | help | back | next

The pack rat is a small rodent found primarily in the southern United States and in Mexico. It is noted for preferring bright, shiny objects and will, for example, leave behind a nut or pebble it was carrying if it comes across a metallic button. It will collect small items it scavenges and bring them back to its home to “decorate” or build up the walls. When pack rats share a human-inhabited space, they can become quite a nuisance. Common complaints include them getting into the infrastructure or attic of a house, stealing objects — like a small silver spoon or diamond earring — gnawing on electrical wiring and being very noisy.

Why does the author mention a small silver spoon or diamond earring?

- Ⓐ To give examples of what kinds of items pack rats like
- Ⓑ To refute the misconception that pack rats eat what they collect
- Ⓒ To explain why pack rats prefer natural items
- Ⓓ To caution readers not to leave expensive jewelry unattended

answer 1. Ⓒ 2. Ⓐ

## Case 분석

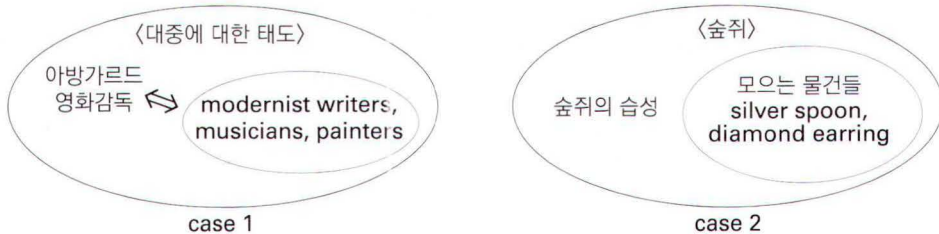
### ① 대조하는 경우

Case 1의 경우 아방가르드 영화감독들의 특징을 서술한 지문으로 그들이 모더니스트들과 유사한 미적 관심을 가지고 있었지만 대중을 향한 태도에서 다른 모더니스트 예술가들과 달랐다는 내용을 담고 있다. 따라서 질문의 대상이 된 modernist writers, musicians and painters와 avant-garde film-makers는 서로 대비되는 관계에 놓여 있다는 것을 알 수 있다. 대비를 나타내는 수사적 의도를 드러내는 표현은 to contrast로 정답은 Ⓒ가 된다.

### ② 예를 드는 경우

반면 모으는 성향이 있는 숲쥐에 대해 서술하는 Case 2 지문의 경우 질문 대상이 된 small silver spoon or diamond earring은 숲쥐가 훔쳐가는 물건들의 종류를 나열하면서 그 예로 등장했다. 예를 들 때 사용되는 수사적 의도 표현은 to give examples 혹은 to list로 선택지 Ⓐ가 가장 적합하다. 또한 문장 간의 관계를 살필 때 접속사 나 전치사 등은 중요한 역할을 하는데 나열됨을 나타내는 전치사 like가 중요한 신호어 역할을 한다.

지금 살펴본 대조나 예시는 수사적 의도 문제에서 가장 빈번하게 등장하는 경우로 부분이 전체 단락 내에서 어떻게 기능하는지를 살펴보면 쉽게 답을 찾을 수 있는데 질문 대상과 전체와의 관계를 그림으로 나타내면 다음과 같다.



## 출제 의도

### ① 단락 내 여러 정보 간의 유기적 연결을 이해할 수 있는지 확인한다.

단락과 단락이 맺고 있는 관계에 대해 질문하는 경우도 있지만 주로 단락 내 특정 정보가 단락 전체와 어떤 관계를 맺고 있는지 테스트한다. 지문 전체의 구성에 대해서 질문하는 문제는 등장하지 않는다.

### ② 다양한 논리 전개 방식을 알고 있는지 확인한다.

글을 논리정연하게 전개하기 위한 다양한 수사적 방식들이 있는데 서술, 정의, 대조, 비판, 논박과 같은 것들이 그 대표적인 예이다. 수험자가 이런 다양한 논리 전개 방식을 이해하고 경우에 맞게 적용시킬 수 있는지 테스트한다.



## smart solution



수사적 의도 문제는 직접적으로 드러난 내용이 아닌 숨은 의도를 파악하는 것이기 때문에 이 유형에 속달되지 않은 수험자들에게는 낯선 유형일 수 있다. 하지만 다양한 논리 전개 방식을 이해하고 순서에 따라 문제를 푸는 훈련을 하면 좋은 성과를 기대할 수 있다.

### 순서대로 훈련한다.

일정한 순서를 염두에 두고 이에 따라 풀어보자. 앞선 Case 1의 예제를 순서에 따라 풀어보면 다음과 같다.

#### Step 1 질문에서 해당 내용을 확인하고 지문에서 등장하는 부분을 찾는다.

Why does the author mention modernist writers, musicians and painters?

저자는 왜 모더니스트 작가와 음악가 그리고 화가에 대해서 언급하는가?

음영으로 나타나 있는 '모더니스트 작가와 음악가 그리고 화가'가 질문 내용에 해당한다. 지금과 같이 지문의 표현을 그대로 가지고 올 경우 지문에 음영 처리되므로 지문 내에서 쉽게 해당 내용 부분을 찾을 수 있다. 하지만 음영 처리되지 않은 경우 직접 해당 단락을 scanning하며 질문 내용을 찾아야 한다.

#### Step 2 지문에서 주변 맥락과의 관계를 살펴본다.

However, avant-garde films differ from other forms of modernist art in that they are actually designed for a mass audience. Modernist writers, musicians, and painters generally disdain popular appeal, and their primary concern is that their work is appreciated within elite circles.

하지만 아방가르드 필름들은 대중을 대상으로 만들어졌다는 점에서 다른 모더니스트 예술과는 달랐다. 모더니스트 작가, 음악가, 화가는 일반적으로 대중에게 호소하는 것을 경멸하고 엘리트 집단 내에서 그들의 작품이 인정받는 게 최대 관심사였다.

음영 부분이 등장한 앞의 문장을 살펴보면 음영 부분이 어떤 맥락에서 등장했는지를 쉽게 알 수 있다. 아방가르드 필름이 대중적 호소를 목적으로 했던 것에 반해 다른 모더니스트 예술가들은 엘리트 집단에게 인정받기를 원했다는 것이 핵심 내용으로 아방가르드 필름과 다른 모더니스트 예술을 대비시키는 수사적 방식을 택하고 있다.

#### Step 3 선택지를 살펴본다.

- (A) To demonstrate an important commonality between two different art forms
- (B) To illustrate the original inspiration for some techniques used in film-making
- (C) To contrast their goals with those of most avant-garde film-makers
- (D) To explain why avant-garde films are not considered high art in elite circles

아방가르드 필름 예술과 다른 모더니스트 예술의 "대비"라는 점을 염두에 두고 선택지를 살펴보면 일단 선택지 (C)가 눈에 들어온다. 선택지 (C)의 뒷부분을 확인하면서 지문 내용과 일치 여부를 확인하면 된다.

11 의도 파악 문제의 오답 유형은 fact문제와 유사하다.

- Ⓐ To demonstrate an important commonality between two different art forms (**not correct**)
  - ▶ 완전히 정답과 반대되는 내용
- Ⓑ To illustrate the original inspiration for some techniques used in film-making (**not mentioned**)
  - ▶ 영화에 사용된 테크닉에 대한 내용은 언급되지 않음
- Ⓒ To contrast their goals with those of most avant-garde film-makers (**answer**)
- Ⓓ To explain why avant-garde films are not considered high art in elite circles (**not mentioned**)
  - ▶ 지문에 등장한 단어들을 이용했지만 아방가르드 영화가 엘리트 집단에게 고급 예술로 받아들여지지 않았다는 내용은 없다.

## ● 선택지에서는 두 부분으로 나누어 확인한다.

수사적 의도를 나타내는 선택지는 주로 to부정사구나 by 이하의 동명사구로 표현되는데 이 때 선택지는 기능 표시 부분과 세부 정보 제시의 두 부분으로 구성된다.

To demonstrate (By demonstrating) an important commonality between two different art forms

기능 제시 부분

세부 정보 제시 부분

11



흔히 기능을 드러내는 앞부분만 보고 쉽게 답을 선택하는 경우가 있는데 서로 대체할 수 있는 비슷한 의미의 기능어가 많이 있으므로 절대 답을 속단해서는 안 된다. 반드시 뒷부분의 세부 정보 부분을 확인하고 지문의 내용과 일치하는지 확인한다. 내용적으로 알맹이가 되는 핵심 정보는 세부 정보 부분에 제시되기 때문이다.

위의 예에서 살펴보면 to demonstrate는 다양한 경우에서 보편적으로 사용될 수 있는 표현이므로 이보다는 세부 정보인 '두 가지 다른 예술 형식 사이의 중요한 공통점을' 밝히기 위해서라는 내용이 오답의 기준이 된다.

## ● 선택지에 등장하는 다양한 표현을 확인해 둔다.

평소 흔히 볼 수 있는 표현이지만 정확한 쓰임을 모르는 경우가 있으므로 기능을 드러내는 다양한 표현을 확인해 두어야 한다. 같은 항목에 놓인 단어들끼리는 서로 대체해 사용이 가능하다.

1. 설명하는 경우: to explain, to illustrate, to describe, to make it clear, to clarify
2. 예시하는 경우: to give an example, to exemplify, to list
3. 증거를 제시하는 경우: to demonstrate, to prove, to make the point
4. 반박하는 경우: to argue, to disagree, to refute
5. 대조나 비교하는 경우: to contrast, to compare



## practice test\_level 1



>> Read paragraphs 1 to 8 and answer the following question for each.

### 1

One of etching's main early uses was to depict sacred images, such as pictures in religious books. Artist Albrecht Durer was one of the first famous artists to use this medium for his work and he, among others, helped create various types of shading and textures in etching. This movement was taken further by artists of the Danube school who introduced greater fluidity and ornamentation to etchings. By the 16<sup>th</sup> century, etching had even gained wide appeal outside of art circles. Armorers began using etching techniques to create patterns on swords, signifying the family history or rank of the sword-bearer.

In the paragraph, the author mentions the etching on swords

- (A) to explain why etching developed as an artform
- (B) to illustrate the gradual evolution of etching techniques
- (C) to demonstrate a unique purpose of etching
- (D) to show that etching was mainly associated with weaponry

### 2

Most breeds of domestic sheep exhibit behavioral similarities. Being prey animals, sheep rely heavily on one another for protection, and visual contact with other sheep is extremely important to individuals. One of the most characteristic behaviors of sheep populations is a tendency to flock together in a group. By crowding together in this manner, sheep gain an advantage against predators. However, not all breeds of sheep exhibit flocking behavior. For example, Icelandic sheep do not tend to flock together because there are no natural predators there to threaten them. But, throughout the history of sheep domestication, livestock owners have found flocking behavior to be a desirable trait because it allows sheepherders to easily control large groups of sheep.

Why does the author discuss Icelandic sheep?

- (A) To introduce an exception to a common behavioral pattern
- (B) To explain why sheep tend to gather together in flocks
- (C) To discuss the history of a common sheepherding method
- (D) To show why livestock owners find a particular behavior desirable

### 3

Until the Industrial Revolution transformed the manufacturing world in the 1800s, the output of products was limited to what could be made by hand. Such essential items as clothing, tools, and furniture were much scarcer and more difficult to obtain in earlier days than they are today, and this was also true of timekeeping instruments. For example, in the early eighteenth century, before the era of mass production, American clocks were produced by teams of craftsmen; clockmakers assembled the internal components and joiners used their woodturning skills to build the body of the clock. Given that it involved such a complex, arduous and expensive process, clock-making remained a small industry, which explains why clocks themselves were not a common consumer item.

Why does the author mention clothing, tools, and furniture?

- (A) To suggest that they were more easily made by hand than clocks were
- (B) To list items that were common household items before clocks were
- (C) To compare the cost of clocks to those of other common goods
- (D) To show that even everyday items were not as common as now

11



### 4

Barred Owls are native to woodlands found over a wide portion of eastern North America, reaching from Mexico all the way up to southern Canada. The twentieth century, however, witnessed their gradual encroachment westward, and they are currently appearing in the Pacific Northwest with great frequency. It is believed that logging in the region's old-growth forests has caused vast areas of towering trees to be replaced with stands of younger, smaller trees, which are preferred by Barred Owls because they are similar to those in the East. The expansion of the Barred Owls' domain threatens to radically change the ecosystems of the Pacific Northwest. Barred Owls are a highly aggressive species, and they have become one of the dominant predators in their new habitats.

How does the author explain the Barred Owl's appearance in the Pacific Northwest?

- (A) By citing the effects of habitat loss in eastern North America
- (B) By providing statistics about dwindling prey populations in the area
- (C) By giving information about logging operations in Canada
- (D) By describing an ongoing environmental change in the region

## 5

While there are many different problem-solving approaches that can be adopted in business management, they all agree on one key point: it is essential to properly define the problem before coming up with a solution. Assume, for instance, that a company's management sets an overall sales target for the month, only for the results to come in well below expectations. In this case, it is vital to think of the disappointing sales results not as the problem itself, but as a *symptom* of the problem. The real underlying problem is what is causing the lower than expected sales. This might be a poorly performing sales team, increased competition in the market, a wider economic slowdown, or something else entirely. By rectifying that issue, the management will be able to improve the company's sales performance.

The author explains how to respond initially to a business problem

- (A) by providing a hypothetical example of a company with a common problem
- (B) by comparing several different problem-solving approaches
- (C) by examining the historical case of a company that had poor sales results
- (D) by highlighting the drawbacks of the solution most businesses come to

## 6

The "concrete jungles" of modern cities have created urban heat islands, whereby cities are hotter overall than rural regions. The large areas of asphalt and tall concrete buildings trap heat rather than reflect it back into the atmosphere. Moreover, the lack of vegetation deprives urban areas of the vital cooling effect of trees and plants. While this phenomenon is well-documented—average temperatures in Tokyo over the last 100 years, for instance, have risen around 50 percent more than those in the surrounding areas—scientists are as yet uncertain about the overall impact that this trend is having on the global climate. However, there is plenty of evidence to suggest that urban heat islands can have a negative impact on the communities they affect. Research indicates that city conditions exacerbate the dangers of heat waves, with over 1,000 people dying from exposure to extreme heat in America every year.

How does the author highlight the damaging effect of the urban heat island phenomenon?

- (A) By emphasizing the effect of urban heat on the Earth's overall climate
- (B) By explaining the impact of urban heat on a globally-recognized city
- (C) By illustrating how vegetation in cities can be affected by heat
- (D) By referring to the growing mortality rate from heat waves

## 7

While some nomadic peoples are hunter-gatherers, most nomadic groups do not survive by foraging for food and eating wild plants and animals. The term “nomad” itself actually derives from the Greek word “nomos,” meaning pasture, and as this name indicates, nomadic peoples mostly practice a form of agriculture. They roam the countryside searching for new regions to exploit. Nomadic pastoralism was common millennia ago, and it is still practiced by people in many countries today. This lifestyle is perhaps most prevalent in Iran, where there are over a million nomadic peoples. Comprised of a variety of different tribes, Iranian nomadic peoples mainly raise cattle, sheep and goats. These groups trek across the country in seasonal migrations, taking their livestock with them from the warm plains to cool mountain pastures in summer. Although arduous, this journey is essential to ensure the survival and productivity of their agriculture.

Why does the author explain the Greek origin of the term “nomad”?

- (A) To demonstrate where nomadic peoples first originated from
- (B) To reveal an important characteristic of the nomadic lifestyle
- (C) To emphasize what an old practice nomadic pastoralism is
- (D) To provide an insight into ancient attitudes to nomadic peoples

11



## 8

Fish and shellfish provide people with protein and other vital nutrients, and in many parts of the world, seaweed is also an important dietary component. While seaweed supplies remain intact throughout the world, the ocean’s fisheries are no longer anywhere near as plentiful as they once were. Overexploitation by the commercial fishing fleets in the modern era has decimated fish and shellfish populations in many parts of the world. The worst affected region is the Atlantic ocean, where several species have gone from abundance centuries ago to near extinction today. Wild salmon, the blue hake, the deep-sea spiny eel, and roundnose grenadiers are all examples of species that are now all but absent from the Atlantic, and several other species are feared to be heading in the same direction.

The author emphasizes the extent of overfishing in the world’s oceans

- (A) by providing detailed statistics about fish species
- (B) by listing endangered fish species from all over the world
- (C) by comparing fish populations with those of shellfish
- (D) by pointing out the area where the problem is most severe



## practice test\_level 2



>> Read passages 1 to 4 and answer the following questions for each.

### 1

After a forager bee has found some suitable flowers, it has to help the others find the nectar source, too. According to most scientists, the distinctive waggle dance of honey bees is the key way in which foragers convey this important information. It had been assumed for centuries that the dance was simply a display to get attention from other bees, but research conducted by entomologist Karl von Frisch in the 20<sup>th</sup> century revealed that the forager's behavior was highly sophisticated. Von Frisch noted that the precise points and turns of the dance resembled detailed directions, and that the bee's orientation during the dance matched the orientation of the sun at the source. On further analysis, he discovered that the vigor of the dance corresponds to the quality and volume of the nectar.

Von Frisch's study is widely accepted, but a minority of researchers are skeptical about his conclusions. Whilst acknowledging the role of the waggle dance in attracting attention and conveying some information, they argue that, given that the nectar source is often several kilometers away from the hive, it is impractical to expect bees to be able to pick up and follow such precise directions. Instead, they suggest that the bees are primarily guided to the source by their sense of smell, following a pheromone trail left behind by the original forager.

1-1. The author talks about the orientation of the sun in paragraph 1

- (A) to illustrate a false assumption that was made about honey bee behavior
- (B) to describe one element that can disrupt bees that are foraging for nectar
- (C) to explain the sorts of experiment that von Frisch wanted to conduct
- (D) to show the complex details imparted through the waggle dance

1-2. In paragraph 2, why does the author mention the distance between the nectar source and bee hive?

- (A) To imply that von Frisch's study was not conducted in a scientific manner
- (B) To show why some people do not support von Frisch's assumptions
- (C) To emphasize how amazing it is that bees communicate through dance
- (D) To explain why bees cannot leave behind a pheromone trail

Monozygotic, or identical, twins share one hundred percent of their genes, and for this reason they have been of great interest to behavioral researchers. They are ideal test subjects to help answer an age-old question—what has a bigger impact on the way people develop, genetics or environment? A few studies have been conducted comparing monozygotic twins raised together with those raised apart, but since it is both rare and, to many, objectionable for twins to be raised separately, this methodology has produced little data. As a result, researchers have had to turn their attention to comparing the differences between monozygotic twins raised together. These twins often share the same experiences, but they also have important independent experiences that can shape their personality.

Many researchers in the field of twin studies have taken this a step further, comparing the convergences between monozygotic twins with those between dizygotic twins—non-identical twins that develop from two separate fertilized eggs. Scientists like Jinks and Fulker have closely compared the data sets from both types of twins, concluding that the influence of environmental and genetic factor varies from trait to trait. Height, for instance, is believed to be determined almost totally by heritability. On the other hand, intelligence, as measured by IQ, is influenced by an even mixture of both environment and genetics. However, this research has received criticism from some quarters, in part because it is considered unlikely that dizygotic twins have the same number of shared experiences as monozygotic twins.



- 2-1. Why does the author pose a familiar question about human behavior in paragraph 1?
- Ⓐ To exemplify the sort of testing that monozygotic twins are subjected to
  - Ⓑ To identify the reason for academic interest in identical twins
  - Ⓒ To explain the methodology used by researchers in twin studies
  - Ⓓ To demonstrate why it is objectionable for twins to be raised apart
- 2-2. In paragraph 2, how does the author describe the recent research on dizygotic and monozygotic twins?
- Ⓐ By listing several studies that have improved our understanding of the topic
  - Ⓑ By explaining variations in the methods used by different researchers
  - Ⓒ By outlining its key findings but also mentioning criticisms of its methodology
  - Ⓓ By comparing its results with those provided by research on monozygotic twins only

### 3

Comets are bodies in our solar system that orbit the sun. Each comet follows its own elliptical orbit, some of which take only few years to complete, while others are known to take thousands of years. At the center of the comet is a nucleus; it is a mass of rock, dust and ice comprised mainly of carbon-based compounds. As a comet nucleus enters the inner solar system, it is believed that the impact of the sun's radiation vaporizes the water and frozen gases lying underneath the surface. As they stream out of the nucleus, they remove some of the dust and other solid material in the nucleus, forming what is known as a coma around the outside. Like the clouds that shroud the Earth, the coma forms a thick, visible atmosphere of gas and dust. This atmosphere is then exposed to solar wind and radiation pressure, which forces a tail of debris to stream out as much as 150 kilometers behind.

Although this is still the most widely-accepted explanation of comet dynamics, it should be noted that recent findings indicate that the process may be more complicated than currently assumed. Samples taken from the tail of the Wild-2 comet in 1999 included crystalline minerals that appeared to have been forged by heat. On the basis of this discovery, some astronomers have concluded that intense fires and internal superheating, believed to be sparked by exposure to the sun's radiation, might also impact on the comet nucleus. Further research is being conducted to verify these claims.

3-1. How does the author describe the nature of the coma in paragraph 1?

- Ⓐ By cataloging its precise dimensions
- Ⓑ By explaining the process by which it forms
- Ⓒ By providing details about its composition
- Ⓓ By comparing it to the size of the nucleus

3-2. The author mentions mineral samples collected by a space probe

- Ⓐ to note a breakthrough that led to a widely-accepted theory about comet dynamics
- Ⓑ to emphasize how powerful the force of the sun's radiation can be
- Ⓒ to explain the basis for the assumption that comets are comprised mainly of ice
- Ⓓ to clarify that some uncertainty remains about the formation of comas and tails

Written records dating back to AD 1,200 have provided scholars with plenty of information about the origins of the Greenland colony. Using these archives, researchers have been able to determine that the original settlers came from Norway in about AD 900. What happened on the island from this point on wards, though, is much less clear. When Christian missionaries from Denmark landed on the southwest coast of Greenland in the early 1700s, they were shocked to see that the Norse colony had been abandoned completely, with no survivors remaining. Several theories arose to explain their disappearance, but the development of accurate radiocarbon dating has helped archaeologists establish what happened to the Greenland colony.

Evidence from excavation sites on Greenland indicates that the Norse colonists practiced livestock farming, particularly of cattle and pigs, upon arrival at the island. Scientists have been able to conclude from tests conducted on human bone remains that the colonists' diet relied primarily on agricultural products at this time. However, bones dated to the 1300s show that the colonists had switched to a diet dominated by seafood, clearly indicating that the colonists' agriculture was beginning to fail.



4-1. Why does the author mention radiocarbon dating in paragraph 1?

- (A) To explain how researchers discovered the Norse colony on Greenland
- (B) To reveal an innovation that has helped archaeologists uncover a historical mystery
- (C) To describe the process academics used to search the archives
- (D) To clarify when Danish missionaries traveled to the southwest coast of Greenland

4-2. The author explains the decline of farming productivity on the Greenland colony in paragraph 2

- (A) by analyzing fossils to show that livestock animals were malnourished in the 1300s
- (B) by outlining evidence of fundamental changes in the food intake of the colonists
- (C) by examining livestock bone remains to show the dwindling availability of farm animals
- (D) by listing the excavation sites where bones of Norse settlers have been recovered



## practice test\_level 3



>> Read passages 1 and 2 and answer the following questions for each.

### 1

#### Medieval French Literature

Prior to the Renaissance, France was an oral culture. In the Middle Ages, the printing press had not yet been invented, so all texts had to be written by hand, and, because only a small portion of the population was able to read, there was little demand for books. As a result, only limited documentation of the products of storytellers and poets in the Middle Ages is left. Occasionally, texts from this time period are recovered, but even in such cases, scholars may have difficulty deciphering the original version because of censorship by scribes, the existence of different versions, and transcription errors. Adding to the difficulty of interpreting medieval literature is the fact that it is impossible to tell from the text alone how a certain story was originally performed.

Consequently, little is known about the surviving texts that now make up the body of medieval French literature, but, piecing together what minimal evidence remains, modern scholars have managed to identify certain traditional literary forms that appear to have been quite popular. While some of these literary forms are well documented, in other cases only one representative example exists. For example, *chanteable*, a medieval French literary form that combines prose and poetry in a sung story, is currently documented by a single manuscript from the thirteenth century: *Aucassin et Nicolette*. The plot is narrated in alternating sections of prose and poetry, telling the story of the forbidden love between a count's son and a slave girl, the couple's imprisonment and escape, and their eventual marriage.

Fortunately, texts representing other medieval French literary forms sometimes survived in greater numbers. Perhaps the earliest genre to materialize in medieval France was the saint's life—a type of story that focused on the virtuousness of a particular saint while narrating the hardships patiently endured by that individual. The best-known works within this tradition are the epic *chansons de geste*, songs

about heroic exploits, and the most famous of all is *The Song of Roland*. Similar in status to Rome's *Aeneid* or England's *Beowulf*, *The Song of Roland* is linked to France's national identity. Celebrated as the pinnacle of France's medieval literature, the poem describes a hero who becomes a victim of betrayal and dies a martyr, before being taken immediately to paradise.

- 1-1. The author mentions the printing press in paragraph 1 for the purpose of
- Ⓐ explaining the main reason that demand for written literature increased
  - Ⓑ marking an important change in the history of French literature
  - Ⓒ describing why surviving written texts from medieval France are rare
  - Ⓓ helping to decipher the original manuscripts written by scribes in medieval times
- 1-2. The author mentions *chanteable* in paragraph 2 as an example of
- Ⓐ a genre that is only represented by one surviving manuscript
  - Ⓑ a type of French medieval literature that still remains popular
  - Ⓒ a traditional literary form that died out in France in the 13<sup>th</sup> century
  - Ⓓ a variety of French poetry that makes extensive use of song
- 1-3. In paragraph 3, the author lists some prominent European national epics so as to
- Ⓐ emphasize that literary genres are similar across different cultures
  - Ⓑ contrast French literature with that of other European nation's
  - Ⓒ accentuate the importance of *The Song of Roland* to French nationalism
  - Ⓓ assert how crucial cultural identity is to one's interpretation of literature



## Navigation Mechanisms in Birds

Although there is great diversity across species, the average migratory bird covers a distance of 2,500 miles each year. The most perplexing question raised by this phenomenon is how the birds are able to navigate during their journeys, in many cases returning to precise locales year after year. Since the mid-twentieth century, extensive experimentation has been shedding light on the various mechanisms of navigation in migratory birds.

One of the earliest discoveries was made by ornithologist Gustav Kramer in the 1950s. Through an experiment with caged European starlings, he demonstrated that the birds relied largely on solar positioning to determine direction. Kramer used a mirror to create an artificial sun situated at an angle of 90 degrees to the actual sun. The starlings, which always oriented themselves in the direction of their natural migratory route despite being caged, subsequently shifted their orientation by 90 degrees in correspondence with the new light source.

Similar experiments were conducted on nocturnal migratory birds during the 1950s and '60s. In one, a group of caged warblers was placed inside a planetarium, where an image of the night sky was projected on the ceiling. Over time, the researchers transformed the star patterns to simulate different locations on Earth. The warblers responded to the various star arrangements, continually reorienting themselves toward their natural migratory destination. In a later experiment, caged indigo buntings were kept in a planetarium where star images were switched between spring and fall constellations. With each change, the birds altered their orientation to match their natural seasonal migration.

The use of solar and stellar cues in navigation is understandable; human navigators have done the same for thousands of years. Less familiar, however, is the concept that migratory birds utilize Earth's magnetic field to find their way. Merkel and Wiltschko's 1964 experiment placed one group of birds in a cement cage and one in a steel cage, with neither group exposed to sun- or starlight. The birds in the cement cage oriented normally, but those in the steel cage failed to do so. The experimenters hypothesized that the disruption of the geomagnetic field caused by the steel was responsible for these results, signaling that migratory birds are somehow able to deduce direction by sensing natural magnetic forces.

- 2-1. In paragraph 1, the author introduces the concept of navigation in birds
- Ⓐ by mentioning how many species of birds make long annual migrations
  - Ⓑ by providing details about the special mechanism that makes it possible
  - Ⓒ by comparing the navigation mechanisms in a number of diverse species
  - Ⓓ by identifying it as a question that has prompted considerable research
- 2-2. Why does the author mention human navigators in paragraph 4?
- Ⓐ To point out that bird migration has long been a subject of research
  - Ⓑ To suggest that there is a limited number of navigational techniques
  - Ⓒ To suggest that solar and stellar positioning are familiar principles
  - Ⓓ To explain how researchers have come to certain conclusions about migration
- 2-3. Why does the author mention Merkel and Wiltschko's 1964 experiment?
- Ⓐ To give additional evidence about solar and stellar cues that birds interpret
  - Ⓑ To present a theory about migration that has called past research into question
  - Ⓒ To suggest that current models do not fully explain the phenomenon of bird migration
  - Ⓓ To explain how researchers discovered that birds sense the geomagnetic field



# word brush-up

▪ Choose one that is closest in meaning to the shaded word or phrase.

01 **ornamentation** in the design

- (A) decoration (B) shape  
(C) coloration (D) feature

02 **assemble** all the components

- (A) order in (B) take apart  
(C) put together (D) clean up

03 **an encroachment** on their civil rights

- (A) defense (B) intrusion  
(C) establishment (D) indignity

04 **rectify** the problem

- (A) remedy (B) absorb  
(C) elude (D) produce

05 perform with great **vigor**

- (A) ease (B) independence  
(C) excess (D) energy

06 the **chronology** of the Byzantine Empire

- (A) record (B) specification  
(C) decline (D) influence

07 **decipher** the ancient Egyptian text

- (A) uncover (B) duplicate  
(C) decode (D) locate

08 **narrate** the incredible story

- (A) interpret (B) convert  
(C) perform (D) describe

09 make a **perplexing** discovery

- (A) profound (B) puzzling  
(C) original (D) valuable

10 **forged** by intense heat and pressure

- (A) formed (B) resisted  
(C) changed (D) damaged



- 11 It is still unclear quite how life on Earth first **materialized**. Scientists have put forward several competing theories to explain how this might have occurred.
- (A) made by      (B) adapted      (C) evolved      (D) showed up
- 12 There is still debate over exactly when people first arrived in the Americas. Archaeologists hope that the recent discovery of fossils in South America may **shed light on** the subject.
- (A) focus more energy on      (B) increase interest in  
(C) give praise to      (D) provide new information about
- 13 Even non-migratory birds possess this ability. Chickens, for example, are understood to use the Earth's magnetic field so as to **orient themselves**.
- (A) establish their location      (B) set their schedule  
(C) regulate their temperature      (D) direct their attention
- 14 In order to **simulate** the weightlessness of outer space, astronauts sometimes train in specially designed underwater habitats. This allows them to become familiar with how to control items and perform tasks in space-like conditions.
- (A) model      (B) speed up      (C) balance      (D) learn about
- 15 It was not until the renaissance that Empiricism became the dominant guiding principle for scientists. Its basic tenet is that scientific truths can only be **deduced** from experiments and observations.
- (A) studied about      (B) diminished      (C) figured out      (D) motivated

answer 01 (A) 02 (C) 03 (B) 04 (A) 05 (D) 06 (A) 07 (C) 08 (D) 09 (B) 10 (A)  
11 (D) 12 (D) 13 (A) 14 (A) 15 (C)

day 12

# schematic table

- ✚ speed keyword
- case example
- ★ smart solution
- ▣ practice test
- ▶ word brush-up

day 12

day 13

+ speed

keyword



# schematic table문제는

항목별 분류 ▾ 다.

schematic table 유형과 summary 유형은 교차로 지문의 마지막 문제로 등장하며 요즘은 summary 유형이 더 자주 출제되는 추세이다. 지문이 두 가지 이상의 대상을 비교하거나 대조하는 방식을 취하고 있을 경우 마지막에 schematic table 유형이 등장할 확률이 높다.

schematic table 유형 역시 고른 정답의 개수에 따라 각각 4점부터 0점까지 차등적으로 점수가 매겨지는데 선택지의 개수에 따라 9개짜리와 7개짜리 두 가지로 나뉘지고 선택지 9개 중에서 7개를 고를 경우 만점 4점, 선택지 7개 중에서 5개를 고를 경우 만점 3점이 주어지며 만점에서 맞춘 개수가 하나씩 줄어들 때마다 1점씩 감점된다. 따라서 1점 이상을 획득하려면 어떤 경우든 선택지의 반 이상을 맞춰야 한다.

주어지는 질문의 형태는 다음과 같다.

**Directions:** Complete the table by matching the statements below. Select the appropriate phrases from the answer choices and match them to  to which they relate. TWO of the answer choices will NOT be used. This question is worth 3[4] points.



## case example

### 대표 문제

Read the passage and answer the question.

#### TOEFL Reading passage

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#### Thermal Insulation

Endothermic animals have developed effective insulating outer layers that help keep their internal temperature up regardless of the external conditions. They can be classified into three main categories: down, underfur and blubber. For example, birds have thermal insulation in the form of down. Down feathers are the very short, soft and fine feathers in the inner layer. The larger and tougher exterior feathers largely serve other functions and are not crucial for thermoregulation, as evidenced by the fact that infant birds possess no exterior feathers at all.

Mammals have also developed a layer of insulation to assist with thermoregulation. In land mammals, the most important thermal insulator is fur or hair. As in the case of bird feathers, it is the inner layer of short, dense and flat underfur that provides them with insulation from the cold. The outer layer of fur visible in most land mammals is usually much coarser and provides little protection from the cold.

On the other hand, fur plays only a minor role for sea-dwelling mammals, which instead rely on a thick layer of fat that collects under their skin, known as blubber. Blubber is an essential insulator for sea mammals because, unlike fur, it remains effective even under extreme pressure, allowing them to dive deep below the surface of the ocean to search for food.

**Directions:** Complete the table by matching the statements below. Select the appropriate phrases from the answer choices and match them to the types of thermal insulation to which they relate. TWO of the answer choices will NOT be used. *This question is worth 3 points.*

Drag your answer choices to the spaces where they belong. To remove an answer choice, click on it. To review the passage, click **View Text**.

### Answer Choices

- |  |          |   |
|--|----------|---|
| (A) provides the only form of covering for the young of some organisms             | Down     | • |
| (B) is unable to operate as an insulator when exposed to high pressures            |          | • |
| (C) accumulates beneath the outer layer of the skin of animals                     | Underfur | • |
| (D) is found both on mammals that dwell on the land and those that live in the sea |          | • |
| (E) develops naturally on all species of endothermic animals                       | Blubber  |   |
| (F) acts as a key component in thermoregulation for bird species                   |          | • |
| (G) relies largely on its exterior part for thermoregulation                       |          |   |

**answer** Down: (A), (F) / Underfur: (B), (D) / Blubber: (C)

12



## Case 분석

온혈 동물의 체온을 유지해 주는 보호막을 **down**, **underfur**, **blubber**의 세 가지 경우로 나누어 서술하고 있는 지문이다. 세 가지의 서로 다른 예가 언급되므로 문제에서 세 개 이상의 분류 항목만이 등장할 것임을 쉽게 예상할 수 있는데 두 항목끼리 비교하거나 대조하는 지문이 자주 등장하긴 하지만 지금처럼 비교 대상이 세 개인 것도 등장한다는 점에 주의한다.

이렇게 지문 초반에서 항목별 서술 방식을 취하고 있다는 것을 확인하면 노트테이킹을 준비해야 하므로 지문을 가볍게 **scanning**하면서 몇 개의 항목이 등장하는지 우선적으로 확인하여 등장 항목만큼의 박스를 미리 만들어 두는 것이 좋다. 지문에 따르면 **down**은 조류의 보호막이고 **underfur**는 포유류의 보호막이며 일종의 지방 성분인 **blubber**는 해양 동물의 체온 유지를 위한 보호막 역할을 한다는 것을 알 수 있는데 각 보호막의 고유한 성격이 무엇인지 노트테이킹하며 체크해 둔다. 선택지를 살펴보면 상당히 자세한 **detail**까지 파악해야 하고, 거의 모든 표현이 지문에서 **paraphrasing**되었다는 것을 알 수 있다. 즉 이 유형을 통해 핵심 항목의 조직적인 이해도뿐만 아니라 다양하게 **paraphrasing**된 표현을 이해할 수 있는지 테스트한다.

## smart solution



리딩 유형 중 가장 점수 배점이 높은 문제인 만큼 지문의 디테일을 거의 완벽하게 이해해야 하는 어려운 문제이다. 오로지 기억에 의존하여 선택지에 등장하는 9개나 7개의 특징들을 항목별로 분류할 수는 없으므로 노트테이킹을 적극적으로 활용하는 것이 핵심이다.

### ● 비교 방식의 지문은 항상 노트테이킹한다.

일단 항목별 비교나 대조의 서술 방식을 취하는 지문은 모두 노트테이킹 대상으로 정하는 것이 좋다. 지문 전체를 훑으면 서 비교 · 대조의 전개 방식인지 확인할 수도 있지만 제목이나 지문의 서두를 통해 드러나는 경우도 있다.

#### ① 비교 방식 지문임을 알아보는 단서

지문에는 기본적으로 제목이 주어지므로 제목을 통해 알 수 있다.

**e.g.** Convergence and Divergence 수렴과 발산 / Neptunism and Plutonism 수성론과 화성론

지문의 서두에서 지문의 구성 방식을 미리 짚고 들어가는 경우 비교 방식의 지문에는 다음과 같은 표현들이 주로 사용되고 항목의 수를 나타내는 숫자가 등장한다.

**e.g.** be classified into X types X개의 유형으로 분류되다

have / include / contain X main categories X개의 주요 범주를 가지고 있다

#### ② 노트테이킹의 방식

처음부터 알아보기 쉽게 노트테이킹을 하는 것이 매우 중요하다. 대표 문제의 경우를 통해 알아보자.

Note Taking	Answer Choices
<p>Topic: 체온 유지를 위한 온혈성 동물의 보호막</p> <ul style="list-style-type: none"> <li>▶ <b>down</b> 조류에게서 볼 수 있음</li> <li>• inner feathers - 온도 유지에 핵심적인 역할</li> <li>• exterior feathers - 온도 유지 기능이 적음</li> <li><b>e.g.</b> 외부 깃털 없이도 체온을 유지하는 아기새</li> <li>▶ <b>fur[hair]</b> 포유류에게서 볼 수 있음</li> <li>• unfur - 온도 유지에 핵심적인 역할</li> <li>• outer layer of fur - 추위 차단 효과 적음</li> <li>▶ <b>blubber, underfur</b> 해양동물에게서 볼 수 있음</li> <li>• blubber는 underfur와 달리 압력을 견딜 수 있으며</li> <li><b>outer layer</b> 아래 축적 되어 있음</li> </ul>	<ul style="list-style-type: none"> <li>▶ <b>A</b> provides the only form of covering for the young of some organisms (Down)</li> <li>▶ <b>B</b> is unable to operate as an insulator when exposed to high pressures (Underfur)</li> <li>▶ <b>C</b> accumulates beneath the outer layer of the skin of animals (Blubber)</li> <li>▶ <b>D</b> is found both on mammals that dwell on the land and those that live in the sea (Underfur)</li> <li>▶ <b>F</b> acts as a key component in thermoregulation for bird species (Down)</li> </ul>

• 체온 유지 방어막(thermal insulation) 세 가지가 언급되었으므로 일단 이 세 항목을 메모해 두고 언급된 세부 사항을 항목 밑에 정리해 간다. 세부 사항을 적을 때 특히 예시나 공통점 등은 반드시 선택지로 등장하므로 주목한다.

- 지문에서의 표현은 선택지에서 거의 paraphrasing되므로 주의한다.

infant birds → the young of some organisms

collects under their skin → accumulates beneath the outer layer of the skin

have thermal insulation in the form of ~ → ~ acts as a key component in thermoregulation

## ● 비교의 지문 전개 방식을 확인해 둔다.

비교 지문을 전개시키는 방식은 크게 아래의 두 가지로 나뉘볼 수 있다.

### ① AB AB방식

단락마다 A와 B의 특징을 계속 대비해 가는 구성이다. 특히 두 항목이 등장할 경우 자주 사용되며 항목 간의 차이점이 두드러질 때 이를 대비시키기에 효율적인 구조이다. 하지만 구성이 복잡해지는 경향이 있으므로 지문 내용을 전체적으로 종합할 때 더 주의를 기울여야 한다.

### ② AA BB방식

A와 B 두 항목을 비교할 경우 한 항목씩 순차적으로 그 특징을 기술해가는 전개 방식으로 대표 문제의 예는 down, underfur, blubber의 특징을 차례로 기술하고 있으므로 기본적으로 이 AA BB방식을 취한다고 할 수 있다. 하지만 복잡한 정보를 다뤄야 하는 토플 지문의 특성상 순수하게 AA BB의 단순한 구성을 띄는 지문은 찾기 힘들며 단락마다

①의 병렬적인 AB 대비 방식을 조금씩 혼용한다고 볼 수 있다.

## ● 신호어를 활용한다.

### ① 내용전환어

비교의 지문 구성에서 내용전환어는 확실한 신호어 역할을 한다. 대표 문제의 예를 보자.

**On the other hand**, fur plays only a minor role for sea-dwelling mammals, which **instead** rely on a thick layer of fat that collects under their skin, known as blubber.

반면 해상 포유류에게 fur는 부차적인 역할만을 하며 대신 그들은 blubber로 알려진 두꺼운 피하지방층에 의존한다.

육상 동물과 해상 동물의 fur를 서로 대비시키는 부분에서 비교의 대표적 전환어인 on the other hand와 instead가 등장했다. unlike, however, on the contrary 등도 대표적인 비교의 전환어이다.

### ② 공통요소 표시어

선택지표에 both가 하나의 독립적인 항목으로 등장하는 경우도 있다. 즉 both항목의 경우 항목 간 공통 해당 사항을 미리 체크해 두어야 하고 both항목이 아니더라도 공통요소를 종합하여 답해야 하는 경우가 많으므로 항목 간 공통요소는 반드시 체크해 둔다. 지문에서 이를 나타내는 신호어는 also, like, as in the case of 등이 있다.





## practice test\_level 1



>> Read passages 1 and 2 and answer the following questions for each.

### 1

#### **Saltwater and Freshwater Fish**

Saltwater fish take in water through their gills, where it is diffused into the bloodstream. Since seawater has a high level of salinity, saltwater fish are at risk of having too much salt in their system. This problem is overcome by using special cells in the gills and scales that excrete excess salt. The other main difficulty that saltwater fish face is that they dehydrate easily. The relative salinity of the seawater that surrounds them is much higher than the water inside their own body, so they are constantly losing water through osmosis—the process by which water naturally goes from an area of low to high density. To make up for this, saltwater fish urinate infrequently, and in small and highly concentrated amounts.

In contrast, freshwater fish face the exact opposite problem; rather than having to stay hydrated, they have special adaptations that help them get rid of excess water. They are able to diffuse their body water through their scales into the water outside. They also have highly developed kidneys that allow them to excrete large quantities of urine, as much as 20 times more than a saltwater fish of equivalent size. Although this urine is dilute, it still contains some salts which are vital for the fish's survival. As such, freshwater fish have had to evolve special cells on their gills that extract salt from the water that surrounds them.

Extraordinarily, some fish species have the ability to alter the way they osmoregulate, meaning that they can extract water and excrete salt in seawater, and diffuse water and obtain salt in freshwater. This feature, called anadromy, allows some species, like salmon and trout, to migrate from freshwater rivers to the oceans. Most anadromous fish are programmed to make this migration at particular stages of their life-cycle when they undergo major physiological changes.

1-1. The word **this** in the passage refers to

- (A) having too much salt
- (B) using special cells
- (C) constantly losing water
- (D) having to stay hydrated

1-2. **Directions:** Complete the table by matching the phrases below. Select the appropriate phrases from the answer choices and match them to the type of fish to which they relate. TWO of the answer choices will NOT be used. ***This question is worth 3 points.***

**Answer Choices**

- (A) have adapted special features to keep themselves hydrated
- (B) produce a large amount of dilute urine
- (C) diffuse salt through special cells in their gills
- (D) lose water through the process of osmosis
- (E) can alter the way they osmoregulate
- (F) get rid of water deliberately through their skin
- (G) have to expel all the salt from their body

Saltwater fish

- 
- 
- 

Freshwater fish

- 
- 



## From Impressionism to Fauvism

Impressionism, named after Claude Monet's masterpiece *Impression, Sunrise*, dominated the French art world in the decades immediately following 1860. Originating from a Paris-based clique of experienced artists, including Monet, Pierre-Auguste Renoir and Camille Pissarro, Impressionism as a movement differed in a number of important ways from the Realism that preceded it. Taking ordinary people, objects and settings as their subjects, the Impressionists firmly believed that, rather than being stationary as art had traditionally depicted, the world was actually in constant motion, and they tried to bring out this sense of movement in their paintings. This effect was achieved through visible brushstrokes which captured the ephemeral or changing qualities of light. Colors were pure, not mixed, in order to achieve greater contrast between brushstrokes and create a more vibrant image. Impressionist paintings were also characterized by open composition, meaning that the main subject tended to blend into the background, rather than commanding the center of the picture.

Impressionism later spawned an avant-garde movement known as Fauvism, which began in the early 1900s. Like Impressionist painters, Fauve artists including Henri Matisse and Andre Derain employed bold brushstrokes and vivid colors in their pieces. Where Fauvism differed from Impressionism, however, was in its treatment of the subject matter. While vibrant, the colors used in Fauvist paintings were often chosen arbitrarily. For instance, the face of the female subject in Matisse's *Woman With a Hat* had a bluish-green tinge, and in his *Open Window*, the sky was given a pinkish hue. Fauve artists also tended to make their subjects the central focus of the painting, and they often altered its form, simplifying it with the use of geometric images. These techniques were designed to give Fauvist paintings a high degree of abstraction, emphasizing the differences between the real world and what could be depicted in a painting.

- 2-1. The word **arbitrarily** in the passage is closest in meaning to
- (A) rashly
  - (B) indiscriminately
  - (C) initially
  - (D) specifically

- 2-2. **Directions:** Complete the table by matching the phrases below. Select the appropriate phrases from the answer choices and match them to art movement to which they relate. TWO of the answer choices will NOT be used. ***This question is worth 3 points.***

**Answer Choices**

(A) tries to express the sense of constant movement	Impressionism
(B) incorporates several important elements of Realist painting	•
(C) employs an apparently random color scheme	•
(D) combines the main subject with the setting	•
(E) catches the natural qualities of light at a moment	Fauvism
(F) focuses on the gap between the reality and the painting	•
(G) uses a soft color palate with lots of mixed hues	•





## practice test\_level 2



>> Read passages 1 and 2 and answer the following questions for each.

### 1

#### **Sugarcane and Sugar Beets**

Sugarcane, a tall grass native to tropical and subtropical climates, is the world's primary sugar crop. Sugar production most likely began in India around 500 BC, from where it spread to other locations in Asia and across the globe. Currently, Brazil, India, China, and Pakistan are the countries where the majority of the world's sugarcane is grown. All of these places provide the warm, moist conditions necessary for the growth of sugarcane. However, since they are also developing countries that lack the resources for high-tech machinery, sugarcane is usually cultivated by hand, so the harvest requires the efforts of many laborers.

Once harvested, it must be transported to a processing plant as soon as possible. The sap which accumulates in the stalk of the plant quickly begins to leak out. Upon arriving at the factory, the sugarcane is first chopped into shreds then mixed with water and pressed repeatedly. Next, the juices are separated from the solid plant fibers and treated to purify the liquid. They are then boiled into a concentrated syrup and allowed to cool, a process that leads to the formation of sugar crystals. The valuable sugar crystals are then extracted using a centrifuge. This serves to separate them from the liquid, which becomes a byproduct known as molasses, a valuable sweetening commodity in its own right.

Discovered much more recently, the sugar beet is another important source of sugar, though annually it accounts for only one-sixth of the production from sugarcane. The main advantage of the sugar beet over sugarcane is its ability to be grown in temperate climates, particularly in Europe and the United States. Mechanized harvesting has become the norm in these developed nations, reducing the need for large workforces.

Unlike sugarcane, beets can generally be stockpiled for long durations after being harvested. Once at the processing plant, the subterranean roots of the plant, which contain all of the sugars, are thinly sliced and placed in a device that extracts their

sugar content using hot water. After further treatments that wring out all of the sugar content and eliminate impurities, the resulting liquid is allowed to evaporate into a thick syrup until crystals begin to form. A centrifuge separates the crystals from the syrup, after which the sugar can be refined into different grades. Unfortunately, the leftover molasses derived from sugar beets contains too many impurities to be a viable sweetening product, and is usually used as livestock feed.

1-1. The word **They** in the passage refers to

- (A) Shreds
- (B) Juices
- (C) Plant fibers
- (D) Sugar crystals

1-2. **Directions:** Complete the table by matching the phrases below. Select the appropriate phrases from the answer choices and match them to the type of sugar crop to which they relate. TWO of the answer choices will NOT be used.

***This question is worth 3 points.***



**Answer Choices**

(A) is mechanically harvested, decreasing the size of the workforce	Sugarcane
(B) loses its valuable sap soon after it is harvested	
(C) leads to the creation of molasses that is unfit for human consumption	Sugar beet
(D) can be sold as a sweetener without any processing	
(E) is used to produce more than a billion tons of sugar each year	
(F) has been grown for the purpose of sugar production since ancient time	
(G) contains sugar in roots of the plant	

## Quilting in the United States

A quilt is an assemblage composed of three layers of materials bound together with needlework. The top layer, formed by a single sheet of cloth, or by pieces of fabric sewn together, is often the most decorative layer, displaying designs produced by small running stitches that serve to both strengthen and ornament the quilt. The middle layer, known as batting, functions as insulation while providing loft to accentuate the designs stitched on the top layer. The third layer serves as a backing for the other two layers.

Since quilting has been practiced for centuries by various cultures, it is an art form with numerous styles and techniques. In the United States, pieced, appliqué, and crazy quilts have enjoyed a great deal of popularity over the past century and a half. Made of pieces of fabric sewn together, often into a design, pieced quilts were once a practical means of using small, leftover scraps of fabric from other projects. Similar to pieced quilts are appliqué quilts, created by sewing fabric cutouts onto a background. Sometimes, the fabrics used in the appliqué method were imported from places like Europe and India and featured fanciful prints. Geometric, symmetrical, abstract, or pictorial in nature, the patterns seen on these kinds of quilts are as diverse as quilters themselves. At first, patterns tended to be closely tied to a specific region, but that changed in the late nineteenth century when publishers began printing quilt patterns in national magazines.

In the 1880s, a new quilting fad swept the United States, leading to a boom in the production of crazy quilts, probably named for their arbitrarily shaped and placed fabric pieces. The inspiration for this new movement was the 1876 Centennial Exposition in Philadelphia, an event that exposed American quilters to asymmetrical art from Japan. The influence of these Asian designs was significant; their “crazy” asymmetry left an indelible mark in the history of American quilts.

As European settlers traveled westward, quilting came to fulfill an important social role. Quilting bees, occasions when everyone gathered to complete a quilt together, helped isolated families combat the loneliness of rural life. While quilting provided pioneers with much-needed bed dressings, door covers, curtains, and floor coverings, it was perhaps most valuable to them as a core of their communities.

2-1. The word **indelible** in the passage is closest in meaning to

- (A) realistic
- (B) permanent
- (C) indescribable
- (D) undetermined

2-2. **Directions:** Complete the table by matching the phrases below. Select the appropriate phrases from the answer choices and match them to the type of quilt to which they relate. **TWO** of the answer choices will NOT be used. ***This question is worth 3 points.***

**Answer Choices**

- |  |                |
|--|----------------|
| (A) did not exist in America before the late nineteenth century              | Pieced quilt   |
| (B) included a middle layer composed of leftover fragments from other quilts | •              |
| (C) was the style most often followed during quilting bees                   | Appliqué quilt |
| (D) created as an imitation of a foreign art style                           | •              |
| (E) featured the placement of fabric pieces on a cloth base                  | •              |
| (F) often contained a top layer made from small portions of unused fabric    | Crazy quilt    |
| (G) occasionally used printed fabrics from abroad                            | •              |
|  | •              |





## practice test\_level 3



>> Read passages 1 and 2 and answer the following questions for each.

