

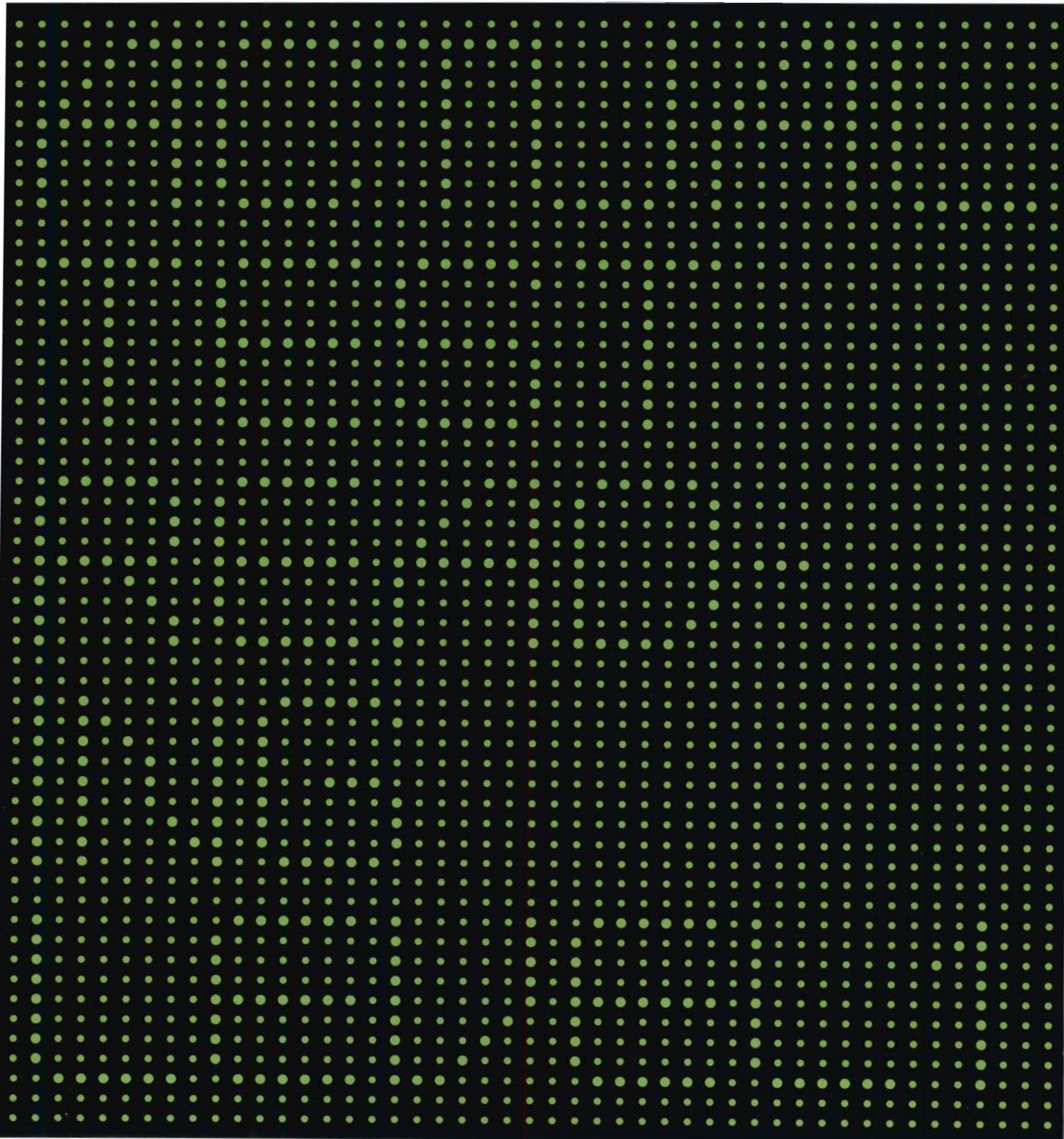
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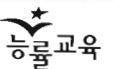
TEST BOOK

TOEFL iBT

ACTUAL TEST **READING** LEVEL 1



고명희·박규병·박영환·김정현·Carey Groleau·Henry John Amen IV 지음



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TOEFL iBT

TEST BOOK

ACTUAL TEST **READING** LEVEL 1

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Actual Test

01

iBT TOEFL Reading

Section Directions

This section measures your ability to understand academic passages in English.

The Reading section is divided into 2 separately timed parts.

Most questions are worth 1 point but the last question in each set is worth more than 1 point. The directions indicate how many points you may receive.

Some passages include a word or phrase that is underlined in blue. Click on the word or phrase to see a definition or an explanation.

Within each part, you can go to the next question by clicking **Next**. You may skip questions and go back to them later. If you want to return to previous questions, click on **Back**. You can click on **Review** at any time and the review screen will show you which questions you have answered and which you have not answered. From this review screen, you may go directly to any question you have already seen in the Reading section.

You may now begin the Reading section. In this part you will read 1 passage. You will have 20 minutes to read the passage and answer the questions.

Click on **Continue** to go on.

1. The phrase **this source** in the passage refers to
- (A) sun
 - (B) wind
 - (C) dammed rivers
 - (D) oceans

2. The word **exploit** in the passage is closest in meaning to
- (A) utilize
 - (B) declare
 - (C) contain
 - (D) determine

3. Why does the author mention **the Hoover Dam** in paragraph 1?
- (A) To give a current example of ocean-based energy technology
 - (B) To explain that dams are effective producers of sustainable energy
 - (C) To draw a comparison between two sources of renewable energy
 - (D) To show that alternative energy sources have not been successful

Paragraph 1 is marked with an arrow [➡].

4. In paragraph 2, the author states that
- (A) waves do not represent the only form of ocean power
 - (B) tropical oceans produce the greatest amount of energy
 - (C) scientists first attempted to collect power from ocean tides
 - (D) most of the electricity created by oceans is not usable

Paragraph 2 is marked with an arrow [➡].

5. The word **induce** in the passage is closest in meaning to
- (A) cause
 - (B) define
 - (C) order
 - (D) monitor

Energy from the Waves

➡ The quest for sustainable sources of energy has led humans to study the energy potential of the sun and the wind, as well as the immense power created by dammed rivers. The oceans, too, represent an impressive source of potential energy. For example, it has been estimated that the oceans could provide nearly 3,000 times the energy generated by hydroelectric dams such as the Hoover Dam. Yet, **this source** remains quite difficult to **exploit**.

➡ But this challenge has not prevented scientists from trying. Within the last few decades, several technologies that can transform the ocean's immense forces into usable electricity have been invented and introduced. Some focus on capturing the power of the changing tides, while others rely on thermal energy created by oceans in certain tropical regions. However, the most common and easiest-to-develop technologies are those designed to harness the power inherent in the ocean's waves.

➡ There are several methods by which ocean-wave energy can be collected. All of them work because the movement of the water that the waves **induce** creates storable energy by directly or indirectly driving a power generator. In one such technology, the changing water levels in the ocean that are produced by waves lift a long floating tube comprised of many sections connected by hinges. As the sections move up and down with the water, they pump a special fluid

continued ➡

6. According to paragraph 3, which of the following is true about wave-power technologies?
- (A) Many of them use submerged objects to obtain the waves' energy.
 - (B) Compressed air must be present for them to work properly.
 - (C) They undertake three steps in order to collect wave power.
 - (D) They rely on the water's motion to create electricity.

Paragraph 3 is marked with an arrow [→].

7. According to paragraph 5, what part did the cables play in OSPREY's design?
- (A) They attached the partially submerged chamber to the sea floor.
 - (B) They generated the electricity which was then collected in turbines.
 - (C) They conducted the electricity from the generator to the shore.
 - (D) They provided stability during powerful ocean storms.

Paragraph 5 is marked with an arrow [→].

8. The word **inhibited** in the passage is closest in meaning to
- (A) delivered
 - (B) prevented
 - (C) protected
 - (D) approved
9. The word **feasible** in the passage is closest in meaning to
- (A) secure
 - (B) exposed
 - (C) necessary
 - (D) appropriate

35 through the tube that can be used to drive a generator. Another technique works on a similar principle, only the floating object rocks back and forth with the motion of the water instead of up and down. A third method of
40 collecting wave energy relies on the rising water from the waves to compress air in a partially submerged chamber. As the waves rush into the chamber, they push the air out through a narrow tunnel. Located inside this
45 tunnel is a turbine connected to a power generator. The movement of the air turns the turbine, which feeds energy into the generator.

A The drawback to each of these concepts is that they make it necessary to have many pieces of machinery linked together. **B** This presents a problem because the larger the device, the more vulnerable it is to damage from hazardous ocean environments, and the more likely it is to interfere with otherwise
55 unspoiled coastal scenery. **C** Also, these methods demand the construction of site-specific machines that take into consideration average local wave heights and sea conditions. **D** In other words, the ability to get power
60 from waves differs from region to region.

→ Japan, Norway, and the UK have all attempted to generate energy by capturing the power of ocean waves. In northern Scotland, the first power plant to use wave
65 power, OSPREY (Ocean Swell Powered Renewable Energy), began operating in 1995. It followed the principle of the third method described above: waves entering a partially submerged chamber pushed air into turbines
70 to generate electricity. The electricity was

continued →

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.

- (A) Most of the numerous wave-energy concepts that exist have been insufficiently examined, usually in situations that do not simulate real ocean conditions.
- (B) Artificial testing pools can be used to evaluate wave-power technologies, but they do not provide as much data as researchers would like.
- (C) Even though the ocean-based energy industry has not yet proven to be profitable, a number of devices that can capture wave power have been proposed.
- (D) No testing of wave-energy collectors can lead to conclusive results because the conditions present in actual oceans are often unpredictable and hazardous.

11. What can be inferred from paragraph 7 about governments?

- (A) They do not believe wave-energy devices can withstand ocean forces.
- (B) Their interests often conflict with those of the energy industries.
- (C) They demand much scientific research before they provide funding.
- (D) Their support is often essential to the success of new endeavors.

Paragraph 7 is marked with an arrow [➡].

12. All of these are problems associated with the collection of wave energy EXCEPT

- (A) the difficulty of finding feasible locations
- (B) the destructive power of the ocean
- (C) the size of the equipment involved
- (D) the constant changing of the tides

then transmitted to power collectors on the shore via underwater cables. Unfortunately, the OSPREY plant was destroyed in a large storm, highlighting an unavoidable difficulty associated with this kind of power generation.

The potential benefits of wave-based energy are hard to ignore. Once the proper machinery is produced and installed, the energy is free. Maintenance costs are small, and the equipment does not pose any threats of environmental pollution. And best of all, the amounts of energy produced are enormous.

➡ However, these theoretical advantages have yet to be fully realized. In many cases, a lack of government funding has inhibited the technologies from advancing. For example, despite the relative abundance of proposed wave-power devices, many have not been adequately tested, and most have been evaluated only in artificial pools where they are not subjected to the harsh marine conditions that exist in actual oceans. Protecting the equipment from the sea's destructive forces, as well as the fundamental task of determining feasible locations for collecting energy, also present formidable challenges. All in all, while ocean power offers some intriguing possibilities, the difficulties involved in harnessing this energy source are substantial and will require more time to overcome.

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

Such a requirement can be quite cost-prohibitive, because engineers must create unique power generation mechanisms for each site.

Where would the sentence best fit?

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

14. **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 quest to establish a reliable source of renewable energy has led researchers to explore a variety of means of harnessing the energy of ocean waves.

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-
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Answer Choices

- | | |
|--|---|
| (A) Tidal power and thermal energy are also examples of how the ocean can meet the growing energy needs of humankind. | (B) Several different methods of gathering wave energy have been developed, including floating generators and partially submerged air chambers with turbines. |
| (C) People must weigh the benefits of ocean-powered generators against the negative effects such machinery will have on coastal habitats. | (D) Many countries have already succeeded in constructing equipment that can transform waves into a limitless source of electricity. |
| (E) Some of the advantages offered by ocean energy include low maintenance costs, little or no environmental harm, and huge production levels. | (F) Wave-energy projects are confronted by many problems, particularly the great diversity of ocean sites and the difficulty of avoiding damage to the equipment. |

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**.

15. In paragraph 1, the author explains the consistency of ancient Egyptian sculptural art by
- (A) comparing ancient Egyptian sculptures with the artistic styles of other civilizations
 - (B) identifying similarities between sculptures made at the beginning, middle, and end of the ancient Egyptian civilization
 - (C) mentioning that the ancient Egyptian civilization was only minimally influenced by other cultures
 - (D) describing the limitations of the carving method used by ancient Egyptian sculptors

Paragraph 1 is marked with an arrow [➡].

16. 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) Ancient Egyptian art cannot be understood in the context of modern values, so it is difficult to comprehend the culture's sculptures.
 - (B) Because ancient Egyptian sculptures depict religious figures, sculpture is believed to have been an important art form.
 - (C) It must be understood that religion significantly influenced ancient Egyptian sculpture, which often drew its content from religious figures.
 - (D) Ancient Egyptian sculptors were products of a religious culture and chose to focus their work on deities and pharaohs.

Contrasting Greek and Egyptian Sculpture

➡ For about three millennia, the ancient Egyptians maintained their unique approach to sculpture with little deviation. Because they were not significantly influenced by other cultures, they sustained a consistent style from approximately 3000 BC to 200 AD. In order to understand the sculptural art produced by ancient Egyptians, it is essential to consider the nature of their culture—it had a deeply religious orientation, which is evident in frequent depictions of divine figures, like deities and pharaohs. Another fundamental characteristic of ancient Egyptian culture was its interest in order and balance. In sculptures, this theme is manifested as the symbolic style artists used to represent human figures.

➡ When sculpting human figures, an ancient Egyptian artist's primary concern was to express the essence of the figure—that is, the permanent aspect of a human being, beyond the physical form that was considered to be impermanent. Few ancient Egyptian sculptors attempted to capture the individual features of a person's face or body. Creating an accurate external likeness was not the artist's goal. In fact, Egyptian artists followed strict conventions about how to appropriately depict human figures in their sculptures, and, as a result, most sculptures of human forms have a very similar look. The ancient Egyptian style of representing human figures, though unrealistic, was intentional.

➡ Carved from blocks of stone, ancient Egyptian sculptures in their finished forms

continued ➡

17. According to paragraph 2, the conventions that ancient Egyptian sculptors followed
- (A) described how to express the essence of a human figure
 - (B) provided sculptors with information about human proportions
 - (C) enabled sculptors to increase the realism of the figures they sculpted
 - (D) prevented sculptors from expressing spiritual concepts in their work

Paragraph 2 is marked with an arrow (➡).

18. The word **intentional** in the passage is closest in meaning to
- (A) deliberate
 - (B) skillful
 - (C) complex
 - (D) uniform

19. According to paragraph 3, many ancient Egyptian sculptures had block-shaped bases because
- (A) they were never finished
 - (B) they created a feeling of stability
 - (C) they were meant to survive for thousands of years
 - (D) they imitated normal human posture

Paragraph 3 is marked with an arrow (➡).

20. Why does the author mention the year **500 BC** in paragraph 5?
- (A) To emphasize that ancient Egyptian sculptures are older than ancient Greek sculptures
 - (B) To imply that ancient Greek sculptures are more sophisticated than ancient Egyptian sculptures
 - (C) To indicate when an important change in ancient Greek sculpture took place
 - (D) To give a date for the oldest known piece of ancient Greek sculpture

Paragraph 5 is marked with an arrow (➡).

35 generally retained cubical characteristics, as sculptors depicted humans in rigid, balanced poses—a style that does not mimic natural human posture. Figures appear very vertical and motionless. Permanence was an important
40 theme in ancient Egyptian sculptures, and artists tried to evoke a sense of stability by fixing figures on sturdy block-shaped bases. Not only did these bases contribute to the visual illusion of permanence, they made
45 Egyptian sculptures particularly enduring—so much so that many of these well-preserved works of art survive today.

Ancient Egyptian sculptures were not created for the sake of making art. Rather, these symbolic art forms were considered functional, as they helped link the Egyptians with the divine. Sculptures were believed to be means for communication with their gods.

➡ Emerging more than a millennium after
55 the ancient Egyptians, the ancient Greeks had a cultural perspective that—though heavily influenced by the Egyptian civilization—differed from the Egyptians' spiritual understanding of the world, and the contrast
60 is visible in the two cultures' approaches to sculptural art. Although the Greeks also had an elaborate pantheon of gods, the culture gradually became more interested in the lives of humans than of gods. Initially, ancient Greek
65 sculptures, like ancient Egyptian sculptures, depicted idealized human forms rather than actual people. Figures were represented in a more symbolic than naturalistic way. However, that changed as the ancient Greeks began to
70 question their mythology, and in **500 BC** Greek sculptors began to model their figures on real individuals.

continued ➡

21. The word **probed** in the passage is closest in meaning to
 (A) investigated
 (B) inherited
 (C) distributed
 (D) normalized

22. The word **endeavored** in the passage is closest in meaning to
 (A) feuded
 (B) attempted
 (C) sculpted
 (D) proposed

23. The word **solely** in the passage is closest in meaning to
 (A) quickly
 (B) exclusively
 (C) regularly
 (D) obviously

24. The word **it** in the passage refers to
 (A) art
 (B) form
 (C) worldview
 (D) role

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

This ideal was conveyed in sculpture by accurately representing the human body.

Where would the sentence best fit?

