



**SATASHKENT**  
College Prep Community

# ***SAToplam 2.0***

## ***Reading***

*Now with March, May, June, August 2025 questions*



**846 Questions  
with Answers**

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# Introduction

## Welcome to the SAToplam Reading Book!

Since the SAT went digital, students around the world have faced a serious challenge: **a lack of reliable, updated practice materials**. Most existing books and resources no longer reflect the structure or style of the new exam, leaving many learners unsure of how to study effectively.

At **@satashkent**, we recognized this problem early. We heard from students who were motivated to succeed but struggled to find quality materials that matched the real test. Therefore, we decided to build a solution for those in need.

This book is not just a practice resource; rather, it's a **strategic tool**. Every question inside comes directly from **real SAT exams** administered between **March 2023 and August 2025**, making your practice as close to the real test as possible. What sets this book apart is its **topic-based structure**: instead of random drills, you'll work on your actual weak points **organized clearly into subtopics like Inference, Quotation, Main Idea and Details, and etc.**

Each section includes:

- **Must-know tips** to guide your thinking
- **Real exam questions** to apply what you learn
- **Recommended timing** to simulate test pressure

Our goal is simple: help you get better where it matters most. This is not about memorizing rules for the sake of rules. It's about building the skills that raise your score and strengthen your overall English usage.

We believe smart practice leads to smart results. So if you're serious about your SAT performance, you're in the right place.

Let's begin, birodari aziz!

## How to Use This Book

The **SAToplam Reading** by **@satashkent** is your all-in-one guide to mastering the Reading section of the digital SAT, built entirely on real exam questions from **March 2023 to August 2025**. It's designed for students preparing independently and aiming for accuracy, efficiency, and topic-specific mastery.

Since the SAT became digital, there's been a shortage of high-quality, structured resources. That's why we created this book: to close the gap for learners who are serious about improving but may not have access to expensive tutors or classes. This is a tool for progress and a mission to make top-tier prep accessible.

### Book Structure

The book is divided into thirteen key domains of the SAT Reading section:

#### 1. Information and Ideas

- Section 1: **Main Idea**
- Section 2: **Details**
- Section 3: **Inference**
- Section 4: **Support**
- Section 5: **Weaken**
- Section 6: **Quote**
- Section 7: **Graph**

These topics sharpen your ability to read carefully, reason with evidence, and analyze written arguments or visuals.

## 2. Craft and Structure

- Section 8: **Central Purpose**
- Section 9: **Overall Structure**
- Section 10: **Underlined Purpose**
- Section 11: **Gap Filling**
- Section 12: **Most Nearly Means**
- Section 13: **Cross-Text Connections**

These questions test your deeper understanding of the author's intent, word meaning, and text structure — skills essential for high-scoring readers.

## How to Study with This Book

### 1. Choose a Topic

Identify what you want to work on: main idea, command of evidence, reading comprehension, or author's purpose.

### 2. Read the Must-Know Tips

At the start of each section, we provide strategic advice to help you approach that specific question type.

### 3. Practice with Real Questions

Every question in this book has been pulled from an actual digital SAT. Practice in sets, and time yourself as you improve.

### 4. Reflect and Review

Don't just mark right or wrong. Understand why the correct answer works and why the others don't.

### 5. Revisit Weak Points

Keep track of missed questions and return to them until you're confident. The goal is mastery, not speed.

*\*Exam Level — This reflects the average amount of time you should spend on each question type during the actual SAT. If you're just beginning your SAT journey, take your time to understand each question thoroughly and focus on solving it with clarity.*

## A Resource for the Community

We built this book with a mission: to support learners in Uzbekistan and beyond who deserve real tools, not recycled theory. If you find any mistakes or want to contribute feedback, message **@randsupport** on Telegram.

This is your book. Use it well and let it take you one step closer to your dream score.

## References

All questions in this book are from March 2023 to August 2025 Real Exams.

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# I Information and Ideas

# Topic 1: Main Ideas

38 Questions

## DIRECTIONS

### Must Know Tips:

- The correct answer choice should cover all points of the passage.
- Use the “True, False, Not Given” technique.
- Eliminate options that are partly correct and partly incorrect.
- Be cautious with options that are too extreme (e.g., "only," "first," "last," "most/best").
- Don't read the question prompt (it's static).

**Recommended time per question in this section:** min: 45 sec, max: 1 min 30 sec, avg: 67.5 sec. (\*Exam level)

The following text is adapted from Daniel Defoe's 1704 nonfiction book *The Storm*.

The sermon is a sound of words spoken to the ear, and prepared only for present meditation and extends no farther than the strength of memory can convey it; a book printed is a record, remaining in every man's possession, always ready to renew its acquaintance with his memory, and always ready to be produced as an authority or voucher to any reports he makes out of it, and conveys its contents for ages to come, to the eternity of mortal time, when the author is forgotten in his grave.

1

Which choice best states the main idea of the text?

- A) People are less likely to forget a message when they hear it spoken aloud than they are when they read it in print.
- B) Unless a spoken message is delivered by [a confident orator, it may be] ignored.
- C) Most authors have little hope of being remembered well past their lifetimes.
- D) Words committed to print have a greater permanence than messages that are merely spoken aloud.

The Far Side of the World, first published in 1984, is a novel in Patrick O’Brain’s Aubrey/Maturin series, which includes twenty books plus an unfinished fragment of a twenty-first. Like the rest of the books in the series, The Far Side of the World has a rather abrupt ending, but the following book, The Reverse of the Medal, picks up neatly where The Far Side of the World leaves off. Thus, the sudden ending is only an issue if one considers the books as independent texts—the Aubrey/Maturin series is best thought of as a single incredibly long work, similar to other multivolume stories, such as John Galsworthy’s The Forsyte Saga.

2

Which choice best states the main idea of the text?

- A) It is unfair that the Aubrey/Maturin series does not have the critical reputation of The Forsyte Saga, which has a similar structure.
- B) The Far Side of the World and The Reverse of the Medal are [two] of the most complex of Patrick O’Brian’s [novels of the Aubrey/Maturin series] with unconventional structures.
- C) The structure of each of the novels of the Aubrey/Maturin series suggests that the series should be considered a single continuous story.
- D) Many readers find the Aubrey/Maturin novels to be remarkably entertaining despite flaws in novels’ structures.

*Master and Commander*, first published in 1969, is a novel in Patrick O’Brian’s Aubrey/Maturin series, which includes twenty completed books. Some critics have found fault with the abrupt endings of *Master and Commander* and other books in the series, saying that they do not finish conclusively but arbitrarily stop. Other critics, however, argue that the books should not be thought of as discrete texts with traditional beginnings and endings but as a single incredibly long work, similar to other multivolume stories, such as John Galsworthy’s *The story of Saga*.

3

Which choice best states the main idea of the text?

- A) The unusual structure that O’Brian uses for *Master and Commander* makes it one of his most intricate books.
- B) Critics have differing views regarding the efficacy of the structures of the novels in the Aubrey/Maturin series.
- C) Some critics think the Aubrey/Maturin series should have the literary form of *The story of Saga*, while others disagree.
- D) Many critics judge the Aubrey/Maturin novels to be remarkably entertaining despite flaws in the novels’ structures.



Horses and barn owls can see in three dimensions (3D) which helps them perceive distance and depth. Octopuses and squid are thought to lack 3D vision. Many researchers once thought the same about cuttlefish, but Trevor Wardell and his team wanted to test whether this assumption was true. The team studied how cuttlefish wearing 3D glasses reacted to 3D images of shrimp (a favorite prey) projected on a tank wall. Cuttlefish changed their striking position to match the 3D images, suggesting that their vision is more like that of horses and barn owls than that of octopuses or squid.

4

Which choice best states the main idea of the text?

- A) Researchers have long known that horses and barn owls can see in 3D.
- B) Cuttlefish are surprisingly similar in structure to octopuses and squid.
- C) Contrary to what many researchers had assumed, cuttlefish may be able to see in 3D.
- D) The ability to see in 3D allows many animals to interact with one another.

Meredith E. Protas and colleagues have explored how convergent evolution—a phenomenon that occurs when the same trait evolves independently in two reproductively separate lineages—can result from a genetic mechanism shared by both lineages. Meanwhile, Bas J. Zwaan and colleagues have investigated how convergence occurs through different genetic mechanisms, but the relative prevalence of convergence through shared and different genetic processes is still poorly understood. This motivated biologist Delbert A. Green II and Cassandra G. Extavour to evaluate both types of convergence in a single study for their 2012 paper.

5

Which choice best states the main idea of the text?

- A) Before Green and Extavour's study, convergence evolution was assumed to require a shared genetic mechanism between two lineages that shared the trait.
- B) Green and Extavour's study was conducted using data from the studies by Protas and colleagues and Zwaan and colleagues.
- C) Green and Extavour's study addresses convergent evolution more comprehensively than the studies by Protas and colleagues and Zwaan and colleagues do.
- D) Both the study by Protas and colleagues and that by Green and Extavour compare convergence through shared genetic mechanism to convergence through different genetic mechanisms.

The following text is from Frances E.W. Harper's 1892 novel *Jola Leroy*. The text describes Robert Johnson, who has recently joined the US Army.

He was daring, without being rash; prompt, but not thoughtless; firm without being harsh. Kind and devoted to the company he drilled, he soon won the respect of his superior officers and the love of his comrades.

6

Which choice best states the main idea of the text?

- A) Robert is well suited to his role in the military.
- B) Robert has put great effort into getting the attention of his comrades.
- C) Robert mainly seeks to help his comrades even if his superiors don't appreciate it.
- D) Robert has made some mistakes out some good qualities.

Animals use many objects as tools to achieve goals more easily. Such goals include grooming, finding food, and protecting themselves. For a long time, people thought tool use was unique to primates. Octopuses and other animals, though, have busted the myth that tool use requires hands. Inventively, octopuses use two halves of a seashell to provide protection or a place to hide. Greater vasa parrots also get creative. They use date pits to grind seashells into calcium powder.

7

Which choice best states the main idea of the text?

- A) Unlike primates, octopuses are exceptionally skillful at using different tools.
- B) There are many myths about tool use that researchers are starting to challenge.
- C) Animals find it difficult to use objects as tools.
- D) Contrary to long-held beliefs, primates aren't the only animals to use tools.

The following text is from Guy de Maupassant's 1884 short story "A Recollection," from the collection *Guy de Maupassant Short Stories* (translated by Albert M. C. McMaster et al. in 1903). The narrator is on a walk in the countryside outside of Paris, France.

I walked slowly beneath the young leaves, drinking in the air, fragrant with the odor of young buds and sap. I sauntered along, forgetful of musty papers, of the offices, of my chief, my colleagues, my documents, and thinking of the good things that were sure to come to me, of all the veiled unknown contained in the future. A thousand recollections of childhood came over me, awakened by these country odors, and I walked along, permeated with the fragrant, living enchantment, the emotional enchantment of the woods warmed by the sun of June.

8

Which choice best states the main idea of the text?

- A) Having decided to leave his current employment, the narrator is returning to his childhood home in the country.
- B) The narrator's natural surroundings help him escape his work concerns by prompting hopes about the future and memories of youth.
- C) The narrator is using the quiet of the countryside to help him think about how projects at work could be advantageous for his career.
- D) The narrator forgets to address pressing work issues because the smells of the countryside distract him with thoughts of his youth.

Tanya Tagaq is a writer and musician and a member of the Inuit community of Cambridge Bay in northern Canada. Critics and fellow writers have praised her work for combining traditional Inuit stories with popular genres of literature, such as fantasy fiction. But Tagaq is not the only Indigenous writer to blend traditional stories with popular literature. In the 2020 novel *The Only Good Indians*, Stephen Graham Jones successfully blended the oral storytelling tradition of his tribe, the Blackfeet Nation, with horror fiction.

9

Which choice best states the main idea of the text?

- A) Non-Indigenous authors should consider the expectations of Indigenous readers.
- B) Several famous Indigenous writers increased their book sales when they began incorporating traditional stories.
- C) Recent Indigenous fiction writers are mixing traditional stories with popular literary genres.
- D) The success of Tanya Tagaq has influenced non-Indigenous authors who write in popular literary genres.

Mexican textile artist Victoria Villasana weaves stories of triumph, using her unique method of applying colorful yarn to photographs of people. In some works, Villasana focuses on celebrating cultural icons who are people of color, as she does in her depiction of musician and composer Prince. However, in other works, Villasana honors ordinary people, as she does in her captivating portrayal of a young girl sitting on a sidewalk. Villasana sees both of these approaches as ways of depicting the power and interconnectedness of all people.

10

Which choice best states the main idea of the text?

- A) Villasana's portrayal of a young girl sitting on a sidewalk focuses more on human connection than it does on human resilience.
- B) Villasana began her artistic career by painting portraits of famous people and then transitioned to depicting everyday people instead.
- C) Villasana's works focus on recognizing both famous and everyday examples of human strength and connection.
- D) Villasana's depiction of Prince receives more attention from scholars than her depiction of a young girl sitting on a sidewalk does.

Horizontal gene transfer involves the exchange of genetic material between organisms not in a parent-offspring relationship. It is common among prokaryotes (single-celled organisms such as the bacteria *Brevibacillus borstelensis* and *Massilia timonae*). The process can have the effect of increasing bacterial resistance to antibiotics; as such, an understanding of how to prevent horizontal gene transfer might result in the mitigation of dangerous pathogens (organisms that cause disease).

11

Which choice best states the main idea of the text?

- A) A common perception of horizontal gene transfer is inaccurate.
- B) Horizontal gene transfer is more common than was initially thought.
- C) The results of new research into horizontal gene transfer cast doubt on earlier findings.
- D) The study of horizontal gene transfer may yield findings with useful applications.



In 2013 Oona M. Lönnstedt and colleagues published a study concluding that ocean acidification has a strong effect on the behavior of *Pomacentrus amboinensis*, a species of fish. However, Lönnstedt and colleagues' study relied on a mean sample size of only about 28 fish. In a 2022 review of various scientists' conclusions about the impacts of ocean acidification on fish behavior, Jeff C. Clements and colleagues caution that relying on such a relatively small sample size can increase the potential for biased analysis. Such analysis, in turn, can contribute to reports of exaggerated effects.

12

Which choice best states the main topic of the text?

- A) A possible shortcoming of a study involving *Pomacentrus amboinensis*.
- B) A discovery regarding the evolution of *Pomacentrus amboinensis*.
- C) A change in fish behavior first reported in 2022.
- D) A newly identified cause of ocean acidification.

In a large community science effort, biologist Abbigail Merrill and colleagues collaborated with hundreds of students and other amateur science enthusiasts for more than three years to study how butterfly color and time of day relate to butterfly behavior. They found that butterfly color might influence behavior more than butterfly size does, and that butterflies were observed to feed more often in the morning than at any other time of day.

13

Which choice best states the main idea of the text?

- A) Time of day and butterfly color seem to have less influence on butterfly behavior than the location where the butterflies are studied does.
- B) A recent study suggested that butterflies' coloring seems to be less relevant to their behavior than time of day.
- C) Collaboration between professional scientists and members of the public is especially useful when studying the behavior of butterflies and other flying insects.
- D) A large study suggested that butterfly color and time of day might influence the behavior of certain butterflies.

President Richard Nixon is most famous for his participation in the 1970s Watergate political scandal, a convoluted tale of criminality and eroded ethics involving a constellation of associates such as political operative Jeb Stuart Magruder and Nixon's secretary Rose Mary Woods. But Nixon's legacy is complex: he has been praised for his role in affirming the sovereignty of tribal nations, and he once made an attempt at reforming United States health care policy that is arguably a precursor to the Affordable Care Act, which became law during the Barack Obama administration.

14

Which choice best states the main idea of the text?

- A) Richard Nixon's reputation is primarily due to the actions of his associates.
- B) Some of Richard Nixon's policies influenced the policies of later presidential administrations.
- C) Jeb Stuart Magruder and Rose Mary Woods were significant figures in the presidency of Richard Nixon.
- D) Richard Nixon is commonly linked with an infamous historical event, but this overshadows some of his notable achievements.

Tomato is an example of a loanword—that is, a word that originated in one language and was later adopted by another. The word came to English indirectly from tomate, the Spanish word for the widely cultivated plant. Spanish had borrowed it from Nahuatl, an Indigenous language of Central Mexico, in which the word's original form is tomatl. "Maize" also has an Indigenous origin and entered English through Spanish. But in this case, the original source was Taíno, a language of the Caribbean islands, in which the word for the corn plant is mahís.

15

Which choice best states the main idea of the text?

- A) Many Spanish words with Indigenous origins first passed through English before entering Spanish.
- B) When borrowing from Indigenous languages, Spanish adopted roughly as many words from Nahuatl as from Taíno.
- C) When non-Indigenous languages borrowed from Indigenous languages, the words often underwent a significant change in meaning.
- D) The English words "tomato" and "maize" are both examples of loanwords from Indigenous languages.

Eighteenth-century economist Adam Smith is famed for his metaphor of the invisible hand, which he putatively used to illustrate a robust model of how individuals produce aggregate benefits by pursuing their own economic interests. Note “putatively”: as Gavin Kennedy has shown, Smith deploys this metaphor only once in his economic writings—to make a narrow point about the then-dominant economic theory of mercantilism—and it was largely ignored until some twentieth-century economists eager to secure an intellectual pedigree for their views elevated it to a fully-fledged paradigm.

16

Which choice best states the main idea of the text?

- A) The reputation of Smith’s metaphor of the invisible hand is not due to the importance of the metaphor in Smith’s work but rather to the promotion of the metaphor by some later economists for their own ends.
- B) Smith’s metaphor of the invisible hand has been interpreted as a model of how individuals acting in their own interest produce aggregate benefits, but it was intended as a subtle critique of the economic theory of mercantilism.
- C) Some twentieth-century economists gave Smith’s metaphor of the invisible hand a significance it does not have in Smith’s work, but it is nevertheless a useful model of how individuals produce aggregate benefits by pursuing their own economic interests.
- D) Although Smith is famed for his metaphor of the invisible hand, the metaphor was largely ignored until economists in the twentieth century came to realize that the metaphor was a robust model that anticipated their own views.

Roy McLendon's Moonlit St. Lucie, a riverscape featuring the silhouette of a single palm tree against the backdrop of shimmering water and a brilliant moonlit sky, is typical of paintings by the Florida Highwaymen, an informal collective of landscape artists mainly active in the 1950s and '60s. Remarkable for anticipating and amplifying cultural perceptions of Florida that became pervasive in the public consciousness, paintings by the Highwaymen are readily identifiable by the natural iconography—placid inland rivers, windswept palm trees—that McLendon and colleagues perpetually revisited.

17

Which choice best states the main idea of the text?

- A) Although similar in its subject matter to many paintings by the Florida Highwaymen, Moonlit St. Lucie is now more highly regarded than other Florida Highwaymen paintings are.
- B) Representative images found across many paintings by McLendon and other Florida Highwaymen came to be widely associated with Florida in part due to the Florida Highwaymen's influence.
- C) Although paintings by the Florida Highwaymen were once celebrated for their depictions of Florida's natural environments, the popularity of these paintings waned after the 1960s.
- D) The placid inland rivers and windswept palm trees that are typical of McLendon's works, which are otherwise indistinguishable from other Florida Highwaymen paintings, help to differentiate McLendon's paintings from those of his colleagues.

The following text is adapted from Jerome K. Jerome's 1889 novel *Three Men in a Boat (To Say Nothing of the Dog)*. The narrator is traveling by boat with Harris and another friend.

[Harris] told us anecdotes of how he had gone across the [English] Channel when it was so rough that the passengers had to be tied into their [beds], and he and the captain were the only two living souls on board who were not ill. Sometimes it was he and the second mate who were not ill; but it was generally he and one other man. If not he and another man, then it was he by himself.

18

Which choice best states the main idea of the text?

- A) During a previous boat trip, Harris spent more time with the other passengers than with the captain.
- B) Harris has a hard time remembering his first trip across the English Channel when his friends ask about it.
- C) When Harris speaks of an earlier trip, he often changes the details but always brags about his own wellness.
- D) Harris is worried that he and his friends will encounter rough waters during their boat trip.



Spanning the 1920s to the 1980s, Mexican architect Luis Barragan's prolific career evolved through distinct phases. After traveling to the United States and Europe in the early 1930s and immersing himself in an international architectural discourse, Barragan began incorporating principles derived from functionalism and modernism in his work, as seen in the El Arenal Parish Church, whose unadorned geometric forms contrast with the historically inspired architecture found in the houses for Emiliano Robles Leon, one of Barragan's early projects in Guadalajara.

19

Which choice best states the main idea of the text?

- A) Barragan's designs of the El Arenal Parish Church and the houses for Emiliano Robles Leon are considered paragons of a functionalist and modernist aesthetic.
- B) Barragan's design of the houses for Emiliano Robles Leon is considered more experimental than his design for the El Arenal Parish Church.
- C) Barragan's early work shows an initial dedication to a modernist aesthetic that he later abandoned.
- D) A notable shift in Barragan's design aesthetic reflects the influence of his time abroad.

Like many other bird species that live only on the Hawaiian archipelago, the Kaua'i 'amakihi has adapted to life in a well-defined habitat, resulting in highly specialized physical and behavioral characteristics that aid the species in survival. However, because the Kaua'i 'amakihi is highly specialized, it is especially vulnerable to environmental changes that can disrupt the delicately balanced ecosystem in which it lives.

20

Which choice best states the main idea of the text?

- A) The Kaua'i 'amakihi is a species of bird that is related to many other Hawaiian birds but does not share a habitat with any of them.
- B) The Kaua'i 'amakihi is an example of a highly specialized bird species found only on the Hawaiian archipelago and is related to several other highly specialized bird species found there.
- C) The Kaua'i 'amakihi is an example of a species unique to the Hawaiian archipelago that is highly specialized and therefore particularly susceptible to habitat disturbance.
- D) Hawaiian birds display a unique range of physical and behavioral characteristics and as a result can only live in habitats unique to the Hawaiian archipelago.

The following text is from Jose Rizal's 1891 novel *The Reign of Greed* (translated by Charles Derbyshire in 1912).

In his solitary retreat on the shore of the sea, whose mobile surface was visible through the open windows, extending outward until it mingled with the horizon, Padre Florentino was relieving the monotony by playing on his harmonium sad and melancholy tunes, to which the sonorous roar of the surf and the sighing of the treetops of the neighboring wood served as accompaniments. Notes long, full, mournful as a prayer, yet still vigorous, escaped from the old instrument. Padre Florentino, who was an accomplished musician, was improvising, and, as he was alone, gave free rein to the sadness in his heart.

21

Which choice best states the main idea of the text?

- A) The residence of Padre Florentino is especially isolated.
- B) Padre Florentino prefers to play music rather than listen to other musicians play.
- C) Padre Florentino has dedicated himself to becoming a skilled musician.
- D) The sadness of Padre Florentino's music reflects his own feelings.

The following text is from Ralph Waldo Emerson's 1841 essay "The Method of Nature."

The scholars are the priests of that thought which establishes the foundations of the earth. No matter what is their special work or profession, they stand for the spiritual interest of the world, and it is a common calamity if they neglect their post in a country where the material interest is so predominant as it is in America.

22

Which choice best states the main idea of the text?

- A) Military experience encourages Americans to contemplate aspects of human life that they would not choose to otherwise.
- B) It is unfortunate that so many intellectuals are concerned with material things rather than ideas.
- C) Many descriptions of the role of scholars in society unfairly diminish their importance.
- D) In a country whose citizens are largely preoccupied with tangible gains, it is crucial that some people work to foster and preserve ideas.

At over a thousand pages across two volumes, *The Fifty-Year Mission*, compiled by Edward Gross and Mark A. Altman, is presented as the "complete, uncensored, unauthorized oral history" as told by the people behind the media franchise Star Trek. The work aspires to be comprehensive by, for example, including accounts from cast and crew members of every Star Trek television series and film to date. But while *The Fifty-Year Mission* is clearly a unique and valuable resource, it has a shortcoming common among oral histories: it lacks a clear authorial point of view that could otherwise unite the various accounts into a cohesive whole.

23

Which choice best states the main idea of the text?

- A) The Fifty-Year Mission includes more accounts from people involved with Star Trek television shows than it does from people involved with Star Trek films.
- B) The compilers of *The Fifty-Year Mission* had lofty goals for their oral history of the Star Trek franchise, but the published work lacks information about many key events in the franchise's history.
- C) The large amount of material compiled into *The Fifty-Year Mission* is surprising given that many of the people involved in the Star Trek franchise did not participate in the oral history project.
- D) *The Fifty-Year Mission* represents a worthwhile attempt to thoroughly recount the history of the Star Trek franchise, but its approach has an important limitation.

Why do black-footed cats purr but leopards roar? Researchers hypothesize that this difference between the two feline species may be partly due to a U-shaped bone in their throats called the hyoid. Black-footed cats, which are much smaller than leopards, have a rigid hyoid that rumbles when the cat's larynx vibrates, resulting in a purr. By contrast, leopards have a somewhat flexible hyoid, and the bone is attached to the skull with a stretchy ligament that black-footed cats lack. These traits allow leopards and most other species of big cats to produce powerful roars. The same traits may also prevent most big cats from purring.

24

Which choice best states the main idea of the text?

- A) Both black-footed cats and leopards have U-shaped hyoid bones, but black-footed cats' hyoids are rigid whereas leopards' hyoids are flexible.
- B) Leopards and most other species of big cats can roar because they have flexible hyoid bones that are attached by stretchy ligaments to their skulls.
- C) Researchers are uncertain why relatively small cats, such as black-footed cats, purr but relatively large cats, such as leopards, roar.
- D) Differences related to the hyoid bone in black-footed cats and leopards may help explain why one species purrs and the other roars.

In their meta-analysis of research on advergames (video games developed to promote products or services), Zeph M.C. van Berlo et al, confirm that such games, though they can elicit player interest, may not facilitate subsequent recall of product and brand information. This phenomenon can be explained by the finite nature of cognitive capacity as it is articulated in Annie Lang's limited capacity model of motivated mediated message processing. In this case, players' cognitive resources are directed foremost toward the advergame's mechanics, leaving little or no capacity for encoding and storing the information the advertiser intends to be salient.

25

Which choice best states the main idea of the text?

- A) The limited capacity model of motivated mediated message processing developed by Lang provides a means of explaining the finding by van Berlo et.al. that players may not readily recollect the brand and product information embedded in advergames.
- B) The meta-analysis by van Berlo et al. reveals that higher engagement in advergame mechanics is linked to lower effectiveness in persuading players to purchase particular brands and products.
- C) Although the limited capacity model of motivated mediated message processing developed by Lang suggests otherwise, advergames can succeed as marketing tools, provided that they achieve a balance between game mechanics and the promotion of a brand or product.
- D) Research by van Berlo et al. corroborates Lang's conclusion that because people predominantly focus on game mechanics when playing video games, it is difficult for advergames to communicate brand and product information in ways that are highly memorable.



Like many other bird species that live only on the Hawaiian archipelago, the 'akeke'e has adapted to life in a well-defined habitat, resulting in highly specialized physical and behavioral characteristics that aid the species in survival. However, because the 'akeke'e is highly specialized, it is especially vulnerable to environmental changes that can disrupt the delicately balanced ecosystem in which it lives.

26

Which choice best states the main idea of the text?

- A) Hawaiian birds display a unique range of physical and behavioral characteristics and as a result can only live in habitats unique to the Hawaiian archipelago.
- B) The 'akeke'e is an example of a species unique to the Hawaiian archipelago that is highly specialized and therefore particularly susceptible to habitat disturbances.
- C) The 'akeke'e is a species of bird that is related to many other Hawaiian birds but does not share a habitat with any of them.
- D) The 'akeke'e is an example of a highly specialized bird species found only on the Hawaiian archipelago and is related to several other highly specialized bird species found there.

Community science involves professional scientists collaborating with members of the public to study a topic. This approach to research can promote community engagement by offering insight into the daily life of a scientist. It's also very effective because it greatly increases the amount of data that can be collected, such as when biologist Grace Herzel and colleagues studied butterfly color and its relation to behavior and used findings reported by hundreds of students and community members in northwestern Arkansas.

27

Which choice best states the main idea of the text?

- A) Abbigail Merrill and colleagues used a community science approach in their butterfly research and were surprised at the effect this had on public understanding of the nature of scientists' work.
- B) A community science approach can increase public understanding of the nature of scientists' work and generate large amounts of data, benefiting both communities and researchers.
- C) A community science approach can benefit communities by increasing public understanding of the nature of scientists' work, but it's less likely to help researchers obtain accurate data.
- D) A community science approach allows researchers to collect significantly more data even though it's unlikely to have much of an effect on public understanding of the nature of scientists' work.

Sometimes an animal will encounter another member of its own species that it doesn't have any connection with. (For example, African lions that aren't in the same pride might meet.) When that happens, the animals have to make decisions: Will they compete for a mate? Will they help in a fight with a predator? Will there be another outcome? In other words, the animals have to think carefully about possible risks and benefits.

28

Which choice best states the main idea of the text?

- A) Animal species that do not have any predators
- B) A kind of meeting between animals of the same species
- C) Animal species that are close to becoming extinct
- D) Different environments that some animal species live in

The following text is adapted from Daniel Defoe's 1704 nonfiction book *The Storm*.

The sermon is a sound of words spoken to the ear, and prepared only for present meditation, and extends no farther than the strength of memory can convey it; a book printed is a record, remaining in every man's possession, always ready to renew its acquaintances with his memory, and always ready to be produced as an authority or voucher to any reports he makes out of it, and conveys its contents for ages to come, to eternity of mortal time, when the author is forgotten in his grave.

29

Which choice best states the main idea of the text?

- A) Words committed to print have a greater permanence than messages that are merely spoken aloud.
- B) People are less likely to forget a message when they hear it spoken aloud than they are when they read it in print.
- C) Unless a spoken message is delivered by an expert, it can be safely ignored.
- D) Most authors have little hope of being remembered well past their lifetimes.

In a study by Mika R. Moran, Daniel A. Rodriguez, and colleagues, residents of Quito, Ecuador, and Buenos Aires, Argentina, were surveyed about parks in their cities. Of the 618 respondents from Quito, 82.9% indicated that they use the city's parks, and of the 683 respondents from Buenos Aires, 69.9% indicated using city parks. Given that the percentage of Quito respondents who reported having access to other desired amenities near parks was much lower than that reported by Buenos Aires respondents, the difference in park use can't be explained by Quito residents having more access to desired nonpark amenities near parks.

30

Which choice best states the main idea of the text?

- A) The study's finding that a greater proportion of residents use parks in Quito than in Buenos Aires is partly due to the greater prevalence of parks in Quito.
- B) The study's findings suggest that an increase in the number of amenities near city parks would likely increase park use in Quito but not in Buenos Aires.
- C) Although the study found that a greater proportion of residents use parks in Quito than in Buenos Aires, that difference isn't due to greater access to amenities near parks in Quito.
- D) Even though the study found that parks in Buenos Aires are more likely to be close to other amenities than parks in Quito are, Quito has more amenities overall than Buenos Aires does.

The following text is from a translation of María Dueñas's 2009 novel *The Time in Between*.

The narrator has just rented an apartment and is entering it for the first time. Over the years there have been many times when my destiny has delivered me unexpected moments, unforeseen twists and turns that I've had to handle on the fly as they appeared. Occasionally I was ready for them; very often I wasn't. Never, however, was I so aware of entering a new stage as I was that afternoon in October when I finally dared to cross the threshold and my steps sounded hollowly in the unfurnished apartment. Behind me was a complicated past, and in front of me, like an omen, I could see a space opening out, a great empty space that time would take care of filling up.

31

Which choice best states the main idea of the text?

- A) The narrator feels optimistic about the future success of a new business.
- B) The narrator recognizes that a particular moment marks a major shift in her life.
- C) The narrator has always had a plan for how to handle big moments in her life.
- D) The narrator wants to express her gratitude for the people who have helped her.

When Kenyan writer Ngugi wa Thiong'o, who had previously published four novels in English, began writing in his native language, Gikuyu, in the 1970s, several fellow writers and critics cautioned that doing so might make his works inaccessible outside his own community. Some noted that Kiswahili—widely spoken in Kenya and elsewhere in Africa—would be a more practical choice. Rejecting their arguments, Ngugi went on to author dozens of acclaimed works in Gikuyu that have been translated into a total of more than thirty languages.

32

Which choice best states the main idea of the text?

- A) Although Ngugi insisted on publishing his first works in Gikuyu, they have since been translated into many other languages.
- B) Although Ngugi's decision to write in Gikuyu was met with some skepticism, it didn't prevent him from achieving literary success.
- C) The reaction to Ngugi's rejection of English illustrates that some literary experts believe that fame is most easily gained by writing in a widely understood language, such as Gikuyu.
- D) In the 1970s, Ngugi became convinced that literature ought to be written in authors' native languages, and he proceeded to publish many works in Gikuyu.



The following text is adapted from Guy de Maupassant's 1884 short story "A Recollection," from the collection Guy de Maupassant Short Stories (translated by Albert M.C. McMaster et al. in 1903). The narrator is taking a boat down the Seine river from Paris, France, to the surrounding countryside.

I took up a position in the bows [front of the boat], standing up and looking at the quays, the trees, the houses and the bridges disappearing behind us. And suddenly I perceived the great viaduct of Point du Jour which blocked the river. It was the end of Paris, the beginning of the country, and behind the double row of arches the Seine, suddenly spreading out as though it had regained space and liberty, became all at once the peaceful river which flows through the plains, alongside the wooded hills, amid the meadows, along the edge of the forests.

33

Which choice best states the main idea of the text?

- A) The narrator is anxious for the trip to the countryside to be over as quickly as possible, and is frustrated that it is taking so long.
- B) The narrator perceives a parallel between the shift from the urban environment to the countryside and the changes in the features of the river itself.
- C) The narrator is surprised to see that the boat is taking him out of the city but is exhilarated by the opportunity to explore an unknown place.
- D) The narrator contrasts his feelings of apprehension with the apparent tranquility of the river as the boat enters the countryside.

The following text is adapted from Guy de Maupassant's 1884 short story "A Recollection," from the collection Guy de Maupassant Short Stories (translated by Albert M.C. McMaster et al. in 1903). The narrator is taking a boat down the Seine river from Paris, France, to the surrounding countryside.

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34

Which choice best states the main idea of the text?

- A) Though the Seine is calm during most of the journey, the arches of the Point du Jour created a small area of heavy current.
- B) The Seine is similar to Paris in that it is beautiful and slow to change
- C) As the journey progressed from Paris to the countryside, the waters of the Seine gradually cleared.
- D) The waters of the Seine are more confined and rough in Paris than they are in the countryside.

Although notorious for its strict formal requirements, the sonnet is nevertheless represented by such wide-ranging examples as Maggie Anderson's "Sonnet for Her Labor" and Tyehimba Jess's "Millie and Christine McCoy"—poems that differ remarkably in subject, rhythm, and structure. It may seem counterintuitive that the sonnet—ostensibly rigid and timeworn—could accommodate such variety, but poet Carl Phillips contends that the form invites experimentation: when a genre's conventions are as recognizable as those of the sonnet, the opportunity to subvert them is especially irresistible.

35

Which choice best states the main idea of the text?

- A) Although Anderson's and Jess's sonnets are both widely celebrated for their striking originality, most modern examples of the form are generally regarded as conventional.
- B) As a form, the sonnet encourages a surprising amount of variety, even though certain characteristics associated with it suggest this would be unlikely.
- C) That the sonnet remains as popular as it is today is unexpected, given that many of the features associated with the form have long since seemed antiquated to readers.
- D) Although the sonnet is now recognized for the way it facilitates experimentation, there was a long period in its history in which very little innovation occurred.

Habitat navigation is a skill that helps animals reach food or safety. To test how navigation works in fish, Shachar Givon and colleagues taught goldfish to drive a vehicle—a motorized fish tank with wheels—on land. The vehicle was programmed to move in the same direction that the fish swam in within the tank. In the experiment, the fish were tasked with driving their tank to a pink board. They received a treat when they succeeded, and they often did. Because the fish could move their tank to the board, Givon concludes that their navigational skills aren't specific to an aquatic environment.

36

Which choice best states the main idea of the text?

- A) Research shows that although they live in the water, fish can navigate on land with a little mechanical help.
- B) Fish can navigate only within their natural aquatic environment in order to find food and safety.
- C) Researchers can train animals to complete many different tasks when they offer the animals treats.
- D) An animal's navigational skills directly depend on that animal's particular environment.

Women like Dorothy T. Blum made important early contributions to the history of US cryptology, a field concerned with secure data communication and storage. Blum provided cryptological services for the US Army in the 1940s and then joined the National Security Agency (NSA). She was a pioneer in transitioning the NSA to using computers for cryptanalysis. In this way, Blum and others like her helped make it possible for more women—such as Maureen Baginski, who currently works in intelligence and supports the FBI—to enter the field of cryptology.

37

Which choice best states the main idea of the text?

- A) Cryptology is a field that focuses primarily on securely managing data.
- B) Women such as Dorothy T. Blum and Maureen Baginski have contributed to the field of cryptology.
- C) Dorothy T. Blum and Maureen Baginski worked together on an important project in the field of cryptology.
- D) Cryptology should be taught more often in schools to encourage more women to enter the field.

Mauricio Drelichman and Hans-Joachim Voth's research into the debt defaults of Philip II (who ruled an empire including Spain and much of Belgium from 1556 to 1598) relates to other work on European early modern state finance, including Hoffman and Norberg's research on the relationship between state finance and political development. But Drelichman and Voth's unique contribution to the field is their reconstruction of the earliest extant set of annual fiscal records for any sovereign state, demonstrating in turn that Philip's defaults were caused by short-term cash shortages, not long-term unsustainable debts.

38

Which choice best states the main idea of the text?

- A) Analysis of the earliest available records of a sovereign state's finances can be found not in the work of Hoffman and Norberg but in that of Drelichman and Voth.
- B) Drelichman and Voth advanced the field of research on European early modern state finance by assembling a novel collection of evidence that gave them insight into Philip II's debt defaults.
- C) The research by Drelichman and Voth suggests that the logistics of ruling both Spain and much of Belgium led to short-term problems with cash that forced Philip II to default on his debts.
- D) Drelichman and Voth's research on Philip II's debt defaults builds on earlier work by Hoffman and Norberg, adding nuance to the earlier work's findings.