### 1

#### **Melodrama from Tragedy**

Tragedy is a type of theater inherited by Western culture from the Greeks, and has long been a favorite genre of playwrights. Its aim is to stimulate an emotional response in audience members, primarily focusing on character development to accomplish this end. By carefully defining complex individuals, tragedies encourage the audience to identify with the characters in the play and empathize with their experiences. It is the suffering of the characters that is meant to move the audience, as they observe favorable circumstances disintegrate into a grim conclusion.

During the nineteenth century, another form of theatre, called melodrama, became extremely popular. The term is derived from two words of Greek origin and literally means “music drama,” which is a reference to the genre’s characteristic inclusion of music to appeal to audience members. Like tragedy, its purpose is to provoke emotional reactions in viewers. However, to do this melodrama relies on elaborate, plot-driven storylines that are played out by stock characters—recognizable stereotypes that are automatically familiar to the audience and therefore do not require much development.

Despite the obvious disparities between the two genres, tragedy and melodrama share a close evolutionary relationship. In the wake of the French Revolution, melodrama emerged from tragedy, an art form that, at the time, had religious relevance and was considered by the European upper classes to be the most refined form of dramatic art. However, the literary style of tragedy could not adequately express the ideals and concerns of common people in post-revolutionary Europe. In order to help represent their experiences in a new era of increased independence, they turned away from the tradition of tragedy and toward a new form of drama, which had a political slant and incorporated mime and music. Melodrama became the style preferred by common people because it departed from the conventions of tragedy in ways that were relevant to working- and middle-class Europeans.

As the new genre was created, some elements of tragedy were retained, such as its emotionally charged content and use of violent events. But much of what had made tragedy a well-respected art form was rejected. Tragedy had always explored inner conflict, examining the opposing forces within humans and showing how these subtle internal powers can overwhelm a person. Melodrama dismissed the internalized division that characterized tragedies and created a dramatic style based on wholeness, external conflict, and resolution. Instead of facing an internal conflict, the wholly good melodramatic hero battles an external villain: an evil person, group, or ideology; a disaster or accident; or fate.

The conclusion is where one of the key differences between melodrama and tragedy lies. The tragic hero experiences a dramatic downfall that leads to a sorrowful or violent ending, usually resulting in the protagonist's death. Melodrama takes the opposite approach. In melodrama, there is a clear resolution that neatly concludes the plot, which sees the antagonist receive retribution for whatever wrongdoing has been committed. After taking the audience through a tense and sentimental journey, melodrama provides an unambiguous, and happy, outcome.

**Directions:** Complete the table by matching the phrases below. Select the appropriate phrases from the answer choices and match them to the dramatic form to which they relate. TWO of the answer choices will NOT be used. ***This question is worth 4 points.***



### Answer Choices

Ⓐ draws its name from a combination of Greek words	Tragedy
Ⓑ features storylines that are mainly propelled by the plot	•
Ⓒ played a political role in Europe after the French Revolution	•
Ⓓ established a precedent of depicting emotional and violent events	•
Ⓔ has a reassuring conclusion	
Ⓕ gained the respect of elites as an art form	Melodrama
Ⓖ failed to achieve popularity among either the upper or lower classes of Europe	•
Ⓗ rejected the use of violence as a narrative technique	•
Ⓘ examines the main characters' inner struggles	•

## Precocial and Altricial Young

Evolution has generated different developmental strategies for different animal species, and scientists divide these strategies into two main classifications, precocial and altricial. In general, precocial species enter the world more fully developed, while altricial species are less developed. The distinctions between precocial and altricial are demonstrated most clearly in birds.

The Latin root of the term “precocial” is the same as that of “precocious”; both words connote the idea of early maturity. In birds, precocial hatchlings will emerge from their eggs with their eyes open, with a full coat of down or even feathers, and will exit the nest either immediately or within a matter of days. Much of their growth has already occurred within the egg.

Precocial development offers both advantages and drawbacks. On the one hand, the mothers must stay well-fed and expend large amounts of energy during gestation\*, for this energy is what enables the young’s extreme development before birth. However, once the offspring have been born, they are more self-sufficient and do not require much attention from their parents. Another advantage is that, since precocial young are more likely to leave the nest directly after birth, there is less chance of an entire brood being eaten or destroyed by predators.

The second developmental strategy gets its name from a Latin root word meaning “to nourish.” This refers to the greater reliance of altricial young on their parents immediately following birth. Altricial birds are generally helpless upon hatching; typically, their eyes are shut, their bare skin is exposed by a lack of down, their skeletons are weaker, and they are incapable of departing the nest to search for food or escape a predator.

Because altricial young are less developed at birth, less strain is placed on the mother during gestation. Consequently, this usually allows her to produce a greater number of offspring in each litter. Another benefit of altricial development can be observed in brain size: though smaller at birth, the brains of altricial organisms experience more postnatal growth, meaning they become proportionately larger than those of precocial species. However, altricial development is not without its disadvantages. The parents must work diligently to provide for their helpless young as they slowly develop. In addition, with the entire brood remaining clustered together

and immobile in the nest, it is much more vulnerable to being wiped out by a predator or other unfortunate event.

While precocial and altricial are useful categories, in reality most species fall somewhere between these two extremes. There are semi-precocial birds, which may hatch ready to leave the nest but require instruction on how to find food, and semi-altricial birds, which can hatch with open eyes and a down covering but remain in the nest to receive parental care before achieving the skills necessary to survive on their own. Parrots blur the distinction further, borrowing aspects of both strategies. Their young receive large amounts of energy from the mother during gestation, but their brains continue to develop after hatching, making them the most intelligent of all birds.

**gestation\*** the period before an organism's birth when it is carried by its parent

**Directions:** Complete the table by matching the sentences below. Select the appropriate sentences from the answer choices and match them to the type of developmental strategy to which they relate. TWO of the answer choices will NOT be used. *This question is worth 4 points.*



**Answer Choices**

Ⓐ Greater numbers of offspring can be born at once.	Precocial development
Ⓑ There is less risk of a single occurrence killing all the young.	•
Ⓒ Young birds may have feathers when they hatch.	•
Ⓓ The organism's brain continues to grow after birth.	•
Ⓔ Great energy is required of the mother before birth.	Altricial development
Ⓕ The strategy is most clearly demonstrated by the parrot.	•
Ⓖ Young birds make their own nests just days after hatching.	•
Ⓗ Attentive parental assistance is required after birth.	•
Ⓘ The bones of newborn birds are somewhat weak.	•

# word brush-up

▪ Choose one that is closest in meaning to the shaded word or phrase.

01 **take in** carbon dioxide

- (A) recycle      (B) absorb  
(C) delete      (D) maintain

02 **excrete** waste

- (A) expose to      (B) utilize  
(C) measure      (D) send out

03 **shred** the plants

- (A) touch      (B) slice  
(C) nourish      (D) grow

04 a **dilute** liquid

- (A) thin      (B) strong  
(C) cold      (D) damp

05 seek **retribution** on behalf of their ancestors

- (A) payback      (B) salvation  
(C) freedom      (D) forgiveness

06 **wring out** the extra moisture

- (A) keep out      (B) swell from  
(C) squeeze out      (D) dampen down

07 **accentuate** the positive aspects

- (A) hide      (B) highlight  
(C) suggest      (D) impress

08 **disintegrate** into dust

- (A) collapse      (B) expand  
(C) solidify      (D) merge

09 **in the wake of** the financial scandal

- (A) causing      (B) considering  
(C) leading      (D) following

10 **connote** the opposite meaning

- (A) challenge      (B) impose  
(C) imply      (D) defy



- 11 Psychological experiments show that young children are unable to **identify with** the experiences of others. It is not until the age of around 8 or 9 that most children develop this skill.
- (A) monitor (B) reproduce (C) empathize with (D) react to
- 12 Local authors like Rolf Boldrewood and Marcus Clarke tried to capture the sense of wilderness and adventure in colonial Australia. So as to make the stories same authentic and more compelling, it **became the norm** that novels were written in the distinctive Australian vernacular.
- (A) was established as a convention (B) returned to normal  
(C) turned out to be the case (D) suited the situation
- 13 While performing yoga, many people report experiencing a feeling of complete calm and spiritual **wholeness**. By focusing purely on the physical, they are able to temporarily suspend feelings of anxiety or concern.
- (A) completeness (B) freedom (C) objectivity (D) adjustment
- 14 One of the most striking features of Van Gogh's work was his use of color. Soft, warm **hues** of yellow and orange were often contrasted with cooler blues and violets.
- (A) areas (B) glimpses (C) combinations (D) shades
- 15 In the late 20<sup>th</sup> century, some historians began **blurring** the lines between fact and fiction. For example, some historical accounts written by respected academics included entirely fictional characters and settings.
- (A) drawing (B) removing (C) deriving (D) obscuring

answer 01 (B) 02 (D) 03 (B) 04 (A) 05 (A) 06 (C) 07 (B) 08 (A) 09 (D) 10 (C)

11 (C) 12 (A) 13 (A) 14 (D) 15 (D)

# day 13 review test iii >> day 02~12

## TOEFL Reading passage

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passage 1>

### Gamma-Ray Bursts

- 1 → Until the launch of the first satellites, all of humankind's observation of space was Earth-based. Consequently, mankind was unable to clearly inspect the sky through the planet's shielding atmosphere. Once satellites elevated astronomers' view to a perspective outside the atmosphere, the entire electromagnetic spectrum, most of which is blocked by the atmosphere, suddenly became detectable. The most surprising revelation gained from this space-based technology came in 1967, when two satellites designed to monitor radiation on Earth's surface, for the purpose of exposing secret nuclear facilities, picked up a burst of the highest-energy radiation in the electromagnetic spectrum; gamma rays. Unexpectedly, the gamma-ray burst they detected did not originate on Earth. It came from deep space.
- 2 → Described as the most incredible celestial phenomena known to exist, gamma-ray bursts immediately engrossed astronomers, and they have been extensively scrutinized since their discovery. The primary point of interest has been the origin of these blasts. Data collected by one of NASA's orbiting observatories in the early 1990s led many astronomers to believe that the gamma-ray bursts they were detecting not only originated outside the solar system, but outside the galaxy. Although based on recorded observations, this theory failed to explain how something so distant could produce such a burst, and a significant minority of scientists remained skeptical. They formed an alternative theory that gamma-ray bursts must occur within the galaxy, on the basis that the bursts were simply too powerful to be extragalactic in origin.
- 3 → A further discovery by a Dutch-Italian satellite in 1997 cast new light on the matter. The satellite observed a gamma-ray-burst afterglow of x-rays, light, and radio waves that faded much more slowly than gamma-ray bursts themselves, which may last for only a few seconds. **A** The discovery of this afterglow made the study of ephemeral gamma-ray bursts much less troublesome because they serve as records of gamma-ray bursts that last for days or even months past the initial event. **B** Providing astronomers with the time necessary to analyze the location of a gamma-ray burst, afterglows rapidly settled the debate about where gamma-ray bursts were coming from. **C** As it turned out, they are the

most distant spectacles known to exist, the furthest one being pinpointed at a distance of 12 billion light years from Earth. **D**

4 → Though theories about the sources of these violent anomalies are varied, most astronomers currently favor the interpretation of gamma-ray bursts as incredibly huge supernovae, that are faster, more explosive, and ten million times brighter than a regular supernova. Constructing simulations of gamma-ray bursts, astronomers have proposed a model of a colossal collapsing star discharging two columns of matter and energy that collide at high speeds to produce a formidable shock, which sends out a burst of gamma rays with the energy of a billion trillion Suns.

5 → Gamma-ray bursts are such a unique marvel they have captured the interest of many members of the scientific community. For example, researchers with the University of Kansas have turned to gamma-ray bursts to explain periods of extinction in Earth's past. They have proposed that the Ordovician extinction that took place around 450 million years ago could have resulted from a nearby gamma-ray burst, which, if it occurred within 6,000 light years of Earth, could have reduced the ozone in the atmosphere by 50 percent in just seconds, exposing life on Earth to ultraviolet radiation that could have caused mass extinctions.

6 For astronomers, the most exciting facet of gamma-ray bursts is not their catastrophic explosions but their potential to inform scientists about the beginning of the universe. Essentially, studying gamma-ray bursts is like looking back in time because light from the afterglow of a gamma-ray burst has been in transit for billions of years by the time it becomes discernable to scientists on Earth. Recently, astronomers observed a gamma-ray burst so distant that it occurred just 900 million years after the proposed origin of the universe; in a universe that, according to the Big Bang theory, is more than 13 billion years old, 900 million years is negligible. Astronomers anticipate that analysis of gamma-ray bursts may furnish evidence about the formation of the very first stars and help improve current theories about the structure of the early universe.

1. The word **shielding** in the passage is closest in meaning to

- (A) effective
- (B) spherical
- (C) thick
- (D) protective

2. In paragraph 1, the author suggests that the satellites that discovered gamma-ray bursts

- Ⓐ were designed to travel into deep space
- Ⓑ were not created for astronomical research
- Ⓒ were able to perceive gamma rays on Earth's surface
- Ⓓ were the product of international cooperation

**Paragraph 1 is marked with an arrow [→].**

3. The word **engrossed** in the passage is closest in meaning to

- Ⓐ disclosed
- Ⓑ fascinated
- Ⓒ disappointed
- Ⓓ overwhelmed

4. The word **they** in the passage refers to

- Ⓐ celestial phenomena
- Ⓑ gamma-ray bursts
- Ⓒ astronomers
- Ⓓ data

5. What can be inferred from paragraph 2 about the theory of local gamma-ray bursts?

- Ⓐ It was developed using data previously collected by NASA.
- Ⓑ It was not backed up by any compelling evidence.
- Ⓒ It was developed after an earlier theory had been rejected.
- Ⓓ It was the most widely accepted theory about the source of gamma rays.

**Paragraph 2 is marked with an arrow [→].**

6. Why does the author mention a Dutch-Italian satellite in paragraph 3?
- (A) To explain the reason why a gamma-ray-burst afterglow occurred
  - (B) To give an example of new technology that could detect x-rays and radio waves
  - (C) To introduce an important discovery that made it easier to study gamma-ray bursts
  - (D) To suggest that astronomers collaborated by sharing their research

**Paragraph 3 is marked with an arrow [→].**

7. The word anomalies in the passage is closest in meaning to
- (A) occurrences
  - (B) irregularities
  - (C) outbursts
  - (D) sources

8. According to paragraph 4, what do astronomers think causes gamma-ray bursts?
- (A) The formation of a typical supernova
  - (B) The birth of a new, bright star
  - (C) The collapse of a huge star
  - (D) The energy of a brilliant sun

**Paragraph 4 is marked with an arrow [→].**

9. According to paragraph 5, what do scientists from the University of Kansas consider to be the direct cause of the Ordovician extinctions?
- (A) Intense heat from a nearby gamma-ray burst
  - (B) The afterglow from a local supernova
  - (C) Exposure to ultraviolet radiation from space
  - (D) The loss of breathable oxygen from the atmosphere

**Paragraph 5 is marked with an arrow [→].**



10. Which of the sentences below best expresses the essential information in the highlighted sentence in the passage? *Incorrect* choices change the meaning in important ways or leave out essential information.

- Ⓐ Gamma-ray bursts are ancient events that occurred billions of years ago, and the light they released has been traveling for millennia.
- Ⓑ Scientists are at a disadvantage when they study gamma-ray bursts because the events they are observing took place in the ancient past.
- Ⓒ Light from gamma-ray bursts must travel for billions of years before reaching Earth, so, in a way, they allow scientists to see into the past.
- Ⓓ Since the evidence of gamma-ray bursts is billions of years old by the time scientists can observe it, this phenomenon is essentially useless.

11. The word *negligible* in the passage is closest in meaning to

- Ⓐ insignificant
- Ⓑ measurable
- Ⓒ proportionate
- Ⓓ enormous

12. Look at the four squares [■] that indicate where the following sentence could be added to the passage.

**At such a distance, the radiation from this particular gamma-ray burst would have been released before the Milky Way Galaxy had come into existence.**

Where would the sentence best fit?

Click on a square [■] to add the sentence to the passage.

13. **Directions:** An introductory sentence for a brief summary of the passage is provided below. Complete the summary by selecting the THREE answer choices that express the most important ideas in the passage. Some sentences do not belong in the summary because they express ideas that are not presented in the passage or are minor ideas in the passage. *This question is worth 2 points.*

**Space-based observation of the stars revealed the existence of deep-space sources of gamma radiation, which scientists have been asking questions about ever since.**

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#### Answer Choices

- |  |  |
|--|--|
| <p>(A) After the unexpected discovery of gamma-ray bursts in the 1960s, scientists were for some time divided about where the sources of such explosive phenomena were located.</p> <p>(C) The 1997 discovery of afterglows made it possible to document the location of gamma-ray bursts and eventually develop theories about their cause.</p> <p>(E) Gamma-ray bursts no longer occur, but they are still visible from Earth because they come from such distant sources that it takes billions of years for their light to travel across the universe.</p> | <p>(B) Many show interest in gamma-ray bursts, which may be able to explain ancient mass extinctions on Earth and provide clues about the early universe.</p> <p>(D) The satellites that discovered intense bursts of gamma radiation in space were attempting to scan the Earth's surface for nuclear-weaponry facilities.</p> <p>(F) If a gamma-ray burst occurred in the vicinity of Earth, it would destroy the atmosphere's ozone layer, making the planet uninhabitable.</p> |
|--|--|

Drag your answer choices to the spaces where they belong. To remove an answer choice, click on it. To review the passage, click **View Text**.

passage 2&gt;

**Tool Usage in Primates**

- 1 Tool usage is a fundamental area of study in the science of human evolution. Tools, broadly defined as implements that facilitate the performance of a task, were once thought to be the distinguishing factor that elevated humans above all other animals. Until the 1960s, this was the central bias in much research about human evolution, especially in relation to humanity's primate ancestors. When Jane Goodall announced, after years of research in Tanzania, that chimpanzees also fashion and manipulate tools, many people were in disbelief—her findings challenged one of the basic precepts justifying the superiority of humans over other primates. It has now become clear that many non-human primates—and even some non-primate animals—use tools in very sophisticated ways.
- 2 Studying the tool use of any form of primate is always a fascinating opportunity for researchers, who look at chimpanzees and gorillas as evolutionary antecedents to humankind and expect that information about these primates will help them understand the history of ancient humans.
- 3 In the years since Goodall's surprising discovery, researchers have documented plenty of examples of chimpanzees using local resources as tools to help them procure food. For instance, in Côte d'Ivoire, chimpanzees have been seen cracking nuts open with stones used as hammers. Chimpanzees in Tanzania have been observed with tools made from grass or straw, which expedite their hunt for termites. All of these examples confirm that chimpanzees are adroit tool users, but what scientists are beginning to discover is that chimpanzees are very selective about which tools they use for specific tasks.
- 4 → When harvesting termites from nests, chimpanzees begin by drilling access holes into the termite mound. These holes are created with a thick stick that is sometimes difficult to push through the termite mound, requiring chimpanzees to use their feet to apply extra force. The action of chimpanzees as they use their feet to press these “puncturing sticks” into the mound is very human, like a gardener stepping on a shovel to push it into an unyielding patch of dirt. When the puncturing stick has served its purpose, chimpanzees turn to another tool, one that is well suited for extracting termites from the nest. This “fishing probe,” which chimpanzees may fray on one end with their teeth, easily pulls termites out through the access holes that were drilled earlier.
- 5 → Interestingly enough, chimpanzees do not use just any appropriately

sized sticks for their tools. Apparently, only particular species of plants produce the desired tools. Puncturing sticks are fabricated from a type of tree known as *Thomandersia hensii*, and fishing probes are obtained from an herb called *Sarcophrynium spp.* Contrary to what scientists originally believed, chimpanzees do not spontaneously improvise tools from whatever materials are nearby; they carefully select their tools before they even begin to hunt for food.

6 → The proficiency of tool-using chimpanzees, if not the details of their selectivity, has been known for some time. Until recently scientists were unaware that gorillas use tools—a discovery that was somewhat shocking to the scientific community, for it had been assumed that gorillas' size and strength enabled them to accomplish the daily tasks for which some smaller primates require tools without any aid.

7 **A** Although, in the past, gorillas in captivity had been seen using tools, they appeared to apply them less extensively than other primates, and for some time there were no confirmed instances of gorillas using tools in the wild. **B** The discovery came recently from researchers who, since 1995, have been observing wild gorillas in a national park in the Republic of the Congo. **C** According to their findings, a female gorilla named Leah used a branch to test the depth of a pool of water and then managed the tool as a walking stick to assist her as she waded out into the water. **D** In a separate occurrence, a female gorilla named Efi used a severed tree trunk as a support to lean on while she foraged for herbs. Later, she lay the trunk down to use as a bridge while crossing a muddy area. These two methods of tool use are quite different from the practices of chimpanzees, clearly demonstrating the diversity of tool usage in primates.

1. The word *bias* in the passage is closest in meaning to

- (A) preconception
- (B) evidence
- (C) definition
- (D) advancement



2. Which of the sentences below best expresses the essential information in the highlighted sentence in the passage? *Incorrect* choices change the meaning in important ways or leave out essential information.
- Ⓐ For many years, academics like Jane Goodall believed that human superiority was proved by the fact that no other primates used tools.
  - Ⓑ Jane Goodall drastically changed the study of human evolution when she demonstrated that chimpanzees made and used tools.
  - Ⓒ Jane Goodall's discovery of chimpanzee tool use was stunning because it contradicted contemporary beliefs about what set humans apart from other primates.
  - Ⓓ Chimpanzees in Tanzania, Jane Goodall discovered, were quite advanced—they had discovered not only how to use tools but how to construct them as well.
3. The word **them** in the passage refers to
- Ⓐ researchers
  - Ⓑ antecedents
  - Ⓒ humankind
  - Ⓓ primates
4. The word **adroit** in the passage is closest in meaning to
- Ⓐ ancient
  - Ⓑ able
  - Ⓒ reliable
  - Ⓓ fast

5. In paragraph 4, why does the author mention a gardener?

- Ⓐ To compare puncturing sticks and fishing probes with human tools
- Ⓑ To explain why humans originally developed tools for working in the dirt
- Ⓒ To emphasize that chimpanzee tool usage can appear similar to human's
- Ⓓ To suggest that chimpanzees and humans use similar tools for different purposes

**Paragraph 4 is marked with an arrow [→].**

6. The word unyielding in the passage is closest in meaning to

- Ⓐ tough
- Ⓑ cracked
- Ⓒ unharvested
- Ⓓ organic

7. What can be inferred from paragraph 5 about scientists' early assumptions about chimpanzees?

- Ⓐ They doubted that chimpanzees planned their tool usage in advance.
- Ⓑ They expected that chimpanzees used specific plant species to make their tools.
- Ⓒ They anticipated that chimpanzees needed two different tools to harvest termites.
- Ⓓ They believed that chimpanzees did not use a fishing probe to extract termites from their nests.

**Paragraph 5 is marked with an arrow [→].**

8. According to paragraph 6, what did scientists initially believe about gorillas?

- Ⓐ Their tools were much simpler than the tools of chimpanzees.
- Ⓑ They used tools in the same manner as chimpanzees.
- Ⓒ Their brains were not as highly developed as the brains of other primates.
- Ⓓ They were strong enough to accomplish most tasks without tools.

**Paragraph 6 is marked with an arrow [→].**



9. The word **severed** in the passage is closest in meaning to
- Ⓐ rotted
  - Ⓑ dehydrated
  - Ⓒ twisted
  - Ⓓ disconnected
10. According to the passage, how does tool use differ between chimpanzees and gorillas?
- Ⓐ Chimpanzees use sticks and twigs, but gorillas use trunks and branches.
  - Ⓑ Chimpanzees use stone tools, but gorillas use wooden tools.
  - Ⓒ Chimpanzees use tools for food gathering, but gorillas use tools for support.
  - Ⓓ Chimpanzees use tools only occasionally, but gorillas use tools on a daily basis.
11. Look at the four squares [■] that indicate where the following sentence could be added to the passage.

**Consequently, some scientists doubted that gorillas were natural tool users.**

Where would the sentence best fit?

Click on a square [■] to add the sentence to the passage.

12. **Directions:** An introductory sentence for a brief summary of the passage is provided below. Complete the summary by selecting the **THREE** answer choices that express the most important ideas in the passage. Some sentences do not belong in the summary because they express ideas that are not presented in the passage or are minor ideas in the passage. ***This question is worth 2 points.***

**Humans once believed that all other primates were incapable of tool use, but subsequent discoveries have conclusively disproved that belief.**

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### Answer Choices

- |   |   |
|---|---|
| <p>(A) Before the 1960s, the scientific community was convinced that tool usage was far too complex for the brains of non-human primates.</p>           | <p>(B) Jane Goodall's 1960s research demonstrated that chimpanzees have the ability to make and use tools, proving that humans are not the only primate tool users.</p> |
| <p>(C) After the tool usage of chimpanzees had become common knowledge, new research revealed the extent of their selectivity when preparing tools.</p> | <p>(D) Researchers have observed that chimpanzees in the wild launch complex hunts for food, coordinating their efforts with other chimpanzees.</p>                     |
| <p>(E) Gorillas have recently been observed in the wild manipulating tools, using them in a different manner than chimpanzees.</p>                      | <p>(F) According to new findings, gorillas are not the only primates to use sophisticated probing and puncturing tools to harvest food.</p>                             |

Drag your answer choices to the spaces where they belong. To remove an answer choice, click on it. To review the passage, click **View Text**.

passage 3&gt;

**Geysers**

- 1 → There are very few areas in the world where hydrogeology is favorable for creating geysers. There are fewer than 1,000 of them in the world, with almost half existing in Yellowstone National Park in the USA, including "Old Faithful," the most famous geyser in the world. The word geyser stems from the Icelandic word *geysir*, meaning "to gush forth," describing the way a hot spring spews forth a stream of boiling water and steam into the air. The conditions for this phenomenon include a source of immense heat, a natural subterranean supply of water, and a series of fissures and cracks in the earth to form a route to the surface of the earth. These features are common to volcanic areas. In addition, the surrounding rock formations must be solid enough to bear the intensity of the pressured water and steam explosions.
- 2 → Usually geyser water is from an underground river or from pooled rain and ground water that has seeped deep down in the earth at the geyser basin. According to mineral level tests of this water, it has been found that it sometimes takes up to five centuries for the water to percolate from the surface into these underground pools. The water is then heated up by flowing over the molten magma that is brewing underneath the earth's surface. The boiling water, which can exceed 199 degrees Fahrenheit, then begins to rise. The water does not vaporize due to the enormous pressure exerted by the weight of overlying rock. As this water rises, steam forms, and little bubbles are created that cannot protrude through the ground constrictions. The bubbles coagulate in these constrictions, forming a dense shelf that places pressure on the overlying water. Eventually, the water above is forced out of the channel and the bubbles escape.
- 3 → Like a sigh of relief, the pressure is decreased on the system and the water begins to boil after settling in a reservoir just beneath the surface. The resulting steam forces the water up through the vents at a greater intensity and the water is expelled faster than it can enter the geyser's plumbing system. Once the water reservoir underneath the geyser vents is exhausted or the gas bubbles fizzle out, then the eruption is over. Normally, the conditions of the water, heat, and subterranean structure remain constant, so for geysers like Old Faithful, they erupt quite regularly. However, there are certain variables that can cause deviations from their predictable patterns.
- 4 → Seasonal changes, including those in atmospheric conditions and barometric pressure, can have an effect on geyser behavior. Depending on the amount of average seasonal rainfall, studies of Old Faithful show it correlates

with changes in eruption intervals. In this particular case, increased rainfall appears to shorten the intervals between eruptions in a systematic fashion. Even the slightest alteration in barometric pressure will have a significant effect on geyser activity on a year-long scale. **A** When the pressure is reduced, the water temperature of the geyser increases, and this results in erratic fluctuations of their eruption patterns.

5 **B** Although less studied by scientists, it appears that the eruptive schedule of a geyser follows a pattern according to Earth tides. **C** They act similar to ocean tides and water, but with the solid ground of the planet oscillating by approximately eight inches daily, in accordance with a lunar or solar rhythm. **D** The Earth is not a stable, fixed entity, but is in fact constantly undergoing complex deformations. When there is a low earth tide, channel openings in the ground layers are squeezed shut and the flow of water is restricted into the subterranean reservoirs. The opposite of this, when the high earth tide causes dilation, opens up cracks and channels within the ground to allow a faster influx of water into the earth's plumbing system.

6 There is also a very strong correlation between earthquake activity and geyser behavior which has been observed for centuries. A clear modern example of their link is when, in 1959, the Hegben Lake earthquake struck California. Its epicenter was only fifty kilometers away from Yellowstone Park, and, immediately following the quake, all the geysers in the park erupted and their average temperature rose by two degrees Celsius. Dormant geysers were triggered, and the behavior of most of the active geysers changed. However, one exception to this was Old Faithful, the only geyser in the park not affected by the Hegben Lake earthquake.

1. Why does the author mention "Old Faithful" in paragraph 1?

- (A) To give an example of a geyser that most people know
- (B) To demonstrate personal knowledge about the topic
- (C) To emphasize the main focus of the passage
- (D) To highlight a benefit of visiting Yellowstone National Park

**Paragraph 1 is marked with an arrow [→].**



2. All of the following are mentioned in paragraph 1 as preconditions for the existence of a geyser EXCEPT

- Ⓐ a heat source
- Ⓑ an underground river or reservoir
- Ⓒ surface water
- Ⓓ fractures in the ground

**Paragraph 1 is marked with an arrow [→].**

3. According to paragraph 2, what can be inferred about magma?

- Ⓐ It takes five hundred years for it to collect in underground pools.
- Ⓑ It has a temperature in excess of 199 degrees Fahrenheit.
- Ⓒ It never vaporizes due to extreme subterranean heat pressure.
- Ⓓ It absorbs some of the geyser water to maintain its viscosity.

**Paragraph 2 is marked with an arrow [→].**

4. The word dense in the passage is closest in meaning to

- Ⓐ placid
- Ⓑ pressed
- Ⓒ sparse
- Ⓓ thick

5. According to paragraph 3, what occurs just before a geyser eruption?

- Ⓐ steam pushes water out through the geyser vents at a high speed
- Ⓑ gas bubbles from the boiling water become excited and explode
- Ⓒ water boils in the underground reservoir and increases pressure
- Ⓓ an accumulation of bubbles forces water gradually through vents

**Paragraph 3 is marked with an arrow [→].**

6. The word **expelled** in the passage is closest in meaning to

- Ⓐ abandoned
- Ⓑ collected
- Ⓒ expired
- Ⓓ discharged

7. The word **their** in the passage refers to

- Ⓐ geysers
- Ⓑ variables
- Ⓒ deviations
- Ⓓ patterns

8. In paragraph 4, the author states that an increase in rainfall in an area with geysers

- Ⓐ increases the frequency of eruptions
- Ⓑ affects the intensity of eruptions
- Ⓒ makes eruptions occur less regularly
- Ⓓ has little impact on geyser activity

**Paragraph 4 is marked with an arrow [→].**

9. The word **erratic** in the passage is closest in meaning to

- Ⓐ dependent
- Ⓑ unpredictable
- Ⓒ explosive
- Ⓓ disconnected



10. Which of the sentences below best expresses the essential information in the highlighted sentence in the passage? *Incorrect* choices change the meaning in important ways or leave out essential information.

- Ⓐ At a high earth tide, the ground's channels are opened and water can be drained into them more easily.
- Ⓑ Water is channeled out of the ground via a complex tidal system that relies on solar and lunar tides.
- Ⓒ Cracks and channels in the earth allow water to flood in, creating a high earth tide.
- Ⓓ Water will flow more easily into the ground once the ground's channels and cracks are opened by atmospheric phenomena.

11. The word *triggered* in the passage is closest in meaning to

- Ⓐ undermined
- Ⓑ repeated
- Ⓒ pulled
- Ⓓ activated

12. Look at the four squares [■] that indicate where the following sentence could be added to the passage.

**These are natural circumstances that arise from interactions between the gravitational fields among the Earth, sun, and moon.**

Where would the sentence best fit?

Click on a square [■] to add the sentence to the passage.

13. **Directions:** An introductory sentence for a brief summary of the passage is provided below. Complete the summary by selecting the THREE answer choices that express the most important ideas in the passage. Some sentences do not belong in the summary because they express ideas that are not presented in the passage or are minor ideas in the passage. *This question is worth 2 points.*

**Geysers, natural springs that spout hot water and steam, are caused by a rare coincidence of hydrogeological circumstances.**

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#### Answer Choices

- |   |   |
|---|---|
| <p>(A) "Old Faithful" is the most famous geyser in the world, and it is located in Yellowstone National Park in the United States.</p> <p>(C) Geysers are generally found in volcanic areas, and unusual geological activity is also proven to have an impact on geyser behavior.</p> <p>(E) Eruptions generally occur at regular intervals, but seasonal changes and earth tides can disrupt these cycles.</p> | <p>(B) When underground water is placed under immense heat and pressure, the geyser erupts, forcing the fast-expanding water to shoot out into the air.</p> <p>(D) Recent tests indicate that it takes approximately five centuries for geysers to develop in geological regions where the conditions are right.</p> <p>(F) While it is commonly believed that tides play a role in geyser activity, most scientists have rejected this theory.</p> |
|---|---|

Drag your answer choices to the spaces where they belong. To remove an answer choice, click on it. To review the passage, click **View Text**.



# step-up training

테마별

day 14

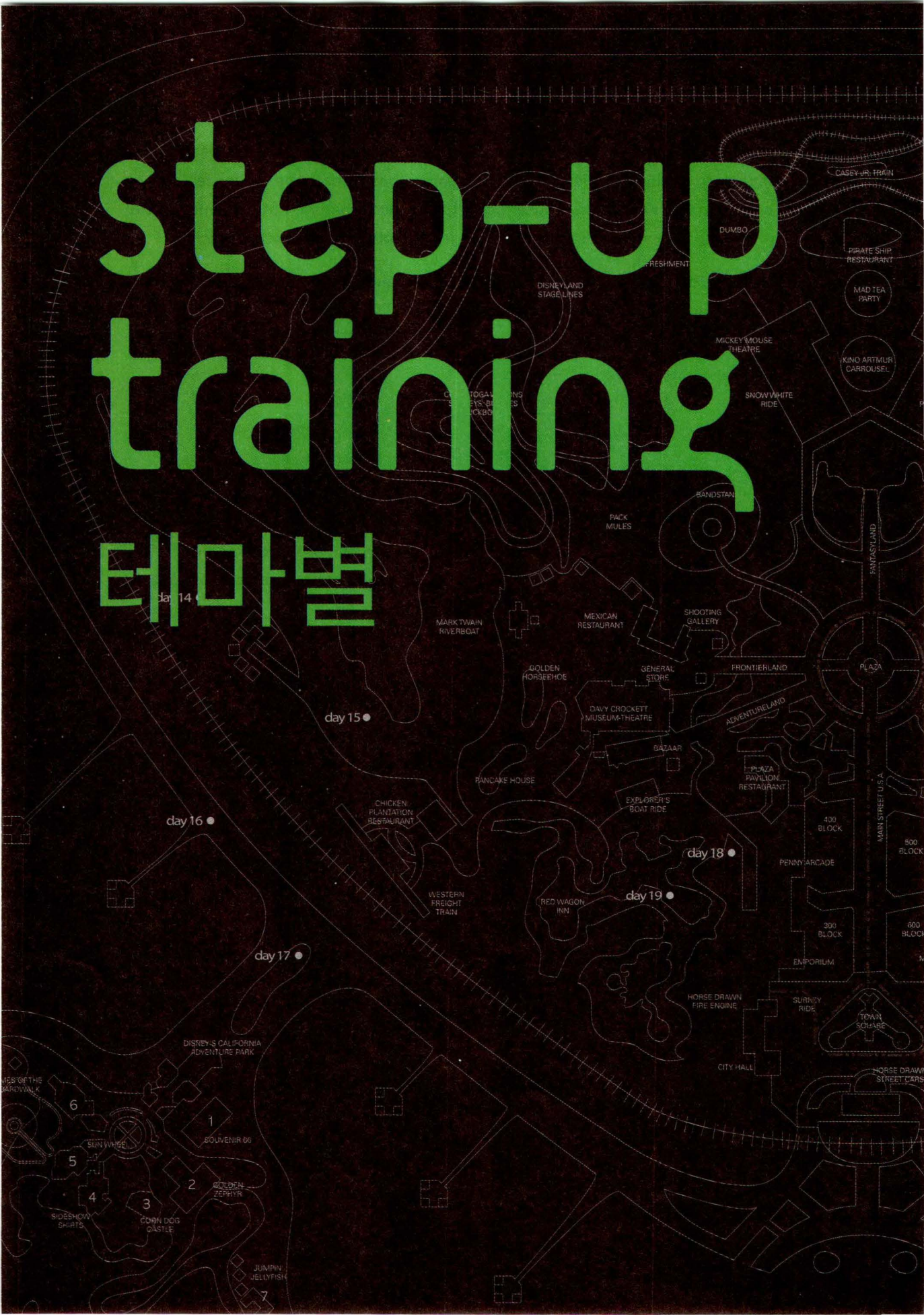
day 15

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day 14 arts

day 15 history

day 16 America

day 17 economy

day 18 Earth

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day 22 review test iv (day 14 ~ 21)

# day 14

## arts

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✚ speed keyword

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ADVENTURES

GOLDEN ZEPHYR

COWBOY CASTLE

JUMPIN' JELLYFISH

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speed

# keyword



arts

*"Great art picks up where nature ends."*

*- Marc Chagall (1887~1985)*

인간의 순수한 창작 활동 영역인 예술은 미술, 음악, 영화, 사진, 문학, 무용, 연극 등의 다양한 매체를 통해 표현된다. TOEFL에서는 이러한 각 분야가 폭넓게 다루어지지만 소재면으로는 회화, 조각, 공예와 같은 미술 분야의 내용이 가장 많으며, 시대면으로는 독자적인 양식을 구축하거나 큰 변화의 시기였던 고대, 중세, 르네상스 등이 자주 등장한다.

기출토픽

- 고대 동굴 벽화
- 고대 그리스와 이집트의 조각
- 중세 고딕 양식: 스테인드 글라스
- 르네상스 시대 예술가의 지위 변화
- 큐비즘

기출토픽

- 문예사조: 그리스 문학, 낭만주의, 다다이즘
- 작가: 마크 트웨인, 에밀리 디킨슨, 워즈워드

Fine Arts

Literature

arts

기출토픽

- 초기 영화의 발전
- 무성영화
- 초상용 사진
- 은판사진

Movies  
&  
Photos

기출토픽

- 고대 연극: 분장의 효과
- 현대 무용가: 마사 그레이엄

Theater  
&  
Dance



## case example

>> Read the passage and answer the following questions.

### TOEFL Reading passage

[review](#) | [help](#) | [back](#) | [next](#)

#### Cave Paintings

Scholarly investigation of cave paintings was a relatively new field of academic inquiry in the 19<sup>th</sup> century, when many famous ancient sites were discovered by spelunkers\* and other explorers. The unique conditions inside the caves had allowed the cave paintings to age so gracefully compared to other ancient works of art. In fact, the cave paintings were so well-preserved, conducted on such a huge scale and in such a deliberate manner, that many of the first experts to examine them believed that they were forgeries made by modern-day pranksters.

First, most cave paintings were protected from light, which is among the leading causes of pigmentation loss and fading in all color paintings. The early experts were fooled in large part because they failed to consider this important fact and wrongly believed that the bright colors still present in many ancient cave paintings could not have endured over thousands of years. Detailed anthropological and archaeological research has also revealed that the caves with the most elaborate cave paintings were not dwellings; they were typically sacred places, whose use was reserved for special occasions.

This removed another serious threat to the cave paintings: water vapor. The natural moisture of the caves in which cave paintings had been best preserved was sufficient to keep the paintings from drying out, yet not so great as to lead to the growth of mold. The water vapor exhaled by human beings has been shown to be a leading cause of the degradation of cave paintings that are open to the general public, so the fact that most cave paintings were made in sheltered, non-inhabited caves helps us to understand how they could endure through the millennia in such good condition.

While some cave paintings are quite small, others are surprisingly large, even ambitious in terms of scale and planning. The setting of many cave paintings suggests that the artists had to have constructed ladders, or even scaffolding, in order to support them as they worked. Although the exact methods used to create these early masterpieces are not precisely known, the subjects of cave paintings reveal a great deal about their creators.

**spelunker\*** someone who goes into underground caves and tunnels as a leisure activity

Fact

1. According to Paragraph 1, which of the following statements is true?
  - (A) Experts were amazed by the vibrant colors of these authentic artifacts.
  - (B) Cave explorers made all of the most significant discoveries.
  - (C) Only some cave drawings were considered worth studying.
  - (D) Many specialists wrongly concluded that the cave drawings were fakes.

Inference

2. Which of the following can be inferred from paragraph 2 and 3 about cave paintings?
  - (A) They would not have survived as well in areas used for human habitation.
  - (B) They were only made in caves used for ceremonial purposes.
  - (C) Moisture has a minor effect on their state of preservation.
  - (D) Water vapor damages them less than sunlight.

Summary

3. **Directions:** An introductory sentence for a brief summary of the passage is provided below. Complete the summary by selecting the THREE answer choices that express the most important ideas in the passage. Some sentences do not belong in the summary because they express ideas that are not presented in the passage or are minor ideas in the passage.

**Ancient cave drawings are the subject of great academic interest and new discoveries provide rare insight into the lives of ancient humans.**

- |   |  |
|---|--|
| <p>(A) The ancient drawings were only recently rediscovered and were initially assumed to be forgeries.</p>                                     | <p>(B) Ancient cave artists were concerned about reducing the effects of light and water vapor on their drawings.</p>    |
| <p>(C) Cave paintings have been well-preserved because they are located in places with low light and the right amount of airborne moisture.</p> | <p>(D) Archaeologists have deduced what methods the ancient artists must have used from clear evidence in the caves.</p> |
| <p>(E) Based on the study of cave paintings, scholars have learned a great deal about ancient humans' social hierarchy.</p>                     | <p>(F) Judging from the location, some cave paintings are massive in terms of scale and planning.</p>                    |





## Outlining

### The Preservation and Scales of Cave Paintings

#### 1 단락

Ancient cave paintings;  
new academic field in 19<sup>th</sup>

19세기 새로운 연구 분야가 된 동굴 벽화 연구

- Well-preserved, huge scale
- Believed to be forgeries

#### 2 단락

Well-preserved;  
protected from light

동굴 벽화가 오랜 기간 잘 보존된 이유 1

- Most caves were protected from the light
- Sacred places for special occasions

#### 3 단락

Well-preserved;  
right amount of moisture

동굴 벽화가 오랜 기간 잘 보존된 이유 2

- The right amount of water vapor
- Water vapor; the cause of degradation

#### 4 단락

Scales and painting methods

동굴 벽화의 규모와 계획 면에서의 거대함

- Surprisingly large in terms of scale and planning
- Possibility that ladders were used

여러 탐험가들에 의해 발견된 동굴 벽화는 새로운 이론 연구 분야가 되었으며,  
동굴 벽화가 오랜 기간 잘 보존된 점과 거대한 규모는 실로 놀랄만하다.

## Perfect Summary

예술 영역에서 동굴 벽화는 자주 출제되는 주제다. 해당 지문은 19세기 이후 새로운 연구 분야로 떠오른 동굴 벽화에 대해 오랜 기간 동안 변질 없이 잘 보존된 이유를 중점적으로 서술하고, 규모 면에서도 상당했음을 덧붙이고 있다. 지문은 <도입(1단락) + 보존 이유 1, 2(2, 3단락) + 규모 설명(4단락)>의 구성을 취하고 있는데 “Ancient cave drawings are the subject of great academic interest and new discoveries provide rare insight into the lives of ancient humans.”로 짧게 요약될 수 있다. 앞의 summary문제의 선택지를 틀린 정보와 언급되지 않은 정보로 나누어 살펴보면 다음과 같다.

### ❶ 틀린 정보 (NOT CORRECT)

- ⓑ Ancient cave artists were concerned about reducing the effects of light and water vapor on their drawings.

(고대 동굴 화가들은 빛과 수증기가 그들의 그림에 미치는 영향을 줄이는 데 관심을 가졌다.)

→ 동굴 자체의 조건이 빛과 수증기의 영향을 덜 받았을 뿐 고대 동굴 화가들의 의도라고 볼 수는 없다.

- ⓓ Archaeologists have deduced what methods the ancient artists must have used from clear evidence in the caves.

(고고학자들은 동굴 내부의 명확한 증거를 통해 고대 화가들이 어떤 방법을 사용했는지 추론했다.)

→ 벽화가 그려진 위치로 볼 때 사다리 등의 도구를 사용했다는 점은 짐작할 수 있지만 그림을 그린 정확한 방법은 알 수 없다는 점이 마지막 단락에 언급되었다.

### ❷ 언급되지 않은 정보 (NOT MENTIONED)

- ⓔ Based on the study of cave paintings, scholars have learned a great deal about ancient humans' social hierarchy.

(동굴 벽화 연구를 바탕으로 학자들은 고대인의 사회계급제도에 관한 많은 정보를 얻었다.)

→ 고대인의 사회계급제도와 관련된 내용은 언급되지 않았다. 지문은 벽화의 소재를 구체적으로 언급하지 않았기 때문에 해당 선택지는 지문과 관련 없는 내용임을 쉽게 알 수 있다.

answer 01. ⓓ 02. Ⓐ 03. Ⓐ, Ⓒ, Ⓔ

back story

#### 라스코(Lascaux) 동굴 벽화



1940년 프랑스 몽티냐크(Montignac)에서 발견된 라스코 동굴 벽화는 알타미라 동굴 벽화와 함께 구석기 시대 회화 중 최고 작품으로 간주되고 있다. 이 동굴 벽화는 흰색, 노란색, 빨간색, 검정색의 주요 네 가지 색과 황토 등이 섞여 있으며, 말, 소, 사슴 등의 동물 200여 마리가 사실적으로 그려져 있다. 벽화의 길이는 1,200m이며 동물들은 주로 크게 표현되어 있어서 어떤 소는 가로 5m 이상 되는 것들도 있다.





## practice test



>> Read passages 1 and 2 and answer the following questions.

passage 1>

### Sculpture in Ancient Greece

The Archaic Period of Greek sculpture lasted from roughly 600 BC to 480 BC. The most common types of sculpture during this period were statues representing male and female figures, called “kouros” (plural “kouros”) and “kore” (plural “korai”), respectively. The kouros and korai statues were generally presented in a static, stilted manner, reminiscent of the angular, stylized figures that characterized the paintings common in the tombs of Ancient Egyptian pharaohs.

The kouros represent naked male figures, which generally were displayed in exactly the same pose—standing straight and staring straight ahead. The feet might be slightly offset, but otherwise the typical kouros looked something like a soldier at the position of attention. With the occasional exception of what is now called an “archaic smile,” the sculptors did not attempt to display any emotion or affect on their statues. This unfortunate effect owed in part to the lack of the dynamic poses and focus on the human body as an object of aesthetic consideration that characterized later Greek sculpture. This made the statues appear lifeless and dull. Other than representing female, rather than male, figures, the korai were virtually identical to the kouros, in terms of artistic representation and style.

The Greek victory at the Battle of Marathon in 490 BC, although a military event, had significant repercussions on Greek artistic expression. Having successfully expelled the invading Persians from their nation, the Greeks felt both a renewed sense of pride and an accompanying interest in improving upon the older, traditional ways of their culture. This led to dramatic changes in the manner and style of Greek sculpture.

The Classical Period that followed the Archaic saw the introduction of naturalism and fluidity to Greek sculpture. No longer were static figures in artificial poses the norm. Rather than consider the human body as merely an object to be copied faithfully—as was the case during the Archaic Period—Classical Period sculptors sought to present their subjects as having intrinsic aesthetic value. They also created sculptures that displayed motion and purpose.

Whereas in the Archaic Period a man might be shown standing straight up with just the slightest hint of a smile showing his emotion, Classical sculpture reveled in flaunting the full range of human motion. This inversion of the previous focus on merely copying the body accurately had far-reaching artistic and even philosophical implications.

**Fact**

1. According to the passage, which of the following is true of Archaic sculpture?
- Ⓐ It represents an inversion of the previous artistic focus.
  - Ⓑ It represents the human body naturally.
  - Ⓒ It portrayed rigid, unemotional representations of the human body.
  - Ⓓ Accurately representing human musculature was a key element.

**Rhetorical**

2. Why does the author mention Greek philosophy in the final paragraph?
- Ⓐ To illustrate the full extent of the Classical Period
  - Ⓑ To demonstrate how the great philosophers inspired Classical artists
  - Ⓒ To show how Greek philosophy was influenced by Classical sculpture
  - Ⓓ To explain the transition from Archaic to Classical sculpture

**Summary**

3. **Directions:** An introductory sentence for a brief summary of the passage is provided below. Complete the summary by selecting the THREE answer choices that express the most important ideas in the passage. Some answer choices do not belong in the summary because they express ideas that are not presented in the passage or are minor ideas in the passage.

**The development of Ancient Greek sculpture was marked by a transition from the Archaic to Classical Periods.**

- |   |  |
|---|--|
| Ⓐ The art of Ancient Egypt served as a model for the sculpture of the Archaic Period.                     | Ⓑ Kouroi and Korai represented human bodies accurately, but lacked any personal touches.               |
| Ⓒ Victory over the Persians sparked change in many aspects of Greek art and culture, including sculpture. | Ⓓ Unlike rigid Archaic sculpture, Classical sculpture was often made from soft and flexible materials. |
| Ⓔ Classical Greek sculptors depicted fluid, natural and purposeful human subjects.                        | Ⓕ Greek Philosophy came to much greater prominence during the Classical Period.                        |



## The Arts and Crafts Movement

The Arts and Crafts movement emerged in Great Britain and the United States during the latter part of the 19<sup>th</sup> century. As the Industrial Revolution brought about increased efficiency in the production of many goods, the relationship of the craftsman-artisan to his creation changed radically. From ancient times through the late Renaissance, everything from the simplest table or chair to the most elaborate palace was the product of skilled craftsmen. In the industrial age, mass production, standardization, and focus on efficiency in pursuit of the maximization of profit overwhelmed the role of the traditional craftsman.

The widely skilled craftsman gave way to the narrowly-focused factory worker. Just as Marx and Engels early in the 19<sup>th</sup> century, had decried the dehumanization of the modern factory worker, the founders of the Arts and Crafts Movement saw the influence of that dehumanization in the fruits of industrialized labor. They sought to recreate earlier conditions, in which dedicated craftsmen, skilled in their trades, invested a lifetime of talent and care into everything they created. This is the crux of the Arts and Crafts Movement.

William Morris was among the most prominent practitioners and advocates of the Arts and Crafts Movement. **A**Rejecting the ornate, ostentatious style typical of the Victorian period, Morris found inspiration in the revival of gothic architecture championed by Augustus Pugin and John Ruskin. **B**In a noteworthy development, the Arts and Crafts Movement took neo-gothic architecture one step further. **C**It extended this style, approach, and method into every element of a home, including its furniture. **D**

The concept behind an "Arts and Crafts Home" (or what came to be called a "Craftsman Home" in the United States) was the same as that of the Arts and Crafts Movement itself: to counteract the effects of industrialization by designing living spaces and furnishings whose creation would rely upon the efforts of skilled craftsman. William Morris, for example, designed every aspect of his homes, from the structure and interior finish products to the furniture. In this way, an Arts and Crafts, or Craftsman Home reflected the vision of a craftsman-designer as brought into being by dedicated artisans skilled in their craft. Such homes clearly stood out from the "cookie cutter" variety favored by those builders whose sole interest was profit, and in this way aimed to strike a blow against the dehumanizing effects of industrialization.

