

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

The following text is from Meredith Nicholson's 1910 short story "The Girl with the Red Feather."

Mrs. Webster G. Burgess always maintains that nothing her husband may do can shock her. When her husband had not appeared at seven she explained to her guest that he had been detained by an unexpected meeting of a clearing-house committee.

As used in the text, what does the word "appeared" most nearly mean?

- A) Developed
- B) Responded
- C) Arrived
- D) Pretended

2

Wildfires likely never happened in Antarctica. That's what scientists used to think. But then a team of researchers discovered charcoal from the Cretaceous period in Antarctica. The team analyzed the charcoal and found that it likely came from a tree that burned in a fire. This suggests that wildfires may have indeed _____ in Antarctica millions of years ago.

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

- A) returned
- B) rotated
- C) occurred
- D) offended

3

Consumers usually _____ rising prices of nonessential products, such as video games or jewelry, by purchasing fewer of those products. When the prices fall, consumers usually react the opposite way, by purchasing more of those products.

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

- A) differ from
- B) respond to
- C) think of
- D) agree with

4

Japanese animator and director Hayao Miyazaki often includes fantasy elements in otherwise realistic settings in his movies, but he tends to _____ details and exposition about those elements. Miyazaki simply presents fantastical characters and actions with little backstory or explanation, encouraging viewers to embrace the presence of the extraordinary in everyday life.

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

- A) withhold
- B) celebrate
- C) combine
- D) invent

5

The following text is from Alice Wong's 2022 memoir *Year of the Tiger: An Activist's Life*. Wong has just described her tendency to procrastinate when she has a writing deadline.

In the middle of these distractions, a vibe will emerge, a point I want to make, a phrase, a hook, a title for a story, an image. A connection or epiphany can happen while watching or reading something brilliant. By doing “nothing” and daydreaming, I am actually composing, even if words don't immediately materialize.

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Based on the text, what does Wong most likely mean when she states that she is “composing”?

- A) She is deceiving herself about her true feelings about a subject.
- B) She is engaging in an important part of her writing process.
- C) She is being soothed by immersing herself in creative works by other people.
- D) She is gathering sources of information to use in her writing.

6

In factories, humans and robots often work together. A research team ran an experiment to find out how working with robots affects relationships between human coworkers. The experiment included teams working together to make electric motor parts. One type of team included only humans and the other type included both humans and robots. Participants were paid for their work and were asked about their willingness to share their earnings with their human teammates. Participants from teams with robots were more likely to share with each other than participants from teams with only humans were.

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

- A) It explains an important part of the design of the experiment discussed in the text.
- B) It illustrates a problem that inspired the study discussed in the text.
- C) It indicates the question that the study discussed in the text was meant to answer.
- D) It states the results of the experiment discussed in the text.

7

Julie Dash's lyrical film *Daughters of the Dust*, first released in 1991, follows members of a Gullah family as they depart from their island home near Georgia in 1902. Though an imaginative, critically acclaimed film with a wide release—and a highly appreciative global audience—Dash's work never received the plaudits it deserved within the US film industry. Interest in the film reignited, however, with Beyoncé's release of *Lemonade* in 2016, due to the visual album's numerous allusions to Dash's film in the form of stylistic references to its scenes, costumes, and celebration of Black life in the US South.

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

- A) It introduces the implication that had Dash's film received more recognition from the US film industry at the time of its release, it wouldn't have attained such influence on Beyoncé's *Lemonade*.
- B) It expands on an attribute of Dash's film that is described earlier in the text in order to draw distinctions between the film and a later work that was influenced by it.
- C) It presents a discrepancy between the value of Dash's film and the industry's response to it that the text goes on to demonstrate was partially rectified by the film's influence on a later work.
- D) It gives a brief overview of how Dash's film was received at the time of release and alludes to the reception of a similar work that is described later in the text.

8

The following text is adapted from Henry James's 1916 short story "The Pupil." A man is being considered for a position as a live-in tutor for a woman's child.