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

As the ancient Greeks **probed** the concept of democracy, their sculptures became very realistic. Like the Egyptians, the Greeks developed sculptural guidelines, but these were not rules about how to create symbolic figures. Instead, the ancient Greeks' guidelines established lifelike human proportions to help sculptors increase the realism of their figures.

A Breaking away from the cubical, rigid poses of ancient Egyptian sculptures, ancient Greek artists portrayed humans in a wide range of postures and **endeavored** to capture the individuality of the figures represented in their sculptures. **B** Individuality was an important theme for a culture so invested in the concept of democracy. **C** Unfortunately, much of the original work of ancient Greek sculptors has been lost or disfigured, sometimes purposely destroyed and other times damaged by neglect. **D**

Unlike ancient Egyptian artists, ancient Greek artists did not produce sculptures **solely** to be functional. Although sculptures were sometimes commissioned as public memorials or as offerings to gods, many were created to be nothing more than art. This attitude toward Greek sculpture allowed artists a great deal of freedom when choosing the subjects and content of their sculptures.

Ancient Greek sculpture was shaped by the earlier style of ancient Egyptian art, but the two civilizations had very different ideas about how to represent human figures in their sculptural art. These notions about the human form were primarily influenced by each culture's worldview and the expectations about the role of humans within it.

26. Directions: Complete the table by matching the phrases below.

Select the appropriate phrases from the answer choices and match them to the type of sculpture 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

- (A) Tried to represent the permanent essence of human beings
- (B) Underwent a stylistic change, rejecting idealized forms in favor of realistic figures
- (C) Was often produced purely for the sake of making art
- (D) Adopted conventions that set proportions for human bodies
- (E) Focused mostly on non-human subjects
- (F) Was never related to religion
- (G) Used poses that were very balanced and vertical
- (H) Was durable enough for much of it to survive for thousands of years
- (I) Was functional in a religious sense, helping people communicate with the divine

Ancient Egyptian Sculpture

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Ancient Greek Sculpture

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27. The word **ensued** in the passage is closest in meaning to
- (A) combined
 - (B) resolved
 - (C) resulted
 - (D) argued
28. According to paragraph 2, what factor is responsible for the manatee's inability to survive in cold water?
- (A) Its diet
 - (B) Its size
 - (C) Its habitat
 - (D) Its behavior

Paragraph 2 is marked with an arrow [➡].

29. From the information in paragraph 3, what can be inferred about species recognized as endangered?
- (A) They are eligible for special treatment.
 - (B) They succeed in stabilizing their populations.
 - (C) They mostly inhabit the state of Florida.
 - (D) They have been the subject of laws for over 100 years.

Paragraph 3 is marked with an arrow [➡].

30. The word **detrimental** in the passage is closest in meaning to
- (A) specialized
 - (B) confusing
 - (C) harmful
 - (D) evident

Protecting the Florida Manatee

01 With an average length of ten feet and
a weight of 1,200 pounds, the large, slow-
moving Florida manatee is perhaps the most
distinctive marine mammal of the southeastern
05 United States. Found predominantly in the
oceans, rivers, and estuaries around southern
Florida in the cooler months, manatees
frequently travel as far west as Texas and
as far north as Virginia during the summer.
10 They have been inhabitants of these marine
environments for 45 million years. In recent
times, however, the manatee has become an
endangered species, and an intense debate
has ensued over some of the measures
15 implemented to protect its survival.

➡ The Florida manatee faces numerous
threats from both natural and human-
generated causes. The most immediate
survival needs for manatees are warm water
20 and an adequate source of food. The animals
will suffer if either of these necessities cannot
be found. For example, in water below
68 degrees Fahrenheit, a manatee's large
body cannot convert food into energy fast
25 enough to keep the animal warm, and it will
most likely die. Sometimes, entire groups of
manatees perish when they are caught too far
north at the time of a sudden cold spell. Two
other potentially lethal hazards are blooms
30 of poisonous marine algae and catastrophic
weather events such as hurricanes.

➡ Despite their sensitivity to these natural
conditions, the biggest threats to the survival
of the manatee come from human activities.

continued ➡

31. 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) Researchers report that 90 percent of all known Florida manatee deaths have been the result of boat collisions.
- (B) Watercraft collisions have led to more manatee deaths than any other cause, and most manatees possess injuries from such encounters.
- (C) While 90 percent of the Florida manatee population has been injured by watercraft, only 25 percent of these incidents resulted in the death of the animal.
- (D) More Florida manatees die as a result of boat collisions than die from any other single cause.

32. Why does the author present the arguments of the boating and fishing communities in paragraph 5?

- (A) To illustrate the controversy caused by the manatee protection issue
- (B) To give examples of some successful conservation efforts
- (C) To explain why new regulations are unnecessary
- (D) To emphasize the importance of the economy over wildlife concerns

Paragraph 5 is marked with an arrow [➡].

33. The word **it** in the passage refers to

- (A) Florida
- (B) increase
- (C) rise
- (D) population

35 One major concern is the loss of habitat due to increases in land development and the introduction of pollutants to the environment. Manatees' access to seagrass, their main food source, and warm water during the winter is
40 limited in this way, forcing them into more northern areas where they are less likely to find the resources they need to survive. They can also be severely harmed by discarded fishing lines and nets, and, more significantly,
45 frequently die after being hit by watercraft. In addition, general harassment by individual humans has led to many manatee deaths. The state of Florida has been passing laws to safeguard manatees from such threats since
50 1893. The animal's listing as an endangered species in 1967 led to the creation of several protected wildlife areas in Florida, and conservationists are hoping to both expand the existing areas and establish new protection
55 zones.

The primary activity which such zones seek to control is boating. Collisions with watercraft are the leading cause of death for the Florida manatee, accounting for 25 percent of all
60 recorded mortalities, and some research has found that as many as 90 percent of observed Florida manatees bear scars from run-ins with boat propellers. More disturbingly, these incidents are responsible for the most deaths
65 of adult manatees of reproductive age. This is detrimental to the overall population, because it affects the manatees best able to multiply the species. Current and proposed protected areas either place speed limits on boat travel
70 or ban the use of marine motor vehicles altogether.

continued ➡

34. The word **contention** in the passage is closest in meaning to
 (A) proof
 (B) interest
 (C) research
 (D) disagreement
35. According to the passage, which of the following statements most accurately reflects the author's opinion about the Florida manatee?
 (A) It has recovered remarkably when compared to the 1980s.
 (B) It has become a burden on the taxpayers of southern Florida.
 (C) It should be more fully protected from dangerous algae blooms.
 (D) It should receive further guardianship from humans in the future.
36. According to paragraph 6, which of the following is true about manatees?
 (A) They can be found in many regions of the world.
 (B) They are expected to migrate farther south.
 (C) They receive limited support from the public.
 (D) They benefit the tourism industry in Florida.
- Paragraph 6 is marked with an arrow (➡).
37. All of these are mentioned in the passage as threats to the Florida manatee EXCEPT
 (A) the spread of diseases
 (B) toxic water plants
 (C) submerged fishing equipment
 (D) the loss of feeding grounds

➡ These conservationist measures have angered the region's boating and fishing communities, who see no need for such
 75 restrictions. Members of these groups argue that existing regulations are more than adequate, and that manatee populations are on the rise and are no longer in danger. Indeed, successive surveys from the 1980s to the
 80 present have tallied larger and larger numbers of manatees living around Florida. However, this increase may be due as much to advances in surveying techniques, which simply enable counters to find more manatees, as it is to an
 85 actual rise in the population. Other allegations that have become points of **contention**, such as the suggestions that expanded refuge zones will devalue property, raise taxes, or hurt the regional economy, have so far proved to be
 90 unfounded.

➡ **A** As awareness about the plight of the Florida manatee spreads, the majority of the public chooses to support efforts to protect the creatures. **B** The manatee is now
 95 a recognized symbol of Florida's wildlife and has become well known throughout the world. **C** Companies offering tourists the opportunity to view manatees in the wild are growing in popularity. **D** Though no one denies that the
 100 endangered Florida manatee still faces many challenges, with the help of conservationists and other concerned members of the public, it can hopefully continue to overcome them.

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

Conservation groups funded by private donations have played a key role in promoting this understanding.

Where would the sentence best fit?

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

39. **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 manatee has always faced certain natural dangers in the waters around Florida, but in modern times humans pose the greatest threat to the survival of the species.

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Answer Choices

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|---|--|
| (A) Manatees were once able to travel to other regions of the United States, but now are confined to the areas around southern Florida. | (B) Coastal development projects and pollution runoff destroy marine environments that provide manatees with the resources that are essential to their survival. |
| (C) Boating collisions are responsible for a quarter of all Florida manatee deaths and inhibit the species' ability to multiply. | (D) Florida has a long history of promoting legal protections for the manatee, beginning in 1893. |
| (E) Money generated from tourism related to manatees has helped pay for some of the conservation programs that benefit the animals. | (F) Though some organizations have taken a leading role in protecting the manatee, others strongly oppose the expansion of conservation measures. |

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**.

Actual Test

02



iBT TOEFL Reading

Section Directions

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You may now begin the Reading section. In this part you will read 1 passage. You will have 20 minutes to read the passage and answer the questions.

Click on **Continue** to go on.

1. According to paragraph 1, a defining feature of tundra is its

- (A) similarity to aquatic biomes
- (B) lack of tall plants
- (C) abundance of organisms
- (D) lack of human inhabitants

Paragraph 1 is marked with an arrow [➡].

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

- (A) lively
- (B) empty
- (C) smooth
- (D) strange

3. In paragraph 2, the author states that Antarctic tundra

- (A) takes up less land area than Arctic tundra does
- (B) supports more kinds of life than alpine tundra does
- (C) is found at higher elevations than Arctic tundra is
- (D) has a thinner permafrost layer than alpine tundra does

Paragraph 2 is marked with an arrow [➡].

4. The phrase **the term** in the passage refers to

- (A) Arctic
- (B) Antarctica
- (C) elevation
- (D) tundra

Arctic Tundra

➡ Our planet is home to many different kinds of environments, which are classified according to features such as climate and the types of plants and animals that live there. Each major classification is known as a “biome,” and these include forest, desert, grassland, and aquatic environments. One biome that is less well known, perhaps due to the lack of human settlement within it, is the tundra zone. The name comes from a Finnish word meaning “treeless plain.” As this description implies, tundra regions are relatively flat and devoid of large vegetation. However, despite its **barren** appearance, there are a number of plant and animal species that make their homes in the tundra biome.

➡ Tundra is found mostly in northern areas approaching the Arctic. There are two other types: Antarctic tundra, which is found in and around Antarctica; and alpine tundra, located on mountains that reach above a certain elevation. However, most tundra falls into the Arctic category, and when used generally, **the term** usually refers to that region. Tundra’s most distinguishing characteristic is situated under the ground. Beginning anywhere from two to twelve feet below the surface, the ground remains frozen year round. Called “permafrost,” this layer can be incredibly thick and does not support any kind of life.

At such high latitudes, temperatures in the tundra biome remain low for most of the year. The average annual temperature is well below freezing, and winter temperatures can

continued ➡

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.

(A) The permafrost causes water to remain aboveground, accessible to the animals, plants, and insects that depend on it.
 (B) Bogs and ponds are used as breeding grounds by plants and animals and even by some insects.
 (C) Plant and animal species living in areas with permafrost rely on frozen bodies of water for their survival.
 (D) Since permafrost is thick enough that water cannot filter through it, bogs and ponds form above the frozen soil.

6. According to paragraph 4, what can be inferred about the majority of plants in the tundra?

(A) They produce flowers during the growing season.
 (B) They do not require any sunlight to reproduce.
 (C) Their growing season is more than two months long.
 (D) Their roots do not extend deep into the ground.

Paragraph 4 is marked with an arrow (➡).

7. The word **scarcely** in the passage is closest in meaning to

(A) softly
 (B) rarely
 (C) evenly
 (D) fairly

35 drop to -94 Fahrenheit (-70 Celsius). Strong winds also blow, sometimes reaching between thirty and sixty miles per hour. On top of this, the tundra biome is one of the world's driest, receiving only six to ten inches of precipitation
 40 annually. Life is sustained by the ice in the soil and the aboveground snow that melt during the summer months. **Because this water cannot drain down through the solid permafrost, it collects at the surface, forming bogs and ponds that provide water for the survival of both plants and animals and even act as breeding grounds for some insects.**

➡ The striking appearance of the tundra's treeless plains may make it hard to believe
 50 that over 1,700 species of plants have been found to grow in this biome. The permafrost leaves only a thin layer of active soil near the surface, so plants with shallow root systems are best adapted for survival. Low shrubs and
 55 grasses, mosses, and some flower species are common. Due to the short summer growing season (lasting only about fifty to sixty days), the plants able to grow and reproduce quickly during this brief time have the best chance of
 60 survival. Most tundra plants are also capable of functioning in low levels of sunlight, because in winter the sun is **scarcely** seen.

➡ As is true of the vegetation, the animal species that inhabit tundra regions are
 65 well adapted to life in the Arctic. **A** They include mammals, birds, insects, and fish; temperatures are too low to support reptile or amphibian species. **B** Similar to tundra plants, the animals in this biome reproduce
 70 quickly during the short period in summer

continued ➡

8. The word **fluctuations** in the passage is closest in meaning to
- (A) changes
 - (B) steps
 - (C) members
 - (D) amounts
9. Why does the author discuss **the lemming** in paragraph 5?
- (A) To explain the feeding habits of predators in the tundra biome
 - (B) To provide an example of a species that is in danger of extinction
 - (C) To identify the most common species in the tundra biome
 - (D) To show how one species can affect the sizes of other populations
- Paragraph 5 is marked with an arrow (➡).
10. All of the following are mentioned in the passage as differences between tundra and other biomes EXCEPT
- (A) the instability of animal populations
 - (B) a permanently frozen layer of soil
 - (C) the presence of valuable minerals
 - (D) low yearly precipitation levels

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

Many of them also develop excess layers of fat at this time to protect them from the approaching cold.

Where would the sentence best fit?

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

when resources are most abundant. **C** In winter, most animals either migrate farther south or remain in hibernation until the spring.

D The migration cycles, combined with the harsh climate conditions, lead to larger than normal **fluctuations** in the animal populations. In fact, they are so vulnerable to small changes in the environment that one key species can determine the population sizes of many other animals, as is the case with **the lemming**, a small rodent that is the tundra's primary herbivore. A large lemming population results in an increase in the numerous predators that feed on the lemming. When the lemming population is small, the opposite occurs.

The features of the tundra make it a very fragile biome. Specific natural balances must be kept in order for the plant and animal species living there to survive. There has traditionally been only minor human activity in tundra regions, but this is beginning to change. Discoveries of oil and mineral deposits have attracted resource extraction companies, and mining and drilling operations have become more common. Hopefully, if such development continues, people will make an effort to respect this unique part of the world.

- 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.*

Its harsh climate and thick layer of frozen soil make the Arctic tundra one of Earth's most unique biomes.

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-
-

Answer Choices

- | | |
|---|--|
| (A) Even though the tundra is usually very cold and dry, melting ice in summer produces surface water that can sustain various species. | (B) Plants have adapted to the tundra by developing shallow roots and taking advantage of the short summer growing season. |
| (C) Plants such as large trees and bushes that require a lot of sunlight to grow are unable to develop in the Arctic tundra. | (D) Many animals inhabiting the tundra survive by reproducing quickly in summer and either migrating or hibernating in winter. |
| (E) The sizes of the populations of many predatory animals in the tundra depend upon the size of the lemming population. | (F) Many tundra regions have been damaged beyond repair by the activities of some drilling and mining companies. |

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**.

13. The word **exclusive** in the passage is closest in meaning to

- (A) critical
- (B) original
- (C) specific
- (D) unique

14. According to paragraph 1, what is true about the relationship between mammoths and elephants?

- (A) Elephants evolved after mammoths became extinct.
- (B) They share no common ancestors.
- (C) Early elephants were larger than the mammoths.
- (D) They coexisted in prehistoric times.

Paragraph 1 is marked with an arrow (➡).

15. 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 sites of the some of the most exciting mammoth finds have been located in the frozen regions of the world.
- (B) Under certain conditions, the food a mammoth was eating at the time of its death was preserved along with its body.
- (C) Scientists can gather more information from a frozen mammoth carcass than they can from other types of remains.
- (D) Important biological and dietary information has been gained from discoveries of ancient, naturally preserved mammoth bodies trapped in ice.

Three Mammoth Species

➡ The two modern elephant species maintain the **exclusive** status of being the largest land mammals on the planet. In the past, however, they had to share this distinction. Their closest prehistoric relatives were the mammoths, which lived during the period between approximately 4,000,000 and 5,000 years ago, and most of these species were as large as, if not larger than, the elephants that survive today.

➡ Paleontologists have pieced together an accurate understanding of the physical structures and behavioral patterns of mammoths from fossils and other specimens that have been collected around the globe.

Some of the most significant finds have involved complete mammoth carcasses preserved in the glaciers and permafrost of Siberia and Alaska, which are particularly useful to scientists because they provide samples of tissue, hair, and even undigested food from these creatures that perished so long ago. Unearthed skeletal remains are also extremely valuable, as they can explain some of the growth patterns and evolutionary transformations of the mammoth. The most frequently encountered **remnants** of these ancient mammals are fossilized teeth, which have been found in numerous sites in North America, Europe, Asia, and Africa.