Fact

1. According to Paragraph 3 which of the following is true of William Morris?
  - (A) Although thought of as a leader of the Arts and Crafts Movement, he actually preferred the neo-gothic style.
  - (B) He applied neo-gothic styles and designs principles to the Arts and Crafts Movement.
  - (C) His work was overshadowed by Augustus Pugin and John Ruskin.
  - (D) He incorporated Victorian architecture into his Arts and Crafts designs.

Rhetorical

2. Look at the four squares [■] that indicate where the following sentence could be added to the passage.

**The neo-gothic style featured simpler designs with more modest, and—to Morris' mind—more "human" living spaces.**

Where would the sentence best fit?

Summary

3. **Directions:** An introductory sentence for a brief summary of the passage is provided below. Complete the summary by selecting the THREE answer choices that express the most important ideas in the passage. Some answer choices do not belong in the summary because they express ideas that are not presented in the passage or are minor ideas in the passage.

**The Arts and Crafts Movement arose in the 19<sup>th</sup> century as a reaction to industrialization and the mass production of modern goods.**

- |  |  |
|--|--|
| <p>(A) The movement had been prominent in Europe since the pre-industrial era, before finally being transported to America and the United Kingdom.</p> <p>(C) Neo-gothic and Victorian architecture were blended together and incorporated into many designs.</p> <p>(E) For inspiration, the Arts and Crafts Movement looked to an idealized past, in which craftsmen took pride in their work.</p> | <p>(B) Creating a "human" environment, both inside and outside the home, was the guiding principle behind the Arts and Crafts style.</p> <p>(D) Ruskin and Pugin were renowned Neo-Gothic architects who inspired the leaders of the Arts and Crafts Movement.</p> <p>(F) The Arts and Crafts style was inclusive, extending from the design of the house, to the way it was built, and even to the way the finished home was furnished.</p> |
|--|--|

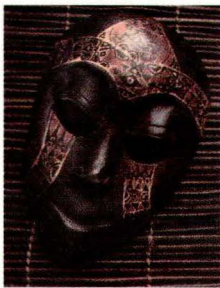


## Prehistoric Art 선사시대 예술

석기The Stone Age와 청동기 시대The Bronze Age의 예술을 일컫는 말로 동굴 벽화cave painting, 동물 조각품처럼 운반이 가능한 작품들portable art, 절벽에 그린 그림open air arts 등이 주요 예술품으로 남아있으며 시험에서는 동굴 벽화에 대한 지문이 출제되었다. 또한 원시 사회부터 종교적 의례ritual와 관련된 다양한 예술적 활동들이 있었으므로 이런 내용도 여러 분야에서 언급된다.

### Make-up 분장

▶ 토플 기출 주제



분장make-up은 원시 사회primitive society의 종교 의식에서 주술 효과를 위해 가면mask이나 채색coloration을 이용한 것에서 출발했다고 볼 수 있다. 초기 분장의 역할은 의식ceremony에 종교적인 의미를 부여하는 것이었으며, 이후 연극에서의 분장theater make-up은 캐릭터를 강조하거나 캐릭터의 심리 상태를 반영하려는 목적으로 사용된다.

## Ancient Art 고대 예술

서양에서는 일반적으로 그리스, 로마와 이집트 등지의 예술을 의미했으나 근래에 들어서는 수메르Sumer, 바빌론Babylon, 인도India를 비롯한 근동The Near East의 고대 예술이 점점 많이 조명되고 있는 추세이다. 실제 시험에서도 수메르 문명에 대한 지문이 출제된 적이 있다.

### Ancient Greek art 고대 그리스 예술

▶ 토플 기출 주제



이상적인 미ideal beauty를 추구하던 시대로 조화harmony와 비례proportion가 중요한 가치였다. 그리스 예술은 특히 조각sculpture과 건축architecture 분야에 많은 작품들을 남겼는데, 조각은 아르카이크 양식Archaic Style, 고전적 양식Classical Style, 헬레니즘 양식Hellenistic Style의 세 가지로 구분되고 시대가 흐를수록 자연스러운 대상의 움직임이 보여준다. 건축의 경우 도리아Doric, 이오니아Ionic, 코린트

### Theme Vocab

prehistoric art

선사시대 예술

primitive society

원시 사회

coloration 채색

ceremony

(종교적) 의식

ideal beauty

이상적인 미

harmony 조화

proportion 비례

sculpture 조각

style (미술의) 양식



## Romanticism 낭만주의

계몽주의enlightenment와 귀족적aristocratic 사고에 반발하여 1700년대 중반 이후 생겨난 학문적intellectual, 예술적artistic 움직임으로 산업혁명Industrial Revolution을 거치면서 더욱 큰 동력을 얻게 되었다. 이성적인rational 사고의 허점이 발견되면서 인간의 감정emotion과 자연nature 속에서 인간성의 진실을 찾고자 한 것이 낭만주의의 핵심이다. 이런 낭만주의 정신은 특히 미술, 음악, 문학 분야에서 다양한 작품으로 구체화되었다.

### William Wordsworth 윌리엄 워즈워드

▶ 토를 기출 주제



영국의 낭만파 시인Romantic poet으로 <서정가요집 Lyrical Ballades>을 통해 영국 최초의 낭만주의 시를 선보였다. 그는 시골 사람들의 소박하고 친근한 언어와 같은, 일반인들의 언어real language of men를 시에 알맞은 언어로 보고 18세기식 기교적sophisticated 시어poetic diction를 배척했다. 그의 작품은 이후 비단 문학뿐만 아니라 유럽 문화에서 큰 의미를 가진다.

## Realism 사실주의

이상주의적인 계몽주의와 환상적인 낭만주의에 대한 반작용reaction으로 19세기 중엽부터 발달하기 시작한 예술 운동이다. 특히 프랑스와, 시민 사회가 발달하였던 영국, 러시아의 문학과 회화를 중심으로 발달하였다.

## Modern Art 현대 예술

현대 예술은 과학 기술의 발달과 함께 등장한 사진과 영화 등으로 예술의 지평을 넓혀가게 된 점이 큰 특징이며 시험에서도 사진, 영화 등에 대한 토픽들이 자주 출제되고 있다.

### Daguerreotype 은판사진

▶ 토를 기출 주제



은판사진Daguerreotype은 사진 기술을 고안하고 사진의 발전을 도모한 프랑스인 다게르의 이름에서 유래했다. 원래는 함께 아이디어를 제공했던 동업자가 있었으나 그의 사후 그 아들에게 특허권patent을 산 뒤 온전하게 다게르의 발명품이 되었다.

### Theme Vocab

enlightenment

계몽주의

aristocratic 귀족적인, 귀족의

rational 이성적인

sophisticated 기교적인

poetic diction 시어

reaction 반작용

Daguerreotype

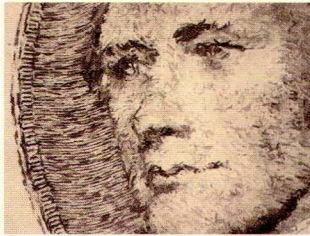
은판사진

patent 특허권

은판사진법은 복제할 수 없는 방법이었지만 약간의 화학 기법 **techniques**만 배우면 찍을 수 있어서 많은 사람들이 자신들의 초상화를 가질 수 있게 되었다. 프랑스보다는 미국에서 크게 유행했는데, 프랑스 사람들은 미적인 요소가 없고 감추고 싶은 부분까지 너무 자세하게 나온다는 이유로 좋아하지 않았던 반면, 미국에서는 사실적 **realistic**으로 재현 **representation**해 준다는 이유로 큰 인기를 끌었다.

## Portrait 초상화

▶ 토플 기출 주제



초상화의 시작은 고대 이집트로 거슬러 올라가지만 대중에게 일반화된 것은 18-19세기가 되어서이다. 초기의 초상화는 대상의 완벽한 모사에 집중했으나 시간이 흐르면서, 외면뿐 아니라 인간성을 드러낼 수 있어야 한다는 요구가 생겨났다. 사진 기술의 도입으로 초상화는 더욱 대중화되었다.

초상화 작업이 증가하면서 사진을 포함해 실루엣 **silhouette**, 미니어처 **miniature** 같은 여러 방법들이 적용되었는데, 실루엣은 선을 이용하여 한 면만을 보여주는 것으로 인상이 강렬해서 개성 **individuality**을 드러내는 데에 사용되었고, 미니어처의 경우 선뿐 아니라 다양한 색채와 소재를 사용했다.

## Sound film 유성 영화

▶ 토플 기출 주제



음성 기술의 발달과 함께 세계 1차대전 이후 유성영화 **sound film**가 등장하였다. 유성 영화 기술에 대한 도전은 끊임없이 계속되었지만 영상과 사운드의 동시성 **synchronization** 문제를 해결하고, 충분한 사운드 음량을 확보하는 일이 결코 쉽지 않았다. 1926년 할리우드 스튜디오는 디스크식 발성 영화기 **vitaphone**라는 시스템을 도입하여 라이브 극에 녹음 사운드 효과를 입힌 단편 영화를 만드는 시도를 하였으며 오케스트라 연주가 영화의 주요

장면에 들어가기도 하였다. 이 성과로 1927년 <The Jazz Singer>라는 최초의 유성 영화가 탄생하여 큰 성공을 거두었다. 초기의 사운드 온 디스크 **sound-on-disc** 시스템은 축음기 혹은 다른 레코드 판을 활동 사진과 맞물려 돌아가게 하는 방식으로 작동된 반면, 후에는 음성을 직접 필름상에 녹음하는 기술인 사운드 온 필름 **sound-on-film(SOF)**이 등장하여 이를 대체했다.

## Theme Vocab

**representation** 재현

**silhouette** 실루엣

**miniature** 미니어처

**individuality** 개성

**sound film** 유성영화

(← **silent film** 무성영화)

**synchronization** 동시성

# day 15 history

day 14 ●

day 15 ●

day 16 ●

day 17 ●

day 18 ●



speed keyword



case example



smart solution



practice test



smart source

speed

# keyword



history ▼

*"History is an unending dialogue between the present and the past."*

- E.H. Carr (1892-1982)

문자의 사용과 고대 문명의 발원, 르네상스, 인쇄술의 발달, 프랑스 혁명과 산업 혁명 등은 인류사의 큰 흐름을 바꾼 핵심 사건들로 한 번쯤 정리해 두는 것이 좋다. 실제 리딩 지문에 등장하는 내용들은 보다 작고 구체적인 사건들이지만 큰 역사적 맥락을 알고 있으면 그 속에서 일어나는 개별 사건들을 보다 쉽게 이해할 수 있기 때문이다. 토플에서는 다양한 역사 관련 지문이 등장하는데 유럽과 근동의 고대 문명, 유럽의 상업이나 농업, 예술의 발달 등이 자주 등장한다.





## case example

>> Read the passage and answer the following questions.

### TOEFL Reading passage

[review](#) | [help](#) | [back](#) | [next](#)

#### Japanese Cities in the Classical and Feudal Eras

A quick look at the cities of modern-day Japan reveals that their layouts do not follow a unified pattern. Rather, there are two main arrangements that can be identified, and it is possible to trace the origins of these city designs back to two eras in the country's history: the classical and the feudal.

The two primary cities exemplifying a classical-era layout are Nara and Kyoto, the imperial capitals during the Nara and Heian Periods, respectively, which together stretched from 710 to 1185 AD. Power in classical Japan rested with the emperor, so these capitals were centered on the imperial palace. Chinese culture was also an important influence, reflected in the fact that the layout of both Nara and Kyoto was modeled after that of Chang'an, the Chinese imperial capital. The emperor's palace faced the south part, and around it stretched a symmetrical grid of streets, with the major avenues running between the palace's many gates and the outer walls of the city. Though much expansion and modernization has taken place in recent centuries, the central layout of Nara and Kyoto remain largely unchanged to this day.

Towards the end of the classical era, power was gradually seized by numerous regional clans, until finally the country fell into the control of a handful of warlords known as shoguns and the feudal era began. With battles between the armies of different shoguns commonplace, military concerns became paramount. Intricate and expansive castles were built, and towns slowly developed within and around these fortified structures. Like the imperial palaces before them, castles functioned as seats of government as well as residences for the shoguns and their families. However, the cities surrounding them looked much different than Nara and Kyoto, as the Chinese system of gridded streets was abandoned in favor of narrow, zigzagging lanes, dead ends, and confusing intersections, the purpose of which were to thwart any enemies who managed to breach the city's outer defenses. Without intimate knowledge of the layout of the city, they would never be able to launch a full-scale assault on the shogun's castle. Anyone who has tried to navigate the older districts of cities such as Tokyo has doubtlessly experienced the effectiveness of Japan's feudal urban planning.

Reference

1. The word it in the passage refers to

(A) Chinese imperial capital      (B) emperor's palace  
(C) south part      (D) symmetrical grid

Simplification

2. Which of the sentences below best expresses the essential information in the highlighted sentence in the passage? *Incorrect* choices change the meaning in important ways or leave out essential information.

(A) The cities that grew up around castles abandoned the Chinese tradition of establishing a horizontal and vertical network of roads.  
(B) Cities like Nara and Kyoto are characterized by crisscrossing lanes, narrow streets, and dead-end alleys, all designed to keep enemy invaders from advancing easily.  
(C) Residents of Japanese cities hoped to make their transportation system confusing enough that enemy infiltrators would be unable to navigate it.  
(D) Different from Chinese streets, the bewildering lanes of the cities around castles were meant to confuse enemies that penetrated the town's defenses.

Summary

3. **Directions:** An introductory sentence for a brief summary of the passage is provided below. Complete the summary by selecting the THREE answer choices that express the most important ideas in the passage. Some answer choices do not belong in the summary because they express ideas that are not presented in the passage or are minor ideas in the passage.

**The layout of Japanese cities reflects the nation's history, particularly the classical and feudal eras.**

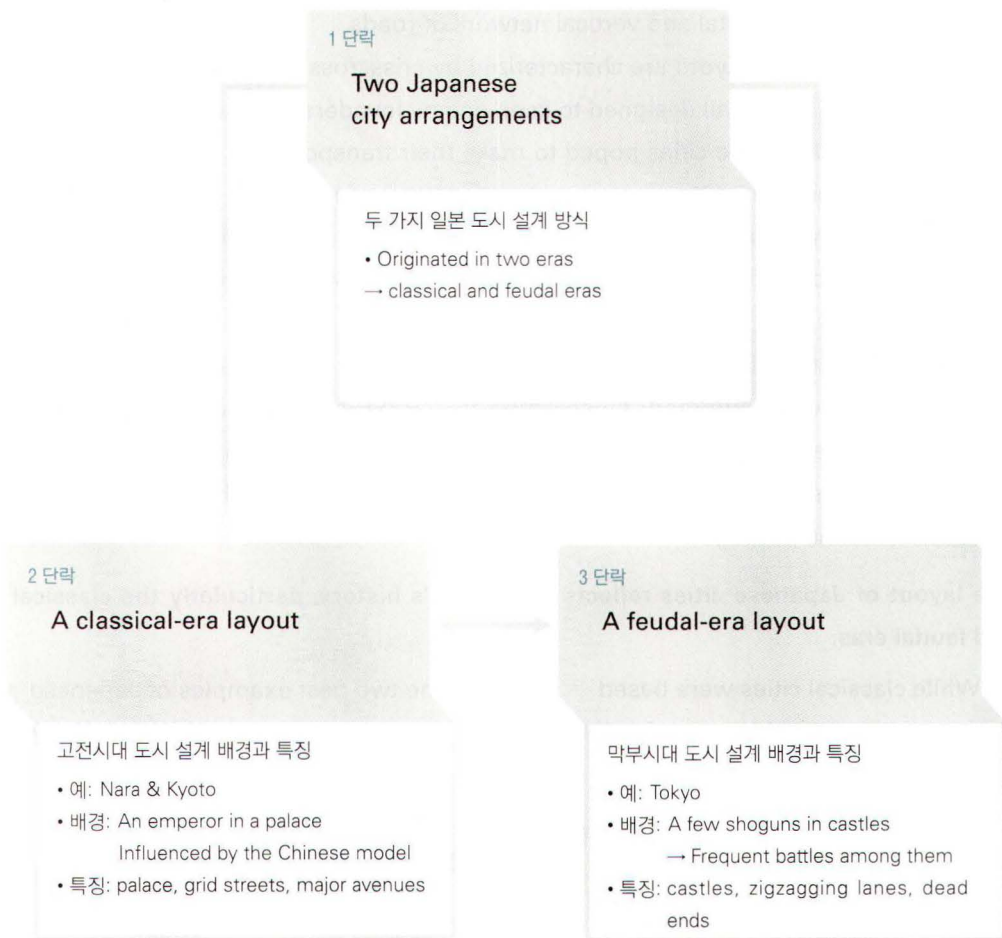
(A) While classical cities were based on the Chinese grid model, feudal cities were planned with the goal of baffling invaders.  
(B) The two best examples of Japanese classical cities, Nara and Kyoto, have changed greatly as a result of the country's rapid modernization.  
(C) Nara and Kyoto demonstrate typical configurations of the classical era, when the emperor's role was central and Chinese culture enjoyed significant influence.  
(D) In both classical and feudal Japanese cities, the outer wall surrounding a municipality was central to its defenses.  
(E) During the feudal era, wars between regional shoguns led to the construction of elaborate castles, which became new centers for Japanese cities.  
(F) The city of Tokyo exemplifies the discrepancy between cities of Japan's classical era and cities that emerged in its feudal era.





## ● Outlining

### Japanese Cities in the Classical and Feudal Eras



일본 현대 도시 설계 방식의 기원은 크게 고전시대와  
막부시대에서 찾아볼 수 있다.

## Perfect Summary

이 지문은 일본의 도시 설계 방식이 크게 고전시대(the classical era)와 막부시대(the feudal era)를 기원으로 하고 있음을 제시하면서, 서로 달랐던 시대적 상황으로 인해 큰 차이를 보이는 두 시대 간 도시 설계 방식을 비교·대조(compare and contrast)하고 있다. 이러한 전반적인 내용을 한 문장으로 요약하면 “The layout of Japanese cities reflects the nation’s history, particularly the classical and feudal eras.”로 표현할 수 있는데 이를 통해 두 시대 각각의 가장 대표적인 특징이나 두 시대 간의 차이를 대조한 문장을 핵심 정보로 골라야 한다는 것을 알 수 있다. 그 외 오답 선택지를 분석해 보면 다음과 같다.

### ❶ 틀린 정보 (NOT CORRECT)

(B) The two best examples of Japanese classical cities, Nara and Kyoto, have changed greatly as a result of the country’s rapid modernization.

(일본 고전시대 도시의 가장 대표적인 두 도시 나라와 교토는 일본의 급속한 현대화의 결과로 크게 변화했다.)

→ 나라와 교토가 고전시대 설계방식을 따른 대표적인 도시의 예인 것은 맞지만 오늘날까지 예전의 모습을 유지하고 있다고 했으므로 틀린 정보.

### ❷ 언급되지 않은 정보 (NOT MENTIONED)

(D) In both classical and feudal Japanese cities, the outer wall surrounding a municipality was central to its defenses.

(일본의 고전시대와 막부시대 도시 모두에서 시를 둘러싼 외벽이 도시 방어에 중추적 역할을 했다.)

→ 고전시대 외벽에 대한 언급이 있으나 그 용도에 대해서는 명시되지 않았다.

(F) The city of Tokyo exemplifies the discrepancy between cities of Japan’s classical era and cities that emerged in its feudal era.

(도쿄 시는 일본 고전시대 도시와 막부시대에 나타난 도시 간의 차이를 잘 보여주는 예다.)

→ 도쿄는 막부시대 도시설계의 모습을 보여주는 대표 예로 등장했을 뿐 차이에 대한 직접적 언급은 없다.

answer 01. B 02. D 03. A, C, E

15



### \*back story | 일본 막부시대의 쇼군(shogun)이란?



쇼군은 일본 무신 정권인 막부의 수장을 가리키는 말로, 형식적으로는 천황의 임명을 받은 신하지만 실제로 조정을 통제하고 무신 세력을 거느렸던 일본의 실질적 통치자였다. 당시 쇼군들의 권력이 강해짐에 따라 그들 사이에서 세력 다툼으로 인한 전투가 다반사로 일어났다. 쇼군은 에도 시대까지 최고 권력자로 700년간 유지되다가 왕정 복고(메이지 유신) 이후 폐지되었다.



## practice test



>> Read passages 1 and 2 and answer the following questions.

passage 1>

### Development of Chinese Arts

There are many ancient arts in China that have been practiced for millennia. Calligraphy, the art of writing, is one such art revered in China for thousands of years. The earliest examples of Chinese calligraphy are known as oracle bone script, incised characters found on the shoulder bones of oxen and on tortoise shells. Chinese calligraphy gradually changed form, evolving into an ancient style called seal script, then into the clerical script of the Han dynasty. Later forms of calligraphic styles included the round and fluid semi-cursive and cursive scripts, the latter a style so simplified that it is illegible without the appropriate training. The most modern, and most easily recognized, manifestation of Chinese calligraphy is referred to as regular script.

Pottery appeared in the timeline of Chinese art history during the Neolithic period, when the Yangshao culture that existed between 5,000 and 3,000 BC produced painted pottery adorned with geometric and representational designs. The evolution of Chinese pottery over the course of several thousand years culminated in the output of masterful porcelain wares during the Tang(618~907 AD) and Sung(960~1279 AD) dynasties. Firing, glazing, decorating, and molding techniques had been perfected, and kilns across China generated ceramic work of ultimate refinement. So highly regarded was the porcelain imported by Europe from China in the sixteenth century that the word "china" eventually came to be synonymous with porcelain, regardless of where the ware was produced.

Another Chinese art form with early origins is silk, a material over which the Chinese maintained a monopoly for millennia by carefully guarding the secret of its production. Silkworm cultivation was once the domain of women, who were also commonly involved in the silk-making process. The material was made into products like clothing and paper, and its value increased over time. In fact, it was such an important symbol of luxury that its use was at one point restricted to members of the imperial family. Silk also proved valuable as a commodity for export, and Chinese silk was distributed great distances by means of the Silk Road, a network of trade routes that radiated across Asia. Even when other civilizations demystified silk production, fine Chinese silks continued to enjoy high demand.

Fact

1. In paragraph 1, the author states that the calligraphic cursive scripts
- (A) are the earliest known form of Chinese writing
  - (B) can be difficult to decipher for those unfamiliar with them
  - (C) developed at the same time as the clerical script
  - (D) are the most widely used in modern times

Inference

2. What can be inferred from paragraph 3 about the trade routes that connected different parts of Asia?
- (A) They were initially established to link various parts of the Chinese empire.
  - (B) The Chinese imperial family controlled most of their commercial traffic.
  - (C) They collapsed once other cultures learned how to produce their own silk.
  - (D) Chinese silk was one of the most important products transported along them.

Summary

3. **Directions:** An introductory sentence for a brief summary of the passage is provided below. Complete the summary by selecting the THREE answer choices that express the most important ideas in the passage. Some sentences do not belong in the summary because they express ideas that are not presented in the passage or are minor ideas in the passage.

**Many art forms have existed in China since ancient times, and their practice has developed over the centuries.**

- |  |   |
|--|---|
| (A) From its origins as oracle bone script, written art has progressed through numerous styles and can now be seen in the regular script.                                  | (B) The seal and clerical scripts were two early examples of Chinese calligraphy and are now seen as the most refined of any style.     |
| (C) Pottery-making methods were imported to China from a neighboring culture millennia ago, but over the course of time Chinese potters have adjusted the style.           | (D) Pottery techniques were perfected over the centuries until Chinese porcelain became a prized commodity, especially in Europe.       |
| (E) China's trade secrets regarding the creation of silk helped ensure large profits from trade, but even after the monopoly ended Chinese silk was considered the finest. | (F) Women in China were once responsible for carrying out all the steps in the process of silk production, but this is less true today. |



## The French Revolution and Art

The French Revolution had many far-reaching effects—the abolition of the monarchy and the nobility chief among them. **A** One often-overlooked, and unintended, consequence was what could be called the “democratization” of art. **B** Prior to the revolution, the enjoyment of the arts was the almost exclusive province of the nobility and aristocracy. **C** Those with financial means were able to become “patrons” of artists, who would create art for their benefactors. **D** Although not all artists had patrons, very few exhibited their work to the masses, and in any case the best paintings and other “objets d’art” would almost invariably be snatched up by a wealthy collector.

It is no accident that the Louvre, currently the most famous museum in France, and perhaps the entire world, was originally a fortress, owned and controlled by the monarchy. It was a repository for the ruling class’ horde of great art. In this sense, it was at base essentially another kind of treasury, where valuable objects were kept safe from the hoi polloi—the common men and women. The general public was quite deliberately excluded from any access at all to the artistic masterpieces that are today available to one and all.

The change that took place in Paris and elsewhere in France following the revolution is easy enough to track. Over a period of years, what were previously just extensive private collections (like the Louvre) opened their doors to the wider public, which allowed the common man and woman to have a clearer and deeper understanding of both their own culture, and of the cultures of the nations around them. This “democratization” of art was a significant milestone, both in practical terms (since more people could see great works of art) and politically. After all, if the average person could now gain access to what was previously the inner sanctum of Kings, he could certainly be expected to have a say in how he was to be governed.

The democratization of art naturally led to dramatic changes. Most notably, art began to be used consciously by those in power as a means of swaying public opinion, and of social and political control. The post-revolutionary governments of France in particular commissioned works of art that would be seen by the masses, and which would, they thought, solidify their support for the ruling regime. This clearly represents the dark side of the democratization of art, namely the politicization of art.

Fact

1. According to paragraph 3, which of the following is true of the democratization of art?
- (A) The people decided, by popular vote, which works of art should be displayed.
  - (B) It only helped people to understand their own culture, not others.
  - (C) It affected both individual citizens and entire nations.
  - (D) Members of the nobility willingly shared their artistic treasures with the people.

Simplification

2. Which of the following best expresses the essential information in the highlighted sentence? *Incorrect* answer choices change the meaning in important ways or leave out essential information.
- (A) Artists who received payments from wealthy patrons for their work rarely had the opportunity to show their work to the general public.
  - (B) The public seldom even got to see the works of independent artists because elites quickly bought all the best pieces.
  - (C) The few artists who chose to market their work to the general public were opposed by the rich and powerful.
  - (D) Wealthy collectors conspired to deny the general public the opportunity to see their great works of art by buying all available artwork of any quality.

Insertion

3. Look at the four squares [■] that indicate where the following sentence could be added to the passage.

**This term merits some explanation, however, since it has a specific meaning that is easily misunderstood.**

Where would the sentence best fit?



## Ancient History 고대사

서구의 시각으로 볼 때 고대가 시작되는 시점은 기록이 발견되는 인류사 **recorded human history**의 기점인 약 BC 776년부터 중세 시작 전(약 AD 476년)까지를 일컫는다. 이 시대 각 지역은 문명 **civilization**의 발상지를 중심으로 소규모 도시 국가 **city-state** 형태를 취하며 발전했다. 지역별로 근동 지역 **Near East**에서는 이집트 **Egypt**, 수메르 **Sumer**, 바빌로니아 **Babylonia**가 도시 국가를 이루어 번성했으며, 지중해 **Mediterranean** · 유럽 지역에서는 고대 그리스 **Ancient Greece**와 로마 제국 **Roman Empire**이 융성하였다. 반면 아메리카 대륙에서는 마야 문명 **Maya civilization**이, 아시아에서는 중국의 황하강 **Yellow River**을 중심으로 한 상왕조 **Shang Dynasty**가 갑골문자 **inscriptions on bones and turtle shells**를 처음 사용하기 시작했다. 시험에서는 수메르와 이집트, 고대 로마와 그리스, 그리스의 대표적 폴리스 **polis**였던 스파르타와 아테네의 상황을 비교해서 서술한 지문들이 출제되었다.

### Ancient Egypt and Sumer 고대 이집트와 수메르

▶ 토를 기출 주제



BC 3,500~3,000년경 나일강 **The Nile**에서 이집트가 단일국가로 통합되던 **unified** 무렵 티그리스 **The Tigris River**와 유프라테스강 **The Euphrates River**에서는 메소포타미아 문명 **Mesopotamian civilization**이 발원했다. 메소포타미아 지역은 이집트와 달리 개방된 지형을 가지고 있어 공격을 받기 쉬웠으므로 이집트처럼 통합을 이루기가 어려웠는데 이

때문에 오랜 기간 도시 국가 **city-state** 간에 다툼이 있는 상태가 지속되다가 BC 3,000~2,500년 무렵에 페르시아에서 수메르인들이 옮겨와 정착하면서 수메르 강을 사이에 두고 고대 이집트와 동시에 발전하게 된다. 수메르의 도시 국가들은 특정 수호신 **patron god**을 모신 신전 **temple**을 도시 중앙에 두고 이 신을 모시는 신관 **priestly governor**에 의해 통치되었는데 이 신관이 영토 **territory**와 노동력 **work force** 모두를 관할했다. 이들은 이집트와 달리 사후 세계에 대한 사상이 없었기 때문에 따로 견고한 무덤을 만들지 않았고 이로 인해 학자들은 고증 **investigation**의 어려움을 겪고 있다. 하지만 수메르는 독특한 문자 체계 **writing system**인 설형문자 **cuneiform script**를 발전시켜 오리엔트 역사상 큰 자취를 남긴 것으로 평가된다.

### Sparta and Athens 스파르타와 아테네

▶ 토를 기출 주제

고대 그리스 **Ancient Greece**시대 도시 국가 **polis** 형태로 함께 발전한 스파르타 **Sparta**

#### Theme Vocab

civilization

문명

city-state

도시 국가

inscriptions on  
bones and turtle  
shells 갑골문자

patron god

수호신

priestly governor

신관

cuneiform script

설형문자

와 아테네Athens는 여러 면에서 대조적인 특징을 보였는데 그 중 여성의 지위position of women 측면에서도 전혀 다른 모습을 보여주었다. 스파르타의 경우 강한 군사력military power 유지에 초점을 두었기 때문에 여성이 어머니로서 아들을 엄격하게strict 훈육할 책임이 있었고, 이런 책임과 함께 여성에게는 상당한 지위가status 보장되었다. 또한 여성도 사유 재산private property을 가질 수 있었으며 남성과 동등한 교육의 기회를 누리고 상당한 신체 훈련gymnastic training을 받았다. 이렇게 스파르타의 여성이 정치적, 사회적, 경제적인 평등equality을 누렸던 반면 아테네의 여성은 주로 집안일을 담당하고 발언권voice을 가질 수 없었기 때문에 일부 문학 작품에서는 이런 점을 한탄하는 내용들이 등장하기도 한다.

## Ancient Greece and Roman Empire 고대 그리스와 로마 제국 ▶ 토를 기출 주제



고대 그리스가 전례에 없이 예술과 문화를 꽃피웠던 반면 로마 제국은 그리스 문화를 적극적으로 수용하면서도 보다 실용적인 분야에서 빛을 발했다. 지중해 세계를 통일한 로마 제국은 넓은 영토extensive territory를 지배하기 위해 도로망the network of roads을 발달시켰으며 윤년

leap year을 포함하는 로마력Roman Calendar을 발명했다. 예술 분야에서는 신고전주의 양식Neoclassic style과 비잔틴 건축Byzantine architecture의 유산을 남기며 고전 문명과 유럽 문명을 잇는 교량 역할을 했다.

## Library of Alexandria 알렉산드리아의 도서관 ▶ 토를 기출 주제



알렉산드리아Alexandria는 기원전 331년 그리스 마케도니아의 왕Greek Macedonian king이었던 알렉산더 대왕Alexancer the Great에 의해 건설되어 그 후 천년간 이집트의 수도 역할을 하면서 많은 문화적 유산을 축적하였는데, 알렉산드리아의 도서관은 그 중 하나이다. 이 도서관은 정원garden, 공동 식당room for shared dining, 독서실reading room과 강의실lecture hall을 갖추고 있었던 것으로 추정되며 오늘날 그 정확한 설계도layout는 알 수 없지만 이 후 대학university의 설계에 영향을 주었던 것으로 보인다. 이 도서관은 풍족한 자금을 후원하는 왕의 지시royal mandate로 전 세계의 모든 지식들을 축적해갔는데 모든 항구로 들어오는 책을 입수해 원본original을 받고 책 주인에게는 모사본copy을 돌려주는 방식을 취하기도 했다. 책을 모으는 것 이외에도 도서관은 국제적인 학자들international scholars을 모아 후원하고patronize 숙박lodging, 연구비stipend를 지급하기도 했다. 하나의 연구 기관으로 기능했던 알렉산드리아의 도서관은 과학적 방법론과 수학의 발달에 지대한 영향을 미쳤다.

### Theme Vocab

status 지위

private property

사유 재산

gymnastic training

신체 훈련

equality 평등

voice 발언권

the network of roads

도로망

leap year 윤년

mandate 지시

patronize 후원하다

## Middle Ages 중세

500년 무렵을 시작으로 유럽에서 천 년간 지속된 중세는 암흑기Dark Ages로 불리고 흔히 신 중심의 사회로만 알고 있지만 중세 중반High Middle Ages부터는 여러 가지 사회적 변화가 일어났다. 11세기에서 13세기 말엽 사이의 유럽은 서서히 중세 초기의 신권 사회에서 벗어나 도시화urbanization, 군사력 확장military expansion, 지성의 부활intellectual revival 등을 맞이하게 되고 이 시기에 인구는 폭발적으로 증가하여explosion in population 사람들은 도시로 유입되거나flow into towns 새로운 농지를 개간하기clear land for cultivation 시작했다. 이 무렵 파리의 거주자는inhabitant 200,000명에 달했고 프랑스 북부의 플랑드르Flanders에서는 자치 도시self-governing town가 생겨나 경제의 자극제가 되었다. 시험에서는 이 시기 이후 유럽의 사회적 변화와 관련하여 상업과 농업의 발달 양상과 관련된 지문이 출제되었다.

### Medieval population growth in Europe 중세 시대 유럽의 인구 증가

중세 중반 한 차례 급감했던 인구가 다시 증가하면서 경제적으로도 변화를 맞게 된다. 특히 농업agriculture의 발전은 주목할 만한데 농업이 획기적으로 발전할 수 있었던 주요한 이유는 이포제two-field에서 삼포제three-field로 윤작crop rotation방식이 바뀐 점, 말의 고삐collar가 새롭게 개발되었던 점, 철의iron 생산이 증가하여 가격이 하락하고 쟁기plow같은 농기구 생산이 용이해진 점 등을 꼽을 수 있다.

#### • 윤작crop rotation과 삼포제 농업three-field system

중세시대에서 20세기에 이르기까지 유럽에서는 주로 연 3회 윤작하는 방식이 사용되었는데 이는 겨울에는 호밀rye이나 밀wheat, 봄에는 귀리oats나 보리barley를 심고 초가을에 이를 추수한 후에는 땅을 휴한하는fallow 방식이다. 이렇게 윤작을 하는 이유는 토양의 생산성을 높이고 지력을 회복하기restore soil 위해서인데 이러한 기술은 봄에 가축livestock을 위한 곡식을 심었을 때 지력이 회복되는 것에서 힌트를 얻은 것이다.

#### • 흑사병Black Death

유럽은 14세기 중반 무렵 흑사병Black Death에 의해 철저하게 파괴되었다devastated. 이는 인류 역사상 가장 치명적인 전염병deadly pandemic으로 유럽에서만 약 5천만 명을 죽음으로 몰고 갔는데 이는 당시 유럽 인구의 삼분의 일에 해당하는 수치이다. 이로 인해 로마 카톨릭 교회는 큰 타격을 입게 되었다.

## Early Modern Period 근세 초기

이 시기는 르네상스Renaissance와 종교 개혁Protestant Reformation같은 일련의 큰 흐름 속에서 유럽 각국이 정체성을 확립해 가던 시기이다. 이탈리아에서 부흥하기 시작한 르네상스는 14세기와 16세기 사이에 유럽 전역으로 확산되어 왕가royalty나 귀족nobility, 로마 카톨릭 교회Roman Catholic Church와 부상하

### Theme Vocab

urbanization 도시화  
explosion in population 인구의 (폭발적) 증가  
clear land 농지를 개간하다  
cultivation 경작  
Black Death 흑사병  
crop rotation 윤작  
restore soil 지력을 회복하다  
collar (말, 소 등의) 고삐  
livestock 가축  
fallow (땅 등을) 휴한 중인  
pandemic 전염병  
Protestant Reformation 종교 개혁  
royalty 왕가  
nobility 귀족

던 상인 계급emerging merchant class의 적극적인 후원patronage 아래 예술, 철학, 음악, 과학 분야에서 눈부신 성과를 이루었다. 이러한 환경 속에서 교회의 권한은 약화되고 유럽의 주요 국가들은 식민지로 세력을 확장해 갔는데, 포르투갈과 스페인 등이 강력한 해상 세력으로 부상한 것도 이 무렵이다.

## Economy in Europe 유럽의 경제

14세기에 흑사병 등으로 큰 타격을 받은 유럽의 경제는 15세기에 들어서면서 각 국가들의 노력에 힘입어 조금씩 활기를 찾게 된다. 새로운 무역 연합trade association이 생겨나 발틱연안shores of the Baltic의 도시들은 한자동맹Hanseatic League을 맺었고 베니스, 제노아, 피사 등의 이탈리아 도시들은 지중해 전역으로 무역을 확대해 갔다. 특히 포르투갈과 스페인은 배를 축조하여 바다로 진출하면서 해양 중심 세력이 되었으며gain naval power 이는 콜럼버스가 아메리카 대륙을 발견하는 시조를 마련했다.

## Venice salt market 베니스의 소금 무역

AD 5세기 석호lagoon 한 가운데에 건설된 도시인 베니스Venice는 도시 중앙에 거대한 S 자형의 운하canal가 관통하고 이를 줄기 삼아 수많은 지류들이 거미줄처럼 퍼져있는 모습을 띄고 있다. 섬은 따로 분리되어 있지만 수많은 다리로 연결되어 있어서 118개의 독립적인 섬이 하나의 연합체를 이루게 되었다. 이 운하는 곧 도시의 인적·물적 유통을 위한 최상의 수송망 역할을 했고, 이런 편리한 교통 인프라로 인해 베니스는 14·15세기 동방과 서방 간의 지중해 교역을 전담하는 세계 최대 무역 도시 중 하나가 되었다. 특히 주변 지역은 양질의 소금을 생산했던 반면 베니스는 자연재해로 인해 소금 생산지가 파괴되면서 소금 무역에 집중하기 시작했다. 정부가 소금 수입상들에게 보조금을 지원해 초저가 판매가 이루어졌으며 이를 통해 주변 국가들 중에서 소금의 판매를 독점monopoly on the sale of salt함으로써 큰 수익을 올리게 되었다. 또한 여기에서 얻은 수익으로 다른 무역과 곡식 공급grain supply에 더 투자가 가능해지기도 했다.

## 18<sup>th</sup> and 19<sup>th</sup> Century 18,19 세기

부패한 귀족 정치aristocracy와 성직자clergy의 권력 독점monopoly on power에 대한 불만은 결국 프랑스에서 프랑스 혁명French Revolution으로 나타났고 이 후 프랑스는 공화정republic을 수립한 반면, 영국은 이 시기를 통해 강력한 대영제국Great Britain으로 성장하였다. 이런 변화를 배경으로 18세기 후반에는 영국에서 산업혁명The Industrial Revolution이 시작되어 유럽 전역으로 확산되었는데 이 시기 동안 새로운 기술의 발명과 사용the invention and implementation of new technology이 이루어졌으며 이는 곧 빠른 도시의 성장rapid urban growth과 대량 고용mass employment, 새로운 노동 계급의 등장the rise of a new working class과 같은 결과를 가져오게 되었다.

### Theme Vocab

merchant class 상인 계급  
patronage 후원  
trade association  
무역 연합  
aristocracy 귀족 정치  
clergy 성직자  
republic 공화국  
Industrial Revolution  
산업혁명  
urban growth 도시의 성장  
mass employment  
대량 고용  
working class 노동 계급

# day 16

# America

day 14 ●

day 15 ●

day 16 ●

✚ speed keyword

● case example

★ smart solution

▣ practice test

✱ smart source

day 1

day 18 ●

day 19 ●

DISNEY'S CALIFORNIA  
ADVENTURE PARK

1

SOLARWIND 66

2

COITEN 20TH

3

DOWN DOG  
CASTLE

4

UMBER  
JELLYFISH

7

ALBANY RIVER QUARTERS

CASLEY JR. TRAIL

DONALD

REFRESHMENTS

PIRATE SHIP  
RESTAURANT

MAD TEA PARTY

MICKEY MOUSE  
THEATRE

KING HARTER  
CARROUSEL

SNOW WHITE  
PIKE

PETER PAN  
PIKE

BANDSTAND

ONCE UPON  
A TIME

PANTAGON

MARY Poppins  
RIVERBOAT

MEXICAN  
RESTAURANT

SHOOTING  
GALLERY

GOLDEN  
HORSESHOE

GENERAL  
SCORE

FRONTIERLAND

FLORA

TOMORROWLAND

DAVEY CROCKETT  
MUSEUM-THEATRE

ADVENTURELAND

FAZAR

HANDSOME HOUSE

EXPLORE'S  
BOAT RIDE

PLAZA  
TRADING  
RESTAURANT

400 BLOCK

500 BLOCK

day 18 ●

PENNY ARCADE

600 BLOCK

700 BLOCK

800 BLOCK

900 BLOCK

1000 BLOCK

1100 BLOCK

1200 BLOCK

1300 BLOCK

1400 BLOCK

1500 BLOCK

1600 BLOCK

1700 BLOCK

1800 BLOCK

1900 BLOCK

2000 BLOCK

2100 BLOCK

2200 BLOCK

2300 BLOCK

2400 BLOCK

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5000 BLOCK

5100 BLOCK

5200 BLOCK

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5400 BLOCK

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speed

# keyword



## America ▼

*"The cement of this union is the heart-blood of every American."*

- Thomas Jefferson (1743 -1826)

미국 대륙의 역사와 사회적 변화를 다룬 지문들 역시 자주 출제된다. 미국 관련 지문에는 단지 독립 국가 미국뿐만 아니라 아메리카 대륙에서 부흥한 고대 문명부터 미대륙의 토착민인 인디언들의 문화까지 골고루 다뤄진다는 데 주의한다. 이 외에도 초기 미국이 연방국가로 성장하면서 겪게 된 여러 가지 사회적 변화들과 산업화의 과정에 초점을 맞추어 배경지식을 갖추어 두는 것이 좋다.





## case example

>> Read the passage and answer the following questions.

### TOEFL Reading passage

[review](#) | [help](#) | [back](#) | [next](#)

#### America's First Inhabitants

The question of who originally populated the Americas is a central one in the field of anthropology. For hundreds of years, scholars have debated the nature of an intercontinental migration that must have taken place 14,000 to 20,000 years ago during the Pleistocene epoch, when the planet was a very different place than it is now. With little continuity between archaeological sites in North and South America, all of the evidence unearthed so far about the landmass's earliest immigrants has proven to be inconclusive. Anthropologists have no answers, only theories.

Since the 1930s, a possible explanation known as the land bridge theory has held wide appeal with its proposal of a migration that occurred across the no-longer-extant Bering land bridge, a link that spanned the Bering Strait 50,000 to 10,000 years ago to connect Siberia and Alaska. It was a journey undertaken by people archaeologists now refer to as the Clovis culture, nomadic hunters who left Eurasia in pursuit of the herds they relied on for food. The land bridge theory, though popular, is not without its flaws. According to archaeological evidence, human settlements at the tip of South America date back to the period shortly after the arrival of the Clovis people. It seems unlikely that recent arrivals from Alaska would have been able to people the entire hemisphere during such a brief timeframe. In addition, there are some artifacts in North and South America that date back a thousand years or more before the presumed arrival of the Clovis people.

In light of such findings that support the possibility of a pre-Clovis culture, alternative migration models have come into consideration. Some of these illustrate a scenario in which migrants came by watercraft. These maritime cultures could have landed in the Pacific Northwest and traveled to South America along the coast. Different versions of the watercraft theory trace the origin of pre-Clovis human settlers to the Bering Strait region, Southeast Asia, and Western Europe. Of course, there are a number of problems with these migration models as well. Foremost is the issue of collecting evidence. Since water levels were lower when migrants would have arrived, any evidence of their presence would now be underwater, essentially inaccessible.

Fact

1. According to paragraph 2, why might the Clovis culture have crossed from Eurasia to the Americas?
- (A) To escape the harsh climate conditions of Siberia
  - (B) To follow the migration of animals they hunted
  - (C) To expand the territory that their civilization controlled
  - (D) To search for land where it was possible to grow food

Rhetorical

2. In paragraph 3, the author mentions the Bering Strait region, Southeast Asia, and Western Europe in order to
- (A) demonstrate that there is no single theory about the arrival of a pre-Clovis culture
  - (B) list locations that are experiencing higher water levels now than 10,000 years ago
  - (C) describe different pieces of evidence related to the journey of pre-Clovis settlers
  - (D) illustrate the parts of the world that interacted with the Clovis culture

Summary

3. **Directions:** An introductory sentence for a brief summary of the passage is provided below. Complete the summary by selecting the THREE answer choices that express the most important ideas in the passage. Some answer choices do not belong in the summary because they express ideas that are not presented in the passage or are minor ideas in the passage.

**Anthropologists believe that humans first arrived in the Americas between 14,000 and 20,000 years ago, but they are uncertain of how this migration occurred.**

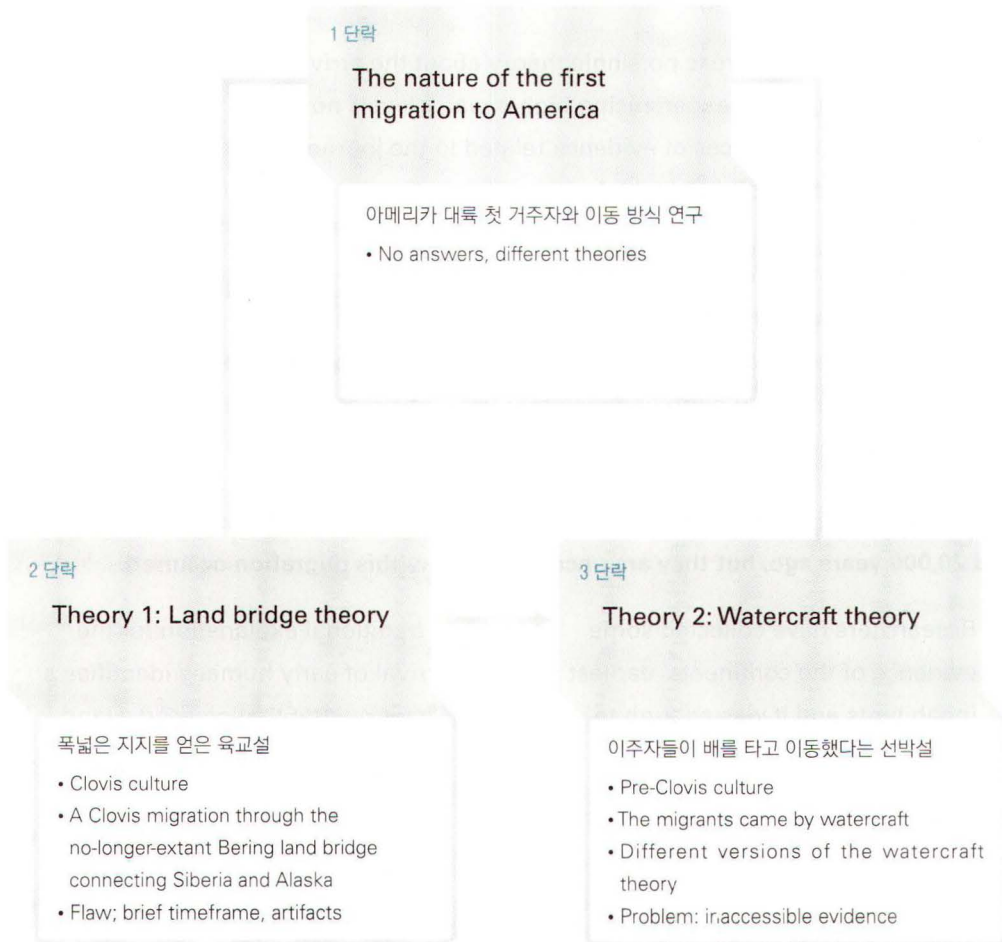
- (A) Researchers have collected some evidence of the continents' earliest inhabitants and it was enough to prove the theory.
- (B) A traditional explanation for the arrival of early humans identifies a Clovis culture that crossed a land bridge into Alaska.
- (C) Due to the great distance between Alaska and the southern tip of South America, it would have taken humans a long time to journey that far.
- (D) Some archaeologists believe a pre-Clovis culture traveled to the Americas by sea, but there is not yet any definite evidence in support of this idea.
- (E) The suspicious timing of settlements in South America and recently discovered artifacts throughout the hemisphere have cast doubt on the land bridge theory.
- (F) Most anthropologists are in agreement that pre-Clovis humans traveled to many locations around the globe before landing in the Pacific Northwest.





## Outlining

### America's First Inhabitants



홍적세 기간 동안 아메리카에 처음으로 거주하게 된 거주자들의 이동 방식에 대해 여러 이론들이 제시되었고 그 중 육교설과 선박설이 대표적이다.

## Perfect Summary

아메리카 대륙의 첫 거주자와 그들이 아메리카로 건너간 이동 방식에 대한 이론을 소개하는 지문으로 토플 관련 필수 테마이다. 홍적세의 아메리카에 사람이 거주하기 시작한 것은 확실하나 그 이동 방식과 최초의 거주자가 누구인지는 증명되지 않았다는 것이 요지이며 이와 관련된 두 가지 이론을 소개하고 있다. 따라서 요지를 담을 수 있는 내용을 한 문장으로 나타내면, "Anthropologists believe that humans first arrived in the Americas between 14,000 and 20,000 years ago, but they are uncertain of how this migration occurred."이 된다. 다음 오답의 내용을 살펴보면 사소한 정보를 변형시키는 것이 아니라 바로 이런 전체적인 맥락과 모순되는 내용이 오답 포인트로 등장한다는 것을 알 수 있다.

### ❶ 틀린 정보 (NOT CORRECT)

- Ⓐ Researchers have collected some evidence of the continents' earliest inhabitants and it was enough to prove the theory.

(연구자들은 아메리카 대륙의 초기 거주민에 대한 증거를 일부 수집했으며 이론을 증명하기에 충분하다.)

→ 아메리카 대륙 최초의 이주민에 관해 지금까지의 증거가 모두 불확실하다는 것은 지문 전체와 관련된 중요한 정보이다.

- Ⓕ Most anthropologists are in agreement that pre-Clovis humans traveled to many locations around the globe before landing in the Pacific Northwest.

(대부분의 인류학자들은 클로비스 이전 사람들이 지구 상의 여러 지역으로 이동했다가 태평양 북서지역에 정착했다는 데 동의한다.)

→ 여러 선박설이 있다고 언급되었으므로 한 가지 동의된 이론이 있다고 볼 수 없다.

### ❷ 언급되지 않은 정보 (NOT MENTIONED)

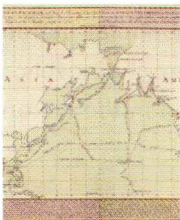
- Ⓒ Due to the great distance between Alaska and the southern tip of South America, it would have taken humans a long time to journey that far.

(알래스카와 남아메리카 남단 간의 먼 거리 때문에 인간이 그만한 거리를 이동하려면 오랜 시간이 필요했을 것이다.)

→ 알래스카와 시베리아를 잇는 베링 육교가 언급되었을 뿐 남아메리카와의 거리에 대한 언급은 없다.

answer 01. Ⓑ 02. Ⓐ 03. Ⓑ, Ⓓ, Ⓔ

#### \*back story | 베링 육교(Bering land bridge)



베링 육교는 빙하시대에 시베리아의 최동단 추코카 반도와 알래스카의 최서단 스워드 반도 사이를 연결했던 육지를 이른다. 이 때 당시는 해수면이 낮았기 때문에 두 대륙이 땅으로 연결되어 있었지만, 현재는 온난화의 영향으로 인해 바다로 두 대륙이 갈라져 있다. 이 육로를 통해서 인류가 아메리카 대륙으로 이주하게 되었고 생물들도 아시아와 아메리카 사이를 이동했다고 고고학자들은 믿고 있다. 건너온 방법에 대해서는 수 천 년에 걸쳐 작은 무리, 가족 단위, 혹은 부족 단위로 생존을 위해 이 육교로 건너왔다고 추측한다.