The poor young man hesitated and procrastinated: it cost him such an effort to broach the subject of terms, to speak of money to a person who spoke only of feelings and, as it were, of the aristocracy. Yet he was unwilling to take leave, treating his engagement as settled, without some more conventional glance in that direction than he could find an opening for in the manner of the large affable lady who sat there drawing a pair of soiled [suede gloves] through a jewelled hand and, at once pressing and gliding, repeated over and over everything but the thing he would have liked to hear.

Which choice best states the main purpose of the text?

- A) It describes a person's unsuccessful attempt to change someone's mind.
- B) It portrays the difficulty a person has with raising a topic of conversation.
- C) It criticizes a person for being excessively timid.
- D) It draws a sharp contrast between the personalities of two people.

9

Chorioactis geaster, a species of mushroom that makes a distinctive hissing sound when it releases its spores, is an elusive fungus that has been observed only in Texas and Oklahoma in the US and in the Miyazaki and Nara Prefectures in Japan. Scientists aren't entirely sure why *C. geaster* is distributed in this way (genetic analysis reveals that the US and Japanese strains diverged 19 million years ago), but the mushroom appears to be very selective: it is typically found on the decaying stumps and roots of only a few tree species that are abundant in these areas.

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

- A) It elaborates on a characterization of *C. geaster* presented earlier in the text.
- B) It emphasizes the uncertainty about *C. geaster* alluded to earlier in the text.
- C) It highlights the negative impact *C. geaster* has on the trees on which it's found.
- D) It provides an explanation for the relationship between *C. geaster* and its habitats.

10

In their study of the steering muscles regulating sclerites (minute hardened structures) in the *Drosophila* (fruit fly) wing hinge, Johan M. Melis et al. used machine learning to devise a convolutional neural network (CNN) model capable of predicting the pattern of wing motion produced by the maximum activity of the muscles. The CNN model's output aligned with results of prior studies by other researchers measuring muscle activity patterns directly—one of several indications, said Melis et al., that the model accurately represents important biomechanical processes underlying wing motion.

Which choice best states the main purpose of the text?

- A) To present evidence from Melis et al.'s study in support of the efficacy of their CNN model
- B) To account for Melis et al.'s reliance in their study on a CNN model in lieu of direct measurement
- C) To provide an overview of how Melis et al. honed the accuracy of their CNN model
- D) To compare results obtained by Melis et al. using their CNN model to prior results obtained from other researchers' models

11

Under US president Franklin D. Roosevelt's New Deal, the Federal Theatre Project (FTP) was one of many government programs that provided jobs during the Depression. Besides employing thousands of people, the FTP also brought theater to audiences across the country. The FTP had theater companies located nationwide, and through touring, it was able to reach rural areas that hadn't been previously exposed to theater. With hundreds of productions of both new and classic plays, the FTP was the largest theater program ever run by the federal government.

According to the text, what did the Federal Theatre Project accomplish during the Depression?

- A) It gave theater workers the opportunity to travel to see new performances in addition to gaining professional work experience.
- B) It created jobs while also making theater accessible to audiences all over the country.
- C) It lowered the cost of theater productions by moving performances from urban to rural areas.
- D) It increased the quality of theater productions by giving the federal government creative oversight.

12

In a period of great prosperity during his reign, Egyptian pharaoh Amenemhat III (circa 1800 BCE) had a pyramid with a massive substructure built at Hawara. The underground complex was largely dismantled in antiquity, but accounts of its splendor remain, including one from Greek historian Herodotus, who claimed to have seen it. In his *Histories* (circa 425 BCE), Herodotus writes of 3,000 chambers adorned with carved figures, a dozen courts flanked by white stone pillars, and many winding passages in the complex, characterizing it as a great labyrinth and “an unending marvel.”

According to the text, what information did Herodotus include in his *Histories*?