## Answers: Main Ideas

Number	Answer	Number	Answer
1	D	2	C
3	B	4	C
5	C	6	A
7	D	8	B
9	C	10	C
11	D	12	A
13	D	14	D
15	D	16	A
17	B	18	C
19	D	20	C
21	D	22	D
23	D	24	D
25	A	26	B
27	B	28	B
29	A	30	C
31	B	32	B
33	B	34	D
35	B	36	A
37	B	38	B

## Topic 2: Details Question

62 Questions

### DIRECTIONS

#### Must Know Tips:

- The correct option will focus on just one point of the passage.
- Read the entire passage to avoid silly mistakes.
- Use the “True, False, Not Given” technique.
- Be cautious with options that are too extreme (e.g., "only," "first," "last," "most/best").
- Eliminate options that are partly correct and partly incorrect.
- To find something, you need to know what you’re searching for.

**Recommended time per question in this section:** min: 45 sec, max: 1 min 20 sec, avg: 62.5 sec. (\*Exam level)

In a study by Mika R. Moran, Daniel A. Rodriguez, and colleagues, residents of Panama City, Panama, and Fortaleza, Brazil, were surveyed about parks in their cities. Of the 318 respondents from Panama City, 53.5% indicated that they use the city’s parks, and of 938 respondents from Fortaleza, 35.7% indicated using city parks. Given that the percentage of Panama City respondents who reported living within a 10-minute walk of a park was much lower than that reported by Fortaleza respondents, greater proximity alone can’t explain the difference in park use.

1

The text makes which point about the difference between the proportions of Panama City residents and Fortaleza residents using parks?

- A) It was much larger than the researchers conducting the study expected.
- B) It could be due to inaccuracies in the survey results.
- C) It was calculated using sources that predate the survey.
- D) It is caused by something other than the parks’ proximity to the residents.



Like all species of baleen whales, the common minkie whale feeds on tiny creatures known as Krill by filtering water through bristlelike keratin structures called baleen plates. In this way, baleen whales can eat up to 30% of their total mass per day. And while no one would call the common minkie whale small-it can have a mass as high as 4000 kg-it is one of the smaller baleen whales and it is much smaller than the fin whale, which can weigh a whopping 80000 kg and consume as much as 24000 kg of krill per day.

2

Based on the text, what can most reasonably be concluded about krill consumption among common minkie and fin whales?

- A) Both of them can eat as much as 24000 kg of krill per day.
- B) The quantities of krill consumed by fin whales has made it difficult for minkie whales to find sufficient food.
- C) The fin whale is able to eat more krill per day than the minkie whale.
- D) Most baleen whales include krill in their diets, but the minkie whale is less likely than the fin whale to do so.

The following text is adapted from Armando's short story "The Love of Clotilde," originally published in Spanish in 1884.

It was said that in {Don's} youth he once wrote a play which won him nothing but hisses and free entry for life behind the scenes of theaters. Whether resigned or not to the verdict of the public, he ceased to write plays and assumed instead the nobler role of a patron to unrecognized authors and artist and to ruined managers. Any youth from the province who arrived in Madrid with a drama in his pocket could take no surer road to seeing it produced than that which led to the home of Don. One and all, he received them with open arms, the good and the bad alike.

3

According to the text, what change coincided with Don becoming a patron of the theater?

- A) He achieved public recognition for an essay he had written earlier.
- B) He stopped writing plays.
- C) He accepted a new job as a critic.
- D) He moved to a town outside Madrid.

Researchers Cear, Elisa, and Andres created a computer model to predict the mix of movie theaters, gyms, and other businesses found in a given neighborhood. How we define a neighborhood and its boundaries is subjective, so the team used a clustering algorithm to locate dense groupings of amenities that represent human-identified neighborhoods like Boston's Harvard square. The predictive model, which incorporates this algorithm, is sure to be invaluable in determining the optimal mix of a city's amenities.

4

According to the text, why did the team employ a clustering algorithm?

- A) It could be used to evaluate the reasons for a business closing.
- B) It provided insights into how consumers are made aware of new movie theaters and gyms.
- C) It could predict which types of businesses would be successful in a given neighborhood.
- D) It gave them an objective way to identify neighborhood.

In O'odham, an Indigenous language from the Southwest region of what is now the United States, gogs means "a dog" whereas gogogs is used to refer to several dogs. This phenomenon, in which an element of a root word is repeated, sometimes with modification, within another word that is related to the root word is called reduplication. In this case, the element "go" in gogs gets repeated in gogogs. There are many examples of this type of reduplication in O'odham.

5

The text makes which point about the O'odham word gogogs?

- A) It contains a repetition of the element "go" in gogs.
- B) It doesn't have a clear equivalent in English.
- C) It is the only word in O'odham that uses reduplication.
- D) It is identical in meaning to several other words in O'odham.

The following text is adapted from Adib Khorrams 2018 novel *Darius the Great Is Not Okay*. Darius, a teenager from the United States, is visiting his family members in Iran.

I dozed and floated on the clouds of Farsi that blew my way from the front seat of Day (Uncle) Jamsheed's SUV. It reminded me of when I was little, and Mom chanted to me in Farsi every night before bedtime. It's hard to describe Farsi chanting the way Mom drew her voice out like the notes of a cello as she recited poems by Rumi or Hafez. I didn't know what they meant, but that didn't matter. It was quiet and soothing.

6

Based on the text, what does the narrator mainly remember about the times when his mother chanted to him?

- A) That he liked the characters in the stories his mother made up while chanting.
- B) That his mother had music playing in the background while she chanted.
- C) That his mother didn't usually chant at night.
- D) That he found the sound of his mother's chanting to be calming.

Researcher César A. Hidalgo, Elisa Castañer, and Andres Sevtsuk created a computer model to predict the mix of businesses and places of interest found in a given neighborhood. The team used data from the Google Places, API service to help identify furniture stores, florists, and other businesses and map their locations. This approach has some limits-data from Places API tend to be restricted to places that the customer facing-but the data set nonetheless provides an extremely reliable source to study colocation patterns of neighborhood amenities.

7

According to the text, what is one potential drawback of Hidalgo and colleagues' method?

- A) It depends upon data that are likely to be outdated.
- B) It is based on recent advancements from other fields that have yet to be applied outside of those contexts.
- C) It is likely to contribute to inaccurate identifications of the boundaries of specific neighborhoods.
- D) It may lead to conclusions that are not reflective of all the amenities in a given neighborhood.

The groundbreaking Negro Ensemble Company (NEC), founded in 1967, produced Paul Carter Harrison's award-winning play *The Great MacDaddy* in 1974. The company was cofounded by Robert Hooks, an actor, producer, and activist, and actor and playwright Douglas Turner Ward, who had met while performing in a 1960 touring production of Lorraine Hansberry's play *A Raisin in the Sun*. They shared a vision of a theater company that would nurture and showcase the work of Black theater professionals. Since its beginning, NEC has provided a forum for the voices of Harrison and other Black playwrights through workshops and performances.

8

According to the text, how did Hooks and Ward initially meet?

- A) Hooks and Ward participated in the same workshop at NEC.
- B) Harrison introduced Hooks to Ward at a performance of *The Great MacDaddy*.
- C) Hooks and Ward attended the same performance of *The Great MacDaddy*.
- D) Hooks and Ward were both actors in a production of *A Raisin in the Sun*.

Like all species of baleen whales, the Antarctic minke whale feeds on tiny creatures known as krill by filtering water through bristlelike keratin structures called baleen plates. In this way, baleen whales can eat up to 30 percent of their total mass per day. And while no one would call the Antarctic minke whale small—it can have a mass as high as 10,000 kg—it is one of the smaller whales and is much smaller than the bowhead whale, which can weigh a whopping 66,000 kg and consume as much as 19,800 kg of krill per day.

9

Based on the text, what can most reasonably be concluded about krill consumption among Antarctic minke and bowhead whale?

- A) The bowhead whale is able to eat more krill per day than the Antarctic minke whale is.
- B) Both the Antarctic minke whale and the bowhead whale can eat as much as 19,800 kg of krill per day.
- C) The quantities of krill consumed by bowhead whale has made it difficult for Antarctic minke whales to find sufficient food.
- D) Most baleen whales included krill in their diary, but the Antarctic minke whale is less likely than the bowhead whale to do so.

Researchers César A. Hidalgo, Elisa Castañer, and Andres Sevtsuk created a computer model to predict the mix of gyms, beauty salons, and other businesses found in a given neighborhood. How we define a neighborhood and its boundaries is subjective, so the team used a clustering algorithm to locate dense groupings of amenities that represent human-identified neighborhoods like Boston's Central Square. The predictive model, which incorporates this algorithm, is sure to be invaluable in determining the optimal mix of a city's amenities.

10

According to the text, why did the team employ a clustering algorithm?

- A) The algorithm provided insight into how customers are made aware of new gyms and beauty salons.
- B) The algorithm gave them an objective way to identify neighborhoods.
- C) The algorithm could be used to evaluate the reasons for a business's closing.
- D) The algorithm could predict which types of businesses would be successful in a given neighborhood.

Known for the albums *Quiet Nights* and *Milestones*, jazz trumpeter Miles Davis collaborated several times with pianist Gil Evans. Their 1958 adaptation of George Gershwin's opera *Porgy and Bess* bears little resemblance to the 1935 original. Davis and Evans felt no desire to please listeners expecting an exact duplication of the opera. They omitted parts, such as the aria "I Got Plenty of Nuthin'," and sometimes made only brief gestures toward Gershwin's melodies. But Davis and Evans's willingness to recompose Gershwin's work led to one of the most enduring albums in Davis's catalog.

11

According to the text, what is true about the aria "I Got Plenty of Nuthin'?"

- A) It appears in the Gershwin opera *Porgy and Bess* and Bessan adaptation by Davis and Evans.
- B) A brief quotation from it appears in Davis and Evans's adaptation of *Porgy and Bess*.
- C) Listeners familiar with Gershwin's body of work generally disliked it.
- D) It was adapted by Davis in a recording that appears on his album *Milestones*.



Baleen whales eat up to 30 percent of their total body mass in krill (tiny shrimplike creatures) per day. So, in one day, an Antarctic minke whale weighing 10,000 kg could eat 3,000 kg, while a southern right whale weighing 80,000 kg could ingest a whopping 24,000 kg. Over the last century, baleen whale populations have declined, and contrary to some scientists' expectations, so have krill populations. Matthew S. Savoca and colleagues resolve this apparent discrepancy by pointing out that baleen whales cycle iron in the ocean, helping support phytoplankton populations, which, in turn, sustain krill populations.

12

Based on the text, what can most reasonably be concluded about Antarctic minke and southern right whales?

- A) Populations of both Antarctic minke and southern right whales have declined significantly over the last century due to decreasing levels of iron in the ocean.
- B) As krill consumption by Antarctic minke whales has decreased, the krill consumption of southern right whales has increased.
- C) The southern right whale is able to eat more krill per day than the Antarctic minke whale is.
- D) Both Antarctic minke and southern right whales can eat krill, but of the two only the Antarctic minke whale can also subsist on phytoplankton.

Cocoa is an example of a loanword—that is, a word that originated in one language and was later adopted by another. The word came to English indirectly from cacao, the Spanish word for the plant that chocolate is made from. Spanish had borrowed it from Nahuatl, an Indigenous language of Central Mexico, in which the word's original form is cacahuatl. "Puma" is also Indigenous in origin and entered English through Spanish. But in this case, the original source was Quechua, a language of South America, in which the word for the mountain lion is also puma.

13

The author makes which point about the Spanish language?

- A) It has served as a medium through which Indigenous languages have influenced English.
- B) Its contribution to English vocabulary roughly equals the collective contribution by Indigenous languages.
- C) It adopted Nahuatl and Quechua words in approximately equal numbers.
- D) It has borrowed words from Indigenous languages and contributed words to them.

In Bolivia, use of solid fuel (e.g., coal, wood) as a share of total household fuel use fell by more than half between 2000 and 2015; such shifts are typically explained by appeal to the energy ladder, a model holding that fuel choice is mediated mainly by household income (specifically, high-technology fuels displace solid fuels as incomes rise). Richard Hosier and Jeffrey Dowd's study of fuel use in Zimbabwe shows how reductive this model is, however: although income of course constrained fuel choice, several factors, including the difficulty of acquiring fuel sources, influenced decisions.

14

Based on the text, the author would most likely agree with which statement about household income?

- A) It can explain some but not all of the differences in fuel choice across households.
- B) It is often said to influence household fuel choice but actually does not.
- C) It affects household fuel choice but not for the reasons assumed by the energy ladder model.
- D) It constrains the amount of fuel households use but not the type of fuel they use.

To understand how temperature change affects microorganism-mediated cycling of soil nutrients in alpine ecosystems, Eva Kaštovská et al. collected plant-soil cores in the Tatra Mountains at elevations around 2,100 meters and transplanted them to elevations of 1,700-1,800 meters, where the mean air temperature was warmer by 2°C. Microorganism-mediated nutrient cycling was accelerated in the transplanted cores; crucially, microorganism community composition was unchanged, allowing Kaštovská et al. to attribute the acceleration to temperature-induced increases in microorganism activity.

15

It can most reasonably be inferred from the text that the finding about the microorganism community composition was important for which reason?

- A) It provided preliminary evidence that microorganism-mediated nutrient cycling was accelerated in the transplanted cores.
- B) It suggested that temperature-induced changes in microorganism activity may be occurring at increasingly high elevations.
- C) It ruled out a potential alternative explanation for the acceleration in microorganism-mediated nutrient cycling.
- D) It clarified that microorganism activity levels in the plant-soil cores varied depending on which microorganisms comprised the community.

Michael G. Campana and colleagues relied on historical DNA (hDNA)—genomic data incidentally preserved in specimens housed in natural history collections—to investigate the evolutionary origins of a fungal pathogen affecting bats. Although this approach offers unique benefits, such as access to genomic data from extirpated populations, it remains a relatively underutilized resource because hDNA is often to some extent degraded, a situation not easily remediable under current methodological paradigms and with extant DNA extraction and analysis technologies.

16

Information in the text best supports which statement about hDNA?

- A) It may yield insights that other types of genomic data cannot.
- B) It has thus far proved valuable mainly to researchers studying pathogens.
- C) It may be underused because of its controversial status among scientists.
- D) It tends to be much more degraded than other types of DNA of comparable age.

The ancient writing system used in the Maya kingdoms of southern Mexico and Central America had a symbol for the number zero. The earliest known example of the symbol dates to more than 2,000 years ago. At that time, almost none of the writing systems elsewhere in the world possessed a zero symbol. And the use of zero in Mexico and Central America may be even more ancient. Some historians suggest that Maya mathematicians inherited it from the Olmec civilization, which flourished in the region 2,400-3,600 years ago.

17

According to the text, what do some historians suggest about Maya civilization?

- A) Maya civilization acquired the use of zero from the Olmec civilization.
- B) Maya civilization respected its historians more than it respected its mathematicians.
- C) Maya civilization was highly secretive about its intellectual achievements.
- D) Maya civilization tried to introduce its writing system to other civilizations.

In Costa Rica, use of solid fuel (e.g., coal, wood) as a share of total household fuel use fell by approximately 60 percent between 2000 and 2019; such shifts are typically explained by appeal to the energy ladder, a model holding that fuel choice is mediated mainly by household income (specifically, high-technology fuels displace solid fuels as incomes rise). Rasmus Heltberg's study of fuel use in Guatemala shows how reductive this model is, however: household fuel use was heterogeneous, flexible, and influenced by several factors, including local price of different sources.

18

Based on the text, which choice best explains why the author characterizes the energy ladder as “reductive”?

- A) The energy ladder asserts that households only consider one aspect of fuel when making fuel choices, but Heltberg's study showed that households ignore that characteristic of fuel and evaluate several other factors instead.
- B) The energy ladder holds that the adoption of one type of fuel means that another type of fuel must be displaced, but Heltberg's study showed that several different fuel types are typically used in equal proportion.
- C) The energy ladder assumes that the same factor influences household fuel choice in all locations, but Heltberg's study showed that fuel choice in Guatemala is influenced by different factors than is fuel choice in Costa Rica.
- D) The energy ladder attributes household fuel choice primarily to a single characteristic of households, but Heltberg's study showed that multiple circumstances can affect household fuel choice.

The groundbreaking Negro Ensemble Company (NEC), founded in 1967, produced Paul Cater Harrison's award-winning play *The Great MacDaddy* in 1974. The company was cofounded by Robert Hooks, an actor, producer, and activist, and actor and playwright Douglas Turner Ward, who had met while performing in a 1960 touring production of Lorraine Hansberry's play *A Raisin in the Sun*. They shared a vision of a theater company that would nurture and showcase the work of Black theater professionals. Since its beginning, NEC has provided a forum for the voices of Harrison and other Black playwrights through workshops and performances.

19

According to the text, how did Hooks and Ward initially meet?

- A) Harrison introduced Hooks to Ward at a performance of *The Great MacDaddy*.
- B) Hooks and Ward attended the same performance of *The Great MacDaddy*.
- C) Hooks and Ward participated in the same workshop at NEC.
- D) Hooks and Ward were both actors in a production of *A Raisin in the Sun*.

Marrakech has high pedestrian traffic, but simply replicating a feature of Marrakech associated with walkability - e.g., its highly varied streetscape - may be insufficient to induce increased walking in other cities. As urbanist Mariela Alfonzo argues, our understanding of individuals' decision - making about whether to walk is insufficiently robust: some studies emphasize the role of demographic characteristics, others the role of public transit availability, and so on, but walking decisions are made in complex contexts in which multiple conditions and needs inform individuals' choices.

20

Based on the text, Alfonzo would most likely agree with which statement about studies of decision-making about walking?

- A) They would be improved by efforts to identify the features that cities with high pedestrian traffic have in common.
- B) They are unlikely to find convincing evidence that any single factor consistently predicts walking decisions.
- C) They have overstated the extent to which people differ in their decision-making processes regarding walking.
- D) They tend to be misleading because they ignore the most important factor influencing walking decisions.

Researchers César A. Hidalgo, Elisa Castañer, and Andres Sevtsuk created a computer model to predict the mix of businesses and places of interest found in a given neighborhood. The team used data from the Google Places API service to help identify movie theaters, gyms, and other businesses and map their locations. This approach has some limits—data from Places API tend to be restricted to places that are customer facing—but the data set nonetheless provides an extremely reliable source to study colocation patterns of neighborhood amenities.

21

According to the text, what is one potential drawback of Hidalgo and colleagues' method?

- A) It may lead to conclusions that are not reflective of all the amenities in a given neighborhood.
- B) It is likely to contribute to inaccurate identifications of the boundaries of specific neighborhoods.
- C) It is based on recent advancements from other fields that have yet to be applied outside of those contexts.
- D) It depends upon data that are likely to be outdated.



Vadamalai Elangovan and Ganapathi Marimuthu showed that high moonlight intensity inhibits the activity of the greater short-nosed fruit bat (*Cynopterus sphinx*), a finding explicable in terms of benefits and costs: greater lunar intensity may not enable the bats to increase foraging success enough to offset the higher chance of detection by predatory owls or hawks. Though many other nocturnal mammals respond to lunar intensity variations similarly to greater short-nosed fruit bats, mongoose lemurs (*Eulemur mongoz*) display the opposite pattern, as their heavy reliance on visual foraging results in a different balance of reward and risk.

22

According to the text, what did Elangovan and Marimuthu find and why does that occur?

- A) Greater short-nosed fruit bats tend to be more active during periods of high lunar intensity than at other times because such conditions allow them to increase their foraging success without making them easier to detect.
- B) Greater short-nosed fruit bats reduce their activity during periods of high lunar intensity because predators can more easily spot the bats in brighter conditions, and such conditions do not benefit the bats enough to justify that risk.
- C) During periods of high lunar intensity, greater short-nosed fruit bats reduce their activity because it is easier for predators to detect the bats in relatively bright conditions than it is for predators to detect mongoose lemurs in such conditions.
- D) During periods of high lunar intensity, mongoose lemurs show a different behavioral response than greater short-nosed fruit bats and many other nocturnal mammals do because the risks to mongoose lemurs under such conditions are greater.

A number of artists associated with hyperpop, a movement in electronic music that emerged in the 2010s, aggressively manipulate their recorded voice. The duo 100 geecs, for example, shifts the pitch of lead singer Laura Les's vocals to be much higher than that of her natural range. And even the hyperpop artists who don't rely on pitch-shifting, such as Shygirl, often distort their vocals using digital tools. Rather than being an arbitrary stylistic choice, hyperpop's persistent modification of the voice functions as a commentary on how digital technology mediates human experience today.

23

Based on the text, the author would be most likely to disagree with which statement about vocal manipulation in hyperpop?

- A) It is an aesthetic feature that has little or no social import.
- B) It confirms hyperpop's ability to offset certain negative effects of digital technology.
- C) It is a symbol of the influence that hyperpop exerts on listeners' sense of self.
- D) It represents changes to human experience brought about by technology.

In a study by Mika R. Moran, Daniel A. Rodriguez, and colleagues, residents of Mexico City, Mexico, and La Paz, Bolivia, were surveyed about parks in their cities. Of the 562 respondents from Mexico City, 77.6% indicated that they use the city's parks, and of the 528 respondents from La Paz, 67.5% indicated using city parks. Given that the percentage of Mexico City respondents who reported living within a 10-minute walk of a park was much lower than that reported by La Paz respondents, greater proximity alone can't explain the difference in park use.

24

The text makes which point about the difference between the proportions of Mexico City residents and La Paz residents using parks?

- A) It could be due to inaccuracies in the survey results.
- B) It was calculated using sources that predate the survey.
- C) It was much larger than the researchers conducting the study expected.
- D) It is caused by something other than the parks' proximity to city residents.

External shopping cues are a type of marketing that uses obvious messaging—a display featuring a new product, for example, or a "buy one, get one free" offer to entice consumers to make spontaneous purchases. In a study, data scientist Sam K. Hui and colleagues found that this effect can also be achieved with a less obvious cue: rearranging a store's layout. The researchers explain that trying to find items in new locations causes shoppers to move through more of the store, exposing them to more products and increasing the likelihood that they'll buy an item they hadn't planned on purchasing.

25

Which response from a survey given to shoppers who made a purchase at a retail store best supports the researchers' explanation?

- A) "I needed to buy some cleaning supplies, but they weren't in their regular place. While I was looking for them, I saw this interesting notebook and decided to buy it, too."
- B) "I didn't buy everything on my shopping list today. I couldn't find a couple of the items in the store, even though I looked all over for them."
- C) "The store sent me a coupon for a new brand of soup, so I came here to find out what kinds of soup that brand offers. I decided to buy a few cans because I had the coupon."
- D) "This store is larger than one that's closer to where I live, and it carries more products. I came here to buy some things that the other store doesn't always have."

Like all species of baleen whales, the sei whale feeds on tiny creatures known as krill by filtering water through bristlelike keratin structures called baleen plates. In this way, baleen whales can eat up to 30 percent of their total mass per day. And while no one would call the sei whale small—it can have a mass as high as 25,000 kg—it is one of the smaller baleen whales and is much smaller than the bowhead whale, which can weigh a whopping 66,000 kg and consume as much as 19,800 kg of krill per day.

26

Based on the text, what can most reasonably be concluded about krill consumption among sei and bowhead whales?

- A) The quantities of krill consumed by bowhead whales has made it difficult for sei whales to find sufficient food.
- B) Both the sei whale and the bowhead whale can eat as much as 19,800 kg of krill per day.
- C) Most baleen whales include krill in their diets, but the sei whale is less likely than the bowhead whale to do so.
- D) The bowhead whale is able to eat more krill per day than the sei whale is.

The food industry has long used thermal technologies to preserve food in large batches. Recent advancements in infrared heating were made through research in Mexico on the preservation of bean flour. Infrared heating is generally considered to be an improvement over more conventional thermal preservation methods: whereas conventional methods transfer energy from the surface of a food to its interior, infrared heating uses high-intensity infrared light to generate heat within the food itself, thus reducing industrial cooking times.

27

Based on the text, what is one disadvantage of some conventional thermal methods?

- A) They are especially vulnerable to technological breakdowns.
- B) They are only effective in heating foods that are lightweight and small in size.
- C) Their cooking times are longer than those of other methods.
- D) They require more energy than other methods do.

Cocoa is an example of a loanword—that is, a word that originated in one language and was later adopted by another. The word came to English indirectly from cacao, the Spanish word for the plant that chocolate is made from. Spanish had borrowed it from Nahuatl, an Indigenous language of Central Mexico, in which the word's original form is cacahuatl. "Iguana" is also Indigenous in origin and entered English through Spanish. But in this case, the original source was Taino, a language of the Caribbean islands, in which the word for the group of related lizard species is iwana.

28

The author makes which point about the Spanish language?

- A) It has served as a medium through which Indigenous languages have influenced English.
- B) Its contribution to English vocabulary roughly equals the collective contribution by Indigenous languages.
- C) It has borrowed words from Indigenous languages and contributed words to them.
- D) It adopted Nahuatl and Taino words in approximately equal numbers.

Reyjane P. Oliveira and colleagues relied on historical DNA (hDNA)—genomic data incidentally preserved in specimens housed in natural history collections to investigate the evolutionary trajectory of the Malagasy grass genus *Chasechloa*. Although this approach offers unique benefits, such as the ability to ascertain the biogeographical origins of organisms, it remains a relatively underutilized resource because hDNA is often to some extent degraded, a situation not easily remediable under current methodological paradigms and with extant DNA extraction and analysis technologies.

29

Information in the text best supports which statement about hDNA?

- A) It may yield insights that other types of genomic data cannot.
- B) It may be underused because of its controversial status among scientists.
- C) It has thus far proved valuable mainly to researchers studying flora.
- D) It tends to be much more degraded than other types of DNA of comparable age.

In Armenia, use of solid fuel (e.g., coal, wood) as a share of total household fuel use fell by approximately 90 percent between 2000 and 2018; such shifts are typically explained by appeal to the energy ladder, a model holding that fuel choice is mediated mainly by household income (specifically, high-technology fuels displace solid fuels as incomes rise). Boukary Ouedraogo's study of fuel use in Burkina Faso shows how reductive this model is, however: although income of course constrained fuel choice, several factors, including the frequency with which certain dishes are cooked, influenced decisions.

30

Based on the text, the author would most likely agree with which statement about household income?

- A) It constrains the amount of fuel households use but not the type of fuel they use.
- B) It affects household fuel choice but not for the reasons assumed by the energy ladder model.
- C) It can explain some but not all of the differences in fuel choice across households.
- D) It is often said to influence household fuel choice but actually does not.

The following text is from Yung Wing's 1909 memoir *My Life in China and America*.

We landed in New York on the 12th of April, 1847, after a passage of ninety-eight days of unprecedented fair weather. The New York of 1847 was altogether a different city from the New York of 1909. It was a city of only 250,000 or 300,000 inhabitants; now it is a metropolis rivaling London in population, wealth and commerce. The whole of Manhattan Island is turned into a city of skyscrapers, churches and palatial residences.

31

Based on the passage, how does Yung perceive New York to have changed between 1847 and 1909?

- A) The city has become more developed and populated.
- B) The architecture of the city has become more practical and less appealing.
- C) The city's residents have become more politically active.
- D) The city's population has become much more diverse than London's.



The following text is from Julia Alvarez's 2000 novel *In the Name of Salomé*. Salomé, a poet, is hosting guests in the front parlor of her family home, and Ramona is her sister.

A salon is a social gathering for the exploration of intellectual ideas. It was evening when the two men got up to leave. Tia Ana had already come into the room several times to see if these guests had departed yet. The front parlor had always been her special province, as she used it for her little school. Now, every evening, it turned into Salomé's salon, as Ramona called it, and it was never in order for its transformation back to a classroom the following morning.

32

Based on the text, what most likely motivates Tia Ana's behavior during Salomé's salon?

- A) She considers the guests to be uninteresting and is trying to convince them to leave.
- B) She is anxious for the gathering to disperse so that she can ready the space for her own needs.
- C) She is impatient to share her plans to start a new school with the guests and hopes they will support her.
- D) She is frustrated because she needs assistance elsewhere in the house, but Salomé is unavailable while entertaining the guests.

In her 1998 book *Blues Legacies and Black Feminism*, Angela Y. Davis bases her analysis in part on recordings of songs sung in the 1920s by Gertrude "Ma" Rainey and Bessie Smith. Davis focuses on how Rainey and Smith improvised the lyrics—replacing the original lines with mischievous jokes and wordplay. Davis's work was particularly labor intensive because in order to transcribe, or write down, the lyrics as Rainey and Smith sang them, Davis had to listen repeatedly to the vinyl recordings, which weren't very clear.

33

What does the text most strongly suggest about the songs sung by Rainey and Smith?

- A) The songs have grown in popularity since Rainey and Smith first sang them.
- B) According to Davis, the songs sung by Rainey were more musically innovative than those sung by Smith typically were.
- C) There were more recordings made of Rainey's songs than there were of Smith's.
- D) There were few, if any, reliable transcriptions of Smith's and Rainey's improvised lyrics when Davis began her research.

Historians point to the rule of the Piast dynasty as crucial to the formation of the Polish state. However, some differentiate between members of the dynasty like Władysław I Herman, who ruled as duke from 1079 to 1102 CE, and less well-documented figures like Lestek, who is said to have ruled in the 9th and 10th centuries but whose historical actuality is disputed. Lestek appears in the *Gesta principum Polonorum*, a chronicle of medieval Polish history written between 1112 and 1118. However, the chronicle's documentation of Lestek relies on oral tradition, unlike its records of later rulers.

34

According to the text, what is a difference between how historians view Lestek and how they view Władysław I Herman?

- A) Historians believe that the *Gesta principum Polonorum* provides more evidence for Lestek's existence than it does for Władysław I Herman's existence.
- B) Historians agree that Władysław I Herman existed, but disagree about whether Lestek existed.
- C) Historians agree that Lestek ruled Poland much later than Władysław I Herman.
- D) Historians find the orally transmitted stories affirming the existence of Władysław I Herman to be more convincing than similar stories about Lestek.

The following text is adapted from Lady Gregory's 1904 play *Spreading the News*. Jack Smith and Bartley Fallon have encountered each other at the local fair.

JACK: It isn't to the fair I came myself, but up to the Five Acre Meadow I'm going where I have a contract for the hay. We'll get a share of it into tramps [drying stacks] today.

BARTLEY: You will not get it into tramps today. The rain will be down on it by evening, and on myself too. It's seldom I ever started on a journey but the rain would come down on me before I'd find any place of shelter.

JACK: If it didn't itself, Bartley, it is my belief you would carry a leaky pail on your head in place of a hat, that way you'd not be without some cause of complaining.

35

Based on the text, what does Jack most likely believe about Bartley?

- A) Bartley will be able to help Jack with cutting the hay.
- B) Bartley is concerned that Jack hasn't prepared for the weather.
- C) Bartley is a poor judge of the weather.
- D) Bartley will find fault with any situation.

Fernand Braudel and other historians of capitalism rarely discuss domestic capitalism in Africa before the period of European colonization, implicitly presenting capitalism as external to and imposed on Africa. John Iliffe and other Africanist scholars have shown, however, that in parts of Africa, institutionally protected private land ownership, the existence of salaried labor, and other features of capitalism predated colonization. One reason for this discrepancy is that historians of capitalism tend to focus on longitudinal economic data drawn from archival records, which do not exist for much of precolonial Africa.

36

Which statement about Iliffe and other Africanist scholars is best supported by information in the text?

- A) They likely make use of different types of evidence than historians of capitalism typically rely on.
- B) They likely have a different view about which activities should be considered capitalist in nature than historians of capitalism do.
- C) They likely differ from historians of capitalism in the methods they use to derive longitudinal economic data from archival records.
- D) They likely view capitalism as having been more beneficial for Africa than historians of capitalism do.

In 2016 Marta S. Pimentel and colleagues published a study concluding that ocean acidification has a strong effect on the behavior of *Sparus aurata*, a species of fish. However, Pimentel and colleagues' study relied on a mean sample size of only 12 fish. In a 2022 review of various scientists' conclusions about the impacts of ocean acidification on fish behavior, Timothy D. Clark and colleagues caution that relying on such a relatively small sample size can increase the potential for biased analysis. Such analysis, in turn, can contribute to reports of exaggerated effects.

37

What does the text most directly suggest about Pimentel and colleagues' conclusion?

- A) It was based on the same mean sample size used in many earlier studies of fish species.
- B) It likely has broad implications for other species of fish besides *Sparus aurata*.
- C) None of the above
- D) It has been largely invalidated by results obtained from similar studies.

Goujun He and colleagues studied a food-delivery phone app that is popular in China. The researchers found that having “no cutlery” automatically selected influences whether customers request disposable plastic utensils with their food orders. Based on their results, the researchers concluded that this and other small changes to the app could reduce plastic waste in China by as much as 3.26 million metric tons per year.

38

According to the text, which choice best describes a conclusion He and colleagues drew from their study?

- A) Production of plastic waste in China is likely to increase in the near future.
- B) Food-delivery apps that prevent customers from requesting cutlery are becoming more popular.
- C) Customers who understand how food-delivery apps work make more environmentally friendly choices.
- D) Small changes to how a food-delivery app works can greatly lower plastic waste.

Can field mustard plants grow on Mars? Can pea plants? You might think the answer to these questions is obviously no, but researchers in the Netherlands recently showed that the seeds of many common plant species can germinate in soil designed to simulate Martian conditions, as long as water is supplied. In fact, some species actually did better in Martian soil than in Earth soil: 30 percent of field mustard seeds sprouted when planted in simulated Martian soil, compared with 4 percent that did when planted in soil from their home planet.

39

According to the text, what percentage of field mustard seeds planted in Martian soil sprouted?

- A) 18 percent
- B) 30 percent
- C) 100 percent
- D) 5 percent

Superlubricity, the state of virtually no friction between materials, has desirable applications in many industries. For example, it can make aircraft engines more efficient. To produce a coating that achieves superlubricity, Chanaka Kumar and colleagues broke down carbon nanotubes into fragments of graphene to fully cover two surfaces that would rub together. Friction between pieces of graphene is generally extremely low, and when the researchers added a drop of oil as lubrication, that friction nearly vanished. This new coating may drastically lower friction-related energy costs.

40

According to the text, what happened when the researchers added oil to the surfaces covered in graphene fragments?

- A) All the pieces of graphene collected on just one of the two surfaces.
- B) The low amount of friction between the surfaces became even lower.
- C) Carbon nanotubes on the surfaces fractured into smaller pieces.
- D) Friction between the surfaces did not noticeably change right away.

Companies involved in petroleum extraction include drilling equipment among their assets. But petroleum extraction is a very carbon-intensive industry, so as social attitudes increasingly favor using less carbon intensive sources of energy, demand for petroleum falls and the drilling equipment will eventually, or even suddenly, become a liability as reduced petroleum prices make it more difficult to recover the expense of maintaining such equipment.

41

What claim does the text make about the demand for petroleum?

- A) Companies involved in petroleum extraction are not affected by the demand for petroleum.
- B) The societal preference for low-carbon energy sources is a factor in the demand for petroleum.
- C) The demand for petroleum follows a predictable annual cycle.
- D) Companies involved in petroleum extraction can benefit from a decline in the demand for petroleum.

Why do flat-headed cats purr but jaguars roar? Researchers hypothesize that this difference between the two feline species may be partly due to a U-shaped bone in their throats called the hyoid. Flat-headed cats, which are much smaller than jaguars, have a rigid hyoid that rumbles when the cat's larynx vibrates, resulting in a purr. By contrast, jaguars have a somewhat flexible hyoid, and the bone is attached to the skull with a stretchy ligament that flat-headed cats lack. These traits allow jaguars and most other species of big cats to produce powerful roars. The same traits may also prevent most big cats from purring.

42

According to the text, which trait do researchers think may contribute to a flat-headed cat's ability to purr?

- A) The shape of the flat-headed cat's larynx
- B) The ligament attaching the hyoid bone to the flat-headed cat's skull
- C) The flat-headed cat's rigid hyoid bone
- D) The relative size of the flat-headed cat's body and throat



Biologist Grace Herzel and colleagues conducted a study of how butterfly color and weather conditions relate to butterfly behavior, which wouldn't have been possible without data gathered by students and other amateur science enthusiasts in the community. Considering over three years worth of data, the researchers found that white butterflies were observed on green flowers more often than any other butterflies were, and that butterflies were observed to feed more often on cloudy days than on other days.

43

According to the text, which factors seemed to be linked to the behavior of butterflies in Grace Herzel and colleagues' study?

- A) Weather conditions but not butterfly color
- B) Butterfly color but not weather conditions
- C) Neither butterfly color nor weather conditions
- D) Both butterfly color and weather conditions

"Coyote" is an example of a loanword—that is, a word that originated in one language and was later adopted by another. The word came to English indirectly from coyote, the Spanish word for the wild canine species. Spanish had borrowed it from Nahuatl, an Indigenous language of Central Mexico, in which the word's original form is coyotl. "Condor" is also Indigenous in origin and entered English through Spanish. But in this case, the original source was Quechua, a language of South America, in which the word for the large vulture species is kuntur.

44

The author makes which point about the Spanish language?

- A) It has served as a medium through which Indigenous languages have influenced English.
- B) Its contribution to English vocabulary roughly equals the collective contribution by Indigenous languages.
- C) It has borrowed words from Indigenous languages and contributed words to them.
- D) It adopted Nahuatl and Quechua words in approximately equal numbers.

Ke Bi and colleagues relied on historical DNA (hDNA)—genomic data incidentally preserved in specimens housed in natural history collections—to investigate the evolutionary trajectory of the alpine chipmunk (*Tamias alpinus*). Although this approach offers unique benefits, such as the ability to contrast historical genomic data with present-day data, it remains relatively underutilized because archival specimens are sometimes stored in ways that compromise DNA quality, a situation not easily remediable under current methodological paradigms and with extant DNA extraction and analysis technologies.

45

What does the text most strongly suggest about specimens from natural history collections?