➡ The many different mammoth species varied greatly in size, anatomy, and habitat, yet they all possessed some of the same general **traits**. They were vegetarians, equipped with

continued ➡

16. What can be inferred from the discussion of fossilized teeth in paragraph 2?

- (A) Many mammoth species originated in North America.
- (B) Mammoths were present in multiple parts of the world.
- (C) Fossils are most commonly found in far northern areas.
- (D) Australia contains the fewest mammoth skeletal remains.

Paragraph 2 is marked with an arrow [➡].

17. The word **remnants** in the passage is closest in meaning to

- (A) traces
- (B) results
- (C) images
- (D) concepts

18. The word **traits** in the passage is closest in meaning to

- (A) advantages
- (B) remarks
- (C) characteristics
- (D) symptoms

19. Why does the author mention the **elephant-like trunk** in paragraph 3?

- (A) To explain why all mammoths were vegetarians
- (B) To argue that mammoths were similar to the modern elephants
- (C) To name an identifying feature possessed by all mammoths
- (D) To describe a method used to distinguish different mammoth species

Paragraph 3 is marked with an arrow [➡].

35 large, flat molars to grind and chew plant material, and consumed enormous amounts of food during a typical day. Their upper incisors developed into two great tusks, and their nose and upper lip joined to create the

40 familiar **elephant-like trunk**. In addition to these obvious similarities, however, each type of mammoth displayed features that set it apart from its relatives.

➡ The Columbian mammoth (*Mammuthus* 45 *columbi*) was the largest of all the mammoths. It stood around fourteen feet tall at the shoulder and could weigh more than ten tons—almost twice as heavy as any other species. The largest pair of tusks ever 50 uncovered, which were sixteen feet in length, belonged to a Columbian mammoth. It made its home in the warmer regions of North America, reaching as far south as Central America. Fossil evidence shows that this 55 species lived between 100,000 and 9,000 years ago, making it one of the last large mammoths to become extinct.

➡ *Mammuthus primigenius*, commonly known as the woolly mammoth, is perhaps the 60 most easily recognizable species. It was also the most successful, despite inhabiting, unlike many other mammoths, the far northern expanses of the globe. **A** First appearing 250,000 years ago, by about 100,000 years ago 65 it occupied a range along the entire northern rim, from the British Isles east through Siberia, over the Bering land bridge, and into northern Canada. **B** To **withstand** the frigid climate, the woolly mammoth developed long, dense coats 70 of hair and fur, giving it a truly extraordinary

continued ➡

20. From paragraph 4, it can be inferred that tusk length in mammoths was
- (A) generally proportionate to body size
 - (B) mostly related to the animals' diets
 - (C) dependent on habitat and climate
 - (D) determined by when the species lived

Paragraph 4 is marked with an arrow [➡].

21. The word **withstand** in the passage is closest in meaning to
- (A) support
 - (B) bear
 - (C) replace
 - (D) cover

22. According to paragraph 5, the woolly mammoth differed from other mammoths in all of the following EXCEPT
- (A) hair growth
 - (B) type of habitat
 - (C) tusk shape
 - (D) extent of range

Paragraph 5 is marked with an arrow [➡].

23. According to paragraph 6, the Wrangel Island pygmies
- (A) have not been designated a separate species
 - (B) appeared earlier than the Channel Islands pygmies
 - (C) are not considered to be mammoths
 - (D) were the descendants of the Channel Islands pygmies

Paragraph 6 is marked with an arrow [➡].

24. The word **them** in the passage refers to
- (A) Columbian mammoths
 - (B) sea levels
 - (C) resources
 - (D) miniature mammoths

appearance. **C** With a height of ten feet and weighing about five tons, it was much smaller than the Columbian mammoth, and its tusks were also slightly shorter, reaching a maximum length of fourteen feet. **D** Similar to those of other mammoth species, though, they curved much more than the tusks of modern elephants do. Paleontologists estimate that the woolly mammoth disappeared around 10,000 years ago.

➡ Though it may be hard to believe, not all mammoth species were large. In fact, there are two well-documented cases of pygmy mammoth populations. One of these was simply a smaller version of the woolly mammoth that inhabited Wrangel Island off the coast of Siberia. The other type of pygmy mammoth is actually considered a unique species (*Mammuthus exilis*) and lived on the Channel Islands just west of California. This species most likely evolved from Columbian mammoths that wandered over to the islands during a period of reduced sea levels between 20,000 and 30,000 years ago. Once there, the limited space and resources available on the islands forced **them** to evolve smaller bodies in order to adapt. The Channel Islands pygmies had an average height of just six feet and weighed only a ton or two. Interestingly, though, these miniature mammoths lasted longer than any other species, with the extinction of the Wrangel Island pygmies occurring only about 4,000 years ago.

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

It also maintained a thick layer of fat just beneath the outer skin that served as insulation from the cold.

Where would the sentence best fit?

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

26. **Directions:** Complete the table by matching the phrases below.

Select the appropriate phrases from the answer choices and match them to the species of mammoth 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

- (A) Was probably the largest land mammal of its time
- (B) Is more likely to have been preserved in glaciers
- (C) Lost its trunk through a gradual evolutionary process
- (D) Became extinct most recently
- (E) Existed simultaneously on multiple continents
- (F) Evolved in isolated habitats
- (G) Had unusually straight tusks
- (H) Appeared first around 100,000 years ago
- (I) Is known to have lived in a tropical environment

Columbian Mammoth

-
-
-

Woolly Mammoth

-
-

Pygmy Mammoth

-
-

27. 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) In the late 1800s, labor unions mainly focused on increasing pay rates and bettering work environments.
- (B) Before labor unions, workers staged local protests to change their situations, but these protests were mostly ineffective.
- (C) The labor unions that formed in the late 1800s were the first opportunity workers had to communicate their opinions.
- (D) With the emergence of labor unions, laborers found a more powerful way to protest injustices they experienced in the workplace.

28. The word **ideals** in the passage is closest in meaning to

- (A) principles
- (B) laws
- (C) governments
- (D) actions

29. The word **hazardous** in the passage is closest in meaning to

- (A) burdensome
- (B) dirty
- (C) dangerous
- (D) dishonest

30. According to paragraph 3, the Washing Society organized strikers by

- (A) voting to set a standard minimum wage
- (B) going from house to house to talk with people
- (C) asking Atlanta families to hire more washerwomen
- (D) discussing their labor union with city officials

Paragraph 3 is marked with an arrow (➡).

Early American Labor Unions

01 The “labor movement” is a term that describes group action taken to protect the rights of laborers, especially concerning better working conditions and wages. In the first few
05 decades after the founding of the United States, early labor activity was taking place throughout the former colonies. In 1786, the first recorded American strike occurred in Philadelphia when printers halted their work in protest against
10 their low wages. Through the country’s first century, laborers in all kinds of trades were involved in small-scale protests to better their working conditions, but it was when the first labor unions—organizations that speak on
15 behalf of workers for fair wages and good working conditions—began to appear in the late 1800s that the labor movement gained momentum. Unions became an embodiment of democratic **ideals**, voicing the concerns
20 of common workers amid the increasing production demands, inadequate salaries, and poor work environments of an industrializing nation.

The benefits and power of labor unions are
25 best understood by looking at specific events in labor history. The Atlanta washerwomen’s strike in 1881 and the Triangle Shirtwaist Factory fire in 1911 show how labor unions helped workers change **hazardous** working
30 conditions and raised people’s awareness of the problems facing many laborers.

➡ In Atlanta in 1881, twenty black women who worked as washerwomen met to discuss setting a standard wage and gaining more

continued ➡

31. According to paragraph 3, what can be inferred about the general population's attitude toward the washerwomen before the strike?
- (A) People were not concerned about washerwomen's low wages.
 - (B) People realized that washing work was very difficult.
 - (C) People thought washerwomen should be allowed to vote.
 - (D) People did not think the Washing Society labor union was fair.

Paragraph 3 is marked with an arrow [➡].

32. In paragraph 4, why does the author mention the Triangle Shirtwaist Factory owner's policy of locking the factory doors?
- (A) To introduce the idea that factory owners used different methods to increase their companies' productivity
 - (B) To support the idea that safety laws were needed to prevent future tragedies like the Triangle fire
 - (C) To give an example of the success labor unions had in changing working conditions in factories
 - (D) To provide an example of the steps factory owners took to protect their employees

Paragraph 4 is marked with an arrow [➡].

33. According to paragraph 4, what can be inferred about factory safety before the founding of the Factory Investigating Commission?
- (A) Employees were not aware of the dangers of working in a factory.
 - (B) There were few laws designed to protect factory employees.
 - (C) Most employers were concerned about keeping their employees safe.
 - (D) There were few workplace injuries among factory employees.

Paragraph 4 is marked with an arrow [➡].

35 control over their profession. They formed a union named the Washing Society and organized a strike, spreading the word by going door to door and inviting other washerwomen to join them. Within three weeks, they had organized three thousand strikers. The Washing Society's group action could not be ignored, and city officials were eventually forced to acknowledge these women's concerns. The union had successfully demanded recognition. Because so many Atlanta families depended on the services that these women provided, the strike encouraged this large population to think about the washerwomen's situation. This group action was especially significant because it allowed black women to take part in a democratic system at a time when they were excluded from political participation because women were denied the right to vote.

➡ Another important event in the history of the labor movement was the 1911 fire in the Triangle Shirtwaist Factory that killed 146 of the 500 factory employees, mostly young women. On the upper floors of the ten-story building, women were trapped inside because of the owner's policy of keeping the exits locked to prevent employees from losing work time by using the restroom. This disaster demonstrated the need for greater regulation of working conditions. The Women's Trade Union League demanded an investigation, and soon the Factory Investigating Commission was founded, passing laws to promote safety in factories. Many other unions responded to the Triangle tragedy as well, organizing to petition for laws protecting the basic rights of

continued ➡

34. The word **endorsed** in the passage is closest in meaning to
- (A) supported
 - (B) questioned
 - (C) admired
 - (D) understood

35. All of the following are mentioned in paragraph 5 as results of the labor movement EXCEPT
- (A) a limited work week that provides employees with two-day weekends
 - (B) a minimum wage that guarantees employees will receive a certain amount of compensation
 - (C) economic growth that occurs on a national level and increases a country's prosperity
 - (D) a fixed length for workdays so that people cannot be forced to work more than eight hours a day

Paragraph 5 is marked with an arrow [➔].

36. The word **they** in the passage refers to
- (A) wages
 - (B) efforts
 - (C) interests
 - (D) unions
37. The word **coordinating** in the passage is closest in meaning to
- (A) explaining
 - (B) expanding
 - (C) organizing
 - (D) improving

laborers that were often overlooked by factory owners. At a time when much of the U.S. population was working in the manufacturing industry, and individual employees had little power to influence factory operations, unions were a means of communicating the wishes of the majority. Thus, common people could change the laws governing their daily lives—the goal of a democracy.

➔ Opponents of the labor movement sometimes approach the issue of labor unions from the perspective of corporations and industries. **A** They say that unions are responsible for decreasing working hours and establishing safety laws, which increases costs for companies and inhibits their productivity. **B** The problem with this argument, however, is that it suggests that profit is more valuable than laborers' well-being. **C** Workers are people with rights—a point of view that labor unions have **endorsed** throughout the history of the labor movement. **D** This belief has led unions to fight for the benefits that many modern working people take for granted, like eight-hour workdays, two-day weekends, laws against child labor, and minimum wages.

Because **they** provide people with a way of **coordinating** their efforts and defending their common interests, labor unions perform a democratic function. As seen in the washerwomen's strike and the Triangle fire, labor unions in the United States have given power to people who otherwise were denied official representation and have responded to unjust situations by working for protective laws.

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

This argument is valid because companies do have to make some concessions in order to protect their employees.

Where would the sentence best fit?

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

39. **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.***

From the earliest days of the United States, workers have been organizing and staging group actions to improve their collective working conditions and benefits.

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-
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Answer Choices

- | | |
|--|---|
| (A) The first and most successful strike in America took place among printers in Philadelphia who were demanding better wages. | (B) The Washing Society labor union conducted a strike in Atlanta and raised both the pay and the recognition of washerwomen. |
| (C) Workers were able to organize and improve the working conditions of washerwomen, but they could not prevent the deaths in the Triangle Shirtwaist Factory. | (D) A fire in the Triangle Shirtwaist Factory and the subsequent pressure from labor unions led the government to pass laws ensuring the safety of workers. |
| (E) The labor movement rejects the idea that company profit is more important than workers' rights and instead struggles to secure better benefits for laborers. | (F) American history is full of examples of labor unions that achieved significant results and made life better for workers. |

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**.

Actual Test

03



iBT TOEFL Reading

Section Directions

This section measures your ability to understand academic passages in English.

The Reading section is divided into 2 separately timed parts.

Most questions are worth 1 point but the last question in each set is worth more than 1 point. The directions indicate how many points you may receive.

Some passages include a word or phrase that is underlined in blue. Click on the word or phrase to see a definition or an explanation.

Within each part, you can go to the next question by clicking **Next**. You may skip questions and go back to them later. If you want to return to previous questions, click on **Back**. You can click on **Review** at any time and the review screen will show you which questions you have answered and which you have not answered. From this review screen, you may go directly to any question you have already seen in the Reading section.

You may now begin the Reading section. In this part you will read 1 passage. You will have 20 minutes to read the passage and answer the questions.

Click on **Continue** to go on.

1. The word **livelihoods** in the passage is closest in meaning to
(A) luck
(B) plans
(C) incomes
(D) reasons

2. According to paragraph 2, the two sides of a weathervane ornament must be unequal in surface area so that
(A) the ornament will conform to an accepted style
(B) they will also be unequal in weight
(C) they will remain motionless in the wind
(D) the ornament will move in the proper fashion

Paragraph 2 is marked with an arrow [➡].

3. The word **affixed** in the passage is closest in meaning to
(A) adjusted
(B) aimed
(C) altered
(D) attached
4. Why does the author give information about medieval European weathervanes in paragraph 3?
(A) To address the high cost of the weathervanes of that time
(B) To elaborate on the religious origins of the weathervane
(C) To contrast their meaning with that of early American weathervanes
(D) To explain how they were different from Greek weathervanes

Paragraph 3 is marked with an arrow [➡].

American Weathervanes

Centuries before the daily forecast, people had different ways of predicting the weather. One such method was to observe the direction of the wind, which required the use of a tool called a weathervane. These practical devices were not only employed by farmers and sailors, whose lives or **livelihoods** depended on foreknowledge of dangerous weather conditions, but were also used by churches, businesses, and ordinary people. Over time, the weathervane evolved to take on additional meanings aside from its practicality.

➡ Styles abound, but all weathervanes display a similar structure. A fixed rod comprises the lower portion. **A** Frequently, there are directional arms branching out from the center of the rod to indicate the four directions; the letters "N," "E," "S," and "W" are often **affixed** to the appropriate arms. **B** Above the rod is the ornament, which is the component that rotates with the wind. **C** In order to operate correctly, the ornament must be equal in weight but unequal in surface area on either side of its central axis. **D** Once this mechanical rule is met, a weathervane crafter is free to apply any design he or she chooses.

➡ The history of the weathervane stretches all the way back to ancient Greece. **They were** also prevalent in medieval Europe among the wealthy, when ornaments frequently possessed some sort of religious significance, but by the time the American colonists started producing weathervanes, things had changed; ornaments made in America were

continued ➡

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.

- (A) In contrast to European weathervanes, the ornaments of those made in America had no direct connection to religion.
- (B) Only the wealthy classes of medieval Europe could afford weathervanes, which explains the influence that religion had on their designs.
- (C) A comparison of early European and American religious weathervane ornaments shows many vast differences in style.
- (D) American colonists were occupied with different concerns than their European predecessors, and their weathervanes did not reflect religious issues.

6. According to the information in paragraph 5, how are banner and silhouette ornaments similar?

- (A) They are usually made to resemble animals or other living things.
- (B) The same process is used to produce both styles.
- (C) They were popular at the beginning of the twentieth century.
- (D) The same European source gave rise to both of them.

Paragraph 5 is marked with an arrow [➡].

7. The word **they** in the passage refers to

- (A) Silhouette vanes
- (B) models
- (C) subjects
- (D) silhouette ornaments

35 seldom influenced by religion. Weathervanes were often used by businesses and reflected whatever type of commerce the owner was involved in. For example, one might have seen a weathervane with a rooster ornament atop
40 a farmhouse, or a cow design used by a dairy farmer. After the Revolutionary War, patriotic images such as the eagle became popular. Trends changed yet again around 1850, when vanes began to be mass-produced.

45 American craftspeople are credited with introducing the great variety of ornament styles that can be observed today. Among these, the most basic is known as the banner style, which probably evolved from the flags that flew from
50 castles in medieval Europe. This common type of ornament consists of a flat panel of wood or metal that is cut into the shape of an arrow or pennant. Pennants are sometimes large enough to have legible messages carved into
55 them.

➡ Other ornaments are made to resemble identifiable figures, usually animals, but occasionally humans and other objects as well. The simplest version of these figural
60 ornaments is what is called a silhouette. Similar to banner-style creations, they are carved from a flat piece of metal or wood. Silhouette vanes were the prevailing models in previous centuries because of the ease
65 and low cost of their production, and **they** also experienced a revival in the early 1900s. However, the subjects of silhouette ornaments created during this second period were more likely to include human figures, often involved
70 in comical activities.

continued ➡

8. The author mentions **mass production** in paragraph 6 to
- (A) compare the status of weathervane makers before and after 1850
 - (B) describe how the fine details on horse ornaments were created
 - (C) suggest the cause of the shift from low-relief to full-bodied ornaments
 - (D) explain why ornaments shaped like cows became so popular

Paragraph 6 is marked with an arrow [➡].