## practice test



>> Read passages 1 and 2 and answer the following questions.

passage 1>

### American Dime Novels

A new kind of literature appeared in the United States around the middle of the nineteenth century. Known as the story paper, a serial publication printed in the form of an eight-page newspaper. It cost a nickel, and contained various short stories, articles, and other informative or entertaining materials. The concept originated in England with *The Boys' and Girls' Penny Magazine* in 1832, and during the 1850s titles such as *The Saturday Journal* and *Happy Days* became quite popular in America. The introduction of cheap printing methods, improvements in shipping, and a growing literacy rate all contributed to the sudden obsession with the story paper.

While many such publications continued well into the twentieth century, in the 1860s a new manifestation of the genre was born: the dime novel. These were produced in book form, running around 100 pages in length with a colorful or illustrated cover, and on average cost ten cents. **A** The earliest dime novels featured tales that were simply reprinted from previously published story papers, most commonly centering on the adventures of characters living in the frontier towns of the American West. **B** However, as readership increased, writers were commissioned to create original stories for inclusion in the serial dime novels, and over the decades these varied from detective mysteries, to working-class narratives, to period romances. **C** Beadle & Adams was the most successful publisher of dime novels, selling multiple series that focused on a variety of themes. **D**

Story papers and dime novels were aimed at poor, youthful individuals, and from the beginning they were ridiculed by those from the upper classes, as well as by literary critics. To these members of high society, dime-novel stories were too formulaic and sensationalized. The same relationship could be observed in England, where the British version of the dime novel was known condescendingly as the "penny dreadful." Yet, dime novels persisted into the 1900s and had an undeniable impact on the development of American comic books and other popular literature. Even early television shows took some of their stories directly from the novels, and literary scholars now recognize the important role the genre played in the history of American writing.

Negative Fact

1. All of the following are mentioned in paragraph 1 as factors that facilitated the rise of the dime novel EXCEPT
- (A) Improvements in living standards and disposable income levels
  - (B) Technology that made printing less expensive
  - (C) The introduction of British story papers in America
  - (D) An increase in the number of people capable of reading

Insertion

2. Look at the four squares [■] that indicate where the following sentence could be added to the passage.

**In fact, it is believed that the term “dime novel” originated with a book produced by this publisher.**

Where would the sentence best fit?

Summary

3. **Directions:** An introductory sentence for a brief summary of the passage is provided below. Complete the summary by selecting the THREE answer choices that express the most important ideas in the passage. Some sentences do not belong in the summary because they express ideas that are not presented in the passage or are minor ideas in the passage.

**During the mid-nineteenth century, Americans developed an infatuation with entertaining stories known as dime novels.**

- |   |   |
|---|---|
| (A) Early dime novels featured previously published material or tales about life in the West, but as readership increased, so did the variety of the stories. | (B) The dime novel concept originated in the United States, but was such a popular success that it spread to England as well.                               |
| (C) Though dime novels were shunned by high society, they remained an enduring and influential form of popular literature in America.                         | (D) Some of the first television shows in America actually drew their subject matter from the material that was printed in dime novels.                     |
| (E) Not everyone appreciated the dime novel; in fact, some referred to them as “penny dreadfuls” and refused to read such sensational literature.             | (F) Dime novels were a form of literature that evolved out of the earlier popularity of story papers, serial publications that were quite a fad in America. |



Even prior to the American Revolution, the British colonies in continental North America always enjoyed a high degree of autonomy. Due to a variety of factors, the British colonial authorities had not been able to exercise complete control over their territory from the very beginning, establishing a precedent that enabled the push for complete self-governance in North America.

In part, the North American colonies were relatively independent because Britain was overstretched and unable to focus its attention on the new territories. **A** Just as the colonies were being founded, a violent and protracted civil war broke out in Britain in 1642, throwing the country into turmoil. **B** On top of this, the British were also involved in constant competition with other European powers. **C** The task of occupying and defending new territories across the world drained resources that could otherwise have been spent on the administration of the colonies. **D**

But it was not simply a case of haphazard British colonial management. There was also a strong movement for self-government within the North America colonies. During the British civil war, the North American colonists had been left to fend for themselves, which allowed them to develop the foundations of a distinct political and social system without interference.

Another driving factor behind the movement for self-governance was the unique makeup of the colonial societies. Many European powers had established and then abandoned settlements in North America, leaving thousands of Dutch in the New York area, Swedes in Delaware, and Spaniards in Florida. Likewise, many parts of North America were colonized by groups fleeing religious persecution in Britain. Pennsylvania was originally settled by Quakers, for instance, while parts of Massachusetts were inhabited by Puritans. Understandably, these diverse religious and ethnic groups felt little loyalty towards the British government. They were among the strongest advocates for local self-rule.

Rapid population growth in the 18th century further contributed to cultural and political independence. Local assemblies gained in power as the British relied more heavily on them to help develop infrastructure and administer affairs. Moreover, by the end of this period, most people no longer identified culturally with Britain, preferring instead to call themselves "Americans." These factors gave further momentum to the movement for autonomy, leading to the Revolutionary War and the birth of the United States.

Simplification

1. Which of the sentences below best expresses the essential information in the highlighted sentence in the passage? *Incorrect* choices change the meaning in important ways or leave out essential information.
- (A) There were many factors that prevented locals from assuming control of the North American colonies, even though Britain was weak.
  - (B) The British colonial forces attempted to have complete control over North America, but for many reasons, they never achieved their goal.
  - (C) The North American colonies achieved full self-governance in spite of the efforts of the British to control the territories.
  - (D) The British never established total dominance in North America, and this allowed the growth of a strong movement for local autonomy.

Fact

2. According to paragraph 3, local political institutions developed very early in colonial American history because
- (A) local politicians were emboldened by the Civil War in Britain
  - (B) the British neglected their colonies as a result of internal strife
  - (C) many British colonial officials had to return for the war at home
  - (D) the settlers built on the foundations created by their colonial rulers

Rhetorical

3. How does the author demonstrate the ethnic diversity of colonial North America in paragraph 4?
- (A) By cataloging pre-existing European settlements
  - (B) By comparing colonial society with European societies
  - (C) By mentioning population figures from the period
  - (D) By describing the racial mix at local churches

Insertion

4. Look at the four squares [■] that indicate where the following sentence could be added to the passage.

**This bloody internal conflict was not fully resolved for another two decades.**

Where would the sentence best fit?



## Pre-Columbian Era 콜럼버스 이전 시대

1492년 콜럼버스가 미대륙에 닿기 전까지의 시대를 뜻하지만 보다 실질적으로는 유럽인들이 미주 토착문화indigenous culture를 점령하기 이전까지를 의미한다. 미주의 토착문화란 아즈텍Aztec과 마야Maya 같은 중앙아메리카Mesoamerica의 문명과 잉카Inca 제국과 같은 안데스Andes문명 그리고 다양한 토착 인디언 문화를 가리키는데 실제 시험에서는 마야 문명과 푸에블로Pueblo 인디언 문화에 대한 내용이 출제되었다.

### The Mayan class structure 마야 문명의 계급 구조

▶ 토를 기출 주제

마야문명은 북아메리카의 작은 인디언 부족이 남하하여 현재의 과테말라 지역에 형성한 문화로 여러 개의 작은 도시국가city-state들로 구성되었으며 철저한 신분제 사회hierarchical society였다. 시험에서는 계급class에 따라 서로 다른 곳에 위치했던 마야인들의 거주지에 대한 내용이 등장했다. 다른 고대 문명과 마찬가지로 신을 모시는 제사장들이 집단의 통치자ruler로 가장 높은 곳에 거주했으며 신분이 낮아질수록 언덕 아래쪽에 거주했다.

### Pueblo Indian 푸에블로 인디언

▶ 토를 기출 주제



미국 남서부에 위치한 인디언 문화로 비가 적은 기후에 대응하기 위한 관개시설irrigation system이 일찍이 발달했으며 진흙mud과 짚straw을 섞어 만든, 아도비adobe로 불리는 독특한 벽돌로 지은 아파트식 취락에 거주했다. 오늘날 이 집단 거주지community 자체를 푸에블로pueblos로 부르기도 한다.

## Colonial America 식민지 미국



유럽인이 미대륙에 정착settlement하던 시기부터 유럽 세력으로부터 독립independence하기까지의 기간을 의미한다. 흔히 생각하듯이 영국에서 메이플라워호Mayflower를 타고 종교의 자유를 찾아 미국 동부에 도착한 청교도단Pilgrim Fathers들이 즉각적으로 독립국가를 건설했던 것이 아니라는 점에 주목할 필요가 있다. 콜럼버스가 미

### Theme Vocab

indigenous culture

토착문화

hierarchical 신분제의

irrigation system

관개시설

mud 진흙

straw 짚

settlement 정착

Pilgrim Fathers 필그림 파  
더스(1620년 Mayflower호를 타고 미국의 Plymouth로 이주 정착한 청교도단)

대륙에 도착한 이래로 영국인들뿐만 아니라 다양한 유럽인들이 미국 대륙으로 건너와 정착하게 되었고 미대륙은 상당한 기간 동안 다양한 유럽 국가들의 식민지령으로 머물렀다. 특히 영국은 미동부의 13개 주를 식민지로 삼아 핵심적인 영향력을 행사하게 되었는데 1776년 이 미국의 13개 주 **thirteen colonies of North America**가 영국으로부터 독립하면서 미국은 독립국가의 시작을 알리게 되는 것이다.

### Thirteen colonies of North America 미국의 13개 주 식민지 ▶ 토를 기술 주제

13개 주 식민지는 1775년 영국의 미국 통치에 저항하여 임시 정부 **provisional government**를 구성하고 독립을 요구 **proclaim**하게 된다. 시험에서는 미국의 독립이 가능했던 사회적 배경과 영국의 정치 상황과 관련된 지문이 출제되었다.

## Revolutionary War and Federalist Era

### 독립전쟁과 연방 시대

1776년과 1789년 사이에 13개 자치주가 영국에서 독립하면서 새 헌법을 비준하고 **ratify the Constitution** 연방정부 **federal government**를 구성하였다. 미국의 독립전쟁은 영국으로부터 자율적인 지위 **autonomous status**를 쟁취하기 위한 과정으로 비폭력적인 **nonviolent** 방식으로 진행되었으며 독립전쟁 이후 미국은 새롭게 구성된 정부하에서 서부로의 개척을 진행하여 영토를 확장하고 사회적 개발을 가속화하기 시작했다.

## Westward Expansion 서부로의 확장

### The Erie Canal 이리 운하 ▶ 토를 기술 주제



1699년 처음 제안되었던 이리 운하의 건설은 100여년이 지난 1817년에야 시작되었다. 이리 운하는 동부 해안 지대 **eastern seaboard**와 서부 내륙 **western interior**를 연결하는 미국 최초의 운송로 **transportation route**였다는 점에서 큰 의의가 있다. 동부와 서부를 잇는 이리 운하는 뉴욕시를 미국의 주요 항구 **chief port**로 자리매김하게 했으며 서부 개척 및 농작물 반출에 크게 기여하였고 운하를 따라 크고 작은 도시들이 발달하는 결과를 가지고 왔다.

### The effect of the Louisiana purchase 루이지애나 구입의 효과 ▶ 토를 기술 주제

1803년에 연방정부는 프랑스로부터 루이지애나 지역을 구입함으로써 서부 지역의 농부들이 중요한 미시시피 강의 수로 **waterway**를 이용하고 광활한 서부의 영토를 활용할 수 있도록 하였다.

### Homestead act 홈스테드법 ▶ 토를 기술 주제

남북전쟁 당시 링컨에 의해 비준된 토지의 자유 보유권 **freehold** 부여법으로 13개 주 밖의 미개척된 땅에 5년 이상 거주하며 이를 개척한 사람에게는 160에이커의 토지를 무상으로 주는 법이다.



### Theme Vocab

**provisional government**

임시 정부

**ratify the Constitution**

헌법을 비준하다

**autonomous status**

자율적 지위

**nonviolent** 비폭력적인

**transportation route**

운송로

**waterway** 수로

**freehold** [법] (부동산) 자유 보유권

# day 17

## economy

day 14 ●

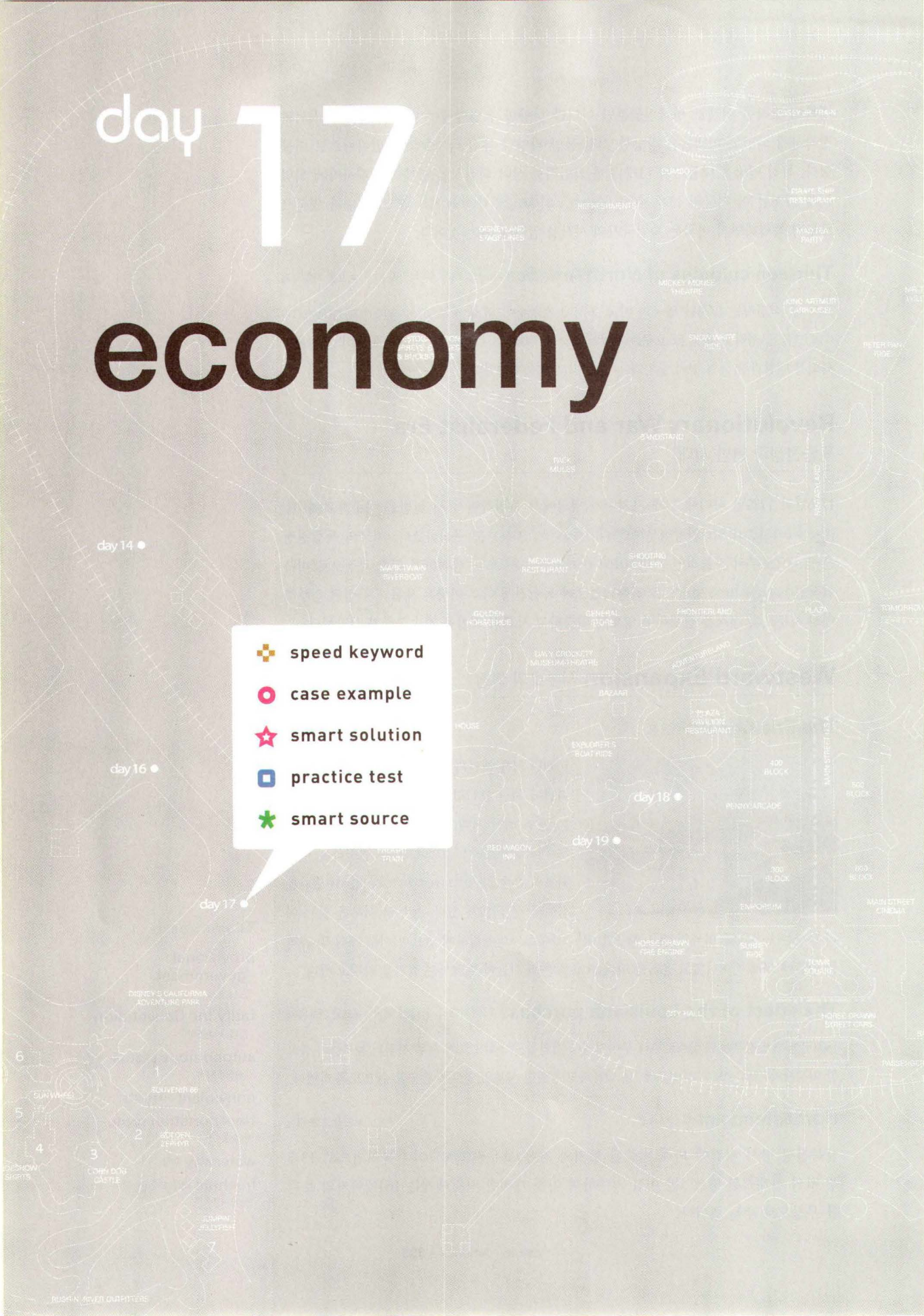
day 16 ●

day 17 ●

day 18 ●

day 19 ●

- ✚ speed keyword
- case example
- ★ smart solution
- ▣ practice test
- ✱ smart source



speed

# keyword

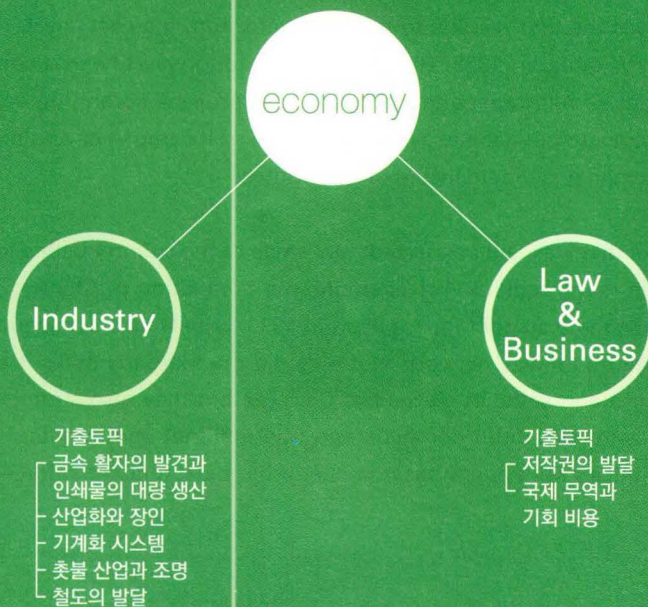


economy ▼

*"The hand-mill gives you society with the feudal lord; the steam-mill society with the industrial capitalist."*

- Karl Marx (1818-1883)

토플에서 인간의 경제 활동을 다룬 지문들은 주로 산업 분야에서 출제된다. 유럽은 영국을 중심으로 18세기 후반부터 약 100년에 걸쳐 생산 기술과 사회 조직의 변화를 겪게 되는데 이런 산업화 과정과 그 사회적 영향에 대한 내용이 자주 출제되며 전체 산업 발달에 큰 영향을 미친 교통, 활자, 법률 등에 대한 지문도 자주 볼 수 있다. 경제학의 원론적인 내용에 대해 다루는 지문들은 출제 빈도가 높지 않지만 기본적인 개념을 알아두면 다양한 지문에서 활용할 수 있으므로 정리해 두는 것이 좋다.





## case example

>> Read the passage and answer the following questions.

### TOEFL Reading passage

review | help | back | next

#### Early Rail System

The innovations of the railway and the steam engine were introduced in England in the late 1700s, but these technologies quickly made their way to the new American nation. Many entrepreneurs and government officials recognized the revolutionary potential of rail transport, both for shipping freight and forging a connection between distant populations. However, in the early nineteenth century, such visionaries were in the minority. More numerous were the skeptics, who worried that railroads would prove to be unprofitable. On top of that, competition from the existing canal transportation system discouraged the fledgling rail industry.

As a result of these factors, the earliest railways in America were undertaken as local endeavors. Over half of the capital used to survey routes, appropriate land, and lay tracks came from state and municipal governments. Most of the rest was collected from small-scale investors—farmers, merchants, and local manufacturers whose businesses were located near the proposed route and were likely to benefit from its construction. Until 1827, most lines ran only short distances, connecting metropolitan centers in the industrial Northeast. Things changed, though, with the chartering of the Baltimore and Ohio(B&O) Railroad in that year. This was the first rail line to run westward from the east coast, reaching as far as Wheeling, West Virginia, in 1853. The B&O went a long way towards convincing skeptics of the advantages of rail transportation, and larger projects sprang up across the country. Federal funds began to be made available, and major rail companies and big-name investors became more involved in the financing of new routes.

Each rail line that was laid connected new areas of the country with each other, sparking rapid changes in many regions. For example, the population of Chicago exploded from a mere 4,000 in 1840 to a staggering 1 million in 1890, largely as a consequence of its role as a hub in the nation's railway network. Not only did the railroads make it possible for more people to travel to and settle in places like Chicago, but they also stimulated the economy in these areas, attracting both domestic and international immigrants. From its localized beginnings, America's rail system became one of the most influential forces in the country's development.

Fact

1. According to the passage, why were businesspeople and government officials eager to embrace the new form of transport?
- (A) They suspected that healthy competition would improve the state of the canal transportation network.
  - (B) They worried that current transportation systems would become unprofitable.
  - (C) They anticipated that technological innovations would revolutionize the transportation industry.
  - (D) They wanted a better means of transporting cargo and access to isolated communities.

Rhetorical

2. Why does the author mention Chicago in paragraph 3?
- (A) To give an example of a sudden change caused by the laying of new rail lines
  - (B) To show how railroads increased the nation's diversity by attracting new immigrants
  - (C) To emphasize the economic impact of railroad development on rural areas
  - (D) To demonstrate that private companies were responsible for opening up new regions

Summary

3. **Directions:** An introductory sentence for a brief summary of the passage is provided below. Complete the summary by selecting the THREE answer choices that express the most important ideas in the passage. Some answer choices do not belong in the summary because they express ideas that are not presented in the passage or are minor ideas in the passage.

**Rail transport in the United States had a humble beginning but grew into a powerful engine of development.**

- (A) Businesses, farmers, and merchants situated near railways contributed most of the funding for the rail transport system.
- (B) The earliest forms of technology that made rail transport feasible, such as the steam engine, first appeared in America.
- (C) Initially, though some recognized the potential benefits of rail transport, many more were uncertain about its profitability.
- (D) The first railroads in America were small, disjointed systems, but the founding of the B&O led to national coordination.
- (E) During the first half of the nineteenth century, Chicago was a relatively small town, its population numbering approximately 4,000 people.
- (F) Railroads eventually transformed the nation, bringing about rapid population growth and strengthening regional economies.



## Outlining

### The Development of Early American Rail System

#### 1 단락

영국 철도 시스템의  
미국 도입

철도의 도입에 대한 초기의 상반된 입장들

- Entrepreneurs and government officials' recognition of the revolutionary potential of rail transport
- But more people were skeptical. ← unprofitable

#### 2 단락

미국 철도 시스템의  
점진적 발달 단계

지방의 노력을 통해 점차 발달된 미국 철도

- Capital from state & municipal governments and farmers, merchants, and local manufacturers
- The development of lines(e.g. B&O Railroad)
- Companies involved in the financing of railroads

#### 3 단락

미국 철도 시스템의  
번성과 결과적 이익

철도의 지역 연결로 나타난 사회의 급속한 변화

- Rapid population increase in Chicago
- Stimulating the economy
- Attracting both domestic and international immigrants

미국에 처음 철도가 도입되었을 때는 회의적인 입장이 더 주도적이었으나 지방의 필요에 의해 점차 발달되고 결국 중요한 사회 발전의 동력이 되었다.

## Perfect Summary

글의 요지는 “Rail transport in the United States had a humble beginning but grew into a powerful engine of development.”로 정리될 수 있는데 지문의 구성이 미국의 철도 시스템의 발달과 영향에 대한 내용을 시간의 흐름에 따라 설명하는 비교적 단순한 구조를 취하고 있으므로 summary시 각 단락의 요지인 초기 반응, 발전 과정, 영향을 다룬 세 개의 문장을 핵심 정보로 선택하면 된다.

### ❶ 틀린 정보 (NOT CORRECT)

- Ⓐ Businesses, farmers, and merchants situated near railways contributed most of the funding for the rail transport system.

(철도 근처에 위치한 기업가, 농부, 상인들은 철도 수송 시스템의 자금을 대다수를 지원했다.)

→ 기업가, 농부, 상인들은 소규모 투자자라 언급되었을 뿐이고 대다수 자금은 주정부와 시정부로부터 나왔다.

- Ⓑ The earliest forms of technology that made rail transport feasible, such as the steam engine, first appeared in America.

(증기기관차와 같이 철도 수송을 가능하게 한 가장 초기 형태의 기술은 미국에서 맨 처음 등장했다.)

→ 철도와 증기기관차는 영국에서부터 도입되었다.

### ❷ 주변 정보 (MINOR)

- Ⓔ During the first half of the nineteenth century, Chicago was a relatively small town, its population numbering approximately 4,000 people.

(19세기 초반 시카고는 비교적 작은 마을이었고 인구는 약 4천 명이였다.)

→ 시카고는 철도로 인한 발전을 보여주는 예로 등장한 것이므로 이 외에 전국 철도망의 중심 역할을 했다는 내용이 등장해야 전체 지문의 요지와 어울리는 핵심 정보로 볼 수 있다.

answer 01. ㉠ 02. ㉡ 03. ㉢, ㉣, ㉤

17



\*back story

#### 산업혁명과 철도의 발달



영국에서 산업혁명이 일어날 당시 철도는 석탄 수송을 목적으로 개발되었고 G.스티븐슨의 증기기관차 발명으로 획기적인 발전을 했다. 1825년과 1830년 석탄 운반의 목적으로 개통된 철도가 상업적 성공을 거둬으로써 영국 전역으로 철도망이 늘어갔으며 영국 내 시장이 빠르게 확장되었다. 이에 자극을 받은 서유럽 나라들과 미국이 철도 기술을 수용하였으나 철도에 드는 자금, 기술, 인력 등을 자급할 수 없었기 때문에 상당 부분 영국에 의존했다.



## practice test



>> Read passages 1 and 2 and answer the following questions.

passage 1>

### The Development of Copyright Law

The invention of the printing press, by Johann Gutenberg in the 15<sup>th</sup> century, made books more accessible, leading to widespread unauthorized copying and laying the foundations for copyright protection. Laws concerning copyright bestow exclusive rights on the author of an original piece of work to copy it into any form, whether in print or some other medium. It was in 1468, in the Republic of Venice, that the first copyright privilege was granted—a special exception for a historical book of the city—before granting privileges became more common in 1492.

**A** As a legal concept, copyright law has its origins in Britain with the Licensing Act of 1662, when the then king, concerned by unauthorized copying of published works, set up a register of licensed books. **B** This was followed by the first modern law regulating copyright, the Statute of Anne, which was passed by British Parliament in 1709. **C** The statute's primary purpose was to encourage learning among people. **D**

In the early years of United States, several laws were implemented to protect author's work for a limited period of time, but it was the Copyright Act of 1790 that first saw government wield its power to enact copyright legislation. Like the Statute of Anne, on which it was modeled, the Act was designed to encourage learning while giving authors of maps, charts, and books exclusive publishing rights for 14 years, with an option to renew the copyright for 14 years if the author was still living.

A landmark in the evolution of copyright law occurred in the Berne Convention of 1886, where for the first time a common copyright was recognized among several nations. Under the Convention, contrary to the American and English standpoints, copyright is granted automatically to creative works as soon as they are recorded, regardless of whether the author actively applied for it. Copyright law has continued to evolve as first motion pictures, then television, and now the Internet challenge the principles of copyright. Once just a legal concept pertaining to book and map publishing, it has grown to significantly influence almost every modern industry.

Vocab

1. The word **pertaining** in the passage is closest in meaning to

(A) leading  
(B) relating  
(C) holding  
(D) subjecting

Insertion

2. Look at the four squares [■] that indicate where the following sentence could be added to the passage.

**It established authors' exclusive ownership of copyright for a period of 28 years, thereby preventing publishers from profiting from books without compensating writers.**

Where would the sentence best fit?

Summary

3. **Directions:** An introductory sentence for a brief summary of the passage is provided below. Complete the summary by selecting the **THREE** answer choices that express the most important ideas in the passage. Some sentences do not belong in the summary because they express ideas that are not presented in the passage or are minor ideas in the passage.

**Copyright law has gone through a number of stages in its evolution to the form it is recognizable in today.**

- |  |   |
|--|---|
| (A) Widespread publishing after the invention of the printing press saw the first copyright privilege granted by the Republic of Venice in 1468.                 | (B) In Britain, the Licensing Act of 1662 and the Statute of Anne in 1709 provided the legal precedents for the establishment of copyright law. |
| (C) The birth of copyright law took place in Venice, Italy, where authors were given exclusive ownership of published works for a period of 28 years.            | (D) The American and British governments adopted the new copyright laws created by the Berne Convention in 1886.                                |
| (E) The U.S.'s Copyright Act of 1790 and the Berne Convention of 1886 gave copyright law an international perspective and remain relevant to modern regulations. | (F) Similar to the British system, the first copyright laws implemented in the U.S. related to published works of maps, charts, and books.      |



## Franchising

Deriving from the old French word for “privilege” or “freedom,” the term franchise refers to a business relationship in which a franchisor provides a licensed privilege and organizational assistance for a fixed period of time to a franchisee in return for a consideration. The concept was originally adopted by European kings for a variety of commercial activities to help them govern their lands. In 1851, the Singer Sewing Machine Company implemented a system of written franchise contracts for the distribution of their sewing machines, thus heralding the age of the modern franchise agreement.

The most basic advantage of franchises is the name recognition it provides a prospective business. **A** When you buy a franchise, you are getting an established success – 80% of franchise operations succeed, as opposed to less than 30% of independent businesses. **B** Acquiring a franchise usually means getting all the necessary equipment, supplies, and training. **C** From the franchisor’s perspective, retaining control over the brand allows expansion and national market penetration at a much faster pace. **D**

The main disadvantage of purchasing a franchise is that the franchisee is contractually bound to follow the franchisor’s operational rules, which can be frustrating. Furthermore, the initial franchise fee is usually expensive, and a portion of subsequent revenues must be given to the franchisor, who also often charges for other services. The franchisor may reserve the right to monitor a franchisee’s accounts and operations, in addition to placing restrictions on any future sale of the business. For the franchisor, establishing a successful franchise can require significant investment and a lot of guidance at a time when revenues are typically still low.

For a lot of people, franchising has provided a way for them to become business owners, while offering lower risks and much support. It can provide a small business with the tools of a big business, and the franchisor is able to increase its market presence without chipping away at its own capital. However, in some sectors, franchising is the business – in other words, the franchisor is simply interested in selling more franchises, irrespective of whether or not they are successful businesses.

Vocab

1. The word **prospective** in the passage is closest in meaning to

- Ⓐ visionary
- Ⓑ potential
- Ⓒ perceptive
- Ⓓ growing

Inference

2. What can be inferred from paragraph 4 about the author's opinion of franchising?

- Ⓐ Franchises are always more successful than independently run businesses.
- Ⓑ Most franchisors are only interested in maximizing their own profits.
- Ⓒ Small businesses become as powerful as large businesses under franchising.
- Ⓓ Franchising offers a great opportunity for success, but is not without its dangers.

Negative Fact

3. According to the passage, all of the following are disadvantages of franchising EXCEPT

- Ⓐ It can be bothersome to franchisees as they have to adhere to strict guidelines.
- Ⓑ It requires the franchisee to invest a lot more than they would to start an independent business.
- Ⓒ It places certain conditions on a franchisee selling his or her business at a later date.
- Ⓓ It can be an expensive and financially draining arrangement for a franchisee.

Insertion

4. Look at the four squares [■] that indicate where the following sentence could be added to the passage.

**This is because franchisees are protected from the mistakes new businesses make, receiving a lot of help setting up and running operations.**

Where would the sentence best fit?

## The Revolution in Printing 인쇄술 혁명

인쇄술은 처음 중국의 목판인쇄 **woodblock printing**에서 시작하여 금속의 개별 활자 **type**를 이용하는 활판인쇄 **movable type printing**로 발전했다. 활판인쇄술은 중국과 고려에서 먼저 발명되었으나 널리 사용되지는 못하고 독일의 구텐베르크가 1450년경 활판인쇄를 이용한 구텐베르크 성서 **Gutenberg Bible**를 인쇄하면서 널리 보급되었다. 그는 활자 조각 **type piece**을 납 **lead**과 주석 **tin**의 합금 **alloy**으로 만들었는데 이는 오늘날 실제 사용되는 활판과 거의 동일한 것이다. 활판인쇄는 목판에 비해 여러 가지 장점이 있었다. 우선 인쇄가 빨랐으며 내구성 **durability**이 좋고, 금속으로 주조하여 **molten** 활판을 다시 녹여 사용할 수 있으며 글자체와 크기를 통일할 **unify** 수 있다는 장점이 있었다. 이런 활자의 편의성 때문에 비로소 인쇄물의 대량생산 **mass production**이 가능해졌다.

### Paper 종이

최초의 종이는 기원전 3,500년경 이집트에서 사용된 파피루스 **papyrus**로 이는 파피루스 나무 **papyrus plant**를 원료로 만들어졌다. 이후 양가죽 **sheepskin**이나 송아지 가죽 **calfskin**을 이용한 양피지 **parchment**가 나타나 사용되다가 2세기경 중국에서 처음으로 오늘날 사용되는 것과 유사한 종이가 등장하여 이슬람 문화로 유입되고, 유럽에서는 12세기 무렵 종이를 제작하게 되었다. 19세기에는 종이 제작이 기계화되어 **mechanized** 비교적싼 가격의 신문이나 책 **cheap print**을 보급할 수 있었고 이로 인해 활발한 정보의 교환 **exchange of information**이 이루어졌다.

## Industrialization in Western Europe

### 서유럽에서의 산업화

산업경제 이전 **pre-industrial**의 사회는 생계 **subsistence**를 유지하는 정도의 생활수준 **standard of living**에 만족해야 했고 당시 유럽 노동력 **labor force**의 80퍼센트 이상은 생계형 농업 **subsistence agriculture**에 종사하고 있었다. 하지만 18세기 영국 북서부에서 시작된 산업혁명 **Industrial Revolution**을 통해 제조 과정 **manufacturing process**의 혁신 **innovation**이 일어나면서 산업화가 진행되었고 이는 곧 유럽 전역과 북미 그리고 전 세계로 확산되어 나갔다.

### Theme Vocab

**woodblock printing**

목판인쇄

**type** 활자, 활자판

**movable type printing**

활판인쇄

**alloy** 합금

**durability** 내구성

**molten** 주조한, 녹은

(← melt)

**mass production**

대량생산

**parchment** 양피지

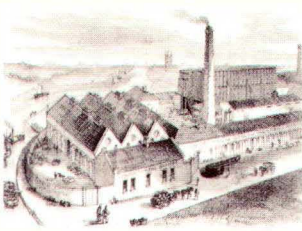
**subsistence** 생계

**standard of living**

생활수준

**labor force** 노동력

## From Farm to Factory 농장에서 공장으로



경작지<sup>arable land</sup>는 한정되어 있는 반면 인구<sup>population</sup>는 계속 증가하면서 농업에만 매달릴 수 없는 상황이 발생했다. 새로운 농업 기술의 발달로 농기구와 같은 기계류에 대한 수요<sup>demand</sup>가 함께 증가하면서 도시의 장인은 지방에서 이탈한 노동자들을 고용했다. 그런데 이들 대부분은 제조 경험이 없었기 때문에 이 노동자들을 관리하기 위한 관리 기술이 등장했는데 표준화<sup>standardization</sup>와 분업<sup>division of work</sup> 같은 것이 그 대표적인 예이다. 이런 관리 기술을 통해 제품의 제조 과정은 간단한 업무로 나누어져 진행되었고 생산성<sup>productivity</sup>의 향상을 가져올 수 있었다. 또한 수입<sup>income</sup> 증가에 따른 자본 축적<sup>accumulation of capital</sup>의 결과로 새로운 기술에 투자<sup>investment</sup>가 가능해졌다.

### Mechanization system 기계화 시스템

▶ 토목 기술 주제

영국에서 처음 시작된 개념으로 미국에서 더욱 발달하였다. 기계화란 기본적으로 가축이나 손으로 하던 노동<sup>manual labor</sup>을 기계로 대체하는 것을 말한다. 하지만 여전히 일부 공정에서는 사람의 능숙한 손놀림이 필요한 부분이 있었기 때문에 손으로 제작하는 공정과 기계로 대체한 작업은 서로 공존했다.

### Scientific management 과학적 관리

▶ 토목 기술 주제



미국의 테일러<sup>Frederick W. Taylor(1856-1915)</sup>는 과학과 일을 접목시켜서 과학적 경영<sup>scientific management</sup> 이론을 완성시켰다. 그의 이름을 따 <sup>Taylorism</sup>이라고도 불린 이 이론은 작업장에서 각 개인을 면밀히 관찰하여 일과 일 사이에 비는 시간을 최대한 줄이는 것이었지만 이는 작업장<sup>workplace</sup>을 비인간화<sup>dehumanization</sup>시킨다는 비판을 받기도 하였다.

### Industrialization and artisans 산업화와 장인

▶ 토목 기술 주제



산업화 이전까지 물품의 제작을 담당했던 사람들은 장인<sup>artisan</sup>들로 장인의 우두머리 격인 마스터<sup>master</sup>가 도제 수습<sup>apprenticeship</sup>을 마친 기능공<sup>journeyman</sup>이나 도제<sup>apprentice</sup>에게 기술을 전수하는 방식으로 그 맥을 이어갔다. 이들은 시간을 기준으로 노동하는 것이 아니었고 장인으로서의 자부심을 가지고 있었지만 산업화와 함께 공장의 생산품이 대량으로 쏟아지면서 상황은 달라졌다. 공장에서 제작한 물건은 장인이 만든 물품만큼 정교하지는 않았지만 생산성 면에서 우월했고 장인들은 기존에 누리던 사회적 지위<sup>status</sup>를 잃게 되었다.

### Theme Vocab

arable land 경작지  
division of work 분업  
productivity 생산성  
accumulation 축적  
capital 자본  
investment 투자  
workplace 작업장  
dehumanization 비인간화  
artisan 장인  
apprentice 도제(직업에 필요한 기술을 배우기 위해 스승 밑에서 일하는 직공)  
journeyman 기능공

# Earth

 smart source

speed

# keyword

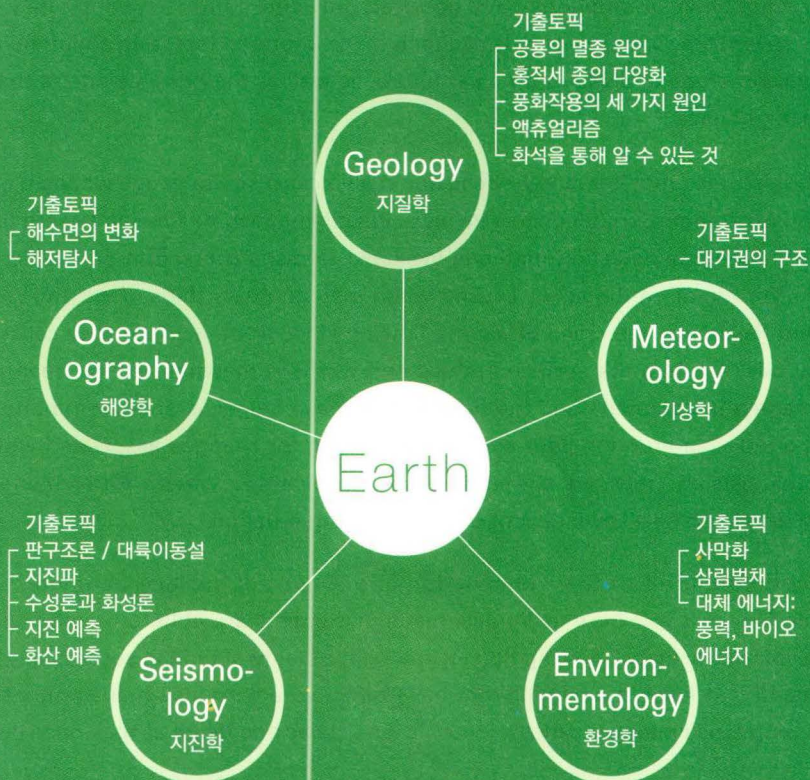


## Earth

*"To me, it underscores our responsibility to deal more kindly and compassionately with one another and to preserve and cherish that pale blue dot, the only home we've ever known."*

- Carl Sagan (1934-1996)

지구를 연구 대상으로 하는 학문은 다양한 분야를 포괄한다. 지각을 연구하는 지질학과 지진학, 해양학 그리고 대기권과 기후 현상을 다루는 기상학 등이 그것이다. 토폴에서는 이런 학문 분야와 관련된 지문들이 골고루 등장하며 최근 환경과 지구 위기를 우려하는 목소리가 높아지면서 환경 관련 지문들도 자주 출제된다.





## case example

>> Read the passage and answer the following questions.

### TOEFL Reading passage

[review](#) | [help](#) | [back](#) | [next](#)

#### Predicting Volcanic Eruptions

Volcanic eruptions have the capacity to devastate wide areas of land and kill large numbers of people. The 1883 eruption of Krakatau in Indonesia, for instance, caused massive destruction, killing over 30,000 people. In light of this and other such events, it is clear that the accurate prediction of eruptions and their effects is crucial. Fortunately, even the most dangerous volcanic regions can be accurately assessed through effective observation, minimizing the dangers posed by active volcanoes in many parts of the world. Careful monitoring allows geologists to make both long- and short-term predictions about eruptions.

Long-term predictions involve assessing the kinds of dangers presented by a particular volcano. Geologists are able to determine the past behavior of a volcano by studying sequences of layered deposits and lava flows nearby. Using this information, they can discover what types of eruptions have occurred previously, how frequently they occurred, and how severe they were. Scientists can then make informed forecasts about the likelihood of the volcano erupting again in the near future, as well as the possible effects that such an eruption might have.

Geologists also monitor current behavior at a volcanic site to gauge when an eruption is imminent. Such short-term prediction involves identifying magma flowing toward the surface and other numerous detection methods available to researchers. **A**In particular, scientists watch out for minor earthquakes, caused when magma nears the surface and creates tiny cracks and fissures in the crust. **B**Magma flowing close to the surface may cause “ground deformations”—where the surface buckles and warps somewhat, having been forced up by the magma underneath—and the detection of these bulges is another important way of spotting a possible eruption. **C**In addition to looking for changes associated with magma flows, geologists also measure gas emissions from volcanoes’ craters. **D**Heightened sulphur levels are known to be a key indicator of an impending eruption.

By combining all of their knowledge about current surface behavior with their understanding of a volcano’s geological history, scientists are able to provide warnings of possible volcanic activity, allowing the general public plenty of time to successfully evacuate. Consequently, at least in societies that have effective emergency management systems, volcanic eruptions no longer cause as much chaos, panic and death as they once did.

Rhetorical

1. Why does the author mention the eruption of Krakatau in paragraph 1?
- (A) To demonstrate the difficulties involved in the process of predicting volcanic activity
  - (B) To explain why the detection of volcanic eruptions is such a vital science
  - (C) To describe what typically occurs in the buildup to a volcanic eruption
  - (D) To illustrate how long- and short-term geological factors contribute to a volcanic eruption

Insertion

2. Look at the four squares [■] that indicate where the following sentence could be added to the passage.

**The mere presence of these tremors shows that there is activity below the surface, while an increase in their frequency or intensity indicates that an eruption may nearly be at hand.**

Where would the sentence best fit?

Summary

3. **Directions:** An introductory sentence for a brief summary of the passage is provided below. Complete the summary by selecting the THREE answer choices that express the most important ideas in the passage. Some sentences do not belong in the summary because they express ideas that are not presented in the passage or are minor ideas in the passage.

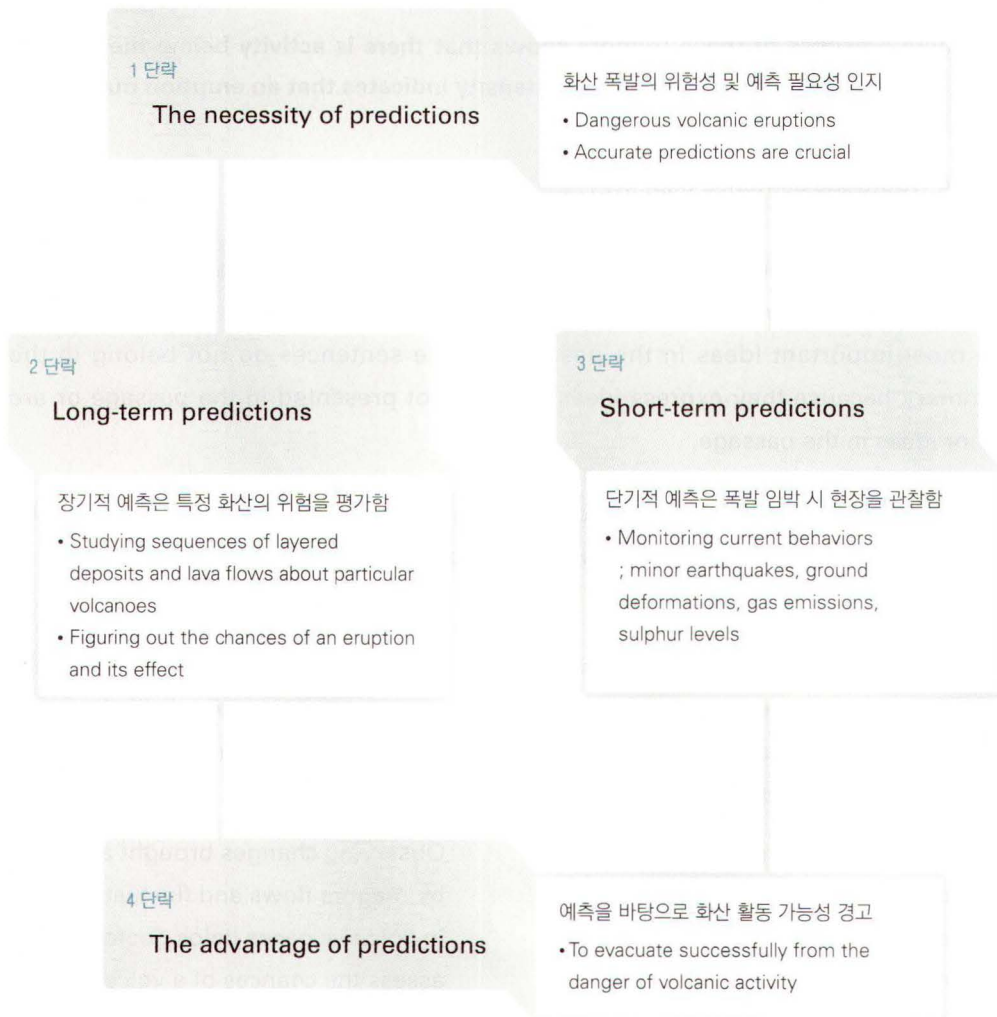
**Volcanic eruptions can be enormously devastating, so geologists have developed a number of methods to monitor volcanoes and predict when they will erupt.**

- (A) While geologists can conduct complete studies on layered deposits and lava flows, they are not always able to gather detailed data about current surface activities.
- (B) Scientists can discover how often a volcano will erupt and how much damage each eruption is likely to cause by using analyses of a volcano's history.
- (C) Scientists know that magma flowing near the surface can put pressure on the earth above it, causing "ground deformations" where the surface warps.
- (D) Observing changes brought about by magma flows and fluctuations in volcanic gases helps geologists assess the chances of a volcanic event in the near future.
- (E) Scientific researchers measure changes in the speed of magma flows in the Earth's crust to determine when and where an eruption will take place.
- (F) Combining their knowledge of a volcano's long- and short-term history, experts can save nearby residents by forewarning them of upcoming eruptions.



## Outlining

### Predicting Volcanic Eruptions



화산 폭발은 엄청난 파괴적 힘을 지니고 있으므로 장기적 · 단기적 예측을 통해 피해를 최소화할 수 있다.

## Perfect Summary

화산 폭발 예측의 필요성을 서두로 폭발을 예측할 수 있는 방식을 장기와 단기적 예측 두 가지 방식으로 나누어 서술하는 지문이다. 따라서 핵심 내용은 Volcanic eruptions can be enormously devastating, so geologists have developed a number of methods to monitor volcanoes and predict when they will erupt 로 요약될 수 있으며 지문을 읽으면서 두 가지 방식이 각각 어떤 경우에 주로 사용되며 어떤 방식으로 이뤄지는지에 초점을 맞추어야 한다.

### ❶ 틀린 정보 (NOT CORRECT)

- Ⓐ While geologists can conduct complete studies on layered deposits and lava flows, they are not always able to gather detailed data about current surface activities.

(지질학자들이 퇴적층과 용암이 흐른 흔적에 대한 완벽한 조사를 실시할 수는 있지만 항상 현 지표 활동에 대한 상세한 데이터를 수집할 수는 없다.)

→ 화산 현장의 현재 움직임을 살펴보는 것은 3단락에서 단기적 예측 방법 중의 하나로 제시되어 있으므로 오답

- Ⓔ Scientific researchers measure changes in the speed of magma flows in the Earth's crust to determine when and where an eruption will take place.

(과학 연구자들은 지각에 흐르는 마그마의 속도 변화를 측정하여 언제, 어디서 분화가 일어날지 알아낸다.)

→ 마그마의 흐름을 통해서 화산 활동을 예측하는 것이지 속도 변화를 토대로 하는 것은 아니다.

### ❷ 주변 정보 (MINOR)

- Ⓒ Scientists know that magma flowing near the surface can put pressure on the earth above it, causing "ground deformations" where the surface warps.

(과학자들은 지표 가까이 흘러나온 마그마가 위쪽 대지에 압력을 가하여 지표가 휘어지는 '지반 변형'을 일으킬 수 있다는 사실을 알고 있다.)

→ 지반 변형과 관련된 내용은 단기적 예측 방법 언급 시 등장한 내용이지만 주요 내용 흐름인 화산 예측 방법과는 관련이 적으므로 부수적인 내용으로 판별해야 한다.

answer 1. B 2. B 3. B, D, F

back story

#### 화산은 정말 위험하기만 할까?



화산은 폭발로 인해 뜻하지 않은 재해를 초래하는 위험한 대상으로 알고 있으나 의외로 많은 혜택을 준다. 화산 지대의 온천들은 관광지나 휴양지로 각광받고 있으며, 화산 활동의 산물인 황과 같은 금속광상(鑛床)들과 화산암이 여러 용도로 사용된다. 또한 무엇보다 중요한 것은 최근 해외 여러 나라에서 지열발전이 연구되고 있다는 것이다. 지열발전은 지구 고온을 이용해 증기터빈을 돌려 에너지를 만들어 내는 방법이기 때문에 청정 에너지원으로 주목받고 있다.





## practice test



>> Read passages 1 and 2 and answer the following questions.

passage 1>

### Fossil Formation

In Earth's history, millions of species have evolved, thrived, and then disappeared into extinction, and one of the only ways we have to learn about them is by studying their fossils. Unfortunately, fossilization is a rare occurrence due to the complexity of conditions necessary for lasting fossils to form. Of the many types of known fossils, the most frequently encountered are those housed in layers of sedimentary rock and created through a process called permineralization.

For permineralization to occur, an organism must possess certain physical characteristics. **A**In almost all cases, these include a hard skeleton or shell, which is the only organic element that will be preserved. **B**Body fluids and the soft tissue of muscles and organs cannot withstand the destructive forces of time and will inevitably disintegrate. **C**In addition to the organism's physical makeup, the location of its death is important; it must be immediately submerged in a body of water. **D**This shields it from the effects of decomposition that would quickly begin to break down a carcass on land. Yet, simply being located underwater is not enough to ensure fossilization. Before too much time passes, the creature must be covered by a thick layer of sediment, encasing it in an oxygen-free environment. If this does not happen, aerobic bacteria will slowly devour the remains, including bones and shell. Clays facilitate the most complete fossilization, as their fine sediments block out nearly all water and bacteria, but coarser sands can serve this purpose as well.

One of the most common fossilized organisms is the trilobite. With their tough exoskeleton, marine environment, and large and widespread populations, many species of this extinct arthropod are well-documented in the fossil record, and they are the perfect illustration of the process of permineralization. Over time, the sediments surrounding a buried trilobite are compacted deep under the ocean floor until they fuse into solid rock. Then, mineral-rich water seeps through the stone and finds its way into the preserved exoskeleton, depositing its minerals that eventually fill all the spaces once occupied by the trilobite's soft body tissue. The minerals harden, creating a precise mold of the intricate internal dimensions of the trilobite, and this solidified structure is what we know as a permineralized fossil.