- A) While they may contain valuable genomic data, not all of them can yield usable hDNA.
- B) They are primarily used as sources of genomic data by scientists studying organisms that have undergone major evolutionary change.
- C) Because of their often deteriorated condition, they tend to yield genomic data that are time-consuming to extract and interpret.
- D) While they were used in a study that made an important scientific discovery, they are generally of marginal value as sources of genomic data.

In the 1960s, Gloria Richardson led a movement to promote racial equality. Her involvement in this effort was inspired by her daughter, Donna Richardson. In 1961, Donna joined protests organized by the Student Nonviolent Coordinating Committee in Cambridge, Maryland. Following her daughter, Gloria joined these protests too. Gloria soon became the cochair of the Cambridge Nonviolent Action Committee. She was also the leader of what became known as the Cambridge movement.

46

According to the text, what did Gloria Richardson lead?

- A) A new business in Cambridge, Maryland
- B) The Cambridge movement
- C) Protests to support environmental protections
- D) Her daughter Donna's high school

Mexican textile artist Victoria Villasana weaves stories triumph, using her unique method of applying colorful yarn to photographs of people. In some works, Villasana focuses on celebrating cultural icons who are people of color, as she does in her depiction of artist Yayoi Kusama. However, in other works, Villasana honors ordinary people, as she does in her captivating portrayal of a woman making tortillas. Villasana sees both of these approaches as ways of depicting the power and interconnectedness of all people.

47

According to the text, what kind of material does Villasana use in her artworks?

- A) Stone
- B) Chalk
- C) Paint
- D) Yarn

Mauricio Drelichman and Hans-Joachim Voth's research on the fiscal vulnerability of Philip II (who ruled not only Spain but other regions including Milan from 1556 to 1598) builds on other studies of European early modern state finance, including Hoffman and Norberg's work on the relationship between state finance and political development. But Drelichman and Voth's unique contribution is their reconstruction of the earliest extant set of annual fiscal records for any sovereign state, which demonstrate that Philip's defaults were caused by short-term liquidity crises, not long-term unsustainable debts.

48

What does the text most strongly suggest about the value of Drelichman and Voth's research to their discipline?

- A) Drelichman and Voth's research uses newly compiled evidence to eliminate one possible reason Philip II defaulted on his debts and to affirm another.
- B) Drelichman and Voth's research revealed the role of Philip II's debt defaults in exacerbating short-term liquidity crises.
- C) Drelichman and Voth's research builds on earlier work about a particular aspect of European early modern state finance By Hoffman and Norberg and corrects errors in that earlier work.
- D) Drelichman and Voth's research presented a novel body of evidence supporting Hoffman and Norberg's hypothesis regarding why Philip II default on several loans.

Google's introduction of the Chrome web browser in 2008 is a quintessential instance of brand extension the company leveraged its brand recognition as an internet search provider to enter a product category where it had not previously competed. An outstanding question is whether perceived category similarity predicts consumers likelihood of purchasing brand extensions. To answer this question, Alicia Grasby et al. identified 30 extended-brand pairs (e.g., the same brand of shoes and gloves) in 52 weeks of purchases by approximately 60,000 households and, for each pair, calculated the change in probability of a brand in one category being purchased if the same brand was purchased in the other category.

Based on the text, which potential study design would most likely to produce evidence that would enable Grasby et al. to answer their research question?

- A) Have a representative sample of the households rate the similarity of the product categories in each extended-brand pair, then determine how, if at all, those ratings correlate with the change in probability that the team calculated for each pair.
- B) Poll a representative sample of the households to determine the degree of brand recognition of each brand in the extended-brand pairs, then determine how, if at all, the degree of brand recognition correlates with the average cost of each product in the pairs.
- C) Have a representative sample of the households rate the similarity of one product in each extended-brand pair to other products in the same category, then determine how, if at all, those ratings correlate with the change in probability that the team calculated for each pair.
- D) Poll a representative sample of the households to determine the degree of brand recognition for each brand in the extended-brand pairs, then determine how, if at all, the degree of brand recognition correlates with the frequency with which a different group of households purchased at least once product of that brand.

In Costa Rica, use of solid fuel (e.g., coal, wood) as a share of total household fuel use fell by approximately 60 percent between 2000 and 2019; such shifts are typically explained by appeal to the energy ladder, a model holding that fuel choice is mediated mainly by household income (specifically, high-technology fuels displace solid fuels as incomes rise). Rasmus Heltberg's study of fuel use in Guatemala shows how reductive this model is, however: household fuel use was heterogeneous, flexible, and influenced by several factors, including local price of different sources.

50

Based on the text, which choice best explains why the author characterizes the energy ladder as “reductive”?

- A) The energy ladder asserts that households only consider one aspect of fuel when making fuel choices, but Heltberg's study showed that households ignore that characteristic of fuel and evaluate several other factors instead.
- B) The energy ladder holds that the adoption of one type of fuel means that another type of fuel must be displaced, but Heltberg's study showed that several different fuel types are typically used in equal proportion.
- C) The energy ladder assumes that the same factor influences household fuel choice in all locations, but Heltberg's study showed that fuel choice in Guatemala is influenced by different factors than is fuel choice in Costa Rica.
- D) The energy ladder attributes household fuel choice primarily to a single characteristic of households, but Heltberg's study showed that multiple circumstances can affect household fuel choice.

The groundbreaking Negro Ensemble Company (NEC), founded in 1967, produced Paul Cater Harrison's award-winning play *The Great MacDaddy* in 1974. The company was cofounded by Robert Hooks, an actor, producer, and activist, and actor and playwright Douglas Turner Ward, who had met while performing in a 1960 touring production of Lorraine Hansberry's play *A Raisin in the Sun*. They shared a vision of a theater company that would nurture and showcase the work of Black theater professionals. Since its beginning, NEC has provided a forum for the voices of Harrison and other Black playwrights through workshops and performances.

51

According to the text, how did Hooks and Ward initially meet?

- A) Harrison introduced Hooks to Ward at a performance of *The Great MacDaddy*.
- B) Hooks and Ward attended the same performance of *The Great MacDaddy*.
- C) Hooks and Ward participated in the same workshop at NEC.
- D) Hooks and Ward were both actors in a production of *A Raisin in the Sun*.



The following text is from Julia Alvarez's 2000 novel *In the Name of Salome*. The narrator and her sister, daughters of a famous poet, are being tutored by Alejandro Román.

Our tutor, Alejandro Román, brought his younger brother, Miguel, to class one day. By now I was eighteen and had learned everything Alejandro had to teach me, so I was glad for a new face. Miguel was an aspiring poet, and he had heard from his brother that the Ureña girls were none other than the daughters of Nicolás Ureña, and they were smart as clockwork. Miguel was hoping not only to meet us but to make the acquaintance of the poet himself at Mama's house.

52

Based on the text, why does Miguel accompany his brother to the sisters' house one day?

- A) Miguel has learned all his brother can teach him and now desires to be tutored by the sisters.
- B) Miguel has not received formal instruction in poetry and wants to ask the sisters' famous father to be his mentor.
- C) Miguel wants to recite his poems to the sisters and inquire about their perspectives on his work.
- D) Miguel anticipates having the opportunity to be introduced to both the sisters and their father.

In 2004, Andrew Rogers created *Ancient Language*. In this work, Rogers created an 80-meter-long geoglyph out of rocks in the Atacama Desert. Rogers's work is part of the land art movement, in which artists reject the confinement and commercialization of art galleries. These artists usually install large-scale pieces outdoors, often in surprising locations.

53

Based on the text, what can be inferred about *Ancient Language*?

- A) Its location may be considered surprising.
- B) It marked a shift in the popularity of the land art movement.
- C) It may have had more commercial success in a different outdoor location.
- D) It was created early in Rogers's career.

Optimal foraging theory (OFT) holds that animals' foraging behaviors reflect cost-benefit trade-offs that vary by species and with dynamic ecological circumstances. One such circumstance is lunar intensity, which Joel Brown and colleagues found to be negatively associated with foraging by Arizona pocket mice but Deborah J. Curtis and colleagues found to be positively associated with foraging by mongoose lemurs. This discrepancy is explicable in terms of OFT: the lemurs' greater reliance on vision means that higher lunar intensity benefits them more than it benefits the mice.

54

Which choice best describes the finding made by Curtis and colleagues, as presented in the text?

- A) Increased lunar intensity is more beneficial for mongoose lemurs than it is for Arizona pocket mice.
- B) As lunar intensity increases, mongoose lemurs increase their foraging activity.
- C) During periods of high lunar intensity, mongoose lemurs increase their reliance on vision.
- D) As lunar intensity increases, Arizona pocket mice reduce their foraging activity.

The following text is from Thomas Mann's 1924 novel *The Magic Mountain*, translated by John E. Woods in 1995.

The story of Hans Castorp that we intend to tell here—not for his sake (for the reader will come to know him as a perfectly ordinary, if engaging young man), but for the sake of the story itself, which seems to us to be very much worth telling (although in Hans Castorp's favor it should be noted that it is his story, and that not every story happens to everybody)—is a story that took place long ago, and is, so to speak, covered with the patina of history and must necessarily be told with verbs whose tense is that of the deepest past.

55

What does the text most strongly suggest about the story of Hans Castorp?

- A) Though it is true that stories of even the most uninteresting people are themselves interesting because all people are unique, the reason this story is interesting is nonetheless difficult to understand because of the passage of time.
- B) Even though it is a story of a person of no particular importance, its age and the manner in which it therefore must be told are both indicators that the story itself is important.
- C) It is a remarkable story that happened to an unremarkable person, though one could plausibly argue that because the story is valuable, some of its value accrues to the person at its center.
- D) Like all stories about the lives of inconsequential people, this story must necessarily be related in a particular way if the reason the story is consequential is to be made evident to the audience.

The Lego Group's introduction of the Legoland theme park in 1968 is a quintessential instance of brand extension—the company leveraged its brand recognition as a toy manufacturer to enter a product category where it had not previously competed. An outstanding question is whether perceived category similarity predicts consumers' likelihood of purchasing brand extensions. To answer this question, Alicia Grasby et al. identified 30 extended-brand pairs (e.g., the same brand of wristwatch and necktie) in 52 weeks of purchases by approximately 60,000 households and, for each pair, calculated the change in probability of a brand in one category being purchased if the same brand was purchased in the other category.

Based on the text, which potential study design would be most likely to produce evidence that would enable Grasby et al. to answer their research question?

- A) Have a representative sample of the households rate the similarity of the product categories in each extended-brand pair, then determine how, if at all, those ratings correlate with the change in probability that the team calculated for each pair.
- B) Poll a representative sample of the households to determine the degree of brand recognition for each brand in the extended-brand pairs, then determine how, if at all, the degree of brand recognition correlates with the frequency with which a different group of households purchased at least one product of that brand.
- C) Poll a representative sample of the households to determine the degree of brand recognition of each brand in the pairs, then determine how, if at all, the degree of brand recognition correlates with the average cost of each product in the pairs.
- D) Have a representative sample of the households rate the similarity of one product in each extended-brand pair to other products in the same category, then determine how, if at all, those ratings correlate with the change in probability that the team calculated for each pair.

Tracks is a 1988 novel by Ojibwe writer Louise Erdrich. It explores how historical events affect families on a reservation in rural North Dakota. Tracks is typical of Erdrich's work. Her writing usually focuses on portrayals of everyday life in Ojibwe communities. Yet some of her novels have fantastical plots and take place outside Ojibwe communities. For example, her 1991 novel The Crown of Columbus is essentially adventure fiction, and the thrilling events in its plot are set largely on a Caribbean island.

57

According to the text, what is one way that The Crown of Columbus differs from most of Erdrich's work?

- A) It has been adapted into a movie.
- B) It isn't set in a rural Ojibwe community.
- C) It contains very little dialogue.
- D) Its main characters are Ojibwe.

The following text is adapted from Rupa Bajwa's 2004 novel The Sari Shop. Ramchand works as an assistant in a shop in Amritsar, India.

Even at ten in the morning, the bazaar was throbbing with activity. The halwai [baker] was already installed in front of the Mishthaan Sweet Shop, pressing jalebi batter into squiggly shapes that floated and simmered in the oil in a big iron cauldron. All the shops had opened for the day and, Ramchand noted guiltily, all the shop assistants were already in place, trying to sell things with fixed, attentive smiles on their shiny, bathed faces.

58

Based on the text, what can most reasonably be inferred about Ramchand?

- A) Ramchand is remorseful about arriving to work later than other shop assistants he sees.
- B) Ramchand is mesmerized by frying jalebi batter while walking to work as a shop assistant.
- C) Ramchand is overwhelmed by a bazaar after seeing the chaos of other shop assistants selling goods.
- D) Ramchand is happy about being at work after seeing shop assistants who are satisfied with their jobs.

Economist Gabriel Zucman finds that 8% of worldwide household wealth is held in tax havens (territories such as Singapore with low tax rates for investors who reside outside those territories). Zucman also finds that use of tax havens differs between countries—they are rarely used by investors living in Japan, while many investors who utilize tax havens reside in Saudi Arabia or Greece. Philosopher Ingrid Robeyns disapproves of the use of tax havens as a method of tax avoidance that, though legally permissible, nonetheless helps investors to sidestep payment toward government upkeep.

59

Based on the text, what does Zucman's research suggest about investors residing in Japan?

- A) They are engaging in investment practices that Robeyns would acknowledge as beneficial because they are legally permissible.
- B) They are less likely than investors residing in Saudi Arabia to store wealth in Singapore.
- C) They are more likely than residents of Singapore to utilize investment strategies that might yield greater returns but that might also result in greater losses.
- D) They are more likely than residents of Greece to engage in tax avoidance.

Radamés Cordero et al. have confirmed that twenty mushroom species (including *Coprinellus micaceus* and species from the genus *Russula*) maintain subambient temperatures in both their fruited bodies and their mycelium (the root-like hyphae from which the fruited bodies grow), though the benefits of this hypothermic behavior are unclear. Noting that relative coldness was more pronounced in fruiting than in nonfruiting sites of the mycelium—a difference that persisted even after fruited bodies were detached—the researchers speculate that thermoregulation in the mycelium may influence reproductive success.

60

Which statement about the mycelium of the twenty mushroom species is best supported by the text?

- A) Variation in thermoregulation across the mycelium may occur independent of the presence or absence of fruited bodies.
- B) The correlation between higher mycelium temperature and greater fruit productivity indicates that successful reproduction may be dependent on thermoregulation in the mycelium.
- C) Temperatures in the fruiting areas of the mycelium are lower than in the nonfruiting areas due to differences in the depth and spread of the mycelium within soil or other organic matter.
- D) The mycelium generally maintains temperatures lower than those of the fruited bodies even when considering temperature variations between fruiting and nonfruiting sites.



High-reward flowers that produce nectar with relatively high sugar concentrations are thought to be especially attractive to stripe-throated hermits and other hummingbird species. But when María A. Maglianesi and team monitored hummingbird visits to flowering plants, including *Palicourea tomentosa*, at Los Cusingos Bird Sanctuary and other sites in Costa Rica, they found that visit frequencies weren't influenced by nectar traits. Rather, physical compatibility of flower corollas (collections of petals) and hummingbird bills more strongly predicted hummingbird-plant interaction patterns.

61

Which statement about hummingbird preferences is most strongly supported by the text?

- A) Hummingbirds consistently prefer plant species whose flowers have physical traits that are compatible with their bills but offer relatively low nectar rewards.
- B) The floral traits that most strongly influence which plant species hummingbirds prefer may result in certain hummingbird species visiting flowers with relatively low nectar rewards over those with higher nectar rewards.
- C) Hummingbirds' preferences are primarily driven by trait-matching between their bills and flower corollas, though nectar qualities are a secondary factor driving their preferences.
- D) Physical compatibility between flower corollas and hummingbird bills becomes an important factor that influences hummingbird preferences when hummingbirds are uncertain about which plants produce highreward nectar.

Researchers who examined data from radio-tagged southern sea otters (*Enhydra lutris nereis*) identified fitness benefits gained by otters that used tools. By using fixed stones as anvils, tool-using otters gained access to high-quality, hard-shelled prey (e.g., mussels and clams) that they could usually not access through biting alone. Non-tool-using otters foraged abundant, energy-poor, easily extractable prey instead (e.g., snails). Even when easily processed prey were depleted, tool-using otters that processed mussels and clams were thus able to obtain their needed energy resources and to do so without incurring tooth damage.

62

What does the text most strongly suggest about southern sea otters in environments where snails, mussels, and clams are present?

- A) Those otters whose diet consists mainly of snails will likely exhibit less tooth damage than will those otters that use tools to consume mussels and clams.
- B) Those otters that do not use tools will likely have more robust health than those otters that do use tools.
- C) Those otters that do not use tools will likely need to process larger amounts of prey to meet their energy requirements than will those otters that use tools.
- D) Those otters that consume mussels and clams without the use of tools will likely spend less time foraging than will those otters that use tools to access the same prey resources.

## Answers: Details Question

Number	Answer	Number	Answer
1	D	2	C
3	B	4	D
5	A	6	D
7	D	8	D
9	A	10	B
11	A	12	C
13	A	14	A
15	C	16	A
17	A	18	D
19	D	20	B
21	A	22	B
23	A	24	D
25	A	26	D
27	C	28	A
29	A	30	C
31	A	32	B
33	D	34	B
35	D	36	A
37	C	38	D
39	B	40	B
41	B	42	C

Number	Answer	Number	Answer
43	D	44	A
45	A	46	B
47	D	48	A
49	A	50	D
51	D	52	D
53	A	54	B
55	C	56	A
57	B	58	A
59	B	60	A
61	B	62	C

## Topic 3: Inference

149 Questions

### DIRECTIONS

#### Must Know Tips:

- Learn causation/correlation logic.
- Learn classification logic.
- Remember that the correct answer is a logical conclusion based on the passage.
- Pay attention to every single character, place, object, and date.
- Don't read the question prompt (it's static).

**Recommended time per question in this section:** min: 1 min, max: 1 min 45 sec, avg: 1 min 22.5 sec. (\*Exam level)

The Study on Global Ageing and Adult Health (SAGE) seeks to discover long-term trends related to aging by compiling and analyzing evidence from approximately 66,000 participants in multiple countries. As with most longitudinal studies, extensive funding support is needed for SAGE to collect the relevant data over timescales and at intervals that will support robust conclusions. But the quality of a more constrained investigation, such as a sociology study seeking only to yield the average age at which people in a given city first become parents, is much less dependent on high levels of funding because \_\_\_\_\_

1

Which choice most logically completes the text?

- A) such studies are likely to be a lower priority for funding than SAGE.
- B) the sociology study is unlikely to be able to recruit 66,000 participants.
- C) expanding the scope of such studies is unlikely to be feasible.
- D) such studies are not trying to identify trends over time.



Anne Bronte's 1847 novel *Agnes Grey* contains elements drawn from Bronte's own life: there are many parallels between the experiences of the novel's tide character and those of Bronte, and as a result *Agnes Grey* is regularly described as an autobiographical novel. This characterization can be useful, but it also presents drawbacks in terms of how the work is perceived, as it may lead readers to believe that Bronte merely fictionalized true events, which, in an artistic field where creativity and inventiveness are prized, can suggest that\_\_\_\_\_

2

Which choice most logically completes the text?

- A) *Agnes Grey* is less of an imaginative achievement than it actually is.
- B) the real-world counterparts of other characters in *Agnes Grey* are hard to identify.
- C) Bronte should not have claimed that *Agnes Grey* is based on real events.
- D) critics disagree about whether *Agnes Grey* shows greater originality than works without autobiographical elements.

Previous research has shown that plant species with a narrow geographical range tend to be more genetically homogeneous than plant species with extensive ranges are. Based on these findings, researchers recently ran simulations to predict how the genetic variation of several species of *Mammillaria*, a genus of cactus found throughout the Americas, might change in different distribution conditions. One of these species, *M. klissingiana*, is found only in the state of Tamaulipas. The researchers simulated what would happen if *M. klissingiana* spread to new habitats outside Tamaulipas, and, consistent with previous findings, the results showed that\_\_\_\_\_

3

Which choice most logically completes the text?

- A) several other *Mammillaria* species could survive in Tamaulipas in the future.
- B) the genetic homogeneity of *M. klissingiana* decreased over time.
- C) there was a gradual increase in the genetic homogeneity of *Mammillaria* species in states neighboring Tamaulipas.
- D) *Mammillaria* species other than *M. klissingiana* would become more common in Tamaulipas.

To better understand people living with PTSD, laboratory experiments conducted on mice determined that the brain stores remote fear memories from the past permanently. Due to the connections between memory neurons in the prefrontal cortex, the brain can hold onto distressing experiences from a few months to decades ago. These results are expected to contribute \_\_\_\_\_

4

Which choice most logically completes the text?

- A) To more effective treatment of individuals suffering from PTSD and other fear-related disorders.
- B) To a better understanding of what causes PTSD in the mice that were studied.
- C) To the realization that there is a connection between memory neurons in the prefrontal cortex.
- D) To additional studies conducted on mice and other lab animals to gain further insights.

In order to identify research trends, Shirley Ann Williams et al. reviewed a collection of studies of the social media website Twitter, such as the 2021 paper by Celik et al. titled "Learning Semantic Relationships between Entities in Twitter." Williams's team searched for the term "Twitter" on the Scopus and Web of Science databases and found that, though most papers returned by the search did in fact focus on the social media platform, a few discussed unrelated subjects such as sounds made by tractor engines. One reasonable explanation for this result is that it occurred because \_\_\_\_\_

5

Which choice most logically completes the text?

- A) a group of researchers had an extensive discussion on Twitter about the design of tractor engines.
- B) most of the papers in the Scopus and Web of Science databases do not discuss automotive engines or social media websites.
- C) the word "Twitter" may not always refer to a social media website, but to other subjects such as noises made by machines.
- D) academics who are active on social networks are likely to announce their recent publications on Twitter.

In a 2012 study in the United States. Michael E. Berndt and Travis K. Bavin found a positive association between levels of dissolved organic carbon and mercury in bodies of fresh water. Many other studies have yielded similar results, suggesting to some scientists that this association is true for all bodies of fresh water. But much of that research has been conducted at broadly similar sites in North America, and when Seam Noh and colleagues examined bodies of fresh water in South Korea, they found a negative association between dissolved organic carbon levels and mercury levels. If similar findings emerge from other locations outside North America, that could suggest that \_\_\_\_\_

6

Which choice most logically completes the text?

- A) the mercury levels reported in Noh and colleagues study were much higher than those reported in the study by Berndt and Bavin even though the dissolved organic carbon levels reported in the two studies were approximately the same.
- B) Berndt and Bavin may have inadvertently measured a different characteristic of bodies of fresh water than their levels of dissolved organic carbon and mercury.
- C) the relationship between dissolved organic carbon and mercury reported by Berndt and Bavin reflects conditions that are characteristic of certain kinds of ecosystems in North America rather than universal conditions.
- D) most of the studies conducted in North America have measured dissolved organic carbon and mercury levels at a higher level of precision than was the case in Noh and colleagues study.

The British Bronze Age began when sophisticated techniques for making tools, weapons, and other objects from metal were introduced to the British Isles around 2500 BCE, and it lasted until around 700 BCE. In Britain during this time, collections of valuable metal objects (called hoards) were sometimes buried for safekeeping. Some stayed buried for many centuries, such as the Parc-y-Meirch hoard, which was unearthed around 1868, and the Fittleworth hoard, discovered in 1995. And although the period is known as the Bronze Age, some hoards, like the Fittleworth hoard, contained decorative objects made of gold; gold was much rarer than bronze, however, and thus it is not surprising that \_\_\_\_\_

7

Which choice most logically completes the text?

- A) some hoards contained no gold, as was the case for the Parc-y-Meirch hoard.
- B) most Bronze Age gold objects were melted down so that the gold could be reused.
- C) the skills needed to make tools and weapons from bronze were to adapt to making decorative items from gold.
- D) some hoards were found as a result of artifacts being dug up by accident.

The state of North Dakota has designated the spiny water flea as an invasive species that could outcompete some of the state's native species. Many other states draw similar distinctions between invasive and native species. But researchers Alejandro Camacho and Jason McLachlan have pointed out that Earth's climate is changing in ways that challenge such designations. Climate changes may cause animals to leave their current ranges and establish new ones. Climate changes may also create good habitats in areas where a species couldn't live previously. These observations suggest that\_\_\_\_\_

8

Which choice most logically completes the text?

- A) It's useful at present for North Dakota to distinguish between invasive and native species in some instances but not in the case of the spiny water flea.
- B) North Dakota was previously home to some spiny water flea but they were outcompeted by invasive species.
- C) state such as North Dakota may need to reevaluate their classifications of species.
- D) North Dakota should coordinate with other states to protect their native species from invasive species.

In June of 1987, South Korean liberalized its stock market, meaning that it began allowing foreign individuals and businesses to invest money in South Korean companies. This was part of a wave of stock markets liberalization from the mid-1980s through the mid-1990s—Brazil in 1988, Venezuela in 1990, and so on. In an analysis of economic data from 1976 to 1993, Ross Levine and Sara Zervos found that liberalization did not lead to enduring increases in investment in companies based in countries that liberalized. Peter Blair Henry, however, found that, on average, investment in companies in liberalized countries increased significantly in the three years following liberation. Taken together, these results suggest that\_\_\_\_\_

9

Which choice most logically completes the text?

- A) investment growth is likely to be more consistent in countries that liberalize than in countries that do not.
- B) it typically takes at least three years for companies to benefit from government policies allowing foreign investment, but governments rarely maintain such policies for that long.
- C) economist's expectations about the effect of liberalization on investment were largely correct.
- D) companies based in countries that begin allowing foreign investment will probably see short term increases in investment, but that their gains are unlikely to last.

The Bronze Age in Britain lasted from around 2500 BCE to approximately 700 BCE. Collections of metal items (called hoards) from all periods of the Bronze Age have been found in Britain, including the Llanarmon-yn-Iâl hoard of artifacts from the 16th century BCE, unearthed around 1982, and the much later Horsehope Craig hoard of artifacts from the 7th century BCE, unearthed around 1865. Sometime in the Middle Bronze Age (approximately from the 14th century BCE to the 10th century BCE), metalsmiths in Britain began to develop swords for the first time. This fact helps explain why, whereas evidence of sword production was found in \_\_\_\_\_

10

Which choice most logically completes the text?

- A) both the Llanarmon-yn-Iâl hoard and the Horsehope Craig hoard, only the latter included evidence of more refined sword production.
- B) hoards discovered before 1865, no such evidence was found in hoards that were discovered later.
- C) the Llanarmon-yn-Iâl hoard, no intact swords were found among the items in the hoard.
- D) the Horsehope Craig hoard, no such evidence was found in the Llanarmon-yn-Iâl hoard.

In a 2017 study that took place in Sweden, Andrea G. Bravo and colleagues found a negative association between levels of dissolved organic carbon and mercury in bodies of fresh water. It may seem reasonable to be skeptical of this finding, since most other studies, such as research conducted in 2014 in Canada by Claire J. Oswald and Brian A. Branfireun, have found that dissolved organic carbon and mercury levels rise together. Like the latter study, however, most studies of the topic have been conducted in North America, and many of those study sites have similar characteristics to one another, suggesting that \_\_\_\_\_

11

Which choice most logically completes the text?

- A) Bravo and colleagues study may have inadvertently measured a different characteristic of bodies of fresh water than their levels of dissolved organic carbon and mercury.
- B) few of the studies conducted in North America have been able to measure dissolved organic carbon and mercury levels with the same level of precision as in Bravo and colleagues' study.
- C) the mercury levels reported in Bravo and colleagues study were much higher than those reported in the study by Oswald and Branfireun even though the dissolved organic carbon levels reported in the two studies were approximately the same.
- D) Bravo and colleagues finding may differ from the findings of other studies due to a difference in environmental circumstances that affects the relationship between dissolved organic carbon and mercury in fresh water.



South Africa has classified the Gaboon viper as an invasive species that could outcompete some of the country's native species. Many other countries draw similar distinctions between invasive and native species. But researchers Alejandro Camacho and Jason McLachlan have pointed out that Earth's climate is changing in ways that challenge such classifications. Climate changes may cause animals to leave their current ranges and establish new ones. Climate changes may also create good habitats in areas where a species couldn't live previously. These observations suggest that \_\_\_\_\_

12

Which choice most logically completes the text?

- A) South Africa should coordinate with other countries to protect their native species from invasive species.
- B) it's useful at present for South Africa to distinguish between invasive and native species in some instances but not in the case of the Gaboon viper.
- C) distinctions among species that countries such as South Africa have made may not fit well with changing circumstances.
- D) South Africa was previously home to some Gaboon vipers but they were outcompeted by invading species.

The Millennium Cohort Study (MCS) examines trends in childhood development among 19,000 people in the United Kingdom unfolding over many years. As is true of most longitudinal studies, this need for years of data collection results in high costs. By contrast, a relatively straightforward fitness study, such as one that is merely trying to identify the percentage of regular exercisers in a city who do weight training, may not need a large budget because \_\_\_\_\_

13

Which choice most logically completes the text?

- A) 19,000 people is more than enough for MCS to find trends in childhood development.
- B) longitudinal methods are probably suitable for the fitness study.
- C) the fitness study can be done well without years of data collection.
- D) it would be easy for MCS researchers to add questions to their childhood development study.

The small white heron and the little blue heron are long legged birds that live in wetlands, like the Everglades in Florida. Laura D'Acunto and colleagues wanted to know how these birds choose an area in which to live. They looked at features of these birds' habitats, such as how quickly water drains from the area and the amount of tree-canopy cover there is in the area. They found that small white herons prefer areas with extensive canopy cover, but this was not true for little blue herons. The researchers therefore concluded that wetland-management strategies that increase the amount of tree canopy in potential wetland bird habitats are less likely to \_\_\_\_\_

14

Which choice most logically completes the text?

- A) attract little blue herons to the area than they are to attract small white herons to the area.
- B) extend the average lifespan of small white herons already in the area than they are to attract a greater number of those birds to the area.
- C) decrease the area's appeal to both small white herons and little blue herons than they are to increase the appeal to other species.
- D) attract birds that don't typically live in wetlands to the area than they are to attract small white herons or little blue herons to the area.

Architects looking for inspiration may examine photographs of iconic buildings such as the Leaning Tower in Pisa. A two-dimensional photograph, however, cannot capture how a building interacts with its surroundings, whether by complementing, blending in with, or perhaps even clashing with sights and activities nearby. An image of the Leaning Tower thus \_\_\_\_\_

15

Which choice most logically completes the text?

- A) conceals the subtle deterioration of the building's materials.
- B) serves to exaggerate the building's historical importance.
- C) misrepresents how the building is perceived by people who have never visited Pisa.
- D) fails to convey the full impact of the building's design and structure.

The Socio-Economic Panel (SOEP) seeks to discover long-term trends related to childhood development by compiling and analyzing evidence from approximately 12,000 participants in Germany. As with most longitudinal studies, extensive funding support is needed for SOEP to collect the relevant data over timescales and at intervals that will support robust conclusions. But the quality of a more constrained investigation, such as a transportation study seeking only to yield the average number of people per day who use a city's public transportation system, is much less dependent on high levels of funding because

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16

Which choice most logically completes the text?

- A) such studies are not trying to identify trends over time.
- B) the transportation study is unlikely to be able to recruit 12,000 participants.
- C) expanding the scope of such studies is unlikely to be feasible.
- D) such studies are likely to be a lower priority for funding than SOEP.

In a 2017 study, Nitika Sharma and Rekha Dayal found that for consumers who value environmental conservation, their likelihood of purchasing a product increased when their perception of the product's effectiveness at addressing an environmental issue increased—in other words, the more environmentally friendly a product is perceived to be by a consumer, the more likely that consumer is to buy it. Subsequently, another research team conducted a study of various demographic groups in Chile, investigating participants' intention to purchase a new food product, and found that, on average, middle-aged adults gave the food product a higher environmental effectiveness rating than any other demographic group did. Assuming that the results of Sharma and Dayal's study are broadly applicable, this finding suggests that

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17

Which choice most logically completes the text?

- A) there is not a meaningful difference in the average likelihood of purchasing environmentally friendly products among the demographic groups included in the study.
- B) the new food product is less appealing to middle-aged adults than other similar products on the market are.
- C) middle-aged adults might be more likely than participants in the other demographic groups to purchase the food product.
- D) middle-aged adults likely prioritize other factors over a product's environmental sustainability when making purchasing decisions.

Many studies have found a positive association between levels of dissolved organic carbon and mercury in bodies of fresh water in North America. But Andrea G. Bravo and colleagues did not find this correlation in a study conducted in Sweden, leading some scientists to hypothesize that the association is particular to North America. However, several other studies conducted outside North America, such as one by Clara E. Moreno and colleagues in Norway, showed similar results to the North American studies, while few have produced results similar to those of Bravo and colleagues' study, suggesting that \_\_\_\_\_

18

Which choice most logically completes the text?

- A) levels of dissolved organic carbon and mercury in bodies of fresh water are both much higher in Sweden than elsewhere.
- B) dissolved organic carbon and mercury levels do typically rise and fall together in fresh water.
- C) there were circumstances unique to Moreno and colleagues' study that impeded accurate measurements of mercury levels.
- D) the hypothesis that the positive association is particular to North America is correct

The *Mammillaria cactus M. guerreronis* occurs naturally only in the state of Guerrero in Mexico, and the smallness of its range makes it especially vulnerable to extinction. The traditional single-species approach to conservation emphasizes the need to focus on individual species most at risk, like *M. guerreronis*, but recently, conservationists have argued that an ecosystem-based approach that incorporates the many interactions between the climate, terrain, and various species of a given geographical area may lead to better outcomes for all the species in a given location. If this view is correct, the single-species approach to the conservation of *M. guerreronis* could thus \_\_\_\_\_

19

Which choice most logically completes the text?

- A) lead to a better understanding of how the distribution of *Mammillaria* species throughout Mexico has affected their survival.
- B) allow conservationists to better consider how climatic changes affecting Guerrero may reduce the number of species competing with *M. guerreronis*.
- C) erroneously shift the focus of conservation efforts away from *M. guerreronis* itself.
- D) fail to consider the ways in which the survival of *M. guerreronis* may be influenced by changes in the populations of other species that inhabit Guerrero.

The Socio-Economic Panel (SOEP) is a longitudinal study surveying approximately 12,000 individuals in Germany to glean extended trends in childhood development. To carry out the necessary sampling of the population over many years, SOEP needs extensive financial support, but this method provides valuable insights into causal relationships. However, when questions of causation are irrelevant, as with a transportation study seeking only to reveal the number of people per day who use a city's public transportation system, longitudinal methods are unnecessary, and so \_\_\_\_\_

20

Which choice most logically completes the text?

- A) the expense of SOEP is likely greater than the cost of longitudinal studies of transportation.
- B) conclusions drawn from SOEP are likely to be more authoritative than those from the transportation study.
- C) longitudinal methods are suitable for studies of childhood development but ought to be avoided for those of transportation.
- D) the success of the transportation study likely requires significantly less financial outlay than that needed for SOEP.

Arthurian legends (tales related to the character of King Arthur) derive from many sources, such as *Annales Cambriae*, composed around 970, and the *Mabinogion* from the 12th and 13th centuries. One of the most significant sources, Geoffrey of Monmouth's *History of the Kings of Britain*, was written in Latin in the 1130s; some material from it was later adapted by the Norman poet Wace into the *Roman de Brut* in 1155. But while no source before 1155 includes references to the famous Round Table at which Arthur's knights assembled, both the *Roman de Brut* and Sir Thomas Malory's 15th century compilation of Arthurian legends, *Le Morte d'Arthur* do. It can therefore be inferred that \_\_\_\_\_

21

Which choice most logically completes the text?

- A) *Le Morte d'Arthur* is more historically accurate than *History*, because the *Mabinogion* had not been written when Geoffrey of Monmouth was writing his work
- B) Geoffrey of Monmouth's accounts of Arthurian legends in his *History* are more similar overall in content to the accounts in the *Mabinogion* than they are to the accounts in *Roman de Brut*
- C) Malory did not use *Annales Cambriae* as a source for information he presented about the Round Table.
- D) Geoffrey of Monmouth was unaware of stories of the Round Table when composing his *History*, though historians know that works containing such stories were available to him.



Research such as the 2015 study of mammals by Jessie Patrice Bunkley and Jesse Rex Barber has shown that noise from human activity, like traffic on a busy highway, has significant effects on animals, and many governments require studies of the potential noise effects on wildlife before approving highway construction projects. A report on one such study proposed many more actions to mitigate the effects on birds in the area than it did to mitigate the effects on mammals in the area. Despite the lack of focus on measures specifically for mammals, conservationists were satisfied that the proposed mitigations were sufficient to protect all the wildlife in the area because \_\_\_\_\_

22

Which choice most logically completes the text?

- A) the effects of noise on birds have been less extensively documented than the effects on mammals have.
- B) the severity of the effects of noise on different species of birds can differ significantly.
- C) the measures intended to protect birds can sometimes have adverse effects on mammals.
- D) the measures aimed at protecting birds will likely also minimize most of the effects on mammals.

Ships in the British Royal Navy during the Napoleonic Wars (1803-1815) were ranked based on military strength. The system considered the number of a ship's cannons and decks. 'First-rate' was the highest ranking, and 'sixth-rate' was the lowest ranking, followed by unranked ships. The size of a ship's crew was based on this ranking: first-rate ships had between 850 and 875 crewmen, while lower-ranked ships had fewer. Three of the ships in the British Royal Navy were the Waterloo (80 cannons and two decks), the Temeraire (98 cannons and three decks), and the Caledonia (120 cannons and three decks). Among these, only the Caledonia was a first-rate ship. It can therefore be concluded that \_\_\_\_\_

23

Which choice most logically completes the text?

- A) the Temeraire had between 850 and 875 crewmen, but the Waterloo and the Caledonia each had fewer than 850 crewmen.
- B) the Waterloo had a smaller crew than the Caledonia.
- C) all ships with three decks were ranked as first-rate ships.
- D) the Caledonia needed a crew larger than 875 people in order to operate efficiently.