9. The word **render** in the passage is closest in meaning to
- (A) present
 - (B) contain
 - (C) limit
 - (D) repair

10. According to the passage, the only type of weathervane ornament that would display words would belong to the
- (A) full-bodied style
 - (B) silhouette style
 - (C) low-relief style
 - (D) banner style

11. Why does the author mention **collectors and historians** in paragraph 7?
- (A) To discuss those who currently use weathervanes to predict the weather
 - (B) To explain who is responsible for pricing old weathervanes
 - (C) To account for the popularity of full-bodied ornaments
 - (D) To identify two groups presently interested in weathervanes

Paragraph 7 is marked with an arrow [➡].

➡ Another figural type is the low-relief ornament, which, instead of being cut from a flat panel, is formed from two pre-made molds and is usually a few inches thick. Sheets of copper are hammered into the molds, and these become the two halves of the figure. They are then trimmed and attached to create the finished ornament. This style is considered the crowning achievement of the American weathervane craft because of the time and effort involved in producing such ornaments by hand. Frequently cast into the shape of a horse, the best of these render their subjects with a surprising amount of detail and precision. Such handmade low-relief ornaments became less common after 1850 when a new, more complicated style emerged. Known as full-bodied ornaments, they offer a fully three-dimensional portrayal of the chosen object. Some of these, such as the popular cow figurine, are so complex that they include over twenty-five individual pieces, requiring the use of several different molds. The construction of these highly elaborate ornaments was made feasible by newly introduced mass production techniques in the second half of the nineteenth century.

➡ From the 1920s onward, weathervanes slowly acquired the status of an art form and currently are prized by collectors and historians alike. Authentic full-bodied weathervanes can sell for tens of thousands of dollars, and even simple banner-style ornaments are worth large sums. Now recognized as one of the finest forms of American folk art, weathervanes have progressed a long way from their initial use as a practical tool.

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

It is installed onto a desired surface, usually the roof of a building, and does not move.

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.***

Once used only as tools, weathervanes in America slowly progressed to become a recognized form of historical folk art.

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Answer Choices

- | | |
|--|---|
| (A) First invented by sailors and farmers, weathervanes soon came to be considered a valuable tool and were used by all kinds of people. | (B) Though always comprising the same basic components, weathervanes continuously changed in style and significance, with many ornament variations appearing in America. |
| (C) Banners and silhouettes are the simplest forms of weathervane ornament and were popular most likely because they were so easy to create. | (D) Old European flags probably provided the inspiration for the banner-style weathervane ornament, many of which were shaped like pennants. |
| (E) The use of molds enabled the creation of much more complex ornaments but also meant that such weathervanes were difficult to produce. | (F) Of the more complex styles, low-relief ornaments represent the pinnacle of craftsmanship, whereas full-bodied ornaments are very intricate and are the most valuable today. |

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**.

14. The word **attributes** in the passage is closest in meaning to
- (A) levels
 - (B) features
 - (C) members
 - (D) combinations
15. The word **it** in the passage refers to
- (A) correlation
 - (B) GPA
 - (C) class
 - (D) record
16. 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) Research has shown that college students attend most of their classes every semester.
 - (B) The more class sessions a course has, the better attended it will be.
 - (C) Students that get high grades can be expected to attend most of their classes.
 - (D) Generally, students that attend more class sessions get higher grades.
17. According to paragraph 3, how does a two-axis graph display the variables of a correlation?
- (A) Each axis corresponds to one variable.
 - (B) Each variable corresponds to one line on the graph.
 - (C) Each variable is represented on both axes.
 - (D) Each axis represents a positive correlation.

Paragraph 3 is marked with an arrow (➡).

Correlations: Positive and Negative

01 A correlation is a mathematical tool that researchers can use to make a comparison between two different characteristics of a group. These characteristics are called
05 variables, and correlations help describe the relationship between the two variables. There are many kinds of correlations: positive and negative, strong and weak, simple and complex. All of them provide important
10 information to people who study specific **attributes** of populations.

Once a correlation is established, it can be quite helpful. Using a proven correlation, researchers only have to measure one of
15 the two variables. Then they can predict the values for the second variable by applying a simple mathematical formula. This is far easier than having to measure both variables separately. For example, it has been proven
20 **that, on average, the more class sessions college students attend during a semester, the higher their final grade in that class will be.** This correlation enables university professors or administrators to accurately
25 predict a student's GPA by looking at his or her class attendance record. Or, conversely, it allows them to estimate how well a class was attended by looking at the grades received by the students in that class.

➡ This situation is an example of a positive correlation. As one variable increases, the other variable also grows by a proportionate amount. In other words, the larger the number of classes students attend, the higher their
35 grades will be. This relationship is easily

continued ➡

18. According to paragraph 4, when one variable in a positive correlation increases, the other variable

- (A) either increases or decreases depending on how you look at it
- (B) stays approximately the same
- (C) increases as well
- (D) decreases by a proportionate amount

Paragraph 4 is marked with an arrow (➡).

19. In paragraph 5, how does the author explain the appearance of a negative correlation line on a graph?

- (A) By comparing it to the graph of a positive correlation line
- (B) By linking the line's direction to the variables' values
- (C) By repeating the description of a two-axis graph
- (D) By stating that the variables move in the same direction.

Paragraph 5 is marked with an arrow (➡).

20. The word **practicality** in the passage is closest in meaning to

- (A) opposition
- (B) usefulness
- (C) complexity
- (D) responsibility

21. The word **engenders** in the passage is closest in meaning to

- (A) overpowers
- (B) comes after
- (C) brings about
- (D) resembles

plotted on a standard two-axis graph, with values on the horizontal x-axis representing one variable and values on the vertical y-axis representing the other. The x-axis values increase from left to right; the y-axis values increase from bottom to top. Because both sets of values in a positive correlation progress in the same way (increasing, in this case), a line will be graphed that slants up and to the right. This is the visual representation of a positive correlation.

➡ Another well-known positive correlation exists between a person's income level and his or her level of education. On average, the higher a person's income, the more years of education that person has completed. Or, vice versa, the more years of education a person completes, the higher that person's income will be. It is also possible to say that the lower a person's education level, the lower his or her income will be. Any way you choose to describe it, the correlation is positive because both variables are moving in the same direction. They either increase together or decrease together, depending on your perspective.

➡ In a negative correlation, however, the opposite occurs. As one variable increases, the other decreases by a proportionate amount. Just as in a positive correlation, the direction that each variable moves individually is not important; it is the relationship between the movements of the two variables that matters. In a negative correlation, they progress in opposite directions. On a two-axis graph, the line symbolizing a negative correlation

continued ➡

22. In paragraph 7, the author states that negative correlations
- (A) offer more information than positive correlations
 - (B) are used less frequently than positive correlations
 - (C) do not work as well as positive correlations
 - (D) share a similarity with positive correlations

Paragraph 7 is marked with an arrow (➡).

23. According to the passage, correlations do all of the following EXCEPT
- (A) facilitate the study of two-variable relationships
 - (B) enable researchers to make predictions about relationships
 - (C) describe cause-and-effect relationships between variables
 - (D) create specific images on a two-axis graph

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

Or there could be a third, unmeasured variable that acts on the relationship, such as the influence of the student's parents.

Where would the sentence best fit?

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

slants down and to the right. The downward movement represents the variable whose value decreases, and the rightward movement represents the variable whose value increases.

An established negative correlation exists between the number of hours of television a student watches per week and the grades that student receives in school. The more television the student watches, the lower his or her grades tend to be. Or, to say it another way, students who spend fewer hours watching television tend to have higher grades in school. Both of these statements describe the same negative correlation. Using this particular relationship, researchers can estimate how much television a child watches simply by observing his or her grade record.

➡ Despite their practicality, correlations both positive and negative have one major disadvantage. They cannot determine or even predict whether the changes in one variable are actually caused by changes in the other.

A For instance, researchers should not assume that watching television necessarily engenders bad grades. **B** The opposite might be true: students who frequently get bad grades become discouraged with schoolwork and choose to watch television instead. **C** This dilemma is part of the definition of correlations. **D** They can label a relationship as either positive or negative, but they cannot explain the causes behind the relationship.

25. Directions: Complete the table by matching the statements below.

Select the appropriate statements from the answer choices and match them to the type of correlation 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) Shows the relationship between the number of classes attended and a student's final grade
- (B) Allows researchers to estimate a student's grades by observing how much television the student watches
- (C) As one variable decreases, the other variable also decreases.
- (D) Shows the lack of any relationship between two variables
- (E) Can create a graphed line that progresses down and to the left
- (F) As one variable decreases, the other variable increases.
- (G) Predicts which variable is responsible for changes in the other variable

Positive Correlation

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Negative Correlation

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26. Why does the author mention **Hawaii** in paragraph 1?
- (A) To identify the state with the most Kress five-and-dimes
 - (B) To discuss the high demand for discount stores in the 1900s
 - (C) To illustrate the extent of the Kress chain's presence
 - (D) To relate the origin of the term "five-and-dimes"

Paragraph 1 is marked with an arrow [➡].

27. The word **they** in the passage refers to
- (A) five-and-dimes
 - (B) Kress stores
 - (C) states
 - (D) items
28. The word **meticulously** in the passage is closest in meaning to
- (A) poorly
 - (B) carefully
 - (C) rapidly
 - (D) quietly
29. From paragraph 2, it can be inferred that most owners of discount stores around 1900
- (A) stocked the same basic inventory of products
 - (B) did not concentrate as much on their stores' appearances as Kress did
 - (C) achieved more success than Kress did
 - (D) were not interested in competing with Kress's chain of stores

Paragraph 2 is marked with an arrow [➡].

30. The word **linger** in the passage is closest in meaning to
- (A) remain
 - (B) move
 - (C) consider
 - (D) release

Kress Five-and-Dimes

➡ American discount stores have a long history. The peak of their popularity came during the early to mid-1900s, when they were commonly known as "five-and-dimes," a reference to the price range of a majority of their merchandise. One of the most successful chains of five-and-dimes was S. H. Kress & Co. By the middle of the twentieth century, there were hundreds of Kress stores situated in cities in twenty-eight states, including **Hawaii**. In addition to providing quality items at low prices, **they** also possessed truly unique and appealing designs that made them an American cultural icon.

➡ Samuel Henry Kress, the founder of the chain, opened his first five-and-dime in Memphis, Tennessee, in 1896 and quickly expanded to other locations. One of the things that, from the very beginning, set his stores apart from the competition was his use of high-quality, aesthetically appealing materials in their construction. Everything was **meticulously** implemented to draw customers in and encourage them to **linger** in the store. Display windows of curved glass gave way to ornamental interiors of marble, fine woods, and brightly lit chandeliers. This exquisite setting was then filled with an enormous selection of products, from clothing to groceries to various other household goods. In addition to shopping, customers were free to enjoy the store's lounge rooms and the soda fountain located in its basement. During the Great Depression of the 1930s, Kress five-and-

continued ➡

31. In paragraph 3, what does the author state about the locations of Kress five-and-dimes?
- (A) They were concentrated in the regions with the richest cultures.
 - (B) They were distributed evenly throughout the United States.
 - (C) They were generally built in areas that lacked large structures.
 - (D) They were often situated on the main road of a city.

Paragraph 3 is marked with an arrow (➡).

32. The word **optimum** in the passage is closest in meaning to
- (A) total
 - (B) common
 - (C) best
 - (D) strangest
33. From the information in paragraph 2 and paragraph 4, what can be inferred about Kress stores in the 1930s?
- (A) They sold mainly luxurious products to their customers.
 - (B) They were used as community centers for out-of-work laborers.
 - (C) They did good business despite poor national economic conditions.
 - (D) They were constructed from materials of substandard quality.

Paragraph 2 and paragraph 4 are marked with arrows (➡).

34. The word **hailed** in the passage is closest in meaning to
- (A) taken
 - (B) ignored
 - (C) found
 - (D) praised

35 dimes served as popular meeting places and offered diversions from the hardships people were facing.

➡ However, the store interiors were not the only attraction of the Kress chain, for each location's facade also represented a stunning architectural achievement. **A** In one of his truly original innovations, Kress created an architectural division within his company, whose employees were responsible for developing exterior designs for the stores. **B** While such centralized control meant that every building displayed certain unifying elements, the remarkable thing about Kress architecture was that each store was fashioned specifically to complement the structures that surrounded it, as well as the culture of the area. **C** Frequently erected along cities' primary downtown thoroughfares, Kress five-and-dimes both blended with and helped define the Main Streets of twentieth century America. **D**

➡ Many of the country's businesses suffered from the onset of the Great Depression in 1929. For S. H. Kress & Co., on the other hand, this event presented the **optimum** opportunity for growth. Taking advantage of the cheap labor and materials that resulted from the economic downturn, Kress was able to construct many more stores than would have been possible otherwise. He recognized that the recession would not last forever and continued to develop his chain's reputation for luxurious discount shopping. By 1944, there were more than 200 Kress five-and-dimes operating throughout the U.S.

continued ➡

35. According to paragraph 5, Edward Sibbert was

- (A) employed by S. H. Kress & Co.
- (B) the owner of a New York City store
- (C) a good friend of Samuel Kress
- (D) hired by an architectural firm

Paragraph 5 is marked with an arrow (➡).

36. The author discusses Genesco Inc. in paragraph 6 to

- (A) describe what happened to the Kress five-and-dimes after they became retail clothing shops
- (B) provide a reason for why so many of the Kress buildings are still standing today
- (C) demonstrate the competition that the Kress company faced from 1964 to 1980
- (D) explain the disappearance of Kress stores in the latter part of the twentieth century

Paragraph 6 is marked with an arrow (➡).

37. 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 buildings that once held the popular five-and-dimes are now home to a variety of different businesses with relatively short histories.
- (B) Despite serving different functions today, the old store buildings symbolize cities' more centralized pasts and play a role in urban renewal projects.
- (C) In the past, most Main Streets in America contained at least one discount store, but today most of them have been forced to close.
- (D) Many modern cities are attempting to reintroduce elements into their downtown districts that were present during the time of the five-and-dimes.

➡ It was also during the Depression and World War II eras that some of the most architecturally memorable Kress buildings were produced. These were largely the work of Edward Sibbert, who headed the company's design team for several years around this time. He was responsible for introducing a flexible variety of modern styles that further elevated the prestige of Kress stores. Many of Sibbert's creations have been hailed by architects for their sophistication and attention to detail. His masterpiece, the seven-story complex on the corner of Fifth Avenue and 39th Street in New York City, received an award for its design and stood with pride as the company's principal outlet.

➡ In 1964, S. H. Kress & Co. was acquired by Genesco Inc., a clothing retailer. It began the process of closing down the less profitable Kress stores until, in 1980, it decided to dissolve the company altogether. Kress's legacy, however, has survived, as Main Streets in cities all over America still contain their monumental Kress buildings. Though the old five-and-dimes are now filled with different businesses, as mementos from a time when a city's Main Street was the center of its community and culture, they are valuable resources for municipalities currently seeking to revitalize their downtown districts.

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

A broad range of styles was utilized, among them Italian Renaissance, Mayan Revival, and Art Deco.

Where would the sentence best fit?

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

39. **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.***

Around the turn of the twentieth century, Samuel Henry Kress founded what turned out to be one of the most pervasive chains of five-and-dime discount stores.

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Answer Choices

- | | |
|---|---|
| (A) In addition to their large selections of low-priced goods, Kress stores attracted customers with their extravagant interior and exterior designs. | (B) An architectural team created as a unit of Kress's organization was charged with designing the spectacular buildings that housed the stores. |
| (C) Kress buildings became a recognizable sight along Main Streets all over America because they all appeared identical to one another. | (D) By utilizing low-cost materials and labor during the Great Depression, Kress was able to greatly expand his business, eventually maintaining hundreds of stores nationwide. |
| (E) The architect Edward Sibbert designed some of the most famous Kress structures and was best known for his work on the impressive New York City store. | (F) The Kress five-and-dimes finally shut down in 1980, but the impressive architecture of their buildings has endured and is still an important feature of many American cities. |

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**.

Actual Test

04

iBT TOEFL Reading

Section Directions

This section measures your ability to understand academic passages in English.

The Reading section is divided into 2 separately timed parts.

Most questions are worth 1 point but the last question in each set is worth more than 1 point. The directions indicate how many points you may receive.

Some passages include a word or phrase that is underlined in blue. Click on the word or phrase to see a definition or an explanation.

Within each part, you can go to the next question by clicking **Next**. You may skip questions and go back to them later. If you want to return to previous questions, click on **Back**. You can click on **Review** at any time and the review screen will show you which questions you have answered and which you have not answered. From this review screen, you may go directly to any question you have already seen in the Reading section.

You may now begin the Reading section. In this part you will read 1 passage. You will have 20 minutes to read the passage and answer the questions.

Click on **Continue** to go on.

1. In paragraph 1, the author describes the study of the cell as
 - (A) a combination of contributions from separate scientists
 - (B) a direct result of the discovery of bacteria
 - (C) the most important scientific field in modern times
 - (D) an attempt to cure diseases caused by bacteria

Paragraph 1 is marked with an arrow [➡].

