

Reading and Writing

33 QUESTIONS

DIRECTIONS

The questions in this section address a number of important reading and writing skills. Each question includes one or more passages, which may include a table or graph. Read each passage and question carefully, and then choose the best answer to the question based on the passage(s).

All questions in this section are multiple-choice with four answer choices. Each question has a single best answer.

1

As Mexico's first president from an Indigenous community, Benito Juarez became one of the most _____ figures in his country's history: among the many significant accomplishments of his long tenure in office (1858–1872), Juarez consolidated the authority of the national government and advanced the rights of Indigenous peoples.

Which choice completes the text with the most logical and precise word or phrase?

- A) unpredictable
- B) important
- C) secretive
- D) ordinary

2

Due to their often strange images, highly experimental syntax, and opaque subject matter, many of John Ashbery's poems can be quite difficult to _____ and thus are the object of heated debate among scholars.

Which choice completes the text with the most logical and precise word or phrase?

- A) delegate
- B) compose
- C) interpret
- D) renounce

3

The Cambrian explosion gets its name from the sudden appearance and rapid diversification of animal remains in the fossil record about 541 million years ago, during the Cambrian period. Some scientists argue that this _____ change in the fossil record might be because of a shift in many organisms to body types that were more likely to be preserved.

Which choice completes the text with the most logical and precise word or phrase?

- A) catastrophic
- B) elusive
- C) abrupt
- D) imminent

4

During a 2014 archaeological dig in Spain, Vicente Lull and his team uncovered the skeleton of a woman from El Algar, an Early Bronze Age society, buried with valuable objects signaling a high position of power. This finding may persuade researchers who have argued that Bronze Age societies were ruled by men to _____ that women may have also held leadership roles.

Which choice completes the text with the most logical and precise word or phrase?

- A) waive
- B) concede
- C) refute
- D) require

5

Within baleen whale species, some individuals develop an accessory spleen—a seemingly functionless formation of splenic tissue outside the normal spleen. Given the formation’s greater prevalence among whales known to make deeper dives, some researchers hypothesize that its role isn’t _____; rather, the accessory spleen may actively support diving mechanisms.

Which choice completes the text with the most logical and precise word or phrase?

- A) replicable
- B) predetermined
- C) operative
- D) latent

6

According to a US tax policy expert, state taxes are _____ other factors when considering an interstate move. Even significant differences in state taxation have almost no effect on most people’s decisions, while differences in employment opportunities, housing availability, and climate are strong influences.

Which choice completes the text with the most logical and precise word or phrase?

- A) consistent with
- B) representative of
- C) overshadowed by
- D) irrelevant to

7

The author's claim about the relationship between Neanderthals and *Homo sapiens* is _____, as it fails to account for several recent archaeological discoveries. To be convincing, his argument would need to address recent finds of additional hominid fossils, such as the latest Denisovan specimens and *Homo longi*.

Which choice completes the text with the most logical and precise word or phrase?

- A) disorienting
- B) tenuous
- C) nuanced
- D) unoriginal

8

The following text is from Georgia Douglas Johnson's 1922 poem "Benediction."

Go forth, my son,
Winged by my heart's desire!
Great reaches, yet unknown,
Await
For your possession.
I may not, if I would,
Retrace the way with you,
My pilgrimage is through,
But life is calling you!

Which choice best states the main purpose of the text?

- A) To express hope that a child will have the same accomplishments as his parent did
- B) To suggest that raising a child involves many struggles
- C) To warn a child that he will face many challenges throughout his life
- D) To encourage a child to embrace the experiences life will offer

9

The following text is adapted from *Indian Boyhood*, a 1902 memoir by Ohiyesa (Charles A. Eastman), a Santee Dakota writer. In the text, Ohiyesa recalls how the women in his tribe harvested maple syrup during his childhood.

Now the women began to test the trees—moving leisurely among them, axe in hand, and striking a single quick blow, to see if the sap would appear. The trees, like people, have their individual characters; some were ready to yield up their life-blood, while others were more reluctant. Now one of the birchen basins was set under each tree, and a hardwood chip driven deep into the cut which the axe had made. From the corners of this chip—at first drop by drop, then more freely—the sap trickled into the little dishes.