Indigenous songs can be repositories of ecological information, from Yi songs about the natural environment to Tlingit songs about wildlife encounters. Kwakwaka'wakw song keeper Kwaxsistalla Wathl'thla aided research by ethnobiologist Dana Lepofsky et al. by contributing songs that reference creating terraced intertidal gardens to foster the healthy development of clams, a staple in the Kwakwaka'wakw people's diet. Such structures date as far back as 3,500 years ago. Intriguingly, analysis of local paleoecological marine bivalve records has revealed significant increases in clam size and productivity as clam garden practices became more prevalent and harvesting pressure increased—a finding that bolsters the notion that \_\_\_\_\_

24

Which choice most logically completes the text?

- A) the Kwakwaka'wakw people encouraged the health of clam gardens and reduced pressure on them by periodically increasing their reliance on other sources of sustenance.
- B) the practical approach described in the Kwakwaka'wakw songs effectively maintained clams as a sustainable food source.
- C) the Kwakwaka'wakw people initially adapted their clam garden practices from similar methods observed among other Indigenous peoples in neighboring areas.
- D) contemporary Kwakwaka'wakw people have only minimally deviated from the clam-gardening practices described in the people's songs.

Saeed M.Z.A. Tarabieh conducted a study of consumer attitudes toward Jordanian food and beverage companies and found that for consumers who value environmental conservation, their likelihood of purchasing a product decreased when their perception of the product's risk of causing environmental harm increased. Subsequently, other researchers conducted a study of various demographic groups in China, investigating participants' intentions to purchase a new television, and found that, on average, rural residents had the highest perception among all the demographic groups in the study of the environmental risks of the TV. Assuming that the results of Tarabieh's study are broadly applicable, this finding suggests that \_\_\_\_\_

25

Which choice most logically completes the text?

- A) the new TV is more appealing to rural residents than other similar products on the market are.
- B) rural residents likely prioritize other factors over a product's environmental sustainability when making purchasing decisions.
- C) there is not a meaningful difference in the average likelihood of purchasing environmentally friendly products among the demographic groups included in the study.
- D) rural residents might be less likely than participants in the other demographic groups to purchase the TV.

Quasars—such as APM 08279+5255, located in the Lynx constellation—are extremely luminous galactic nuclei powered by supermassive black holes, some of which are known to have developed within the first billion years of the formation of the universe. Based on simulations they conducted, astrophysicists Daniel Whalen, Muhammad Latif, and colleagues concluded that these early quasars developed partly as a result of rare convergences of gases in space without the need for ultraviolet backgrounds or other extreme and implausible environmental conditions that models of the early universe have included to account for the presence of these quasars. If this conclusion is correct, it suggests that\_\_\_\_\_

26

Which choice most logically completes the text?

- A) future models of the early universe may not need to include conditions that explain early quasars since those quasars may not have actually existed at the time.
- B) it may be possible to develop models of the early universe that rest on more credible assumptions than previous models have.
- C) factors that previous models of the early universe assumed were necessary for the formation of quasars may have actually been consequences of the formation of quasars.
- D) previous models of the early universe may have underemphasized the importance of ultraviolet backgrounds to quasar formation.

Nora Ephron's 1983 novel *Heartburn* is regularly described as autobiographical. That characterization is apt—there are many parallels between the experiences of the novel's narrator, Rachel Samstat, and those of Ephron—but it should not be taken to mean that all the people and events depicted in *Heartburn* are based on actual people and events. The novel is largely pure invention, and readers who neglect this fact and instead try to identify more and more real-life analogues thus risk\_\_\_\_\_

27

Which choice most logically completes the text?

- A) overemphasizing the extent to which Ephron took inspiration from earlier writers.
- B) positing unsupportable connections between *Heartburn* and Ephron's life.
- C) misrepresenting *Heartburn* as being more widely read than it actually is.
- D) minimizing the fact that Ephron drew on real-world material when writing *Heartburn*.

The great blue heron and the small dark heron are long-legged birds that live in wetlands, like the Everglades in Florida. Laura D'Acunto and colleagues wanted to know how these birds choose an area in which to live. They looked at features of the birds' habitats, such as the geographic location of the area and how deep the water is during the birds' breeding season. They found that great blue herons prefer areas with deep water during breeding season, but that was not true for small dark herons. The researchers concluded that water management strategies that increase the depth of water in potential wetland bird habitats during breeding season are therefore less likely to \_\_\_\_\_

28

Which choice most logically completes the text?

- A) attract small dark herons to the area than they are to attract great blue herons to the area.
- B) extend the average lifespan of great blue herons already in the area than they are to attract a greater number of those birds to the area.
- C) attract birds that don't typically live in wetlands to the area than they are to attract great blue herons or small dark herons to the area.
- D) decrease the area's appeal to both great blue herons and small dark herons than they are to increase the appeal to both.

Evan MacLean and colleagues evaluated behavioral and genetic data from over 14,000 dogs, representing more than 100 breeds, and found that certain similarities in behavior between breeds correspond to genetic similarities between those breeds, suggesting a genetic basis for breed differences in behavior. This was the case for both dog rivalry and energy but was especially pronounced for chasing, which can be seen when a dog pursues small animals like birds or squirrels. A different study found that the French bulldog and the bullmastiff breeds exhibit similar chasing behavior, suggesting that \_\_\_\_\_

29

Which choice most logically completes the text?

- A) their similarities with respect to that behavior could result from a shared aspect of their genetics.
- B) individual French bulldogs likely display higher levels of chasing than individual bullmastiffs.
- C) French bulldogs and bullmastiffs show a greater tendency toward chasing than most other dog breeds do.
- D) the two breeds will likely become less genetically similar over time.

Buried collections of Bronze Age metal items (called hoards) have been found all over Britain. For hoards discovered since the 1960s, such as the 1965 discovery of the Walderslade hoard, advancements like inexpensive metal detectors, ground-penetrating radar, and aerial surveys have made it much easier for searchers to locate hoards before putting the first shovel in the ground. Hoards found before the 1960s, however, such as the discovery of the Achnacree hoard around 1921, were not aided by such technologies and thus were much more likely to \_\_\_\_\_

30

Which choice most logically completes the text?

- A) include gold jewelry.
- B) result from artifacts being unearthed accidentally.
- C) include rare items from the 10th century BCE.
- D) occur before the ground was disturbed.

The state of Wisconsin has classified the walnut twig beetle as an invasive species that could harm some of the state's native species. But researchers Alejandro Camacho and Jason McLachlan have pointed out that 'invasive' and 'native' are labels that describe temporary circumstances. Changes in Earth's climate may force animals from their current ranges. Climate changes may also create good habitats in areas where a species couldn't live previously. In the case of Wisconsin, these observations suggest that \_\_\_\_\_

31

Which choice most logically completes the text?

- A) the state was previously home to some walnut twig beetles but they were outcompeted by invading species.
- B) it's useful at present for the state to distinguish between invasive and native species in some instances but not in the case of the walnut twig beetle.
- C) even if Earth's climate doesn't change in the way scientists predict, the walnut twig beetle will likely establish itself in the state.
- D) the state's designation of the walnut twig beetle as invasive may be appropriate now but not in the future.



In May of 1986, the Philippines liberalized its stock market, meaning that it began allowing foreign individuals and businesses to invest money in Filipino companies. This was part of a wave of stock market liberalizations around the world—Malaysia in 1987, Morocco in 1988, and so on. The standard view among economists at the time was that liberalization would make it easier for companies to raise money from investors. Economist Peter Blair Henry examined the economies of 11 countries that were part of the liberalization wave and found that, on average, companies based in those countries received significant increases in investment in the three years following liberalization, suggesting that \_\_\_\_\_

32

Which choice most logically completes the text?

- A) companies in Malaysia experienced a greater increase in investment following liberalization than did companies in the Philippines.
- B) economists who held the standard view of liberalization failed to anticipate some serious negative effects of liberalization.
- C) companies did not benefit from liberalization until at least three years after liberalization occurred.
- D) empirical evidence was consistent with the scholarly consensus about the consequences of liberalization.

J.G. Ballard's 1984 novel *Empire of the Sun* contains elements drawn from Ballard's own life—there are many parallels between the experiences of the novel's protagonist, Jim Graham, and those of Ballard, and as a result *Empire of the Sun* is regularly described as an autobiographical novel. This characterization can be useful, but it also presents drawbacks in terms of how the work is perceived, as it may lead readers to believe that Ballard merely fictionalized true events, which, in an artistic field where creativity and inventiveness are prized, can suggest that \_\_\_\_\_

33

Which choice most logically completes the text?

- A) Ballard should not have claimed that *Empire of the Sun* is based on real events.
- B) the real-world counterparts of other characters in *Empire of the Sun* are hard to identify.
- C) *Empire of the Sun* is less of an imaginative achievement than it actually is.
- D) critics disagree about whether *Empire of the Sun* shows greater originality than works without autobiographical elements.

Indigenous songs are an important resource for ecological information. Songs of the Warlpiri people in Yuendumu, Australia, convey information about wild edible seeds, and the songs of the Sakha people in Siberia, Russia, address the effects of climate change on local ecosystems. There have been efforts made to preserve Indigenous languages over the years—e.g., the United Nations’ International Decade of Indigenous Languages (2022-2032). However, such attempts have typically focused on spoken language despite the fact that some expressions in these languages appear only in songs. Therefore, if those involved in such efforts want to ensure that a comprehensive range of information is secured, they must\_\_\_\_\_

34

Which choice most logically completes the text?

- A) recognize that Indigenous languages likely have more unique expressions that represent ecological knowledge than represent other types of information.
- B) acknowledge that Indigenous songs are largely but not entirely composed using phrases taken from spoken language.
- C) incorporate the preservation of songs into their broader efforts to protect Indigenous languages.
- D) analyze musical similarities in the songs of the Warlpiri and Sakha people.

In a 2014 study that took place in Laos, Stéphane Guéron, Delphine Tisserand, and colleagues found a negative association between levels of dissolved organic carbon and mercury in bodies of fresh water. It may seem reasonable to be skeptical of this finding, since most other studies, such as research conducted in 2015 in Canada by Stéphanie Hamelin and colleagues, have found that dissolved organic carbon and mercury levels rise together. Like the latter study, however, most studies of the topic have been conducted in North America, and many of those study sites have similar characteristics to one another, suggesting that \_\_\_\_\_

35

Which choice most logically completes the text?

- A) few of the studies conducted in North America have been able to measure dissolved organic carbon and mercury levels with the same level of precision as in Guéron, Tisserand, and colleagues’ study.
- B) the mercury levels reported in Guéron, Tisserand, and colleagues’ study were much higher than those reported in the study by Hamelin and colleagues even though the dissolved organic carbon levels reported in the two studies were approximately the same.
- C) Guéron, Tisserand, and colleagues’ study may have inadvertently measured a different characteristic of bodies of fresh water than their levels of dissolved organic carbon and mercury.
- D) Guéron, Tisserand, and colleagues’ finding may differ from the findings of other studies due to a difference in environmental circumstances that affects the relationship between dissolved organic carbon and mercury in fresh water.

As complex life cycle parasites, *Opechona* sp. and *Cucullanellus kanabus* require multiple host species throughout their development.

Extrapolating from parasite counts on Pacific herring and seven other fish species collected from Puget Sound from 1880 to 2019, Chelsea Wood et al. found that the abundance of three-host parasites, such as *Opechona* sp., negatively correlated with rising average annual sea temperatures; the abundance of two-host parasites, such as *C. kanabus*, was largely stable. Noting that fish and other marine vertebrates are especially vulnerable to climate change, Wood et al. observed that all three-host parasites in the study depend on at least two vertebrate species, while all two-host parasites depend on only one, suggesting that

New Zealand has classified the rainbow lorikeet as an invasive species that could harm some of the country's native species. But researchers Alejandro Camacho and Jason McLachlan have pointed out that Earth's climate is changing in ways that challenge such classifications. Climate changes may force animals from their current ranges. Climate changes may also create good habitats in areas where a species couldn't live previously. These observations suggest that

36

Which choice most logically completes the text?

- A) although *Opechona* sp. and *C. kanabus* both require Pacific herring as a host, *C. kanabus* was more adversely affected by warming-driven changes in the Pacific herring population than *Opechona* sp. was.
- B) a parasite's sensitivity to warming temperatures is negatively correlated with the number of unique vertebrate species it depends on throughout its life cycle.
- C) warming-induced population changes among Puget Sound vertebrates may have suppressed some parasite populations, but there were no changes among the eight studied host species that affected two-host parasite abundance.
- D) population size and density of the eight fish species examined in the study were likely largely unaffected by rising sea temperatures.

37

Which choice most logically completes the text?

- A) New Zealand was previously home to some rainbow lorikeets but they were outcompeted by invading species.
- B) even if Earth's climate doesn't change in the way scientists predict, the rainbow lorikeet will likely establish itself in New Zealand.
- C) labels like the one that New Zealand has applied to the rainbow lorikeet reflect environmental conditions that may not persist.
- D) it's useful at present for New Zealand to distinguish between invasive and native species in some instances but not in the case of the rainbow lorikeet.

All stainless steel contains varying amounts of iron, carbon, and corrosion—inhibiting chromium. However, ferritic stainless steel, often used for induction cookers, contains a higher percentage of chromium (at least 10.5%) than does austenitic stainless steel and a higher concentration of iron, which is responsible for its magnetic properties. Unlike ferritic stainless steel, austenitic stainless steel has a face-centered cubic crystalline structure resulting from the addition of nickel to the alloy. Austenitic stainless steel has two subtypes: the 300 series, often used for storage containers, and the 200 series, which has less nickel and more manganese than the 300 series and is used for indoor architecture. Thus, stainless steel used to manufacture storage containers will have

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Which choice most logically completes the text?

- A) similar magnetic properties to stainless steel used to manufacture induction cookers.
- B) a concentration of manganese greater than 10.5%, while stainless steel used to manufacture indoor architecture will not.
- C) a face-centered cubic crystalline structure, while stainless steel used to manufacture induction cookers will not.
- D) a lower percentage of nickel in its composition than stainless steel used to manufacture induction cookers will.

As complex life cycle parasites, *Lecithaster* sp. and *Capillaria parophrysi* require multiple host species throughout their development. Extrapolating from parasite counts on Pacific herring and seven other fish species collected from Puget Sound from 1880 to 2019, Chelsea Wood et al. found that the abundance of three-host parasites, such as *Lecithaster* sp., negatively correlated with rising average annual sea temperatures; the abundance of two-host parasites, such as *C. parophrysi*, was largely stable. Noting that fish and other marine vertebrates are especially vulnerable to climate change, Wood et al. observed that all three-host parasites in the study depend on at least two vertebrate species, while all two-host parasites depend on only one, suggesting that

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Which choice most logically completes the text?

- A) although *Lecithaster* sp. and *C. parophrysi* both require Pacific herring as a host, *C. parophrysi* was more adversely affected by warming-driven changes in the Pacific herring population than *Lecithaster* sp. was.
- B) population size and density of the eight fish species examined in the study were likely largely unaffected by rising sea temperatures.
- C) warming-induced population changes among Puget Sound vertebrates may have suppressed some parasite populations, but there were no changes among the eight studied host species that affected two-host parasite abundance.
- D) a parasite's sensitivity to warming temperatures is negatively correlated with the number of unique vertebrate species it depends on throughout its life cycle.



Over 600 languages are spoken in New York City in addition to English—one can find Aromanian spoken in the neighborhood of Ridgewood, or Hindi in Gramercy Park. Many immigrants from north China, where Mandarin is the primary language, reside in the neighborhood of Flushing (part of New York City’s borough of Queens) while those who emigrated from south China, where many people speak Cantonese or Fuzhounese as a first language, tend to reside in Chinatown, in the borough of Manhattan. Among speakers of Chinese languages, those in Flushing tend to speak Mandarin as their primary language while those in Chinatown tend to speak Cantonese or Fuzhounese as their primary language. This is most likely because \_\_\_\_\_

40

Which choice most logically completes the text?

- A) Chinese immigrants who emigrated to New York City many years ago are more likely to speak several Chinese languages than are more recent Chinese immigrants.
- B) there are geographic differences in primary language within China that are reflected in the settlement patterns of Chinese immigrants in New York City.
- C) Chinese immigrants regularly change their residences between Queens and Manhattan after they emigrate, rather than staying in one borough.
- D) taken together, there are more Cantonese and Fuzhounese speakers among Chinese immigrants in New York City than there are Mandarin speakers.

Indigenous songs are an important resource for ecological information. Songs of the Warlpiri people in Yuendumu, Australia, convey information about wild edible seeds, and the songs of the Karen (hta) Hin Lad Nai people in Thailand offer detailed information about bees. There have been efforts made to preserve Indigenous languages over the years—e.g., the United Nations’ International Decade of Indigenous Languages (2022-2032). However, such attempts have typically focused on spoken language despite the fact that some expressions in these languages appear only in songs. Therefore, if those involved in such efforts want to ensure that a comprehensive range of information is secured, they must \_\_\_\_\_

41

Which choice most logically completes the text?

- A) analyze musical similarities in the songs of the Warlpiri and Karen (hta) Hin Lad Nai people.
- B) acknowledge that Indigenous songs are largely but not entirely composed using phrases taken from spoken language.
- C) incorporate the preservation of songs into their broader efforts to protect Indigenous languages.
- D) recognize that Indigenous languages likely have more unique expressions that represent ecological knowledge than represent other types of information.



In a 2012 study that took place in Brazil, Enelton Fagnani, José Roberto Guimarães, and Pedro Sérgio Fadini found a negative association between levels of dissolved organic carbon and mercury in bodies of fresh water. It may seem reasonable to be skeptical of this finding, since most other studies, such as research conducted in 1995 in the United States by Charles T. Driscoll and colleagues, have found that dissolved organic carbon and mercury levels rise together. Like the latter study, however, most studies of the topic have been conducted in North America, and many of those study sites have similar characteristics to one another, suggesting that \_\_\_\_\_

42

Which choice most logically completes the text?

- A) few of the studies conducted in North America have been able to measure dissolved organic carbon and mercury levels with the same level of precision as in Fagnani, Guimarães, and Fadini's study.
- B) Fagnani, Guimarães, and Fadini's finding may differ from the findings of other studies due to a difference in environmental circumstances that affects the relationship between dissolved organic carbon and mercury in fresh water.
- C) Fagnani, Guimarães, and Fadini's study may have inadvertently measured a different characteristic of bodies of fresh water than their levels of dissolved organic carbon and mercury.
- D) the mercury levels reported in Fagnani, Guimarães, and Fadini's study were much higher than those reported in the study by Driscoll and colleagues even though the dissolved organic carbon levels reported in the two studies were approximately the same.

As complex life cycle parasites, *Anisakis* sp. and *Cucullanellus kanabus* require multiple host species throughout their development.

Extrapolating from parasite counts on spotted ratfish and seven other fish species collected from Puget Sound from 1880 to 2019, Chelsea Wood et al. found that the abundance of three-host parasites, such as *Anisakis* sp., negatively correlated with rising average annual sea temperatures; the abundance of two-host parasites, such as *C. kanabus*, was largely stable. Noting that fish and other marine vertebrates are especially vulnerable to climate change, Wood et al. observed that all three-host parasites in the study depend on at least two vertebrate species, while all two-host parasites depend on only one, suggesting that

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Which choice most logically completes the text?

- A) although *Anisakis* sp. and *C. kanabus* both require spotted ratfish as a host, *C. kanabus* was more adversely affected by warming-driven changes in the spotted ratfish population than *Anisakis* sp. was.
- B) warming-induced population changes among Puget Sound vertebrates may have suppressed some parasite populations, but there were no changes among the eight studied host species that affected two-host parasite abundance.
- C) population size and density of the eight fish species examined in the study were likely largely unaffected by rising sea temperatures.
- D) a parasite's sensitivity to warming temperatures is negatively correlated with the number of unique vertebrate species it depends on throughout its life cycle.

The glossy ibis and the small dark heron are long-legged birds that live in wetlands, like the Everglades in Florida. Laura D'Acunto and colleagues wanted to know how these birds choose an area in which to live. They looked at features of the birds' habitats, such as the geographical location of the area and how deep the water is during the birds' breeding season. They found that glossy ibises prefer areas with deeper water during breeding season, but that was not true for small dark herons. The researchers concluded that water management strategies that increase the depth of water in potential wetland bird habitats during breeding season are therefore more likely to

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Which choice most logically completes the text?

- A) attract glossy ibises to the area than they are to attract small dark herons to the area.
- B) attract birds that don't typically live in wetlands to the area than they are to attract glossy ibises or small dark herons to the area.
- C) extend the average lifespan of glossy ibises already in the area than they are to attract a greater number of those birds to the area.
- D) decrease the area's appeal to both glossy ibises and small dark herons than they are to increase the appeal to either.

Scientists recently created a model to predict how increasing human activity will affect future mammal population sizes in U.S. national forests. Unfortunately, when the model is applied to large forests, its predictions for large-mammal populations are too high, and when applied to small forests, its predictions for small-mammal populations are too small. Beaverhead-Deerlodge National Forest in Montana is a large forest, covering more than 3 million acres. If used to evaluate the effect of increasing human activity on this forest in years, the model would likely therefore \_\_\_\_\_

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Which choice most logically completes the text?

- A) exaggerate the effect of increasing human activity on small mammals.
- B) overestimate the actual population sizes of large mammals.
- C) ignore the predator-prey relationships between large and small mammals.
- D) reflect factors affecting large mammals other than increasing human activity.

Narwhals are shy whales that live in the remote Arctic Ocean. Some of them have a long tusk, like a unicorn horn, with sensitive nerves. Narwhals are known for this tusk, but many actually don't have one and its purpose is unknown. One group of scientists came up with a possible purpose in 2014. The scientists suggested that the tusk may help narwhals determine when water around them is likely to start freezing and become dangerous for them. Marine biologist Kristin Laidre disagrees with that idea, though. She reasons that if the narwhal's tusk serves such an important purpose, then it's most likely that \_\_\_\_\_

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Which choice most logically completes the text?

- A) some narwhals would seek a new habitat.
- B) more narwhals would have a tusk.
- C) fewer marine animals would also have tusk.
- D) narwhals would become less shy over time.

Over 600 languages are spoken in New York City in addition to English—one can find Bartangi spoken in the neighborhood of Yorkville, or Ghaile in Jackson Heights. Most speakers of Chinese languages reside in the neighborhood of Flushing (part of New York City’s borough of Queens) and in Chinatown, in the borough of Manhattan. New immigrants from north China, where Mandarin is the primary first language, tend to settle in Queens, while new immigrants from south China, where many people speak Cantonese or Fuzhounese as a first language, tend to settle in Manhattan. It can therefore be inferred that \_\_\_\_\_

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Which choice most logically completes the text?

- A) languages tend to change more rapidly in areas where many languages are spoken than in areas where few languages are spoken.
- B) correlations in a country between languages and regions where they are spoken can replicate themselves in a new country to which the original country’s citizens emigrate.
- C) languages spoken by immigrant peoples can differ significantly in vocabulary and pronunciation from those same languages in their country of origin.
- D) there is a positive correlation between the physical size of a country and the number of languages spoken in that country.

F. Scott Fitzgerald’s 1920 novel *This Side of Paradise* contains elements drawn from Fitzgerald’s own life—there are many parallels between the experiences of the novel’s protagonist, Amory Blaine, and those of Fitzgerald—and as a result *This Side of Paradise* is regularly described as an autobiographical novel. This characterization can be useful, but it also presents drawbacks in terms of how the work is perceived, as it may lead readers to believe that Fitzgerald merely fictionalized true events, which, in an artistic field where creativity and inventiveness are prized, can suggest that \_\_\_\_\_

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Which choice most logically completes the text?

- A) *This Side of Paradise* is less of an imaginative achievement than it actually is.
- B) Fitzgerald should not have claimed that *This Side of Paradise* is based on real events.
- C) critics disagree about whether *This Side of Paradise* shows greater originality than works without autobiographical elements.
- D) the real-world counterparts of other characters in *This Side of Paradise* are hard to identify.

Over 600 languages are spoken in New York City in addition to English—one can find Acehnese spoken in the neighborhood of Astoria, for example, or Hindi in Gramercy Park. English is the most common, with 65% of New Yorkers speaking it at home; Spanish is second, at 20%. A linguist hypothesizes that a Spanish dialect—a variation differing from the parent language in some of its vocabulary, pronunciation, and grammar—has developed in New York City, partly due to its linguistic interaction with English. Previous research shows that younger speakers of nonmajority languages are more likely to borrow words from the majority language of a region than are older speakers. If the linguist’s hypothesis is correct, it is therefore likely to be the case that \_\_\_\_\_.

Arthurian legends (tales related to the character of King Arthur) derive from many sources, such as *Preiddeu Annwfn*, composed around 900, and *Erec and Enide* from around 1170. One of the most significant sources, Geoffrey of Monmouth’s *History of the Kings of Britain*, was written in Latin in the 1130s; some material from it was later adapted by the Norman poet Wace into the *Roman de Brut* in 1155. But while no source before 1155 includes references to the famous Round Table at which Arthur’s knights assembled, both the *Roman de Brut* and Sir Thomas Malory’s 15th-century compilation of Arthurian legends, *Le Morte d’Arthur*, do. It can therefore be inferred that \_\_\_\_\_.

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Which choice most logically completes the text?

- A) Younger speakers of Spanish in New York City would be more likely to use a dialect specific to New York City than older speakers living in the same neighborhood would be.
- B) The proportion of younger speakers who use a Spanish dialect specific to New York City is higher in neighborhoods where many languages are spoken than in neighborhoods where Spanish and English predominate.
- C) Both the number of languages spoken in New York City and the number of dialects of each of those languages will increase over time.
- D) Spanish used by younger speakers in New York City tends to have more words borrowed from other nonmajority languages than borrowed from English.

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Which choice most logically completes the text?

- A) Malory did not use *Preiddeu Annwfn* as a source for information he presented about the Round Table.
- B) Geoffrey of Monmouth was unaware of stories of the Round Table when composing his *History*, though historians know that works containing such stories were available to him.
- C) *Le Morte d’Arthur* is more historically accurate than *History*, because *Erec and Enide* had not been written when Geoffrey of Monmouth was writing his work.
- D) Geoffrey of Monmouth’s accounts of Arthurian legends in his *History* are more similar overall in content to the accounts in *Erec and Enide* than they are to the accounts in *Roman de Brut*.



An analysis by Alain Elayi and colleagues of coins minted in Sidon in the fifth and fourth centuries BCE reveals a change in their composition over time: while a coin from circa 450 BCE contains about 98% silver and 1% copper, a coin from 367 BCE (the end of Ba'alšillem II's reign) contains 74.2% silver and 24.7% copper, giving it a relatively yellowish appearance that traders would have noticed. Because coins with a silver content below 80% were widely considered unsuitable for trade, Elayi et al. speculate that a crisis in confidence in the currency occurred in Sidon around 367 BCE, which was likely relieved—despite Sidon's persistent oppressive financial obligations—as a result of Ba'alšillem II's successor Abd'aštar I's decision to \_\_\_\_\_.

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Which choice most logically completes the text?

- A) keep the amount of silver in Sidonian coins consistent with that in coins minted in 367 BCE but decrease their weight.
- B) proclaim that the percentage of silver in coins suitable for trade would be raised to a threshold higher than 80%.
- C) fund the mining of some copper deposits that were not available to Ba'alšillem II.
- D) begin minting heavier coins with a proportion of silver to copper similar to that in coins minted in 367 BCE.

Over 600 languages are spoken in New York City in addition to English—one can find Bengali spoken in the neighborhood of Parkchester, or Fujianese in Sunset Park. Most speakers of Chinese languages reside in the neighborhood of Flushing (part of New York City's borough of Queens) and in Chinatown, in the borough of Manhattan. New immigrants from north China, where Mandarin is the primary first language, tend to settle in Queens, while new immigrants from south China, where many people speak Cantonese or Fuzhounese as a first language, tend to settle in Manhattan. It can therefore be inferred that \_\_\_\_\_.

52

Which choice most logically completes the text?

- A) correlations in a country between languages and regions where they are spoken can replicate themselves in a new country to which the original country's citizens emigrate.
- B) there is a positive correlation between the physical size of a country and the number of languages spoken in that country.
- C) languages tend to change more rapidly in areas where many languages are spoken than in areas where few languages are spoken.
- D) languages spoken by immigrant peoples can differ significantly in vocabulary and pronunciation from those same languages in their country of origin

The Mammillaria cactus *M. anniana* occurs naturally only in the state of Tamaulipas in Mexico, and the smallness of its range makes it especially vulnerable to extinction. The traditional single-species approach to conservation emphasizes the need to focus on individual species most at risk, like *M. anniana*, but recently, conservationists have argued that an ecosystem-based approach that incorporates the many interactions between the climate, terrain, and various species of a given geographical area may lead to better outcomes for all the species in a given location. If this view is correct, the single-species approach to the conservation of *M. anniana* could thus \_\_\_\_\_.

53

Which choice most logically completes the text?

- A) fail to consider the ways in which the survival of *M. anniana* may be influenced by changes in the populations of other species that inhabit Tamaulipas.
- B) erroneously shift the focus of conservation efforts away from *M. anniana* itself.
- C) lead to a better understanding of how the distribution of Mammillaria species throughout Mexico has affected their survival.
- D) allow conservationists to better consider how climatic changes affecting Tamaulipas may reduce the number of species competing with *M. anniana*.

Arthurian legends (tales related to the character of King Arthur) derive from many sources, such as *Preiddeu Annwfn*, composed around 900, and *Tom a Lincoln* from around 1607. One of the most significant sources, Geoffrey of Monmouth's *History of the Kings of Britain*, was written in Latin in the 1130s; some material from it was later adapted by the Norman poet Wace into the *Roman de Brut* in 1155. But while no source before 1155 includes references to the famous Round Table at which Arthur's knights assembled, both the *Roman de Brut* and Sir Thomas Malory's 15th-century compilation of Arthurian legends, *Le Morte d'Arthur*, do. It can therefore be inferred that \_\_\_\_\_.

54

Which choice most logically completes the text?

- A) Geoffrey of Monmouth's accounts of Arthurian legends in his *History* are more similar overall in content to the accounts in *Tom a Lincoln* than they are to the accounts in *Roman de Brut*.
- B) Geoffrey of Monmouth was unaware of stories of the Round Table when composing his *History*, though historians know that works containing such stories were available to him.
- C) Malory did not use *Preiddeu Annwfn* as a source for information he presented about the Round Table.
- D) *Le Morte d'Arthur* is more historically accurate than *History*, because *Tom a Lincoln* had not been written when Geoffrey of Monmouth was writing his work.

Exclusively inhabiting tropical countries such as Sierra Leone, wild chimpanzees lack adaptations to seasonal variations in ultraviolet B (UVB) irradiance from sunlight; since UVB exposure enables vertebrates to synthesize vitamin D, this raises questions about how chimpanzees in mid-latitude zoos are affected by the lower and more variable UVB irradiance in those locations. In a study of zoo chimpanzees in Sweden and other mid-latitude countries, Sophie Moittié and colleagues found not only that chimpanzees' vitamin D levels correlate with UVB irradiance but also that vitamin D levels show no evidence of plateauing as UVB irradiance reaches its highest local levels, suggesting that

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55

Which choice most logically completes the text?

- A) averaged across seasons, vitamin D levels in zoo chimpanzees in mid-latitude countries such as Sweden tend to be comparable to those in wild chimpanzees in tropical countries such as Sierra Leone.
- B) adaptations to seasonal variations in UVB irradiance may be emerging in zoo chimpanzees in Sweden and other mid-latitude countries.
- C) providing supplemental vitamin D to chimpanzees in zoos in Sweden and other mid-latitude countries would likely not be beneficial.
- D) zoo chimpanzees in Sweden and other mid-latitude countries tend to synthesize less vitamin D than they are inherently capable of synthesizing.

Many Indian snack foods, such as bhatoora and paneer pakora, acquire their flavor from being fried in oil; some are also coated in batter beforehand. Chemists Marc A. Meyers and Andrew Grazela studied the mass and heat transfer processes that occur when foods are fried in batters containing hydrocolloids, polymers that become viscous or gel-like in water. During frying, water in the food evaporates, leaving voids that oil (a pure fat) can fill. As the process continues, water from the food's center moves to the crust as long as the crust remains permeable. However, hydrocolloids can create structures in the crust that reduce the transfer of moisture out of the food's core during frying. Therefore, a food fried without a hydrocolloid batter coating will likely

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Which choice most logically completes the text?

- A) have a more viscous crust when frying is completed than it would have if it were fried with a coating of hydrocolloid batter.
- B) have a higher fat content than it would have if it were fried with a coating of hydrocolloid batter.
- C) need to be cooked more quickly at a higher temperature than it would need to be cooked if it were fried with a coating of hydrocolloid batter.
- D) need to be cooked in a different oil than it would need to be cooked in if it were fried with a coating of hydrocolloid batter.

Zooarchaeologist Ophélie Lebrasseur and her team examined a fox skeleton discovered in 1991 at an archaeological site alongside artifacts of human habitation (like spear points) in central Argentina. Lebrasseur et al. determined that the fox was *Dusicyon avus*, an extinct species resembling a jackal, and radiocarbon dating placed the fox at the site at the same time as human inhabitants. (Indeed, the inhabitants may have deliberately buried the fox.) In addition, while wild foxes have a diet entirely made of meat, isotopic signatures of the skeleton's teeth indicated that the fox's diet, like that of the humans, was partly composed of plant material. Lebrasseur et al. therefore concluded that \_\_\_\_\_

57

Which choice most logically completes the text?

- A) the humans who were alive at the same time as the fox most likely ate more meat than the fox did.
- B) the fox had a diet more similar to that of jackals than to that of wild foxes.
- C) the humans who were alive at the same time as the fox hunted using the spears whose points were also found at the site.
- D) the fox may have been a companion animal of the humans who inhabited the site at the same time.

Prolonged exposure to anthropogenic noise (sounds from human sources like traffic or mining) can affect animals, as Graeme Shannon and colleagues found in a 2014 study of black-tailed prairie dogs. Researchers conducted a meta-analysis of studies of how such noise affects animals and found that, for every study, relevant traits or behaviors of the animals were observably different between the exposed group and the otherwise similar but unexposed group. Although, on average, studies of mammals showed larger differences than studies of fish did, for every class of animals examined, there were individual studies showing differences well above the average for mammals. Therefore, the results of the meta-analysis suggest that \_\_\_\_\_

58

Which choice most logically completes the text?

- A) some studies of fish found larger effects of exposure to anthropogenic noise than some studies of mammals did.
- B) the differences that studies attribute to exposure to anthropogenic noise are likely to be more pronounced for fish than they are for mammals.
- C) the difference found in the study conducted by Graeme Shannon and colleagues was likely larger than the average difference for studies of black-tailed prairie dogs included in the meta-analysis.
- D) the studies in the meta-analysis that examined mammals were more likely than those that examined fish to specify whether the observed effects were detrimental.



Liverpool Football Club won more than half its home matches between 1947 and 2003, helping to distinguish the team as a top British professional soccer club. Additionally, Liverpool, whose home uniform color is mainly red, was more successful in home matches than was Watford Football Club, whose home uniform color is not red. Research has shown that many people associate the color red with power and dominance. Past experiences with red objects such as stop signs can even cause people to respond to the color red with caution and hesitation. These findings, if applicable in the context of athletic competitions, could suggest that in matches played at Liverpool's home stadium, opponents may have \_\_\_\_\_

59

Which choice most logically completes the text?

- A) played more aggressively than they would have if their own uniforms were red.
- B) been influenced by the color of Liverpool's uniforms.
- C) been aware that Liverpool's uniform color affected their own performance.
- D) been unaffected by the red clothing worn by fans in the stadium.

India has classified the spiraling whitefly as an invasive species that could harm some of the country's native species. But researchers Alejandro Camacho and Jason McLachlan have pointed out that "invasive" and "native" are labels that describe temporary circumstances. Changes in Earth's climate may force animals from their current ranges. Climate changes may also create good habitats in areas where a species couldn't live previously. In the case of India, these observations suggest that \_\_\_\_\_

60

Which choice most logically completes the text?

- A) the country's designation of the spiraling whitefly as invasive may be appropriate now but not in the future.
- B) it's useful at present for the country to distinguish between invasive and native species in some instances but not in the case of the spiraling whitefly.
- C) even if Earth's climate doesn't change in the way scientists predict, the spiraling whitefly will likely establish itself in the country.
- D) the country was previously home to some spiraling whiteflies but they were outcompeted by invading species.



As exemplified by Temiar songs about landforms and landmarks and Lakota songs about gathering mouse beans, ecological information can be transmitted in Indigenous songs, and in some instances is maintained only in this way. Kwaxistalla Wathl'thla, a song keeper for the Kwakwaka'wakw people in Canada, collaborated with ethnobiologist Dana Lepofsky et al., sharing songs referencing terraced intertidal clam gardens the people implemented in the past to foster healthy development of a dietary staple. Drawing on archaeological evidence as well, Lepofsky et al. determined that the prevalence of the practice described in the songs corresponded with growth in clam size and abundance despite increased harvesting pressure—a finding that demonstrates that

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61

Which choice most logically completes the text?

- A) representation of practical applications of ecological knowledge is the defining characteristic of the music of certain Indigenous peoples.
- B) the Kwakwaka'wakw people likely would not have detailed their creation of clam gardens in songs if their efforts had not produced significantly larger clams.
- C) the clams harvested from intertidal terraces by Kwakwaka'wakw people in the past likely were a different species than the clams found in those areas today.
- D) effective methods for the cultivation of sources of sustenance are among the ecological knowledge preserved in Indigenous songs.

A group of primate conservationists recently began a long-term study of the effects of different conservation strategies on the white-headed langur (*Trachypithecus poliocephalus*). The species population is currently estimated to be around 1,000. It is challenging to accurately count these primates, however, which makes it difficult to tell whether the population is increasing, decreasing, or staying stable. The study may thus

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62

Which choice most logically completes the text?

- A) risk making inaccurate conclusions about the effectiveness of different conservation strategies.
- B) cause other conservationists to adopt a new methodology for counting populations.
- C) benefit from including species beyond the white-headed langur.
- D) fail to consider less-well-known conservation approaches for the white-headed langur.