Insertion

1. Look at the four squares [■] that indicate where the following sentence could be added to the passage.

**That said, there are rare cases in which traces of soft tissues survive in fossil evidence.**

Where would the sentence best fit?

Reference

2. The phrase **this purpose** in the passage refers to

- (A) forming a thick layer of sediment
- (B) creating an oxygen-free environment
- (C) facilitating complete fossilization
- (D) blocking out water and bacteria

Summary

3. **Directions:** An introductory sentence for a brief summary of the passage is provided below. Complete the summary by selecting the **THREE** answer choices that express the most important ideas in the passage. Some sentences do not belong in the summary because they express ideas that are not presented in the passage or are minor ideas in the passage.

**Fossils are uncommon because they form under very specific circumstances that cause minerals to harden into what is essentially a mold of an organism.**

- |  |   |
|--|---|
| (A) For a fossil to form, a carcass must be covered by water right away and protected from exposure to oxygen.                 | (B) Trilobites are a now-extinct form of arthropod that have afforded scholars a great deal of insight into the fossilization process.                        |
| (C) Because of their habitat and the structure of their bodies, trilobites are some of the most commonly fossilized organisms. | (D) Successful fossilization is dependent on the organism being encased in clay, as other types of sands are too coarse to ensure an oxygen-free environment. |
| (E) Aerobic bacteria are responsible for the degradation of many ancient organisms that might otherwise have become fossils.   | (F) Permineralization only preserves organisms with certain physical characteristics, particularly those that possess a shell or a skeleton.                  |



## The Structure of the Earth's Atmosphere

The atmosphere is a thin layer of gases surrounding the Earth and protecting it from extreme temperatures, retaining heat while blocking much of the ultraviolet radiation from the sun. Made up of 78% nitrogen, 21% oxygen, and 1.0% argon, carbon dioxide, and traces of other gases, the Earth's present atmosphere is unlikely to be in its original form. In its early stages, the atmosphere was probably similar to those of the gas giant planets, as it contained a more even spread of various gases.

The Earth's atmosphere can be divided into four main regions—troposphere, stratosphere, mesosphere, and thermosphere—with the final region, the exosphere, stretching out into space. The troposphere is the bottom layer of the atmosphere, accounting for approximately 85% percent of its mass and lying below about 12km, thus forming a thin shell of air around Earth. This zone is where all weather takes place and temperatures decrease with altitude.

A thin buffer zone of a few kilometers called the tropopause separates the troposphere from the stratosphere, a relatively stable layer containing the majority of the stratospheric ozone. The stratosphere contains denser, cooler air below warmer, lighter air—resulting in an increase in temperature with altitude. This rise in temperature is due to most of the ozone being located here and interacting with ultraviolet light.

Ninety kilometers from the Earth's surface is the mesosphere, and stretching above this layer for 600kms lies the thermosphere including the ionosphere. Temperature again decreases with altitude in the mesosphere, dropping to  $-90^{\circ}\text{C}$  near its outer part, where it meets the ionosphere. The latter layer is very thin and responsible for absorbing high-energy photons from the sun and reflecting radio waves, thereby making long-distance radio communication possible. **A**

Above the thermosphere lies the upper limit of the atmosphere, the exosphere. **B** Hydrogen is the main element found in this atmospheric layer, although other light gases such as helium, carbon dioxide and atomic oxygen are also present. **C** These gases are able to escape into outer space at the far extremities of the exosphere, which scientists estimate is about 10,000 km beyond the Earth's surface. **D**

Inference

1. What can be inferred from paragraph 1 about gases in the Earth's atmosphere?
- (A) Space consumed all of the gases present when the atmosphere was formed.
  - (B) At one time it contained more gases than the gas giant planets.
  - (C) There was less nitrogen and oxygen in the early stages of its formation.
  - (D) It was created through the effects of the sun's ultraviolet radiation.

Rhetorical

2. Why does the author mention ultraviolet light in paragraph 3?
- (A) To show the role played by the tropopause in the atmosphere
  - (B) To describe what the majority of the stratosphere is composed of
  - (C) To compare it with the role of ozone in increasing stratospheric temperatures
  - (D) To explain why temperature increases with altitude in the stratosphere

Reference

3. The word its in the passage refers to
- (A) ionosphere
  - (B) temperature
  - (C) altitude
  - (D) mesosphere

Insertion

4. Look at the four squares [■] that indicate where the following sentence could be added to the passage.

**In fact, there is no definitive end point to the atmosphere: it just gets gradually thinner until merging with outer space.**

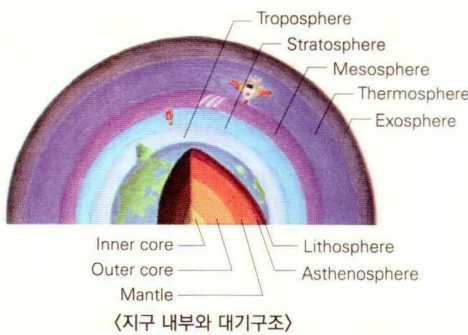
Where would the sentence best fit?



## Seismology, Meteorology 지진학, 기상학

지진학은 지구 내부의 구조와 화산, 지진 등의 지각 변동 현상을 연구하는 학문으로 인간의 삶에 큰 영향을 미치는 화산과 지진 예측 방법론 개발에 초점을 맞춘다. 반면 기상 예측은 기상학의 영역으로 실제 시험에서는 화산, 지진, 기상 예측 등과 관련된 지문이 출제된 적이 있다.

### Earth's interior and exterior 지구의 내, 외부 구조



지구의 내부는 크게 다섯 개의 층으로 이루어져 있고 지구를 둘러싸고 있는 대기권 역시 일반적으로 다섯 개의 층으로 나눈다.

지구 내부를 가장 바깥쪽에서부터 살펴보면 암석권 **lithosphere**과 연약권 **asthenosphere**으로 이루어진 지각 **crust**과 그 아래의 맨틀 **mantle**이 고체

**solid** 상태를 이루고 있으며, 중심부에는 액체 **liquid** 금속질로 된 외핵 **outer core**과 철 **iron**, 니켈 **nickel** 등의 고체 금속질로 구성된 내핵 **inner core**이 있다. 내핵의 경우 굉장히 빠른 속도로 회전 **spin**하는 것이 특징이다. 반면 지구의 외부는 기체 **gas**가 둘러싸고 있는데, 이 기체가 온도 **temperature**와 화학적 성질 **chemistry**에 따라 여러 개의 층을 이루고 있어 이를 대기권 **layers of the atmosphere**이라고 한다. 다섯 개의 층은 대류권 **troposphere**, 성층권 **stratosphere**, 중간권 **mesosphere**, 열권 **thermosphere**, 그리고 제일 외부를 둘러싸고 있는 외기권 **exosphere**이며 대류권에서는 위로 올라갈수록 기온이 낮아져 대류 현상 **convection**이 자주 일어나고 일기의 변화가 심한 반면, 성층권에서는 기온이 일정하게 유지되며 오존층 **ozone layer**은 바로 이 성층권에 위치한다.

- 대류권: 지표에서 약 12km까지에 위치하며 이는 비행기가 운항되는 정도의 높이이다.
- 성층권: 약 50km까지를 가리키며 기상을 예측하는 기상 풍선 **weather balloon**이 떠 있는 위치이다.
- 중간권: 약 90km까지를 가리키며 운석 **meteor**의 움직임이 활발하다.
- 열권: 약 690km까지의 높이이며 가장 넓은 대역을 형성하고 있다. 하부에는 전리층 **ionosphere**이 위치하고 오로라 **aurora** 현상이 자주 나타나며 우주왕복선 **space**

### Theme Vocab

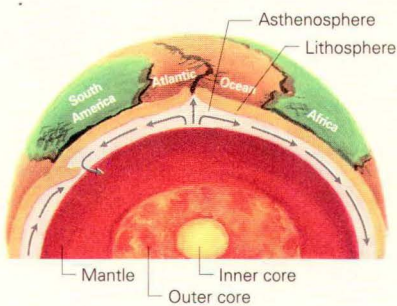
interior	내부
exterior	외부
solid	고체
liquid	액체
core	핵
gas	기체
convection	대류
meteor	운석
space shuttle	우주왕복선

shuttle이 떠 있는 곳이기도 하다.

- 외기권: 10,000km까지의 높이를 가리키며 대기권의 가장 외부층을 형성한다.

## Plate tectonics 판구조론

판구조론에서는 지구의 각 대륙이 움직이는 하나의 판plate이고 맨틀mantle의 대류 현상convection이 이 판을 움직인다고 설명하는데 이 이론은 베게너Wegener가 주창한 대륙이동설continental drift의 근거 이론이 되었다. 판구조론에서는 지각을 이루고 있는 암석권lithosphere의 판들이 부드럽고 유동성fluidity 있는 맨틀의 일부인 연약권asthenosphere 위를 움직이면서 화산volcano활동이나 지진earthquake 등의 다양



한 지각 변동diastrophism과 지형 변화를 일으킨다고 본다. 7개의 주요 판으로는 북아메리카판, 남아메리카판, 유라시아판, 태평양판, 아프리카판, 인도-호주판, 남극판이 있고 각 판들이 서로 맞대고 있는 경계에는 판이 소멸되는 수렴경계convergent boundary와 판이 생성되는 발산경계divergent boundary, 판의 소멸이나 생

성이 없는 보존경계conservative boundary가 형성된다.

### • 판게아 이론Pangaea theory

지구를 하나의 단일한 판으로 보는 이론으로 현재의 대륙이 고생대말기까지는 하나의 대륙으로 존재했다고 보는 입장이다. 초대륙이라고도 부른다.

## Seismic wave 지진파

▶ 토를 기술 주제

지진파는 크게 실체파body wave와 표면파surface wave로 나누어진다.

- 실체파body wave: 지각 내부를 통과하여 전달되는 파로 파장에 상관없이 일정 속도를 유지한다.

- P파P-wave (primary wave): 파의 전파propagation방향과 매질medium의 이동 방향이 동일한 종파longitudinal wave로 가장 속도가 빠르다.
- S파S-wave (secondary wave): 파의 전파propagation방향과 매질medium의 이동 방향이 수직인 횡파transverse wave이다.

- 표면파surface wave: 지표면을 따라 파가 전달되어 지진 발생시 큰 규모의 피해를 일으키고 속도는 가장 느리며 파장에 따라 속도가 변한다.

## Volcano 화산

마그마magma가 분출하며extrude 응고된solidified 용암lava으로 만들어진 산 형태의 구멍opening을 말한다. 지구 내부에서 가열되어 액체화된 마그마가 마그마궤magma chamber을 이루고 있다가 지각crust의 틈으로 밀려나오는 것이 화산 폭발volcanic eruption이며 화산 활동의 진행 여부에 따라 활화산active volcano, 휴화산dormant

## Theme Vocab

plate 판

continental drift

대륙이동설

lithosphere 암석권

fluidity 유동성

asthenosphere 연약권

body wave 실체파

surface wave 표면파

longitudinal wave 종파

transverse wave 횡파

extrude 분출하다

solidify 응고하다

lava 용암

opening 구멍

magma chamber

마그마궤(상당량의 마그마가 지하에 고여 있는 곳)

active volcano 활화산

dormant volcano

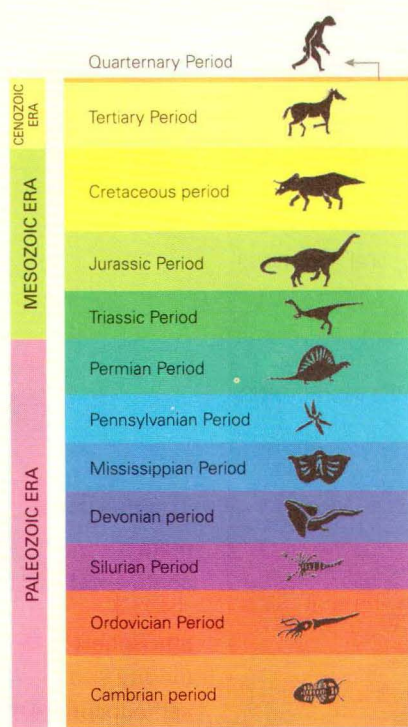
휴화산

volcano, 사화산extinct volcano으로 나뉜다. 화산이 폭발하기 전에는 마그마의 이동으로 인해 지진이 발생하고 가스의 분출량이 증가하는 현상이 나타나는데 이를 통해 미리 화산 폭발을 예측할 수 있게 된다.

## Geology 지질학

지각crust을 역사적인 관점에서 연구·관찰하는 학문으로 지질시대geologic age의 진행 과정과 지각을 이루는 다양한 암석들에 대한 배경지식을 갖추어 두면 다양한 지문에서 응용할 수 있다.

### Geologic age 지질시대



〈지질 시대〉

지질시대geologic age란 지각crust이 생성된 약 60억 년 전부터 인류가 출현한 1만 년 전까지의 시기를 말한다. 지질시대는 신생대Cenozoic Era, 중생대Mesozoic Era, 고생대Paleozoic Era의 3개 대era와 12개의 기period로 구분되며 기를 더 세분화하여 다시 세epoch로 나누고 세는stage나 age의 더 작은 시대 단위로 쪼갤 수 있다.

공룡이 번성하던 시기는 중생대로 트라이아스기Triassic Period 말기에서 백악기Cretaceous Period말기까지이며 인류가 출현한 것은 신생대 4기의 홍적세Pleistocene Epoch로 추정되는데 실제 시험에서는 이런 다양한 지질시대가 지문의 배경으로 자주 언급되므로 특히 중생대와 신생대를 중심으로 중요 내용을 정리해 두는 것이 좋다.

#### ■ 공룡의 멸종 원인

▶ 토를 기출 주제

중생대에 번성하던 공룡dinosaur은 약 6,500만년 전 신생대로 넘어가던 시기에 지구에서 자취를 감추었다. 이 시기에는 비단 공룡뿐만 아니라 지구에 거주하던 생물종의 거의 70%가 멸종extinction하게 되는데 이에 대한 원인으로는 몇 가지 가설이 있지만 소행성충돌론The Asteroid-impact Theory이 가장 일반적으로 받아들여지고 있다. 이 이론에서는 우주의 소행성이 지구에 충돌하여 지각crust을 관통penetrate하면서 활동기에 있던active 화산의 폭발volcanic eruption을 자극하고, 산성비acid rain을 동반한 엄청난 폭우storm를 유발하면서 지구 환경은 큰 변화를 겪게 되었다고 본다. 뿐만 아니라 폭발blast로 인해 발생한 열heat은 많은 생물들을 태우고incinerate, 엄청난 먼지가 태양빛을 막으면서 지구의 기온이 급강하하여 대다수의 생물들이 사라지게 되었다는 가설

### Theme Vocab

extinct volcano 사화산

geologic age 지질시대

Cenozoic Era 신생대

Mesozoic Era 중생대

Paleozoic Era 고생대

Pleistocene Epoch

홍적세

extinction 멸종

The Asteroid-impact Theory 소행성충돌론

penetrate 관통하다

volcanic eruption

화산 폭발

acid rain 산성비

blast 폭발, 돌풍

incinerate 태우다

hypothesis 가설

crater 구멍, 분화구

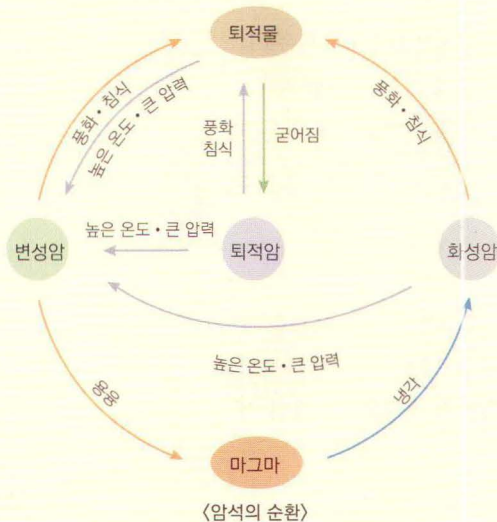
**hypothesis**이다. 이런 충돌의 증거가 되는 충돌 구멍**impact crater**은 세계 몇몇 곳에  
서 발견되고 있는데 멕시코만**The Gulf of Mexico**의 칩수랍**Chixulub**이 가장 대표적  
인 예이다.

▪ 홍적세 이후 종의 다양화

▶ 토를 기출 주제

신생대 제 4기에 해당하는 홍적세는 대빙하기**major ice age**에 해당하며 4~6회의 빙하기  
**glacial age**와 그 사이의 간빙기**interglacial age**를 거치게 되는데 이러한 급격한 기후  
변화는 대부분의 동물상**fauna**와 식물상**flora**에게 큰 영향을 미쳤다. 빙하가 밀려올 때마다  
원래의 거주지를 떠나 남쪽으로 이동해야 했으므로. 매머드**mammoth**를 포함한 대형동물  
군**megafauna**을 비롯한 많은 생물종이 감소하다가**depopulate** 결국 멸종하기에 이르  
렀다. 하지만 홍적세 이후 기후가 다시 따뜻해지면서 종**species**은 더욱 다양하게 분화하기  
시작한 것으로 보고 있다.

**Rock formation** 암석의 생성



지구 내부 구조에서 지각과 상부  
의 맨틀을 암석권**lithosphere**  
이라고 부르며 이를 구성하는 암  
석은 크게 퇴적암**sedimentary  
rock**, 변성암**metamorphic  
rock**, 화성암**igneous rock**  
으로 나뉘고, 이 각각의 암석들은  
일정한 사이클을 거치면서 서로 순  
환**circulation**한다. [좌측 표 참조]  
우리가 일상적으로 관찰하게 되  
는 지구의 표면**crust**은 주로 풍화  
**weathering**와 침식**erosion**  
을 거치며 퇴적된**deposited** 퇴

적암이 주종을 이루고 있는데 퇴적암은 지층**stratum** 형태를 이루고 있고 화석**fossil**을 포  
함하고 있다는 점이 가장 큰 특징이다. 반면 화성암의 경우 지구 내부의 마그마가 식으며 형  
성되며, 퇴적암이나 화성암이 온도와 압력의 영향을 받아 변하면 변성암이 된다.

▪ 액추얼리즘**actualism**

▶ 토를 기출 주제

액추얼리즘의 입장에서는 돌이 형성되는 과정을 직접 관찰할 수는 없지만 하나의 돌을 통해  
일반적인 생성 과정을 추론해 낼 수 있다고 본다. 특정 종류의 돌은 과거나 현재에 상관없이  
동일한 형성 과정을 거친다는 전제를 따르기 때문이다. 하지만 관찰이 선행되지 않은 이론의  
경우 그 진실 여부를 가리기 힘들다는 반박을 받고 있다.

**Soil Formation** 토양의 생성

▶ 토를 기출 주제

토양은 기본적으로 암석**rock**의 풍화작용**weathering**으로 형성되지만 이러한 생성 과정에  
영향을 미치는 요인은 크게 아래 세 가지로 나누어 볼 수 있다.

**Theme Vocab**

- major ice age 대빙하기
- glacial age 빙하기
- interglacial age 간빙기
- fauna 동물상(한 지역 혹은 한 시  
대의 동물군)
- flora 식물상
- depopulate 인구가 감소하다
- sedimentary rock 퇴적암
- metamorphic rock  
변성암
- igneous rock 화성암
- weathering 풍화
- erosion 침식
- deposit 퇴적시키다
- stratum 지층
- fossil 화석

▪ 기계적 **mechanical** 요인

토양의 재료가 되는 암석을 모암석 **parent material** 이라고 부르는데 바로 이 암석의 종류가 토양의 종류에 영향을 미친다.

▪ 화학적 **chemical** 요인

기후는 토양의 생성에 큰 영향력을 미치는데 강수량이 높고 더 따뜻한 곳에서 토양의 생성이 활발하다. 기후가 올라가면 화학적 풍화율 **rate of chemical weathering** 이 상승하기 때문이다.

▪ 생물학적 **biological** 요인

토양에 어떤 생물이 살고 있는가 하는 점도 토양의 생성에 영향을 미친다. 침엽림 **coniferous forests** 은 인셉티솔 **inceptisols** 로 알려진 토양을 만들고, 낙엽림 **deciduous forests** 은 부식토층 **humus layer** 을 만들어 알피솔 **alfisols** 이라는 토양을 만들어내게 된다.

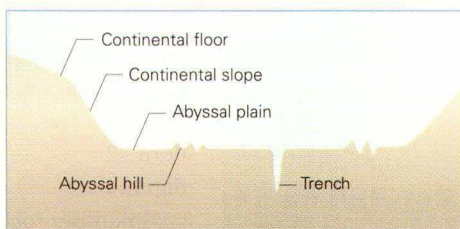
## Glacier Formation 빙하의 생성

겨울에 내리는 눈이 여름에 녹는 눈의 양보다 많아서 이 눈이 축적되면서 지각 위에 얼음층을 형성할 경우 이를 빙하라고 부르고 주로 고산지대나 극지방에서 볼 수 있다. 이러한 빙하는 지구 최대의 담수 **freshwater** 저장고 **reservoir** 이며 바다에 이어 두 번째로 큰 물 저장 지역이다.

## Oceanography 해양학

해양학은 다루는 연구 대상에 따라 해양생물학과 해양물리학, 해양지질학 등으로 세분화될 수 있으나 1960년대 이후에는 해저 지형이나 구성 암석, 해저 자원, 해저 화산 활동 등의 해양 자료를 탐사하는 해저의 지질학 연구가 활발하게 진행되고 있으며 시험에서도 이와 관련된 내용이 자주 출제되고 있다.

## Submarine Topography 해저 지형



〈해저의 구조〉

를 이루는 부분은 대륙사면 **continental slope** 이며, 2,000m 이하의 심해저로 들어가 평평하게 펼쳐진 곳은 심해저 평원 **abyssal plain**, 암석으로 구성되어 언덕 모양을 이루고 있는 곳이 심해저 구릉 **abyssal hill** 이다. 심해저 곳곳에 깊이 파인 부분은 해구 **trench** 라고 부른다.

해저 **seafloor, seabed** 의 지형은 기본적으로 육상의 구조와 유사하며 깊이와 모양, 구성성분에 따라 다섯 개의 부분으로 나눌 수 있다. 먼저 태양빛이 닿는 해저 200m까지의 완만한 지역이 대륙붕 **continental floor**, 급격한 경사

### Theme Vocab

**coniferous forests**

침엽림

**deciduous forests**

낙엽림

**humus layer** 부식토층

**glacier** 빙하

**freshwater** 담수

**reservoir** 저장고

**seafloor** 해저

(=seabed)

**continental floor** 대륙붕

**trench** 해구

## Ocean Sea Level 해수면의 변화

▶ 토를 기출 주제

해수면sea level은 항상 동일한 수위를 유지하고 있는 것처럼 보이지만 실제로는 많은 변화를 보인다. 해수면의 변화를 일으키는 다양한 요인들 중에는 빙하glacier의 작용과 지각 아래 맨틀mantle의 운동, 고온에 따른 증발evaporation 등이 있다. 빙하 작용의 경우 기온이 올라가면 빙하가 녹아서 해수면이 높아지고 추우면 결빙되면서 해수면이 낮아지는데, 해수면이 낮아지면 물에 가라앉아 있던 땅들이 나타나 생물들이 이곳을 통해 이동을 하게 되지만 다시 해수면이 높아지면 빠져나올 수 없어 일정 지역에 고립되기도isolated 한다.

## Ocean Surveyor 해저탐사

▶ 토를 기출 주제

해저유전offshore oil field과 같은 해저 자원 탐사를 주목적으로 하는 해저탐사는 해저라는 특성상 굉장히 더디게 진행될 수밖에 없지만 최근 기술의 발전과 함께 더욱 다양한 방법이 도입되고 있는데 로봇을 이용하거나 음향 측심echo-sounding을 이용하는 방법, 위성satellite을 이용하는 방법 등이 사용되고 있다.

- 로봇의 이용: 해상에서 모선mother ship이 조종을 하는 두 팔이 달린 로봇이 직접 탐사에 나서 해저 생물organism이나 광물mineral의 샘플을 채취하는sample 방법이다. 고가이고 좁은 지역에 한정해서 사용할 수밖에 없다는 단점이 있다.
- 음향 측심: 지상이나 잠수함에서 초음파super-sound를 해저로 쏘아 음파sound wave가 되돌아 오는 시간을 재어 바닥까지의 거리distance를 측정하는 방법이다.
- 위성의 사용: 위성을 이용하여 지구의 중력gravity에 변화를 주면 해수면의 높이sea level가 바뀌는 것을 이용하여 해저 탐사를 할 수 있다.

## Environmentology 환경학

### Desertification 사막화

▶ 토를 기출 주제

사막이란 건조한arid 상태로 되어 버려 식물이 살 수 없게 된 지역으로 원래 가뭄drought 등의 자연적 요인에 의해 강수량precipitation보다 증발량이 많아지면서 생겨나는 것으로 보았으나, 최근에는 곡식 재배growing crops나 가축 방목grazing cattle, 삼림벌채deforestation와 같은 다양한 인간의 활동으로 인해 지표 반사율이 증가하고 강우량이 감소하면서 세계 곳곳에서 그 어느 때보다 빠른 속도로 사막화가 진행되고 있다. 사막화로 인해 무엇보다 생물다양성biodiversity이 손실되고 관목지shrubland가 초원grassland으로 이행transition하는 것과 같은 변화가 일어나고 있다.

#### • 삼림 벌채deforestation

경작지arable land 개발이나 목장pasture개발 등을 목적으로 숲을 제거하여 비삼림지대로 만드는 것으로, 충분한 재조림reforestation이 일어나지 않을 경우 발생한다. 삼림이 사라지게 되면 무엇보다 생물다양성을 저해할 뿐만 아니라 토양soil과 지표수groundwater, 대기의 수분 함유량이 줄어들게 되고 토양의 응집력cohesion이 감소하여 침식erosion, 홍수flooding, 산사태landslide의 원인이 된다.

### Theme Vocab

evaporation	증발
oil field	유전
echo-sounding	음향 측심
satellite	위성
mineral	광물
sample	(샘플의 용도로) 채취하다
gravity	중력
desertification	사막화
arid	건조한, 메마른
drought	가뭄
biodiversity	생물다양성
shrubland	관목지
arable land	경작지
reforestation	재조림
groundwater	지표수
cohesion	응집
flooding	홍수
landslide	산사태

# day 19

# life

- ✚ speed keyword
- case example
- ★ smart solution
- ▣ practice test
- ✱ smart source

day 18 ●

day 19 ●

day 21 ●

day 20 ●

day 22 ●

speed

# keyword

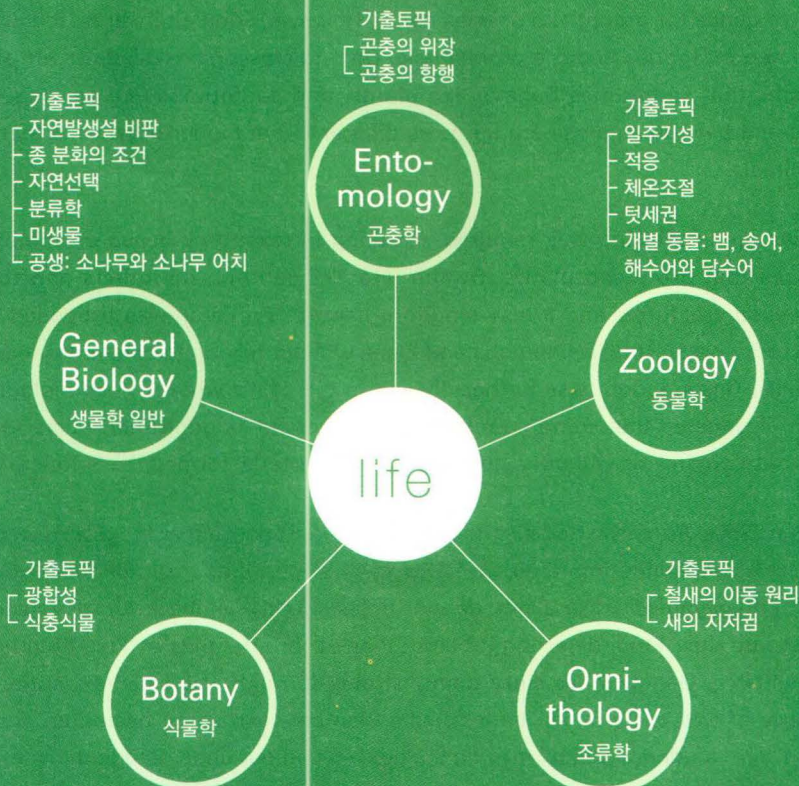


life

*"The violets in the mountains have broken the rocks."*

– Tennessee Williams (1911-1983)

미생물부터 포유류까지 모든 생명체에 관한 지문은 토플의 단골 출제 분야이다. 생물의 종류가 다양한 만큼 모든 생명체와 생물학의 연구 방법론에 대한 지문이 폭넓게 등장하고 있으며 가장 출제 빈도가 높은 부분이므로 주로 다루어지는 주제들을 중심으로 배경지식을 갖추어 두어야 한다.





## case example

>> Read the passage and answer the following questions.

### TOEFL Reading passage

review | help | back | next

#### The History of Taxonomy

Derived from the Greek words for “arrangement” and “law,” the term taxonomy refers to the practice of classifying things into groups. Usually, it deals with biological classification, and its purpose is to recognize, categorize, and identify life forms. This practice can be traced all the way back to the great Greek scientist Aristotle, who decided that all living things could be divided into two kingdoms, plants and animals. Subsequently, biologists went on to group species into higher level “taxa,” or groupings, according to resemblance or shared traits.

The practice of biological taxonomy did not change much until 1753, when the Swedish botanist Carolus Linnaeus classified all known plants based on the arrangement and numbers of parts in flowers. This new system of identification gave each species two Latin names—a genus (or group) and species name. However, soon afterwards, the division of all life into two categories became problematic. On a microscopic level, there are single-celled organisms that sometimes behave like plants, and sometimes like animals. Moreover, bacteria and blue-green algae are far more different from higher organisms than plants are from animals.

A change in thinking was required, resulting in taxonomy based on the evolutionary processes that produced plants. By the late 19<sup>th</sup> century, biologists had found many single-celled creatures, and a new kingdom named “Protista” was proposed that would include tricky organisms like amoeba and algae without having to categorize them as plants or animals. This kingdom was further divided in the 1930s when French biologist Edouard Chatton discovered that some members of the Protista kingdom had nuclei while others didn’t. These organisms without a nucleus, such as bacteria, formed the “Monera” Kingdom.

In the 1950s, American botanist Robert Whittaker proposed that fungi such as mushrooms and yeast be separated into their own “Plantae” kingdom as they neither feed themselves through photosynthesis, like plants do, nor ingestion, like animals do. They instead secrete enzymes into their food, digesting it before they absorb it – thus a “Five Kingdom” system had been born. Genetics has since demonstrated through “cladistic taxonomy” that DNA sequences of two bacteria can be less alike than between some bacterium and a human. Hence, a “six kingdom system” may be the next step in our understanding of life.

Simplification

1. Which of the sentences below best expresses the essential information in the highlighted sentence in the passage? *Incorrect* choices change the meaning in important ways or leave out essential information.
- (A) Robert Whittaker maintains that the “Plantae” kingdom is the most important in understanding different life forms because of its unique characteristics.
  - (B) Because animals and plants acquire energy through photosynthesis, they fall into a different category than fungi do according to an American botanist.
  - (C) An American botanist claimed that fungi are the only member of the “Plantae” kingdom that feed themselves differently to plants and animals.
  - (D) As fungi do not nourish themselves in the ways plants and animals do, they should be categorized separately according to botanist Robert Whittaker.

Summary

2. **Directions:** An introductory sentence for a brief summary of the passage is provided below. Complete the summary by selecting the THREE answer choices that express the most important ideas in the passage. Some sentences do not belong in the summary because they express ideas that are not presented in the passage or are minor ideas in the passage.

**The science of taxonomy has evolved to categorize all living things according to their position in the various “kingdoms” of life forms.**

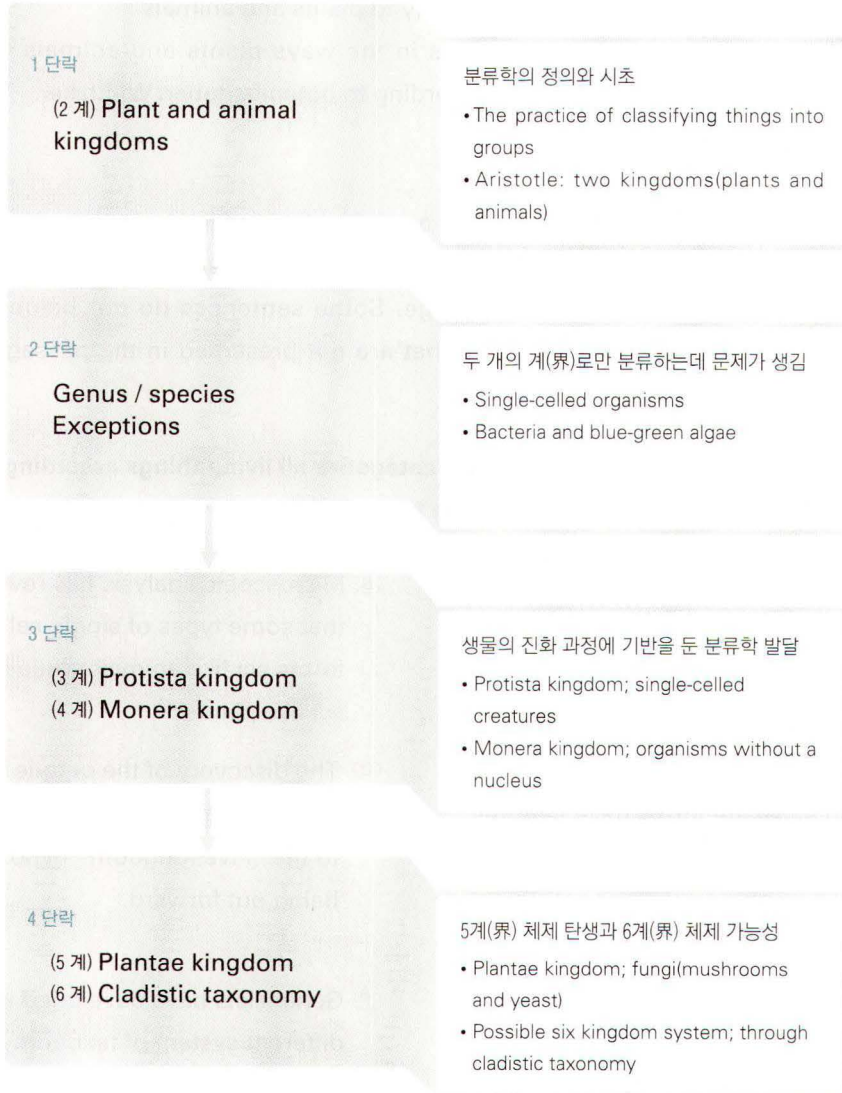
- (A) Aristotle’s assertion in ancient Greece that life can be divided into plant and animal form was the first step in the classification of life.
- (B) Microscopic analysis has revealed that some types of single-celled life forms act like animals while others act like plants.
- (C) Once it was discovered that single-cell life forms have features that distinguish them from both plants and animals, a new kingdom called “Prostita” was proposed.
- (D) The discovery of the unique features of single-cell life forms and fungi led to the “Five Kingdom” hypothesis being put forward.
- (E) The American botanist Robert Whittaker discovered that the “Monera” kingdom needed to be further divided into a “Plantae” kingdom.
- (F) Geneticists have developed a different system of taxonomy from that used by biologists, and according to their method of classification there are actually six distinct kingdoms.





## Outlining

### The History of Taxonomy



분류학은 식물과 동물의 두 계(界)를 토대로 계(界)들을  
추가해 가면서 생명체들의 분류를 세분화해 왔다.

## Perfect Summary

분류학 중 특히 생물 분류학의 발전 과정을 다룬 지문이다. 지문 내용은 “The science of taxonomy has evolved to categorize all living things according to their position in the various “kingdoms” of life forms.”란 문장으로 요약될 수 있으며 구체적으로 동식물의 두 계(界)에서부터 점차 분화되어 속(genus)과 종(species)이 추가되고, 원생생물계, 원핵생물계, 식물계를 포함한 5계(界)까지 발전하여, 이제 6계(界) 체제까지 생길 가능성이 있다는 내용이다.

### ❶ 틀린 정보 (NOT CORRECT)

- Ⓔ The American botanist Robert Whittaker discovered that the “Monera” kingdom needed to be further divided into a “Plantae” kingdom.

(미국 식물학자인 로버트 휘태커는 ‘원핵’생물계가 ‘식물’계로 더 세분화될 필요가 있다는 것을 발견했다.)

→ ‘원핵’생물계는 에두아르 사통이 세분화한 것으로 박테리아 등 핵이 없는 유기체를 나누는 계이고, 로버트 휘태커의 ‘식물’계는 버섯이나 효모 등의 균류를 분류한 것으로 각각 다른 분류 개념이다.

- Ⓕ Geneticists have developed a different system of taxonomy from that used by biologists, and according to their method of classification there are actually six distinct kingdoms. (유전학자들은 생물학자들이 사용한 분류학과는 다른 체제를 개발했으며 그들의 분류 방법에 따르면 실제로는 6계 체제가 존재한다.)

→ 유전학에서 박테리아 DNA 관련 연구가 언급되지만 6계 체제는 가능성만을 두고 있으므로 틀린 정보이다.

### ❷ 주변 정보 (MINOR)

- Ⓖ Microscopic analysis has revealed that some types of single-celled life forms act like animals while others act like plants. (미시적 분석에서 일부 단세포 생명체는 동물과 같은 행태를 보이지만 다른 단세포 생명체는 식물과 같은 행태를 보인다는 것을 밝혀냈다.)

→ 이 내용은 동물과 식물로만 분류한 2계의 문제점을 드러내는 예시 부분일 뿐이다.

answer 01. Ⓓ 02. Ⓐ, Ⓒ, Ⓓ

#### \*back story | 균류(fungus)



균류는 효모, 버섯 등을 총칭하는 종으로 스스로 광합성을 하지 못한다. 로버트 휘태커가 이들을 따로 분류하기 이전까지는 엽록소 등의 동화 색소가 없어서 하등 식물로 분류되었다. 그러나 현재는 형태, 특성, 생식 등의 차이점을 토대로 식물과는 다른 한 계통으로 분류되고 있다. 균류는 크게 3종으로 나뉘는데, 사생균은 퇴비, 낙엽, 토양 등의 죽은 물질을 분해하여 영양을 섭취하는 종류이고, 기생균은 동물이나 곤충과 같은 숙주에서 기생하여 영양분을 얻는 종류다. 마지막으로 공생균은 기생하는 대상과 서로 이익을 주고 받으면서 생존한다.



## practice test



>> Read passages 1 and 2 and answer the following questions.

passage 1>

### Spontaneous Generation

Spontaneous generation, or abiogenesis, is the concept that some vital force contained in organic matter can cause life to spring into existence from seemingly inanimate objects. This production of life from non-organic matter was considered to be an irrefutable truth since at least the time of Aristotle right through the Middle Ages. Evidence for spontaneous generation appeared to be all around, from the frogs that suddenly appeared in muddy soil after the Nile flooded to the mice that appeared in thatched barns where grain was stored.

**A**In 1668, the Italian physician Francesco Redi postulated that maggots seemingly arising spontaneously from rotting meat actually developed from eggs laid by flies. **B**By placing meat in a variety of containers, some open to the air and others sealed, Redi showed that maggots only appeared in those open containers where flies could reach the meat. **C**Nevertheless, people continued to believe in spontaneous generation as the invention of microscopes in the 17<sup>th</sup> century allowed people to see all kinds of new life, from bacteria to yeast. **D**

However, in 1859, the French chemist Louis Pasteur finally put an end to the debate with his famous swan-neck flask experiment in which he bent the neck of a flask containing boiled meat broth into an "S" shape. This allowed air to enter, but any airborne microorganisms would settle in the neck due to gravity. Upon tilting the flask so that the broth could contact where any microorganisms would have settled, it became cloudy with life, thus contradicting the theory of spontaneous generation and showing that microorganisms are present everywhere.

Though most scientists accepted the veracity of Pasteur's experiment, the modern age has seen the rise of another version of spontaneous generation dealing with the origins of life on Earth. As far back as the ancient Greek scientists, it had been suggested that all species had sprung into existence from some primordial soup influenced by the life-giving properties of heat and air. The advent of Darwinism after 1859 lent credence to this view, and such conditions may yet be shown to exist on some molecular level of life between the inorganic and organic worlds.

Inference

1. What can be inferred from paragraph 3 about experiments concerning spontaneous generation?
- (A) They had always used S-shape flasks to identify microorganisms.
  - (B) They had been carried out since the time of the ancient Greeks.
  - (C) They were done by using containers filled with various foods.
  - (D) They hadn't previously been done under sufficiently accurate conditions.

Insertion

2. Look at the four squares [■] that indicate where the following sentence could be added to the passage.

**Spontaneous generation gained further "proof" when an experiment by John Needham showed that even boiled broth became cloudy with small organisms when left in open air.**

Where would the sentence best fit?

Summary

3. **Directions:** An introductory sentence for a brief summary of the passage is provided below. Complete the summary by selecting the THREE answer choices that express the most important ideas in the passage. Some sentences do not belong in the summary because they express ideas that are not presented in the passage or are minor ideas in the passage.

**Through the ages, people have investigated whether spontaneous generation is a reality of nature.**

- |  |   |
|--|---|
| (A) The evidence of maggots materializing from rotting meat was the catalyst for studying whether spontaneous generation exists.                               | (B) The observations of scientists and the general public through the ages suggested that some organisms could spring to life from certain non-living entities. |
| (C) Spontaneous generation was believed to account for the appearance of certain life forms by the ancient Greeks as well as people living in the Middle Ages. | (D) Whether or not organisms can suddenly spring to life will never be known under the current method of scientific investigation.                              |
| (E) Experiments carried out by Francesco Redi and Louis Pasteur indicated that spontaneous generation was a fallacy and microorganisms are airborne.           | (F) Investigations into the origins of life on Earth and evolution suggest that at some point in time, chemicals conditions may have led to spontaneous life.   |



## Insect Navigation

Insects navigate using a method called path integration, whereby the organism keeps track of its current position by gauging its direction and estimating its distance from a reference point. Integrating details about direction and distance, insects are able to store information about a route so that they can travel directly from a food source back to the nest, even if their original route was meandering.

Walking insects and flying insects navigate through different types of environments, so they naturally rely on slightly different path integration techniques. Some species of ants simply mark their trails with chemical scents that can be easily followed to the nest on the return journey. However, in environments such as deserts, where ants run the risk of dehydrating while foraging, it is disadvantageous to make a return journey along a possibly circuitous original path when a more direct route is available. Desert ants such as these estimate distance by evaluating their leg movements and walking speed, which they determine by analyzing stride length and stride frequency. It is as though walking insects such as ants have an internal odometer that records their mileage. With this information, it is possible to plot a return route that is faster and more direct.

Leaving a trail of chemicals and analyzing leg movements is possible for ground-dwelling organisms like ants, but for insects that fly, this type of navigation is simply not viable. In the air, unpredictable head- and tailwinds may complicate calculations for flying insects, making it difficult to determine how far they have traveled. Bees overcome this issue by assessing travel distance based not on their physical exertion but on "optic flow," or the amount of movement that crosses their field of vision as they fly. Yet, measuring optic flow is not the only navigational tool bees have at their disposal; rather, they synthesize data from a number of navigation systems in order to orient themselves in their environment. A solar compass enables bees to note the position of destinations in relation to the sun, and an internal clock tracks both elapsed travel time and the movement of the sun during that period. Furthermore, the ability to recognize landmarks makes it possible for bees to navigate when the sky is overcast.

Rhetorical

1. Why does the author mention Desert ants in paragraph 2?
- (A) To explain how calculations of walking speed differ within different terrains
  - (B) To suggest that the arid environment limits the distances they are able to travel
  - (C) To contrast the ways in which they chart their routes with those of other desert insects
  - (D) To illustrate more advanced navigational techniques possessed by some land insects

Fact

2. According to paragraph 3, why is it important for bees to be able to navigate by referencing land features?
- (A) It assists them in measuring the sun's movement during their journey.
  - (B) It is a necessary variable in the process of analyzing "optical flow."
  - (C) It helps them determine their orientation when the sun is not visible.
  - (D) It enables them to find their way back to the hive even at night.

Summary

3. **Directions:** An introductory sentence for a brief summary of the passage is provided below. Complete the summary by selecting the THREE answer choices that express the most important ideas in the passage. Some sentences do not belong in the summary because they express ideas that are not presented in the passage or are minor ideas in the passage.

**Path integration is the technique insects use to analyze their location and direction of travel in order to move efficiently between two points.**

- (A) Because most of their movements are from the nest to a food source and back, insects tend to follow established paths repeatedly.
- (B) Many land insects use chemical trails to retrace their routes, though some are able to analyze their speed and mileage to return more efficiently.
- (C) Insects that live in dry climates are at constant risk of dehydration, so they must spend as little time outside of their nests as possible.
- (D) Land and airborne insects are similar in their uses of path integration in that both rely on scent to orient themselves within the environment.
- (E) By combining data about the location and movement of the sun and the elapsed time of travel, bees can accurately conclude how to reach their destination.
- (F) Flying insects like bees often use visual inputs to determine the distances they cover in a given journey.



## General Biology 생물학 일반

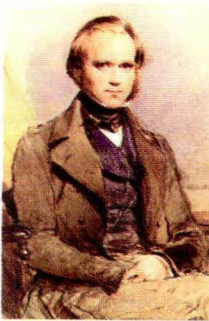
생명체의 구조와 기능을 연구 대상으로 하는 생물학은 다루는 대상이 광범위하여 동물학<sup>zoology</sup>, 식물학<sup>botany</sup>, 미생물학<sup>microbiology</sup> 등의 다양한 하위 학문으로 나뉘어진다. 다루는 생물의 종류에 따라 개별적인 학문이 형성되어 있으므로 생물학 일반에서는 생물의 전반적 발전에 영향을 미친 이론들을 정리해 보자.

### The Origin of Species 종의 기원

영국의 생물학자 다윈<sup>Darwin</sup>의 저서로 자연선택설<sup>natural selection</sup>에 근거하여 인간의 진화 과정을 설명하였다. 자연선택설<sup>natural selection</sup>이란 생물 개체 사이에서 발생하는 생존경쟁에서 환경에 적응한 개체만이 생존하여 자손을 남기고, 환경에 적응력이 빠른 형질<sup>favorable traits</sup>만이 선택적으로 살아남아 진화<sup>evolution</sup>가 일어난다는 이론이다.

#### ■ 자연선택설 비판

▶ 토를 기출 주제



다윈은 자연선택이 오랜 기간을 거쳐 일어나는 것이라고 보았지만 반드시 그런 것은 아니다. 적이 많은 곳에서 연어는 빨리 성장하고 새끼도 많이 낳지만 적이 별로 없는 곳에서는 평균 크기가 커진다. 또 특정한 사건도 생물의 진화 양상에 영향을 미치는데 갈라파고스 섬에 큰 부리<sup>beak</sup>의 새와 작은 부리의 새가 공존하다가 작은 부리의 새들이 먹이 부족으로 죽고 큰 부리의 새만 살아남자 그 후의 세대들은 평균적으로 큰 부리를 가지게 되었다. 그리고 다시 비가 심하게 쏟아진 후 부리의 크기를 관찰한 결과 평균 부리 크기가 작아

졌다는 것이 발견되었다.

### The Differentiation of Species 종의 분화

▶ 토를 기출 주제

한 종이 분화되기 위해서는 '두 집단의 격리<sup>isolation</sup>'와 '유전자 풀<sup>gene pool</sup>의 변화'가 이루어져 결과적으로 두 집단 간에 생식 가능한 자손을 낳을 수 있어야 한다. 격리에는 지리적 격리<sup>geographic isolation</sup>, 생태적 격리<sup>ecological isolation</sup>, 생식적 격리<sup>reproductive isolation</sup>가 있으며 지리적 격리 없이도 생식적으로 격리되면 종의 분화는 가능하다.

- 지리적 격리<sup>geographic isolation</sup>: 바다, 하천 등 지역적 장애물에 의해 일어나는 격리
- 생태적 격리<sup>ecological isolation</sup>: 선호하는 생식지의 차이에 따라 나타나는 격리
- 생식적 격리<sup>reproductive isolation</sup>: 생식 행동이나 생식 구조 등이 다른 개체군

#### Theme Vocab

species 종  
natural selection  
자연선택(설)  
trait 형질  
evolution 진화  
beak (새의) 부리  
differentiation 분화  
isolation 격리  
gene pool 유전자 풀

population이 서로 다른 지역에 살면서 일어나는 격리

## Symbiosis 공생

▶ 토를 기출 주제

다른 두 생물종 간에 일어나는 상호작용interaction으로 서로 이익을 얻는 관계부터 손해를 보는 관계까지 그 관계의 양상은 다양하다.

▪ 상리공생mutualism: 두 생물종 모두가 이익을 얻는 관계이다.

e.g. 악어crocodile와 악어새Egyptian plover, 산호coral와 조류algae

▪ 편리공생commensalism: 한 쪽만 이익을 얻고 다른 한 쪽은 손해나 이익이 없는 관계이다.

e.g. 다른 몸에 붙어 이동하는 노래기millipede, 다른 종에 자신의 집을 짓는 조류

▪ 기생parasitism: 한 쪽은 이익을 얻고 한 쪽은 피해를 입는 관계이다. 숙주host에 붙어서 기생하는 기생충parasite이 대표적인 예이다.

▪ 소나무Pine와 소나무 어치Pine Jay의 상호공생관계

▶ 토를 기출 주제



소나무와 새의 일종인 소나무 어치는 대표적인 상호공생mutualism의 관계로 소나무가 자신의 씨앗을 밖으로 노출하여 일부러 소나무 이치에게 먹게 하는데 이는 여분의 씨앗들이 땅에 묻히게 하려는 행동이다. 소나무 어치는 식량으로 이용할 수 있어서 이익을 보고 소나무는 종의 확산에 도움을 얻게 된다.

## Zoology 동물학

동물의 분류와 형태, 유전 등을 연구하는 생물학의 한 분야로 동물들의 중요한 습성이나 개별 동물들을 다룬 지문이 자주 출제되는 편이다.

## Circadian Rhythm 일주기성

▶ 토를 기출 주제

동물들은 생체시계bio-clock와 같은 것을 지니고 있어서 이 생체시계가 동물이 활동을 해 나가는데 적절한 생체리듬을 주관한다. 이러한 생체시계가 체내에 있는지 혹은 외부적 요인에 의해 작동되는 것인지에 대해 논란이 있으나 기온, 빛, 자기장, 낮의 길이, 계절 같은 외부요인이 강하게 작용한다는 입장이 지배적이다.

## Adaptation 적응

▶ 토를 기출 주제

동물이 가혹한 주변 환경에 맞서 삶에 보다 적합한 방식으로 '적응'해 나가는 것은 광범위한 동물군에서 다양한 방식으로 나타난다. 온도 적응temperature adaptation은 가장 대표적인 적응의 예로 변온동물ectotherm의 온도 적응 방식을 보면, 어류는 차가

### Theme Vocab

population 개체군

symbiosis 공생

mutualism 상리공생

alga (바다) 조류 (pl. algae)

parasitism 기생

circadian 일주기성, 24시간 주기의

bio-clock 생체시계

adaptation 적응

ectotherm 변온 동물



은 물에서 따뜻한 물로 이동할 때 서서히 체내의 신진대사 **metabolism** 방식을 바꾸고, 도마뱀 **lizard** 역시 유사한 방식으로 신진대사를 조절하여 피부색 **skin color**이 변하는 것을 볼 수 있는데 이는 체온이 내려가면 피부에 있는 색소세포를 확산시켜 열을 흡수하고, 체온이 올라가면 색소세포를 응집시켜 열의 흡수를 방지하는 식으로 주변 온도에 적응하기 때문이다. 이러한 온도 적응 외에 독 **venom**이나 점액 **slime**을 분비하는 **secrete** 방어적 행동도 적응의 한 형태로 볼 수 있으며 동물의 털갈이 **molting** 역시 적응의 대표적 예이다.