Which choice best describes the function of the underlined sentence in the text as a whole?

- A) It portrays the range of personality traits displayed by the women as they work.
- B) It foregrounds the beneficial relationship between humans and maple trees.
- C) It demonstrates how human behavior can be influenced by the natural environment.
- D) It elaborates on an aspect of the maple trees that the women evaluate.

10

Text 1

Ecologists have long wondered how thousands of microscopic phytoplankton species can live together near ocean surfaces competing for the same resources. According to conventional wisdom, one species should emerge after outcompeting the rest. So why do so many species remain? Ecologists' many efforts to explain this phenomenon still haven't uncovered a satisfactory explanation.

Text 2

Ecologist Michael Behrenfeld and colleagues have connected phytoplankton's diversity to their microscopic size. Because these organisms are so tiny, they are spaced relatively far apart from each other in ocean water and, moreover, experience that water as a relatively dense substance. This in turn makes it hard for them to move around and interact with one another. Therefore, says Behrenfeld's team, direct competition among phytoplankton probably happens much less than previously thought.

Based on the texts, how would Behrenfeld and colleagues (Text 2) most likely respond to the "conventional wisdom" discussed in Text 1?

- A) By arguing that it is based on a misconception about phytoplankton species competing with one another
- B) By asserting that it fails to recognize that routine replenishment of ocean nutrients prevents competition between phytoplankton species
- C) By suggesting that their own findings help clarify how phytoplankton species are able to compete with larger organisms
- D) By recommending that more ecologists focus their research on how competition among phytoplankton species is increased with water density

11

In 2014, Amelia Quon and her team at NASA set out to build a helicopter capable of flying on Mars. Because Mars's atmosphere is only one percent as dense as Earth's, the air of Mars would not provide enough resistance to the rotating blades of a standard helicopter for the aircraft to stay aloft. For five years, Quon's team tested designs in a lab that mimicked Mars's atmospheric conditions. The craft the team ultimately designed can fly on Mars because its blades are longer and rotate faster than those of a helicopter of the same size built for Earth.

According to the text, why would a helicopter built for Earth be unable to fly on Mars?

- A) Because Mars and Earth have different atmospheric conditions
- B) Because the blades of helicopters built for Earth are too large to work on Mars
- C) Because the gravity of Mars is much weaker than the gravity of Earth
- D) Because helicopters built for Earth are too small to handle the conditions on Mars

12

In West Africa, jalis have traditionally been keepers of information about family histories and records of important events. They have often served as teachers and advisers, too. New technologies may have changed some aspects of the role today, but jalis continue to be valued for knowing and protecting their peoples' stories.

Which choice best states the main idea of the text?

- A) Even though there have been some changes in their role, jalis continue to preserve their communities' histories.
- B) Although jalis have many roles, many of them like teaching best.
- C) Jalis have been entertaining the people within their communities for centuries.
- D) Technology can now do some of the things jalis used to be responsible for.