- A) A record of how long it took for the pyramid and complex to be constructed at Hawara
- B) An account of the magnificence of the complex that once stood beneath the pyramid at Hawara
- C) A discussion of how building the pyramid and complex at Hawara led to a period of prosperity
- D) An explanation of how Herodotus was able to arrange to see the pyramid and complex at Hawara

13

India’s Chandrayaan space program focuses on exploring the Moon. The missions include three vehicles: a lander, a rover, and an orbiter. Chandrayaan-2 was launched in 2019. Although the Chandrayaan-2 orbiter remained in flight around the Moon, the lander and rover crashed. Despite the crash, the Chandrayaan-2 mission has provided some important information.

Which statement, if true, would most directly support the text’s characterization of the mission’s outcome?

- A) One of the main goals of the Chandrayaan-2 mission was to set a lander on the Moon’s surface.
- B) During the 2023 mission, known as Chandrayaan-3, the rover and lander managed to safely reach the Moon’s surface.
- C) The Chandrayaan-2 rover had six wheels and weighed approximately 20 kilograms (44 pounds).
- D) The Chandrayaan-2 orbiter continues to orbit the Moon, and its instruments have identified possible signs of water.

14

Projected Annual Costs and Profits of Biofuel Profit Models (in dollars)

Method	LCFS revenue	Total revenue	Total cost	Total profit
Heuristic	6,837,474	37,957,674	30,528,134	7,429,540
Lexicographic	9,878,474	40,998,474	30,528,134	10,470,340
Proposed	11,157,472	42,277,472	30,933,469	11,344,003

Biofuels typically emit less carbon than do fossil fuels. In California, biofuel manufacturers have two revenue sources: biofuel sales and LCFS (low carbon fuel standard) credits purchased from them by companies producing fuel that falls short of California's emission standards. Given the interplay between these revenue streams, Meltem Denizel et al. examined three models for how a biofuel firm might maximize profit: the industry-standard heuristic model, a lexicographic model, and a model proposed by the researchers. They concluded that although their model maximized profit, it might not be ideal for firms that need to minimize cash outflows.

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

- A) The proposed model shows the highest total revenue, LCFS revenue, and total cost of all three models.
- B) Both the total revenue and total profit for the lexicographic model are higher than those for the heuristic model but lower than those for the proposed model.
- C) While the proposed model projects the highest total profit, it also projects a higher total cost than the lexicographic model, which projects the same total cost as the heuristic model but a higher total profit.
- D) While the total profit and the LCFS revenue are nearly the same for the proposed model, the total profit is significantly greater than the LCFS revenue for the lexicographic model.

15

Autofiction is an emerging literary form that incorporates autobiographical writing into fiction. Practitioners of autofiction emphasize the autobiographical aspects of their work by patterning their protagonists' lives after their own, typically naming their protagonists after themselves. Autofiction usually borrows formal elements from autobiographical writing too, including its first person point of view and its use of a narrative voice so forthright that it borders on confessional. Ocean Vuong's 2019 novel *On Earth We're Briefly Gorgeous* is a representative work of autofiction, one that erases the distinction that fiction typically observes between authors and the characters they create.

Which statement, if true, would most strongly support the text's description of *On Earth We're Briefly Gorgeous*?

- A) *On Earth We're Briefly Gorgeous* makes use of imagery in much the same way that contemporary poetry does, exploiting certain images—butterflies, for example—for their emotional or conceptual associations; in this way, Vuong blurs the distinction between poetry and fiction.
- B) Although the narrative of *On Earth We're Briefly Gorgeous* proceeds in a largely chronological fashion, as narratives do in most works of fiction, the form of Vuong's narrative is unique: the novel consists of a single long letter that the protagonist, a soft-spoken young man, has written to his mother.
- C) The novel's protagonist bears an obvious resemblance to Vuong himself, and in interviews Vuong speaks of the protagonist as a sort of alter ego, yet the protagonist refers to himself as "Little Dog" throughout the novel and never divulges his actual name.
- D) The novel portrays the upbringing of the protagonist, a young writer, in a working-class Vietnamese American family that is virtually identical to Vuong's family, and the protagonist narrates the novel in a tone that many reviewers describe as surprisingly frank.