2. The word **undetected** in the passage is closest in meaning to
 - (A) unable
 - (B) untouched
 - (C) unseen
 - (D) unlocked

3. 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) 1595 was the first time that a microscope had been used to try to understand cells.
- (B) The creation of the first multiple-lens microscope was a major event in the history of cellular research.
- (C) Compound microscopes are those that contain more than one lens in order to obtain greater magnification abilities.
- (D) Scientists in 1595 were able to make use of a very important new tool—the compound microscope.

4. The word **slivers** in the passage is closest in meaning to
 - (A) slices
 - (B) slots
 - (C) branches
 - (D) slides

Discovering the Cell

➡ Since the earliest days of scientific study, people have been trying to understand how life forms and functions. Over hundreds of years, the collective work of researchers revealed that all living organisms are composed of units called cells. Though they may carry out different functions and be different sizes, the fundamental structure and purpose of all cells are essentially the same. They regulate the growth and physical characteristics of every type of organism, from single-celled bacteria to humans, whose bodies contain trillions of cells. The knowledge of cells that scientists enjoy today is the result of an accumulation of many individual discoveries and achievements.

Cells went **undetected** for centuries for one very simple reason: they are so small that they cannot be perceived by the naked eye. Some early philosophers did suggest the existence of some kind of basic “building block” common to all living things, but none of them had the means to scientifically prove their theories. **Thus, one very important occurrence in the history of the understanding of the cell took place in 1595 with the invention of the first compound microscope—that is, the first microscope to make use of more than one lens in its magnification process.** Early models were of course very limited, but they offered a more detailed inspection of specimens than had previously been possible.

It was such a device that allowed English scientist Robert Hooke in 1663 to become the

continued ➡

5. The word **it** in the passage refers to
 (A) discovery
 (B) advancement
 (C) microscope
 (D) research
6. In paragraph 4, the author introduces **the Cell Theory** by
 (A) comparing the careers of two different scientists
 (B) describing the evolution of the microscope in the 1800s
 (C) identifying the differences between it and earlier theories
 (D) discussing the discoveries that immediately preceded it
- Paragraph 4 is marked with an arrow [➡].
7. The word **formulated** in the passage is closest in meaning to
 (A) copied
 (B) developed
 (C) denied
 (D) believed
8. According to the passage, the person who first determined what lies at the center of a plant's cell was
 (A) Matthias Schleiden
 (B) Robert Hooke
 (C) Robert Brown
 (D) Theodor Schwann

35 first known human to observe a cell. He cut some thin **slivers** of cork, which is a tissue made of dead plant matter, and viewed them under the microscope. **A** What he saw was a network of millions of tiny chambers packed
 40 tightly together. **B** These were in fact the walls of dead cells, since cork comes from dead plant material. **C** Hooke decided to call these chambers "cells" because they reminded him of the small monastery cells that monks lived
 45 in. **D**

➡ For more than a century after Hooke's discovery, a lack of advancement in microscope designs made it impossible for more in-depth research on the cell to be
 50 conducted. In the 1800s, however, **it** began again at a remarkable pace. During the early part of the century, many thinkers started to propose that cells were the most fundamental part of all living organisms. Living plant cells,
 55 as opposed to those of Hooke's cork samples, were found to contain a variety of smaller elements surrounded by a liquid mixture termed "cytoplasm." In 1833, the naturalist Robert Brown discovered the nucleus, or
 60 central structure, of plant cells. Then, in 1839, through a combination of collaboration and independent research, German scientists Matthias Schleiden and Theodor Schwann conclusively determined that cells are the
 65 basic unit of organization in both plant and animal life. Schwann subsequently **formulated** what became known as **the Cell Theory**.

➡ Essentially, this theory stated that, in addition to being the most fundamental unit
 70 of life, cells were themselves alive. They took

continued ➡

9. According to paragraph 5, how did Rudolf Virchow change the original Cell Theory?
- (A) He emphasized the importance of nonliving matter.
 - (B) He discovered that cells are not capable of repairing themselves.
 - (C) He translated the original theory into other languages.
 - (D) He provided the correct explanation of how new cells are created.

Paragraph 5 is marked with an arrow [➡].

10. The word **asserting** in the passage is closest in meaning to
- (A) admitting
 - (B) wondering
 - (C) declaring
 - (D) returning

11. Why does the author mention **science and medicine** in paragraph 6?
- (A) To show how cellular research is expected to change in the future
 - (B) To acknowledge the role of early philosophers and scientists
 - (C) To give examples of fields that benefit from cellular research
 - (D) To suggest that more information about DNA is needed

Paragraph 6 is marked with an arrow [➡].

in energy, regulated their own growth, and performed repairs on themselves. These ideas have been proven and are part of the modern version of the Cell Theory, but when it came to cell reproduction, Schwann's explanation was incorrect. He proposed that cells were generated spontaneously, and that they could arise anywhere—even from nonliving matter. In 1855, the German researcher Rudolf Virchow corrected this misunderstanding, **asserting** that cells reproduce by dividing and that they can only be created by other cells. He also elaborated on the other characteristics of cells in greater detail, formalizing the version of the Cell Theory that has remained mostly unchanged to this day.

➡ In modern times, the study of cells focuses on DNA, a substance that is usually found in a cell's nucleus and directs the growth of that cell. Scientists have thus discovered ways to map the genetic makeup of plants and animals, gaining new insights into the mysteries of life. As time goes on, there will surely be further exciting innovations in **science and medicine** made possible by the study of the cell. In this way, the work begun so long ago by early philosophers and scientists will continue.

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

Now, with concrete evidence of its existence, the study of the cell had begun.

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.***

It took centuries of scientific thought and research to achieve the understanding of the cell that is shared by scientists today.

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Answer Choices

- | | |
|--|---|
| (A) Without an effective microscope design, philosophers had no way of determining whether their theories about cells were correct. | (B) Using a newly introduced microscope to look at cork samples, Robert Hooke was able for the first time to observe the presence of cells. |
| (C) In the early 1800s, cytoplasm and nuclei were both discovered to be important components of plant cells, and the first Cell Theory was introduced. | (D) The original Cell Theory was revolutionary, but was incorrect in its depiction of how cells acquired and used energy. |
| (E) The Cell Theory was soon revised to include new information about cellular reproduction and became the foundation of modern cellular study. | (F) Studies involving the genetic structure of plants and animals seek to understand the ways in which DNA directs the growth of cells. |

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**.

14. The word **external** in the passage is closest in meaning to
- (A) natural
 - (B) independent
 - (C) permanent
 - (D) simple
15. According to paragraph 1, what is pollination?
- (A) The ability to reproduce without any assistance
 - (B) The transfer of pollen from plants to insects
 - (C) The use of pollinating agents in the reproductive process
 - (D) The movement of sex cells from the anther to the carpel

Paragraph 1 is marked with an arrow [➡].

16. 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) Many pollinators are needed to pollinate single-crop fields, which contain plants that come into bloom all at once.
 - (B) In a single-crop field, sometimes there are more blossoms than can be used, and other times pollinators are without food.
 - (C) A single-crop field cannot rely on natural pollinators alone, so other methods of pollination must be used to help the field produce a harvest.
 - (D) After a single-crop field blooms, natural pollinators are unable to find enough food to survive.

Pollination Methods

➡ Plants reproduce when genetic material from the male reproductive organ, the anther, is transferred to the female reproductive organ, the carpel. This process is called pollination, a reference to the pollen (the male sex cell) that is carried to the carpel. Some plants are self-pollinators and do not require any outside help to transfer pollen grains from the male anther to the female carpel. Many plants, however, rely on **external** pollinating agents like water, wind, animals, and, most often, insects to assist with pollination.

In human agricultural activities, successful external pollination is essential because plants produce fruits and vegetables only when pollination occurs. There are three methods for accomplishing such agricultural pollination. The first method is "natural pollination," carried out most commonly by birds and wild insects that happen to move pollen between flowers as they visit different blossoms to feed. The process is quite accidental, but it nevertheless successfully spreads genetic material among the plant population.

As the term implies, natural pollination has been going on for a long time without human interference. However, in modern U.S. food production, this method alone is no longer sufficient to fertilize all the plants involved. This is because current agricultural practices often encourage the seeding of large fields with a single crop, thus reducing the diversity of the land. Since there is only one kind of food and one kind of habitat, the amount of species

continued ➡

17. According to paragraph 4, “managed pollinators” are
- (A) domesticated bees that are raised to pollinate commercial crops
 - (B) not capable of meeting the needs of agricultural pollination
 - (C) primarily used in research to develop artificial pollination methods
 - (D) not as useful to farmers for pollination as honeybees are

Paragraph 4 is marked with an arrow [➡].

18. In paragraph 5, why does the author mention California almond?
- (A) To support the claim that honeybees are the most important pollinator
 - (B) To suggest that managed pollinators are ineffective in U.S. agriculture
 - (C) To introduce artificial pollination as a method of agricultural pollination
 - (D) To give an example of a large crop that honeybees help pollinate

Paragraph 5 is marked with an arrow [➡].

19. The word **susceptible** in the passage is closest in meaning to
- (A) related
 - (B) vulnerable
 - (C) opposed
 - (D) committed

35 that find the land suitable is severely limited, and many natural pollinators are forced to vacate the area. Furthermore, because all the plants in a single-crop field bloom at the same time, dense concentrations of pollinators are
40 needed, but only for a short amount of time, while, during the rest of the year, the field does not offer enough food to support these natural pollinators. Other factors contributing to the failure of natural pollination include modern
45 human activities such as logging, pesticide use, and urban growth, as well as natural factors like insect diseases, all of which are causing natural pollinators to disappear.

➡ In order to ensure the continued
50 productivity of their crops, growers have had to find other ways of pollinating their fields. Managed pollinators and artificial pollination offer two solutions to the problem of disappearing natural pollinators. “Managed
55 pollinators” is a term ascribed to bees that are cultivated for the specific purpose of agricultural pollination. Although many kinds of bees are used as managed pollinators, the most common variety is the honeybee.
60 Honeybees collect pollen and store it using “pollen baskets,” which are located on their back legs. This means that they can gather more pollen at each blossom, and that more will be accidentally distributed as they travel
65 from flower to flower.

➡ Fruit and vegetable growers all over the United States contract with beekeepers, hiring the services of honeybees to pollinate their fields. **A** In the United States agricultural
70 industry, ninety different crops rely on

continued ➡

20. The passage identifies all of the following as threats to populations of natural pollinators EXCEPT

- (A) human activities related to industrialization, construction, and urban development
- (B) temperature changes caused by shifts in climate and season
- (C) natural infestations of honeybee hives by harmful bee parasites
- (D) the use of pesticides on plants and fields cultivated for agricultural purposes

21. The word **cling** in the passage is closest in meaning to

- (A) react
- (B) move
- (C) stick
- (D) jump

22. The word **them** in the passage refers to

- (A) Scientists
- (B) plants
- (C) grains
- (D) yields

23. According to paragraph 6, what is the function of a honeybee's electrostatic charge?

- (A) It helps the honeybee locate the flowers with the most pollen.
- (B) It is a form of navigation used by many varieties of bees.
- (C) It causes plants to become electrostatically charged.
- (D) It attracts pollen from the flower to the honeybee's body.

Paragraph 6 is marked with an arrow (➡).

honeybees for pollination, but the crop requiring the most bees is the California almond. **B** In total, this industry uses one million hives—almost half the U.S. population of managed honeybees. **C** Managed pollinators like honeybees are an important alternative to natural pollination, but the main drawback is that managed honeybee populations are susceptible to the same factors—such as harmful pesticides and insect diseases—that have reduced natural pollinator populations. **D** The worst threat to the survival of honeybees is the Varroa mite, a parasite that has destroyed 95 to 98 percent of the wild honeybee population. Although cultivated honeybees are somewhat protected because humans provide them with sheltered environments and use chemicals to ward off mites, they are still at risk.

➡ “Artificial pollination” is another alternative to natural pollination. This method accomplishes pollination through artificial techniques, eliminating the need for natural or managed pollinators like honeybees. One such technique currently in use is called electrostatic pollination. Past studies have revealed that pollinating insects like bees have an electrostatic charge that causes pollen to cling to their bodies. Scientists applied this information to test and develop this artificial pollination method. They introduced an electrostatic charge to test plants and then dusted charged pollen grains over them. They found that the pollen was electrostatically attracted to the plants, which increased the rate of pollination and led to larger crop yields. The downside is that the quality of

continued ➡

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

Another crop that requires large amounts of honeybees is the Maine blueberry, which uses 50,000 hives yearly for the purpose of pollination.

Where would the sentence best fit?

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

electrostatically pollinated crops is slightly reduced. Yet, it is nonetheless an important option for agricultural growers, considering the lack of natural pollinators and the risks facing the populations of managed pollinators.

25. **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.***

Pollination takes place when pollen is carried from one part of a plant to another, and this process has occurred naturally for thousands of years.

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Answer Choices

- (A) The amount of fruits and vegetables that are produced by agricultural crops depends on the amount of pollination that takes place.
- (B) Modern human practices, such as creating single-crop fields, have led to the failure of natural pollination in many cases.
- (C) Farmers throughout the United States employ large concentrations of honeybees to pollinate their fields, a process known as managed pollination.
- (D) Managed pollination has become impractical because a sizable portion of the honeybee population has been destroyed by parasites.
- (E) Scientists use artificial pollination techniques to control the levels of electrostatic charge present in plants and pollen.
- (F) Artificial pollination methods such as electrostatic pollination offer an alternative to the use of insects that are vulnerable to diseases and environmental changes.

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**.

26. The word **move** in the passage is closest in meaning to
- (A) shift
 - (B) transfer
 - (C) touch
 - (D) replace
27. According to paragraph 1, which of the following is true about the history of acting?
- (A) The majority of it has been carried out on the stage.
 - (B) Many early actors performed both onscreen and onstage.
 - (C) Stage acting methods have always been the same.
 - (D) Screen actors have abandoned all previous acting conventions.
- Paragraph 1 is marked with an arrow [➡].
28. The word **both** in the passage refers to
- (A) performances
 - (B) playwrights and performers
 - (C) stage and screen actors
 - (D) techniques
29. According to paragraph 2, what should a play do in order to achieve success?
- (A) Present a storyline that includes a lot of action
 - (B) Establish an emotional connection between the actors and the audience
 - (C) Feature actors who have received awards for their performances
 - (D) Show in front of small audiences sitting close to the stage
- Paragraph 2 is marked with an arrow [➡].

Stage and Screen Acting

➡ There has always been a place for the actor in society. Since the earliest civilizations, people have been putting on dramatic performances to entertain, enlighten, and **move** their audiences. For nearly all of this time, plays acted out live onstage were the dominant format. Over the centuries, actors developed certain methods and conventions in order to give the best stage performances. Then, with the recent invention of the video camera, came a completely new type of dramatic storytelling—film—and the need for a new style of acting. Though **both** can trace the history of their professions back to the earliest playwrights and performers, stage and screen actors rely on very different techniques.

➡ **A** The most fundamental element of any performance is the audience. **B** For instance, the audience of a play is made up of people who are physically present in the vicinity of the stage. **C** For the play to be successful, each of its actors must be able to convey the actions, emotions, and motivations of his or her character to this live audience. **D**

➡ This requirement has led to certain established guidelines for stage acting. In order to ensure that the entire audience—some members of which, especially in large theaters or open areas, may be quite far removed from the stage—can follow the intricacies of the story, the actors must exaggerate their performances. Their physical gestures and facial expressions should be more **pronounced** than in real life. Also, stage actors have to

continued ➡

30. The word **pronounced** in the passage is closest in meaning to
 (A) complex
 (B) special
 (C) planned
 (D) obvious
31. Based on the information in paragraph 3, it can be inferred that the amount of exaggeration a stage actor employs might vary depending on
 (A) the length of the play
 (B) the skills of the other actors
 (C) the subject matter of the play
 (D) the size of the performance space
- Paragraph 3 is marked with an arrow (➡).
32. 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) Since they are always facing new audiences, good stage actors must always deliver fresh performances.
 (B) The audience of each performance of a play contains different people, and they expect a good show every night.
 (C) Stage actors need to play their roles with a certain enthusiasm in order to entertain people.
 (D) An actor who cannot perform well for many nights in a row will not become popular.
33. The word **intimate** in the passage is closest in meaning to
 (A) constant
 (B) serious
 (C) intelligent
 (D) personal

35 learn to project their voices so that even the spectators sitting in the back rows can hear them clearly. Voice control is another skill necessary for acting on the stage. Since not every audience member will be able to discern
 40 the subtle expressions of an actor's face or body language, that actor should be able to transmit those normally visible features of a character through his or her voice. It is this style of exaggeration and vocal adeptness that
 45 defines a great stage actor.

➡ Furthermore, the very nature of a live performance necessitates certain skills. During a show, actors must deliver their lines correctly on the first attempt. This puts particular
 50 emphasis on memorization and, in some cases, a talent for improvisation. In addition, because the audience for each performance is a new, different set of people, the ideal stage actor should be able to perform his or
 55 her part night after night as if it were the first time, with the same precision and excitement. This demand for consistency can be trying, especially considering that some plays run for over a year.