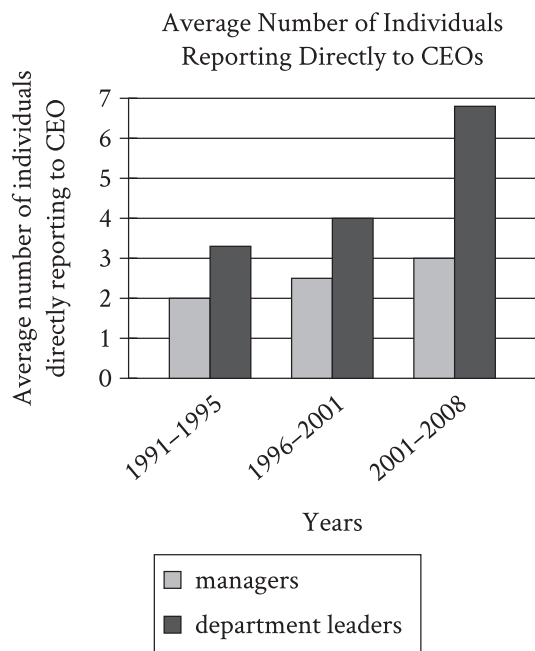
13

In 1934 physicist Eugene Wigner posited the existence of a crystal consisting entirely of electrons in a honeycomb-like structure. The so-called Wigner crystal remained largely conjecture, however, until Feng Wang and colleagues announced in 2021 that they had captured an image of one. The researchers trapped electrons between two semiconductors and then cooled the apparatus, causing the electrons to settle into a crystalline structure. By inserting an ultrathin sheet of graphene above the crystal, the researchers obtained an impression—the first visual confirmation of the Wigner crystal.

Which choice best states the main idea of the text?

- A) Researchers have obtained the most definitive evidence to date of the existence of the Wigner crystal.
- B) Researchers have identified an innovative new method for working with unusual crystalline structures.
- C) Graphene is the most important of the components required to capture an image of a Wigner crystal.
- D) It's difficult to acquire an image of a Wigner crystal because of the crystal's honeycomb structure.

14



Considering a large sample of companies, economics experts Maria Guadalupe, Julie Wulf, and Raghuram Rajan assessed the number of managers and leaders from different departments who reported directly to a chief executive officer (CEO). According to the researchers, the findings suggest that across the years analyzed, there was a growing interest among CEOs in connecting with more departments in their companies.

Which choice best describes data from the graph that support the researchers' conclusion?

- A) The average numbers of managers and department leaders reporting directly to their CEO didn't fluctuate from the 1991-1995 period to the 2001-2008 period.
- B) The average number of managers reporting directly to their CEO was highest in the 1996-2001 period.
- C) The average number of department leaders reporting directly to their CEO was greater than the average number of managers reporting directly to their CEO in each of the three periods studied.
- D) The average number of department leaders reporting directly to their CEO rose over the three periods studied.

15

When digging for clams, their primary food, sea otters damage the roots of eelgrass plants growing on the seafloor. Near Vancouver Island in Canada, the otter population is large and well established, yet the eelgrass meadows are healthier than those found elsewhere off Canada's coast. To explain this, conservation scientist Erin Foster and colleagues compared the Vancouver Island meadows to meadows where otters are absent or were reintroduced only recently. Finding that the Vancouver Island meadows have a more diverse gene pool than the others do, Foster hypothesized that damage to eelgrass roots increases the plant's rate of sexual reproduction; this, in turn, boosts genetic diversity, which benefits the meadow's health overall.

Which finding, if true, would most directly undermine Foster's hypothesis?

- A) At some sites in the study, eelgrass meadows are found near otter populations that are small and have only recently been reintroduced.
- B) At several sites not included in the study, there are large, well-established sea otter populations but no eelgrass meadows.
- C) At several sites not included in the study, eelgrass meadows' health correlates negatively with the length of residence and size of otter populations.
- D) At some sites in the study, the health of plants unrelated to eelgrass correlates negatively with the length of residence and size of otter populations.

16

Scholars have noted that F. Scott Fitzgerald's writings were likely influenced in part by his marriage to Zelda Fitzgerald, but many don't recognize Zelda as a writer in her own right. Indeed, Zelda authored several works herself, such as the novel *Save Me the Waltz* and numerous short stories. Thus, those who primarily view Zelda as an inspiration for F. Scott's writings _____

Which choice most logically completes the text?

- A) overlook the many other factors that motivated F. Scott to write.
- B) risk misrepresenting the full range of Zelda's contributions to literature.
- C) may draw inaccurate conclusions about how F. Scott and Zelda viewed each other's works.
- D) tend to read the works of F. Scott and Zelda in an overly autobiographical light.

17

Among social animals that care for their young, such as chickens, macaque monkeys, and humans, newborns appear to show an innate attraction to faces and face-like stimuli. Elisabetta Versace and her colleagues used an image of three black dots arranged in the shape of eyes and a nose or mouth to test whether this trait also occurs in *Testudo* tortoises, which live alone and do not engage in parental care. They found that tortoise hatchlings showed a significant preference for the image, suggesting that _____

Which choice most logically completes the text?