Scholars are increasingly exploring the communication and preservation of ecological knowledge through Indigenous songs (e.g., Temiar songs about landforms and landmarks and those of the Tlingit people about wildlife encounters). In one study, ethnobiologist Dana Lepofsky et al. received insight from Kwaxsistalla Wathl'thla, a song keeper for the Kwakwaka'wakw people in Canada, into songs referencing the people's use of terraced gardens in intertidal zones along the Pacific Northwest coast for the cultivation of clams for consumption. Archaeological evidence of significant increases in clam size and abundance in that area concurrent with the documented past implementation of the method described in the songs supports the conclusion that \_\_\_\_\_

For its 1974 work *Instant Mural*, the Chicano art collective Asco taped members Patsy Valdez and Humberto Sandoval to an outdoor wall in East Los Angeles. The work is manifestly a commentary on constraint, but many critics focus on Valdez and the social constraints women faced at the time, which is understandable but leaves the presence of Valdez's male collaborator Sandoval unexplained. We should instead consider that in 1974, the art establishment's recognition of Chicano artists was (and had long been) restricted to sociohistorical muralists, leaving nonmuralist Chicano artists—like Asco's members—struggling to even exhibit their work; attending to this context opens an interpretation that accounts for all the evidence, allowing us to conclude that \_\_\_\_\_

63

Which choice most logically completes the text?

- A) there is greater corroboration in the archaeological record of ecological practices described in Kwakwaka'wakw songs than of those described in Temiar and Tlingit songs.
- B) non-Indigenous people around the Pacific Northwest coast adopted the practice developed by the Kwakwaka'wakw people after observing its efficacy.
- C) although contemporary Kwakwaka'wakw people have a deep understanding of and appreciation for the fishing and farming practices used by their ancestors, they no longer implement those methods.
- D) the practice used by ancestors of modern Kwakwaka'wakw people not only effectively maintained a food source but also promoted its robustness.

64

Which choice most logically completes the text?

- A) while Valdez's presence in *Instant Mural* represents the social constraints placed on women at the time, Sandoval's presence represents Chicano muralists' frustration at their lack of recognition by the art establishment.
- B) the main subject of *Instant Mural* is female Chicano artists' experience of being doubly constrained by gender-role expectations and the marginalization of certain types of art.
- C) *Instant Mural* is best understood not as a critique of the social constraints placed on women but rather as a critique of sociohistorical muralists' depictions of Chicano culture.
- D) *Instant Mural* is a reflection on the constraining aesthetic expectations placed on Chicano artists in general rather than

on the social constraints placed on women specifically.

A road was recently built in a Maryland woodland that is home to the house finch. Some finches' nests were situated close to the new road and others were deeper in the woodland. Common ravens, which eat finch eggs, can spot nests near the open spaces of roads more easily than they can spot nests surrounded by woodland. Accordingly, researchers in Maryland trying to predict the impact of the new road on finches have suggested that \_\_\_\_\_

65

Which choice most logically completes the text?

- A) finch eggs will make up about the same percentage of common ravens' diet as they did before the road was built.
- B) the number of finches building nests near the road will gradually increase as the finches adapt to the presence of the common ravens.
- C) finches nesting near the road will lose eggs to common ravens at a higher rate than will finches nesting far from the road.
- D) finches nesting far from the road will lay fewer eggs per nest than will finches nesting near the road.

Biologists Rebecca M. Calisi-Rodriguez and George E. Bentley examined research on species such as dark-eyed juncos and tucos, which have both been studied under laboratory conditions as well as in the wild, to see whether there were significant differences between findings in the wild and in the lab. And, for example, they found for tucos that daytime is the most active period for wild individuals but not for captive individuals. Calisi-Rodriguez and Bentley therefore concluded that the laboratory setting was likely \_\_\_\_\_

66

Which choice most logically completes the text?

- A) more suitable than wild settings for studying tucos' patterns of rest and activity.
- B) affecting the results for both tucos and dark-eyed juncos.
- C) more suitable for studying dark-eyed juncos than for studying tucos.
- D) interfering with tucos' patterns of rest and activity.

All stainless steel contains varying amounts of iron, carbon, and corrosion-inhibiting chromium. However, ferritic stainless steel, often used for induction cookers, contains a higher percentage of chromium (at least 10.5%) than does austenitic stainless steel as well as a higher concentration of iron. Unlike ferritic stainless steel, austenitic stainless steel has a face-centered cubic crystalline structure held stable by the presence of nickel and nitrogen. Austenitic stainless steel has two subtypes: the 200 series, often used for washing machines, and the 300 series, which has more nickel than the 200 series and is often used for storage containers or furnaces. Thus, stainless steel used to manufacture \_\_\_\_\_

67

Which choice most logically completes the text?

- A) furnaces and stainless steel used to manufacture washing machines will both have a chromium content of less than 10.5%.
- B) washing machines will have a higher concentration of nickel in its composition than stainless steel used to manufacture furnaces will.
- C) induction cookers will have a face-centered cubic crystalline structure, but stainless steel used to manufacture storage containers will not.
- D) storage containers and stainless steel used to manufacture induction cookers will have a similar concentration of nitrogen in their compositions.

The Clarion-Clipperton Zone (CCZ) is an expanse of abyssal plain and seamounts (underwater mountains) between Hawai'i and Mexico in which mining is permitted, but the area's biodiversity is poorly understood. The vast majority of invertebrate species found in a recent survey of the CCZ were hitherto unknown to scientists, and sampling for animal life has been highly concentrated in the eastern part of the zone. Some species like *Ledella knudseni* were identified both morphologically and molecularly (using DNA analysis), whereas *Prionospio branchioclada* and other species for which molecular sampling was impracticable were identified solely based on physical morphology. Since molecular analysis does not require distinguishing subtle physiological differences, it is \_\_\_\_\_

68

Which choice most logically completes the text?

- A) more likely to properly distinguish between morphologically similar but distinct invertebrate species than is the method used to identify *Prionospio branchioclada*.
- B) more frequently used for identifying species with physiological characteristics like those of *Ledella knudseni* than morphological analysis is.
- C) better suited to distinguishing *Prionospio branchioclada* from morphologically similar species than to distinguishing *Ledella knudseni* from morphologically similar species.
- D) capable of providing greater physiological detail about a species than is the method used for *Prionospio branchioclada*.



As exemplified by Sakha songs about local ecosystems and Kaluli songs about rainforest sounds, ecological information can be transmitted in Indigenous songs, and in some instances is maintained only in this way. Kwaxsiatalla Wathl'thla, a song keeper for the Kwakwaka'wakw people in Canada, collaborated with ethnobiologist Dana Lepofsky et al., sharing songs referencing terraced intertidal clam gardens the people implemented in the past to foster healthy development of a dietary staple. Drawing on archaeological evidence as well, Lepofsky et al. determined that the prevalence of the practice described in the songs corresponded with growth in clam size and abundance despite increased harvesting pressure—a finding that demonstrates that \_\_\_\_\_

69

Which choice most logically completes the text?

- A) the clams harvested from intertidal terraces by Kwakwaka'wakw people in the past likely were a different species than the clams found in those areas today.
- B) the Kwakwaka'wakw people likely would not have detailed their creation of clam gardens in songs if their efforts had not produced significantly larger clams.
- C) representation of practical applications of ecological knowledge is the defining characteristic of the music of certain Indigenous peoples.
- D) effective methods for the cultivation of sources of sustenance are among the ecological knowledge preserved in Indigenous songs.

Researchers have noted that people with clinically typical hearing perceive sounds they believe to be meaningful as quieter than sounds of the same volume that they believe to be noise (i.e., meaningless to the listener). In a recent study, Antonia Olivia Dolan and colleagues allowed participants to listen to (and adjust the volume of) recordings of music in popular genres like heavy metal and acoustic folk, as well as recordings of nature sounds. The researchers noted that participants may have treated the nature sounds as noise, which suggests that if a participant was exposed to Metallica's 'Sad but True' and the nature sounds at a volume of 61.5 decibels, the participant likely would have \_\_\_\_\_

70

Which choice most logically completes the text?

- A) experienced the nature sounds as louder than 'Sad but True' even though they were not.
- B) believed that neither the nature sounds nor 'Sad but True' were at a volume of 61.5 decibels.
- C) perceived the nature sounds and 'Sad but True' to be comparably meaningful despite perceiving the music to be quieter.
- D) adjusted the volume of the nature sounds to be greater than 61.5 decibels.



Evan MacLean and colleagues evaluated behavioral and genetic data from over 14,000 dogs, representing more than 100 breeds, and found that variation in behavior between breeds can be attributed to genetic variations between those breeds, suggesting a genetic basis for breed differences in behavior. This was the case for both separation problems and dog rivalry but was especially pronounced for attachment and attention-seeking, which can be seen when a dog solicits affection or attention. In a different study, researchers found that, with regard to attachment and attention-seeking, the French bulldog behaves notably different ways than the cairn terrier. Together these findings

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Which choice most logically completes the text?

- A) the French bulldog and the cairn terrier differ with respect to the genetic underpinnings for attachment and attention-seeking.
- B) the French bulldog and the cairn terrier will likely become more genetically similar over time.
- C) French bulldogs and cairn terriers show a greater tendency toward attachment and attention-seeking than most other dog breeds do.
- D) individual French bulldogs may display higher levels of attachment and attention-seeking than individual cairn terriers

The lacy hawkmoth, a large-bodied moth, defends itself against the eastern red bat and other insect-eating bats, which use echolocation to hunt, by emitting ultrasonic clicks that can, for instance, disrupt the bats' echolocation signals. To investigate moths' defense ultrasound—which researchers had thought was exclusive to tiger moths, hawkmoths and one species of geometrid moths—Akito Y. Kawahara et al. recorded the responses of moths from 252 genera, representing most families of large-bodied moths, to audio playback of bat echolocation. The researchers found that 52 of the genera, including several genera belonging to the geometer family, produced defensive ultrasonic clicks. This result suggests that

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72

Which choice most logically completes the text?

- A) anti-bat ultrasound production may be a more prevalent defense strategy among large-bodied moths than previously known to researchers.
- B) ultrasound production is only one of a diverse range of effective strategies moths employ to evade bat attacks.
- C) unlike the 52 moth genera that emit ultrasonic clicks, most moth genera have likely not developed defenses specifically against bat attacks.
- D) some genera of large-bodied moths may use ultrasonic signaling for purposes other than avoiding capture by predators such as the eastern red bat.

As exemplified by Yi songs about the natural environment and Tlingit songs about wildlife encounters, ecological information can be transmitted in Indigenous songs, and in some instances is maintained only in this way. Kwaxsistalla Wathl'eth, a song keeper for the Kwakwaka'wakw people in Canada, collaborated with ethnobiologist Dana Lepofsky et al., sharing songs referencing terraced intertidal clam gardens the people implemented in the past to foster healthy development of a dietary staple. Drawing on archeological evidence as well, Lepofsky et al. determined that the prevalence of the practice described in the songs corresponded with growth in clam yield and abundance despite increased harvesting pressure—a finding that demonstrates that \_\_\_\_\_

73

Which choice most logically completes the text?

- A) representation of practical applications of ecological knowledge is the defining characteristic of the music of certain Indigenous peoples.
- B) the Kwakwaka'wakw people likely would not have detailed their creation of clam gardens in songs if their efforts had not produced significantly larger clams.
- C) the clams harvested from intertidal terraces by Kwakwaka'wakw people in the past likely were a different species than wild clams found in those areas today.
- D) effective methods for the cultivation of sources of sustenance are among the ecological knowledge preserved in Indigenous songs.

Researchers have noted that people with clinically typical hearing perceive sounds they believe to be meaningful as quieter than sounds of the same volume that they believe to be noise (i.e., meaningless to the listener). In a recent study, Antonia Olivia Dolan and colleagues allowed participants to listen to (and adjust the volume of) recordings of music in popular genres like acoustic folk and orchestral, as well as recordings of nature sounds. The researchers noted that participants may have treated the nature sounds as noise, which suggests that if a participant was exposed to Jose Gonzalez's "Heartbeats" and the nature sounds at a volume of 61.5 decibels, the participant likely would have \_\_\_\_\_

74

Which choice most logically completes the text?

- A) adjusted the volume of the nature sounds to be greater than 61.5 decibels.
- B) believed that neither the nature sounds nor "Heartbeats" were at a volume of 61.5 decibels.
- C) experienced the nature sounds as louder than "Heartbeats" even though they were not.
- D) perceived the nature sounds and "Heartbeats" to be comparably meaningful despite perceiving the music to be quieter.

Evan MacLean and colleagues evaluated behavioral and genetic data from over 14,000 dogs, representing more than 100 breeds, and found that variations in behavior between breeds can be attributed to genetic variations between those breeds, suggesting a genetic basis for breed differences in behavior. This was the case for both separation problems and energy but was especially pronounced for trainability, which can be seen when a dog demonstrates willingness to fetch objects. In a different study, researchers found that, with regard to trainability, the English mastiff behaves in notably different ways than the Yorkshire terrier. Together, these findings imply that \_\_\_\_\_

75

Which choice most logically completes the text?

- A) the English mastiff and the Yorkshire terrier will likely become more genetically similar over time.
- B) the English mastiff and the Yorkshire terrier differ with respect to the genetic underpinnings for trainability.
- C) individual English mastiffs may display higher levels of trainability than individual Yorkshire terriers.
- D) English mastiffs and Yorkshire terriers show a greater tendency toward trainability than most other dog breeds do.

The jade hawkmoth, a large-bodied moth, defends itself against Brandt's myotis and other insect-eating bats, which use echolocation to hunt, by emitting ultrasonic clicks that can, for instance, signal the moths' unpleasant taste. To investigate moths' defensive ultrasound—which researchers had thought was exclusive to tiger moths, hawkmoths, and one species of geometer moths—Jesse R. Barber et al. recorded the responses of moths from 252 genera, representing most families of large-bodied moths, to audio playback of bat echolocation. The researchers found that 52 of the genera, including several genera belonging to the geometer family, produced defensive ultrasonic clicks. This result suggests that \_\_\_\_\_

76

Which choice most logically completes the text?

- A) unlike the 52 moth genera that emit ultrasonic clicks, most moth genera have likely not developed defenses specifically against bat attacks.
- B) some genera of large-bodied moths may use ultrasonic signaling for purposes other than avoiding capture by predators such as Brandt's myotis.
- C) ultrasound production is only one of a diverse range of effective strategies moths employ to evade bat attacks.
- D) anti-bat ultrasound production may be a more prevalent defense strategy among large-bodied moths than previously known to researchers.

As exemplified by Yi songs about the natural environment and Tlingit songs about wildlife encounters, ecological information can be transmitted in Indigenous songs, and in some instances is maintained only in this way. Kwaxsistalla Wathl'thla, a song keeper for the Kwakwaka'wakw people in Canada, collaborated with ethnobiologist Dana Lepofsky et al., sharing songs referencing terraced intertidal clam gardens the people implemented in the past to foster healthy development of a dietary staple. Drawing on archaeological evidence as well, Lepofsky et al. determined that the prevalence of the practice described in the songs corresponded with growth in clam size and abundance despite increased harvesting pressure—a finding that demonstrates that

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77

Which choice most logically completes the text?

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- B) the Kwakwaka'wakw people likely would not have detailed their creation of clam gardens in songs if their efforts had not produced significantly larger clams.
- C) the clams harvested from intertidal terraces by Kwakwaka'wakw people in the past likely were a different species than the clams found in those areas today.
- D) effective methods for the cultivation of sources of sustenance are among the ecological knowledge preserved in Indigenous songs.

Sheffield United Football Club won more than half its home matches between 1947 and 2003, helping to distinguish the team as a top British professional soccer club. Additionally, Sheffield United, whose home uniform color is mainly red, was more successful in home matches than was Cardiff City Football Club, whose home uniform color is not red. Researches has shown that many people associate the color red with power and dominance. Past experiences with red objects such as stop signs can even cause people to respond to the color red with caution and hesitation. These findings, if applicable in the context of athletic competitions, could suggest that in matches played at Sheffield United's home stadium, opponents may have

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Which choice most logically completes the text?

- A) been unaffected by the red clothing worn by fans in the stadium.
- B) played more aggressively than they would have if their own uniforms were red.
- C) been influenced by the color of the Sheffield United's uniforms.
- D) been aware that Sheffield United's uniform color affected their own performance.



In June 1986, India liberalized its stock market, meaning that it began allowing foreign individuals and businesses to invest money in Indian companies. This was part of a wave of Stock market liberalizations from the mid-1980s through the mid-1990s—Colombia in 1991, Nigeria in 1995, and so on. In an analysis of economic data from 1976 to 1993, Ross Levine and Sara Zervos found that liberalization did not lead to enduring increases in investment in companies based in countries that liberalized. Peter Blair Henry, however, found that, on average, investment in companies increased significantly in the three years following liberalization. Taken together, these results suggest that\_\_\_\_\_

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Which choice most logically completes the text?

- A) liberalization may provide a boost to investment that fades over time.
- B) economists' expectations about the effect of liberalization on investment were largely correct.
- C) companies typically do not benefit from liberalization until at least three years after liberalization occurs.
- D) investment growth is likely to be more consistent in countries that liberalize than in countries that do not.

Data collected by the Mars rover Curiosity at the Gale Crater's Murray Formation are suggestive of hydrological deposition of sediment in the distant past. To characterize the nature of the depositional environment, Frances Rivera-Hernández et al analyzed the grain size of Murray Formation sediment, finding that although there are intervals of coarse grains, most of the sediment consists of fine grains that show signs of cracking due to episodic desiccation. Rivera-Hernández et al. concluded that the coarse grains are sandstone, which tends to be deposited by flowing water, whereas the fine grains are mudstone, which is slowly deposited by settling out of suspension in low-flow water, leading the researchers to posit that \_\_\_\_\_

80

Which choice most logically completes the text?

- A) a lake existed at the Murray Formation for a prolonged period, though the lake occasionally experienced drying and there were periods in which one or more streams were present.
- B) a stream-fed lake was present at Murray Formation for extended period, and although the streams experienced occasional drying, the lake did not.
- C) one or more streams existed at the Murray Formation for an extended period until being replaced by a lake that persisted for only a brief period before permanently drying.
- D) although the area of the Murray Formation experienced a prolonged period of dryness that prevented a lake from forming, water flowing from a distant source was present.



Although the language of the Olmec civilization, which flourished in southern Mexico circa 1500 BCE-400 BCE, hasn't been identified, it likely belonged to the Mixe-Zoquean family, a group of related languages whose present-day representatives are spoken in an area corresponding to ancient Olmec sites. The family can be subdivided into a Zoque branch, which includes Francisco León Zoque, and a Mixe branch, which includes North Central Mixe. Many words in the Mayan languages—languages spoken in the region but otherwise unrelated to the Mixe-Zoquean family—are Mixe-Zoquean in origin and were likely borrowed during the period when the Olmecs dominated the entire area. Tellingly, all those words derive from Zoque branch, suggesting that \_\_\_\_\_

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Which choice most logically completes the text?

- A) North Central Mixe and the other languages of the Mixe branch likely supplanted the language of the Zoque branch sometime before 1500 BCE.
- B) the language of the Olmec civilization was likely the founding of the family that includes Mayan languages.
- C) the language of the Olmec civilization contributed words not only to Mayan languages but also to other languages in the Mixe-Zoquean family.
- D) the Mixe-Zoquean family had already diverged into the Mixe and Zoque branches by the time the Olmecs became the prevailing power in the region.

Manchester United Football Club won more than half its home matches between 1947 and 2003, helping to distinguish the team as a top British professional soccer club. Additionally, Manchester United, whose home uniform color is mainly red, was more successful in home matches than was Coventry City Football Club, whose home uniform color is not red. Research has shown that many people associate the color red with power and dominance. Past experiences with red objects such as stop signs can even cause people to respond to the color red with caution and hesitation. These findings, if applicable in the context of athletic competitions, could suggest that the uniforms worn by Manchester United's players in their home matches may have \_\_\_\_\_

82

Which choice most logically completes the text?

- A) increased Manchester United player's sense of excitement.
- B) negatively effected the performance of players on opposing teams.
- C) led fans to perceive the team's opponents as more dominant than they actually were.
- D) caused Manchester United's players to play less skillfully.

Biologists Rebecca M. Calisi-Rodriguez and George L. Bentley examined research on white-throated sparrows and degus, both of which have been studied in the laboratory as well as in the wild, to see how studies' settings might have affected their results. Lab studies are useful because they make it easy to control important variables, but white-throated sparrows' surroundings can significantly affect their hormone levels. Therefore, it's not altogether surprising that when Calisi-Rodriguez and Bentley examined studies of white-throated sparrows, they found that \_\_\_\_\_

83

Which choice most logically completes the text?

- A) hormone levels were higher in wild males than in captive male degus.
- B) captive sparrows and wild sparrows usually exhibited very similar hormone levels.
- C) significant difference in hormone levels between individuals were found for both captive sparrows and wild sparrows.
- D) baseline levels of the hormone corticosterone are higher in captive sparrows than they are in wild sparrows.

Exclusively inhabiting tropical countries such as Liberia, wild chimpanzees lack adaptations to seasonal variations in ultraviolet B (UVB) irradiance from sunlight; since UVB exposure enables vertebrates to synthesize vitamin D, this raises questions about how chimpanzees in mid-latitude zoos are affected by the lower and more variable UVB irradiance in those locations. In a study of zoo chimpanzees in Norway and other mid latitude countries, Sophie Moittié and colleagues found not only that chimpanzees' vitamin D levels correlate with UVB irradiance but also that vitamin D levels show no evidence of plateauing as UVB irradiance reaches its highest local levels, suggesting that \_\_\_\_\_

84

Which choice most logically completes the text?

- A) averaged across seasons, vitamin D levels in zoo chimpanzees in mid-latitude countries such as Norway tend to be comparable to those in wild chimpanzees in tropical countries such as Liberia.
- B) adaptations to seasonal variations in UVB irradiance may be emerging in zoo chimpanzees in Norway and other mid-latitude countries.
- C) zoo chimpanzees in Norway and other mid-latitude countries tend to synthesize less vitamin D than they are inherently capable of synthesizing
- D) providing supplemental vitamin D to chimpanzees in zoos in Norway and other mid-latitude countries would likely not be beneficial.

To understand consumer loyalty to specific online retailers, Marina Žižakov and colleagues conducted a survey using 58 statements as proxy indicators of customer experience with receiving online purchases. The statements were categorized by topic – e.g., statement 13, 'I am eagerly awaiting the delivery of the ordered items,' was categorized as anticipation and respondents all of whom were from Serbia (which is characterized as having a developing economy), rated the importance of each statement to their experience. Researchers found that participants placed low importance on package aesthetics and high importance on speedy delivery and package tracking, but the researchers cautioned against applying the findings to customers generally, suggesting that \_\_\_\_\_

85

Which choice most logically completes the text?

- A) additional research is needed with participants from countries of varying levels of economic development to determine whether delivery time and tracking are more important than package design to customers broadly.
- B) customers in countries with higher levels of economic development than that of Serbia are likely to regard package design as relatively more important than delivery time and transparency.
- C) online retailers that operate in a variety of countries are more likely to increase customer loyalty if they make their deliveries in less time and allow customers to track those deliveries than if they improve their packaging.
- D) the greater importance assigned to delivery time and tracking than to package design may not be observed if the survey were to be given to a larger group of Serbian participants.

Chelsea Wood et al. tracked temperature-driven changes in the abundance of *Opechona* sp (a complex life cycle parasite, or CLP, that requires three host species throughout its life cycle), *Anthocotyle merlucci* (a directly transmitted parasite, which requires only one host species), and 83 other parasite taxa found on eight fish species. CLPs are transmitted when an infected host is ingested by an individual of another species, typically shielding CLPS from the external environment, whereas directly transmitted parasites are exposed to external conditions during transmission. However, Wood et al. found that three-host CLP abundance decreased as sea temperatures rose, whereas directly transmitted parasite abundance was largely stable, suggesting that \_\_\_\_\_

86

Which choice most logically completes the text?

- A) CLPs primarily transmitted by ingestion were less dependent on host species adversely affected by warming temperatures than were CLPs that use other transmission strategies.
- B) as the number of host species involved in a parasite's transmission increases, the parasite is better protected against rising temperatures.
- C) directly transmitted parasites identified in the study were more likely to use transmission strategies that shield them from warming temperatures than were three-host CLPS.
- D) any advantages that the transmission strategy used by three-host CLPs may

Prolonged exposure to anthropogenic noise (sounds from human sources like traffic or mining) can affect animals, as Debra M. Shier and colleagues found in a 2012 study of Stephens kangaroo rats. Researchers conducted a meta-analysis of studies of how such noise affects animals and found that, for every study, relevant traits or behaviors of the animals were observably different between the exposed group and the otherwise similar but unexposed group. Although, on average, studies of mammals showed larger differences than studies of amphibians did, for every class of animals examined, there were individual studies showing differences well above the average for mammals. Therefore, the results of the meta-analysis suggest that \_\_\_\_\_

have conferred did not completely offset the negative effects of other temperature driven factors on CLP abundance.

87

Which choice most logically completes the text?

- A) some studies of amphibians found larger effects of exposure to anthropogenic noise than some studies of mammals did.
- B) the studies in the meta-analysis that examined mammals were more likely than those that examined amphibians to specify whether the observed effects were detrimental.
- C) the differences that studies attribute to exposure to anthropogenic noise are likely to be more pronounced for amphibians than they are for mammals.
- D) the difference found in the study conducted by Debra M. Shier and colleagues was likely larger than the average difference for studies of Stephens kangaroo rats included in the meta-analysis.

Liverpool Football Club won more than half its home matches between 1947 and 2003, helping to distinguish the team as a top British professional soccer club. Additionally, Liverpool, whose home uniform color is mainly red, was more successful in home matches than was Oldham Athletic Association Football Club, whose home uniform color is not red. Research has shown that many people associate the color red with power and dominance. Past experiences with red objects such as stop signs can even cause people to respond to the color red with caution and hesitation. These findings, if applicable in the context of athletic competitions, could suggest that in matches played at Liverpool's home stadium, opponents may have \_\_\_\_\_

88

Which choice most logically completes the text?

- A) been unaffected by the red clothing worn by fans in the stadium.
- B) played more aggressively than they would have if their own uniforms were red.
- C) been aware that-Liverpool's uniform color affected their own performance.
- D) been influenced by the color of Liverpool's uniforms.



In November of 1989, Argentina liberalized its stock market, meaning that it began allowing foreign individuals and businesses to invest money in Argentinian companies. This was part of a wave of stock market liberalizations from the mid-1980s through the mid-1990s—Bangladesh in 1991, Nigeria in 1995, and so on. In an analysis of economic data from 1976 to 1993, Ross Levine and Sara Zervos found that liberalization did not lead to enduring increases in investment in companies based countries that liberalized. Peter Blair Henry, however, found that, on average, investment in companies in liberalized countries increased significantly in the three years following liberalization. Taken together, these results suggest that \_\_\_\_\_

89

Which choice most logically completes the text?

- A) economists' expectations about the effect of liberalization on investment were largely correct.
- B) companies typically do not benefit from liberalization until at least three years after liberalization occurs.
- C) investment growth is likely to be more consistent in countries that liberalize than in countries that do not.
- D) liberalization may provide a boost to investment that fades over time.

Data collected by the Mars rover Curiosity at the Gale Crater's Murray Formation are suggestive of hydrological deposition of sediment in the distant past. To characterize the nature of the depositional environment, Frances Rivera-Hernández et al. analyzed the grain size of Murray Formation sediment, finding that although there are intervals of coarse grains, most of the sediment consists of fine grains that show signs of cracking due to episodic desiccation. Rivera-Hernández et al. concluded that the coarse grains are sandstone, which tends to be deposited by flowing water, whereas the fine grains are mudstone, which is slowly deposited by settling out of suspension in low-flow water, leading the researchers to posit that \_\_\_\_\_

90

Which choice most logically completes the text?

- A) although the area of the Murray Formation experienced a prolonged period of dryness that prevented a lake from forming, water flowing from a distant source was present.
- B) a lake existed at the Murray Formation for a prolonged period, though the lake occasionally experienced drying and there were periods in which one or more streams were present.
- C) one or more streams existed at the Murray Formation for an extended period until being replaced by a lake that persisted for only a brief period before permanently drying.
- D) a stream-fed lake was present at the Murray Formation for an extended period, and although the streams experienced occasional drying, the lake did not.



Although the language of the Olmec civilization, which flourished in southern Mexico circa 1500 BCE-400 BCE, hasn't been identified, it likely belonged to the Mixe-Zoquean family, a group of related languages whose present-day representatives are spoken in an area corresponding to ancient Olmec sites. The family can be subdivided into a Zoque branch, which includes Copainalá Zoque, and a Mixe branch, which includes Isthmus Mixe. Many words in the Mayan languages – languages spoken in the region but otherwise unrelated to the Mixe-Zoquean family – are Mixe-Zoquean in origin and were likely borrowed during the period when the Olmecs dominated the entire area. Tellingly, all those words derive from the Zoque branch, suggesting that \_\_\_\_\_

91

Which choice most logically completes the text?

- A) Isthmus Mixe and the other languages of the Mixe branch likely supplanted the languages of the Zoque branch sometime before 1500 BCE.
- B) the Mixe-Zoquean family had already diverged into the Mixe and Zoque branches by the time the Olmecs became the prevailing power in the region.
- C) the language of the Olmec civilization contributed words not only to Mayan languages but also to other languages in the Mixe-Zoquean family.
- D) the language of the Olmec civilization was likely the founding language of the family that includes Mayan languages.

Austria, which, according to international indices, has relatively strong democratic institutions and low intranational income inequality, experienced an inflation rate of 2.08% in 2017, whereas Cameroon, which shows the opposite pattern on such indices, had an inflation rate of only 0.64% that year. Such a comparison may seem consistent with the theoretical critique that by diluting control over the economy, democratic institutions inhibit states' ability to counteract inflationary pressures, but when Raj Desai et al. examined democratic strength, intranational inequality, and inflation in more than 100 countries, they found that democratic strength, if associated with low inequality, restrains inflationary pressures, which would suggest that \_\_\_\_\_

92

Which choice most logically completes the text?

- A) factors other than the Austria's political structure contributed to the country's inflation rate exceeding that of Cameroon in 2017.
- B) the 2017 difference between Austria's inflation rate and Cameroon's inflation rate is primarily but not exclusively attributable to the different levels of intranational income inequality in the two countries.
- C) international indices may have underestimated the strength of the Austria's democratic institutions relative to Cameroon's.
- D) inflation in the Austria in 2017 would have been higher if the Austria's government had less control over the economy.

In the early 19th century, ships in the British Royal Navy were ranked based on military strength. The system considered the number of a ship's cannons and decks. 'First-rate' was the highest ranking, and 'sixth-rate' was the lowest ranking, followed by unranked ships. This ranking determined the size of a ship's crew: first-rate ships had between 850 and 875 crewmen, while lower-ranked ships had fewer. Two of the ships in the British Royal Navy from this period were the Dreadnought (98 cannons and three decks) and the Caledonia (120 cannons and three decks). Of these two, only the Caledonia was ranked a first rate ship. It can therefore be concluded that \_\_\_\_\_

93

Which choice most logically completes the text?

- A) not all ships with three decks were ranked as first-rate ships.
- B) all ships with at least 98 cannons were ranked as first-rate ships.
- C) the Dreadnought had between 850 and 875 crewmen.
- D) the Caledonia needed a crew larger than 875 people in order to operate efficiently.

Research such as the 2010 study of arthropods by Advin Yim-Hol Chan and colleagues has shown that noise from human activity, like traffic on a busy highway, has significant effects on animals, and many governments require studies of the potential noise effects on wildlife before approving highway construction projects. A report on one such study proposed many more actions to mitigate the effects on birds in the area than it did to mitigate the effects on arthropods in the area. Despite the lack of focus on measures specifically for arthropods, conservationists were satisfied that the proposed mitigations were sufficient to protect all the wildlife in the area because \_\_\_\_\_

94

Which choice most logically completes the text?

- A) the measures aimed at protecting birds will likely also minimize most of the effects on arthropods.
- B) the severity of the effects of noise on different species of birds can differ significantly.
- C) the effects of noise on birds have been less extensively documented than the effects on arthropods have.
- D) the measures intended to protect birds can sometimes have adverse effects on arthropods.

Mariana Lopes Barata and Pedro Simoes Coelho collected data from 324 music-streaming service users to identify factors that influence users to opt for paid (premium) versions of music streaming services, like Spotify. They hypothesized that performance expectancy (how much the use of a service is perceived to benefit the consumer) would be positively correlated with users' intentions to adopt premium versions. The researchers asked participants to rate statements such as "Overall, a paid music streaming service is advantageous." They found that, indeed, performance expectancy positively influences the intention to adopt premium streaming service versions, which suggests that \_\_\_\_\_

95

Which choice most logically completes the text?

- A) users' intentions to pay for premium streaming services are probably unaffected by factors other than performance expectancy.
- B) participants who strongly agreed with the statement "Overall, a paid music streaming service is advantageous" were more likely to express loyalty to Spotify than to other streaming services.
- C) the statement "Overall, a paid music streaming service is advantageous" is not a reliable measure of performance expectancy.
- D) it may be advantageous for music streaming companies to try to influence the extent to which potential users perceive the use of the premium version to be beneficial.

The olona shrub is one of many forest plant species native to Oahu (a Hawaiian island) that are at risk of extinction. The survival of most of these species in the wild largely depends on birds eating their fruits and then dropping the seeds in different locations. Although Oahu's native fruit-eating birds have all gone extinct, the common waxbill and other fruit eating bird species have been introduced to the island and are now common there. Studies confirm that these non-native birds are spreading plant seeds on Oahu, suggesting that the birds \_\_\_\_\_

96

Which choice most logically completes the text?

- A) are dropping higher numbers of native forest plant seeds around the island than native bird species did in the past.
- B) show significantly more interest in eating the fruits of native forest plants than in eating the fruits of non-native ones.
- C) may be necessary for the continued survival of vulnerable forest plant species, such as the olona shrub.
- D) may also engage in other activities that affect the ability of olona shrubs and other vulnerable forest plants to continue to spread to new areas.

Many studies have found a positive association between levels of dissolved organic carbon and mercury in bodies of fresh water in North America. But Petri Porvari and Matti Verta did not find this correlation in a study conducted in Finland, leading some scientists to hypothesize that the association is particular to North America. However, several other studies conducted outside North America, such as one by Sara M. Ekström and colleagues in Sweden, showed similar results to the North American studies, while few have produced results similar to those of Porvari and Verta's study, suggesting that \_\_\_\_\_

97

Which choice most logically completes the text?

- A) the hypothesis that the positive association is particular to North America is correct.
- B) levels of dissolved organic carbon and mercury in bodies of fresh water are both much higher in Finland than elsewhere.
- C) there were circumstances unique to Ekström and colleagues' study that impeded accurate measurements of mercury levels.
- D) dissolved organic carbon and mercury levels do typically rise and fall together in fresh water.

Chelsea Wood et al. tracked temperature-driven changes in the abundance of *Anisakis* sp. (a complex life cycle parasite, or CLP, that requires three host species throughout its life cycle), *Gyrodactylus* sp. (a directly transmitted parasite, which requires only one host species), and 83 other parasite taxa found on eight fish species. CLPs are transmitted when an infected host is ingested by an individual of another species, typically shielding CLPs from the external environment, whereas directly transmitted parasites are exposed to external conditions during transmission. However, Wood et al. found that three-host CLP abundance decreased as sea temperatures rose, whereas directly transmitted parasite abundance was largely stable, suggesting that \_\_\_\_\_

98

Which choice most logically completes the text?

- A) any advantages that the transmission strategy used by three-host CLPs may have conferred did not completely offset the negative effects of other temperature-driven factors on CLP abundance.
- B) CLPs primarily transmitted by ingestion were less dependent on host species adversely affected by warming temperatures than were CLPs that use other transmission strategies.
- C) as the number of host species involved in a parasite's transmission increases, the parasite is better protected against rising temperatures.
- D) directly transmitted parasites identified in the study were more likely to use transmission strategies that shield them from warming temperatures than were three-host CLPs.



Prolonged exposure to anthropogenic noise (sounds from human sources like traffic or mining) can affect animals, as Amy Morris-Drake and colleagues found in a 2017 study of dwarf mongooses. Researchers conducted a meta-analysis of studies of how such noise affects animals and found that, for every study, relevant traits or behaviors of the animals were observably different between the exposed group and the otherwise similar but unexposed group. Although, on average, studies of mammals showed larger differences than studies of birds did, for every class of animals examined, there were individual studies showing differences well above the average for mammals. Therefore, the results of the meta-analysis suggest that \_\_\_\_\_

99

Which choice most logically completes the text?

- A) the studies in the meta-analysis that examined mammals were more likely than those that examined birds to specify whether the observed effects were detrimental.
- B) the differences that studies attribute to exposure to anthropogenic noise are likely to be more pronounced for birds than they are for mammals.
- C) the difference found in the study conducted by Amy Morris-Drake and colleagues was likely larger than the average difference for studies of dwarf mongooses included in the meta-analysis.
- D) some studies of birds found larger effects of exposure to anthropogenic noise than some studies of mammals did.

Studies conducted in individual Western societies have demonstrated associations between personality traits and five musical factors (mellowness, unpretentiousness, sophistication, intensity, and contemporariness) underlying individual preferences for styles of Western music. To investigate these associations across cultures, David M. Greenberg et al. collected music-preference assessments for Western genres and self-reported personality traits from participants in fifty-three countries across six continents. The study confirmed that the five-factor framework accurately captured participants' tastes in Western music, and, moreover, the study found similar correlations between patterns of these factors and of personality traits, suggesting that \_\_\_\_\_

100

Which choice most logically completes the text?

- A) the five-factor framework can likely be used to predict preferences for non-Western music styles based on personality traits even if the characteristics of those styles substantially differ from characteristics of Western music styles.
- B) the strength of the relationship between personality traits and musical preferences varies less across cultures than researchers had previously assumed.
- C) people with a relatively high degree of familiarity with Western music styles are likely to express stronger preferences for those styles than people with a relatively low degree of familiarity with those styles are.
- D) across cultural contexts, people who share similar profiles of personality traits tend to prefer listening to similar types of music styles.