## Thermoregulation 체온조절

▶ 토를 기출 주제

체온조절을 위해서 동물들은 지방층 **blubber**과 털 **fur**, 깃털 **feather**을 이용하는데 특히 털 **fur**의 경우 털 자체가 보온 역할을 하기도 하지만 털이 눕거나 **flatten** 서는 **erect** 것에 따라 털에 공기층 **layer of air**이 형성되어 체온조절에 기여하게 된다. 이렇게 외부를 덮고 있는 부가적인 부분뿐만 아니라 혈관 **blood vessel**도 체온조절의 역할을 할 때가 있다. 온도가 올라가면 혈액을 몸 표면에 많이 돌게 해서 열을 방출시키고 추울 때는 밖으로 도는 혈액을 줄여 열 손실 **heat loss**을 막는다. 코끼리가 얇은 귀를 가지는 것은 바로 체온조절을 용이하게 하기 위한 예로 볼 수 있다.

## Territoriality 텃세권 제도

▶ 토를 기출 주제



텃세권 **territory**이란 한 종 **species**이 동종의 다른 개체나 다른 종으로부터 방어하는 **defend** 자신의 영역 **area**으로, 다양한 척추동물 **vertebrate**과 조류, 어류 등에서 나타나고 이러한 텃세권이 패턴화될 경우 텃세권 제도 **territoriality**라고 부른다. 텃세권의 기능은 개체에 따라 조금씩 다르지만 무엇보다 안정

정적인 식량원 **food resources** 확보, 짝짓기 **mating**, 번식 **breeding**을 일차적인 목적으로 볼 수 있다. 텃세권을 선언하는 방식 역시 다양한데 새의 지저귀임 **bird song**처럼 청각적인 **auditory** 것, 울새 **robin**의 가슴이 붉어지는 것처럼 시각적인 **visual** 것, 개나 고양이 가 냄새로 표시해 남기는 것 **deposit of scent marks**과 같은 후각적인 **olfactory** 방식 등이 있다.

## Freshwater Fish & Seawater Fish 민물고기와 바닷물고기

▶ 토를 기출 주제

애초 어류는 담수 **freshwater**에서 서식하다가 점차 해수 **seawater**로 적응 **adaptation**해 간 것으로 보이는데, 민물고기와 바닷물고기 모두 아가미 **gill**가 주요 호흡기관 **respiratory system**이며 지느러미 **fin**가 운동기관 **locomotive organ**이라는 점에서

## Theme Vocab

**metabolism** 신진대사  
**venom** 독  
**slime** 점액  
**secrete** 분비하다  
**molting** 털갈이  
**thermoregulation** 체온조절  
**blubber** (주로 고래 등에서 볼 수 있는 표피의) 지방층  
**blood vessel** 혈관  
**heat loss** 열 손실  
**territory** 텃세권  
**mating** 짝짓기  
**breeding** 번식  
**auditory** 청각의  
**olfactory** 후각의  
**freshwater** 담수  
**gill** 아가미

기본적인 생리학적 구조는 동일하다. 하지만 서로 서식 환경내 염도salinity 차이가 큰 만큼 삼투압조절osmoregulation기능은 완전히 다른 방식으로 작동한다. 민물고기의 경우, 체액body fluids의 염도가 서식하는 담수에 비해 높기 때문에 수분이 계속 몸 속으로 침투하게 되고, 이 때 체내 수분량이 과다해지지 않도록 신장kidney이 혈액 속 수분을 흡수하



여 다량의 묽은 오줌으로 배출한다. 반면 바닷물고기는 해수의 염도가 체내 염도보다 높아서 몸 속 수분을 지나치게 잃게 될 위험이 있으므로 고농도의 오줌을 조금씩 배출하고 과잉 염분은 아가미에 있는 특수 세포를 통해 외부로 방출시키는 방식으로 체내 수분량의 항상성homeostasis을 유지한다.



## Ornithology 조류학

조류학은 조류의 행동, 기능, 생리 등을 연구하는 학문으로 조류는 다른 생물에 비해 이동을 위한 생리와 방향판정력이 뛰어나고 발성 등이 발달했으며 텃세권을 형성하기 때문에 시험에서도 새의 이동이나 지저귀, 텃세권 등과 관련된 내용이 자주 등장한다.

### Bird Vocalization 새의 발성

▶ 토를 기출 주제



새의 발성bird vocalization은 크게 새의 짹짹거림bird call과 새의 지저귀bird song으로 구별되는데 짹짹거림은 이어지지 않는 단속적인 소리로 어린 새들이 어미새에게서 먹이를 구하는 신호signal나 주변에 위험을 알리는 경고alarm의 기능을 할 때가 많다. 반면 새의 지저귀는 보다 길고 복잡한 소리가 섞인 것으로

구애courtship나 짝짓기의 목적을 가질 때가 많은 것으로 보고 있다. 이러한 새의 발성은 너무 빈번할 경우 포식자predator에게 노출될 위험을 높이기도 하지만 근본적으로 개체 간에 의사소통 기능뿐만 아니라 종족 번식에도 필수적인 역할을 하는 것으로 여겨지고 있다.

### Theme Vocab

salinity 염도

osmoregulation

삼투압조절기능

body fluids 체액

homeostasis 항상성

vocalization 발성

courtship 구애

predator 포식자

# day 20 matter

- ✚ speed keyword
- case example
- ★ smart solution
- ▣ practice test
- ✱ smart source

+ speed

# keyword



matter ▼

*"I am convinced that God does not play dice."*

- Albert Einstein (1879-1955)

우주와 물질계의 구성 원리에 관한 내용 역시 토플에서 빈번하게 다루어진다. 이 분야의 지문은 특히 상식 수준에서 이해하기 어려운 내용들이 많고 즉석에서 지문을 읽고 내용 파악이 힘든 경우가 대부분이므로 미리 천체와 태양계에 대한 기본 개념들과 용어를 정리해 두고 물리학, 수학, 화학에서 이미 출제된 토플 중심으로 배경지식을 갖추어 두는 것이 필수이다.

기출토플  
지구형 행성과 목성형 행성  
별의 거리  
유성  
달의 분화구

Astronomy  
천문학

기출토플  
전자기파  
분자물리학

Physics  
물리학

기출토플  
- 수의 발달

Math  
수학

기출토플  
질소 고정  
주기율표의 발달

Chemistry  
화학

matter



## case example

>> Read the passage and answer the following questions.

### TOEFL Reading passage

review | help | back | next

#### Stars

The development of quantum theory in the early 20<sup>th</sup> century provided the breakthrough that allowed scientists to determine the composition and temperature of the Sun and other stars in the universe. Astronomers were able to calculate a star's age, mass, and chemical make-up by observing its movement through space, yielding fascinating insights into the true nature of the universe.

Stars start their lives as relatively cool gaseous masses before gravity pulls the gas together until the temperature rises to a point where a nuclear reaction begins. Here, two hydrogen atoms combine to create a reaction called fusion, which in turn forms the inert gas helium. This is possible because the energy created by one helium atom is slightly less in weight than the two hydrogen atoms, causing the excess mass to be converted into energy, as recorded in Einstein's famous equation  $E=mc^2$ .

**A** The vast majority of stars are less than three times the mass of our Sun, and the stars in this category follow the "main sequence"—a cycle that takes billions of years from genesis to death. **B** Basically, a star's exact lifespan on the main sequence is decided by the total amount of energy generated by nuclear fusion. **C** As a star's luminosity indicates energy radiated, total lifespan can be estimated by calculating a star's total energy divided by luminosity. **D**

In order to simplify the complex interrelationships between a star's five main characteristics—luminosity, color, temperature, size, and mass—the Hertzsprung-Russell diagram was developed to determine a star's age and current evolutionary state. A star's age is often indicated by its metallicity—the oldest stars, called Population II, have released a lot of their metal-enriched material and thus have very low metallicities. In contrast, younger, or Population I, stars have been enriched by these metallic releases and contain higher metallicities.

Probably the most exciting part a star's life is its death. When fusion ceases in a star's core, the only source of energy is its store of thermal energy, which illuminates the surrounding shells, or nebulae, forming a white dwarf. Similar to our Sun, this white dwarf cools, changing color from blue to white to yellow and eventually red before finally dying.

Negative Fact

1. According to paragraph 2, what is NOT true about a star's creation?
- (A) A helium atom is created by a fusion of two hydrogen atoms.
  - (B) The leftover weight of hydrogen atoms is changed into energy.
  - (C) Gravity makes gases become hotter causing a reaction.
  - (D) After nuclear fusion, cool masses of gas combine to make stars.

Insertion

2. Look at the four squares [■] that indicate where the following sentence could be added to the passage.

**A star with greater than three times the solar mass spends much less time on the main sequence and has a shorter life cycle.**

Where would the sentence best fit?

Summary

3. **Directions:** An introductory sentence for a brief summary of the passage is provided below. Complete the summary by selecting the THREE answer choices that express the most important ideas in the passage. Some sentences do not belong in the summary because they express ideas that are not presented in the passage or are minor ideas in the passage.

**The 20<sup>th</sup> century witnessed extraordinary progress in our understanding of the formation and life cycles of stars.**

- |   |  |
|---|--|
| (A) The nuclear reaction caused by the fusion of hydrogen particles and resultant helium gas form the building blocks for a star's existence. | (B) Einstein's formula $E=mc^2$ explains how surplus energy results in the formation of stars throughout the universe.                               |
| (C) White dwarves, such as our Sun, are the most commonly observed stage in the life cycle of a star.   | (D) The total energy created by the nuclear fusion dictates a star's lifespan, and most stars fall into the main sequence category.                  |
| (E) The Hertzsprung-Russel diagram was developed to calculate a star's mass and size, thereby indicating its approximate age.                 | (F) The level of metal-enriched content in a star indicates its age, with younger stars having a higher level of metallicity compared to older ones. |





## Outlining

### The Characteristics of Stars in Universe

#### 1 단락

##### Quantum theory

20세기 초 양자 이론의 발전

- To determine a star's characteristics

#### 2 단락

##### Nuclear reaction

항성의 핵반응

- Fusion; excess mass by helium → energy (by  $E=mc^2$ )

#### 3 단락

##### Lifespan, main sequence

항성들의 수명과 주계열성

- Lifespan on the main sequence; decided by the energy (divided by luminosity)

#### 4 단락

##### Age, metallicity

항성 연령은 금속 함유량으로 나타남

- Hertzsprung-Russel diagram, population I, II

#### 5 단락

##### Death

열에너지에 따라 항성의 색이 달라짐

- Blue → white → yellow → red(dying)

20세기 초 양자 이론의 발전으로 항성에 대한 여러 발견이 이뤄졌고 이를 토대로 우주의 본질에 대한 통찰력이 생겨났다.

## Perfect Summary

양자 역학의 발전을 통해 밝혀진 항성의 특징들을 다룬 지문이다. 즉 The 20<sup>th</sup> century witnessed extraordinary progress in our understanding of the formation and life cycles of stars로 요약될 수 있는데 총 네 단락에 걸쳐서 항성의 핵반응, 수명, 연령, 사멸의 4가지 포인트를 짚어 주고 있다.

### ❶ 틀린 정보 (NOT CORRECT)

- Ⓔ The Hertzsprung-Russel diagram was developed to calculate a star's mass and size, thereby indicating its approximate age.

(헤르츠프룽-러셀 도표는 항성의 질량과 크기를 계산해서 그 대략적인 연령을 나타내기 위해 개발되었다.)

→ 4단락에서 헤르츠프룽-러셀 도표가 항성의 질량과 크기 등과 관련이 있으나, 항성의 연령은 질량과 크기의 계산으로 나오는 것이 아니라 금속 함유량과 관련이 있다고 했다.

### ❷ 주변 정보 (MINOR)

- Ⓑ Einstein's formula  $E=mc^2$  explains how surplus energy results in the formation of stars throughout the universe.

(아인슈타인의 공식인  $E=mc^2$ 는 전 은하계에서 잉여 에너지가 어떻게 항성을 형성시키는지 설명한다.)

→ 아인슈타인 공식은 핵융합이라는 핵심 내용을 설명하기 위한 세부 정보로 간주해야 한다.

### ❸ 언급되지 않은 정보 (NOT MENTIONED)

- Ⓒ White dwarves, such as our Sun, are the most commonly observed stage in the life cycle of a star.

(태양과 같은 백색 왜성은 항성의 주기에서 가장 흔히 관찰되는 단계이다.)

→ 주기에 대한 설명 중 백색 왜성의 관찰 빈도에 대해서는 따로 언급되지 않았다.

answer 01. Ⓓ 02. Ⓑ 03. Ⓐ, Ⓓ, Ⓕ

#### \*back story | 항성의 에너지원



대부분의 항성들이 내는 빛의 에너지원이 무엇인지에 대한 궁금증이 계속 있어 왔는데 그에 관한 첫 번째 견해는 중력수축설이었다. 이는 중력위치에너지가 운동에너지로 전환될 수 있고 열에너지는 운동에너지의 한 형태라는 데 기원을 두고 있으며 중력위치에너지 변화량의 절반 가량이 공간으로 복사되어 항성의 광도로 나타난다고 보았다. 그러나 이 이론은 항성의 나이만큼 에너지가 지속될 수 없다는 문제점이 있었다. 이에 독일의 바이츠제커는 아인슈타인의 이론적 배경을 토대로 열 핵융합 반응 시 가벼운 원자핵들이 고온, 고밀도의 조건 아래 서로 충돌하여 무거운 원자핵으로 합쳐지는 과정에서 나타난 질량 결손이 복사에너지로 진화된다는 것을 알아냈다.





## practice test

>> Read passages 1 and 2 and answer the following questions.

passage 1>

### The History of the Periodic Table

Since ancient times, people have theorized that all material things are made up of a combination of substances, or elements, that cannot be broken down into simpler substances through ordinary chemistry. But it wasn't until the first scientific discovery of an individual element in 1649 by German scientist Henning Brand that a periodic table of elements began to evolve. Brand's discovery of phosphorous opened the floodgates for scientists to acquire a vast body of knowledge of the properties of elements and their compounds.

**A**The first to glimpse a semblance of order among the elements was Johann Wolfgang Dobereiner, who noted that bromine seemed to have properties halfway between those of chlorine and iodine, labeling such groups "triads." **B**This concept was furthered by French geologist A.E. Beguyer de Chancourtois, who presented a list of elements positioned on a cylinder according to increasing atomic weight. **C**This was the first major step to ordering chemical elements in a systematic way. **D**

Controversy has reigned over who should receive credit for being the "father" of the periodic table, with Germany's Lothar Meyer and Russia's Dmitri Mendeleev both producing amazingly similar results while working independently. Meyer had compiled a list of elements into a periodic table according to their atomic weights. However, before it was published in 1870, Mendeleev's 1869 work *Principles of Chemistry* revealed a more sophisticated table. Mendeleev organized the known elements according to their atomic weights too, but his table also provided information about their chemical properties. Elements with similar properties were arranged into families, appearing at regular intervals, or periodically in vertical columns. The only problem was that the table contained some gaps.

Over time, scientists began filling these blanks. In 1898, William Ramsey showed that the inert gas argon, which did not fit any of the known periodic groups, could be placed between chlorine and potassium despite its atomic weight being greater than that of potassium. Scientists soon recognized that the table's arrangement of elements in order of atomic weight was problematic, and by 1913 British physicist Henry Moseley confirmed that what really matters is not an element's atomic weight but its atomic number—the number of electrons its atom carries.

Inference

1. What can be inferred from paragraph 3 about the work of German chemist Lothar Meyer?
- (A) He had not realized that elements could be listed according to their atomic weights.
  - (B) He was able to fill in many of the gaps in Mendeleev's analysis.
  - (C) He had made similar observations about the elements as Mendeleev had.
  - (D) He had been heavily influenced by the discoveries of other chemists.

Insertion

2. Look at the four squares [■] that indicate where the following sentence could be added to the passage.

**The next two centuries saw a process of trial and error in which scientists strove to find a way to present elements in an organized fashion.**

Where would the sentence best fit?

Summary

3. **Directions:** An introductory sentence for a brief summary of the passage is provided below. Complete the summary by selecting the THREE answer choices that express the most important ideas in the passage. Some sentences do not belong in the summary because they express ideas that are not presented in the passage or are minor ideas in the passage.

**The 17<sup>th</sup> century saw the beginning of a new understanding of the elements which culminated in the development of the periodic table.**

- |   |   |
|---|---|
| <p>(A) German and French scientists developed the theory of triads to explain the significance of particular elements to scientific understanding.</p> <p>(C) German chemist Lothar Meyer was the first to realize that gaps existed in any list of elements categorized according to atomic weight.</p> <p>(E) Russian chemist Dmitri Mendeleev published the landmark periodic table in 1869 in which he organized the elements by atomic weight.</p> | <p>(B) The 18<sup>th</sup> and 19<sup>th</sup> centuries witnessed a number of scientists making new discoveries about the elements and the importance of their atomic weights.</p> <p>(D) William Ramsey demonstrated that because argon fit between chlorine and potassium, the periodic table provided a consistent explanation of all elements.</p> <p>(F) The world had to wait until the early 20<sup>th</sup> century for a more comprehensive periodic table that allowed for discrepancies in atomic weight.</p> |
|---|---|



## The History of Tallying

The origins of counting can be traced as far back as the Paleolithic period, with physical evidence suggesting that humans were using crude numbers around 30,000 BC. In prehistoric times, there was a necessity among hunter-gatherers to find a way to distinguish between one and many, whether they were dealing with days, prey, or even predators. When early man needed to express larger numbers, they began to develop early systems of tallying to denote specific quantities.

The beginnings of mathematical thought were found in the desire to count sheep and in the need to keep track of property and time. **A**One popular method was to use stones as counters, with each stone representing a single object, such as a sheep or a unit of trade. **B**For example, a flock of sheep might be kept track of by placing one small stone in a pile for each sheep as it is sent out to graze. **C**When the sheep is brought in at night, a stone could be removed from the pile. **D**

A vital clue to the nature of prehistoric mathematics was discovered in the late 1930s when a 30,000-year old wolf bone with a series of 55 carved notches was unearthed in Czechoslovakia. Typical of ancient counting systems, the wolf bone's notches were arranged into groups of five, with a second notch after the first 25 marks. This indicates that prehistoric man was counting by fives and then tallying in groups of five, making it a lot faster to count. Since nature has endowed people with five digits on each hand, "five" seems to have been the favored base system of numerals across many cultures.

As time went by, people developed tally sticks—long pieces of bone, ivory, wood, or stone—to record numbers, quantities, and even messages. The tally stick's primary function was probably to keep track of a person's possessions, whether sheep or land. Though these early tallying systems represented great advances for prehistoric man, they were limited in terms of their capacity to share information. As a consequence, people began to develop written numbers, signaling the first stage in modern numerical systems.

Inference

1. What can be inferred from paragraph 3 about prehistoric man's tallying methods?
- (A) They could not deal with objects of more than five in amount.
  - (B) They were beginning to use various symbols to represent numbers.
  - (C) They were evolving to calculate larger amounts.
  - (D) They were invented in the area around Czechoslovakia.

Insertion

2. Look at the four squares [■] that indicate where the following sentence could be added to the passage.

**Initially, tallying was done by using fingers, but soon more complex calculations were necessary.**

Where would the sentence best fit?

Summary

3. **Directions:** An introductory sentence for a brief summary of the passage is provided below. Complete the summary by selecting the THREE answer choices that express the most important ideas in the passage. Some sentences do not belong in the summary because they express ideas that are not presented in the passage or are minor ideas in the passage.

**Prehistoric people devised systems of counting more than 30,000 years ago to help them in their everyday lives.**

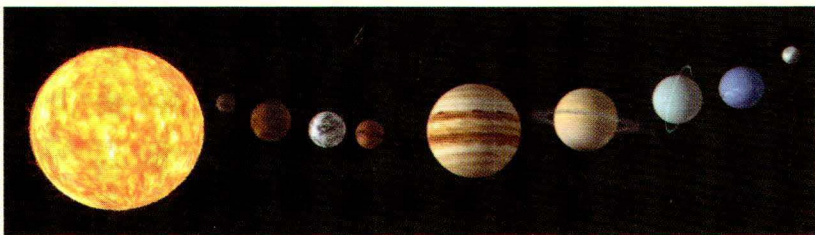
- |  |   |
|--|---|
| (A) The catalyst for forming systems of tallying was man's need to keep track of possessions and time.               | (B) Paleolithic man used piles of stones or notches on bones to signify the amount of things, such as sheep, that they owned. |
| (C) Tallying with bones always contained a system whereby people carved notches in groups of five.                   | (D) Early counting systems were not comprehensive enough to allow information to be shared among people.                      |
| (E) Man evolved to use tally sticks and numeral systems with larger bases in order to deal with larger calculations. | (F) Hunter-gatherers had devised a system of counting using tally sticks by as early as 30,000 BC.                            |



## Astronomy 천문학

우주의 다양한 천체에 대해 연구하는 학문으로 시험에서 자주 출제되는 분야 중 하나이다. 다루지는 토픽은 다양하지만 지구를 포함하고 있는 태양계와 별의 나이, 위치 측정 등과 관련된 천문학의 기본적인 토픽들을 정리해 두는 것이 좋다.

### Solar system 태양계



항성fixed star인 태양을 중심으로 총 8개의 행성planet이 돌고 있는데 먼저 태양에 근접해서 수성Mercury, 금성Venus, 지구Earth, 화성Mars과 같은 지구형 행성terrestrial planets이 공전orbit하고 그 다음에는 소행성대asteroid belt가 자리잡고 있으며 이어서 목성Jupiter, 토성Saturn, 천왕성Uranus, 해왕성Neptune과 같은 목성형 행성Jovian planets이 차례로 위치한다. 이 행성들의 궤도 바깥쪽에는 얼음덩어리로 구성된 카이퍼띠Kuiper belt가 있으며 가장 외부에는 오르트구름Oort cloud이 위치하고 있다.

반면 명왕성은 2006년까지 태양계의 9번째 행성으로 간주되었으나 명왕성과 유사한 성격을 지닌 세레스Ceres와 에리스Eris같은 별들이 속속 발견되고 자체로 궤도 부근의 카이퍼띠를 끌어당길 만한 중력gravity을 가지고 있지 않은 것으로 판단되어 세레스, 에리스와 함께 행성이 아닌 왜소행성dwarf planet으로 재분류되었다.

- 항성fixed star: 스스로 핵융합반응에 의해 에너지를 생성하여 빛을 발하는 천체를 말하며 은하계에 약 1000억 개의 항성이 있을 것으로 추정되고 있다.
- 소행성대asteroid belt: 화성과 목성 사이에서 떠돌고 있는 작은 행성들이 모여 있는 지역을 말한다.
- 카이퍼띠Kuiper belt: 해왕성 바깥 쪽에서 이 주변을 도는 작은 천체들의 집합체로 얼음과 운석으로 구성되어 있다.
- 왜소행성dwarf planet: 소행성과 행성의 중간단계 천체로 태양 주변을 돌지만 자체 중력은 없어서 주변 행성이 존재하지 않는 별이다.

### Theme Vocab

fixed star 항성

planet 행성

Mercury 수성

Venus 금성

Mars 화성

terrestrial planet

지구형 행성

asteroid belt 소행성대

Jupiter 목성

Saturn 토성

Uranus 천왕성

Neptune 해왕성

Jovian planet

목성형 행성

gravity 중력

## Terrestrial planets & Jovian planets 지구형 행성과 목성형 행성 ▶ 토플 기출 주제

위에서 살펴보았듯이 수성, 금성, 지구, 화성이 지구형 행성에 속하는데 이들은 크기가 작은 편이며 금속~~metal~~과 돌~~rock~~로 구성되어 있다. 반면 목성, 토성, 천왕성, 해왕성은 목성형 행성으로 분류되며 크기가 큰 편이고 얼음~~ice~~과 가스~~gas~~로 이루어져 있다. 지구형 행성과 목성형 행성은 각각 형성되는 과정에서 유사점이 있는 것으로 추정되며 이 중 생명체가 존재하는 곳은 지구뿐인 것으로 확인되고 있다.

## Comet, Coma, Tail 유성, 코마, 꼬리 ▶ 토플 기출 주제



태양계의 외곽에 존재하는 오르트구름~~Oort cloud~~에서 태양계 내의 중력~~gravity~~이나 섭동~~perturbation~~을 받아 태양계 내로 진입한 천체이다. 혜성은 얼음과 먼지로 구성된 핵~~nucleus~~ 주변을 코마~~coma~~로 불리는 대기가 감싸고 있으며 이 주위를 다시 수소운이 감싸고 이동 중에는 꼬리~~tail~~를 가지는 것이 특징이다. 코마는 태양에 가까워짐에 따라 얼음이 녹으면서 형성되며 수소운은 코마의 주성분인  $H_2O$ 가 분해되면서 형성된 것이다.

▪ 섭동~~perturbation~~: 행성이 다른 천체의 힘에 의해 궤도~~orbit~~를 벗어나는 것을 말한다.

## Lunar crater 달의 분화구 ▶ 토플 기출 주제



달의 표면~~moon's surface~~은 굉장히 울퉁불퉁~~uneven~~한 형태를 취하고 있는데 이는 표면에 위치한 수많은 분화구~~crater~~ 때문이다. 이들 구멍들은 지구의 화산 구멍과 달리 화산폭발~~volcanic eruption~~에 의해 형성된 것이 아니라 소행성~~asteroid~~이나 혜성~~comet~~과의 충돌~~impact~~에 의해 형성된 것이라는 의견이 지배적이다. 이 충돌분화구~~impact crater~~는 거의 일정한 속도로 생겨나기 때문에 지역당 분화구의 수가 그 지대의 나이를 짐작하게

~~estimate~~ 해 주는 역할을 하기도 한다.

## Location of stars 별의 위치

별의 위치를 구별하는 데는 몇 가지 방법이 있지만 우선 별의 밝기~~luminosity~~로 구별이 가능하다. 별의 밝기를 결정짓는 요소는 별의 원래 밝기와 지구로부터의 거리인데, 어떤 별이 육안으로 밝게 보인다고 하더라도 별 자체가 밝아서라기보다 지구와의 거리가 가깝기 때문일 수 있으며, 실제로 희미하게 보이는 별들도 실제로는 밝으나 몇 광년~~light year~~ 더 멀리 떨어져 있기 때문일 수 있다는 가능성을 염두에 두어야 한다. 별의 밝기는 등급으로 구분되는데 대개 육안으로 볼 수 있는 별의 밝기는 6등급까지이며 최근 허블망원경의 발명으로 보다 정확하게 별의 위치를 측정할 수 있게 되었다.

## Theme Vocab

~~perturbation~~ 섭동

~~nucleus~~ 핵

~~orbit~~ 궤도

~~impact crater~~ 충돌분화구

~~luminosity~~ 밝기

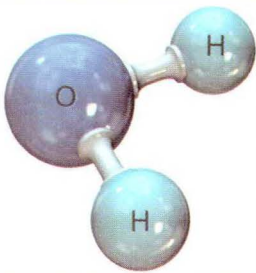
~~light year~~ 광년

- 허블망원경Hubble telescope: 일반 고성능 망원경의 해상도보다 10~30배, 감도는 50~100배 이상으로 빅뱅big bang 이후의 5억 년 전 빛부터 지금 도착한 빛까지를 포착할 수 있는 고성능 망원경이다.

## Chemistry 화학

물질의 조성이나 구조를 다루는 학문으로 다양한 화학 반응과 관련된 내용들이 자주 출제되고 있으며 지문 곳곳에서 화학식이 등장하므로 기본적인 개념을 정리해 두는 것이 좋다.

### Atom and molecule 원자와 분자



원칙적으로 원자atom는 물질의 가장 기본적 단위이지만 실제로 물질이 구성될 때는 다른 종 또는 같은 종의 원자가 결합하여 분자molecule 단위로 물질을 구성한다. 가장 대표적인 예로 물과 산소를 들 수 있는데 이들의 구성을 보면 수소hydrogen 원자 2개와 산소oxygen 원자 1개가 결합한 물분자가 물의 최소 구성 단위가 되며 산소 원자 2개가 결합된 산소 분자로 산소가 구성된다. 분자는 물질의 안정성

stability을 보장하는 최소 단위로 분자 내에 변화가 생길 경우 물질의 속성은 변화를 겪게 되는데 분자에 가해진 변화로 발생하는 변화를 화학 변화라고 부른다.

### Nitrogen fixation 질소고정

▶ 토를 기술 주제

대기 중의 비활성 분자 상태inert molecular form의 질소를 암모니아ammonia나 질산염nitrate처럼 생리적으로 이용할 수 있는 질소화합물nitrogen compounds로 전환하는convert 것을 말한다. 질소고정의 방법에는 생물학적 고정biological fixation과 화학적 고정chemical fixation의 두 가지 방법이 있다.

- 생물학적 고정biological fixation: 생물체에 의한 질소대사의 한 과정으로 질소동화nitrogen assimilation라고도 불린다. 질소고정 세균을 비롯한 식물의 뿌리혹박테리아 등에 의해서 발생하며 대기 중의 비활성 질소를 환원시켜 최종적으로는 아미노산 상태로 만든다. 질소고정을 하는 생물은 주로 식물이나 미생물로, 무기물에서 유기물을 생성하지 못하는 동물에게서는 잘 발생하지 않는다.
- 화학적 고정chemical fixation: 생물체에 의해 발생하는 것이 아닌 경우로 자연적인 번개의 공중방전spark discharge이나 화학적인 공중질소고정에 의한 것 등이 있다.

### Theme Vocab

atom 원자

molecule 분자

inert 비활성의

compound 혼합물, 화합물

convert 전환하다

assimilation 동화

spark discharge 공중방전

철<sup>iron</sup>은 비용 대비 강도가 높아 다양한 용도로 사용되는 금속<sup>metal</sup>이다. 순수한 상태의 철은 부드럽기 때문에 주로 강철<sup>steel</sup>의 형태로 사용되는데 철은 탄소<sup>carbon</sup>의 함유량과 몇 가지 특징에 따라 다음 세 가지로 나눌 수 있다.

- 주철<sup>cast iron</sup>: 가장 가공이 되지 않은<sup>crude</sup> 상태로 순도가 낮은<sup>impure</sup> 철이다. 탄소 함유량이 셋 중 가장 높다.
- 연철<sup>wrought iron</sup>: 탄소함유량이 0.25% 상태로 강하지만 두드려 펴기 쉬운<sup>malleable</sup> 상태이다.
- 강철<sup>carbon steel</sup>: 탄소함유량이 0.02%에 불과하며 가장 사용하기 좋은 상태의 철로 약간의 망간<sup>manganese</sup>과 황<sup>sulfur</sup>을 함유하고 있다.

철로 만들어진 금속합금<sup>metal alloy</sup>의 가장 큰 단점은 녹<sup>rust</sup>이 슴다는 것인데 이것을 방지하기 위해서 아연도금<sup>galvanization</sup>, 플라스틱 코팅<sup>plastic coating</sup> 등의 다양한 방법이 사용된다.

## Energy 에너지

최근에는 석탄이나 석유와 같은 화석 연료 에너지<sup>fossil fuel energy</sup>의 고갈에 대비하고, 보다 청정한 에너지를 확보하기 위한 노력으로 다양한 대체에너지<sup>alternative energy</sup>가 개발되고 있는 추세이며 이와 관련된 지문들이 자주 등장한다. 시험에서는 생물연료<sup>biofuel</sup>를 이용한 에너지 자원과 풍력<sup>wind power</sup>에 대한 지문이 나왔다. 최근에 각광받고 있는 재생에너지 중 대표적인 것을 정리하면 다음과 같다.

- 풍력 에너지<sup>wind power</sup>: 풍력발전기<sup>wind turbines</sup>의 날개를 회전시키면서 얻는 에너지를 전기로 변환한다. 비용이 적게 들고 보조 전력<sup>backup power</sup>이 필요할 때 특히 효과적이다.
- 태양열 에너지<sup>solar power</sup>: 집열판<sup>solar pond</sup>이 흡수한 태양의 복사열<sup>radiant</sup>을 전기에너지로 변환하여<sup>convert</sup> 저장해 두고 이용한다.
- 지열 에너지<sup>geothermal power</sup>: 지표<sup>Earth's surface</sup> 아래 저장되어 있는 열을 이용하는 것으로 대부분의 지열 에너지는 간헐천<sup>geyser</sup> 지역에서 활발하게 이용이 가능하다.



### Theme Vocab

cast iron 주철  
wrought iron 연철  
metal alloy 금속합금  
galvanization 아연도금  
alternate energy 대체에너지  
biofuel 생물연료  
wind turbine 풍력발전기  
backup power 보조 전력  
radiant 복사열  
geothermal 지열의  
geyser 간헐천

# day 21

# human

- ✚ speed keyword
- case example
- ★ smart solution
- ▣ practice test
- ✱ smart source

speed

# keyword

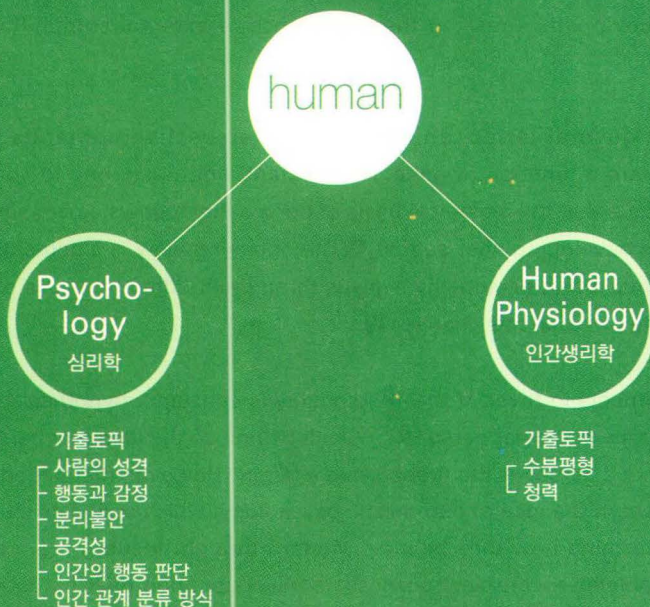


human

*"It all depends on how we look at things, and not on how they are themselves."*

- Carl Jung (1875 - 1961)

인간의 정신과 육체를 다루는 심리학과 생리학적 주제에 대한 내용도 토플 지문으로 등장한다. 특히 심리학은 자주 출제되는 분야 중 하나인데 인간의 행동과 성격, 인간 관계 등에 대한 지문이 출제되었고 육체의 기능적 부분을 연구하는 생리학 관련 기출 토플도 정리해 두는 것이 좋다.





## case example

>> Read the passage and answer the following questions.

### TOEFL Reading passage

[review](#) | [help](#) | [back](#) | [next](#)

#### How Human Personality Develops

Human personality can be thought of as an organized or dynamic set of traits or dispositions that influences the way a person feels, thinks, and acts in various situations. Traditionally, personality traits were considered to be relatively constant qualities across time and situations. People believed that personality was mainly dependent on genetic factors, but nowadays most scientists believe that personality and disposition are a combination of situational influences and biological factors that create behavior, thought, and emotion specific to an individual.

Throughout history, a range of theories have been proposed to explain the human personality. Most 20<sup>th</sup>-century thought was influenced by the work of Sigmund Freud, who divided the human personality into three components: the id, the ego, and the superego. Freud and his supporters believed that personality is dependent on early childhood factors and mostly established by age five. In contrast, Carl Jung and his followers put forward the concept of behaviorism, stressing the importance of external stimuli in the formation of personality.

**A**In more general terms, an essentialist perspective contends that personality characteristics are a function of genetics, constant, and not prone to social influences. **B** Essentialists argue that the biological basis of personality follows a path similar to that of the body and stops developing after age 30. **C**The opposing view is a contextualist one, whose supporters maintain that personality evolves throughout different stages of life and changes as a person's life or social role changes. **D**

Other arguments in favor of the "personality is constant" hypothesis range from God's role in **bestowing** a particular personality on all beings, to the idea that personality correlates to whether or not a person is the first born in a family. However, many modern psychologists have moved toward the idea of humanistic psychology, which suggests that people have the free will to determine how they behave. Modern thought focuses more on the "Big Five" factors—agreeableness, conscientiousness, extraversion, neuroticism, and openness—all of which change over time, if less so after people reach 30.

Vocab

1. The word **bestowing** in paragraph 4 is closest in meaning to

(A) accepting  
(B) imparting  
(C) designing  
(D) allowing

Insertion

2. Look at the four squares [■] that indicate where the following sentence could be added to the passage.

**Modern studies seem to support the latter view, as marital and employment statuses, as well as physical and psychological health, all affect personality development in profound ways.**

Where would the sentence best fit?

Summary

3. **Directions:** An introductory sentence for a brief summary of the passage is provided below. Complete the summary by selecting the THREE answer choices that express the most important ideas in the passage. Some sentences do not belong in the summary because they express ideas that are not presented in the passage or are minor ideas in the passage.

**Changes in human behavior throughout life have given rise to many different theories concerning the development of human personality.**

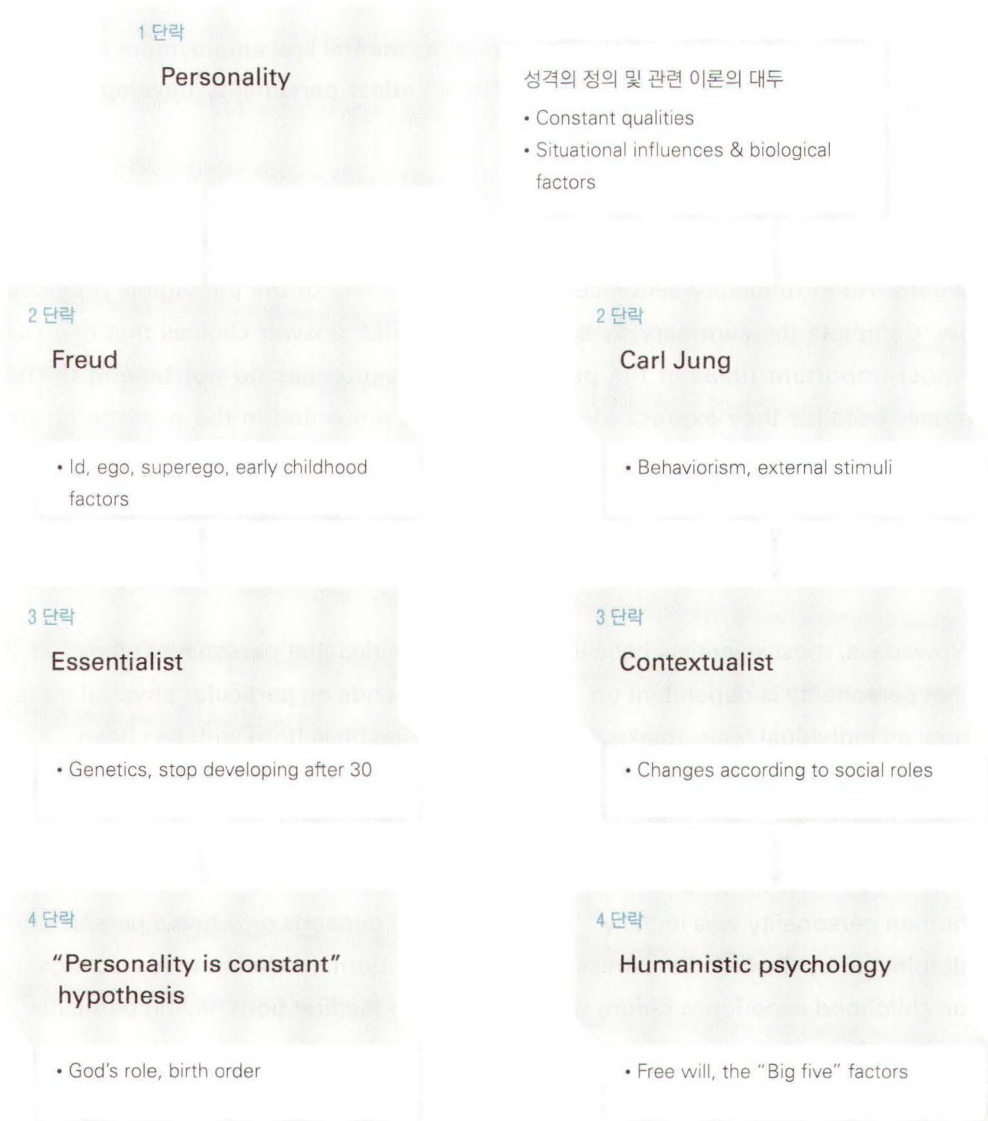
- |  |   |
|--|---|
| (A) Nowadays, most scientists believe that personality is dependent on how an individual feels, thinks, and responds to a current situation they are experiencing.           | (B) The idea that personality type depends on particular physical traits a person is born with has been supported since the establishment of philosophy.            |
| (C) Twentieth-century thought on human personality was initially dominated by the Freudian stress on childhood experience before Jungian behaviorism arrived.                | (D) Many people believe that personality type depends on when a person was born in relation to his siblings, with the first born having particular characteristics. |
| (E) The fundamental gap in opinions of human personality lies between the essentialist view of constancy and the idea that social factors influence personality development. | (F) Modern ideas have focused on intrinsic personality factors that a person can influence, though many people believe such influence diminishes after 30.          |





## Outlining

### The Theoretical Development of Human Personality



인간의 사고나 행동에 영향을 주는 특징이나 기질의 집합체인 성격은  
시대의 흐름에 따라 여러 가지 이론으로 발달되어 왔다.

## Perfect Summary

인간의 성격에 대해 다루고 있는 지문으로 성격은 일정 기간이 지나면 고정된다는 입장과 처한 환경에 따라 변화하고 다르게 나타난다는 대립적인 입장을 역사적인 영향 관계 속에서 서술하고 있다. 이 지문의 전체적인 내용을 포괄하는 도입문은 “Changes in human behavior throughout life have given rise to many different theories concerning the development of human personality.”로 정리할 수 있다.

### ❶ 틀린 정보 (NOT CORRECT)

- Ⓐ Nowadays, most scientists believe that personality is dependent on how an individual feels, thinks, and responds to a current situation they are experiencing.  
(오늘날 대부분의 과학자들은 개인들이 어떻게 느끼고, 생각하며, 처한 현 상황에 어떻게 대응하는가에 따라 성격이 좌우된다고 믿는다.)

→ 1단락에서 현대 과학자들은 성격을 상황적 영향과 생물학적 요인 간의 결합으로 보았다.

### ❷ 언급되지 않은 정보 (NOT MENTIONED)

- Ⓑ The idea that personality type depends on particular physical traits a person is born with has been supported since the establishment of philosophy.  
(성격 타입은 타고 난 특정한 신체적 특성에 달려있다는 생각이 철학의 확립 이후 지지를 받아 왔다.)

→ 성격을 유전의 기능으로 본 것은 본질주의적 관점이나 철학의 확립 이후 지지를 받았다는 내용은 없다.

### ❸ 주변 정보 (MINOR)

- Ⓓ Many people believe that personality type depends on when a person was born in relation to his siblings, with the first born having particular characteristics.  
(많은 사람들은 성격 타입이 형제 자매들과 비교해서 그 사람이 언제 태어났는지에 달려있고, 맏이들이 특정한 특징을 가지고 있다고 믿는다.)

→ 성격에 대한 여러 관점의 예를 드러낸 4단락 첫 부분의 내용이지만, 현대의 이론은 인간성 심리학이 주류라고 했으므로 부수적인 정보로 볼 수 있다.

answer 01. Ⓑ 02. Ⓓ 03. Ⓒ, Ⓔ, Ⓕ

\*back story

#### 프로이트의 성격구조



프로이트는 성격을 원초아(id), 자아(ego), 초자아(superego)의 세 가지 구조로 정의하였다. 원초아(id)란 성격의 원초적이고 본능적 요소로 생물학적 충동(수면, 섭취, 배설, 성욕 등)을 즉시 만족시키려는 욕구이다. 자아(ego)는 현실과 상황에 따라 작동되는 성격의 의사결정 요소로 원초아(id)와 현실 사이를 중재하는 역할을 하며 사회적 요소를 고려해 행동을 결정하게 한다. 초자아(superego)는 가치관, 선과 악, 규범 등의 사회적 기준을 통합하는 성격의 요소로 도덕성을 추구한다. 프로이트는 인간의 행동이란 이 세 가지의 구성요소가 상호작용한 결과라고 보았다.





## practice test

>> Read passages 1 and 2 and answer the following questions.

passage 1>

### Separation Anxiety

Separation anxiety is a stage in a child's development when being separated from their primary caregiver typically leads to crying and distress. This condition usually affects babies from about eight months old, reaching its most intense level between one and two years, though it can begin after just three months.

In the early stages of their lives, babies cannot really tell the difference between those taking care of them and can be soothed by any calming person. After three months, however, babies begin to understand the concept of object permanence—that there is only one of everything, and if it goes away it may not come back—and this causes anxiety. They start to become aware of familiar faces and places and will exhibit happiness upon seeing a parent or distress when they leave.

Between about three and six months, a baby becomes aware of strangers, and this can lead to a condition called stranger anxiety. Again, this is related to the development of the realization of object permanence. If a baby is separated from a parent and introduced to a stranger, anxiety will follow. That is why it is important for parents to interact in a calming manner with their baby when a stranger enters a room.

**A** Separation anxiety can manifest itself in many ways. **B** Babies may experience headaches or stomachaches when anticipating separation, or they may simply not want to lose sight of their parents. **C** When parents need to go out, they should leave their babies with people they are familiar with, such as relatives, or familiarize their baby with an alternative caregiver while in the parent's presence. **D**

Separation anxiety usually reaches a peak between 9 months and 1 year, when a child's awareness often becomes so acute that any unwanted separation can cause an instant negative reaction. However, through a gradual process of acclimation, infants begin to understand that such separations are generally temporary. By the time of their 2<sup>nd</sup> birthday or shortly afterwards, most children begin to actually enjoy having some autonomy over their own actions and rarely feel anxious about being separated from their parents.

- Fact**
1. According to paragraph 2, what is the most notable feature of babies after three months?
- (A) They begin to recognize strangers.
  - (B) They become aware of what object permanence means.
  - (C) They don't realize whoever take care of them.
  - (D) They start to show intense anxiety when left alone.

- Insertion**
2. Look at the four squares [■] that indicate where the following sentence could be added to the passage.

**The key to tackling such behavior is to minimize separations, particularly if the infant appears worried or anxious.**

Where would the sentence best fit?

- Summary**
3. **Directions:** An introductory sentence for a brief summary of the passage is provided below. Complete the summary by selecting the THREE answer choices that express the most important ideas in the passage. Some sentences do not belong in the summary because they express ideas that are not presented in the passage or are minor ideas in the passage.

**Separation anxiety is a natural stage in the development of children in which being apart from their caregivers can lead to anguish.**

- (A) After three months, a baby will be sufficiently aware of his or her surroundings to identify where things should be.
- (B) In the initial three months of a baby's life, he or she is unaware of the uniqueness of objects and therefore does not panic when away from a parent.
- (C) When a child becomes aware of the permanence of certain things, they will feel distressed if they lose sight of a parent.
- (D) Separation anxiety is most severe from 9 months to 1 year, but it slowly becomes less acute until, at around the age of 2, children become more independent.
- (E) Parents should have a baby become familiar with aunts, uncles, and grandparents so he or she can feel comfortable when separated from a parent.
- (F) After a baby reaches two years of age, he or she will not suffer the same level of anxiety in the presence of strangers as before.



## Lengthening the Human Life Span

Much debate has arisen among scientists as to whether aging is a type of “disease” that may be curable, allowing extension of human life through scientific methods. Some researchers, known as life extensionists, contend that aging is simply an accumulation of damage to cells and tissue and that advanced technology can fix this damage, thus greatly extending life span. Their primary strategy is to apply currently available anti-aging measures in the anticipation of a complete cure to aging becoming available in the near future. Other biogerontologists, however, argue that this is wishful thinking.

In the 1930s, scientists discovered that supplying rodents with a carefully balanced but calorie-restricted diet allowed them to live longer, healthier lives than their counterparts on a normal diet. This practice of calorie restriction has subsequently been shown to extend the maximum life span of numerous species, including yeast, fruit flies, and even monkeys. In rodents, an approximately 50% extension of life span is linked to a 50% restriction of calories from the amount freely-feeding animals consume. Nevertheless, some critics have argued that these results only apply to short-lived species, not humans.

To date, most anti-aging measures have focused on the use of nutritional supplements, primarily antioxidant supplements, to extend life span. These aim to tackle free radicals—molecules with an unpaired electron that take an electron from another molecule, which in turn becomes unstable and causes cells to function abnormally. Specifically, these free radicals are active forms of oxygen that can destroy cells from within, damaging DNA molecules and preventing repair. The free radical theory claims that these oxygen radicals cause many of the bodily changes associated with aging. Unfortunately, adding antioxidants to diets has not demonstrated any effects on aging.

With the recent discovery of genes that protect us from aging, many biogerontologists and life extensionists believe that advances in the fields of biogerontology and bioengineering will eventually eliminate all aging and disease, as well as allowing for complete rejuvenation to a youthful condition. Though these genes have yet to be controlled in such a way as to reverse the inevitable mortality rate associated with aging, it's possible that the future may see scientists manipulating some genes so people age more slowly.

Reference

1. The word their in the passage refers to
- (A) biogerontologists
  - (B) scientists
  - (C) rodents
  - (D) lives

Rhetorical

2. Why does the author mention electrons in paragraph 3?
- (A) To point out why DNA affects how people age differently
  - (B) To identify the most important contributor to the aging process
  - (C) To illustrate a treatment proven to increase human life span
  - (D) To explain how free radicals contribute to the aging process

Vocab

3. The word manipulating in the passage is closest in meaning to
- (A) creating
  - (B) altering
  - (C) removing
  - (D) maintaining

Negative Fact

4. According to the passage, all of the following have been suggested as ways to combat aging EXCEPT
- (A) maintaining a strict diet
  - (B) increasing active oxygen
  - (C) controlling certain genes
  - (D) ingesting antioxidants



## Psychology 심리학

심리학은 동물의 행동이 실험 대상이 되는 경우도 있으나 본질적으로 인간의 마음과 행동을 연구 대상으로 하는 학문으로 지각<sup>perception</sup>, 인지<sup>cognition</sup>, 감정<sup>emotion</sup>, 성격<sup>personality</sup>, 행동<sup>behavior</sup>, 인간 관계<sup>interpersonal relationship</sup> 등이 주요한 연구 대상이다. 실제 시험에 이러한 내용을 다루는 지문들이 자주 등장하며 학과에 따라 연구 대상에 대한 접근 방식이나 연구의 대상 자체가 다른 경우가 많으므로 심리학의 발전 맥락에서 중요한 역할을 한 연구 방법론을 간단하게 정리해 두는 것이 좋다.

### Methodology 심리학적 방법론

인간의 마음에 대한 연구는 고대부터 진행되어 왔지만 학문적 체계를 갖추고 성장하게 된 것은 19세기 후반으로 이 무렵에 프로이트의 정신분석<sup>psychoanalysis</sup>이 등장하여 인간의 무의식<sup>unconsciousness</sup>에 대한 본격적인 연구가 시작되었다. 이후 행동주의<sup>behaviorism</sup>와 실존주의<sup>existentialism</sup> 철학의 배경을 지닌 인본주의적 방법론<sup>humanism</sup>이 대두되었고 컴퓨터의 발달과 함께 정보의 획득과 처리에 초점을 맞추는 인지주의<sup>cognitivism</sup>가 등장하였다.