- A) face-like stimuli are likely perceived as harmless by newborns of social species that practice parental care but as threatening by newborns of solitary species without parental care.
- B) researchers should not assume that an innate attraction to face-like stimuli is necessarily an adaptation related to social interaction or parental care.
- C) researchers can assume that the attraction to face-like stimuli that is seen in social species that practice parental care is learned rather than innate.
- D) newly hatched *Testudo* tortoises show a stronger preference for face-like stimuli than adult *Testudo* tortoises do.

18

Compiled in the late 1500s largely through the efforts of Indigenous scribes, *Cantares Mexicanos* is the most important collection of poetry in Classical Nahuatl, the principal language of the Aztec Empire. The poems portray Aztec society before the occupation of the empire by the army of Spain, and marginal notes in *Cantares Mexicanos* indicate that much of the collection's content predates the initial invasion. Nonetheless, some of the poems contain inarguable references to beliefs and customs common in Spain during this era. Thus, some scholars have concluded that _____

Which choice most logically completes the text?

- A) while its content largely predates the invasion, *Cantares Mexicanos* also contains additions made after the invasion.
- B) although those who compiled *Cantares Mexicanos* were fluent in Nahuatl, they had limited knowledge of the Spanish language.
- C) before the invasion by Spain, the poets of the Aztec Empire borrowed from the literary traditions of other societies.
- D) the references to beliefs and customs in Spain should be attributed to a coincidental resemblance between the societies of Spain and the Aztec Empire.

19

In a study of the cognitive abilities of white-faced capuchin monkeys (*Cebus imitator*), researchers neglected to control for the physical difficulty of the tasks they used to evaluate the monkeys. The cognitive abilities of monkeys given problems requiring little dexterity, such as sliding a panel to retrieve food, were judged by the same criteria as were those of monkeys given physically demanding problems, such as unscrewing a bottle and inserting a straw. The results of the study, therefore, _____

Which choice most logically completes the text?

- A) could suggest that there are differences in cognitive ability among the monkeys even though such differences may not actually exist.
- B) are useful for identifying tasks that the monkeys lack the cognitive capacity to perform but not for identifying tasks that the monkeys can perform.
- C) should not be taken as indicative of the cognitive abilities of any monkey species other than *C. imitator*.
- D) reveal more about the monkeys' cognitive abilities when solving artificial problems than when solving problems encountered in the wild.

20

To survive when water is scarce, embryos inside African turquoise killifish eggs _____ a dormant state known as diapause. In this state, embryonic development is paused for as long as two years—longer than the life span of an adult killifish.

Which choice completes the text so that it conforms to the conventions of Standard English?

- A) enter
- B) to enter
- C) having entered
- D) entering

21

Formed in 1967 to foster political and economic stability within the Asia-Pacific region, the Association of Southeast Asian Nations was originally made up of five members: Thailand, the Philippines, Singapore, Malaysia, and Indonesia. By the end of the 1990s, the organization _____ its initial membership.

Which choice completes the text so that it conforms to the conventions of Standard English?

- A) has doubled
- B) had doubled
- C) doubles
- D) will double

22

The intense pressure found in the deep ocean can affect the structure of proteins in fish's cells, distorting the proteins' shape. The chemical trimethylamine N-oxide (TMAO) counters this effect, ensuring that proteins retain their original _____ is found in high concentrations in the cells of the deepest-dwelling fish.

Which choice completes the text so that it conforms to the conventions of Standard English?

- A) configurations. TMAO
- B) configurations TMAO
- C) configurations, TMAO
- D) configurations and TMAO

23

Food and the sensation of taste are central to Monique Truong's novels. In *The Book of Salt*, for example, the exiled character of Binh connects to his native Saigon through the food he prepares, while in *Bitter in the Mouth*, the character of Linda _____ a form of synesthesia whereby the words she hears evoke tastes.

Which choice completes the text so that it conforms to the conventions of Standard English?