60 ➡ Acting for the screen, on the other hand, calls for a completely different approach. As opposed to a theater filled with hundreds of people, the camera occupies the role of audience. Immediately, the performance
 65 becomes much more intimate. The camera's ability to focus closely on the actor eliminates the need for exaggerated gestures. Instead, screen actors are judged on how natural their movements and words appear. Small
 70 details in facial expression or tone of voice

continued ➡

34. According to paragraph 5, what can be inferred about talented screen actors?
- (A) They frequently write their own lines.
 - (B) They do not appear as though they are acting.
 - (C) They know how to operate cameras and microphones.
 - (D) They are not as talented as the best stage actors.

Paragraph 5 is marked with an arrow [➡].

35. The word **excel** in the passage is closest in meaning to
- (A) be quick
 - (B) be good
 - (C) be open
 - (D) be large

36. From paragraph 4 and paragraph 6, what can be inferred to be the similarity between stage and screen actors?
- (A) They both should be able to perform well in either format.
 - (B) They both must tolerate repetition without becoming bored.
 - (C) They both are paid well for their work in a performance.
 - (D) They both have only one chance to deliver their lines correctly.

Paragraph 4 and paragraph 6 are marked with arrows [➡].

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

The onlookers are the ones for whom the story is told and therefore are the ones who determine how the story is told.

Where would the sentence best fit?

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

are captured by the camera and microphone and can be made to convey very complicated emotions. This allows characters in films to possess more nuanced personalities than their counterparts on the stage. Overall, the result is that screen actors can more closely approximate the feelings and situations of real life through their performances, creating new possibilities for dramatic storytelling genres.

- ➡ With the substitution of a recording device for a live audience, screen actors enjoy the luxury of being able to perform a scene over and over again until they get it exactly right. Of course, this means that, just as in stage acting, they must deliver their performances with great effort and enthusiasm time after time. Despite this similarity, the two formats clearly demand quite distinct talents from their actors. In fact, there is such a gap between the requirements of the stage and those of the screen that artists who try to cross over frequently find they cannot **excel** at both. This diversity suggests that the two will continue to coexist for some time to come.

38. Directions: Complete the table by matching the phrases below.

Select the appropriate phrases from the answer choices and match them to the type of acting 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

- (A) Attempts to capture lifelike moments
- (B) Relies largely on actors' voices to convey important details
- (C) Requires that actors consistently recall their lines correctly
- (D) Reflects most closely the performance styles of long ago
- (E) Is only suited for certain genres of storytelling
- (F) Demands that actors more explicitly display their characters' emotions
- (G) Uses cameras to emphasize actors' exaggerations
- (H) Offers actors the chance to redo scenes
- (I) Relies on technology to transmit subtleties

Stage Acting

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Screen Acting

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Actual Test

05

iBT TOEFL Reading

Section Directions

This section measures your ability to understand academic passages in English.

The Reading section is divided into 2 separately timed parts.

Most questions are worth 1 point but the last question in each set is worth more than 1 point. The directions indicate how many points you may receive.

Some passages include a word or phrase that is underlined in blue. Click on the word or phrase to see a definition or an explanation.

Within each part, you can go to the next question by clicking **Next**. You may skip questions and go back to them later. If you want to return to previous questions, click on **Back**. You can click on **Review** at any time and the review screen will show you which questions you have answered and which you have not answered. From this review screen, you may go directly to any question you have already seen in the Reading section.

You may now begin the Reading section. In this part you will read 1 passage. You will have 20 minutes to read the passage and answer the questions.

Click on **Continue** to go on.

1. The word **ascertain** in the passage is closest in meaning to
 - (A) study
 - (B) discover
 - (C) remember
 - (D) suggest

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) Coins are an example of inorganic matter commonly found on a stratum.
 - (B) Radiocarbon dating cannot provide information about the age of organic matter.
 - (C) It is possible to estimate the age of inorganic matter that is found on the same stratum as objects they coexisted with.
 - (D) Some objects cannot be radiocarbon-dated, but their ages likely match those of objects on the same stratum.

3. The word **its** in the passage refers to
 - (A) estimate
 - (B) presumption
 - (C) radiocarbon dating
 - (D) archaeology

4. Based on the information in paragraph 1 and paragraph 2, radiocarbon dating is used more often than other dating methods because it
 - (A) can be applied in many ways
 - (B) can be used to date inorganic samples
 - (C) is faster than other dating methods
 - (D) is the cheapest method

Paragraph 1 and paragraph 2 are marked with arrows (➡).

Carbon-14 Dating Method

➡ Radiocarbon dating is a scientific method used for determining the approximate ages of organic archaeological samples. Although there are several other techniques employed to estimate the ages of ancient remains, carbon-14 (also known as ^{14}C) is the most commonly used.

➡ The radiocarbon dating method measures the amount of ^{14}C in organic material in order to **ascertain** how much time has passed since an organism's death. This method has been employed to determine the ages of subjects that lived as long as fifty thousand years ago. Although radiocarbon dating cannot directly calculate the ages of inorganic materials, such as coins, organic matter discovered on the same ground level, or stratum, can provide an accurate estimate based on the presumption that both objects once coexisted. Because of its broad applications, radiocarbon dating is utilized in various fields, such as archaeology, anthropology, and geology.

➡ Prior to the advent of radiocarbon dating, researchers studying ancient artifacts were able to conclude that when objects were uncovered at archaeological sites, the deeper they were found in the ground, the older they were. Scientists also deduced that remnants discovered on a similar stratum were most likely comparable in age. There were, however, some obstacles to this method of dating artifacts. Accurately determining the age of a sample required confirmation from written records, and if no such records existed—due to

continued ➡

5. According to paragraph 3, before radiocarbon dating scientists relied on the assumption that the artifacts that are the deepest underground
- (A) are the most common
 - (B) are found on different strata
 - (C) are the oldest
 - (D) are very similar to one another

Paragraph 3 is marked with an arrow [➡].

6. The word **remnants** in the passage is closest in meaning to
- (A) rocks
 - (B) ancestors
 - (C) remains
 - (D) techniques
7. According to paragraph 3, how did scientists determine the ages of archaeological samples before radiocarbon dating?
- (A) They referred to historical records.
 - (B) They compared items from different strata.
 - (C) They contrasted items found in different areas.
 - (D) They measured the amount of oxygen in items.

Paragraph 3 is marked with an arrow [➡].

8. According to paragraph 4, how did Libby's technique benefit the field of archaeology?
- (A) It used ^{14}C to identify archaeological samples buried underground.
 - (B) It found small quantities of ^{14}C in the air.
 - (C) It naturally absorbed ^{14}C from archaeological samples.
 - (D) It used ^{14}C to estimate the ages of archaeological samples.

Paragraph 4 is marked with an arrow [➡].

35 the age of the item, for example—verifying the time frame was virtually impossible. Moreover, samples found at similar ground depths but at great distances apart could not automatically be assumed to be equivalent without other
40 supporting evidence.

➡ Fortunately, the radiocarbon dating technique, developed in 1949 by Willard F. Libby, helped to resolve these problems. When ^{14}C , which is naturally present in
45 very small quantities in the air, is absorbed by living organisms, some of it remains in their tissues. ^{14}C is created in the upper atmosphere where it unites with oxygen and transforms into carbon dioxide (CO_2). In this
50 form, it is integrated into the Earth's ecology, as plants absorb carbon dioxide from the air and pass along the ^{14}C to organisms higher up in the food chain; animals devour plants, taking in ^{14}C , and humans in turn consume
55 both. Throughout an organism's life cycle, it constantly takes in ^{14}C . **A** When living things die, however, ^{14}C stops being absorbed, and the amount inside the dead organism begins to decay. **B** Libby found that by measuring the
60 amount of ^{14}C that was left in organic material, the age of the subject could be estimated, as the rate of decay, or half-life of ^{14}C , is gradual yet steady. **C** Various radioactive substances have different rates of decay, ranging from
65 seconds to thousands of years. **D** In the case of ^{14}C , it takes 5,730 years for half of the initial quantity of the ^{14}C that was absorbed by an organism to disappear after it has died. It takes another 5,730 years for half of the remaining
70 half to decay, and so on. This means if Libby discovered that ^{14}C from an organic sample

continued ➡

9. What can be inferred from paragraph 4 about the rates of decay of some radioactive substances?

- (A) They are too fast to be useful for dating purposes.
- (B) They do not have half-lives.
- (C) They are more consistent than ^{14}C .
- (D) They are too difficult to calculate.

Paragraph 4 is marked with an arrow [➡].

10. According to paragraph 5, radiocarbon dating cannot accurately date samples older than fifty thousand years because

- (A) there are no samples that survive more than fifty thousand years
- (B) the amount of ^{14}C is very small in samples older than fifty thousand years
- (C) there are no written records from fifty thousand years ago
- (D) it takes fifty thousand years for ^{14}C to develop in samples

Paragraph 5 is marked with an arrow [➡].

11. Why does the author mention the Dead Sea Scrolls in paragraph 5?

- (A) To suggest that there would be no way to estimate the ages of ancient artifacts without radiocarbon dating
- (B) To contrast objects older than fifty thousand years with objects that are more modern
- (C) To give an example of an artifact that cannot be accurately tested using radiocarbon dating
- (D) To support the claim that radiocarbon dating is an effective way to date ancient artifacts

Paragraph 5 is marked with an arrow [➡].

gave off half as much radiation as modern ^{14}C , he could estimate the sample to be approximately 5,730 years old.

75 ➡ There are limits to this procedure, however—namely, that it can only estimate the ages of organic objects that are less than fifty thousand years old. In objects older than that, the quantity of ^{14}C is too small for scientists
80 to examine and render a reliable conclusion. But, overall, the technique is still highly dependable. To demonstrate its effectiveness, the radiocarbon dating method has been tested on historically recorded artifacts
85 whose ages are known, such as the Dead Sea Scrolls and pieces of an Egyptian tomb; the results have been very impressive—the ages calculated by the radiocarbon dating technique closely match the ages of the artifacts as
90 documented in historical records. These tests have proven that radiocarbon dating is an invaluable tool, one which will undoubtedly continue to be used in the future for a variety of applications.

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

This slow rate of decay makes ^{14}C ideal for use in determining the ages of ancient artifacts.

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 radiocarbon dating method is a procedure that measures the amount of ^{14}C in organic remains and uses that information to accurately estimate the ages of old artifacts.

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Answer Choices

- | | |
|--|---|
| (A) Because ^{14}C is present in the atmosphere, it is constantly absorbed by living things and can be found in every organism. | (B) ^{14}C , which is formed in the upper atmosphere, is a component of air all over the Earth. |
| (C) Comparing an artifact with historical records is a useful way of determining its origin and age, but it is not always accurate. | (D) Although radiocarbon dating is limited to artifacts less than fifty thousand years old, it is a dependable and invaluable tool. |
| (E) Scientists have verified the preciseness of the radiocarbon dating method by testing it on artifacts whose ages are known. | (F) Radiocarbon dating is useful in fields other than archaeology, such as anthropology and geology. |

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**.

14. The word **it** in the passage refers to
- (A) fluid
 - (B) water
 - (C) phenomenon
 - (D) whirlpool
15. According to paragraph 1, how are whirlwinds categorized?
- (A) They are divided according to their intensity.
 - (B) They are distinguished by where they form.
 - (C) They are grouped by the frequency of their appearance.
 - (D) They are classified according to the fluid they contain.

Paragraph 1 is marked with an arrow [➡].

16. How does the author explain the movement of heated air in paragraph 2?
- (A) By contrasting the properties of air and water
 - (B) By first describing the movement of cold air
 - (C) By explaining the effect a dust devil has on it
 - (D) By comparing it to a more familiar phenomenon

Paragraph 2 is marked with an arrow [➡].

17. The word **confined** in the passage is closest in meaning to
- (A) warm
 - (B) limited
 - (C) twisted
 - (D) specific

Dust Devils and Tornadoes

➡ Vortexes are formed from the rotational movement of a fluid. If this fluid is water, the phenomenon is a whirlpool, as seen when water exits a tub through a drain. If it is a gas, such as air, the correct term for the vortex is a whirlwind. Different types of whirlwinds materialize all over the world, and they are divided into two main categories. The greater whirlwinds are made up of funnel clouds, waterspouts, and the infamous tornado. The most representative type of lesser whirlwind is commonly referred to as a "dust devil." Though both whirlwinds, dust devils and tornadoes form under very dissimilar circumstances and display many contrasting qualities.

➡ A dust devil is created when a column of air suddenly heats up relative to the surrounding temperature. Because of heat's natural tendency to rise, the hot air moves upward as it displaces the cooler air around it, spinning rapidly just like water running down a drain. This rotational motion is the most efficient way for fluids to travel through a confined space.

When it first begins to develop, the devil is invisible, as only the air is moving, but the spinning winds quickly pick up particles and other debris from the ground and carry them up the vortex, giving it a discernable shape and size. Dust devils get their name because these lesser whirlwinds often form in areas containing loose dirt or other fragmented materials that are easily carried

continued ➡

18. 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) Dust devils remain unseen until their winds draw in materials that provide a visible form to the swirling vortex.
- (B) The shape and size of a dust devil depends on the kinds of particles its winds pick up from the ground.
- (C) It may be difficult to identify a devil when it first begins to form because the air alone cannot be seen.
- (D) Once enough debris is incorporated into the vortex, the devil grows in size until it becomes large enough to see.

19. According to paragraph 4, how does desert sand contribute to the formation of a dust devil?

- (A) It is easily transported because of its small size.
- (B) It warms columns of air by reflecting the sun's heat.
- (C) Sand dunes cause the wind's rotational movement.
- (D) It dries the air, causing it to rise rapidly.

Paragraph 4 is marked with an arrow [➡].

20. In paragraph 5, the author states that a vortex within a thunderstorm is made to spin faster when

- (A) its temperature rises
- (B) it grows larger
- (C) its width is decreased
- (D) it meets a funnel cloud

Paragraph 5 is marked with an arrow [➡].

35 by the whirlwind. However, they can also arise over water, snow, and even fire. The specific substances transported by the vortex determine the appearance of the devil.

➡ Due to the requirement of heat in the formation of a dust devil, the sun is quite important. Sunny, clear, dry weather with little or no wind offers the prime conditions for the generation of a devil. Deserts are obviously the most common sites of this phenomenon.

45 Heat radiating from the hot, flat sand easily creates the thermally charged columns. Yet, dust devils can occur in any location where the right conditions are present. They range from a few to hundreds of meters in height, with diameters anywhere from tens of meters to less than one. They are typically short-lived and do not pose much of a threat.

➡ Whereas heated air is responsible for producing dust devils, greater whirlwinds such as tornadoes form as a result of the movement of cold air. Most tornadoes are spawned by powerful thunderstorm systems. When the colder air of the storm front overtakes an area of warmer air, the latter is forced to rise rapidly and begins to spin as it does in a dust devil.

Combined with the winds already present in the thunderstorm clouds, the rising air can be sculpted into a narrow column, increasing its rotational speed. For reasons still unknown, it is then possible for this vortex to grow in strength and become a funnel cloud.

Funnel clouds appear to descend from the overhanging storm clouds because they pull moisture from the clouds down into the vortex. However, this does not always happen,

continued ➡

21. The word **spawned** in the passage is closest in meaning to
- (A) controlled
 - (B) covered
 - (C) produced
 - (D) pushed

22. The word **detected** in the passage is closest in meaning to
- (A) compared
 - (B) understood
 - (C) checked
 - (D) noticed

23. According to the passage, the vortices of tornadoes and dust devils are invisible unless
- (A) thunderstorms are present in the vicinity
 - (B) they last for more than ten minutes
 - (C) they form over areas containing water, snow, or fire
 - (D) substances of some kind are moved by the whirlwind

24. The word **prone** in the passage is closest in meaning to
- (A) subject
 - (B) used
 - (C) known
 - (D) related

25. From paragraph 7, it can be inferred that "tornado alley" in America
- (A) creates whirlwinds that then travel north into Canada
 - (B) experiences the most tornadoes per year of any region
 - (C) lies between contrasting climatic zones
 - (D) was the location of the deadliest tornado in the world

Paragraph 7 is marked with an arrow [➡].

meaning that the whirlwind could develop unseen. If the funnel cloud reaches the ground, visible or not, it is called a tornado. Sometimes, tornadoes are not **detected** until

75 their contact with the ground begins to kick up dust and debris. Tornadoes that happen to form over a body of water are referred to as waterspouts.

➡ Tornadoes occur worldwide, but some

80 regions are more **prone** to this phenomenon than others. **A** Perhaps the most famous is America's "tornado alley," an area that covers several midwestern states, where cold air from the Rocky Mountains or Canada often meets

85 warm, moist air from the Gulf of Mexico. **B** The ability of these whirlwinds to exceed wind speeds of 480 km/h poses great risks to life and property, killing approximately sixty people each year in the United States. **C** The

90 deadliest tornado in U.S. history occurred in 1925, raging through Missouri, Illinois, and Indiana and taking 695 lives. **D** Tornadoes can be anywhere from a few dozen meters to more than five kilometers in width. Like dust

95 devils, the average tornado is somewhat short-lived, lasting less than ten minutes, but some continue their destructive wanderings for an hour or longer.

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

Some of the most frequent and violent tornado activity on Earth takes place here.

Where would the sentence best fit?

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

27. **Directions:** Complete the table by matching the phrases below.