#### ■ 행동주의<sup>behaviorism</sup>

종래의 심리학이 인간의 의식<sup>consciousness</sup>을 연구 대상으로 삼았다면 행동주의의 경우 객관적으로 관찰 가능한 행동<sup>behavior</sup>만을 연구 대상으로 삼았다는 것이 가장 큰 특징이다. 심리학의 객관성 확보를 주장한 스키너<sup>Skinner</sup>를 비롯한 일군의 행동주의자들은 인간의 감정<sup>feeling</sup>, 욕구<sup>needs</sup>, 동기<sup>motivation</sup>와 같은 내적 요소가 아닌 외부 자극<sup>stimulus</sup>에 대한 반응<sup>response</sup>을 관찰함으로써 이론을 발전시켰다. 이들에게 조건과 반응의 연결을 촉진시키는 수단인 강화<sup>reinforcement</sup>는 핵심 개념으로 등장한다.

#### ■ 인본주의<sup>humanism</sup>

인간의 자아실현 욕구에 초점을 맞추는 심리학적 방법론으로 매슬로우<sup>Maslow</sup>의 욕구계층이론<sup>Hierarchy of Needs</sup>이 그 배경이 되었다. 이들은 행동주의 심리학이 개인의 감정과 욕구를 무시한 점을 비판하며 인간의 잠재력 개발과 자아실현 욕구를 강조했다.

#### ■ 인지주의<sup>cognitivism</sup>

1950년대까지 행동주의 심리학이 주류를 이루었다면 그 이후 현재까지는 인지주의적 방법론이 널리 지지를 얻고 있다. 인지주의자들은 기억<sup>memory</sup>, 언어습득<sup>language acquisition</sup>의 과정 등을 주요 연구 대상으로 삼았는데 기본적으로 지식의 획득 과정인 인지과정에 관심을 두었다. 피아제<sup>Piaget</sup>의 인지발달단계 이론이 대표적이다.

### Theme Vocab

perception 지각  
cognition 인지  
emotion 감정  
personality 성격  
behavior 행동  
interpersonal relationship 인간 관계  
consciousness 의식  
stimulus 자극  
response 반응  
reinforcement 강화  
Hierarchy of Needs 욕구계층이론  
language acquisition 언어습득

## Personality 사람의 성격

▶ 토를 기출 주제

사람의 성격이 변하지 않는다고 보는 결정론determinism은 유전heredity적 요소를 강조하는 입장이다. 하지만 행동주의자들은 성격을 외부 환경environment으로부터 주어지는 자극에 따라 유동적인 것으로 보며 개인과 환경의 상호작용mutual interaction적 측면을 강조했다. 인지주의자들 역시 세계에 대한 인지나 기대expectation에 따라 행동은 달라지므로 성격은 기억memory과 감정emotion이 환경과 뒤섞여 나타난다고 보았다.

## The judgment of human behavior 인간 행동의 판단

▶ 토를 기출 주제

사람들은 타인의 행동을 판단할 때 그 사람의 주변 상황은 고려하지 않고 단지 그 사람의 성격 때문에 특정한 행동을 한다고 보는 경우가 많다. 하지만 실제로는 특정 상황이 특정 행동을 유발시키는 경우도 많은데, 특정 행동이 성격에 의한 것인지 상황에 의한 것인지 구별하기 위해서는 관찰대상이 그 행동을 하지 않기 위해서 취하는 방법을 주의 깊게 살펴볼 필요가 있다.

### ■ 신생아 행동의 관찰

신생아들의 반응은 여러 가지로 해석될 여지가 많기 때문에 심리학적 실험을 하는 것이 매우 힘들다. 어떤 물체를 따라서 눈동자가 움직인다는 것이 관찰되었다고 하더라도 눈동자의 움직임이 바로 그 물체 때문인지를 확인하기가 쉽지 않기 때문이다. 따라서 최근에는 이런 난점을 보완하기 위해서 녹화를 통한 관찰이라든가, 심박동수heart rate 측정, 뇌의 반응 기록 등의 방법이 병행되고 있다.

## Human Physiology 인체생리학

앞서 살펴본 심리학과 상호 보완의 관계에 있는 생리학은 육체의 기능적 측면을 연구하는 학문으로 동·식물 모두가 연구 대상이 될 수 있지만 실제 시험에서는 인체 작용이나, 인체 각 기관별 기능을 다룬 인체생리학이 자주 출제되었다.

## Water balance 수분평형

▶ 토를 기출 주제

수분평형이란 생물체가 1일 섭취하거나 체내에서 생성한 수분량은 피부와 배설물을 통해 배설된 수분량과 거의 동일하여 항상성을 유지한다는 말이다. 하지만 체내에 새로운 수분이 보충되지 않고 유실될 경우 사람은 탈수 증상dehydration을 보일 수 있으나 사람의 경우 15% 이상, 여타 동·식물들은 50~90%의 물을 잃어도 생존할 수 있고 신진대사metabolism에 큰 지장은 없다. 다만 염분을 과잉 섭취할 경우 체내의 세포 삼투압osmotic pressure이 증가하므로 갈증에 시달리게 된다.

- 탈수dehydration: 탈수로 인한 수분이 고갈된 상태를 말한다.
- 신진대사metabolism: 영양분 섭취 → 새로운 물질로 전환 → 에너지의 생산으로 반복해서 순환하는 과정이다.
- 삼투압osmotic pressure: 수분 순도를 유지하려는 작용으로 여과filtering의 기조가 된다.

### Theme Vocab

determinism 결정론

heredity 유전

mutual interaction  
상호작용

metabolism 신진대사

osmotic pressure 삼투압

filtering 여과

## TOEFL Reading passage

review | help | back | next

passage 1&gt;

## Stage Lighting Craft

- 1 Dazzling sets and actors' performances may be the components of theatre that stand out most in the minds of audiences, but neither of these two essential elements are complete without the lighting that illuminates the stage. In theatre, stage lighting plays a central and versatile role as it thoroughly affects the way an audience experiences and interprets information. One of its most basic functions is to provide visibility in a darkened theatre so the performance can be observed clearly by the audience. However, stage lighting accomplishes many other objectives beyond the simple need for visibility.
- 2 **A**One way stage lighting adds to a performance is by creating an impression of time and place, simulating sources of illumination that are appropriate to a setting. **B**Firelight, lamplight, and sunlight are forms of lighting that may be necessary to provide natural illumination for a set, but there are also times when less realistic lighting is warranted. **C**In these instances, stage lighting can be used to emphasize abstraction, surrealism, minimalism, or other characteristics that may alter the audience's perception of time and place.**D**
- 3 → The aesthetic arrangement of elements on a stage, called composition, is vital to a performance and another way stage lighting enhances a scene. By varying the brightness and focus of the stage lights, they can create balance and emphasis at specific locations on the stage. A further crucial function of this lighting is the evocation of moods. Psychologically, different types of lighting are associated with different emotions and states of mind. For instance, colored lighting is used frequently, with blues conveying a sense of calm or sadness, reds expressing anger or danger, and yellows hinting at warmth or joy. Horror, sadness, excitement, and a wide range of other emotional states can be conveyed through stage lighting alone, thus creating a compelling experience.
- 4 → Due to the subtle nature of stage lighting objectives, lighting designers must use light sources that can be precisely controlled to make fine adjustments. While fluorescent lights are the most efficient type of light bulb, they are seldom used for stage purposes because they cannot be dimmed without the use of special equipment. Also, fluorescent bulbs take several seconds to warm up to

work, so in performances requiring lighting to be frequently turned on, off and altered, they are impractical. In general, tungsten halogen light bulbs are the preferred choice as stage lights because they do not have the same limitations as fluorescent lights.

5 → The main instrument used in stage lighting is the spotlight. There are several types, but the most common one is called the Ellipsoidal Reflector Spotlight(ERS), which is broadly applied to fulfill many stage lighting needs. The ERS can be positioned anywhere, from the back of the theatre to the front of the stage, and can be adjusted to brighten the entire stage or emit a narrow beam by sliding a patterned metal plate called a “gobo” across the front. Another type of spotlight that sees frequent use in stage lighting is the Followspot. As the name suggests, it is a moving spotlight that provides additional emphasis and focuses the audience’s attention on a particular performer or to a specific place. Both these spotlights, ranging from illuminating an entire scene to drawing the eye to a precise spot, are indispensable apparatuses that help realize the objectives of stage lighting.

6 As technology further develops, there will be exciting new changes to the mechanizations of stage lighting. It is a fast-evolving field that has seen a number of innovations in the recent past. Fiber optics have been developed that are now able to transfer both light and data simultaneously, and a new generation of light sources are being looked into, like Xenon, Metal Halide, Fluorescent, Induction, and Sulfur lamps. These advancements provide great hope for the future of entertainment lighting design, and offer up the potential of some day being able to control stage lights with perhaps just our voices or minds.

1. The word **Dazzling** in the passage is closest in meaning to

- Ⓐ dreadful
- Ⓑ realistic
- Ⓒ splendid
- Ⓓ expensive

2. The word **warranted** in the passage is closest in meaning to

- Ⓐ reduced
- Ⓑ admired
- Ⓒ controlled
- Ⓓ needed



3. In paragraph 3, why does the author mention colored lighting?

- Ⓐ To show how directors highlight certain parts of the stage
- Ⓑ To illustrate how stage lighting can evoke emotions
- Ⓒ To provide an example of effective composition
- Ⓓ To demonstrate recent innovations in stage lighting

**Paragraph 3 is marked with an arrow [→].**

4. The word compelling in the passage is closest in meaning to

- Ⓐ powerful
- Ⓑ undeniable
- Ⓒ obvious
- Ⓓ irreplaceable

5. Which of the sentences below best expresses the essential information in the highlighted sentence in the passage? *Incorrect* choices change the meaning in important ways or leave out essential information.

- Ⓐ Special equipment is employed to increase the efficiency of fluorescent lights.
- Ⓑ Fluorescent bulbs, despite their effectiveness, are rarely used in theaters as they require additional equipment to create effects.
- Ⓒ The efficiency of fluorescent light bulbs is reduced when they are dimmed frequently during a production.
- Ⓓ Fluorescent lighting has such a wide-range and is so efficient, it is often used without the assistance of special equipment.

6. The paragraph 4 discusses the light bulbs used in stage lighting in relation to all of the following EXCEPT

- Ⓐ their general efficiency
- Ⓑ the amount of time it takes for them to warm up
- Ⓒ the speed with which they can be dimmed
- Ⓓ their adjustability in brightness

**Paragraph 4 is marked with an arrow [→].**

7. What can be inferred from paragraph 5 about the Ellipsoidal Reflector Spotlight?

- Ⓐ It is the most expensive piece of stage lighting equipment.
- Ⓑ It is bolted down to the most advantageous location near the stage.
- Ⓒ Its popularity is related to its versatility.
- Ⓓ It requires a patterned gobo to be effective.

**Paragraph 5 is marked with an arrow [→].**

8. According to paragraph 5, moving spotlights are primarily used to

- Ⓐ light the edges and corners of the stage, where actors are rarely positioned
- Ⓑ illuminate any characters that are in motion during a scene
- Ⓒ highlight events that occur off the stage area
- Ⓓ draw the attention of the audience to certain details

**Paragraph 5 is marked with an arrow [→].**



9. The word indispensable in the passage is closest in meaning to

- Ⓐ necessary
- Ⓑ regular
- Ⓒ enormous
- Ⓓ desirable

10. The word It in the passage refers to

- Ⓐ technology
- Ⓑ lighting
- Ⓒ Fiber optics
- Ⓓ data

11. Look at the four squares [■] that indicate where the following sentence could be added to the passage.

**For example, the lighting in a scene that takes place at night should appear to be produced by moonlight.**

Where would the sentence best fit?

Click on a square [■] to add the sentence to the passage.

12. **Directions:** An introductory sentence for a brief summary of the passage is provided below. Complete the summary by selecting the THREE answer choices that express the most important ideas in the passage. Some sentences do not belong in the summary because they express ideas that are not presented in the passage or are minor ideas in the passage. *This question is worth 2 points.*

**Stage lighting contributes to an audience's experience of a performance and is therefore quite fundamental in theater.**

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#### Answer Choices

- |  |   |
|--|---|
| <p>(A) Making the stage visible is one of the simplest functions of stage lighting, but it is by no means the only purpose of lighting design.</p>                       | <p>(B) Above all, lighting designers must ensure that the lighting that appears on stage comes from realistic sources, like lamps, a fire, or the sun.</p>  |
| <p>(C) Stage lighting has several objectives, some of which include the expression of time and place, the organization of a composition, and the creation of a mood.</p> | <p>(D) A sense of calm or sadness, anger or danger, and warmth or joy can be conveyed respectively through the use of blue, red, yellow colored lights.</p> |
| <p>(E) Fiber optics and new light source developments ensure that the future for stage lighting is unlimited and may result in marvelous new technologies.</p>           | <p>(F) Meeting the objectives of stage lighting is made possible by instruments like tungsten halogen light bulbs, ERSs, and followspots.</p>               |

Drag your answer choices to the spaces where they belong. To remove an answer choice, click on it. To review the passage, click **View Text**.



passage 2&gt;

## Typewriter

- 1 While it is now hard to imagine a world without computer word processors, it is worth remembering that even the computer's predecessor, the typewriter, is a relatively new technology. The first usable model was not invented until the mid-nineteenth century, in America. The large discrepancy in time between the invention of Johann Gutenberg's fifteenth century printing press and the typewriter is largely due to the lack of need for a personal typewriter. Labor was cheap and abundant, whereas machines were expensive. Only once industrial production was automated and widespread was the time right for typewriters to play a functional role in society.
- 2 → There were many claims from all over the world to the invention of the first typewriter. For example, an Italian inventor created a prototype typewriter in 1851, and in 1861, a Brazilian priest fashioned his own "machine" out of very rudimentary materials like wooden knives. However, the first officially recognized typewriter came from Milwaukee, Wisconsin in 1868. A local publisher, Christopher Latham Sholes, who was also a politician, and two others, Carlos Glidden and Samuel Soule, began to attempt developing a machine that would print numbers consecutively on the pages of a book. After Glidden suggested focusing on reproducing letters of the alphabet, Sholes later built the first prototype of his typewriter. This first typewriter could only print the letter "W," but the crucial point was that it printed these Ws as quickly as Sholes could press the key.
- 3 → After continuous tinkering and testing, Sholes and his associates created the world's first practical typewriter. It could operate faster than a person could write, and the letters were all legible. In addition, it was superior to all the other claimed "first typewriter" apparatuses because it had a shift key, meaning both cases of each letter could be used, whereas the other early typewriter models allowed only capital letters.
- 4 → What was most innovative about Sholes' model was its unique QWERTY layout. Previous unofficial typewriters had keyboards outfitted in alphabetical order. **A** Typewriters have letters engraved on the end of a metal key, and when you typed the letter, the metal key would spring up, press down on an ink ribbon, and then print the letter on the paper. **B** Often times, with the initial alphabetic keyboard layout, if the letters were typed too quickly, the keys would get stuck or jammed. **C** To remedy this, Sholes rearranged the keyboard to place the most common pairs of letters far apart. **D** Although it no longer serves such a

practical purpose, with typewriters all but obsolete, QWERTY is still the universal layout today for computer keyboards.

- 5 → The first commercially produced typewriters debuted quietly. Sholes, Glidden, and Soule sold the patent for their typewriter to the company Denmore and Yost, who then partnered up with the Remington and Sons Company, a sewing machine manufacturer that had previously employed Sholes. Production began at Sholes and Glidden Typewriters on March 1<sup>st</sup>, 1873, in New York. These typewriters were only sold to businesses in the U.S. and the lackluster sales can be attributed to prevailing attitudes. Many companies felt that a letter to a customer had to be hand written, and that typed correspondence would be too impersonal and rude. Once typewriters hit the commercial market for home use, too, only 5,000 were sold in the first five years. However, by the turn of the century, typewriters had grown in popularity as first businesses, then individuals, began to use it for daily correspondence.
- 6 → The widespread adoption of typewriters in businesses was one of the key factors that ushered in a new era for working women. While not the sole factor for social change, the typewriter was a strong contributor to the feminization of office work. Previously, the world of business and commerce had been exclusively male. However, with many men drafted to fight in the Civil War, and with the increasing specialization of office work and division of labor, women were being hired as secretaries and “typewriters.” At the time, organizing, typing and answering calls were tasks that women were considered to be capable of performing, so employers were happy for women to handle these particular roles. Moreover, working-class women relished the opportunity to leave their factory jobs, as office work was cleaner, less physically demanding, and higher-paying. By 1890, 64 percent of stenographers were women.

1. The word discrepancy in the passage is closest in meaning to

- Ⓐ difference
- Ⓑ overlap
- Ⓒ calculation
- Ⓓ resemblance



2. In paragraph 2, why does the author put quotation marks around the word, "machine"?

- Ⓐ To lend support to this claim of the first typewriter
- Ⓑ To dismiss the story of the Brazilian priest and his typewriter
- Ⓒ To raise doubt about the true definition of a machine
- Ⓓ To suggest a real machine ought to contain mechanics

**Paragraph 2 is marked with an arrow [→].**

3. The word crucial in the passage is closest in meaning to

- Ⓐ negligible
- Ⓑ key
- Ⓒ urgent
- Ⓓ subordinate

4. According to paragraph 3, what was the main advantage of Sholes, Glidden and Soule's typewriter over other early prototypes?

- Ⓐ It produced writing that was clear and legible.
- Ⓑ It accommodated both upper and lower case letters.
- Ⓒ It operated faster than any other model on the market.
- Ⓓ It incorporated a separate set of keys for capitals.

**Paragraph 3 is marked with an arrow [→].**

5. The word apparatuses in the passage is closest in meaning to

- Ⓐ theories
- Ⓑ devices
- Ⓒ inventors
- Ⓓ imitations

6. The word **this** in the passage refers to
- Ⓐ The original keyboard layout
  - Ⓑ The letters being typed too quickly
  - Ⓒ The keys getting jammed or stuck
  - Ⓓ The rearrangement of the keyboard
7. According to paragraph 4, how does Sholes' legacy still affect our world today?
- Ⓐ Typewriters are still being used in particular vocations.
  - Ⓑ He invented the computer keyboard.
  - Ⓒ His keyboard layout is the most widely used.
  - Ⓓ Smaller versions of his original typewriter are very popular.

**Paragraph 4 is marked with an arrow [→].**

8. In paragraph 5, the author says that companies were initially reluctant to use typewriters because
- Ⓐ writing correspondence by hand was still quicker and more convenient
  - Ⓑ contemporary social standards did not allow business letters to be typed
  - Ⓒ the devices were regarded as items for home use rather than business use
  - Ⓓ few workers had the specialized skills required to use the new equipment

**Paragraph 5 is marked with an arrow [→].**

9. The word lackluster in the passage is closest in meaning to

- Ⓐ short-term
- Ⓑ low
- Ⓒ reasonable
- Ⓓ scornful

10. According to paragraph 6, what can be inferred about women who worked in offices?

- Ⓐ They soon outnumbered males in most offices.
- Ⓑ They worked longer hours than factory laborers.
- Ⓒ They were limited to working in secretarial roles.
- Ⓓ They had the same employment conditions that men did.

**Paragraph 6 is marked with an arrow [→].**

11. Look at the four squares [■] that indicate where the following sentence could be added to the passage.

**The new arrangement meant it took longer to type, ensuring that the keys would not get stuck.**

Where would the sentence best fit?

Click on a square [■] to add the sentence to the passage.

12. **Directions:** An introductory sentence for a brief summary of the passage is below. Complete the summary by selecting the THREE answer choices that express the most important ideas in the passage. Some sentences do not belong in the summary because they express ideas that are not presented in the passage or are minor ideas in the passage. *This question is worth 2 points.*

**Despite early unfavorable response, typewriters marked the beginning of a sweeping modern change that revolutionized industry and social history.**

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#### Answer Choices

- |   |   |
|---|---|
| <p>(A) The typewriter created by Sholes, Glidden, and Soule was actually based on designs previously made by Brazilian and Italian inventors.</p> <p>(C) Sholes created the QWERTY keyboard layout for his typewriter by separating commonly typed letters, thus inventing the first functional machine of its kind.</p> <p>(E) The typewriter helped open the door for women to begin entering office jobs as typists and secretaries.</p> | <p>(B) Sholes and his associates initially sought out to create a machine that could print numbers consecutively for the pages of a book.</p> <p>(D) The first typewriters were distributed by a sewing machine company and had poor sales initially, because many people still preferred handwritten notes and letters at the time.</p> <p>(F) The QWERTY keyboard layout continues to be the universal standard today for computer users.</p> |
|---|---|

Drag your answer choices to the spaces where they belong. To remove an answer choice, click on it. To review the passage, click **View Text**.

passage 3&gt;

**Convergences and Divergences in the Oceans**

- 1 → The waters of the world's oceans are constantly on the move, driven by a number of different currents and intermixing with one another as they travel the globe. Most obvious among them are currents that move horizontally, which are powered by the wind, differences in temperature and salinity, the tides, as well as other diverse factor. These include the Gulf Stream, which transports tropical seawater and warmth from the Gulf of Mexico north to the west coast of Europe and is responsible for that continent's temperate climate. Yet, there are also forces that move the ocean's waters vertically, and these currents are no less important in determining the attributes present in particular oceanic environments. The phenomena that set the vertical currents in motion are known as convergences and divergences.
- 2 → A convergence occurs at the meeting point of two masses of water flowing towards each other. Because not all of the water can remain on the same horizontal plane, some of it is forced downwards in a type of current known as downwelling. At the ocean's surface, a convergence is most likely to be caused by the pressure exerted by the wind as it drives two bodies of water together. On the other hand, deeper incidents, which occur beyond the reach of the wind's power, are attributed to the meeting of water masses with different temperatures and salinities. The colder and saltier the water, the heavier it is, so it will sink under a body of water that is warmer or has lower salinity.
- 3 → Exemplifying this phenomenon is the Antarctic Convergence, a borderline encircling the continent of Antarctica where frigid waters flowing north meet and sink beneath the warmer waters contained in the southernmost portions of the Atlantic, Pacific, and Indian Oceans. **A** The average position of the Antarctic Convergence is 54 degrees south of the equator, nearly parallel with the tip of South America. **B** Water temperature on one side of the line will typically be five to ten degrees Fahrenheit warmer or cooler than that on the other side. **C** The result is a dramatic difference in the types of marine life observed on either side of the boundary, as well as in weather patterns. **D**
- 4 → Conversely, the phenomenon that takes places when two bodies of water move away from each other is called a divergence. The sudden departure of surface water at the site of a divergence leads to an upwelling of water from greater depths to take its place. The equator is the most common location at which a divergence will occur, and the effect observed here looks much like a convection current caused when liquid is heated and circulates. Currents driven

by easterly winds along the equator run in the opposite direction to the Earth's rotation, creating a resistance force which can drive water northwards on the northern side of the equator and southward on the southern side, parting the water at the equatorial line and forming a divergence. A related phenomenon frequently transpires along the edges of large landmasses. By the momentum of the winds, the rotation of the Earth, and other influential forces, water can be pushed away from the coastlines, creating a divergence that draws up deeper water to replace it.

- 5 → Divergences are essential for maintaining the marine life inhabiting the uppermost layers of the oceans. Deep ocean water tends to be rich in nutrients, due to its slow accumulation of decaying matter that filters down from above. When an upwelling current resulting from a divergence transports this deep water to the surface, the combination of abundant nutrients and sunlight promotes the growth of phytoplankton, which are the base of the oceanic food chain. As coastal divergences are common along the west coast of North and South America, fishermen in these regions have taken advantage of the phenomenon by creating some of the world's most productive fisheries. In fact, it is estimated that upwelling currents in divergent zones are responsible for half of the world's total fish catch. Another effect of the cold water brought to the surface at a divergence is the moderation or even outright prevention of hurricanes and cyclones, which are energized by warm surface waters.

1. According to paragraph 1, the world's oceans

- (A) exchange water with each other
- (B) have roughly the same salinity
- (C) each produce different currents
- (D) dictate the patterns of the winds

**Paragraph 1 is marked with an arrow [→].**

2. The word **These** in the passage refers to

- (A) currents that induce horizontal movement
- (B) differences in temperature and salinity
- (C) tropical seawater and warmth
- (D) forces that move the ocean's waters vertically



3. The word **exerted** in the passage is closest in meaning to

- Ⓐ magnified
- Ⓑ closed
- Ⓒ applied
- Ⓓ counted

4. In paragraph 2, the author says that convergences in deep water are caused by

- Ⓐ a downwelling current cutting through the horizontal plane of a body of water
- Ⓑ the compound impact of strong winds on the surface water above
- Ⓒ pressure that builds up on bodies of water at great depths
- Ⓓ disparities in temperature and salinity between two large accumulations of water

**Paragraph 2 is marked with an arrow [→].**

5. Based on the information in paragraph 3, what can be inferred about the Atlantic, Pacific, and Indian Oceans?

- Ⓐ They are directly affected by changes in Antarctica.
- Ⓑ They contain the coldest water of any oceans.
- Ⓒ They share a common border at the Antarctic Convergence.
- Ⓓ Their waters are all approximately the same temperature.

**Paragraph 3 is marked with an arrow [→].**

6. All of the following are mentioned in paragraph 3 as differences found on either side of the Antarctic Convergence EXCEPT

- Ⓐ trends in the weather
- Ⓑ the temperature of the ocean
- Ⓒ plant and animal species
- Ⓓ the direction of water flow

**Paragraph 3 is marked with an arrow [→].**

7. Which of the sentences below best expresses the essential information in the highlighted sentence in the passage? *Incorrect* choices change the meaning in important ways or leave out essential information.

- Ⓐ Divergences are more likely to form on the northern side of the equator than they are on the southern side.
- Ⓑ Equatorial divergences, where a body of water is divided in two, are created by powerful currents that move through this part of the globe.
- Ⓒ A wind-driven current flowing counter to the planet's rotation can create a divergence by pushing water directly away from the equator in both hemispheres.
- Ⓓ Wind blowing in various directions sometimes contains enough force to separate a body of water at the equator, forming a divergence.

8. The word **transpires** in the passage is closest in meaning to

- Ⓐ locates
- Ⓑ arises
- Ⓒ determines
- Ⓓ reveals

9. How does the author introduce the idea of equatorial upwelling in paragraph 4?

- Ⓐ By providing a well-known example of the effect
- Ⓑ By likening it to a familiar scientific concept
- Ⓒ By theorizing about the specific locations where it occurs
- Ⓓ By comparing it to something from daily life

**Paragraph 4 is marked with an arrow [→].**



10. According to paragraph 5, why are fisheries on the west coast of the Americas so productive?

- Ⓐ There is more decaying matter at the surface.
- Ⓑ They receive more sunlight than fisheries elsewhere.
- Ⓒ The waters have a steady supply of phytoplankton.
- Ⓓ They are sheltered from normal coastal upwelling.

**Paragraph 5 is marked with an arrow [→].**

11. The word moderation in the passage is closest in meaning to

- Ⓐ avoidance
- Ⓑ slowing
- Ⓒ development
- Ⓓ likeness

12. Look at the four squares [■] that indicate where the following sentence could be added to the passage.

**Antarctic waters continue northward at great depths to surface elsewhere in the world, part of the global system of currents.**

Where would the sentence best fit?

Click on a square [■] to add the sentence to the passage.

13. **Directions:** Complete the table by matching the phrases below. Select the appropriate phrases from the answer choices and match them to the ocean phenomenon to which they relate. TWO of the answer choices will NOT be used. *This question is worth 3 points.*

Drag your answer choices to the spaces where they belong. To remove an answer choice, click on it. To review the passage, click **View Text**.

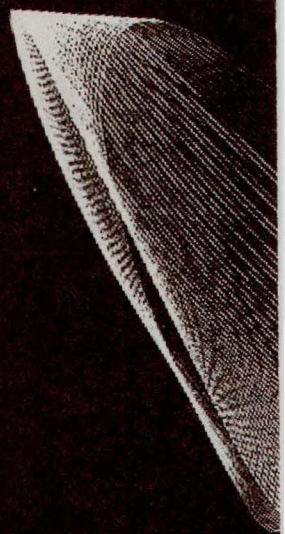
#### Answer Choices

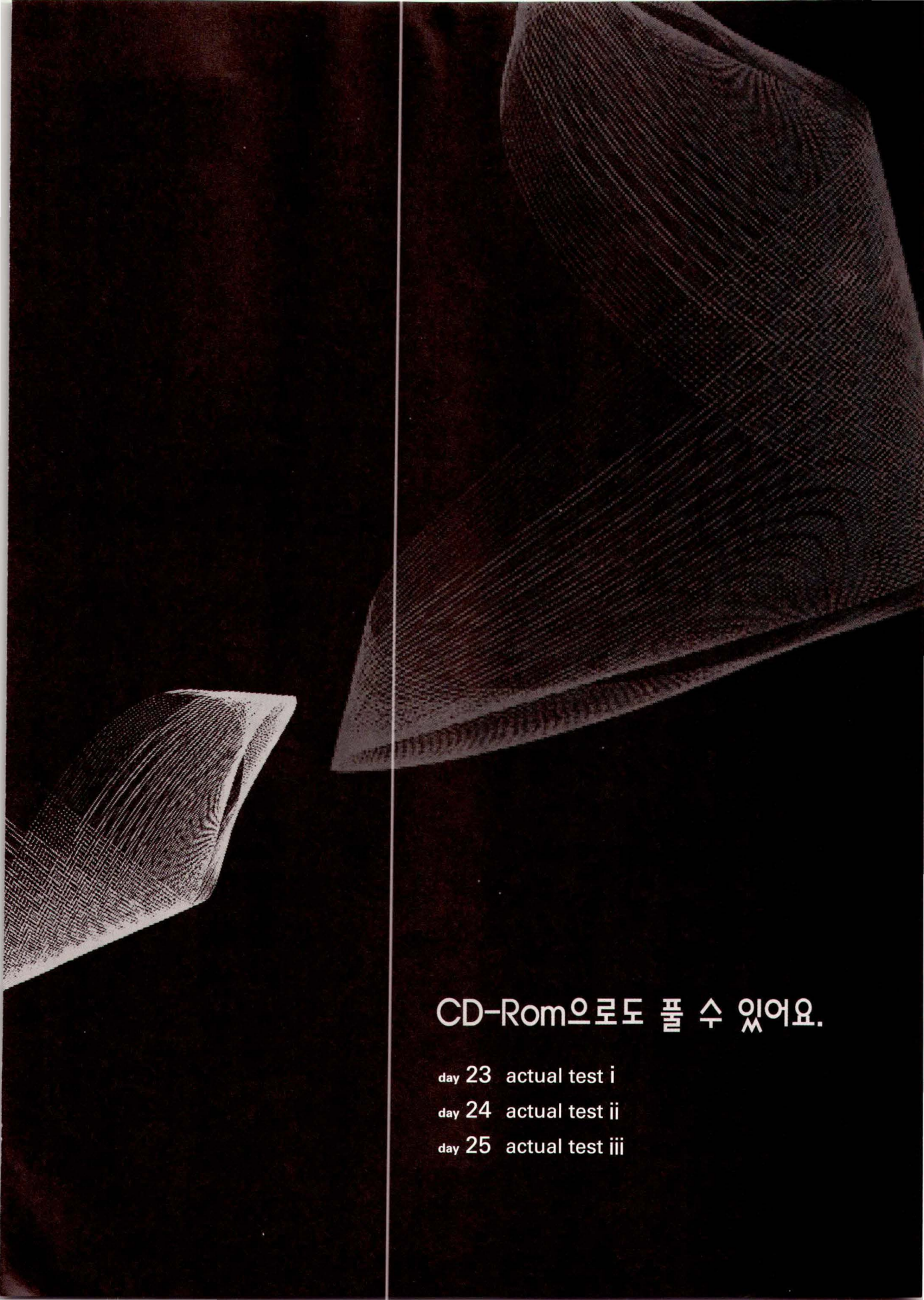
- |   |             |
|---|-------------|
| Ⓐ causes water from deeper regions to rise to the surface         | Convergence |
| Ⓑ is most often observed causing downwelling near the equator     | •           |
| Ⓒ results in colder or saltier water being drawn downwards        | •           |
| Ⓓ can inhibit certain violent weather events                      |             |
| Ⓔ forms a border between oceans in the southern part of the globe | Divergence  |
| Ⓕ drives water from the Gulf of Mexico to the European coast      | •           |
| Ⓖ often occurs near continents                                    | •           |



# actual training

실전 문제





CD-Rom으로도 풀 수 있어요.

day 23 actual test i

day 24 actual test ii

day 25 actual test iii

Part 1

TOEFL Reading passage

review | help | back | next

time 00:20:00

**Film Exchanges in America's Early Movie Industry**

- 1 → Motion pictures were exhibited to the public in the late 1800s, though the first device to accomplish this would seem very unfamiliar to today's movie-going audiences. Thomas Edison's 1893 Kinetoscope was little more than a wooden box with a small glass window. Intended only for individual viewing, it housed a roll of film, a mechanical device to circulate the film, and a small light to illuminate it. A person would peer through the window and watch a short moving sequence, usually just a depiction of an everyday event or the performance of an acrobat or dancer. Needless to say, the medium's ability to serve only one customer at a time severely limited its profitability.
- 2 → Everything changed two years later with the advent of projection, by which a much larger film image could be shown to multiple viewers simultaneously. The Lumière brothers of France were the first to introduce this new technology with a projection machine called a cinematograph. Edison was quick to follow their lead and created his Vitascope projector in late 1895. With the potential to make money by charging admission to movies now within reach, the innovators of the film industry were ready to expand their business ventures.
- 3 → There were two industry models in practice during the early 1900s. A handful of successful firms, such as the Biograph Company, owned the equipment to make their own films as well as the venues in which to display them. Such companies were rare, however; most films were shown by independent exhibitors. These included traditional theater owners, who added short film presentations to their programs of live-action entertainment, and traveling cinema exhibitors, who moved from town to town to reach new audiences, often following circuits established by rural fairs. They typically purchased films directly from the production companies that made them, paying a set price per foot of film regardless of its content. Because movies of the time were never longer than one or two minutes, it was feasible to buy them outright. However, this system failed to attract significant audiences as the public soon tired of the small stock of films exhibitors had to offer, and the reels of film themselves deteriorated quickly through repeated transport and screening in traveling cinema shows.

- 4 → Things changed again when producers began increasing the length of their films in order to tell more complex stories. Longer films entailed higher prices, and it became difficult for small-scale exhibitors to purchase them. This, in turn, prevented production studios from creating as many movies as they could, since they had no one to sell them to. It was precisely this dilemma that gave rise to the film exchange. An early version of a motion-picture distributor, film exchanges were responsible for bridging the gap between production and exhibition. They financed production studios, giving them the funds they needed to film more movies. Then, they purchased these films and rented them out to exhibitors around the country for a fraction of what it would have cost the exhibitors to purchase the films themselves.
- 5 → The film-exchange system revolutionized the industry, greatly benefiting all parties involved. **A** Film rentals allowed exhibitors to show a wide variety of movies and gave them constant access to new films so they could change their programs frequently. **B** This led to the rise of what we now know as the movie theater, a venue dedicated solely to the public exhibition of films. **C** Film exchanges made money by taking a percentage of ticket sales, and the production studios were paid by the exchanges. **D** Moreover, as a result of the increase in revenue that came as movies gained popularity, the studios began to focus on elevating the quality of their products.
- 6 → Many historians view the development of film exchanges as the single most important factor in the transformation of the film industry from an entertainment novelty to a major business. After 1920, independent exchanges grew scarcer as a few corporations succeeded in capturing control of the production, distribution, and exhibition of films. Yet many of the practices established by film exchanges prior to the 1920s are still used today by the most successful Hollywood distributors.

1. The word *it* in the passage refers to

- (A) device
- (B) film
- (C) window
- (D) sequence



2. In paragraph 1, the author states that Kinetoscope films

- Ⓐ offered a limited range of subject matter
- Ⓑ required patience from the viewer
- Ⓒ were projected on a glass surface
- Ⓓ received acclaim from the general public

**Paragraph 1 is marked with an arrow [→].**

3. Based on the information in paragraph 1 and paragraph 2, what can be inferred about the cinematograph and the Vitascope projector?

- Ⓐ They were greatly influenced by Edison's earlier inventions.
- Ⓑ They both were very different from today's projection devices.
- Ⓒ Their inventors worked together to create them.
- Ⓓ They both made more money than the Kinetoscope had.

**Paragraph 1 and paragraph 2 are marked with arrows [→].**

4. Why does the author mention the Biograph Company?

- Ⓐ To identify the most successful company in the film industry at the time
- Ⓑ To describe an exception to a trend in film exhibition in the early 1900s
- Ⓒ To discuss the first addition of films to traditional entertainment programs
- Ⓓ To illustrate the model on which most other small film companies were based

5. The word circuits in the passage is closest in meaning to

- Ⓐ traditions
- Ⓑ assemblies
- Ⓒ rules
- Ⓓ routes

6. According to paragraph 3, how was the price of a film determined?

- Ⓐ By the physical proportions of the film itself
- Ⓑ By the popularity of the film's content
- Ⓒ By the success of the film in the past
- Ⓓ By the distance exhibitors had to travel to buy it

**Paragraph 3 is marked with an arrow [→].**

7. Which of the sentences below best expresses the essential information in the highlighted sentence in the passage? *Incorrect* choices change the meaning in important ways or leave out essential information.

- (A) The lack of variety and short life of film reels prevented the industry from experiencing real success.
- (B) In order to attract larger audiences to their showings, exhibitors needed to expand their stocks of films.
- (C) Due to difficulties transporting the films long distances, traveling cinemas were not commercially successful.
- (D) The public soon began demanding higher-quality films, but most exhibitors were unable to obtain them.

8. The word *entailed* in the passage is closest in meaning to

- (A) founded
- (B) contained
- (C) required
- (D) allowed

9. What can be inferred from paragraph 4 about film exchanges?

- (A) They charged high rental prices for the films they owned.
- (B) They possessed large amounts of startup capital.
- (C) They participated in both production and exhibition.
- (D) They broadened the market for films overseas.

**Paragraph 4 is marked with an arrow [→].**

10. In paragraph 5, the author suggests that the rise in profits that came with the success of movies

- (A) led to an improvement in the overall quality of films
- (B) was captured primarily by the film exchanges
- (C) pressed studios to keep the production quota
- (D) was most beneficial to film exhibitors

**Paragraph 5 is marked with an arrow [→].**



11. According to paragraph 6, what caused the disappearance of film exchanges?

- Ⓐ The increased profitability of the film industry
- Ⓑ A shift in preference toward Hollywood distributors
- Ⓒ The formation of corporate film monopolies
- Ⓓ A decline in the quality of their services

**Paragraph 6 is marked with an arrow [→].**

12. Look at the four squares [■] that indicate where the following sentence could be added to the passage.

**Nickelodeons, so named because the cost of admission was a nickel, appeared first, but fancier exhibition halls opened to suit bigger audiences and more refined tastes.**

Where would the sentence best fit?

Click on a square [■] to add the sentence to the passage.

13. **Directions:** An introductory sentence for a brief summary of the passage is provided below. Complete the summary by selecting the **THREE** answer choices that express the most important ideas in the passage. Some sentences do not belong in the summary because they express ideas that are not presented in the passage or are minor ideas in the passage. ***This question is worth 2 points.***

**During the early years of America's film industry, several changes took place in attempts to make films more profitable.**

- 
- 
- 

#### Answer Choices

- |  |   |
|--|---|
| <p>(A) Thomas Edison's Kinetoscope holds the distinction of being the first device ever created that could exhibit motion-picture films to an audience.</p> <p>(C) In the early 1900s, theater owners and traveling exhibitors purchased films directly from the studios but enjoyed little success in displaying them to the public.</p> <p>(E) Early film exchanges would rent out exhibition halls, giving a cut of the ticket sales to both the theater owner and the film production company.</p> | <p>(B) Due to the obvious limitations of the Kinetoscope, it was the introduction of projection that first gave businessmen hopes of making money from showing movies.</p> <p>(D) The audiences' demand for more elaborate stories resulted in longer films, which meant that most exhibitors could no longer afford to buy them outright.</p> <p>(F) The creation of film exchanges gave exhibitors access to a steady stream of films and enabled the industry to grow.</p> |
|--|---|

Drag your answer choices to the spaces where they belong. To remove an answer choice, click on it. To review the passage, click **View Text**.



You have seen all of the questions in this part.  
You can review your work if there's time remaining  
or you can continue to the next part.



### Two Types of Social Groups

- 1 → One of the most basic elements of human life is the way in which we form social groups and interact with the members of those groups. According to sociologists, no one is ever entirely separate from the social networks that surround him or her, and the groups we belong to play an enormous role in determining how we see ourselves and our world. Early American sociologist Charles H. Cooley(1864–1929) defined two principal categories of human groupings, and his ideas are still widely accepted today. He termed them primary and secondary, based on the kinds of relationships individuals in the group share with each other.
- 2 → In primary groups, we form what Cooley referred to as primary relationships. These are marked by strong, long-lasting emotional ties, feelings of intimacy and genuine concern for the well-being of the other person or people. Intangible items, such as love, respect, and support, are exchanged by individuals in primary groups, causing them to feel nurtured by the relationships the group affords them. Participation in the group is therefore seen as its own reward; there is no concrete, external goal that members are working towards.
- 3 → Due to the time and effort it takes to build such close bonds, primary groups are typically small. Some prominent examples given by Cooley include families, groups of childhood friends, and the tight-knit communities adults enter into with their neighbors or other close peers. In the view of Cooley and later sociologists, it is the primary group that is most important in the development of an individual's personal beliefs and values, and assists that person with his or her integration into society at large.
- 4 Secondary groups, in contrast, are characterized by the lack of intimate relationships among their members. These secondary relationships involve less personal interaction and weaker emotional connections, and therefore they do not have as significant an impact on the development of an individual's worldview. In addition, since ties between individuals are not as strong, many secondary groups either exist for only a short time before dissolving, or experience frequent changes in membership.
- 5 → Secondary groups can be quite large. A company's employees, a university's student body, and even a country's citizens are all examples of

secondary groups. **A**The items individuals exchange are usually tangible in nature, such as the labor provided in return for wages in the case of a commercial organization. **B**Most notably, though, the reason that secondary groups form in the first place is to accomplish a specific task. **C**Employees participate in the secondary group of their company with the intention of creating a product or service, as well as to receive pay. **D**If the group fails to achieve its goal, it will most likely cease to exist.

6 → Cooley believed that both primary and secondary groups are universal to human societies. While modern sociologists agree with this, they have also observed that the ratio of primary to secondary groups varies according to the level of a society's technological development. In less-developed nations, individuals spend most of their lives in a single location with prolonged exposure to a certain group of people. This enables them to develop close bonds more easily, so primary groups are commonplace. Developed countries, on the other hand, have witnessed an increase in secondary groups at the expense of primary groups. The fast pace, widespread technology and diversity of life in these societies make it harder for people to connect emotionally with each other. Instead, innovations such as Internet chat rooms and convenient transportation have expanded the number of secondary groups that people in developed societies belong to.

7 While the effects of such a loss of primary groups is not yet fully understood, some researchers believe it explains many of the social problems faced by such societies. The role that primary groups play in social and emotional development is so important that, if traditional primary groups fail to provide individuals with an environment in which they can experience this growth, they may seek it elsewhere. The formation of street gangs, the use of illegal drugs, and other detrimental lifestyles seen in developed societies may represent failed attempts to fill the void left by the disappearance of primary groups.

1. According to paragraph 1, how did Cooley differentiate between primary and secondary groups?
- (A) By using definitions formulated by earlier American sociologists
  - (B) By focusing on the types of interactions displayed by group members
  - (C) By assigning values to groups based on their role in personal development
  - (D) By comparing the types of roles they play in society

**Paragraph 1 is marked with an arrow [→].**



2. It can be inferred from paragraph 2 that the typical primary group
- Ⓐ cannot supply everything an individual needs to be happy
  - Ⓑ contains members that are emotionally healthy
  - Ⓒ remains together for a long period of time
  - Ⓓ does not encourage the formation of relationships outside the group

**Paragraph 2 is marked with an arrow [→].**

3. The word **affords** in the passage is closest in meaning to
- Ⓐ lends
  - Ⓑ provides
  - Ⓒ costs
  - Ⓓ teaches
4. In paragraph 3, the author states that primary groups are largely responsible for
- Ⓐ shaping how their members relate to their social environment
  - Ⓑ making sure societies work together towards a common goal
  - Ⓒ forming organizations that undertake community development
  - Ⓓ introducing new sets of beliefs and values to human society

**Paragraph 3 is marked with an arrow [→].**

5. The word **dissolving** in the passage is closest in meaning to
- Ⓐ returning
  - Ⓑ settling down
  - Ⓒ arguing
  - Ⓓ breaking up
6. Why does the author mention labor and wages in paragraph 5?
- Ⓐ To suggest that commercial entities are different from most secondary groups
  - Ⓑ To explain the reason why most secondary groups exist
  - Ⓒ To contrast these resources with tangible items found in secondary groups
  - Ⓓ To characterize the nature of exchanges within secondary groups

**Paragraph 5 is marked with an arrow [→].**

7. According to paragraph 6, one similarity between primary and secondary groups is that they both

- Ⓐ give rise to technological development
- Ⓑ are absent in less-developed nations
- Ⓒ can be observed in all kinds of societies
- Ⓓ are essential to the health of societies

**Paragraph 6 is marked with an arrow [→].**

8. The word **them** in the passage refers to

- Ⓐ less-developed nations
- Ⓑ individuals
- Ⓒ bonds
- Ⓓ primary groups

9. The phrase **at the expense of** in the passage is closest in meaning to

- Ⓐ along with
- Ⓑ regardless of
- Ⓒ among
- Ⓓ in place of

10. What can be inferred from paragraph 6 about a society with a high level of technological advancement?

- Ⓐ Its primary groups are concerned mainly with acquiring material goods.
- Ⓑ It is less common for people to commit to primary or secondary groups.
- Ⓒ It allows its citizens to join more primary groups than those of other societies.
- Ⓓ Its people form secondary groups more often than primary groups.

**Paragraph 6 is marked with an arrow [→].**



11. Which of the sentences below best expresses the essential information in the highlighted sentence in the passage? *Incorrect* choices change the meaning in important ways or leave out essential information.

- (A) The primary group, representing a safe and loving environment, enables individuals to express themselves freely and grow emotionally.
- (B) Most of the traditional primary groups in a society are no longer able to offer their members emotional well-being.
- (C) It cannot be overlooked that belonging to primary groups is a necessary part of every individual's developmental processes.
- (D) Individuals will seek vital emotional fulfillment in other social environments if their customary primary groups cannot supply it.

12. The word **detrimental** in the passage is closest in meaning to

- (A) harmful
- (B) recent
- (C) diverse
- (D) worrying

13. Look at the four squares [■] that indicate where the following sentence could be added to the passage.

**Similarly, individuals may join a community sports club with the sole purpose of getting in shape or improving their athletic skills.**

Where would the sentence best fit?

Click on a square [■] to add the sentence to the passage.

14. **Directions:** Complete the table by matching the phrases below. Select the appropriate phrases from the answer choices and match them to the type of group to which they relate. TWO of the answer choices will NOT be used. ***This question is worth 4 points.***

Drag your answer choices to the spaces where they belong. To remove an answer choice, click on it. To review the passage, click **View Text**.

#### Answer Choices

- |  |                  |
|--|------------------|
| Ⓐ do not play an important role in forming a person's value system | Primary groups   |
| Ⓑ increase in frequency as the average age of a society increases  | •                |
| Ⓒ provide members with emotional support                           | •                |
| Ⓓ come together to pursue a common and clearly identified goal     | •                |
| Ⓔ are more easily found in less developed countries                | Secondary groups |
| Ⓕ witness exchanges of items that cannot be quantified             | •                |
| Ⓖ are often large but short-lived                                  | •                |
| Ⓗ are responsible for a country's level of development             | •                |
| Ⓘ exist more frequently in regions where people do not travel      |                  |



### The Mediterranean's Killer Algae

- 1 → Today there are many invasive species threatening ecosystems all over the world, but few are of as much concern as *Caulerpa taxifolia*. This species of green algae grows in long, thin blades similar in appearance to sea grass. Each individual alga is single-celled, with a length of up to a meter, they are some of the largest cells in the world. Algae contain chlorophyll and produce their own food through photosynthesis. Also they reproduce asexually, meaning that if an alga is cut in two each half will develop into a whole new organism.
- 2 → *Caulerpa taxifolia*'s native habitats are the tropical waters of the Caribbean, south Pacific, east Atlantic, and Indian Ocean. However, in the 1970s, a new strain was bred in Europe to decorate exhibits in saltwater aquariums. The strain proved useful for this purpose, for it was able to grow more quickly, form denser patches, and tolerate a greater temperature range—from 10 to 31 degree Celsius—than the original. Created in Germany, the improved algal strain was distributed in 1980 to, among other facilities, the Oceanographic Museum in Monaco, a tiny country on the French coast. Four years later, a sample of the algae escaped the museum and began to grow on the seafloor just outside.
- 3 → By 1989, this small sample had turned into a 2.2-acre field of *Caulerpa taxifolia*. **A**It continued to spread rapidly throughout the Mediterranean, appearing at locations up to 350 kilometers from Monaco in 1991, and by 1994 it had arrived in the waters of Italy, Croatia, and Spain. **B**Officials in the region, however, were slow to respond. **C**Their delays allowed the species to develop a strong foothold in the Mediterranean, and the invasion reached global proportions when the algae were spotted off the coasts of California in 1998 and Australia in 2000. **D**
- 4 → Dubbed “killer algae” by many scientists, the aquarium strain of *Caulerpa taxifolia* poses a whole host of threats to the areas it colonizes. Its rapid, dense growth patterns enable it to successfully out-compete all native varieties of algae and sea grasses. Due to its ability to thrive in both warm and cold waters at a variety of depths(anywhere from one to 100 meters), few coastal marine environments are safe. The disappearance of native vegetation affects all the animals that depend on it for food and shelter, while *Caulerpa taxifolia* itself is inedible to most species because it secretes many harmful toxins.

5 The algae also cause negative repercussions for humans, in particular the commercial fishing industry. As a result of habitat loss, many species fishermen have relied on for centuries are no longer available, and the algae are notorious for clogging fishing nets and even snagging boat propellers. In addition, the decrease in the natural diversity of plant and animal life in the Mediterranean has led to a severe decline in **marine tourism**.

6 → In recent years, many methods have been employed in attempts to eliminate the invasive algae. The simplest is known as manual uprooting, in which individual divers use their hands to pull the algae out by the roots. Unfortunately, *Caulerpa taxifolia* has spread in the Mediterranean to the point that this method is no longer **feasible** there. While it holds promise for removing small, isolated patches, extreme care must be taken, as any small fragments of the algae left behind could grow and take root once again.

7 Various physico-chemical procedures have been tried as well. These include exposure to copper and salt, air suction, ultrasound devices, and hot water jets, but each seems more effective at slowing the algae's expansion than actually eliminating it. Studies of biological methods, such as the introduction of sea slugs\* that feed on the algae, have also yielded discouraging results. Instead of consuming the algae blades, the slugs merely cut **them** into small pieces that could easily disperse and form new colonies elsewhere. **Until an answer to the problem is found, scientists urge caution, encouraging marine organizations to be on the lookout for new algae growth and to help educate the public about the serious risks this invasive species represents.**

**slug\*** a small slow-moving creature with a long soft body and no legs, like a snail without a shell.

15. All of the following are mentioned in paragraph 1 as characteristics of *Caulerpa taxifolia* EXCEPT

- Ⓐ the world's largest algae
- Ⓑ the ability to make food on its own
- Ⓒ a slender, green appearance
- Ⓓ an invader of foreign ecosystems

**Paragraph 1 is marked with an arrow [→].**



16. What can be inferred from paragraph 2 about *Caulerpa taxifolia* prior to the 1970s?

- Ⓐ It was not known to scientists.
- Ⓑ It did not flourish in a wide range of temperatures.
- Ⓒ It was used primarily in freshwater aquarium exhibits.
- Ⓓ It was found only off the coast of France.