The oceanic whitetip shark and the Pacific halibut are ectothermic (cold-blooded) fish, whereas the shortfin mako shark and the yellowfin tuna are regional endotherms—they retain metabolic heat resulting in body temperatures above the ambient water temperature. Modeling the effect of falling ambient temperatures on ectotherms indicated to researchers Haley R. Dolton and colleagues that ectotherms' body temperatures inexorably decrease toward the ambient temperature. Data from wild basking sharks show that even though their body temperature consistently remains 1.0 to 1.5°C above ambient, it also declines as the ambient temperature falls. This suggests that the body temperatures of the\_\_\_\_\_

101

Which choice most logically completes the text?

- A) yellowfin tuna and the shortfin mako shark are likely to be more variable than the body temperature of the basking shark.
- B) Pacific halibut and the basking shark are at least partly determined by the ambient water temperature.
- C) basking shark and the shortfin mako shark remain fixed even as ambient water temperature changes, while the body temperature of the Pacific halibut changes with variations in the ambient water temperature.
- D) basking shark and the yellowfin tuna remain fixed even if the ambient water temperature changes, while the body temperature of the oceanic whitetip shark varies even if the ambient temperature is stable.

Humans have a very strong bias toward right-handedness, with approximately 85-90% having right as their dominant hand. Among studies of nonhuman primates, James Welles's 1976 study of captive chimpanzees and catarrhine monkeys reported more right-handed individuals than left-handed ones, but William C. McGrew and colleagues' 1999 study of wild chimpanzees did not find a tendency toward right-handedness. It's important to note, however, that captive animals spend significantly more time with humans than wild animals do, and therefore \_\_\_\_\_

102

Which choice most logically completes the text?

- A) the apparent difference between the two studies' results may be partly attributable to the 1976 study using a different standard to determine handedness than the 1999 study did.
- B) the right-handedness exhibited by the captive chimpanzees and catarrhine monkeys might be, in part, an effect of extended contact with humans.
- C) the number of individuals in the study of captive chimpanzees and catarrhine monkeys is likely too small to support the claim that the species tends toward right-handedness.
- D) the number of individuals in the study of wild chimpanzees is probably too small to support the claim that no tendency toward

right handedness was found in that population.

Arthurian legends (tales related to the character of King Arthur) derive from many often contradictory sources, such as *Annales Cambriae*, composed around 970, and *Tom a Lincoln* from around 1607. Sir Thomas Malory's 15th-century text *Le Morte d'Arthur* was an attempt to compile these stories into a coherent narrative. Many of Malory's sources derive from Geoffrey of Monmouth's *History of the Kings of Britain*, written in the 1130s. While neither *History* nor any works that predate it mention Arthur's famous Round Table at which his knights assembled, *Le Morte d'Arthur* does, suggesting that\_\_\_\_\_

103

Which choice most logically completes the text?

- A) when a version of an Arthurian legend contradicted the version in *History*, Malory preferred to include Geoffrey of Monmouth's version in *Le Morte d'Arthur*.
- B) *Le Morte d'Arthur* is more historically accurate than *History*, because *Tom a Lincoln* had not been written when Geoffrey of Monmouth was writing his work.
- C) Geoffrey of Monmouth's accounts of Arthurian legends in *History* are more similar overall in content to the accounts in *Tom a Lincoln* than they are to the accounts in *Le Morte d'Arthur*.
- D) Malory encountered the Round Table in a source that Geoffrey of Monmouth was not familiar with when writing his *History*.

Prolonged exposure to anthropogenic noise (sounds from human sources like traffic or mining) can affect animals, as Kirsty Elizabeth McLaughlin and Hansjoerg P. Kunc found in a 2015 study of zebra cichlids. Researchers conducted a meta-analysis of studies of how such noise affects animals and found that, for every study, relevant traits or behaviors of the animals were observably different between the exposed group and the otherwise similar but unexposed group. Although, on average, studies of fish showed larger differences than studies of birds did, for every class of animals examined, there were individual studies showing differences well above the average for fish. Therefore, the results of the meta-analysis suggest that\_\_\_\_\_

104

Which choice most logically completes the text?

- A) the studies in the meta-analysis that examined fish were more likely than those that examined birds to specify whether the observed effects were detrimental.
- B) the difference found in the study conducted by Kirsty Elizabeth McLaughlin and Hansjoerg P. Kunc was likely larger than the average difference for studies of zebra cichlids included in the meta-analysis.
- C) some studies of birds found larger effects of exposure to anthropogenic noise than some studies of fish did.
- D) the differences that studies attribute to exposure to anthropogenic noise are likely

to be more pronounced for birds than they are for fish.

The musical Hadestown was produced off-Broadway in New York in 2016. A revised version of the musical premiered on Broadway in 2019, in a larger production. In a review of the Broadway production, theater critic Jesse Green enthusiastically praised the musical's storytelling. However, Green also explained that he had seen the earlier version of Hadestown in 2016 and had found the storytelling to be very confusing. This suggests that in Green's view, \_\_\_\_\_

105

Which choice most logically completes the text?

- A) Hadestown improved greatly between 2016 and its premiere on Broadway.
- B) the 2016 version of Hadestown had fewer storytelling problems than the 2019 version did.
- C) Hadestown should have had a larger production in 2019 than it actually did.
- D) the 2019 version of Hadestown was less enjoyable than the 2016 version

Biochemists I. Sam Saguy and Eli J. Pinthus studied the mass and heat transfer processes that occur when foods, such as the Indian snacks makka poha and shankarpali, are fried in oil. During frying, water in the crust evaporates, leaving voids that oil can fill, thereby increasing the food's fat content. As the process continues, water from the food's center moves to the crust as long as the crust remains permeable. Therefore, the less moisture a food loses during frying, \_\_\_\_\_

106

Which choice most logically completes the text?

- A) the less the fat content is increased through frying.
- B) the higher the temperature must be to fry the food.
- C) the slower the crust will lose its permeability.
- D) the crispier the crust will be when frying is completed

To address the susceptibility of materials used in components of high-performance machinery, such as aircraft engines, to creep (deformation that is induced by persistent mechanical stress and that often occurs at elevated temperatures), materials researchers have developed silicon carbide (SiC) fibers for producing aerospace composites. Testing the thermomechanical properties of several commercially available SiC fibers, Ramakrishna T. Bhatt et al. found that in comparison with two polymer-derived SiC fibers, a nitrogen-treated SiC exhibited a lower minimum creep rate, a measure of the rate at which a stress-exposed material deforms at a constant temperature and uniaxial load. The finding suggests that \_\_\_\_\_

107

Which choice most logically completes the text?

- A) unlike the two polymer-derived SiC fibers, the nitrogen-treated SiC fiber can substantially inhibit creep, provided that temperatures and loads are consistent.
- B) aerospace composites containing the nitrogen-treated SiC fiber may have the ability to withstand mechanical stress for a longer period of time than can aerospace composites containing either of the two polymer-derived SiC fibers.
- C) composites based on the two polymer-derived SiC fibers have chemical properties that may improve the mechanical and thermal stability of aerospace equipment to a greater extent than do composites based on the nitrogen-treated SiC fiber.
- D) the two polymer-derived SiC fibers likely hold similar potential for reducing the creep resistance of materials exposed to stress and elevated temperatures, thus prolonging the life span of aerospace machinery.

Chemists M. H. Gamble, P. Rice, and J. D. Selman studied the mass and heat transfer processes that occur when foods, such as the Indian snacks malapua and puri bhaji, are oil fried. During frying, water in the crust evaporates, leaving voids that oil (a pure fat) can fill. As the process continues, water from the food's center moves to the crust as long as the crust remains permeable. Therefore, it is likely that, all other things being equal, sections of a food that lose less moisture during the frying process \_\_\_\_\_

108

Which choice most logically completes the text?

- A) will develop a thicker crust during the frying process than sections that lose more moisture.
- B) will have a lower fat content after frying is completed than sections that lose more moisture.
- C) will have a crust that loses its permeability less quickly during the frying process than sections that lose more moisture.
- D) will have a higher temperature after frying is completed than sections that lose more moisture.

Ants and aphids are known to be mutualistic: ants feed on the honeydew produced by aphids, while aphids benefit from ants' protection against predators. If aphid colonies—which generally require relatively stable surfaces, such as trees or other woody plants, to thrive—are too small to produce significant volumes of honeydew, however, ants will prey on aphids. Researcher Tae-Sung Kwon examined ant and aphid abundance in two habitats in South Korea, one on the mainland and one on Jeju Island. Though the habitats differed in some important respects, both were predominantly grassland, which could help explain why Kwon observed \_\_\_\_\_

109

Which choice most logically completes the text?

- A) different ant and aphid species on the mainland compared to those on the island.
- B) a positive correlation between aphid diversity and abundance on both the mainland and the island.
- C) a negative correlation between ant and aphid abundance on both the mainland and the island.
- D) diminished ant and aphid abundance on the mainland compared to that on the island.

Omar Asensio and colleagues used machine-learning algorithms to examine consumer reviews of 12,720 electric vehicle (EV) charging stations in the US. They found that privately owned or managed charging stations at or near restaurants and convenience stores had relatively low proportions of negative reviews, while stations at or near car rental companies had significantly higher proportions of negative reviews. Additionally, stations at or near car rental companies tend to require consumers to pay full price to use them, while stations elsewhere often offer subsidized or even complimentary charging. Assuming that stations at different sites provide roughly equivalent levels of service, these results suggest that \_\_\_\_\_

110

Which choice most logically completes the text?

- A) EV owners are usually unaware of the fees for using charging stations.
- B) drivers are more likely to visit areas with many restaurants and convenience stores than they are to visit areas with fewer such businesses.
- C) charging stations located near car rental companies are more frequently visited than charging stations located near restaurants and convenience stores.
- D) users who are offered a discount have lower expectations of the quality of charging stations than users who are not offered a discount do.



Many contemporary Indigenous painters practice a specifically Indigenous mode of abstraction; for example, Starr Hardridge often assembles compositions out of motifs common in the traditional beadwork and graphic art of his tribe. In contrast, the prominent Indigenous practitioners of abstract painting during the mid-twentieth century, such as the Southern Cheyenne artist Dick West, typically aligned their compositional strategies with Abstract Expressionism—a school of painting dominated by European American artists—instead of with traditionally nonrepresentational forms of Indigenous art. Thus, in the case of West’s generation, the identification of an abstract painting as Indigenous art tends to

111

Which choice most logically completes the text?

- A) deny the extent to which cultural identity influences an artist’s work.
- B) depend not on stylistic details but instead on an awareness of the artist’s identity.
- C) obscure the Indigenous origins of certain motifs associated with Abstract Expressionism.
- D) place a greater emphasis on the artist’s biography than on the aesthetic merit of the painting.

Whereas Joan Lockard’s 1984 study of captive gorillas reported more right-handedness than left-handedness, Jane Goodall’s 1963 study of wild chimpanzees did not. According to a meta-analysis of studies of nonhuman primates, captive populations are more likely to be described as right-handed than wild populations are. Statistical analysis indicates a handedness study would need a minimum of 176 individuals to show a representative result; however, the study by Lockard included a total population of 8, and the study by Goodall included a total population of 8. This suggests that

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Which choice most logically completes the text?

- A) the study by Lockard reliably represents handedness in captive primates but not in wild primates.
- B) Goodall likely underestimated the prevalence of right-handedness among the wild chimpanzees in the study.
- C) neither the study by Lockard nor the study by Goodall provides sufficient evidence to make a meaningful comparison about handedness in primates.
- D) the study by Lockard reliably represents handedness in captive primates, but the study by Goodall likely does not reliably represent handedness in wild primates.

Archaeologists have traditionally thought that many cities in ancient Mesopotamia, including Uruk and Ur, lay on the extremely dry banks of the Tigris and Euphrates rivers. Jennifer Pournelle and her team found evidence that the land these ancient cities sat on consisted of marshy wetlands. This finding suggests that \_\_\_\_\_

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Which choice most logically completes the text?

- A) Uruk was founded at an earlier time than Ur was.
- B) far fewer fish species are found in rivers today than in ancient times.
- C) the land many ancient Mesopotamian cities sat on wasn't as dry as previously believed.
- D) people in Ur engaged in trade with people from many parts of ancient Mesopotamia.

Like many other fruit-eating birds on the Hawaiian island of Oahu, the northern cardinal helps forest plants spread by carrying seeds from the plants' fruits to different locations (a process called seed dispersal). Ecologists have found that fruit-eating birds disperse some seeds from plants native to Oahu that are at risk of extinction in the wild, such as the kawau tree, but disperse many more seeds from soapbush shrubs, night-blooming jessamine shrubs, and other non-native plants that are already widespread. Believing that the great availability of fruit from non-native plants might be making birds less likely to eat fruit from native plants, the ecologists conclude that \_\_\_\_\_

114

Which choice most logically completes the text?

- A) the kawau tree, the soapbush shrub, and the night-blooming jessamine shrub are the plant species on Oahu most in danger of going extinct in the wild.
- B) vulnerable native plants would probably benefit if the populations of non-native plants, such as the soapbush shrub and night-blooming jessamine shrub, were reduced.
- C) the northern cardinal and other fruit-eating birds on Oahu would likely favor fruits from native forest plants if native and non-native plants were equally widespread.
- D) roughly equal numbers of seeds from native and non-native plants would be dispersed if the populations of fruit-eating birds, such as the northern cardinal, increased.

Northeastern Kansas's Jefferson County is among the most rural counties in the United States: the US Census Bureau classified it as 98.8% rural in 2010. Researchers studying populations of counties like Jefferson often struggle to recruit and retain participants. Melissa Valerio and colleagues tested whether a method called snowball sampling could improve recruitment and retention. Working in two rural counties, the researchers identified a small number of people who had the characteristics desired for a proposed study and asked them to recruit additional participants from their social networks. Valerio and colleagues found that participants recruited via snowball sampling showed a much higher retention rate than did people recruited by strangers, suggesting that \_\_\_\_\_

115

Which choice most logically completes the text?

- A) being recruited to participate in a study by someone with whom one is socially connected may impart a feeling of obligation to persist with participation in the study.
- B) people with relatively small social networks are inherently less likely to be recruited to participate in a study via snowball sampling than are people with relatively large social networks.
- C) snowball sampling is more likely to improve retention rates among rural participants than among nonrural participants.
- D) social networks can become large enough that two people can share a network but nevertheless regard each other as strangers.

In 1900, in collaboration with Cherokee cultural historian Will West Long, white ethnographer James Mooney assembled a collection of traditional oral stories related to him by Cherokee elders. Based on their content, Mooney categorized them into various genres: historical traditions, tales of animals, and so on. Noting that some stories feature detailed descriptions of geographic locations in the Cherokee homeland, Mooney demarcated those as a genre he referred to as "wonder stories." While Long and Mooney's collaboration proved valuable as an act of cultural preservation, it is important to bear in mind that Cherokee people are not known to have applied genre divisions to their stories before Mooney's work. There is, therefore, \_\_\_\_\_

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Which choice most logically completes the text?

- A) some reason to think that other traditional stories that the Cherokee elders did not share with Mooney would not have met Mooney's criterion for classifying them as "wonder stories" despite including geographical information.
- B) no evidence for Mooney's conclusion that the Cherokee elders who recounted the stories believed that the geographic details included in some stories were accurate descriptions of the Cherokee homeland.
- C) considerable uncertainty about whether Mooney's classifications of the stories shared by the Cherokee elders were influenced by Long's views about which features of a story are most indicative of the genre to which the story belongs.
- D) no reason to believe that the Cherokee elders who provided the stories would have agreed with Mooney that the inclusion of geographical specificity in some stories marked those stories as different in kind from other stories.

Many studies have found a positive association between levels of dissolved organic carbon and mercury in bodies of fresh water in North America. But Petri Porvari and Matti Verta did not find this correlation in a study conducted in Finland, leading some scientists to hypothesize that the association is particular to North America. However, several other studies conducted outside North America, such as one by Yao Luo and colleagues in China, showed similar results to the North American studies, while few have produced results similar to those of Porvari and Verta's study, suggesting that \_\_\_\_\_

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Which choice most logically completes the text?

- A) levels of dissolved organic carbon and mercury in bodies of fresh water are both much higher in Finland than elsewhere.
- B) the hypothesis that the positive association is particular to North America is correct.
- C) dissolved organic carbon and mercury levels do typically rise and fall together in fresh water.
- D) there were circumstances unique to Luo and colleagues study that impeded accurate measurements of mercury levels.

Chelsea Wood et al. tracked temperature driven changes in the abundance of *Opechona* sp. (a complex life cycle parasite, or CLP, that requires three host species throughout its life cycle), *Anthocotyle merlucci* (a directly transmitted parasite, which requires only one host species), and 83 other parasite taxa found on eight fish species. CLPs are transmitted when an infected host is ingested by an individual of another species, typically shielding CLPs from the external environment, whereas directly transmitted parasites are exposed to external conditions during transmission. However, Wood et al. found that three-host CLP abundance decreased as sea temperatures rose, whereas directly transmitted parasite abundance was largely stable, suggesting that \_\_\_\_\_

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Which choice most logically completes the text?

- A) as the number of host species involved in a parasite's transmission increases, the parasite is better protected against rising temperatures.
- B) any advantages that the transmission strategy used by three host CLPs may have conferred did not completely offset the negative effects of other temperature driven factors on CLP abundance.
- C) CLPs primarily transmitted by ingestion were less dependent on host species adversely affected by warming temperatures than were CLPs that use other transmission strategies.
- D) directly transmitted parasites identified in the study were more likely to use transmission strategies that shield them from warming temperatures than were three-host CLPs.

Prolonged exposure to anthropogenic noise (sounds from human sources like traffic or mining) can affect animals, as Lidia Eva Wysocki and colleagues found in a 2006 study of common carp. Researchers conducted a meta-analysis of studies of how such noise affects animals and found that, for every study, relevant traits or behaviors of the animals were observably different between the exposed group and the otherwise similar but unexposed group. Although, on average, studies of fish showed larger differences than studies of birds did, for every class of animals examined, there were individual studies showing differences well above the average for fish. Therefore, the results of the meta-analysis suggest that \_\_\_\_\_

119

Which choice most logically completes the text?

- A) the studies in the meta-analysis that examined fish were more likely than those that examined birds to specify whether the observed effects were detrimental.
- B) the differences that studies attribute to exposure to anthropogenic noise are likely to be more pronounced for birds than they are for fish.
- C) the difference found in the study conducted by Lidia Eva Wysocki and colleagues was likely larger than the average difference for studies of common carp included in the meta-analysis.
- D) some studies of birds found larger effects of exposure to anthropogenic noise than some studies of fish did.



Ships in the British Royal Navy during the Napoleonic Wars (1803-1815) were ranked based on military strength. The system considered the number of a ship's cannons and decks.

"First-rate" was the highest ranking, and "sixth-rate" was the lowest ranking, followed by unranked ships. The size of a ship's crew was based on this ranking: first-rate ships had between 850 and 875 crewmen, while lower-ranked ships had fewer. Three of the ships in the British Royal Navy were the Waterloo (80 cannons and two decks), the Temeraire (98 cannons and three decks), and the Caledonia (120 cannons and three decks). Among these, only the Caledonia was a first-rate ship. It can therefore be concluded that \_\_\_\_\_

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Which choice most logically completes the text?

- A) the Temeraire had between 850 and 875 crewmen, but the Waterloo and the Caledonia each had fewer than 850 crewmen.
- B) the Waterloo had a smaller crew than the Caledonia.
- C) all ships with three decks were ranked as first-rate ships.
- D) the Caledonia needed a crew larger than 875 people in order to operate efficiently.

In a 2018 study, Deepak Jaiswal and Rishi Kant found that consumers' knowledge of environmental issues had no effect on the likelihood that the consumers would purchase environmentally friendly products. Since this study was based on fewer than 400 young adults in India, however, doubts have been raised about how reliable and representative the findings are. To better understand the issue, Wencan Zhuang and colleagues analyzed the results of 54 studies of eco-friendly consumer behavior, such as a 2018 study from Indonesia that included 916 participants and a 2018 study from India with 202 participants. Taking all 54 studies together, Zhuang and colleagues found a significant positive effect of environmental knowledge on eco-friendly purchasing decisions, suggesting that \_\_\_\_\_

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Which choice most logically completes the text?

- A) a sample size of 202 may be sufficient to make reliable conclusions about the relationship between knowledge of environmental issues and purchasing decisions.
- B) concerns about the broad applicability of Jaiswal and Kant's conclusion were justified.
- C) the number of participants in Jaiswal and Kant's study was far below the number of participants in most studies of purchasing decisions.
- D) Jaiswal and Kant's methodology was more precise than the methodology used in the 2018 study from Indonesia.

J.G. Ballard's 1984 novel *Empire of the Sun* is regularly described as autobiographical. That characterization is apt—there are many parallels between the experiences of the novel's protagonist, Jim Graham, and those of Ballard—but it should not be taken to mean that every person or event depicted in *Empire of the Sun* has a real-life analogue. Much of the novel is pure invention, and readers who neglect this fact and instead focus excessively on correspondences between the novel and Ballard's life can thus\_\_\_\_\_

122

Which choice most logically completes the text?

- A) misrepresent *Empire of the Sun* as being more widely read than it actually is.
- B) overemphasize the extent to which Ballard took inspiration from earlier writers.
- C) fail to appreciate how much creativity Ballard shows in the book.
- D) refuse to acknowledge that Ballard drew on real-world material when writing *Empire of the Sun*.

The ratio of methane to other atmospheric constituents—represented by a measure called the methane mole fraction—influences a variety of meteorological phenomena, notably precipitation and humidity. For Titan, Saturn's largest moon, the observational data that exist are too sparse and discrepant to fully constrain the range of the methane mole fraction at various atmospheric levels. Juan Lora and colleagues point out that outputs of the IPSL atmospheric model of Titan, which track closely to observations in some respects, reflect how the model's developers responded to this challenge: by prescribing a uniform methane mole fraction for the lowest level of the atmosphere. It is therefore important to note that\_\_\_\_\_

123

Which choice most logically completes the text?

- A) further observations of Titan may clarify the moon's methane mole fraction sufficiently for the model to employ a single value rather than a range.
- B) some disagreements between the model's simulations of Titan's precipitation and humidity and the moon's actual precipitation and humidity are to be expected.
- C) inconsistencies across the model's simulations of Titan's precipitation and humidity could be attributable to variations in the moon's methane mole fraction.
- D) even though the model's outputs sometimes agree with observational data, Titan's real methane mole fraction is likely higher than the methane mole fraction used in the model.

Many studies have found a positive association between levels of dissolved organic carbon and mercury in bodies of fresh water undisturbed by human activity. But Stéphane Guédron, Delphine Tisserand, and colleagues did not find this correlation in an examination of freshwater bodies impacted by wastewater, leading some scientists to hypothesize that the association could be particular to undisturbed waters. However, Ida Tjerngren and colleagues carried out a study on freshwater bodies disturbed by urban development that showed similar results to the studies on undisturbed waters, suggesting that\_\_\_\_\_

124

Which choice most logically completes the text?

- A) levels of dissolved organic carbon and mercury are both much higher in bodies of fresh water impacted by wastewater than they are in bodies of fresh water disturbed by urban development.
- B) Guédron, Tisserand, and colleagues' study used different methods to measure the concentration of mercury in fresh water than Tjerngren and colleagues' study did.
- C) the effects of wastewater on the association between levels of dissolved organic carbon and mercury should not be taken as indicative of the effects of every type of human disturbance.
- D) disturbances linked to wastewater affect significantly more bodies of fresh water than disturbances linked to urban development do.

Like many other genera of wild bees, bumblebees have in recent decades experienced population collapse caused by, among other factors, habitat destruction and climate variation. Bumblebees are also one of the most researched bee genera, second only to honeybees. As a result, ecologists have gained much of their insight about wild-bee declines from bumblebees. In a 2021 paper, zoologist Guillaume Ghisbain notes that bumblebees are among the relatively few wild-bee genera that display social behaviors and dietary generalism (ability to obtain nectar and pollen from a diversity of plant species), two traits that are associated with increased resilience to some specific environmental changes. Ghisbain therefore contends that\_\_\_\_\_

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Which choice most logically completes the text?

- A) because bumblebees and other bees with generalist diets are less negatively affected by environmental stress than bees with specialized diets are, they are less likely to experience major population changes in the future than bees with specialized diets are.
- B) although bumblebees have been more extensively studied than most wild bees, researchers should not use bumblebees to draw conclusions about the decline of other wild bees, even ones with feeding patterns and levels of sociability that are similar to those of bumblebees.
- C) although bumblebees and many other wild bees have experienced similar population declines in the past, compared with other wild bees, bumblebees are likely at greater risk of being harmed by climate variation than by habitat destruction.
- D) because the responses of bumblebees and other wild bees to environmental treats are not always comparable, researchers need to exercise caution when extrapolating information about wild bee population declines from bumblebees.

Ocean Vuong's 2019 novel *On Earth We're Briefly Gorgeous* is regularly described as autobiographical. That characterization is apt—there are many parallels between the experiences of the novel's character of Little Dog and those of Vuong—but it should not be taken to mean that all the people and events depicted in *On Earth We're Briefly Gorgeous* are based on actual people and events. The novel is largely pure invention, and readers who neglect this fact and instead try to identify more and more real-life analogues thus risk\_\_\_\_\_

126

Which choice most logically completes the text?

- A) positing unsupportable connections between *On Earth We're Briefly Gorgeous* and Vuong's life.
- B) minimizing the fact that Vuong drew on real-world material when writing *On Earth We're Briefly Gorgeous*.
- C) misrepresenting *On Earth We're Briefly Gorgeous* as being more widely read than it actually is.
- D) overemphasizing the extent to which Vuong took inspiration from earlier writers.

Scientists looking for signs of ancient life in Asia have found many examples of fossilized hominins, including in a geological formation at the Minatogawa Limestone Quarry. However, to find even older specimens like early multicellular organisms from the Ediacaran period, scientists must look elsewhere, such as in the Ediacaran geological formation at Mistaken Point in North America, because\_\_\_\_\_

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Which choice most logically completes the text?

- A) North America has sites with hominins but not sites with early multicellular organisms.
- B) early multicellular organisms are found at more sites around the world than hominins.
- C) that formation is from an earlier time than the formation with the hominins.
- D) the hominins at Mistaken Point are better preserved than the hominins at the Minatogawa Limestone Quarry.

A soil's microbial community (the microbial taxa present in their relative abundances) is known to affect plants' nutrient acquisition. Corrine Walsh and colleagues hypothesized that microbial communities could also affect plants' flavor chemistry, including volatiles and secondary metabolites like glucosinolates. Recognizing that soil moisture varies by location in the wild and could influence plants' chemistry, Walsh et al. introduced distinct microbial communities to individually potted mustard plants (*Brassica juncea*) growing in a controlled environment, then measured the plants' glucosinolates, like 3-methylthiopropyl and allyl (the most prominent), that create the spicy and bitter flavors in mustard. This method thus enabled the researchers to\_\_\_\_\_

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Which choice most logically completes the text?

- A) distinguish variations in glucosinolates due to differences in microbial communities from those that in a natural setting may be due to differences in soil moisture.
- B) disentangle the influence of microbial communities on soil moisture from their influence on glucosinolate content in the plants.
- C) differences in plants' flavor chemistry result from differences in the level of glucosinolates regardless of the soil moisture.
- D) re-create the conditions of studies conducted in the wild that found links between soil microbial communities and levels of 3-methylthiopropyl in mustard plants.



In September of 1989, Indonesia liberalized its stock market, meaning that it began allowing foreign individuals and businesses to invest money in Indonesian companies. This was part of a wave of stock market liberalizations around the world—Jamaica in 1991, Nigeria in 1995, and so on. The standard view among economists at the time was that liberalization would make it easier for companies to raise money from investors. Economist Peter Blair Henry examined the economies of 11 countries that were part of the liberalization wave and found that, on average, companies based in those countries received significant increases in investment in the three years following liberalization, suggesting that\_\_\_\_\_

129

Which choice most logically completes the text?

- A) companies in Jamaica experienced a greater increase in investment following liberalization than did companies in Indonesia.
- B) companies in the countries Henry studied did not benefit from liberalization until at least three years after liberalization occurred.
- C) economists who held the standard view of liberalization failed to anticipate some serious negative effects of liberalization.
- D) economists' expectations about the effect of liberalization on investment were largely correct for the countries Henry studied.

Researchers who study olfaction—the sense of smell—define valence as a person's perception of how pleasant an odor is. Conventional wisdom holds that valence is culturally mediated. A team of scientists led by Artin Arshamian evaluated this view by testing how people from ten different places—including the Semelai people from a small community in the Malay Peninsula and the Chachi people from a small community in Ecuador—ranked ten odors from most pleasant to least pleasant. In general, respondents ranked scents similarly regardless of where they lived, overwhelmingly choosing the odorant eugenol as more pleasant than caprylic acid. These results show that \_\_\_\_\_

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Which choice most logically completes the text?

- A) valence may affect cultural traditions more strongly than researchers had previously predicted.
- B) the respondents agreed more often on unpleasant odors than they did on pleasant ones.
- C) the conventional belief that odor pleasantness can be objectively measured is questionable.
- D) the standard view of culture's role in olfactory valence may be unsound.

Rudolf Cesaretti et al, conducted an analysis of historical urban scaling trends circa 1300CE in Western Europe, focusing on agglomeration patterns within medieval settlements. They examined settlements in urban systems across Western Europe, with groupings based on regionally distinct political structures, economic focuses, and spatial constraints — including the aristocratically controlled city-state of Parma in northern Italy, merchant controlled city-states like Goerlitz in Germany, the wool-trading centers of Lincoln and Canterbury in England, and prime trade fair towns like Troyes in France. A prevalent trend emerged: as a city's total settled area increased, so did population density in its core urban areas. This finding implies that

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Which choice most logically completes the text?

- A) even when they were substantial, known inter-regional differences in characteristics of urban systems had a limited effect on agglomeration patterns in medieval Western European settlements.
- B) the observed relationship is heavily influenced by urban characteristics that were particular to medieval Western Europe, making it unlikely that a similarly strong relationship between area and population density would be found for medieval settlements in other regions.
- C) the effects of variations in political and economic interests on agglomeration patterns were less evident in comparisons between medieval settlements within a region than in comparisons between groups of settlements across regions of Western Europe.
- D) despite regional differences in their political and economic systems, medieval Western European settlements shared common spatial constraints that encouraged high population density in core urban areas.

The compositional strategy of *Untitled*, a 1955 work by Cherokee artist Edna Massey, is far more closely aligned with Abstract Expressionism — a mid-twentieth-century school of painting dominated by European American artists — than with traditionally abstract forms of indigenous art, such as beadwork. Few viewers would infer from the stylistic attributes of *Untitled* that Massey was Indigenous. In this respect, the work typifies Indigenous painters' forays into abstraction during the period. In contrast, the contemporary Caddo artist Chad "Nishi" Earles assembles abstract compositions out of motifs common in the traditional ceramics and graphic art of his tribe. Thus in Earles's work, abstraction has the effect of \_\_\_\_\_

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Which choice most logically completes the text?

- A) rendering Indigenous identity more legible than it is in *Untitled*.
- B) asserting the indigenous origins of motifs associated with Abstract Expressionism; the density would be found for medieval settlements in other regions.
- C) challenging the dominance of European American artists within Abstract Expressionism.
- D) reconciling Indigenous and European American influences that coexist uneasily in *Untitled*.

Archaeologists assume that when a major demographic shift interrupts the intergenerational transmission of expertise, this manifests in the archaeological record in the form of simultaneous reductions in the complexity of multiple specialized crafting traditions. Inventories of excavation sites from the Alazani River valley and nearby areas dating from 4000 to 500 BCE show a steep drop occurring around 1500 BCE in the number of objects featuring gold filigree, an advanced technique in which fine threads of gold are arranged in intricate patterns. The inventories also indicate that advanced copper-alloy metallurgy and most other specialized crafting traditions continued to flourish during this period, a finding suggesting that \_\_\_\_\_

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Which choice most logically completes the text?

- A) disruptions around 1500 BCE in the utilization of gold filigree likely occurred in the context of demographic continuity among peoples of the Alazani River valley.
- B) a sudden simultaneous decline in artifacts from multiple specialized crafting traditions is less likely than previously assumed to indicate that the transmission of expertise was disrupted by demographic changes.
- C) peoples in the Alazani River valley continued to uphold multiple specialized crafting traditions, including goldsmithing and copper-alloy metallurgy, even as demographic shifts occurred.
- D) cross-cultural transmission between distinct demographic groups in the Alazani River valley likely explains the expansion of copper-alloy metallurgy beginning around 1500 BCE.

Right-handedness is overwhelmingly prevalent in humans. Among studies of laterality in nonhuman primates, Dulce D. Shafer's 1988 study of captive gorillas reported no tendency toward right-handedness, while S.G. Lutz-Maki and P.F. MacNeilage's 1991 study of captive chimpanzees did. However, the latter study included only 14 individuals, and a meta-analysis of primate-laterality studies demonstrated that a minimum sample size of 176 individuals is required to be confident that a finding of population-level handedness is not mere statistical noise. The claim of right-handedness in the 1991 study should therefore be treated skeptically given that \_\_\_\_\_

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Which choice most logically completes the text?

- A) right-handedness does not occur frequently enough among chimpanzees to reliably appear in a sample of only 14 individuals.
- B) the apparent difference between the two studies' results may be partly attributable to the 1988 study using a different standard to determine handedness than the 1991 study did.
- C) the study that did not find right-handedness in gorillas was also based on an insufficient population size.
- D) the sample size on which the claim is based is far below the threshold identified in the meta-analysis.

Before the 1858 publication of *On the Origin of Species*, Charles Darwin developed his theory of natural selection in five notebooks. In them he first expressed one of natural selection's principles: that species produce more offspring than available resources can sustain. He also listed books he read, such as Charles Lyell's *Elements of Geology*. A fall 1838 entry in one of Darwin's notebooks mentions species struggle for survival in a world of insufficient resources "as inference from Malthus," referring to a 1798 essay by economist Thomas Malthus asserting that population growth will outpace agricultural production. A later notebook, begun in October 1838, mentions "the grand crush of population." This suggests that \_\_\_\_\_

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Which choice most logically completes the text?

- A) though some of Darwin's notebook entries relating to his theory of natural selection date from 1838, others must have been written as late as 1858.
- B) in early fall 1838, Darwin realized that Malthus's ideas regarding human populations derived from observations of animal behavior in nature.
- C) sometime in or before October 1838, Darwin determined that a postulate rooted in economics might also be applicable to biology.
- D) a key concept in Darwin's theory of natural selection had been previously articulated in the same terms by economists sometime between 1798 and 1838.



The advent of online streaming has led many music listeners to drift away from ownership of music (through downloads or through physical media such as compact discs) in favor of the streaming services YouTube Music and AccuRadio, among others. Luis Aguiar studied the effect of the 2011 implementation of a restriction on the free version of the French streaming service Deezer: its unlimited usage was reduced to five hours a month, while the paid premium version's usage remained unlimited. Aguiar found that listeners who used the free service visited licensed online music sellers (e.g., the iTunes store) and sites that make unlicensed music available to download about 2% less after the restriction was implemented, suggesting that \_\_\_\_\_

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Which choice most logically completes the text?

- A) the implementation of the restriction reduced the overall number of users of the streaming service.
- B) restrictions on the amount of music that can be streamed may actually suppress users' interest in owning music.
- C) most users of the free streaming service were probably encouraged by the restriction to move to a paid version of the service with unlimited, ad-free listening.
- D) consumers are unlikely to purchase physical copies of music that is readily available through streaming.

Exclusively inhabiting tropical countries such as Senegal, wild chimpanzees lack adaptations to seasonal variations in ultraviolet B (UVB) irradiance from sunlight; since UVB exposure enables vertebrates to synthesize vitamin D, Sophie Moittié and colleagues studied zoo chimpanzees in Italy and other mid-latitude countries to see how vitamin D levels are affected by the seasonal variations in UVB irradiance that occur in those locations. They found that chimpanzees' vitamin D levels were significantly lower in winter than in summer and appeared unaffected by oral supplementation of vitamin D administered by zookeepers. Moittié and colleagues point out, however, that supplementation was rare, highly varied, and poorly tracked, and therefore they caution against concluding that \_\_\_\_\_

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Which choice most logically completes the text?

- A) vitamin D levels among zoo chimpanzees in Italy and other mid-latitude countries likely show different seasonal patterns than do vitamin D levels among wild chimpanzees in Senegal and other tropical countries.
- B) the lack of an observed effect of supplemental vitamin D on zoo chimpanzees in Italy and other mid-latitude countries may reflect shortcomings in the data rather than actual ineffectiveness.
- C) providing zoo chimpanzees in Italy and other mid-latitude countries with supplemental vitamin D has no promise as a strategy for offsetting winter reductions in their vitamin D levels.
- D) winter reductions in UVB irradiance in Italy and other mid-latitude countries can contribute to variations in zoo chimpanzees' vitamin D levels.



In an analysis of medieval urbanization in Pisa, Greifswald, and other European settlements, researchers drew on modern urban scaling theory, which posits that population density in core urban areas increases as a city grows larger. Hypothesizing that this typical relationship would have differed in medieval settlements because of the constraining influence of strong hierarchical social structures (which are much less pronounced in modern cities) on social networking and economic integration—drivers of urban agglomeration—the team created a model that accounted for the presence of restrictive institutions. They found that the typically expected density-size relationship held for each of the 173 medieval settlements whose growth they analyzed, suggesting that \_\_\_\_\_

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Which choice most logically completes the text?

- A) although there tends to be a positive relationship between population size and development of core urban areas for both medieval settlements and modern cities, social institutions likely limited the rate at which population density increased in medieval settlements.
- B) despite a change in the role of social structures over time, there is likely a notable consistency between medieval settlements and modern cities in underlying elements of the social and economic interactions among individuals that shape the development of core urban areas.
- C) the social and economic dynamics that affect urban agglomeration were likely much different in medieval settlements than in modern cities, despite the similarity across time in population density patterns.
- D) the constraining influence of hierarchical medieval institutions likely had a significant effect on individuals in some social groupings but little to no effect on members of other social groupings.