Select the appropriate phrases from the answer choices and match them to the type of whirlwind 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

- (A) Arise due to the advancement of cold air
- (B) Can occur without being visible
- (C) Require clear weather conditions
- (D) Form from the rapid heating of air
- (E) Have the potential to be very destructive
- (F) Must be exposed to fire in order to materialize
- (G) Last for a relatively short period of time
- (H) Are generated by preexisting storm systems
- (I) Can change from a lesser to a greater whirlwind or vice versa

Dust Devils

Tornadoes

Both

28. The word **comprehensive** in the passage is closest in meaning to

- (A) careful
- (B) broad
- (C) scholarly
- (D) brief

29. According to paragraph 2, why did London go to the Klondike?

- (A) To search for gold
- (B) To pursue a career as a writer
- (C) To find source material for his writing
- (D) To study the effects of the harsh climate on people

Paragraph 2 is marked with an arrow [➡].

30. The word **initiated** in the passage is closest in meaning to

- (A) stalled
- (B) overlooked
- (C) changed
- (D) began

31. What can be inferred from paragraph 3 about London's writing?

- (A) It earned him money.
- (B) It was misunderstood by the public.
- (C) It was not considered very important.
- (D) It was difficult to understand.

Paragraph 3 is marked with an arrow [➡].

32. Which of the following can be inferred from paragraph 4 about London's philosophical beliefs?

- (A) They were revolutionary during his lifetime.
- (B) They were not widely known in American culture.
- (C) They were offensive to many people.
- (D) They were influenced by several different philosophers.

Paragraph 4 is marked with an arrow [➡].

Influences on *The Call of the Wild*

01 Because Jack London was a rather
prolific writer, producing a large body of
work throughout his career, an analysis of
his writing style is perhaps most effective
05 when focused on a single representative
work because a **comprehensive** survey of
his writing would only provide a superficial
overview of London's tendencies as a writer
without examining the nature of his writing.
10 Two components that are central to London's
writing are his biographical experiences
and his philosophical notions, both of which
feature prominently in *The Call of the Wild*, the
novel for which he is best known.

15 ➡ **A** London held a variety of unusual
jobs that provided him with ideas for his
later writings, but one of his most influential
experiences—that supplied him with a sizable
reserve of source material—was his expedition
20 into the Klondike as a gold prospector. **B**
When the Klondike Gold Rush began in
1897, thousands of people traveled to Yukon
Territory, a northern Canadian province near
Alaska. **C** Through the winter of that year,
25 London searched for gold with little success.
D However, journaling throughout his stay in
the Klondike, London recorded his experiences
and the stories he heard from other prospectors
there. These writings became the basis
30 for several later works, and this subject
matter brought him his first literary acclaim by
capturing the attention of the American public.

➡ After leaving the Klondike in 1898,
London turned to his writing as a source of

continued ➡

33. In paragraph 4, why does the author mention **environmental determinism**?
- (A) To give an example of one way London's philosophical interests influenced his writing
 - (B) To support the claim that London's primary interest as a writer was in making money
 - (C) To introduce the idea that London's writing receives more credit than it deserves
 - (D) To explain why London often chose to use animals as main characters instead of humans

Paragraph 4 is marked with an arrow [➡].

34. According to the passage, what kind of writing did London originally become famous for?
- (A) Journal writing about gold prospecting
 - (B) Stories set in northern Canada
 - (C) Histories on the Klondike Gold Rush
 - (D) Essays about environmental determinism

35. According to paragraph 5, London used the main character, Buck, to show that
- (A) the primary influence on our behavior is our environment
 - (B) society's moral rules are stronger than people want to admit
 - (C) people do not appreciate what they have until it is absent
 - (D) few people are strong enough to survive in a world without social rules

Paragraph 5 is marked with an arrow [➡].

36. The word **its** in the passage refers to
- (A) environment
 - (B) climate
 - (C) Yukon
 - (D) behavior

35 income. Eventually, one of his short stories about the North was accepted for publication, and this first sale **initiated** his career as a writer. In 1904, London published *The Call of the Wild*, a novel that was initially received positively and that has grown in popularity to become a part of the American literary canon.

➡ *The Call of the Wild* draws upon London's experiences in northern Canada, but it also incorporates many of his personal beliefs about nature and humanity—themes guided by the philosophers that deeply influenced him. One of the theories that London applied to his writing was the idea of **environmental determinism**, which suggests that humans are products of their environments. Their behavior is primarily determined by their surroundings, and the expectations of society only have a secondary influence. This belief is at the root of London's writing, especially his works about the harsh climate of the Klondike. London's interest in environmental determinism led to the frequent portrayal of situations in which characters must behave in ways that conflict with what society deems moral and correct.

➡ In *The Call of the Wild*, the Klondike—a location with which London was personally familiar—presents an ideal setting for an exploration of London's philosophical ideas. Through his central character, Buck, a dog taken from his comfortable life in California and sent to work in the Klondike, London suggests that the environment—here, the climate of the Yukon—is the main force shaping our behavior. In fact, **its** influence is powerful enough to contradict even the

continued ➡

37. The word **primitive** in the passage is closest in meaning to
- (A) high
 - (B) respectful
 - (C) instinctive
 - (D) angry

38. 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) In order to adjust to his new life, Buck's behavior must become harsher than it was before.
- (B) Buck discovers that he does not need society to tell him what is right and wrong.
- (C) Even though the Klondike is different, Buck maintains his sense of self.
- (D) After spending time in the Klondike, Buck finds he can no longer remember his old morals.

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

These people, like London, envisioned wealthy futures for themselves and were willing to endure the many hardships that would, they believed, bring them closer to their fortunes.

Where would the sentence best fit?

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

most fundamental social laws about morality.

Buck identifies "the reign of **primitive law**," which supersedes the rules he had become accustomed to in his former life. "The facts

75 of life took on a fiercer aspect and...he faced it with all the latent cunning of his nature

aroused." Buck realizes that the "civilized" **ethics of his former life no longer apply, and he adopts a new code of behavior, which,**

80 **though cruel compared to the morals taught by society, enables him to adjust to life in the Klondike.** London makes it clear that the

inability to perceive and accept the laws of the wild results in death. In the novel, after

85 continually failing to recognize the behavioral rules determined by their environment, Buck's three gold-seeking masters become its victim, dying as they try to cross a frozen body of water.

90 It is certainly evident in *The Call of the Wild* that London's writing is heavily influenced by his experiences and philosophical ideas. With his Klondike expedition inspiring the novel's setting, London creates a stage for conveying

95 his thoughts about human behavior and society.

40. 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.***

Jack London's work was influenced by ideas and experiences that the author was exposed to.

-
-
-

Answer Choices

- | | |
|---|---|
| (A) <i>The Call of the Wild</i> is based on London's time in the Klondike, where he worked as a gold prospector. | (B) <i>The Call of the Wild</i> was written from the perspective of an animal rather than from the point of view of a person. |
| (C) In 1898, London published his first short story and soon after began to rely on his writing as a means of economic support. | (D) London's writing was influenced by the ideas of environmental determinism, a philosophy to which he subscribed. |
| (E) London's novels quickly became successful, and audiences eagerly anticipated the author's future work. | (F) Through the central character in <i>The Call of the Wild</i> , London shows that the environment is the main influence on our behavior. |

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**.

Actual Test

06

iBT TOEFL Reading

Section Directions

This section measures your ability to understand academic passages in English.

The Reading section is divided into 2 separately timed parts.

Most questions are worth 1 point but the last question in each set is worth more than 1 point. The directions indicate how many points you may receive.

Some passages include a word or phrase that is underlined in blue. Click on the word or phrase to see a definition or an explanation.

Within each part, you can go to the next question by clicking **Next**. You may skip questions and go back to them later. If you want to return to previous questions, click on **Back**. You can click on **Review** at any time and the review screen will show you which questions you have answered and which you have not answered. From this review screen, you may go directly to any question you have already seen in the Reading section.

You may now begin the Reading section. In this part you will read 1 passage. You will have 20 minutes to read the passage and answer the questions.

Click on **Continue** to go on.

1. In paragraph 1, why does the author mention Temperature and aridity?

- (A) To provide an established definition for what constitutes a desert environment
- (B) To describe factors that account for many desert animals' adaptations
- (C) To explain why one concept is more important than the other
- (D) To identify the specific habitats in which each condition is found

Paragraph 1 is marked with an arrow [➡].

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) Deserts are extreme climates, where exposure to high temperatures may be fatal for animals that are not well adjusted to the environment.
- (B) Although animals in temperate regions must also regulate their body temperatures, this ability is especially crucial for animals in hot climates.
- (C) Animals cannot survive if their body temperatures fluctuate too far beyond the boundaries of their optimal temperature range.
- (D) Because deserts have extreme temperatures, animals that inhabit these regions are exposed to more risks than animals in other climates.

3. The word **scorching** in the passage is closest in meaning to

- (A) overwhelming
- (B) intense
- (C) burning
- (D) stimulating

Characteristics of Desert Animals

➡ Animals that live in the desert possess unique characteristics that allow them to survive the harsh conditions of their habitats. Deserts, with extreme temperature ranges and arid climates, pose difficult challenges for the diverse species that make their homes there. Temperature and aridity—the major concerns faced by desert animals—serve as the primary causes for many of their climatic adaptations.

Maintaining optimal body temperatures is critical for animals in a variety of climates, but in regions where environmental temperatures range to high extremes, control over body temperature is particularly essential, often making the difference between life and death. Desert animals have many ways of dealing with their scorching habitats. These adaptations can be roughly divided into two categories: adaptations for heat avoidance and adaptations that accomplish heat dissipation.

Many species avoid the heat by seeking shelter in microclimates—areas that can be considered miniature “climates” in a sense, for their environmental conditions differ, in terms of temperature, from the larger climate they are contained within. **A** For example, kangaroo rats hide away in a type of underground microclimate—deep burrows that keep them cool. **B**

By waiting until the sun sets to begin their periods of activity, nocturnal animals avoid the heat by coordinating their habits. **C** A wide variety of species have evolved this tactic. **D**

continued ➡

4. Which of the following can be inferred from paragraph 5 about animal activity during midday?
- (A) Most animals are inactive during the middle of the day.
 - (B) Many desert iguanas sleep during the hottest part of the day.
 - (C) Animals with light coloration are most active during midday.
 - (D) Desert iguanas usually seek shady places.

Paragraph 5 is marked with an arrow [➡].

5. According to paragraph 6, kangaroos and cheetahs lick their paws because
- (A) their paws are especially sensitive to the heat
 - (B) moisture accumulates on those parts of their bodies
 - (C) it initiates the process of evaporative cooling
 - (D) their paws become dry faster than the rest of their bodies

Paragraph 6 is marked with an arrow [➡].

6. The word **them** in the passage refers to
- (A) animals
 - (B) body temperatures
 - (C) Cheetahs and kangaroos
 - (D) paws
7. In paragraph 7, the author illustrates the potential efficiency of adaptations to arid climates by
- (A) telling the average annual amount of water that falls in deserts
 - (B) explaining that some animals do not need to drink water
 - (C) giving examples of animals that live in deserts
 - (D) defining the term "desert"

Paragraph 7 is marked with an arrow [➡].

Mountain lions, coyotes, and bats are among the numerous nocturnal desert species that spend the day avoiding the powerful heat.

➡ While some animals adjust their behavior to help them survive in the desert, others rely on physical adaptations to help them dissipate heat. Some animals have evolved advantageous coloration to help them reflect sunlight away from their bodies, preventing the unnecessary absorption of excess heat. The desert iguana is a species that is capable of adjusting its body color, lightening in color to almost pure white during the hottest hours of the day. This ability permits it to remain active during midday while high temperatures confine many other animals to areas of shade.

➡ Another means of heat dissipation is evaporative cooling, which helps some animals lower their body temperatures. Cheetahs and kangaroos, for example, lick their paws because the resulting evaporation of water dissipates heat, helping them maintain comfortable body temperatures. Additionally, cheetahs—and several other species, like desert bighorn sheep—employ evaporative cooling in the form of panting, which facilitates evaporation from the respiratory system.

➡ In deserts, which by definition receive less than twenty-five centimeters of rain a year, adaptations related to water procurement and water conservation are absolutely necessary. Some species have highly efficient adaptations that enable them to survive for long periods without water. In fact, the most economical desert species do not even need to drink at all.

continued ➡

8. According to paragraph 8, some insects meet their water requirements by
- (A) feeding on insects that have special adaptations to the desert
 - (B) spending their active hours searching for water sources
 - (C) accessing water held in plants
 - (D) storing fluids in their bodies

Paragraph 8 is marked with an arrow [➡].

9. The word **parched** in the passage is closest in meaning to
- (A) uncomfortable
 - (B) strenuous
 - (C) dry
 - (D) sour

10. Based on the information in paragraph 8 and paragraph 9, what can be inferred about addax?
- (A) They do not produce urine because they do not drink water.
 - (B) They are particularly adept at procuring and conserving water.
 - (C) They cannot survive without water as long as camels can.
 - (D) They prey on animals that drink large quantities of water.

Paragraph 8 and paragraph 9 are marked with arrows [➡].

11. Based on the information in paragraph 10, which of the following best explains the term **embryonic diapause**?
- (A) The termination of pregnancy
 - (B) The conception of an embryo during a drought
 - (C) A temporary cessation of embryonic development
 - (D) An increase in reproduction before a drought

Paragraph 10 is marked with an arrow [➡].

➡ For some animals, acquiring the water they need is a simple matter, for their adaptations to their habitat free them from the obligation of searching for water; their water requirements are fulfilled by the water content in the foods they eat. Some insect species obtain water from succulent desert plants like cactuses. In their leaves, stems, and fruit, plants store fluids that provide insects with the water they need to survive. Ostriches are also able to meet their water requirements through their food, and they can survive for months without water. Similarly, addax—desert-dwelling antelope—and kangaroo rats obtain all the moisture they need from the foods they eat. Both of these animals are capable of going their entire lives without drinking any water.

➡ Adaptations for efficient water procurement are one evolutionary result of life in the desert, but there are others. Water conservation adaptations also help some species, reducing the amount of water they lose through the excretion of wastes. Instead of excreting urine diluted with water, these animals discharge highly concentrated urine. Camels and addax rely on this form of water conservation to help them endure the **parched** conditions of their habitats.

➡ Another means of water conservation is related to reproduction. Because reproduction is an especially water-taxing biological process, a variety of species cease reproductive activities during dry periods. Grey kangaroos also stop breeding when there are insufficient water supplies, but they have a unique method for dealing with prolonged periods of drought:

continued ➡

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

In the desert, such microclimates may exist in the form of shaded refuges or underground retreats.

Where would the sentence best fit?

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

embryonic diapause. During embryonic diapause, embryos, their growth suppressed, remain in the uterus for extended periods of time. In this manner, the mother is able to conserve water and at the same time increase her baby's chances of survival by delaying birth until the environment is conducive to the production of offspring.

13. **Directions:** Complete the table by matching the statements below. Select the appropriate statements from the answer choices and match them to the type of adaptation 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

- (A) Nocturnal desert species are primarily active during the night.
- (B) In microclimates, some species avoid the general conditions of the regional climate.
- (C) Some animals protect themselves from desert conditions by going without food.
- (D) For grey kangaroos, embryonic diapause facilitates survival in desert regions.
- (E) As they excrete biological wastes, some species expel concentrated urine.
- (F) Certain species have the ability to adjust their coloration.
- (G) When animals pant, they increase the rate of evaporation from the respiratory tract.
- (H) At certain times, some species manipulate their habitats to create shaded areas.
- (I) Desert conditions cause some species to temporarily stop breeding.

Temperature

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-
-
-

Aridity

-
-
-

14. The word **mitigate** in the passage is closest in meaning to
- (A) discuss
 - (B) evade
 - (C) relieve
 - (D) study
15. According to paragraph 1, what is the purpose of the Millennium Environmental Assessment?
- (A) To research the public's attitude toward environmental conservation
 - (B) To inform the United Nations about the global pollution crisis
 - (C) To clean up regions that have been contaminated by human activities
 - (D) To inform people about the effects of human activities on the ecosystem
- Paragraph 1 is marked with an arrow (➡).
16. The word **fundamental** in the passage is closest in meaning to
- (A) expensive
 - (B) rare
 - (C) basic
 - (D) useful
17. It can be inferred from paragraph 3 that focusing exclusively on the marketability of a natural resource is hazardous because
- (A) it encourages people to ignore the sometimes indispensable nonmarketable functions of a natural resource
 - (B) the pursuit of profit often causes people to take risks they would have otherwise avoided
 - (C) nonmarketable services often result in the destruction of a natural resource
 - (D) it causes companies to pursue logging and grazing activities that are harmful to people who live near exploited forests
- Paragraph 3 is marked with an arrow (➡).

The Planet's Ecological Crisis

➡ As a result of countries becoming more and more industrialized, pollution has become a serious problem. Unfortunately, efforts to **mitigate** the planet's pollution problems are failing to match the level of environmental contamination generated by human cultures. In response to this increase in ecosystem change, the Millennium Ecosystem Assessment (MA) was launched in 2001 by the United Nations Secretary-General, Kofi Annan. The aims of this research program are to provide people—both decision-making officials and the general public—with information about the likely future consequences of current human activity that affects the ecosystem. In March 2005, the MA issued its first report based on four years of research. The conclusions presented in the report emphasize the magnitude of the negative ecological effects caused by societies all over the world.