- A) experienced
- B) had experienced
- C) experiences
- D) will be experiencing

24

Inventor John Friedman created a prototype of the first flexible straw by inserting a screw into a paper straw and, using dental floss, binding the straw tightly around the _____. When the floss and screw were removed, the resulting corrugations in the paper allowed the straw to bend easily over the edge of a glass.

Which choice completes the text so that it conforms to the conventions of Standard English?

- A) screw's thread's.
- B) screws' threads.
- C) screw's threads.
- D) screws threads'.

25

In her analysis of Edith Wharton's *The House of Mirth* (1905), scholar Candace Waid observes that the novel depicts the upper classes of New York society as "consumed by the appetite of a soulless _____ an apt assessment given that *The House of Mirth* is set during the Gilded Age, a period marked by rapid industrialization, economic greed, and widening wealth disparities.

Which choice completes the text so that it conforms to the conventions of Standard English?

- A) materialism"; and
- B) materialism" and
- C) materialism,"
- D) materialism"

26

To humans, it does not appear that the golden orb-weaver spider uses camouflage to capture its _____. The brightly colored arachnid seems to wait conspicuously in the center of its large circular web for insects to approach. Researcher Po Peng of the University of Melbourne has explained that the spider's distinctive coloration may in fact be part of its appeal.

Which choice completes the text so that it conforms to the conventions of Standard English?

- A) prey, rather,
- B) prey rather,
- C) prey, rather;
- D) prey; rather,

27

In Death Valley National Park’s Racetrack Playa, a flat, dry lakebed, are 162 rocks—some weighing less than a pound but others almost 700 pounds—that move periodically from place to place, seemingly of their own volition. Racetrack-like trails in the _____ mysterious migration.

Which choice completes the text so that it conforms to the conventions of Standard English?

- A) playas sediment mark the rock’s
- B) playa’s sediment mark the rocks
- C) playa’s sediment mark the rocks’
- D) playas’ sediment mark the rocks’

28

In crafting her fantasy fiction, Nigerian-born British author Helen Oyeyemi has drawn inspiration from the classic nineteenth-century fairy tales of the Brothers Grimm. Her 2014 novel *Boy, Snow, Bird*, for instance, is a complex retelling of the story of Snow White, while her 2019 novel _____ offers a delicious twist on the classic tale of Hansel and Gretel.

Which choice completes the text so that it conforms to the conventions of Standard English?

- A) *Gingerbread*—
- B) *Gingerbread*,
- C) *Gingerbread*
- D) *Gingerbread*:

29

While researching a topic, a student has taken the following notes:

- NASA uses rovers, large remote vehicles with wheels, to explore the surface of Mars.
- NASA’s rovers can’t explore regions inaccessible to wheeled vehicles.
- Rovers are also heavy, making them difficult to land on the planet’s surface.
- Microprobes, robotic probes that weigh as little as 50 milligrams, could be deployed virtually anywhere on the surface of Mars.
- Microprobes have been proposed as an alternative to rovers.

The student wants to explain an advantage of microprobes. Which choice most effectively uses relevant information from the notes to accomplish this goal?

- A) Despite being heavy, NASA’s rovers can land successfully on the surface of Mars.
- B) Microprobes, which weigh as little as 50 milligrams, could explore areas of Mars that are inaccessible to NASA’s heavy, wheeled rovers.
- C) NASA currently uses its rovers on Mars, but microprobes have been proposed as an alternative.
- D) Though they are different sizes, both microprobes and rovers can be used to explore the surface of Mars.

30

While researching a topic, a student has taken the following notes:

- Abdulrazak Gurnah was awarded the 2021 Nobel Prize in Literature.
- Gurnah was born in Zanzibar in East Africa and currently lives in the United Kingdom.
- Many readers have singled out Gurnah's 1994 book *Paradise* for praise.
- *Paradise* is a historical novel about events that occurred in colonial East Africa.

The student wants to introduce *Paradise* to an audience unfamiliar with the novel and its author. Which choice most effectively uses relevant information from the notes to accomplish this goal?