Eastern Ohio's Monroe County is among the most rural counties in the United States: the US Census Bureau classified it as 97.7% rural in 2010. Researchers studying populations of counties like Monroe often struggle to recruit and retain participants. Melissa Valerio and colleagues tested whether a method called snowball sampling could improve recruitment and retention. Working in two rural counties, the researchers identified a small number of people who had the characteristics desired for a proposed study and asked them to recruit additional participants from their social networks. Valerio and colleagues found that participants recruited via snowball sampling showed a much higher retention rate than did people recruited by strangers, suggesting that

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Which choice most logically completes the text?

- A) snowball sampling is more likely to improve retention rates among rural participants than among nonrural participants.
- B) being recruited to participate in a study by someone with whom one is socially connected may impart a feeling of obligation to persist with participation in the study.
- C) social networks can become large enough that two people can share a network but nevertheless regard each other as strangers.
- D) people with relatively small social networks are inherently less likely to be recruited to participate in a study via snowball sampling than are people with relatively large social networks.

The glossy ibis and the little blue heron are long-legged birds that live in wetlands, like the Everglades in Florida. Laura D'Acunto and colleagues wanted to know how these birds choose an area in which to live. They looked at features of the birds' habitats, such as the geographic location of the area and how deep the water is during breeding season. They found that although only glossy ibises prefer areas with deep water during breeding season, both glossy ibises and little blue herons prefer areas that have standing water for more than 60 days per year. The researchers therefore concluded that neither species is very drawn to areas where

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Which choice most logically completes the text?

- A) there is relatively deep water during the breeding season.
- B) there are any features that attract the other species.
- C) species with breeding seasons longer than 60 days are likely to be present.
- D) there is standing water for far fewer than 60 days per year.

In 2008, the US state of Hawaii enacted rate stability regulations (RSRs), constraining insurance companies' latitude to raise premiums (the periodic fees policyholders pay to maintain insurance policies) after policies are in effect. RSRs are effective at protecting existing policyholders from price volatility, but Naoki Aizawa and Ami Ko note that since dynamic pricing of premiums is an important risk-mitigation tool for insurers, RSRs may lead some insurers to scale back or entirely cease selling new policies in the affected market, thereby reducing the competitive pressure that typically restrains premium prices for new policies. Thus, Hawaii's RSRs may \_\_\_\_\_

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Which choice most logically completes the text?

- A) benefit policyholders at the expense of nonpolicyholders seeking to acquire policies.
- B) reduce premium price volatility once policies are in effect but increase risks for policyholders.
- C) prevent large increases in premium prices for new policies despite leading to fewer insurers offering such policies in the affected market.
- D) be more advantageous for insurers than they are for either current or prospective policyholders.

Saeed M.Z.A. Tarabieh conducted a study of consumer attitudes toward Jordanian food and beverage companies and found that for consumers who value environmental conservation, their likelihood of purchasing a product decreased when their perception of the product's risk of causing environmental harm increased. Subsequently, other researchers conducted a study of various demographic groups in Vietnam, investigating participants' intentions to purchase a new skin-care product, and found that, on average, parents of small children had the lowest perception among all the demographic groups in the study of the environmental risks of the skin-care product. Assuming that the results of Tarabieh's study are broadly applicable, this finding suggests that \_\_\_\_\_

142

Which choice most logically completes the text?

- A) parents of small children likely prioritize other factors over a product's environmental sustainability when making purchasing decisions.
- B) there is not a meaningful difference in the average likelihood of purchasing environmentally friendly products among the demographic groups included in the study.
- C) the new skin-care product is less appealing to parents of small children than other similar products on the market are.
- D) parents of small children might be more likely than participants in the other demographic groups to purchase the skin-care product.

Although Grant Tavinor concludes that computer games are art by virtue of their forming a subcategory of fiction, and Berys Gaut similarly places them within the realm of cinema, neither approach adequately captures a central aspect of playing these games: when the player no longer attends to the narrative and is instead simply absorbed in the instrumentalities of gameplay. This is among the reasons philosopher C. Thi Nguyen contends that the work of computer-game designers is in what he calls the medium of player agency, which the designer prescribes through rules and goals, and which elicits positive aesthetic experiences in the player who agrees to adopt it. Therefore, Nguyen's position is that Tavinor's and Gaut's frameworks \_\_\_\_\_

143

Which choice most logically completes the text?

- A) are helpful starting points for studying computer games as art, even though these frameworks are overly simplistic.
- B) are useful for analyzing the narrative aspects of computer games, even if neither attempts to address player agency.
- C) overstate the influence of fiction and cinema on the narrative elements of computer games.
- D) subsume computer games under other categories of media that do not address a feature of games that is integral to player enjoyment.

As observed in a 2011 study by Emilio García-Robledo and Alfonso Corzo, macroalgal proliferation may have a suppressive effect on the abundance of cyanobacteria and other microphytobenthos (MPB)-chlorophyll-producing microbes inhabiting marine sediment-in part by reducing the amount of sunlight available to MPB. Examining benthic chlorophyll concentrations (a widely used proxy for MPB biomass) in mudflats in Curlew Bay and other coastal sites in Virginia, Alice F. Besterman and Michael L. Pace found that those concentrations did not negatively correlate with macroalgal proliferation. However, they noted that MPB may respond to low-light conditions by producing higher-than-normal concentrations of chlorophyll, and they thus concluded that \_\_\_\_\_

144

Which choice most logically completes the text?

- A) researchers ought to account for the possibility that because MPB have the capacity to compensate for reduced sunlight availability, benthic chlorophyll concentrations may not always be a reliable indicator of MPB biomass.
- B) although their finding was inconsistent with that of García-Robledo and Corzo, this discrepancy was not attributable to the ability of MPB to accelerate chlorophyll production to mitigate the negative impact of macroalgal accumulations.
- C) although elevated levels of macroalgae do not always correspond to Increased levels of benthic chlorophyll, there is likely a larger trend in MPB biomass that is related to macroalgal presence but unrelated to light conditions.
- D) the effect of macroalgal concentrations on MPB abundance that García-Robledo and Corzo reported was not observed in Curlew Bay and other Virginia sites because low-light conditions likely are not generalizable across the sites in the studies.

Neuroscientist Artin Arshamian and his team sought to determine what affects a person's perception of an odor as pleasant: is it culture, personal taste, or aspects of human anatomy? The team assessed odor preferences in ten groups of people with different modes of living (urban, agricultural, and hunter-gatherer) including the Maniq people from a small community in Thailand and the Seri people from a small community in Mexico. The team observed that across cultures, people generally rated odors about the same: ethyl butyrate, which smells like peaches, was typically rated more pleasant than diethyl disulfide, which smells like garlic. The team's study thus undermined the idea that \_\_\_\_\_

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Which choice most logically completes the text?

- A) a person who perceives certain odors as pleasant will likely perceive the odors as roughly equal in pleasantness.
- B) culture significantly influences whether a person perceives an odor as pleasant or unpleasant.
- C) personal taste has little influence on whether odors are perceived as pleasant or unpleasant.
- D) people agree in their perception of odors as pleasant or unpleasant regardless of where they live.



Many studies have found a positive association between levels of dissolved organic carbon and mercury in bodies of fresh water undisturbed by human activity. But Stéphane Guédron, Delphine Tisserand, and colleagues did not find this correlation in an examination of freshwater bodies impacted by wastewater, leading some scientists to hypothesize that the association could be particular to undisturbed waters. However, Ida Tjerngren and colleagues carried out a study on freshwater bodies disturbed by urban development that showed similar results to the studies on undisturbed waters, suggesting that \_\_\_\_\_

146

Which choice most logically completes the text?

- A) levels of dissolved organic carbon and mercury are both much higher in bodies of fresh water impacted by wastewater than they are in bodies of fresh water disturbed by urban development.
- B) Guédron, Tisserand, and colleagues' study used different methods to measure the concentration of mercury in fresh water than Tjerngren and colleagues study did
- C) the effects of wastewater on the association between levels of dissolved organic carbon and mercury should not be taken as indicative of the effects of every type of human disturbance.
- D) disturbances linked to wastewater affect significantly more bodies of fresh water than disturbances linked to urban development do.

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 \_\_\_\_\_

147

Which choice most logically completes the text?

- A) the evolutionary benefits of a crablike body form are less certain than many studies of carcinization had previously implied.
- B) despite having many living relatives, some decarcinized groups did not benefit from 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) a crablike body form may not be optimal in all cases, with ecological conditions sometimes favoring the persistence of decarcinization.

A group of primate conservationists recently began a long-term study of the effects of different conservation strategies on the northern muriqui (*Brachyteles hypoxanthus*). The species population is currently estimated to be around 1,000. It is challenging to accurately count these primates, however, which makes it difficult to tell whether the population is increasing, decreasing, or staying stable. The study may thus \_\_\_\_\_

148

Which choice most logically completes the text?

- A) cause other conservationists to adopt a new methodology for counting populations.
- B) risk making inaccurate conclusions about the effectiveness of different conservation strategies.
- C) benefit from including species beyond the northern muriqui.
- D) fail to consider less-well-known conservation approaches for the northern muriqui.

In dialects of English spoken in Scotland, the "r" sound is strongly emphasized when it appears at the end of syllables (as in "car") or before other consonant sounds (as in "bird"). English dialects of the Upland South, a region stretching from Oklahoma to western Virginia, place similar emphasis on "r" at the ends of syllables and before other consonant sounds. Historical records show that the Upland South was colonized largely by people whose ancestors came from Scotland. Thus, linguists have concluded that \_\_\_\_\_

149

Which choice most logically completes the text?

- A) the English dialects spoken in the Upland South acquired their emphasis on the "r" sound from dialects spoken in Scotland.
- B) emphasis on the "r" sound will eventually spread from English dialects spoken in the Upland South to dialects spoken elsewhere.
- C) the English dialects spoken in Scotland were influenced by dialects spoken in the Upland South.
- D) people from Scotland abandoned their emphasis on the "r" sound after relocating to the Upland South.

## Answers: Inference

Number	Answer	Number	Answer
1	D	2	A
3	B	4	A
5	C	6	C
7	A	8	C
9	D	10	D
11	D	12	C
13	C	14	A
15	D	16	A
17	C	18	B
19	D	20	D
21	C	22	D
23	B	24	B
25	D	26	B
27	B	28	A
29	A	30	B
31	D	32	D
33	C	34	C
35	D	36	C
37	C	38	C
39	C	40	B
41	C	42	B

Number	Answer	Number	Answer
43	B	44	A
45	B	46	B
47	B	48	A
49	A	50	A
51	B	52	A
53	A	54	C
55	D	56	B
57	D	58	A
59	B	60	A
61	D	62	A
63	D	64	D
65	C	66	D
67	A	68	A
69	D	70	A
71	A	72	A
73	D	74	C
75	B	76	D
77	D	78	C
79	A	80	A
81	D	82	B
83	D	84	C
85	A	86	D

Number	Answer	Number	Answer
87	A	88	D
89	D	90	B
91	B	92	A
93	A	94	A
95	D	96	C
97	D	98	A
99	D	100	D
101	B	102	B
103	D	104	C
105	A	106	A
107	B	108	B
109	C	110	D
111	B	112	C
113	C	114	B
115	A	116	D
117	C	118	B
119	D	120	B
121	B	122	C
123	B	124	C
125	D	126	A
127	C	128	A
129	D	130	D



Number	Answer	Number	Answer
131	D	132	A
133	A	134	D
135	C	136	B
137	C	138	B
139	B	140	D
141	A	142	D
143	D	144	A
145	B	146	C
147	D	148	B
149	A		

## Topic 4: Command of Evidence - Support

58 Questions

### DIRECTIONS

#### Must Know Tips:

- Use a visual map (e.g., if A rises, B goes down).
- Read the question prompt to know if it's a support or weaken question.
- The passage is always in two parts: Background information and Hypothesis
- You should not support or weaken the entire passage but the claim itself (hunt the claim).

**Recommended time per question in this section:** min: 1 min, max: 1 min 35 sec, avg: 1 min 17.5 sec. (\*Exam level)

The bird species *Myiobius barbatus* (the bearded flycatcher), which forages in relatively dense vegetation, and *Platyrinchus saturatus* (the cinnamon-crested spadebill), which forages in open areas or low-density vegetation, share territory in French Guiana with *Thainnomanes caesius* (the cinereous antshrike), which emits a loud alarm call when it detects predators. Biologist Ari Martinez and colleagues, who studied the ecological community the species share, hypothesized that there is an inverse relationship between birds' field of vision while foraging and their sensitivity to alarm calls from neighboring species.

1

Which finding, if true, would most directly support Martinez and colleagues' hypothesis?

- A) When Martinez and colleagues played *T. caesius* alarm calls, *M. barbatus* and *P. saturatus* displayed no reaction, whereas *T. caesius* displayed predator-avoidance behavior.
- B) Many local bird species with similar foraging habits to those of *M. barbatus* displayed no reaction when Martinez and colleagues played *T. caesius* alarm calls, whereas *M. barbatus* displayed predator-avoidance behavior.
- C) Some individuals of *P. saturatus* displayed predator-avoidance behavior when Martinez and colleagues played *T. caesius* alarm calls, whereas nearly all did when *M. barbatus* alarm calls were played.
- D) *P. saturatus* displayed no reaction when Martinez and colleagues played *T. caesius* alarm calls, whereas *M. barbatus* displayed predator avoidance behavior in response to the calls.

New research suggests that coffee could have a positive effect on cardiovascular health. Although caffeine is coffee's most well-known constituent, the beverage contains more than 100 biologically active components. In a study led by Jiyoung Kim, researchers at Seoul National University concluded that non-caffeinated compounds likely play a role in the positive relationship between coffee consumption and health.

2

Which finding, if true, would most directly support the researchers' conclusion?

- A) Whereas regular coffee contains from 70-140 mg of caffeine per cup, decaf contains approximately 0-7mg.
- B) Decaffeinated coffee causes cells to produce NQO1, an enzyme that has neuroprotective benefits.
- C) Extracts from caffeinated coffee have been shown to aid weight loss more than a placebo.
- D) People who drink several cups of coffee every day are less vulnerable to certain diseases.

It was only when Alma Thomas turned away from figurative art and toward abstraction that she rose to acclaim as an artist. When the solidity of her line gave way to broken, vibrant colors, the beauty she had long seen emerged.

3

Which choice, if true, would most effectively support the writer's claim?

- A) Her painting *Starry Night and the Astronauts* (1972) includes a small kaleidoscope of red, orange, and yellow that suggests the spaceship *Apollo 10*.
- B) Thomas was fascinated by the natural world, incorporating everything from the flowers in her garden to the stars in the night sky into her paintings.
- C) Her *Still Life with Vases and Flowers* (1964), which contains realistic images, feels labored, whereas *Lunar Surface* (1970) glows with rich splashes of purple and blue.
- D) Although Thomas's own works focused on nature, she believed that art could also evoke the energy of airplanes, cars, skyscrapers, and electric signals.

Biologist Rosanna Alegato believes that we might learn how multicellular organisms developed from single celled ones if we understand why the single celled organism *Salpingoeca rosetta*, the oldest living relative of animals, sometimes forms colonies of cells. Alegato and colleagues reviewed data from many studies of how *S. rosetta* responds when exposed to another type of single-celled organism, bacteria, including John P. Bowman's work with *Algoriphagus ratkowsky* bacteria and Iftikhar Ahmed's work with *Algoriphagus boritolerans* bacteria. Alegato and colleagues concluded that both *A. ratkowsky* and *A. boritolerans* might have played a role in the development of multicellular organisms.

4

Which finding, if true, would most directly support Alegato and colleagues' conclusion?

- A) Bowman and Ahmed found that *S. rosetta* tended to form colonies after bacterial exposure.
- B) Bowman found that *S. rosetta* tended to form colonies after bacterial exposure, but Ahmed did not.
- C) Ahmed found that *S. rosetta* tended to form colonies after bacterial exposure, but Bowman did not.
- D) Neither Bowman nor Ahmed found that *S. rosetta* tended to form colonies after bacterial exposure.

Veronice L. Bura, Akito Y. Kawahara, and Jayne E. Yack investigated the evolution and function of sound production in silk moth and hawk moth caterpillars. They found that during harmless simulated attacks on isolated caterpillars, 33% of the tested species produced sound, which ranged from clicks in *Manduca pellenia* to whistles in *Rhodinia fugax*. Although some insects use sound to communicate with members of the same species, the researchers claim that the caterpillar sounds recorded in their study are directed primarily at predators.

5

Which finding, if true, would most directly support Bura and colleagues' claim?

- A) In most cases, the sound that caterpillar species produced during simulated attacks was not produced by other caterpillar species during simulated attacks.
- B) Chickens and yellow warblers, two predators of caterpillars, have been observed to stop their attacks in response to caterpillars' sounds.
- C) Caterpillar clicks were emitted in a frequency of detectable by birds that prey on caterpillars, but caterpillar whistles were not.
- D) Each caterpillar species tended to produce one sound during simulated attacks, although individuals occasionally made a variety of other sounds during simulated attacks as well.

Psychologists Gregory Bryant, Dorsa Amir, and colleagues investigated cross-cultural perceptions of spontaneous (real) laughter and volitional (fake or forced) laughter. Study participants from 21 societies, including those in Austria and Turkey, listened to randomized recordings of 18 spontaneous laughs taken from natural conversations between pairs of women and 18 volitional laughs produced separately by 18 different women in response to an instruction to laugh. Analysis of the participants' evaluations of the laughs prompted the team to conclude that the ability to distinguish between spontaneous and volitional laughter appears to be universal across cultures.

6

Which potential finding from another study, if true, would most directly strengthen the team's conclusion?

- A) Acoustic features of spontaneous laughter, such as pitch and intensity, have measurable variations both within and across societies.
- B) There is some evidence of correlation between the average size of communities in a society and judgments of spontaneous and volitional laughter by listeners in that society.
- C) Listeners from both Austria and Turkey tend to be able to determine how well two people know each other based on recordings of their conversation.
- D) Spontaneous laughter typically has a recognizably higher pitch than volitional laughter, regardless of what society the speakers in a conversation are from.



The Arapaho language of the Plains region in the United States has 16 vowel and consonant sounds. In contrast, the Hadza language of eastern Africa has 70. Why would languages differ in this way? One researcher has hypothesized that when modern humans arose in Africa, they spoke a single language, but as humans gradually spread throughout Africa and then around the globe, that language developed into new languages. Those developed into still more languages as small bands of humans spread even farther, with each new language retaining fewer sounds from humanity's original language.

7

Which finding, if true, would best support the researcher's hypothesis?

- A) Languages that emerged in northwestern North America tend to have more sounds than languages that emerged in East Asia do, even though northwestern North America is farther away from Africa than East Asia is.
- B) Languages that emerged in Eastern Europe tend to have more sounds than languages that emerged in East Asia do, and Eastern Europe is closer to Africa than East Asia is.
- C) Languages that emerged in Western Europe tend to have fewer sounds than languages that emerged in East Asia do, and Western Europe is closer to Africa than East Asia is.
- D) Languages that emerged in Southeast Asia tend to have more sounds than languages that emerged in East Asia do, even though the two regions are roughly the same distance from Africa.

Biologist Rosanna Alegado believes that we might learn how multicellular organisms developed from single-celled ones if we understand why the single-celled organism *Salpingoeca rosetta*, the oldest living relative of animals, sometimes forms colonies of cells. Alegado and colleagues reviewed data from many studies of how *S. rosetta* responds when exposed to another type of single-celled organism, bacteria, including Eric W. Triplett's work with *Dyadobacter fermentans* bacteria and Jung-Hoon Yoon's work with *Algoriphagus marincola* bacteria. Alegado and colleagues concluded that both *D. fermentans* and *A. marincola* might have played a role in the development of multicellular organisms.

8

Which finding, if true, would most directly support Alegado and colleagues' conclusion?

- A) *S. rosetta* tended to form colonies when exposed to *A. marincola* but not when exposed to *D. fermentans*.
- B) Although several studies involving other bacteria species found that *S. rosetta* tended to form colonies after bacteria exposure, only the studies using *D. fermentans* and *A. marincola* tested whether the amount of bacteria exposure affected the rate of colony formation.
- C) *S. rosetta* tended to form colonies when exposed to *D. fermentans* but not when exposed to *A. marincola*.
- D) *S. rosetta* tended to form colonies when exposed to *D. fermentans* and when exposed to *A. marincola*.

External shopping cues are a type of marketing that uses obvious messaging—a display featuring a new product, for example, or a "buy one, get one free" offer to entice consumers to make spontaneous purchases. In a study, data scientist Sam K. Hui and colleagues found that this effect can also be achieved with a less obvious cue: rearranging a store's layout. The researchers explain that trying to find items in new locations causes shoppers to move through more of the store, exposing them to more products and increasing the likelihood that they'll buy an item they hadn't planned on purchasing.

9

Which response from a survey given to shoppers who made a purchase at a retail store best supports the researchers' explanation?

- A) I needed to buy some cleaning supplies, but they weren't in their regular place. While I was looking for them, I saw this interesting notebook and decided to buy it, too.
- B) I didn't buy everything on my shopping list today. I couldn't find a couple of the items in the store, even though I looked all over for them.
- C) The store sent me a coupon for a new brand of soup, so I came here to find out what kinds of soup that brand offers. I decided to buy a few cans because I had the coupon.
- D) This store is larger than one that's closer to where I live, and it carries more products. I came here to buy some things that the other store doesn't always have.

A number of artists associated with hyperpop, a movement in electronic music that emerged in the 2010s, aggressively manipulate their recorded voice. The singer Dorian Electra, for example, shifts the pitch of their vocals to be much deeper than that of Electra's natural range. And even the hyperpop artists who don't rely on pitch-shifting, such as Rina Sawayama, often distort their vocals using digital tools. By persistently modifying the voice, hyperpop invites the listener to reflect on the extent to which digital technology mediates the human experience today.

10

Which description of vocal manipulation in hyperpop is best supported by the text?

- A) It serves as an example of digital technology's negative influence on daily life.
- B) It represents the continuity of human experience despite social and historical change.
- C) It functions as a commentary on contemporary social conditions.
- D) It symbolizes the power of contemporary music to influence listeners' sense of self.

The phrase *usa-don sonda* is a future-oriented expression used by members of the Yupno, an Indigenous group in Papua New Guinea, that translates to "next week." Rafael Núñez and colleagues recorded Yupno speakers explaining several of these temporal-related words and phrases and coded each speaker's manual gestures. Previous research has found evidence of Spanish speakers referring to the left/right axis to describe events in time, and many researchers believe that this tendency to make temporal distinctions along imagined linear axes is universal. However, Núñez and colleagues claim that this tendency is not in fact ubiquitous.

11

Which finding, if true, would most directly support Núñez and colleagues claim?

- A) Yupno speakers were observed making temporal gestures both indoors and outdoors, though with greater frequency when indoors.
- B) When outdoors and referring to the future, Yupno speakers facing uphill gesture in front of themselves, whereas those facing downhill gesture behind themselves.
- C) Yupno speakers typically use their left hand to make temporal gestures regardless of whether the gestures are past oriented or future oriented.
- D) Some Yupno grammatical structures used when talking about time are also used in Spanish.

Periods of subfreezing temperatures in Alaska have been growing shorter in response to climate warming, potentially enabling increased carbon dioxide ( $CO_2$ ) absorption through greater productivity of creeping dogwood (*Cornus canadensis*) plants and other vegetation, but also potentially enabling increased  $CO_2$  output through greater heterotrophic respiration ( $CO_2$  generated by the activity of soil microorganisms). Hydrologist Yonghong Yi and her colleagues developed a model incorporating numerous inputs—years of solar radiation and snow cover data among them—to evaluate the effects of warming on the  $CO_2$  balance in Alaska, concluding that net  $CO_2$  is likely to increase if warming hastens spring snow melt.

12

Which finding, if true, would most directly support the researchers' conclusion?

- A) Early snow melt reduces the amount of soil moisture available for the growth of plant species such as *C. canadensis*, and it raises the rate of heterotrophic respiration.
- B) Early snow melt extends the period in which plant species such as *C. canadensis* can absorb  $CO_2$ , but has no effect on the rate of heterotrophic respiration.
- C) Early snow melt slows the growth of plant species such as *C. canadensis* by reducing soil insulation, and it suppresses heterotrophic respiration.
- D) Early snow melt amplifies the effect of solar radiation on the growth of plant species such as *C. canadensis* and on the rate of heterotrophic respiration.

Neurobiologists Laura Cuaya, Raúl Hernández-Pérez, and colleagues investigated the language detection abilities of eighteen dogs. The researchers monitored the brain activity of Bran (a border collie), Alma (a mixed breed), and other dogs while the animals listened to three recordings: one of *The Little Prince* being read in Spanish, the second in Hungarian, and a third made up of short, randomly selected fragments of the first two, scrambled so that they didn't resemble human speech. Each dog was familiar with either Spanish or Hungarian, but not both. The team concluded that differences in dogs' anatomical features may affect their ability to distinguish speech from nonspeech.

13

Which finding from the study, if true, would most directly support the team's conclusion?

- A) The pattern of brain activity that long-headed dogs showed when hearing the scrambled recording was different from the pattern of brain activity that short-headed dogs showed when hearing the language they were accustomed to.
- B) Long-headed dogs accustomed to hearing Spanish tended to show more brain activity when hearing Spanish than long-headed dogs accustomed to hearing Hungarian showed when hearing Hungarian.
- C) Compared with longer-headed dogs, shorter-headed dogs showed less difference in brain activity when hearing either Spanish or Hungarian than when hearing the scrambled recording.
- D) Compared with longer-headed dogs, shorter-headed dogs showed a greater difference in brain activity when hearing the language they were accustomed to than when hearing the other language.



The onsets of growing seasons in Alaska have been shifting earlier, potentially enabling increased carbon dioxide ( $CO_2$ ) absorption through greater productivity of mooseberry (*Viburnum edule*) plants and other vegetation, but also potentially enabling increased  $CO_2$  output through greater heterotrophic respiration ( $CO_2$  generated by the activity of soil microorganisms). Hydrologist Yonghong Yi and her colleagues modeled seasonal changes in net  $CO_2$  in Alaska in a landscape grid of 1 square kilometer ( $km^2$ ) cells and again in a grid of 10  $km^2$  cells, which are finer resolutions than most models of net  $CO_2$  have achieved. The researchers concluded that variations in the landscape affect net  $CO_2$  in ways that most models are too coarse to capture.

14

Which finding from the researchers' study, if true, would most directly support the researchers' conclusion?

- A) Higher average heterotrophic respiration rates were found for summer months than for winter months when modeled using either a grid of 1  $km^2$  cells or a grid of 10  $km^2$  cells.
- B) No correlations between seasonal variations in average heterotrophic respiration and  $CO_2$  absorption by *V. edule* and other plant species were found when modeled using either a grid of 1  $km^2$  cells or a grid of 10  $km^2$  cells.
- C) Lower average heterotrophic respiration rates were found for autumn months when modeled using a grid of 1  $km^2$  cells than when modeled using a grid of 10  $km^2$  cells.
- D) When seasonal fluxes in average  $CO_2$  absorption and heterotrophic respiration were modeled using a grid of 1  $km^2$  cells, much more data were generated than when seasonal fluxes were modeled using a grid of 10  $km^2$  cells, though the two models reported identical net  $CO_2$ .

Fernand Braudel and other historians of capitalism rarely discuss domestic capitalism in Africa before the period of European colonization, implicitly presenting capitalism as external to and imposed on Africa. John Iliffe and other Africanist scholars have shown, however, that in parts of Africa, institutionally protected private land ownership, the existence of salaried labor, and other features of capitalism predated colonization. One reason for this discrepancy is that historians of capitalism tend to focus on longitudinal economic data drawn from archival records, which do not exist for much of precolonial Africa.

15

Which statement about Iliffe and other Africanist scholars is best supported by information in the text?

- A) They likely make use of different types of evidence than historians of capitalism typically rely on.
- B) They likely have a different view about which activities should be considered capitalist in nature than historians of capitalism do.
- C) They likely differ from historians of capitalism in the methods they use to derive longitudinal economic data from archival records.
- D) They likely view capitalism as having been more beneficial for Africa than historians of capitalism do.

Veronica L. Bura, Akito Y. Kawahara, and Jayne E. Yack investigated the evolution and function of sound production in silk moth and hawk moth caterpillars. They found that during harmless simulated attacks on isolated caterpillars, 33% of the tested species produced sound, which ranged from clicks in *Manduca pellenia* to vocalizations in *Sphecodina abbottii*. Although some insects use sound to communicate with members of the same species, the researchers claim that the caterpillar sounds recorded in their study are directed primarily at predators.

16

Which finding, if true, would most directly support Bura and colleagues' claim?

- A) None of the species that emitted sounds did so before the simulated attacks, and nearly all stopped emitting sounds within ten seconds after the attacks.
- B) In most cases, the sound that a caterpillar species produced during simulated attacks was not produced by other caterpillar species during simulated attacks.
- C) Caterpillar clicks were emitted in a frequency detectable by birds that prey on caterpillars, but caterpillar vocalizations were not.
- D) Each caterpillar species tended to produce one sound during simulated attacks, although individuals occasionally made a variety of other sounds during simulated attacks as well.

Thomas Piketty and other historians of capitalism rarely discuss domestic capitalism in Africa before the period of European colonization, implicitly presenting capitalism as external to and imposed on Africa. Crislayne Alfagali and other Africanist scholars have shown, however, that in parts of Africa, export-oriented manufacturing, the existence of salaried labor, and other features of capitalism predated colonization. One reason for this discrepancy is that historians of capitalism tend to focus on longitudinal economic data drawn from archival records, which do not exist for much of precolonial Africa.

17

Which statement about Alfagali and other Africanist scholars is best supported by information in the text?

- A) They likely view capitalism as having been more beneficial for Africa than historians of capitalism do.
- B) They likely have a different view about which activities should be considered capitalist in nature than historians of capitalism do.
- C) They likely make use of different types of evidence than historians of capitalism typically rely on.
- D) They likely differ from historians of capitalism in the methods they use to derive longitudinal economic data from archival records.

Past research suggests that pollination by honeybees is responsible for up to 10 percent of total Chinese cabbage crop production. Now researchers are trying to determine how dependent cucumber crop production is on honeybees. The first phase of their study involved shielding some cucumber plants to prevent insects from pollinating them, resulting in those plants having 40 to 90 percent lower crop production than plants that were pollinated normally. However, the researchers claim that the first-phase experiment alone didn't tell them how much of that difference in crop production is due specifically to excluding honeybees.

18

Which finding, if true, would most directly support the researchers' claim?

- A) The shielding used in the first phase of the study did not affect the amount of sunlight the cucumber plants received.
- B) Other insects like solitary bees also pollinate Chinese cabbage plants, and some studies have allowed them to pollinate normally while excluding honeybees.
- C) Other insects like squash bees also pollinate cucumber plants, and the shielding in the first phase of the study blocked them as well.
- D) Honeybees are more commonly used to pollinate cucumber plants than Chinese cabbage plants.

A film studies student is researching early 20th-century film serials, which consisted of individual episodes of a single long story that were shown weekly in theaters. Clancy of the Mounted is a 1933 serial that, over its 12 episodes, kept its audience interested with the suspense and drama that are typical of the northern adventure genre. The student, however, claims that ultimately audiences of the time preferred resolution and closure over ongoing tension.

19

Which finding, if true, would most directly support the student's claim?

- A) The 12th episode of Clancy of the Mounted was the most expensive episode of the series to produce.
- B) The 12th episode of Clancy of the Mounted was viewed by more people than was any previous episode in the series.
- C) Modern critics generally regard the first episode as the best installment of Clancy of the Mounted.
- D) Audiences of the time considered Clancy of the Mounted to belong to a genre other than the northern adventure genre.

Water flowing around an obstruction creates vortices (patterns of swirls) of varying size; by detecting the vortices, fish can determine the size and position of the obstruction. Testing by Yuzo R. Yanagisuru, Otar Akanyeti, and James C. Liao using models of three head shapes—narrow (low ratio of width to length), intermediate, and wide (high ratio of width to length)—showed that for large vortices, fish with intermediate heads would be better able than wide-headed fish to distinguish between vortices and general turbulence in the water. A second research team has therefore hypothesized that in low-visibility conditions, intermediate-headed fish will be more likely than wide-headed fish to detect obstructions that create large vortices.

20

Which finding, if true, would most directly support the second research team's hypothesis?

- A) A study using obstructions that created large vortices in low-visibility conditions found that the intermediate-headed black sea bass (*Centropristis striates*) bumped into the obstructions just as often as the wide-headed *Synodontis macropunctata* did.
- B) A study using obstructions that created large vortices in low-visibility conditions found that the wide-headed *Synodontis macropunctata* bumped into obstructions more often than the intermediate-headed black sea bass (*Centropristis striates*) did.
- C) A study using obstructions that created large vortices in low-visibility conditions found that some specimens of the intermediate-headed black sea bass (*Centropristis striates*) bumped into the obstructions more often than other specimens of the same fish did.
- D) A study using obstructions that created large vortices in low-visibility conditions found that the *Synodontis macropunctata*, which has a relatively wide head, bumped into more than half of the obstructions.



Some toothpastes contain titanium dioxide nanoparticles ( $TiO_2$ -NPs), which can leach into waterways and soils via wastewater. In a 2015 study, Adeline Bourgeault and colleagues found that  $TiO_2$ -NPs can accumulate in the bodies of zebra mussels (*Dreissena polymorpha*). While bioaccumulation of manufactured nanoparticles may be inherently worrisome, it has been hypothesized that  $TiO_2$ -NP bioaccumulation in invertebrates like *D. polymorpha* could serve a valuable proxy role, obviating the need for manufacturers to conduct costly and intrusive sampling of vertebrate species—such as common carp (*Cyprinus carpio*), commonly used in regulatory compliance testing—for nanoparticle bioaccumulation, as environmental protection laws currently require.

21

Which finding, if true, would most directly support the hypothesis presented in the text?

- A) In comparable environments, *D. polymorpha* and *C. carpio* display comparable rates of  $TiO_2$ -NP uptake.
- B) Compared with *C. carpio*, *D. polymorpha* can tolerate significantly higher  $TiO_2$ -NP concentrations without displaying any negative effects.
- C) It is easier to detect low and harmless concentrations of  $TiO_2$ -NPs in *D. polymorpha* than it is to detect high and harmful concentrations of  $TiO_2$ -NPs in *C. carpio*.
- D)  $TiO_2$ -NP concentrations in *D. polymorpha* tend to vary more from individual to individual than do  $TiO_2$ -NP concentrations in *C. carpio* when the species are exposed to similar levels of  $TiO_2$ -NPs.

Almost all works of fiction contain references to the progression of time, including the time of day when events in a story take place. In a 2020 study, Allen Kim, Charuta Pethe, and Steven Skiena claim that an observable pattern in such references reflects a shift in human behavior prompted by the spread of electric lighting in the late nineteenth century. The researchers drew this conclusion from an analysis of more than 50,000 novels spanning many centuries and cultures, using software to recognize and tally both specific time references—that is, clock phrases, such as 7 a.m. or 2:30 p.m.—and implied ones, such as mentions of meals typically associated with a particular time of day.

22

Which finding from the study, if true, would most directly support the researchers' conclusion?

- A) Novels published after the year 1800 include the clock phrase 10 a.m. less often than novels published before the year 1800 do.
- B) Among novels published in the nineteenth century, implied time references become steadily more common than clock phrases as publication dates approach 1900.
- C) The time references of noon (12 p.m.) and midnight (12 a.m.) are used with roughly the same frequency in the novels.
- D) Novels published after 1880 contain significantly more references to activities occurring after 10 p.m. than do novels from earlier periods.

Early Earth is thought to have been characterized by a stagnant lid tectonic regime in which the upper lithosphere (the outer rocky layer) was essentially immobile and there was no interaction between the lithosphere and the underlying mantle. Researchers investigated the timing of the transition from a stagnant lid regime to a tectonic plate regime, in which the lithosphere is fractured into dynamic plates that in turn allow lithospheric and mantle material to mix. Examining chemical data from lithospheric and mantle-derived rocks ranging from 285 million to 3.8 billion years old, the researchers dated the transition to 3.2 billion years ago.

23

Which finding, if true, would most directly support the researchers' conclusion?

- A) Mantle-derived rocks older than 3.2 billion years show significantly more compositional diversity than lithospheric rocks older than 3.2 billion years do.
- B) There is a positive correlation between the age of lithospheric rocks and their chemical similarity to mantle-derived rocks, and that correlation increases significantly in strength at around 3.2 billion years old.
- C) Among rocks known to be older than 3.2 billion years, significantly more are mantle derived than lithospheric, but the opposite is true for the rocks younger than 3.2 billion years.
- D) Mantle-derived rocks younger than 3.2 billion years contain some material that is not found in older mantle-derived rocks but is found in older and contemporaneous lithospheric rocks.

Honda's introduction of a walk-behind lawnmower in 1978 is an instance of brand extension—the company leveraged its brand recognition as an automobile manufacturer to enter a product category where it had not previously competed. To determine if perceived category similarity predicts consumers' likelihood of purchasing brand extensions, Alicia Grasby et al. identified 30 extended-brand pairs (e.g., the same brand of hand lotion and mouthwash) in 52 weeks of purchases by approximately 60,000 households; for each pair, Grasby et al. had consumers rate the similarity of the product categories and calculated the change in probability of a brand in one category being purchased if the same brand was purchased in the other category.

24

Which finding, if true, would provide evidence that the possibility Grasby et al. investigated does occur?

- A) Consumers' ratings and the changes in probability calculated by the researchers were both affected by level of brand recognition.
- B) There was a strong positive correlation between consumers' ratings and the changes in probability calculated by the researchers.
- C) Consumers' ratings varied substantially by category pair, whereas the changes in probability calculated by the researchers were broadly similar for each pair.
- D) Consumers tended to purchase more products in categories in which extended-brand pairs are found than in categories in which extended-brand pairs are not found.

Microsoft's introduction of the Xbox console in 2001 is an instance of brand extension—the company leveraged its brand recognition as a software producer to enter a product category where it had not previously competed. To determine if perceived category similarity predicts consumers' likelihood of purchasing brand extensions, Alicia Grasby et al. identified 30 extended-brand pairs (e.g., the same brand of mobile phone and headphones) in 52 weeks of purchases by approximately 60,000 households; for each pair, Grasby et al. had consumers rate the similarity of the product categories and calculated the change in probability of a brand in one category being purchased if the same brand was purchased in the other category.