16

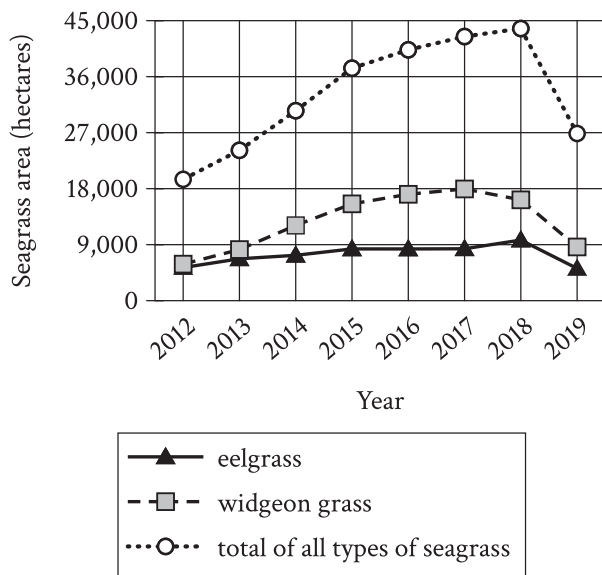
Carolina chickadees are cavity nesting birds that initiate nest building at the same time of year as golden paper wasps, a species that also nests in enclosed spaces. Researchers observed that both species will settle in nesting boxes, but birds and wasps are not often observed co-occupying boxes, leading to the hypothesis that the two species compete for nesting sites. To test this hypothesis, the researchers installed nesting boxes throughout a nature preserve in the US state of North Carolina, manipulated some of the boxes to exclude birds, and then monitored the boxes for two years. Not only was the hypothesis validated, there was also a clear indication of competitive advantage for birds.

Which finding from the study, if true, would most directly support the text's characterization of the study's results?

- A) Even though overall usage of the nesting boxes by wasps and birds was high throughout the study, 24% of the manipulated boxes remained vacant each spring, while less than 4% of the unmanipulated nesting boxes remained vacant.
- B) Nest initiation by either birds or wasps but not both was observed in more than 90% of the unmanipulated boxes, but nest initiation by wasps was observed in less than 50% of the manipulated boxes.
- C) Although only 15 instances of co-occupation of unmanipulated boxes by wasps and birds were observed over the course of the study, in a majority of those instances, wasps were already occupying the boxes when birds initiated nesting in them.
- D) Wasps initiated nesting in manipulated boxes much more often than in unmanipulated boxes, and 80% of initial co-occupations of unmanipulated boxes resulted in abandonment by wasps but not by birds.

17

Chesapeake Bay Seagrass Coverage
2012–2019



Chesapeake Bay seagrass meadows constitute crucial habitats for many aquatic species. Historically, eelgrass has been predominant, but widgeon grass is proving better suited to recent increases in sea temperature, tolerating heat better and growing faster than eelgrass does. Although the increase in widgeon grass has been associated with a substantial increase in total seagrass coverage in the bay, researchers caution that the latter change does not necessarily make the seagrass ecosystem as a whole more resilient to environmental shocks.

Which statement, if true, would account for data shown in the graph and would illustrate the point made by the researchers?

- A) Between 2012 and 2017, the total area covered by widgeon grass and the total area covered by all types of seagrass increased as water temperatures in the bay increased.
- B) Water temperatures in the bay increased slowly from 2012 to 2018, but in early 2019 there was an unprecedentedly large increase in temperatures, which reached levels that can be tolerated by few seagrass species other than widgeon grass.
- C) In early 2018, a fungal infection that affects widgeon grass and eelgrass but does not affect other types of seagrass spread through the bay.
- D) In early 2019, unusually heavy rains washed excessive nutrients into the bay, leading to algal blooms that prevented sunlight from reaching many seagrass species.