According to the MA board's statement summarizing the report, practically two-thirds of the services provided by the ecosystem are currently jeopardized by human activities. Although some of these assets—like erosion control and cultural heritage—are often underappreciated because they cannot be marketed for economic gain, they are nonetheless very valuable resources. In addition to furnishing **fundamental** resources like food and water, the Earth's ecosystem offers a host of other benefits that societies depend on every day, such as climate regulation, recreation, tourism, storm protection, aesthetic quality, and spiritual value.

continued ➡

18. Why does the author mention Chicago in paragraph 3?
- (A) To give an example of a harmful side effect of logging and grazing
 - (B) To explain why people are interested in marketing natural resources
 - (C) To suggest that ecological services without economic value are important
 - (D) To support the idea that some nonmarketable resources have economic value

Paragraph 3 is marked with an arrow [➡].

19. All of the following are mentioned in the passage as nonmarketable services provided by the ecosystem EXCEPT
- (A) providing timber for logging
 - (B) managing soil erosion
 - (C) slowing the rate of carbon dioxide accumulation
 - (D) purifying and improving the quality of the air
20. It can be inferred from paragraph 4 that the MA believes the general public
- (A) is not concerned with the conservation of natural resources
 - (B) does not appreciate the economic value of nonmarketable services
 - (C) does not realize that natural resources could be used for profit
 - (D) will never voluntarily conserve the planet's natural resources

Paragraph 4 is marked with an arrow [➡].

21. The word **epic** in the passage is closest in meaning to
- (A) huge
 - (B) ambitious
 - (C) obvious
 - (D) unfortunate

➡ Equating the value of an ecological service solely with its marketability is short-sighted and hazardous. The benefits provided by forests, for example, are generally measured in terms of the economic value of logging and grazing, two activities that result in the destruction of the forest. Forests provide nonmarketable services that not only have significant economic value but are sometimes even essential to human well-being. Carbon sequestration (the long-term storage of carbon, which slows the buildup of carbon dioxide in the atmosphere) and regulation of air quality are two nonmarketable yet economically valuable services provided by forests. According to one study, over the course of a year, trees in Chicago saved the city over nine million dollars in air-quality improvements.

➡ To help people understand the consequences of disrupting the ecosystem, the MA board's statement associates an economic value with the planet's natural resources by factoring in both their saleable and unsaleable services. Comparing the latter figure with the net value obtained when natural resources are depleted for their marketable services shows that it is economically advantageous for human societies to be ecologically sensitive. For example, ecologically preserved Canadian wetlands are worth nearly 6,000 US dollars per hectare, but only 2,500 dollars per hectare when intensively farmed.

➡ The MA report makes it evident that humankind has arrived at a point in time where the only way to lessen environmental

continued ➡

22. 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) Individual people and nations are unwilling to solve the planet's environmental problems.
- (B) The planet's environmental problems are so large that international cooperation is the only solution.
- (C) According to the MA report, there are significant environmental problems currently facing humanity.
- (D) Although many countries would like to fix the planet's ecological crisis, the MA report proves that the task is impossible.

23. What can be inferred from paragraph 5 about the solution to the current pollution crisis?

- (A) It will involve developing an organization to research and assess humans' impact on the planet's ecology.
- (B) It will be managed by an organization like the United Nations.
- (C) It will involve reducing pollution produced by specific countries.
- (D) It will require environmental activism at both global and individual levels.

Paragraph 5 is marked with an arrow [→].

24. The word **it** in the passage refers to

- (A) MA
- (B) ownership
- (C) action
- (D) environment

25. The word **obligation** in the passage is closest in meaning to

- (A) debt
- (B) need
- (C) hope
- (D) responsibility

problems is at an international level, for resolving the planet's ecological imbalance is an issue too great for single countries or

75 individual people to tackle. **A** Environmental problems have reached such epic proportions that any countermeasure will need to be on the scale of an international environmental movement. **B** At the base of an effective
80 environmental movement, there must be a change in individuals' attitudes toward preserving the ecosystem. **C** The perception of the environment as an eternally self-renewing service must be shifted, allowing
85 people to recognize the need for conservation—a task that would be accomplished by providing everyone with better education about the world's increasing pollution crisis and expanding communities' roles in caring
90 for local environments. **D** The MA believes that if people feel a sense of ownership of local natural resources, they will be more motivated to take action to protect the environment from decisions that would
95 exploit it. In addition to educating the public about the importance of the ecosystem, a response to the current environmental crisis must influence policymakers by changing their base assumptions about the economic
100 value of natural resources. It is essential to consider all the services a resource provides, not just the saleable products. This will give decision-makers a more accurate estimate of the true value of an undisrupted ecology. It has
105 become the **obligation** of every individual and society to take an active part in environmental protection.

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

There are several components to this kind of environmental movement.

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.***

The research presented in the MA report demonstrates that it is essential to protect the planet's ecology, even though that task will require major efforts.

-
-
-

Answer Choices

- | | |
|---|--|
| (A) The Millennium Ecosystem Assessment was founded by an international organization representing many countries. | (B) Although some natural resources cannot be bought or sold, they nonetheless form critical parts of the Earth's ecology. |
| (C) Preserving the planet's ecology has the potential to provide people with significant economic returns. | (D) An environmental movement can only succeed if it occurs at both global and individual levels. |
| (E) It is hoped that governments around the world will unite to solve environmental problems in the near future. | (F) Providing education on environmental hazards and how best to protect our world from looming environmental disasters is one of the biggest challenges facing humankind. |

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**.

28. According to paragraph 1, why did some people expect to find life on Venus?
- (A) Scientific data that was gathered supported the theory.
 - (B) They could observe surface conditions similar to those on Earth.
 - (C) Its brightness was thought to be caused by living things.
 - (D) It shares many of the same physical characteristics that Earth has.

Paragraph 1 is marked with an arrow [➡].

29. The word **devise** in the passage is closest in meaning to
- (A) solve
 - (B) repair
 - (C) create
 - (D) explain

30. The word **contours** in the passage is closest in meaning to
- (A) routes
 - (B) outlines
 - (C) materials
 - (D) creatures

31. In paragraph 2, the author explains the concept of radar-mapping by
- (A) describing the construction of a telescope
 - (B) illustrating one of its early uses
 - (C) discussing the clouds on Venus
 - (D) comparing it to traditional technologies

Paragraph 2 is marked with an arrow [➡].

32. The word **they** in the passage refers to
- (A) scientists
 - (B) vehicles
 - (C) telescopes
 - (D) photographs

Observing Venus

➡ As the brightest object in the night sky after the sun and moon, the planet Venus has always attracted the attention of humans. It is the closest planet to Earth, and its size, shape, mass, and age are similar to those of our world. For these reasons, many people once thought that Venus might also have Earth-like surface conditions, and that it might even be home to life like that on Earth. However, until relatively recently, scientists were unable to obtain any data about the surface of Venus in order to confirm or disprove these theories.

➡ Most other planets in our solar system are easily observable from Earth through the use of telescopes and other astronomical equipment. But Venus is different. Its surface is constantly obscured by a dense layer of clouds that no traditional telescope can penetrate. As a result, scientists had to devise other methods for uncovering Venus's secrets. One solution was to make use of radar technology. In the 1940s and '50s, radar had begun to be used to map the contours of the ocean floor. A ship floating on the water would shoot a radar pulse downwards, and by calculating how long it took the pulse to bounce back, accurate maps of the sea floor could be created. Beginning in the early 1960s, the world's largest radio-radar telescope, at Arecibo, Puerto Rico, began directing its gaze toward Venus.

➡ Around the same time, scientists in both the U.S. and the Soviet Union were in the early stages of implementing a second solution to

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33. According to paragraph 3, the advantage orbiting spacecraft had over telescopes on Earth was that they
- (A) utilized radar technology to capture images of Venus's surface
 - (B) were able to transmit surface photographs directly to Earth
 - (C) continued to function in Venus's harsh climatic conditions
 - (D) were easily able to observe a variety of regions on Venus

Paragraph 3 is marked with an arrow [➡].

34. 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 surfaces of Earth and Venus look different, but they may actually have been formed in similar ways.
 - (B) Structurally, the surfaces of Earth and Venus are so similar that scientists believe they were created by the same forces.
 - (C) The geological processes that are responsible for shaping Earth's surface also took place on the planet Venus.
 - (D) Because of several important differences between the surfaces of Venus and Earth, it is unlikely they were formed in the same way.
35. What can be inferred about Earth from the information in paragraph 5?
- (A) It had more volcanoes in the past than Venus did.
 - (B) Volcanic activity played a role in shaping its surface.
 - (C) Its surface displays more impact craters than Venus's.
 - (D) Lava flows can be used to determine the age of its crust.

Paragraph 5 is marked with an arrow [➡].

the problem of Venus's cloud cover: orbiting spacecraft. Most of these vehicles made use of the same radar technology to image the planet's surface, but they had greater access through their maneuverability than the Earth-based telescopes as they circled the planet. In 1975, the Soviet-built Venera 9 probe successfully landed on Venus and transmitted surface photographs back to Earth—the first-ever images sent from another world. From 1990 to 1992, NASA's remotely operated Magellan spacecraft succeeded in radar-mapping a full 93 percent of the surface, giving us an unprecedented view of the true Venus.

A Needless to say, the possibility of life on Venus was ruled out by these scientific endeavors. B The thick clouds that hid the surface from astronomers for so long are composed of sulfuric acid, with only trace amounts of water vapor. C The planet's atmosphere is made up mostly of carbon dioxide. D Pressure at the surface is more than 90 times what it is on Earth, and the temperature is nearly 900 degrees Fahrenheit (480 Celsius).

➡ Yet, even though the surface of the planet Venus appears very different from that of the Earth, in terms of structure the two are somewhat comparable, suggesting that similar geological forces may have been responsible for shaping the outer shells of both worlds. The relative lack of impact craters leads scientists to believe that Venus once witnessed intense volcanic activity, which would have thoroughly recycled its outer crust, erasing all evidence of old craters. Indeed, radar

continued ➡

36. Why does the author mention the Earth's oceans in paragraph 6?
- (A) To emphasize the height of the mountains on the plateaus of Venus
 - (B) To illustrate how many more lowland regions there are on Earth than on Venus
 - (C) To explain the primary difference between the surfaces of Earth and Venus
 - (D) To discuss why Maxwell Montes measures higher than Mt. Everest

Paragraph 6 is marked with an arrow [➡].

37. The word **comprise** in the passage is closest in meaning to
- (A) include
 - (B) acquire
 - (C) prevent
 - (D) overcome

38. According to paragraph 7, what can be inferred about upcoming missions to Venus?
- (A) They will fully complete the picture of the planet's surface.
 - (B) They will not involve the use of radar devices.
 - (C) They will study the possibility of living on the planet.
 - (D) They will not attempt to land spacecraft on the surface.

Paragraph 7 is marked with an arrow [➡].

39. All of the following are mentioned in the passage as methods used to observe Venus EXCEPT
- (A) manned vehicles
 - (B) orbiting spacecraft
 - (C) radio-radar telescopes
 - (D) landing probes

images show the presence of many enormous solidified lava flows on the surface of Venus, but there are few, if any, active volcanic sites remaining.

- 75 ➡ Observers have also learned that the majority of the planet is flat, made up of gently rolling plains with various areas of lower land. Highlands account for only 5–10 percent of the surface area. This would be similar to the appearance of Earth's surface if all the oceans were drained away. The two main highland plateaus on Venus are Aphrodite Terra and Ishtar Terra, approximately the same sizes as the Earth continents of South America and 85 Australia, respectively. Though Aphrodite Terra is the larger of the two highland regions, Ishtar Terra's mountains are twice as tall and **comprise** Venus's highest elevations. The tallest peak, Maxwell Montes, would reach 90 7,000 feet (2.1 kilometers) above Mt. Everest.

- ➡ Despite the fact that Venus proved not to be the mirror image of Earth, as some earlier thinkers had proposed, modern scientists are very intrigued by the similarities they have 95 discovered. A spacecraft was launched in November of 2005 to orbit Venus, and two more such missions are planned for 2008 and 2009. With this continuing curiosity to learn more about the brightest "star" in the sky, 100 Earth's nearest planetary neighbor is sure to become less and less mysterious in the years to come.

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

In fact, the planet is one of the least hospitable in the solar system.

Where would the sentence best fit?

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

41. **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.***

After years of research and the success of many high-tech projects, astronomers have finally been able to gather data about the surface of Venus.

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Answer Choices

- | | |
|---|--|
| (A) The Arecibo telescope in Puerto Rico delivered some of the first glimpses of what Venus is like beneath its layers of clouds. | (B) Concrete information obtained about the harsh conditions on the surface of Venus makes it clear that there is no life on the planet. |
| (C) Mountains discovered on Venus are taller than those on Earth, perhaps due to ancient volcanic activity on the planet. | (D) Because the clouds covering Venus are composed of sulfuric acid, ordinary telescopes cannot see through them to the surface. |
| (E) Though demonstrating many differences, the surfaces of Earth and Venus show signs of having experienced similar geologic phenomena. | (F) The vast plains and occasional mountainous uprisings of Venus's surface resemble structural features that can also be observed on Earth. |

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 Key

Actual Test 01

1. (D) 2. (A) 3. (C) 4. (A) 5. (A) 6. (D) 7. (C) 8. (B) 9. (D) 10. (A) 11. (D) 12. (D) 13. **D** 14. (B), (E), (F) 15. (C) 16. (C) 17. (A) 18. (A) 19. (B) 20. (C) 21. (A) 22. (B) 23. (B) 24. (C) 25. **C** 26. Ancient Egyptian Sculpture: (A), (G), (H), (I) / Ancient Greek Sculpture: (B), (C), (D) 27. (C) 28. (B) 29. (A) 30. (C) 31. (B) 32. (A) 33. (B) 34. (D) 35. (D) 36. (D) 37. (A) 38. **B** 39. (B), (C), (F)

Actual Test 02

1. (B) 2. (B) 3. (A) 4. (D) 5. (A) 6. (D) 7. (B) 8. (A) 9. (D) 10. (C) 11. **C** 12. (A), (B), (D) 13. (D) 14. (D) 15. (D) 16. (B) 17. (A) 18. (C) 19. (C) 20. (A) 21. (B) 22. (C) 23. (A) 24. (A) 25. **C** 26. Columbian Mammoth: (A), (H), (I) / Woolly Mammoth: (B), (E) / Pygmy Mammoth: (D), (F) 27. (D) 28. (A) 29. (C) 30. (B) 31. (A) 32. (B) 33. (B) 34. (A) 35. (C) 36. (D) 37. (C) 38. **B** 39. (B), (D), (E)

Actual Test 03

1. (C) 2. (D) 3. (D) 4. (C) 5. (A) 6. (B) 7. (A) 8. (C) 9. (A) 10. (D) 11. (D) 12. **A** 13. (B), (C), (F) 14. (B) 15. (A) 16. (D) 17. (A) 18. (C) 19. (B) 20. (B) 21. (C) 22. (D) 23. (C) 24. **C** 25. Positive Correlation: (A), (C), (E) / Negative Correlation: (B), (F) 26. (C) 27. (B) 28. (B) 29. (B) 30. (A) 31. (D) 32. (C) 33. (C) 34. (D) 35. (A) 36. (D) 37. (B) 38. **C** 39. (A), (D), (F)

Actual Test 04

1. (A) 2. (C) 3. (B) 4. (A) 5. (D) 6. (D) 7. (B) 8. (C) 9. (D) 10. (C) 11. (C) 12. **D** 13. (B), (C), (E) 14. (B) 15. (D) 16. (B) 17. (A) 18. (D) 19. (B) 20. (B) 21. (C) 22. (B) 23. (D) 24. **C** 25. (B), (C), (F) 26. (C) 27. (A) 28. (C) 29. (B) 30. (D) 31. (D) 32. (A) 33. (D) 34. (B) 35. (B) 36. (B) 37. **B** 38. Stage Acting: (B), (C), (D), (F) / Screen Acting: (A), (H), (I)

Actual Test 05

1. (B) 2. (D) 3. (C) 4. (A) 5. (C) 6. (C) 7. (A) 8. (D) 9. (A) 10. (B) 11. (D) 12. **C** 13. (A), (D), (E) 14. (A) 15. (A) 16. (D) 17. (B) 18. (A) 19. (B) 20. (C) 21. (C) 22. (D) 23. (D) 24. (A) 25. (C) 26. **B** 27. Dust Devils: (C), (D) / Tornadoes: (A), (E), (H) / Both: (B), (G) 28. (B) 29. (A) 30. (D) 31. (A) 32. (D) 33. (A) 34. (B) 35. (A) 36. (A) 37. (C) 38. (A) 39. **C** 40. (A), (D), (F)

Actual Test 06

1. (B) 2. (B) 3. (C) 4. (A) 5. (C) 6. (C) 7. (B) 8. (C) 9. (C) 10. (B) 11. (C) 12. **A** 13. Temperature: (A), (B), (F), (G) / Aridity: (D), (E), (I) 14. (C) 15. (D) 16. (C) 17. (A) 18. (D) 19. (A) 20. (B) 21. (A) 22. (B) 23. (D) 24. (D) 25. (D) 26. **B** 27. (B), (C), (D) 28. (D) 29. (C) 30. (B) 31. (B) 32. (B) 33. (D) 34. (A) 35. (B) 36. (C) 37. (A) 38. (D) 39. (A) 40. **B** 41. (B), (E), (F)