**Paragraph 2 is marked with an arrow [→].**

17. The word *tolerate* in the passage is closest in meaning to

- Ⓐ symbolize
- Ⓑ formulate
- Ⓒ withstand
- Ⓓ intensify

18. According to paragraph 3, what was partially responsible for the algae's rapid expansion in the 1990s?

- Ⓐ The species' ability to reproduce rapidly in warm tropical waters
- Ⓑ The transportation of cargo between Monaco and other Mediterranean countries
- Ⓒ The development of new strains of the algae in California and Australia
- Ⓓ The failure of Mediterranean authorities to act decisively

**Paragraph 3 is marked with an arrow [→].**

19. According to paragraph 4, *Caulerpa taxifolia* is known as "killer algae" because

- Ⓐ it has colonized a variety of underwater environments
- Ⓑ it eliminates native plants and drives away native animals
- Ⓒ it is toxic to people who come into contact with it
- Ⓓ it grows too deep for other species to reach it

**Paragraph 4 is marked with an arrow [→].**

20. The word **secretes** in the passage is closest in meaning to

- (A) produces
- (B) allows
- (C) contains
- (D) transforms

21. Why does the author mention marine tourism?

- (A) To show how people's lives may be put in danger by the algae's growth
- (B) To explain how human activities have encouraged the spread of *Caulerpa taxifolia*
- (C) To contrast the impact on the tourism to what has happened in the commercial fishing industry
- (D) To give an example of the effects that changed ecosystems have on humans

22. The word **feasible** in the passage is closest in meaning to

- (A) practical
- (B) comprehensive
- (C) firm
- (D) routine

23. According to paragraph 6, why is manual uprooting a difficult process?

- (A) It requires divers to undergo strenuous training.
- (B) The algae's roots are usually too strong to pull out.
- (C) It is necessary to remove every last piece of algae.
- (D) The algae grow back faster than they can be removed.

**Paragraph 6 is marked with an arrow [→].**

24. The word **them** in the passage refers to

- (A) sea slugs
- (B) discouraging results
- (C) algae blades
- (D) new colonies



25. Which of the sentences below best expresses the essential information in the highlighted sentence in the passage? *Incorrect* choices change the meaning in important ways or leave out essential information.

- Ⓐ Thanks to the public outreach programs initiated by marine organizations, new algae growth has slowed in recent years.
- Ⓑ For now, all that can be done is to prevent the establishment of new algae colonies and raise awareness about the threat.
- Ⓒ Anyone who encounters the algae in the wild should exercise extreme caution and report the sighting to the authorities immediately.
- Ⓓ Unfortunately, independent scientists and research organizations have so far been unable to find a solution to the problem of the invasive algae.

26. Look at the four squares [■] that indicate where the following sentence could be added to the passage.

**For much of the 1990s, more emphasis was placed on assigning blame and conducting research than on taking action to control the algae.**

Where would the sentence best fit?

Click on a square [■] to add the sentence to the passage.

27. **Directions:** An introductory sentence for a brief summary of the passage is provided below. Complete the summary by selecting the **THREE** answer choices that express the most important ideas in the passage. Some sentences do not belong in the summary because they express ideas that are not presented in the passage or are minor ideas in the passage. ***This question is worth 2 points.***

***Caulerpa taxifolia*, a species of green algae, is one of the most alarming invasive species in the world today.**

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#### Answer Choices

- |  |   |
|--|---|
| <p>(A) Specially created to be more durable and fast-growing, the aquarium strain of the algae was accidentally introduced to the wild in 1984.</p> <p>(C) <i>Caulerpa taxifolia</i> now grows in coastal waters worldwide, badly damaging marine ecosystems as well as human industries.</p> <p>(E) All attempts to remove <i>Caulerpa taxifolia</i> manually have backfired, breaking the algae into small fragments and encouraging further growth.</p> | <p>(B) Developed by scientists in Germany, the algae are comprised of a collection of unusually large single-cells that reproduce asexually.</p> <p>(D) The toxic nature of the algae has made parts of the Mediterranean potentially hazardous for humans to fish and swim in.</p> <p>(F) Though several attempts have been made to kill off the algae, scientists have yet to determine the best method for doing so.</p> |
|--|---|

Drag your answer choices to the spaces where they belong. To remove an answer choice, click on it. To review the passage, click **View Text**.



You have seen all of the questions in this test.  
You can review your work if there's time remaining.



# day 24 actual test ii

## Part 1

### TOEFL Reading passage

review | help | back | next

time 00:20:00

#### Energy from Natural Gas

- 1 → Much of the world gets its energy from fossil fuel sources, including coal, oil, and natural gas, all of which were created millions of years ago. The process began with dead plant and animal matter that collected and over time was buried deep within the earth. There, exposed to extreme pressure and temperatures, the carbon-based material underwent various chemical and physical changes. Some of it became coal, some oil, and some natural gas, depending on the exact conditions it was subjected to.
- 2 → Natural gas is both invisible and odorless. During the first century of the fossil fuel era, it was disregarded as a worthless byproduct of coal and oil. However, people later discovered that it could also be a useful source of energy, and they set about trying to realize its potential. Its use began to grow in the twentieth century and has increased rapidly within the last 40 years. Nowadays, natural gas is employed all over the world to heat homes, generate electricity, power factories, and even fuel vehicles.
- 3 → Because it was created through the same process as other fossil fuels, natural gas can often be retrieved from oil fields, something known as an associated source. Coal beds have similarly been known to yield natural gas. In addition, there are isolated deposits containing only gas that are referred to as non-associated sources. To access a subterranean natural gas pocket, a hole is drilled down into it, just as in oil extraction. However, due to the gas's lightness, it will rise to the surface on its own instead of having to be pumped out.
- 4 → The compound we know as natural gas is actually a composite of several different substances, the primary one being methane gas. Each deposit has a unique makeup, but other common components of natural gas include propane, butane, and sulfur. Borrowing terms used in the description of oil, natural gas with a high sulfur content is called "sour," while that with a low content is referred to as "sweet." Regardless of the exact composition, natural gas must be refined to remove its impurities; when ready for use, it is nearly pure methane.
- 5 → Natural gas offers many advantages as a fuel source, the first and most

important being that it is extremely clean burning. While oil and coal both have complex molecular structures, methane's is simple: one carbon atom surrounded by four atoms of hydrogen. The lack of excess particles translates into fewer waste byproducts during combustion. For example, all fossil fuels produce carbon dioxide when burned, but natural gas releases substantially less carbon dioxide than other fuels. Given the major role of carbon dioxide in the acceleration of global warming, this is an important attribute. In addition, natural gas emits far less nitrogen and sulfur, which are key contributors to the smog that pollutes the air in metropolitan areas, as well as acid rain.

- 6 The benefits of natural gas extend far beyond its cleanliness. Since it contains fewer waste particles, its energy can be acquired with much more efficiency than that of the other fossil fuels, meaning a lower overall cost for the consumer. **A** Another advantage is that natural gas is transported via underground pipelines instead of by ships and trucks. **B** Finally, natural gas is relatively plentiful and widespread. **C** Geologists have identified extensive stores in Canada, the United States, Russia, the Middle East, and Australia, among other locations. **D** With the world's oil supplies quickly dwindling, it is becoming more important than ever to utilize alternative energy resources such as natural gas.
- 7 → Of course, no energy resource is perfect, and there are some drawbacks to the use of natural gas. Its low density means that it requires larger tanks for storage than oil and coal do, and it is impossible to pipe it across the oceans. Some people have concerns about its safety as well, since its lack of color and smell can make detecting a leak difficult. However, when both its positive and negative characteristics are weighed, it becomes clear that natural gas is perhaps the best energy resource available today.

1. According to paragraph 1, the oil, coal, and natural gas that exist today
- (A) remain mostly hidden
  - (B) share similar origins
  - (C) are found deep underground
  - (D) can be hard to tell apart

**Paragraph 1 is marked with an arrow [→].**

2. The phrase **realize its potential** in the passage is closest in meaning to

- Ⓐ recognize its success
- Ⓑ exploit it
- Ⓒ measure its capacity
- Ⓓ manufacture it

3. In paragraph 2, the author explains that natural gas use

- Ⓐ was delayed due to a lack of technology
- Ⓑ has only recently become widespread
- Ⓒ began late in the nineteenth century
- Ⓓ has surpassed that of the other fossil fuels

**Paragraph 2 is marked with an arrow [→].**

4. What can be inferred from paragraph 3 about the extraction of natural gas?

- Ⓐ It mainly occurs during the extraction of coal.
- Ⓑ There is the potential for large amounts of gas to be lost.
- Ⓒ It is a simpler process than the extraction of oil.
- Ⓓ Non-associated sources are preferred.

**Paragraph 3 is marked with an arrow [→].**

5. The word **composite** in the passage is closest in meaning to

- Ⓐ mixture
- Ⓑ foundation
- Ⓒ derivative
- Ⓓ simulation

6. According to paragraph 4, what can be inferred about “sweet” natural gas?

- Ⓐ It is more valuable than pure methane gas.
- Ⓑ It contains more sulfur than “sour” natural gas.
- Ⓒ It has high concentrations of propane and butane.
- Ⓓ It requires less refining than “sour” natural gas.

**Paragraph 4 is marked with an arrow [→].**

7. Why does the author discuss carbon dioxide’s relationship to global warming in paragraph 5?

- Ⓐ To illustrate methane’s molecular structure
- Ⓑ To show the link between global warming and smog
- Ⓒ To suggest that fossil fuels should not be burned
- Ⓓ To elaborate on a benefit of natural gas’s cleanliness

**Paragraph 5 is marked with an arrow [→].**

8. The word **this** in the passage refers to

- Ⓐ oil and coal both have complex molecular structures
- Ⓑ all fossil fuels produce carbon dioxide when burned
- Ⓒ natural gas releases substantially less carbon dioxide than other fuels
- Ⓓ natural gas emits far less nitrogen and sulfur

9. The word **emits** in the passage is closest in meaning to

- Ⓐ displays
- Ⓑ gives off
- Ⓒ affects
- Ⓓ breaks down



10. According to paragraph 7, one danger of using natural gas is that

- Ⓐ there is no way to monitor its transfer across oceans
- Ⓑ its accidental release is hard to notice
- Ⓒ it is hazardous when mixed with coal or oil
- Ⓓ large amounts of it must be stored in a single container

**Paragraph 7 is marked with an arrow [→].**

11. Which of the following statements most accurately reflects the author's opinion about natural gas?

- Ⓐ It represents a preferable alternative to other fossil fuel resources.
- Ⓑ Its use in the production of energy carries high costs.
- Ⓒ Its drawbacks will be overcome by technology in the future.
- Ⓓ It should completely replace oil and coal as the world's energy source.

12. Look at the four squares [■] that indicate where the following sentence could be added to the passage.

**Not only does this ensure its protection from severe weather events and other unpredictable hazards, but it also reduces the amount of energy required to move it from place to place.**

Where would the sentence best fit?

Click on a square [■] to add the sentence to the passage.

13. **Directions:** An introductory sentence for a brief summary of the passage is provided below. Complete the summary by selecting the **THREE** answer choices that express the most important ideas in the passage. Some sentences do not belong in the summary because they express ideas that are not presented in the passage or are minor ideas in the passage. ***This question is worth 2 points.***

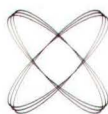
**Originally, natural gas was not considered a useful commodity and it has only become a major source of energy in the last century.**

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#### Answer Choices

- |  |  |
|--|--|
| Ⓐ Natural gas differs from other fossil fuels in that it is not found in underground deposits.                           | Ⓑ Natural gas is extracted from both associated and non-associated sources, and there are many different varieties.                |
| Ⓒ Some deposits of natural gas contain high concentrations of impurities such as sulfur and cannot be used commercially. | Ⓓ Because it burns cleaner than coal and oil, natural gas is much less damaging for the environment.                               |
| Ⓔ One of the main drawbacks in the use of natural gas is that it cannot be piped across oceans.                          | Ⓕ Natural gas is an appealing alternative to other fossil fuels because it is cheaper, more easily transported, and more abundant. |

Drag your answer choices to the spaces where they belong. To remove an answer choice, click on it. To review the passage, click **View Text**.



You have seen all of the questions in this part.  
You can review your work if there's time remaining  
or you can continue to the next part.



### The Snake's Forked Tongue

- 1 → One of the most intriguing physical characteristics of snakes is their forked tongues. While this trait is also shared by some types of lizards, all snake species exhibit split tongues, which usually have a more pronounced fork than those of lizards. Any observer of snakes has no doubt noticed that they often stick their tongues out of their mouths, flick them up and down in the air, and then retract them. In fact, due to a slight indentation in the upper jaw, many species can protrude their tongues without even opening their mouths.
- 2 → The explanation for this behavior remained unknown for centuries, giving rise to many folk superstitions. For example, the forked tongue has become synonymous with deceit, from the idea that two separate tongues would enable a creature to voice two contrasting ideas at the same time. Another popular misconception is that snakes sting other animals with their tongues. Recently, though, scientists uncovered the truth about the forked tongue, and its actual use is much less sinister.
- 3 → Snakes differ greatly from humans on a sensory level. On the one hand, their eyesight is poor and they lack outer ears so they cannot hear with much volume or clarity, but, on the other, some have the ability to “see” and hunt in the dark by sensing the body heat of their prey. In addition, snakes have a method of smelling that is peculiar in that it is actually performed by the tongue rather than by the nostrils and nasal cavities, which in fact undertake other functions, such as breathing. When a snake flicks its tongue around in the air, it is actually snaring chemical particles, which can be thought of as odors. Next, the snake brings its tongue back in and places it against the roof of its mouth, where there are two small openings that correspond to the two tips of the forked tongue. These make up the snake’s Jacobson’s organ, a kind of chemoreceptor that analyzes the chemical odors on the tongue and sends this information to the snake’s brain.
- 4 → This technique for “smelling” the surrounding environment is truly unique, but even more amazing is the reason why the snake’s tongue is forked. By spreading the tips apart when the tongue is flicked out, each samples chemical particles from a slightly different position in the air and brings them back to the Jacobson’s organ. The organ then determines which tip was exposed to a larger amount of the particles in question, and this data tells the snake where the

source of the odor can be found. In other words, if the tongue's right tip contains more of the particles, such as those of an animal's chemical odor, the snake knows that to find the animal it must travel to the right, not to the left.

5 → Obviously, the ability of snakes to pursue scents in this fashion is very useful in hunting. **A** It has been proven to be quite accurate, allowing them to pick up the trail of rodents and other prey even though the animal itself may be a great distance away. **B** Similarly, if the odor the snake **perceives** belongs to a predator, it is able to adjust its course to steer clear of the danger. **C** Another suggested use of snakes' sense of smell is that it aids them in ascertaining the locations of communal dens\*, where snakes reside in groups during the winter months. **D**

6 → However, scientists who have studied the chemoreception process in snakes believe its most vital role is in the detection of mates. Because most snakes lead solitary lives for much of the year, the capability of males to track down females during the mating season is essential for the survival of snake species. A male does this by sampling the air for the pheromones of a female. The chemical odor given off by the female gives the male all the information he needs, including whether she is of the same species, whether she is ready to mate, and in which direction she is traveling. Without the olfactory use of their tongues, it would be much harder for snakes to reproduce.

**den\***: the home of certain types of wild animals such as lions or foxes

1. The word **pronounced** in the passage is closest in meaning to
  - (A) controlled
  - (B) obvious
  - (C) evolved
  - (D) useful
  
2. According to paragraph 1, many snake species have the ability to
  - (A) stick out their tongues while their mouths are shut
  - (B) imitate the behavior of lizards
  - (C) bring prey into their mouths with their tongues
  - (D) retract the lips from their jaws

**Paragraph 1 is marked with an arrow [→].**



3. In paragraph 2, why does the author list folk superstitions?

- Ⓐ To suggest that they inhibited true knowledge about snakes from progressing
- Ⓑ To emphasize that snakes are considered dangerous by most people
- Ⓒ To explain the origins of scientific research into snakes' tongues
- Ⓓ To describe the mystery that has been associated with snakes' irregular tongues

**Paragraph 2 is marked with an arrow [→].**

4. According to paragraph 3, how do the senses of snakes differ from those of humans?

- Ⓐ Snakes use their nostrils and nasal cavities when smelling.
- Ⓑ Snakes have less developed hearing abilities than humans.
- Ⓒ Snakes' eyesight is better at night than during the day.
- Ⓓ Snakes' sensitivity to heat is less than that of humans.

**Paragraph 3 is marked with an arrow [→].**

5. The word snaring in the passage is closest in meaning to

- Ⓐ testing
- Ⓑ keeping
- Ⓒ forming
- Ⓓ catching

6. The word These in the passage refers to

- Ⓐ particles
- Ⓑ openings
- Ⓒ tips
- Ⓓ odors

7. Which of the sentences below best expresses the essential information in the highlighted sentence in the passage? *Incorrect* choices change the meaning in important ways or leave out essential information.

- Ⓐ Snakes have an unusual method of smelling which is similar to the way other animals breathe.
- Ⓑ As well as being used for smelling, the nostrils and nasal cavities also serve the additional function of allowing the snake to breathe.
- Ⓒ Uniquely, a snake's tongue is what helps it to pick up scents, and its nostril or nasal cavity is for other tasks.
- Ⓓ As well as having peculiar tongues, snakes also have distinctive nostrils and nasal cavities.

8. According to paragraph 4, what is the function of the Jacobson's organ in snakes?

- Ⓐ To assist in the search for chemical particles in the air
- Ⓑ To enable the tongue's fork to be spread more widely
- Ⓒ To utilize the snake's trained sense of direction
- Ⓓ To compare the sensory input of the two tongue tips

**Paragraph 4 is marked with an arrow [→].**

9. The word **perceives** in the passage is closest in meaning to

- Ⓐ imitates
- Ⓑ discharges
- Ⓒ notices
- Ⓓ carries

10. All of the following are mentioned in paragraph 5 and paragraph 6 as ways in which snakes use their tongues EXCEPT

- Ⓐ avoiding animals that may pose a threat to them
- Ⓑ finding a snake of the opposite sex in order to reproduce
- Ⓒ following other snakes during cooperative hunts
- Ⓓ determining the location of potential food sources

**Paragraph 5 and paragraph 6 are marked with arrows [→].**

11. What can be inferred from paragraph 6 about the pheromones of female snakes?

- Ⓐ They are produced year round.
- Ⓑ They are species specific.
- Ⓒ They are only detectable by male snakes.
- Ⓓ They are the strongest chemical odors.

**Paragraph 6 is marked with an arrow [→].**

12. Look at the four squares [■] that indicate where the following sentence could be added to the passage.

**Young snakes especially may rely on their tongues and Jacobson's organs to follow the scents left by adults on their way to these hibernation spots.**

Where would the sentence best fit?

Click on a square [■] to add the sentence to the passage.

13. **Directions:** An introductory sentence for a brief summary of the passage is provided below. Complete the summary by selecting the THREE answer choices that express the most important ideas in the passage. Some sentences do not belong in the summary because they express ideas that are not presented in the passage or are minor ideas in the passage. *This question is worth 2 points.*

**The forked tongues of snakes have puzzled people for centuries, and their true function has only recently been discovered.**

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#### Answer Choices

- |   |   |
|---|---|
| <p>(A) The only animals other than snakes that possess forked tongues are lizards, though there are some important differences between the two.</p>                     | <p>(B) Despite what superstitions may suggest, snakes actually use their tongues to smell their surroundings.</p>                             |
| <p>(C) The fork in the tongue enables the snake to sample odors from two different places, and its Jacobson's organ then determines where the smell is coming from.</p> | <p>(D) The sensitivity of snakes' Jacobson's organ makes it possible for them to track animals even when a great distance separates them.</p> |
| <p>(E) Scientists believe snakes use their tongues for hunting and navigation, but their primary role most likely deals with mating.</p>                                | <p>(F) Snakes use the olfactory sensors in their tongues to ensure that they do not stray too far while traveling in groups.</p>              |

Drag your answer choices to the spaces where they belong. To remove an answer choice, click on it. To review the passage, click **View Text**.



### Innovations in Medieval European Agriculture

- 1 In the year 1,000 CE, Europe's societies were organized under a system known as Manorialism. The basic unit was the manor, a village or villages including large areas of farmland and ruled over by a lord, who provided military protection for the local peasant population in return for their labor and a share of their harvested crops. Unfortunately, the agricultural techniques in practice at the time were rather undeveloped. Farmers had to work arduously every day to produce just enough food to survive. But then, in the eleventh century, several changes took place that allowed for a significant increase in crop yields.
- 2 → Several factors may have played a role in this transformation. There is evidence, for example, that the global climate began to warm slightly in the ninth century. **A** Historians also note that the frequency of violent invasions by neighboring peoples had decreased by the year 1,000. **B** Yet, even more important were several specific technological innovations, some of which were introduced from other parts of the world. **C** European farmers had, to some extent, already been influenced by outsiders; the waterwheels and windmills used during Manorialism originated in the Muslim world, for instance. **D** It was the tools and techniques that made their way onto the continent after 1,000 CE, however, that drastically changed the course of European agriculture.
- 3 → Prior to the eleventh century, most farmers practiced the old Roman two-field system of crop rotation. A plot of land would be divided into two halves. The two halves were then rotated every six months, with one being planted and the other going unused. This system worked in the Mediterranean region, where soil quality was generally lower. However, first in Germany, then elsewhere in Europe, farmers finally figured out that the local conditions could support more crops, and they began to implement a three-field system. Each parcel of land was now divided into thirds, with two growing crops and one lying fallow at any given time. This simple modification yielded 33% more food while requiring less labor and also encouraged the planting of a greater variety of crops. As diets improved and peasants acquired more free time, they were able to undertake the clearing of land by cutting trees and draining marshes, thus creating more farmland and further increasing food production.
- 4 → Another shift toward greater agricultural efficiency came as the result of a new tool. Up until this time, most peasants used a simple wooden plow to cut

furrows in the fields. Likely introduced by the Slavs of Eastern Europe, the heavy plow made this job much easier. It featured a large iron blade to slice through the thick soil and other features that reduced the amount of time it took to dig adequate furrows. Due to its weight, a team of eight oxen was needed to pull the heavy plow, and, because most peasants were lucky to own one ox, their new tool led to greater collaboration among farmers. Single-family fields were combined to create large communal plots, and cooperation boosted efficiency. Another change was that, since a team of eight oxen was very difficult to turn, long vertical strips of farmland took the place of the standard square field.

5 → As time went on, the use of oxen in plow teams was abandoned in favor of the horse. This resulted from both the invention of the horseshoe around 900 CE, which enabled horses to work without damaging their hooves, and the introduction of the horse collar, giving the animals the ability to pull the plow with their chests. Replacing the traditional yoke harness, which had required that they pull from the neck, the horse collar expanded a single horse's pulling power from 1,000 to 5,000 pounds. A team of horses still could not pull more weight than a team of oxen, but the horses were twice as fast and could work longer into the day. Along with the other developments occurring in European agriculture around this time, the substitution of horses for oxen helped increase the average crop yield of most manors. Surplus food stores were accumulated, which served as the foundations of the great civilizations that arose during the next centuries.

14. Which of the sentences below best expresses the essential information in the highlighted sentence in the passage? *Incorrect* choices change the meaning in important ways or leave out essential information.

- (A) Farmers banded together and shared responsibility for protecting the manor and producing food.
- (B) Peasant populations had no choice but to donate their crops to their lord, for it was he who controlled the military.
- (C) Most manors of the time were organized similarly, consisting of a number of peasant villages surrounding the lord's estate.
- (D) In a manor, peasants provided labor and food in exchange for their security, which was guaranteed by a local lord.



15. The word **arduously** in the passage is closest in meaning to

- Ⓐ with skill
- Ⓑ regardless
- Ⓒ without rest
- Ⓓ temporarily

16. In paragraph 2, the author states that waterwheels and windmills

- Ⓐ led to the rise of Manorialism in Europe
- Ⓑ were adopted by European farmers from other peoples
- Ⓒ significantly altered agriculture in Europe
- Ⓓ were invented in the Muslim world after 1000 CE

**Paragraph 2 is marked with an arrow [→].**

17. According to paragraph 3, what can be inferred about three-field system?

- Ⓐ It increased productivity but was more labor intensive.
- Ⓑ It made crops less vulnerable to weather conditions.
- Ⓒ It spread from the Mediterranean to the rest of Europe.
- Ⓓ It was suitable in regions that had richer soil.

**Paragraph 3 is marked with an arrow [→].**

18. The word **modification** in the passage is closest in meaning to

- Ⓐ adjustment
- Ⓑ invention
- Ⓒ growth
- Ⓓ condition

19. In paragraph 3, the author explains the importance of the switch to the three-field system by

- Ⓐ discussing the role of crop variety in a healthy diet
- Ⓑ describing how it began a process of further agricultural improvement
- Ⓒ illustrating the division of farmland it prescribed
- Ⓓ comparing the amount of work it required to that under the two-field system

**Paragraph 3 is marked with an arrow [→].**

20. All of the following are mentioned in paragraph 4 as results of the introduction of the heavy plow EXCEPT

- Ⓐ a rise in trade with the peoples of Eastern Europe
- Ⓑ a change in the standard shape of farm fields
- Ⓒ an increase in the communal undertakings of farmers
- Ⓓ a decrease in the time needed to prepare fields for planting

**Paragraph 4 is marked with an arrow [→].**

21. The word **boosted** in the passage is closest in meaning to

- Ⓐ served
- Ⓑ affected
- Ⓒ raised
- Ⓓ designed

22. What can be inferred from paragraph 5 about plow animals?

- Ⓐ Their use was mandated under the system of Manorialism.
- Ⓑ They can pull more weight with their chests than with their necks.
- Ⓒ They were replaced by new technologies in the eleventh century.
- Ⓓ Humans began to utilize them around 900 CE.

**Paragraph 5 is marked with an arrow [→].**



23. According to paragraph 5, what was the benefit of using horses to plow fields instead of oxen?

- Ⓐ They required less food during the day.
- Ⓑ They pulled heavier loads.
- Ⓒ Their necks were less susceptible to strain.
- Ⓓ They worked faster and longer.

**Paragraph 5 is marked with an arrow [→].**

24. The word **accumulated** in the passage is closest in meaning to

- Ⓐ inspected
- Ⓑ discovered
- Ⓒ collected
- Ⓓ maintained

25. Look at the four squares [■] that indicate where the following sentence could be added to the passage.

**Both of these changes surely facilitated the development that was to take place in European agriculture.**

Where would the sentence best fit?

Click on a square [■] to add the sentence to the passage.

26. **Directions:** An introductory sentence for a brief summary of the passage is provided below. Complete the summary by selecting the THREE answer choices that express the most important ideas in the passage. Some sentences do not belong in the summary because they express ideas that are not presented in the passage or are minor ideas in the passage. *This question is worth 2 points.*

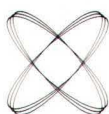
**European agriculture in the time of Manorialism was not very advanced, but some significant changes around 1000 CE allowed farmers to make great progress.**

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#### Answer Choices

- |  |   |
|--|---|
| (A) The fact that peasants were required to give large amounts of their harvests to the lord of the manor meant they did not have enough for themselves. | (B) The adoption of the heavy plow, and the cooperation it encouraged between farmers, increased food production.         |
| (C) The Roman system of crop rotation resulted in half of all farmland going unused at any given time.   | (D) As farmers employed the three-field system, their crop yields went up and their labor requirements went down.         |
| (E) Greater reliance on horses, after the invention of the horseshoe and collar, improved the efficiency of European farmers.                            | (F) The introduction of foreign inventions, such as waterwheels and windmills, dramatically changed European agriculture. |

Drag your answer choices to the spaces where they belong. To remove an answer choice, click on it. To review the passage, click **View Text**.



You have seen all of the questions in this test.  
You can review your work if there's time remaining.



Part 1

TOEFL Reading passage

review | help | back | next

time 00:20:00

**A Scientific Debate: Neptunism vs. Plutonism**

- 1 → For modern geologists, the question of how rocks are formed has been answered. The processes by which sediments are cemented together to form sedimentary rocks, subterranean magma shoots to the surface to form igneous rocks, and intense heat and pressure transform both of these into metamorphic rocks are well understood. But in the days when geology was just beginning to develop as a separate scientific discipline, the origin of Earth's rocks was the subject of an intense debate. Among the theories circulating around the late eighteenth and early nineteenth centuries were two primary contenders: Neptunism, posited by the German Abraham Werner, and Plutonism, a theory of James Hutton, a Scottish geologist.
- 2 To fully understand the debate between Neptunism and Plutonism, it is essential to first examine the broader scientific context in place at the time. Before the nineteenth century, the accepted view of Earth's history was defined by a concept known as Catastrophism. Its basic **tenets** were that the planet was of a young age and that **its** past was marked by a series of distinct and catastrophic events. In England in particular, this theory was influenced by the belief that a worldwide flood had occurred as described in the Christian Bible.
- 3 → Werner's theory of Neptunism relied on some of the assumptions inherent in Catastrophism. The word Neptunism comes from the name of the Roman god of the sea, Neptune, as Werner suggested that all of Earth had once been covered by a vast, hot ocean. The waters of this ocean, he said, contained small amounts of diluted minerals. Over time, these ancient waters evaporated and sank lower, and as they disappeared, the minerals remained and fused into crystals to produce the rocks and landmasses visible on Earth's surface. A series of later catastrophic floods, such as the one reported in the Bible, added more rocks and explained the different rock layers that geologists were beginning to discover around this time.
- 4 Concurrently, there were many other geologists who were starting to reject the notion of Catastrophism. **▲** Much of the contemporary evidence being collected regarding fossils and the complexity and diversity of

geologic formations suggested that the planet was much older than anyone had previously thought. **B** As a result, the theory of Uniformitarianism was introduced, which stated that Earth's geologic processes were gradual and unfolding at an incredibly slow rate over an immense timeframe. **C** Even more important for the field of geology, Uniformitarianism held that those same processes were still occurring. **D**

5 James Hutton was among the earliest **proponents** of Uniformitarianism, and it greatly informed his theory of Plutonism. Named for the Roman god of the underworld, Pluto, it stated that Earth's rocks were created through the tremendous heat and force of volcanic activity. Hutton described a continuous cycle by which heat deep within Earth pushed up the land above, creating mountains and volcanoes, and deposited rocks on the surface. **Erosion over time would break down the rocks and transport their sediments to the bottom of the oceans, where they were heated and turned into solid rock once more, and again lifted to the surface by volcanic activity.** This concept of a long, continuous cycle was a clear expression of Uniformitarianism and provided a better explanation for how the geologic complexities of Earth had taken shape.

6 → During the first half of the nineteenth century, increasing numbers of scientists adopted Hutton's views, and today he is often referred to as the "father of geology." Werner's theory of Neptunism, on the other hand, was dismissed, and Uniformitarianism replaced Catastrophism as the guiding principle of geologic study. Even though Plutonism was later shown to contain many inaccuracies, some of its concepts turned out to be close to the truth. For instance, its descriptions of the volcanic uplift of the crust and the continuous recycling of rock fit well with the modern theory of plate tectonics. Moreover, Hutton's ideas encouraged the development of more accurate methods for determining the age of rocks, such as radiocarbon dating, by which geologists have been able to confirm that Earth's history stretches back billions of years.

1. In paragraph 1, the author introduces the debate between Neptunism and Plutonism by
- (A) providing information about the backgrounds of both of the geologists involved
  - (B) describing how scientists studied the planet before the creation of geology
  - (C) explaining the differences in the formation of sedimentary, igneous, and metamorphic rocks
  - (D) contrasting modern geologic knowledge with that of previous centuries

**Paragraph 1 is marked with an arrow [→].**

2. The word discipline in the passage is closest in meaning to
- Ⓐ field
  - Ⓑ inquiry
  - Ⓒ idea
  - Ⓓ potential
3. The word tenets in the passage is closest in meaning to
- Ⓐ opinions
  - Ⓑ principles
  - Ⓒ examinations
  - Ⓓ entitlements
4. The word its in the passage refers to
- Ⓐ Catastrophism
  - Ⓑ planet
  - Ⓒ England
  - Ⓓ theory
5. According to paragraph 3, how did Neptunism account for the multiple layers of rock found on Earth's surface?
- Ⓐ They were caused by the failure of some minerals to fuse into crystals.
  - Ⓑ Each was deposited by a distinct extreme flooding event.
  - Ⓒ They were the result of an uneven distribution of minerals in the water.
  - Ⓓ The ancient ocean evaporated little by little, leaving rocks at each layer.

**Paragraph 3 is marked with an arrow [→].**

6. According to the passage, both Neptunism and Plutonism were named after
- Ⓐ important principles of Catastrophism or Uniformitarianism
  - Ⓑ well-known theories established by early Roman thinkers
  - Ⓒ the phenomenon they identified as essential to rock formation
  - Ⓓ the materials they claimed that rocks were composed of
7. The word **proponents** in the passage is closest in meaning to
- Ⓐ formulas
  - Ⓑ supporters
  - Ⓒ objects
  - Ⓓ designers
8. Which of the sentences below best expresses the essential information in the highlighted sentence in the passage? *Incorrect* choices change the meaning in important ways or leave out essential information.
- Ⓐ Eroded sediments from rocks at the surface would be slowly transported to the depths of the ocean, where intense heat would change their physical structure.
  - Ⓑ Rocks brought to the surface by volcanoes were eroded, carried as sediments to the seafloor, and then formed into rocks to begin the cycle anew.
  - Ⓒ Erosion was the driving force behind this rock cycle, for without it, there would be no fresh sediments to form new rocks.
  - Ⓓ The immense power released during periods of volcanic activity resulted in the movement of rocks from great depths up to the surface.
9. Why does the author mention plate tectonics and radiocarbon dating in paragraph 6?
- Ⓐ To identify some of James Hutton's other innovations
  - Ⓑ To support the claim that Catastrophism was replaced by Uniformitarianism
  - Ⓒ To prove that many of Plutonism's ideas were incorrect
  - Ⓓ To explain how Hutton's theories have influenced modern geology

**Paragraph 6 is marked with an arrow [→].**

10. All of the following are mentioned about the theory of Catastrophism in the passage EXCEPT

- Ⓐ It successfully explained the discovery of fossils in the late 1700s.
- Ⓑ It was sometimes related to Biblical accounts of Earth history.
- Ⓒ It was the foundation of geologic study prior to the 1800s.
- Ⓓ Its dominance was ended by the rise of Uniformitarianism.

11. Look at the four squares [■] that indicate where the following sentence could be added to the passage.

**What this meant was that the ancient history of Earth could be understood by studying currently observable phenomenon.**

Where would the sentence best fit?

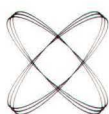
Click on a square [■] to add the sentence to the passage.

12. **Directions:** Complete the table by matching the phrases below. Select the appropriate phrases from the answer choices and match them to the geologic theory to which they relate. TWO of the answer choices will NOT be used. ***This question is worth 3 points.***

Drag your answer choices to the spaces where they belong. To remove an answer choice, click on it. To review the passage, click **View Text**.

### Answer Choices

- |   |           |
|---|-----------|
| (A) described a lengthy and gradual process characteristic of Uniformitarianism | Neptunism |
| (B) was established as fact by scientists of a later era                        | •         |
| (C) was soon abandoned by geologists along with Catastrophism                   | •         |
| (D) attributed rock formation to crystals that arose from evaporated waters     | Plutonism |
| (E) held that all of our planet's history could be studied directly             | •         |
| (F) contained a mix of both incorrect and accurate concepts                     | •         |
| (G) posited that rocks were created by intense heat and pressure                | •         |



You have seen all of the questions in this part.  
You can review your work if there's time remaining  
or you can continue to the next part.



### Historical Changes in the European Art World

- 1 → European artists in the Late Middle Ages were accorded the same social status as blacksmiths, carpenters, tailors, and other craftsmen. Whereas philosophers, musicians, and poets were seen as exercising intellectual skills, artists were not. Like other craftsmen, they were organized under the guild system. Originally developed prior to the second millennium AD, guilds were formal organizations founded by people who practiced a similar craft, with the intention of ensuring they received fair payment for their services and fostering the exchange of knowledge among members. In most European cities, there would be a masons' guild, a smiths' guild, and a carvers' guild, along with those established by painters, sculptors, and architects. New members began as apprentices, learning from the masters of their craft, and if they demonstrated enough skill, they would one day be eligible to become master craftsmen themselves.
- 2 → Then, in the fourteenth century, Europe entered a period of significant transformation known as the Renaissance. This term literally means "rebirth," as it describes an era when European scholars were rediscovering works of the Classical Greeks and Romans. Ancient texts on math, science, and philosophy, written by such figures as Plato and Cicero, became the subjects of intense study and altered the ways in which Europeans viewed their world. From its origins in Florence, Italy, the Renaissance radiated throughout the continent and affected every aspect of the lives of the people living there.
- 3 The quest for Classical knowledge that characterized the Renaissance also led to a rebirth of the conception of the artist. **A** Depiction of nature in its true form became the ideal, and painters began to study mathematical perspective and optics in order to more realistically represent their subjects. **B** This emphasis on intellectual investigation distinguished the arts from the so-called mechanical crafts, and artists witnessed a marked improvement in their social standing. **C** By the 1500s, descriptions like "genius" and "divine" were being ascribed to Michelangelo, Leonardo da Vinci, and other creators of artistic masterpieces. **D**
- 4 → The Renaissance also spawned the introduction of formal educational institutions. Called academies, the first of these, such as the Platonic Academy founded in Florence in 1438, focused on literature and scientific disciplines. Soon, though, artistic pursuits were added to the curriculum, including

everything from painting to architecture. Next came the rise of academies dedicated solely to education in the arts. Rome's Academy of St. Luke, established in 1593, was one of the most popular, and these centers quickly replaced the artists' guilds as the premier purveyors\* of artistic knowledge.

5 → By the close of the Renaissance in the late seventeenth century, academies of art had spread from Italy north to other regions. French academies became highly influential, and their mission shifted from general education to the cultivation of a national artists' movement. Whereas the early Italian academies had not charged their pupils or limited their enrollment, French academies instituted tuition and entrance examination systems to ensure that only certain students were admitted. Control was exercised by the government, and as time went on, the academies devised very specific artistic conventions that its members were expected to follow. Still emphasizing the Classical ideals that had flourished during the Renaissance, they came to be regarded as conservative rather than creative. The artwork of academy students was displayed in exhibitions known as salons, which were usually open only to people of high social status. Any artist whose work was not approved of by the academies was barred from participation in the salons.

6 → After the French Revolution, a gradual move toward greater public access to artistic works began with the opening of the Louvre Museum in Paris in 1793. This idea caught on, and soon public art museums could be found all over Europe, loosening the hold of the powerful academies on the art world. New styles were more easily met with acceptance and new avenues were created through which the work of artists that the academies saw as too radical could be shown. Subsequently, the nineteenth century witnessed the introduction of many unique artistic styles, a trend which has continued to the present day.

**purveyor\*** a person or company that provides goods or services

1. The word **accorded** in the passage is closest in meaning to

- (A) elevated
- (B) bestowed
- (C) acclaimed
- (D) applied



2. Which of the sentences below best expresses the essential information in the highlighted sentence in the passage? *Incorrect* choices change the meaning in important ways or leave out essential information.

- Ⓐ The purpose of a guild was to establish financial precedents that would benefit both the people who produced the crafts as well as their customers.
- Ⓑ Guilds were established to ensure that all members who shared their knowledge of the craft would receive the same payment for their services.
- Ⓒ Members of craft guilds had access to the collective knowledge possessed by everyone who practiced that same craft.
- Ⓓ For centuries, craftsmen involved in a similar trade had been in guilds which provided them with economic protection and professional development.

3. According to paragraph 1, guilds in the Late Middle Ages included a system that allowed members to

- Ⓐ begin as master craftspeople if they had enough skill
- Ⓑ progress steadily up the hierarchy in their field
- Ⓒ practice more than one craft at a time
- Ⓓ exchange goods and services with other craftsmen

**Paragraph 1 is marked with an arrow [→].**

4. In paragraph 2, the author explains the nature of the Renaissance by

- Ⓐ discussing ancient Greek and Roman history
- Ⓑ relating the accomplishments of Plato and Cicero
- Ⓒ providing a definition for the name itself
- Ⓓ describing Florence, Italy, in the fourteenth century

**Paragraph 2 is marked with an arrow [→].**

5. The word **marked** in the passage is closest in meaning to
- Ⓐ signed
  - Ⓑ clear
  - Ⓒ rapid
  - Ⓓ special
6. The word **spawned** in the passage is closest in meaning to
- Ⓐ remained with
  - Ⓑ held off
  - Ⓒ brought forth
  - Ⓓ stood for
7. According to paragraph 4, how did the Academy of St. Luke differ from the Platonic Academy?
- Ⓐ One of them focused on painting while the other focused on architecture.
  - Ⓑ The Platonic Academy was supported by the guilds, but the Academy of St. Luke was not.
  - Ⓒ They were constructed at the same location but in different years.
  - Ⓓ The curriculum consisted only of artistic subjects at the Academy of St. Luke.

**Paragraph 4 is marked with an arrow [→].**

8. The word **they** in the passage refers to
- Ⓐ academies
  - Ⓑ conventions
  - Ⓒ members
  - Ⓓ ideals

9. In paragraph 5, the author states that the French salons
- Ⓐ were first established during the Renaissance
  - Ⓑ only supported artists who conformed to particular standards
  - Ⓒ were responsible for the popularity of art museums in later years
  - Ⓓ admitted people regardless of their social standing

**Paragraph 5 is marked with an arrow [→].**

10. The word **avenues** in the passage is closest in meaning to
- Ⓐ inventions
  - Ⓑ channels
  - Ⓒ approaches
  - Ⓓ formats

11. Based on the information in paragraph 5 and paragraph 6, what can be inferred about the French academies?
- Ⓐ They were initially operated by successful artists and teachers from Italy.
  - Ⓑ They eventually began encouraging artists to be more radical and creative.
  - Ⓒ They dominated the European art world in the period after the Renaissance.
  - Ⓓ They played a pivotal role in opening up the art world to the general public.

**Paragraph 5 and paragraph 6 are marked with arrows [→].**

12. Look at the four squares [■] that indicate where the following sentence could be added to the passage.

**Sculptors similarly were expected to possess detailed knowledge of anatomy so they could capture the intricacies of the human form.**

Where would the sentence best fit?

Click on a square [■] to add the sentence to the passage.

13. **Directions:** An introductory sentence for a brief summary of the passage is provided below. Complete the summary by selecting the THREE answer choices that express the most important ideas in the passage. Some sentences do not belong in the summary because they express ideas that are not presented in the passage or are minor ideas in the passage. *This question is worth 2 points.*

**During the Renaissance, art developed into an important medium of creative expression.**

- 
- 
- 

**Answer Choices**

- |  |  |
|--|--|
| (A) The work of the Classical Greeks and Romans formed the philosophical foundations of the Renaissance, the origins of which have been traced to Florence.      | (B) While artists had historically been considered simple craftsmen, the changes brought about by the Renaissance encouraged recognition of their intellectual skills. |
| (C) The art academies that were opened starting in the late 1500s became the most important centers for the spread of artistic teachings in Europe.              | (D) French academies were more popular than their Italian counterparts in part because they actively supported local artists' movements.                               |
| (E) Art salons, such as those in Paris, were the only places where the general public could observe the impressive work being done by students of the academies. | (F) For a time, the development of art was controlled by the French academies, but newer and less restrictive styles grew in popularity.                               |

Drag your answer choices to the spaces where they belong. To remove an answer choice, click on it. To review the passage, click **View Text**.



### America's Western Migration

- 1 → After America declared independence in 1776, its citizens began migrating from the original colonies along the Atlantic coast, crossing the Appalachian Mountains and heading west. By 1800, trading centers had been established from Ohio to Alabama and pioneers were already making their way towards the Mississippi River. With the Louisiana Purchase of 1803 and further land acquisitions, the frontier of the American nation was continually pushed westward, and groups of settlers were never far behind.
- 2 → This tremendous migration was carried out by individuals who chose to leave the relative safety of the East and venture into unknown territories. They followed common trails, the earliest of which led to places like Missouri, Kansas, and Nebraska. After 1840, others into the Far West were opened and saw steadily increasing traffic. The people who undertook such journeys were motivated by a variety of factors. Early American cities, particularly those in the Northeast, had developed at a tremendous pace, leaving some longing for a return to simpler lifestyles. They were crowded, employment was often limited to the factories, and smoke from coal-burning industrial facilities polluted the air. For many Americans, the urban landscape did not match their image of the ideal life.
- 3 → Yet economic pressure was likely the primary catalyst for westward migration. For some families in the early 1800s, it was difficult to obtain enough resources to live on. This was true in the South as well as the North, where instead of factories the expansive plantations ruled the economy. A privileged few owned most of the farmland and dominated the agricultural market so that small farmers had trouble making money. Americans struggling under such conditions were very receptive to the reports constantly arriving from western settlers, which described vast regions of bountiful farmland waiting to be claimed. These accounts were often terribly misleading, emphasizing the positive aspects of migration while ignoring the negative, but they nonetheless convinced many that their fortunes lay on the western frontier.
- 4 → The U.S. government did everything it could to encourage the migration trend, seeing it as the best method for ensuring that America, rather than the Mexico, England, or the Native Americans, gained control of the western territories. Politicians passed a series of measures that made land available to farmers—or homesteaders—at drastically reduced rates or, in many cases, for

free. For example, soldiers who served in the War of 1812 against Britain were promised tracts of western farmland, and six million acres were distributed under this arrangement. Congress's Preemption Act of 1841 gave squatters, people who had begun living on a piece of land without ownership of it, the opportunity to purchase up to 160 acres for just \$1.25 per acre. This concept was expanded under the 1862 Homestead Act, which allowed any citizen to claim a 160-acre plot for nothing more than the trivial \$10 fee charged to file an application. Then, if that person established a farm on the land and improved it for five years, he or she would be granted ownership of it.

- 5 → While these government policies spurred migration, the advent of new transportation technologies ultimately enabled the large-scale settlement of western regions. In the early 1800s communities had to remain close to major rivers, for these provided the only sure means of transporting goods back to the eastern markets. Overland transportation by horse-drawn wagon was simply too slow and costly. Construction of canals was the first attempt to address this problem. The Erie Canal, running 363 miles from Lake Erie to the Hudson River at Albany, resulted in a significant drop in the cost of shipping merchandise from Buffalo to New York City, from 19 to 2 cents a ton. In addition, the introduction of the steamboat in the first half of the century led to greater utilization of water routes such as the Mississippi and Missouri Rivers. **A** The biggest change occurred in 1869 when overland transport became feasible. **B** The transcontinental railroad was completed that year, solidifying the country's claim to all land in between the coasts, and producing the most important changes for western settlers. **C** Western pioneers were no longer isolated, and their townships quickly grew to become some of America's most important cities. **D**

14. Why does the author mention the Louisiana Purchase in paragraph 1?

- (A) To discuss how the territories of Ohio and Alabama were added to the nation
- (B) To identify the start of Americans' western migration
- (C) To explain why pioneers were able to travel to the Mississippi River
- (D) To illustrate how America expanded after achieving independence

**Paragraph 1 is marked with an arrow [→].**

15. The word **others** in the passage refers to

- (A) territories
- (B) trails
- (C) places
- (D) journeys



16. According to paragraph 2, one reason why people chose to leave their homes in the Northeast was the fact that

- Ⓐ factories did not pay workers enough money
- Ⓑ their families had moved to the Far West around 1840
- Ⓒ large cities were suffering from environmental degradation
- Ⓓ western settlements exhibited a culture similar to that in the Northeast

**Paragraph 2 is marked with an arrow [→].**

17. The word catalyst in the passage is closest in meaning to

- Ⓐ source
- Ⓑ instrument
- Ⓒ obstacle
- Ⓓ stimulus

18. According to paragraph 3, how did Southern plantations cause people to move west?

- Ⓐ By teaching them the skills they needed to start their own farms
- Ⓑ By promising to supply them with agricultural produce for their journey
- Ⓒ By building factories that destroyed people's farmland
- Ⓓ By severely limiting economic opportunities for small-scale farmers

**Paragraph 3 is marked with an arrow [→].**

19. What can be inferred from paragraph 3 about the reports people sent back about life on the western frontier?

- Ⓐ They played a partial role in attracting people to the west.
- Ⓑ Some of them were fabricated by people who had not made the trip.
- Ⓒ They began as a way to secure more funding for western farms.
- Ⓓ Their authors were punished by the authorities for misleading people.

**Paragraph 3 is marked with an arrow [→].**

20. Which of the sentences below best expresses the essential information in the highlighted sentence in the passage? *Incorrect* choices change the meaning in important ways or leave out essential information.

- Ⓐ At the time, the U.S. was struggling against many other nations to gain control of western lands.
- Ⓑ The American government encouraged all people, regardless of their background, to settle in western regions.
- Ⓒ Mexico, England, and the Native Americans all fought with America for the rights to the western territories.
- Ⓓ U.S. authorities supported westward migration as it kept other peoples from taking over the land there.

21. In paragraph 4, why does the author give details about various legislative acts that were passed by Congress?

- Ⓐ To discuss the government's successful attempts to put an end to squatting
- Ⓑ To describe how the U.S. government provided incentives for people to move west
- Ⓒ To demonstrate that western territories were subject to the same laws as the rest of the country
- Ⓓ To show that there were many barriers to becoming a landowner in the west

**Paragraph 4 is marked with an arrow [→].**

22. According to paragraph 5, why were most western settlements of the early 1800s located near rivers?

- (A) Most of the homesteaders who went west traveled by steamboat.
- (B) This gave them access to the Erie Canal and the ability to ship merchandise to New York.
- (C) Water routes represented the only means by which goods could be transported reliably.
- (D) They required large amounts of water in order to grow healthy crops.

**Paragraph 5 is marked with an arrow [→].**

23. In paragraph 5, the author suggests that the railroad was responsible for

- (A) the founding of townships on the west coast of America
- (B) enabling people to travel to different countries
- (C) popularizing the Mississippi River region
- (D) the major development of America's western lands

**Paragraph 5 is marked with an arrow [→].**

24. The word solidifying in the passage is closest in meaning to

- (A) confirming
- (B) invalidating
- (C) determining
- (D) clarifying

25. Look at the four squares [■] that indicate where the following sentence could be added to the passage.

**Both quick and reliable, trains made it possible for people to homestead far from the rivers.**

Where would the sentence best fit?

Click on a square [■] to add the sentence to the passage.

26. **Directions:** An introductory sentence for a brief summary of the passage is provided below. Complete the summary by selecting the **THREE** answer choices that express the most important ideas in the passage. Some sentences do not belong in the summary because they express ideas that are not presented in the passage or are minor ideas in the passage. ***This question is worth 2 points.***

**In the nineteenth century, the American nation expanded west all the way to the Pacific Ocean, and its citizens were quick to settle the newly acquired lands.**

- 
- 
- 

#### Answer Choices

- |  |  |
|--|--|
| <p>(A) Before long, trails were created that linked population centers along different routes, and people used these to access faraway western regions.</p> <p>(C) The Preemption Act and the Homestead Act were designed to compensate soldiers who had fought for the U.S. by giving them land for free.</p> <p>(E) Innovations in transportation finally established the firm connections between east and west that were needed to ensure successful western settlement.</p> | <p>(B) Facing a range of economic and social problems in the developed eastern states, many Americans chose to head west in the early 1800s.</p> <p>(D) To encourage the growth of the country, the American government sold western farmland at bargain prices to anyone who would agree to cultivate it.</p> <p>(F) Large-scale construction projects, such as the building of canals and railroads, didn't play a big role considering the amount invested.</p> |
|--|--|

Drag your answer choices to the spaces where they belong. To remove an answer choice, click on it. To review the passage, click **View Text**.



You have seen all of the questions in this test.  
You can review your work if there's time remaining.

## | 토마토 TOEFL iBT READING을 만든 사람들 |

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(주)능률교육 (우편번호 121-841)

펴 낸 날 2008년 10월 20일 초판 제1쇄 발행  
2011년 8월 16일 제6쇄

전 화 02 2014 7114

팩 스 02 3142 0357

홈페이지 [www.itomato.co.kr](http://www.itomato.co.kr)

I S B N 978-89-5997-267-8

등록번호 제 1-68호

정 가 23,000원



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교재 내용 문의 (02-3774-6566)

제품 구입, 교환, 불량, 반품 문의 (02-2014-7118 / 7177)

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