18

Time-based media artworks feature video, slides, audio, or computer technologies. To experience a time-based media artwork, viewers watch or listen to the piece as it plays over a period of time, usually in a museum setting. When designing such works, artists carefully select which equipment and materials to use to display them. But artists' choices can create a challenge for museums. Works may make use of technologies that become outdated, such as slide projectors and old television monitors. Such technologies can be difficult to maintain and replacements aren't always available. If these technologies break, therefore, _____

Which choice most logically completes the text?

- A) replacing the works with newer works that use more up-to-date technologies may be too expensive for many museum budgets.
- B) museum policies about how to dispose of the works may need to be updated.
- C) continuing to exhibit the works may require adapting artists' original visions for how their works are displayed.
- D) modern viewers may experience the works over longer periods of time than the works' first viewers did.

19

Carcinization, or the evolution of a crablike body form, has taken place in crustaceans many times over the last 250 million years. Decarcinization has occurred several times as well, even though it involves the loss of traits such as sideways walking that seem to have helped carcinized groups persist in a variety of ecosystems. In a 2021 paper, Joanna Wolfe and team note that many decarcinized groups are extinct and have very few living relatives—signs that decarcinization might be an “evolutionary dead-end.” But the team also discusses frog crabs, a living decarcinized group with traits suited to dwelling in sediment; fossils show that the group had decarcinized members as far back as the Early Cretaceous. This example suggests that _____

Which choice most logically completes the text?

- A) despite having many living relatives, some decarcinized groups did not benefit from decarcinization.
- B) a crablike body form may not be optimal in all cases, with ecological conditions sometimes favoring the persistence of decarcinization.
- C) sideways walking may have been less important to the survival of frog crabs than a protected abdomen and other traits associated with carcinization.
- D) the evolutionary benefits of a crablike body form are less certain than many studies of carcinization had previously implied.

20

During the Second World War, codebreakers working for the US military deciphered encrypted messages. Many of _____ codebreakers were women.

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

- A) that
- B) this
- C) these
- D) it

21

The atomic structure of an element _____ the element's place on the periodic table.

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

- A) determining
- B) to determine
- C) having determined
- D) determines

22

You can see Brazilian artist Tarsila do Amaral's bold use of color in her painting *Sol Poente* (*Setting Sun*). Created in 1929, the painting _____ bright green cacti towering in front of a candy-orange sky.

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

- A) featuring
- B) feature
- C) features
- D) to feature

23

In addition to being a celebrated writer, musician, and educator, Zitkála-Šá (Yankton Dakota) was the cofounder of the National Council of American _____ advocated for Native American civil rights throughout the 1920s and 1930s.

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

- A) Indians, which
- B) Indians
- C) Indians,
- D) Indians. Which

24

Assembling _____ by hand and in painstaking detail, Nigerian American artist Njideka Akunyili Crosby works at a methodical pace when completing her massive collage-based paintings.

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

- A) her
- B) that
- C) them
- D) it

25

The Eiger, the Mönch, the Jungfrau—Alpine summits like these were little more than wastelands to many Europeans until the eighteenth century, when attitudes toward such intimidating landscapes shifted as part of a broader aesthetic _____ by Irish philosopher Edmund Burke, this shift framed mountains as sublime objects capable of producing delightful terror.

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

- A) revolution initiated
- B) revolution that, initiated
- C) revolution. Initiated
- D) revolution, initiated

26

The unconventional literary philosophy with which Fernando Pessoa approached his writing is manifested in the Portuguese poet's "heteronyms," his term for the dozens of fictional personas in whose voices he authored many of his _____ among these personas was Ricardo Reis, author of classical odes in a Horatian style.