- A) Abdulrazak Gurnah, who wrote *Paradise* and later was awarded the Nobel Prize in Literature, was born in Zanzibar in East Africa and currently lives in the United Kingdom.
- B) Many readers have singled out Abdulrazak Gurnah's 1994 book *Paradise*, a historical novel about colonial East Africa, for praise.
- C) A much-praised historical novel about colonial East Africa, *Paradise* (1994) was written by Abdulrazak Gurnah, winner of the 2021 Nobel Prize in Literature.
- D) *Paradise* is a historical novel about events that occurred in colonial East Africa, Abdulrazak Gurnah's homeland.

31

While researching a topic, a student has taken the following notes:

- Ulaanbaatar is the capital of Mongolia.
- The city's population is 907,802.
- Ulaanbaatar contains 31.98 percent of Mongolia's population.
- Hanoi is the capital of Vietnam.
- The city's population is 7,781,631.
- Hanoi contains 8.14 percent of Vietnam's population.

Which choice most effectively uses information from the given sentences to emphasize the relative sizes of the two capitals' populations?

- A) Mongolia's capital is Ulaanbaatar, which has 907,802 people, and Vietnam's capital is Hanoi, which has 7,781,631 people.
- B) The populations of the capitals of Mongolia and Vietnam are 907,802 (Ulaanbaatar) and 7,781,631 (Hanoi), respectively.
- C) Even though Hanoi (population 7,781,631) is larger than Ulaanbaatar (population 907,802), Ulaanbaatar accounts for more of its country's population.
- D) Comparing Vietnam and Mongolia, 7,781,631 is 8.14 percent of Vietnam's population, and 907,802 is 31.98 percent of Mongolia's.

32

While researching a topic, a student has taken the following notes:

- One of history's greatest libraries was the House of Wisdom in Baghdad, Iraq.
- It was founded in the eighth century with the goal of preserving all the world's knowledge.
- Scholars at the House of Wisdom collected ancient and contemporary texts from Greece, India, and elsewhere and translated them into Arabic.
- Writings included those of the Greek philosopher Aristotle and the Indian mathematician Aryabhata.
- The House of Wisdom used Chinese papermaking technology to create paper versions to be studied and shared.

The student wants to explain how the House of Wisdom preserved the world's knowledge. Which choice most effectively uses relevant information from the notes to accomplish this goal?

- A) The House of Wisdom was known for bringing together knowledge from around the world, including from Greece, India, and China.
- B) Founded in Iraq in the eighth century, the House of Wisdom employed many scholars as translators.
- C) Writings from the Greek philosopher Aristotle and the Indian mathematician Aryabhata were preserved at the House of Wisdom.
- D) The House of Wisdom collected writings from different countries and created paper versions in Arabic to be studied and shared.

33

While researching a topic, a student has taken the following notes:

- British musicians John Lennon and Paul McCartney shared writing credit for numerous Beatles songs.
- Many Lennon-McCartney songs were actually written by either Lennon or McCartney, not by both.
- The exact authorship of specific parts of many Beatles songs, such as the verse for "In My Life," is disputed.
- Mark Glickman, Jason Brown, and Ryan Song used statistical methods to analyze the musical content of Beatles songs.
- They concluded that there is 18.9% probability that McCartney wrote the verse for "In My Life," stating that the verse is "consistent with Lennon's songwriting style."

The student wants to make a generalization about the kind of study conducted by Glickman, Brown, and Song. Which choice most effectively uses relevant information from the notes to accomplish this goal?

- A) Based on statistical analysis, Glickman, Brown, and Song claim that John Lennon wrote the verse of "In My Life."
- B) There is only an 18.9% probability that Paul McCartney wrote the verse for "In My Life"; John Lennon is the more likely author.
- C) It is likely that John Lennon, not Paul McCartney, wrote the verse for "In My Life."
- D) Researchers have used statistical methods to address questions of authorship within the field of music.

STOP

**If you finish before time is called, you may check your work on this module only.
Do not turn to any other module in the test.**

No Test Material On This Page