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

- A) works and
- B) works: and
- C) works;
- D) works,

27

A groundbreaking visual artist of her day, _____ including artists Vasily Kandinsky and Piet Mondrian.

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

- A) the explorations of Hilma af Klint into abstract modes of painting occurred well before those of many of her contemporaries,
- B) well before many of her contemporaries, Hilma af Klint explored abstract modes of painting,
- C) Hilma af Klint explored abstract modes of painting well before many of her contemporaries,
- D) Hilma af Klint, well before many of her contemporaries, explored abstract modes of painting,

28

In a theater-in-the-round, the stage is surrounded on all sides by the audience. This means that the play must remain visible from all angles. _____ plays performed in-the-round often use minimal sets and scenery, so the view of the actors is not blocked.

Which choice completes the text with the most logical transition?

- A) For this reason,
- B) By contrast,
- C) Instead,
- D) Next,

29

Analyses of Rembrandt's seventeenth-century painting *The Night Watch*, citing its richly saturated colors and stark contrasts between light and shadow, often characterize the work as an exemplar of the Baroque-era style. Many art historians, however, challenge the very notion of a distinct Baroque era. They claim that the so-called Baroque aesthetic was, _____ just an extension of the stylings of the Renaissance era.

Which choice completes the text with the most logical transition?

- A) first of all,
- B) similarly,
- C) in reality,
- D) nevertheless,

30

The lack of accessible written sources is a common challenge faced by biographers of pre-nineteenth-century subjects. _____ when writing his biography of Alexander Hamilton (1755–1804), historian Ron Chernow had at his disposal Harold Syrett's 26-volume, 19,000-document *Papers of Alexander Hamilton*.

Which choice completes the text with the most logical transition?

- A) To take one well-known example,
- B) It thus came as no surprise that,
- C) In accordance with this premise,
- D) On the other end of the spectrum,

31

Plastic bag proponents point out that, while most curbside recycling programs can't process the bags, consumers have the option to bring their plastic bags to specialty recycling facilities. That the number of consumers who go to such efforts remains paltry suggests that practical concerns counter the bags' theoretical recyclability. _____ the notion that plastic bags are recyclable appears at present to be little more than wishful thinking on their proponents' part.

Which choice completes the text with the most logical transition?

- A) In response,
- B) In other words,
- C) At the same time,
- D) However,

32

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

- The Schomburg Center for Research in Black Culture is a research library in New York City.
- It was named for Arturo Alfonso Schomburg.
- It was founded in 1925.

The student wants to indicate the year the Schomburg Center was founded. Which choice most effectively uses relevant information from the notes to accomplish this goal?

- A) The Schomburg Center was named for Arturo Alfonso Schomburg.
- B) The Schomburg Center was founded in 1925.
- C) The Schomburg Center is a research library.
- D) The Schomburg Center is located in New York City.

33

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

- Stop motion animation (SMA) is a filmmaking technique that involves manipulating characters (puppets, clay figures, etc.) by hand in minute increments.
- Each change in position is meticulously captured in a series of images that, when played back, give the illusion of motion.
- Producer Travis Knight: “It’s a process that dates back to the dawn of cinema, with a charm and a warmth and a beauty that other forms of animation...do not have. And because you effectively get one opportunity to get it right, every shot is a high-wire act.”
- Knight: SMA is “raw and it’s imperfect. It’s also undeniably human.”

The student wants to emphasize the aesthetic qualities of SMA by quoting Knight. Which choice most effectively uses relevant information from the notes to accomplish this goal?

- A) With its puppets and clay figures, stop motion animation, Knight says, “dates back to the dawn of cinema.”
- B) The handmade, “imperfect” look of stop motion animation, says Knight, lends this “undeniably human” technique a “charm and a warmth and a beauty.”
- C) As Knight says, “you effectively get one opportunity to get it right” when meticulously capturing the series of images that, when played back, give it the illusion of motion.
- D) Stop motion animation is imperfect, making every shot “a high-wire act,” Knight says.

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.**