25

Which finding, if true, would provide evidence that the possibility Grasby et al. investigated does occur?

- A) Consumers' ratings varied substantially by category pair, whereas the changes in probability calculated by the researchers were broadly similar for each pair.
- B) Consumers tended to purchase more products in categories in which extended-brand pairs are found than in categories in which extended-brand pairs are not found.
- C) There was a strong positive correlation between consumers' ratings and the changes in probability calculated by the researchers.
- D) Consumers' ratings and the changes in probability calculated by the researchers were both affected by level of brand recognition.

The utilization of deceptive antipredator displays is well documented in the little ringed plover (*Charadrius dubius*) and other species of the avian order Charadriiformes. An extensive literature review conducted by Léna de Framond et al. revealed that this trait has evolved across a surprisingly large phylogenetic distribution of 13 Aves orders, including Caprimulgiformes and Gruiformes. Subsequent investigation of potential selection mechanisms prompted the researchers to conclude that independent of avian order, the prevalence of the trait is mediated by environmental variations associated with the absolute latitude of brooding sites.

26

Which finding, if true, would most strongly support the researchers' conclusion?

- A) Across the orders in the study, approximately 54% of the bird species brood in ranges from 50° to 80° absolute latitude, but most of the birds that are known to use deceptive antipredator displays brood between 0° and 30° absolute latitude.
- B) Deceptive antipredator displays are documented in Charadriiformes species across the entire range of absolute latitudes of brooding sites within that order, but in species from other orders, deceptive antipredator displays are documented only when brooding sites are at absolute latitudes 10°–20° higher than what is typical for those species.
- C) The use of deceptive antipredator displays is widespread among Charadriiformes species independent of the absolute latitude of their breeding sites, but its prevalence in other avian orders is limited to species with brooding sites located in absolute latitudes of 0°–30°.
- D) Across the orders in the study, deceptive antipredator displays are observed in approximately 34% of species with brooding ranges of 0°–30° absolute latitude and approximately 60% of species with brooding ranges of 50°–80° absolute latitude.

Neurobiologists Laura Cuaya, Raúl Hernández-Pérez, and colleagues investigated the language detection abilities of eighteen dogs raised in similar settings. The researchers monitored the brain activity of Barney (a golden retriever), Bingo (a mixed breed), and other dogs while the animals listened to three recordings: one of *The Little Prince* being read in Spanish, the second in Hungarian, and a third made up of short, randomly selected fragments of the first two, scrambled so that they didn't resemble human speech. Each dog was familiar with either Spanish or Hungarian, but not both. The team concluded that the amount of previous language exposure a dog has received may influence its ability to distinguish familiar languages from unfamiliar ones.

27

Which finding from the study, if true, would most directly support the team's conclusions?

- A) Dogs showed a different pattern of brain activity when hearing the language they were accustomed to than when hearing the scrambled recording and the difference in brain activity increased with the age of the dog scanned.
- B) Although the dog's general hearing sensitivity declined with age, dogs of all ages showed more brain activity in response to hearing the language they were accustomed to than in response to hearing the other language.
- C) The similarity between the pattern of brain activity a dog showed in response to hearing the scrambled recording and the pattern of brain activity it showed in response to hearing the language it was not accustomed to was greatest among older dogs.
- D) The difference between the pattern of brain activity a dog showed when hearing the language it was accustomed to and the pattern of brain activity it showed when hearing the language it was not accustomed to was greatest among older dogs.



Cardiff, Wales, has installed engineered structures – mainly breakwalls – along 87% of its shoreline to protect infrastructure from storm surges and other hazards, a practice known as shoreline hardening. Investigating the impact of such structures on waterbird communities at various sites in the Chesapeake Bay on the US East Coast, Diann Prosser et al. hypothesized that shoreline hardening more negatively affects waterbirds than does land development for uses such as housing or agriculture. To evaluate the responses of local waterbird species, including the osprey, to landscape alterations, the researchers utilized the Index of Waterbird Community Integrity (IWCI), on which a low score corresponds to low community integrity.

28

Which finding, if true, would most directly support the researchers' hypothesis?

- A) Waterbird communities at Back River, a site with a relatively high percentage of developed land and a relatively low percentage of hardened shoreline, had higher average IWCI scores than did waterbird communities at Margothly, a site with a lower percentage of developed land but a higher percentage of hardened shoreline.
- B) Waterbird communities at Langford, a site with a relatively high percentage of developed land and a relatively low percentage of hardened shoreline, had lower average IWCI scores than did waterbird communities at Mill, a site with a lower percentage of developed land but a higher percentage of hardened shoreline.
- C) Waterbird communities at Stony and Curtis, two sites with relatively high percentages of developed land and hardened shoreline, had similar IWCI scores, whereas waterbird communities at Ware and Honga, two sites with relatively low percentage of developed land and hardened shoreline, had widely differing IWCI scores.
- D) Waterbird communities at Old Road, a site with a relatively high percentage of developed land and hardened shoreline, had lower average IWCI scores than did waterbird communities at Onancock, a site with a relatively low percentage of developed land and hardened shoreline.

The bird species *Schistocichla leucostigma* (the spot-winged antbird) shares some territory in French Guiana with *Thamnomanes caesius* (the cinereous antshrike), which emits a loud alarm call when it detects predators. Biologist Ari Martinez and colleagues recorded *T. caesius* alarm calls and played them in the vicinity of wild *S. leucostigma*. Finding that the birds often froze in place or scattered into vegetation upon hearing the calls, they concluded that *S. leucostigma* associates *T. caesius* alarm calls with danger.

29

Which finding, if true, would most directly support Martinez and colleagues' conclusion?

- A) In some instances, *S. leucostigma* froze in place or scattered into vegetation when Martinez and colleagues approached but not before they began playing sounds.
- B) When Martinez and colleagues played control sounds of random noise in the vicinity of *S. leucostigma*, the birds displayed no reaction.
- C) Other bird species than *S. leucostigma* also showed a tendency to freeze in place or scatter into vegetation when Martinez and colleagues played *T. caesius* alarm calls.
- D) Martínez and colleagues played alarm calls from different *T. caesius* individuals and observed no significant variation in the responses of *S. leucostigma*.

Mooseberry (*Viburnum edule*) plants are native to Alaska, where harsh conditions have historically impeded potential invasive species. As the boreal climate has warmed in recent decades, however, common knotgrass (*Polygonum aviculare*) plants have established themselves in Alaska. It has been suggested that warming-induced delays in the onset of subfreezing temperatures in autumn can benefit invasives more than native species; to evaluate this possibility, biologists Christa Mulder and Katie Spellman tracked *V. edule* and *P. aviculare*, along with other native and invasive species, over several years, concluding that invasives are advantaged by delays in subfreezing temperature onset in Alaska.

30

Which finding, if true, would most directly support Mulder and Spellman's conclusion?

- A) Although *V. edule* and *P. aviculare* both tended to produce leaves later into autumn in years with late subfreezing temperature onset, the extension was much greater for *P. aviculare* than for *V. edule*.
- B) Although significant interannual variations in subfreezing temperature onset were observed during the study, neither *P. aviculare* nor *V. edule* showed any significant interannual variation in the cessation of leaf production.
- C) Although *V. edule* and *P. aviculare* tended to stop producing leaves at about the same time in years with historically typical temperature patterns, *P. aviculare* stopped producing leaves sooner than *V. edule* did in years with late subfreezing temperature onset.
- D) Although *V. edule* and *P. aviculare* both tended to produce more leaves overall in years with late subfreezing temperature onset than they did in years with historically typical temperature patterns, the years with late subfreezing temperature onset also had early growing season onset in spring.

Water flowing around an obstruction creates vortices (patterns of swirls) of varying size; by detecting the vortices, fish can determine the size and position of the obstruction. Testing by Yuzo R. Yanagisuru, Otar Akanyeti, and James C. Liao using models of three head shapes – narrow (low ratio of width to length), intermediate, and wide (high ratio of width to length) – showed that for large vortices, fish with intermediate heads would be better able than wide-headed fish to distinguish between vortices and general turbulence in the water. A second research team has therefore hypothesized that in low-visibility conditions, intermediate-headed fish will be more likely than wide-headed fish to detect obstructions that create large vortices.

31

Which finding, if true, would most directly support the second research team's hypothesis?

- A) A study using obstructions that created large vortices in low-visibility conditions found that the devil catfish (*Bagarius bagarius*), which has a relatively wide head, bumped into more than half of the obstructions.
- B) A study using obstructions that created large vortices in low-visibility conditions found that the wide-headed devil catfish (*Bagarius bagarius*) bumped into obstructions more often than the intermediate-headed rainbow trout (*Oncorhynchus mykiss*) did.
- C) A study using obstructions that created large vortices in low-visibility conditions found that the intermediate-headed rainbow trout (*Oncorhynchus mykiss*) bumped into the obstructions just as often as the wide-headed devil catfish (*Bagarius bagarius*) did.
- D) A study using obstructions that created large vortices in low-visibility conditions found that some specimens of the intermediate-headed rainbow trout (*Oncorhynchus mykiss*) bumped into the obstructions more often than other specimens of the same fish did.

The bird species *Myiobius barbatus* (the bearded flycatcher) shares some territory in French Guiana with *Thamnomanes caesius* (the cinereous antshrike), which emits a loud alarm call when it detects predators. Biologist Ari Martinez and colleagues recorded *T. caesius* alarm calls and played them in the vicinity of wild *M. barbatus*. Finding that the birds often froze in place or scattered into vegetation upon hearing the calls, they concluded that *M. barbatus* associates *T. caesius* alarm calls with danger.

32

Which finding, if true, would most directly support Martinez and colleagues' conclusion?

- A) Other bird species than *M. barbatus* also showed a tendency to freeze in place or scatter into vegetation when Martinez and colleagues played *T. caesius* alarm calls.
- B) Martinez and colleagues played alarm calls from different *T. caesius* individuals and observed no significant variation in the responses of *M. barbatus*.
- C) In some instances, *M. barbatus* froze or scattered into vegetation when Martinez and colleagues approached but not before they began playing sounds.
- D) When Martinez and colleagues played control sounds of random noise in the vicinity of *M. barbatus*, the birds displayed no reaction.

The linguistic niche hypothesis (LNH) posits that the exotericity of languages (how prevalent non-native speakers are) and grammatical complexity are inversely related, which the LNH ascribes to attrition of complex grammatical rules as more non-native speakers adopt the language but fail to acquire those rules. Focusing on two characteristics that are positive indices of grammatical complexity, fusion (when new phonemes arise from the merger of previously distinct ones) and informativity (languages' capacity for meaningful variation), Olena Shcherbakova and colleagues conducted a quantitative analysis for more than 1,300 languages and claim the outcome is inconsistent with the LNH.

33

Which finding, if true, would most directly support Shcherbakova and colleagues' claim?

- A) Shcherbakova and colleagues' analysis showed a slightly positive correlation between grammatical complexity and fusion.
- B) Shcherbakova and colleagues' analysis showed a slightly negative correlation between grammatical complexity and exotericity.
- C) Shcherbakova and colleagues' analysis showed a slightly positive correlation between fusion and exotericity and between informativity and exotericity.
- D) Shcherbakova and colleagues' analysis showed a slightly negative correlation between grammatical complexity and fusion and between grammatical complexity and informativity.



Among the most visited art museums in the world, the Museo Reina Sofía in Madrid had approximately 4.4 million visitors in 2019. The Museo Reina Sofía also offers virtual tours that art lovers can view online for free. Although there were initial concerns that people who viewed the virtual tours would then consider an in-person visit unnecessary, museum administrators claim that their surveys of in-person visitors show that those concerns were unjustified.

34

Which statement, if true, would most directly support the administrators' claim?

- A) Most surveyed visitors to the Museo Reina Sofía indicated that they lived somewhere other than Madrid.
- B) Many surveyed visitors to the Museo Reina Sofía indicated that the virtual tours convinced them to plan an in-person visit.
- C) Many surveyed visitors to the Museo Reina Sofía indicated that they would likely view the virtual tours in order to reminisce about their in-person visit.
- D) Most surveyed visitors to the Museo Reina Sofía indicated that they were unaware of the virtual tours before their first in-person visit.

Growing seasons in Alaska have been extending further into the year in response to climate warming, potentially enabling increased carbon dioxide ( $CO_2$ ) absorption through greater productivity of marsh cinquefoil (*Comarum palustre*) plants and other vegetation, but also potentially enabling increased  $CO_2$  output through greater heterotrophic respiration ( $CO_2$  generated by the activity of soil microorganisms). Hydrologist Yonghong Yi and her colleagues developed a model incorporating numerous inputs – years of solar radiation and snow cover data among them – to evaluate the effects of warming on the  $CO_2$  balance in Alaska, concluding that net  $CO_2$  is likely to increase if warming hastens spring snow melt.

35

Which finding, if true, would most directly support the researchers' conclusion?

- A) Early snow melt extends the period in which plant species such as *C. palustre* can absorb  $CO_2$  but has no effect on the rate of heterotrophic respiration.
- B) Early snow melt slows the growth of plant species such as *C. palustre* by reducing soil insulation, and it suppresses heterotrophic respiration.
- C) Early snow melt reduces the amount of soil moisture available for the growth of plant species such as *C. palustre*, and it raises the rate of heterotrophic respiration.
- D) Early snow melt amplifies the effect of solar radiation on the growth of plant species such as *C. palustre* and on the rate of heterotrophic respiration.

A team of public transportation experts in Detroit is creating a new streetcar stop for the Woodward Avenue Streetcar system that will service a neighborhood in which a stop does not currently exist. To decide where to place the stop, the team is using a survey from ten years ago that asked how far neighborhood residents would be willing to walk to a streetcar stop. The team also looked at studies showing that people's willingness to walk to public transit is influenced by factors like weather and the presence of paved sidewalks and available crosswalks. A researcher has argued that the survey does not accurately reflect the feelings of today's residents of this neighborhood.

36

Which finding, if true, would most directly support the researcher's claim?

- A) The number of sidewalks and crosswalks in the neighborhood that the streetcar stop will service has increased substantially in the last ten years.
- B) Residents of Detroit are much less likely to use public transit on rainy days than on clear days.
- C) There has been a sharp increase in the last ten years in cyclists who use the roads in the neighborhood that the streetcar stop will service.
- D) Current users of the Woodward Avenue Streetcar are satisfied with the number of stops along the line.

Some food packaging contains silver nanoparticles (Ag-NPs), which can leach into waterways and soils via wastewater. In a 2015 study, Tina Ramskov and colleagues found that Ag-NPs can accumulate in the bodies of marine annelid worms (*Capitella teleta*). While bioaccumulation of manufactured nanoparticles may be inherently worrisome, it has been hypothesized that Ag-NP bioaccumulation in invertebrates like *C. teleta* could serve a valuable proxy role, obviating the need for manufacturers to conduct costly and intrusive sampling of vertebrate species – such as Atlantic salmon (*Salmo salar*), commonly used in regulatory compliance testing – for nanoparticle bioaccumulation, as environmental protection laws currently require.

37

Which finding, if true, would most directly support the hypothesis presented in the text?

- A) When *C. teleta* and *S. salar* are exposed to similar levels of Ag-NPs, individuals of the two species tend to accumulate similar amounts of Ag-NPs, adjusted for body size.
- B) Ag-NP concentrations in *C. teleta* correlate strongly with Ag-NP levels in the environment, whereas Ag-NP concentrations in *S. salar* are fairly stable regardless of environment.
- C) Compared with *S. salar*, *C. teleta* can tolerate significantly higher Ag-NP concentrations without displaying any negative effects.
- D) It is easier to detect low and harmless concentrations of Ag-NPs in *C. teleta* than it is to detect high and harmful concentrations of Ag-NPs in *S. salar*.

Mooseberry (*Viburnum edule*) plants are native to Alaska, where harsh conditions have historically impeded potential invasive species. As the boreal climate has warmed in recent decades, however, common knotgrass (*Polygonum aviculare*) plants have established themselves in Alaska. It has been suggested that warming-induced delays in the onset of subfreezing temperatures in autumn can benefit invasives more than native species; to evaluate this possibility, biologists Christa Mulder and Katie Spellman tracked *V. edule* and *P. aviculare*, along with other native and invasive species, over several years, concluding that invasives are advantaged by delays in subfreezing temperature onset in Alaska.

38

Which finding, if true, would most directly support Mulder and Spellman's conclusion?

- A) Although *V. edule* and *P. aviculare* both tended to produce leaves later into autumn in years with late subfreezing temperature onset, the extension was much greater for *P. aviculare* than for *V. edule*.
- B) Although significant interannual variations in subfreezing temperature onset were observed during the study, neither *P. aviculare* nor *V. edule* showed any significant interannual variation in the cessation of leaf production.
- C) Although *V. edule* and *P. aviculare* tended to stop producing leaves at about the same time in years with historically typical temperature patterns, *P. aviculare* stopped producing leaves sooner than *V. edule* did in years with late subfreezing temperature onset.
- D) Although *V. edule* and *P. aviculare* both tended to produce more leaves overall in years with late subfreezing temperature onset than they did in years with historically typical temperature patterns, the years with late subfreezing temperature onset also had early growing season onset in spring.

The bird species *Hylophilus ochraceiceps* (the tawny-crowned greenlet) shares some territory in French Guiana with *Thamnomanes caesius* (the cinereous antshrike), which emits a loud alarm call when it detects predators. Biologist Ari Martinez and colleagues recorded *T. caesius* alarm calls and played them in the vicinity of wild *H. ochraceiceps*. Finding that the birds often froze in place or scattered into vegetation upon hearing the calls, they concluded that *H. ochraceiceps* associates *T. caesius* alarm calls with danger.

39

Which finding, if true, would most directly support Martinez and colleagues' conclusion?

- A) When Martínez and colleagues played control sounds of random noise in the vicinity of *H. ochraceiceps*, the birds displayed no reaction.
- B) Other bird species than *H. ochraceiceps* also showed a tendency to freeze in place or scatter into vegetation when Martinez and colleagues played *T. caesius* alarm calls.
- C) Martinez and colleagues played alarm calls from different *T. caesius* individuals and observed no significant variation in the responses of *H. ochraceiceps*.
- D) In some instances, *H. ochraceiceps* froze in place or scattered into vegetation when Martinez and colleagues approached but before they began playing sounds.

Apple's introduction of the iPhone in 2007 is a quintessential instance of brand extension—the company leveraged its brand recognition as a computer manufacturer to enter a product category where it had not previously competed. An outstanding question is whether perceived category similarity predicts consumers' likelihood of purchasing brand extensions. To answer this question, Alicia Grasby et al. identified 30 extended-brand pairs (e.g., the same brand of laundry detergent and air freshener) in 52 weeks of purchases by approximately 60,000 households and, for each pair, calculated the change in probability of a brand in one category being purchased if the same brand was purchased in the other category.

Based on the text, which potential study design would be most likely to produce evidence that would enable Grasby et al. to answer their research question?

- A) Have a representative sample of the households rate the similarity of the product categories in each extended-brand pair, then determine how, if at all, those ratings correlate with the change in probability that the team calculated for each pair.
- B) Have a representative sample of the households rate the similarity of one product in each extended-brand pair to other products in the same category, then determine how, if at all, those ratings correlate with the change in probability that the team calculated for each pair.
- C) Poll a representative sample of the households to determine the degree of brand recognition for each brand in the extended-brand pairs, then determine how, if at all, the degree of brand recognition correlates with the frequency with which a different group of households purchased at least one product of that brand.
- D) Poll a representative sample of the households to determine the degree of brand recognition of each brand in the extended-brand pairs, then determine how, if at all, the degree of brand recognition correlates with the average cost of each product in the pairs.



Veronica L. Bura, Akito Y. Kawahara, and Jayne E. Yack investigated the evolution and function of sound production in silk moth and hawk moth caterpillars. They found that during harmless simulated attacks on isolated caterpillars, 33% of the tested species produced sound, which ranged from clicks in *Manduca pellenia* to whistles in *Rhodinia fugax*. Although some insects use sound to communicate with members of the same species, the researchers claim that the caterpillar sounds recorded in their study are directed primarily at predators.

41

Which finding, if true, would most directly support Bura and colleagues' claim?

- A) In most cases, the sound that caterpillar species produced during simulated attacks was not produced by other caterpillar species during simulated attacks.
- B) Chickens and yellow warblers, two predators of caterpillars, have been observed to stop their attacks in response to caterpillar sounds.
- C) Caterpillar clicks were emitted in a frequency detectable by birds that prey on caterpillars, but caterpillar whistles were not.
- D) Each caterpillar species tended to produce one sound during simulated attacks, although individuals occasionally made a variety of other sounds during simulated attacks as well.

Neurobiologists Laura Cuaya, Raúl Hernández-Pérez, and colleagues investigated the language detection abilities of eighteen dogs raised in similar settings. The researchers monitored the brain activity of Grog (a border collie), Alma (a mixed breed), and other dogs while the animals listened to three recordings: one of *The Little Prince* being read in Spanish, the second in Hungarian, and a third made up of short, randomly selected fragments of the first two, scrambled so that they didn't resemble human speech. Each dog was familiar with either Spanish or Hungarian, but not both. The team concluded that the amount of previous language exposure a dog has received may influence its ability to distinguish familiar languages from unfamiliar ones.

42

Which finding from the study, if true, would most directly support the team's conclusion?

- A) Although the dogs' general hearing sensitivity declined with age, dogs of all ages showed more brain activity in response to hearing the language they were accustomed to than in response to hearing the other language.
- B) The difference between the pattern of brain activity a dog showed when hearing the language it was accustomed to and the pattern of brain activity it showed when hearing the language it was not accustomed to was greatest among older dogs.
- C) The similarity between the pattern of brain activity a dog showed in response to hearing the scrambled recording and the pattern of brain activity it showed in response to hearing the language it was not accustomed to was greatest among older dogs.
- D) Dogs showed a different pattern of brain activity when hearing the language they were accustomed to than when hearing the scrambled recording, and the difference in brain activity increased with the age of the dog scanned.

Water flowing around an obstruction creates vortices (patterns of swirls) of varying size; by detecting the vortices, fish can determine the size and position of the obstruction. Testing by Yuzo R. Yanagisuru, Otar Akanyeti, and James C. Liao using models of three head shapes—narrow (low ratio of width to length), intermediate, and wide (high ratio of width to length)—showed that for medium-sized vortices, fish with wide heads would be least able to distinguish between vortices and general turbulence in the water. A second research team has therefore hypothesized that in low-visibility conditions, wider-headed fish will be less likely than narrower-headed fish to detect obstructions.

43

Which finding, if true, would most directly support the second research team's hypothesis?

- A) A study using obstructions that created medium-sized vortices in low-visibility conditions found that the anglerfish (*Lophiodes monodi*), which has a relatively wide head, bumped into more than half of the obstructions.
- B) A study using obstructions that created medium-sized vortices in low-visibility conditions found that the narrower-headed dusky smooth-hound (*Mustelus canis*) bumped into the obstructions just as often as the wider-headed anglerfish (*Lophiodes monodi*) did.
- C) A study using obstructions that created medium-sized vortices in low-visibility conditions found that the wider-headed anglerfish (*Lophiodes monodi*) bumped into obstructions more often than the narrower-headed dusky smooth-hound (*Mustelus canis*) did.
- D) A study using obstructions that created medium-sized vortices in low-visibility conditions found that some specimens of dusky smooth-hound (*Mustelus canis*), which has a relatively narrow head, bumped into the obstructions more often than other specimens of the same fish did.

Although Eastern North Pacific (ENP) gray whales generally migrate between their wintering waters along the coast of Mexico and their foraging waters in the Arctic, a subset of this population—known as the Pacific Coast Feeding Group (PCFG)—forages along the coastlines of Northern California (USA) and British Columbia (Canada) instead. Interestingly, individuals in this subset reach smaller maximum sizes than other ENP whales do, despite having similar pre-maximum growth rates. Researchers hypothesize that this difference may be an adaptation to distinct resource opportunities in the PCFG foraging range.

44

Which finding, if true, would most directly support the researchers' claim regarding the size of PCFG whales?

- A) When foraging along the coasts of Northern California and British Columbia, PCFG whales are in closer proximity to major ports and urban populations than ENP whales in the main group are when foraging in Arctic waters.
- B) When present along the coasts of Northern California and British Columbia, PCFG whales tend to forage in rocky kelp beds at shallow depths inaccessible to whales as large as those in the ENP main group.
- C) Certain crustacean prey species available along the coasts of Northern California and British Columbia where PCFG whales tend to forage are not available in the Arctic waters where ENP whales in the main group forage.
- D) The average body size of PCFG whales observed along the coasts of Northern California and British Columbia has remained relatively steady in recent decades, while the average body size of ENP whales in the main group has slightly decreased.

Piezoelectric harvesters convert kinetic energy (resonance) to electrical energy, precluding the need for external electrical sources. The vibration of a spacecraft, for example, can provide sufficient energy to power many of its sensors piezoelectrically. A newly designed piezoelectric harvester incorporating a highly conductive carbon-fiber-reinforced polymer (CFRP) electrode has been shown to provide steady energy loads during resonance, an absolute prerequisite for wireless communication devices to be powered piezoelectrically.

45

Which finding, if true, would most directly support the text's claim about wireless communication devices?

- A) The near-constant kinetic vibration of a spacecraft makes it possible to power its wireless communication devices using only non-CFRP piezoelectric harvesters.
- B) Intermittent or unpredictable electrical supply undermines the efficacy of wireless communication devices.
- C) The CFRP electrode is incompatible with most wireless communication devices.
- D) The high conductivity of the CFRP is what makes the energy output from a piezoelectric harvester sufficient for wireless communication devices.



Ningyo joruri is a form of theater that was popular in eighteenth-century Japan and that unites puppetry with playing of the shamisen, a stringed musical instrument. The popularity of ningyo joruri was due to a puppetry method called sannin zukai, in which three puppeteers operated a single puppet that was large, detailed, and capable of extensive movement and nuanced emotional expression. Over the ensuing centuries, audience interest in ningyo joruri began to decline and sannin zukai became prohibitively expensive to mount so that sannin zukai puppeteers could no longer make the profession a full-time career. Eventually, ningyo forurt productions resorted to cheaper forms of puppetry, such as kuruma ningyo, which involves only one puppeteer

46

Which statement, if true, would most strongly support the claim in the underlined sentence?

- A) The kuruma ningyo puppeteering method is not easy: it requires fewer puppeteers to manipulate puppets that are as large as those used in sannin zukai, but each puppeteer's work is more complex.
- B) The costs of building sannin zukai puppets were very high until the advent of machine-based production methods in the nineteenth century made them comparable to the costs of building kuruma ningyo puppets.
- C) In 1872, Japanese puppeteer Nishikawa Koryu developed a technique called kuruma ningyo, or cart puppetry, in which puppets have wooden pegs on their feet that the puppeteer can manipulate by moving his own feet.
- D) The few remaining theatrical companies with sannin zukai performers in the present day are mostly amateur troupes, in which members have other forms of employment that serve as their primary source of income.

Adelaide, Australia, has installed engineered structures along 53% of its shoreline to protect infrastructure from wave erosion and other hazards, a practice known as shoreline hardening. To evaluate the responses of waterbirds to two types of hardening structures—riprap and bulkheads—Diann Prosser et al. surveyed waterbird communities consisting of the brown pelican, the red knot, and 62 other species at different sites in the Chesapeake Bay on the US East Coast. Utilizing the Index of Waterbird Community Integrity (IWCI), on which a high score corresponds to high community Integrity, the researchers found that bulkheads are more strongly negatively correlated with waterbird community integrity than is riprap.

47

Which finding, if true, would most directly support researchers' finding?

- A) The difference in average IWCI scores for waterbird communities at Stony and Old Road, two sites with a higher percentage of shoreline consisting of bulkheads than of riprap, was statistically insignificant.
- B) Waterbird communities at Curtis, a site with equal percentages of shoreline consisting of bulkheads and riprap, had higher average IWCI scores than did waterbird communities at Miles, a site with different percentages of shoreline consisting of bulkheads and riprap.
- C) Waterbird communities at Old Road, a site with a relatively high percentage of shoreline consisting of bulkheads, had lower average IWCI scores than did waterbird communities at Miles, a site with a relatively high percentage of shoreline consisting of riprap.
- D) Waterbird communities at Curtis, a site with a high percentage of shoreline consisting of bulkheads and riprap, had lower average IWCI scores than did waterbird communities at Onancock, a site with a low percentage of shoreline consisting of bulkheads and riprap.

Piezoelectric harvesters convert kinetic energy (resonance) to electrical energy, precluding the need for external electrical sources. The vibration of a spacecraft, for example, can provide sufficient energy to power many of its sensors piezoelectrically. A newly designed piezoelectric harvester incorporating a highly conductive carbon fiber reinforced polymer (CFRP) electrode has been shown to provide steady energy loads during resonance, an absolute prerequisite for wireless communication devices to be powered piezoelectrically.

48

Which finding, if true, would most directly support the text's claim about wireless communication devices?

- A) The near-constant kinetic vibration of a spacecraft makes it possible to power its wireless communication devices using only non-CFRP piezoelectric harvesters.
- B) Intermittent or unpredictable electrical supply undermines the efficacy of wireless communication devices.
- C) The CFRP electrode is incompatible with most wireless communication devices.
- D) The high conductivity of the CFRP is what makes the energy output from a piezoelectric harvester sufficient for wireless communication devices.

To help combat the growing rate of microplastic pollution, a team of researchers developed a synthetic sponge that can soak up microplastic particles from liquid. The sponge, composed mainly of starch and gelatin, does this by trapping the tiny particles within its pores. Guoqing Wang, one of the researchers, says that the formula for the sponge can be adjusted to best suit the size of particle the sponge is intended to trap, making it versatile in its potential applications. Chemist Christian Adlhart, however, claims that this sponge would be difficult to massproduce.

49

Which finding, if true, would most directly support Adlhart's claim?

- A) Textiles are one of the largest sources of microplastic pollution in our oceans.
- B) The sponge created by Wang and his team has a relatively light weight for its volume, making it potentially easy to ship to different locations.
- C) The absorption capabilities of the sponge created by Wang and his team varied depending on the liquid solution used in the team's experiments.
- D) The worldwide supply of starch and gelatin is in high demand from the food industry, so those substances would be difficult to source in significant quantities.

Born in Chile in 1917, artist and ethnomusicologist Violeta Parra was a pioneer in the nueva canción chilena (Chilean New Song) movement that emerged in the late 1950s and then spread throughout Latin America, Portugal, and Spain as nueva canción. Parra traveled all over Chile compiling extensive records of authentic folk music as well as recipes, proverbs, and other facets of cultural history. These records formed the foundation for the early movement's revival of traditional Chilean folk forms in new songs that represented modern realities of the working class and strongly advocated for social change. As the movement spread beyond Chile, the breadth of musical traditions incorporated into its foundation also expanded.

50

Which detail about songs associated with nueva canción, if true, would best illustrate the underlined claim?

- A) Many feature political commentary addressing contemporary issues that stemmed from shared experiences of European colonization in Latin American countries.
- B) Many demonstrate the stylistic influence of corrido, a genre of narrative songs from Mexico that had come to be characterized by political themes in the early 1800s.
- C) Many were written with parts meant to be played on the quena, a traditional flute used across Andean countries, including Chile.
- D) Many were produced by Argentinian artists in the late 1950s, with others by artists in additional Latin American countries first emerging soon after.

Norfolk, Virginia, has installed engineered structures along 56% of its shoreline to protect infrastructure from wave erosion and other hazards, a practice known as shoreline hardening. To evaluate the responses of waterbirds to two types of hardening structures—riprap and bulkheads—Diann Prosser et al surveyed waterbird communities consisting of the osprey, the common tern, and 62 other species at different sites in the Chesapeake Bay on the US East Coast. Utilizing the Index of Waterbird Community Integrity (IWCI), on which a high score corresponds to high community Integrity, the researchers found that bulkheads are more strongly negatively correlated with waterbird community integrity than is riprap.

51

Which finding, if true, would most directly illustrate the researchers' finding?

- A) Waterbird communities at Curtis, a site with a high percentage of shoreline consisting of bulkheads and riprap, had lower average IWCI scores than did waterbird communities at Onancock, a site with a low percentage of shoreline consisting of bulkheads and riprap.
- B) Waterbird communities at Old Road, a site with a relatively high percentage of shoreline consisting of bulkheads, had lower average IWCI scores than did waterbird communities at Miles, a site with a relatively high percentage of shoreline consisting of riprap.
- C) Waterbird communities at Curtis, a site with equal percentages of shoreline consisting of bulkheads and riprap, had higher average IWCI scores than did waterbird communities at Miles, a site with different percentages of shoreline consisting of bulkheads and riprap.
- D) The difference in average IWCI scores for waterbird communities at Stony and Old Road, two sites with a higher percentage of shoreline consisting of bulkheads than of riprap, was statistically insignificant.



The bird species *Malacoptilafusca* (the white-chested puffbird) practices a foraging strategy known as sallying (catching insects in flight and returning to a perch to eat them), enabling it to scan for prey and predators simultaneously. Conversely, *Myrmotherula guttata* (the rufous-bellied antwren), with which *M. fusca* shares territory in French Guiana, practices foliage gleaning (picking insects off leaves), substantially limiting the bird's field of vision while foraging. Biologist Ari Martínez and colleagues hypothesized that the greater vulnerability inherent in the latter strategy is reflected in greater sensitivity to predator warning signals from neighboring species.

52

Which finding, if true, would most directly support Martínez and colleagues' hypothesis?

- A) When Martinez and colleagues played control sounds of random noise, only *M. guttata* displayed predator-avoidance behavior, whereas both *M. guttata* and *M. fusca* displayed such behavior when alarm calls from another local bird species were played.
- B) When Martinez and colleagues played alarm calls from a species that does not share territory with *M. fusca* and *M. guttata*, *M. fusca* displayed predator avoidance behavior, whereas *M. guttata* did not display any behavioral change.
- C) When Martinez and colleagues played alarm calls from another local bird species, *M. guttata* displayed predator avoidance behavior, whereas *M. fusca* did not display any behavioral change.
- D) When Martinez and colleagues played *M. fusca* alarm calls, only *M. fusca* displayed predator-avoidance behavior, whereas both *M. fusca* and *M. guttata* displayed such behavior when *M. guttata* alarm calls were played

In medieval England, singers and minstrels made livings as traveling performers, but the pieces they performed have been a mystery, thought to be lost or never committed to paper at all. Recently, however, James Wade has argued that a manuscript collection compiled in the fifteenth century by Richard Heege contains three pieces likely copied from a repertoire book belonging to a minstrel working in the area around Heege's home. Wade cites features of the texts indicative of live performance, such as chastising the audience, extensive use of simple structures (allowing for easy memorization), and requests for tips (payment) from listeners.

53

Which statement, if true, would most strongly support Wade's argument?

- A) Heege's collection contains the earliest examples of the three pieces in question, but each of those pieces occurs in other manuscript collections compiled after Heege's.
- B) The three pieces in question contain references that presume that the audience is familiar with Brackonwet and other small villages near where Heege lived.
- C) Features like simple structures also occur in other texts from the period that were widely read but are not known to have been performed for live audiences.
- D) Traveling minstrels are thought to have performed mainly for elite audiences, and other parts of Heege's collection reflect his interest in works with popular appeal

Psychologists Gregory Bryant, Dorsa Amir, and colleagues investigated cross-cultural perceptions of spontaneous (real) laughter and volitional (fake or forced) laughter. Study participants from 21 societies, including those in Austria and Samoa, listened to randomized recordings of 18 spontaneous laughs taken from natural conversations between pairs of women and 18 volitional laughs produced separately by 18 different women in response to an instruction to laugh. Analysis of the participants' evaluations of the laughs prompted the team to conclude that the ability to distinguish between spontaneous and volitional laughter appears to be universal across cultures.

54

Which potential finding from the team's study, if true, would most directly support the team's conclusion?

- A) An assessment of the effect of demographic variables on judgements of laughter type in Austria, Samoa, and the other societies in the study revealed that participants' evaluations were correlated with the economic conditions of the societies in which participants live.
- B) The overall rate of correct judgments by participants was 64%, substantially better than chance, and spontaneous and volitional laughs were recognized at similar rates in Austria, Samoa, and the other societies in the study.
- C) Acoustic features of spontaneous laughter, such as pitch and intensity, have measurable variations both within and across societies.
- D) A variety of people from Austria and Samoa evaluated the recordings in the study, and no significant differences in listeners' judgments of laughter types were found.

Water flowing around an obstruction creates vortices (swirls) that vary in size with the obstruction's size and position, and fish sense these vortices to navigate around the obstructions. Using models of three fish-head shapes—narrow (low ratio of width to length), intermediate, and wide (high ratio of width to length)—Yuzo R. Yanagisuru, Otar Akanyeti, and James C. Liao showed that as vortex size increases, pressure fluctuations at the snout increase for narrow-headed fish but remain low for wide-headed fish. A second research team has therefore hypothesized that in low visibility, a fish will be more likely to avoid an obstruction when the associated pressure fluctuations at the fish's snout are greater.

Which finding, if true, would most directly support the second research team's hypothesis?

- A) A study using obstructions that created large vortices in low-visibility conditions found that some specimens of the narrow-headed flat needlefish (*Ablennes hians*) bumped into the obstructions more often than other specimens of the same fish did.
- B) A study using obstructions that created large vortices in low-visibility conditions found that the narrow-headed flat needlefish (*Ablennes hians*) bumped into the obstructions just as often as the wide-headed devil catfish (*Bagarius bagarius*) did.
- C) A study using obstructions that created large vortices in low-visibility conditions found that the wide-headed devil catfish (*Bagarius bagarius*) bumped into obstructions more often than the narrow-headed flat needlefish (*Ablennes hians*) did.
- D) A study using obstructions that created large vortices in low-visibility conditions found that the devil catfish (*Bagarius bagarius*), which has a relatively wide head, bumped into more than half of the obstructions.

In medieval England, jugglers and minstrels made livings as traveling performers, but the pieces they performed have been a mystery, thought to be lost or never committed to paper at all. Recently, however, James Wade has argued that a manuscript collection compiled in the fifteenth century by Richard Heege contains three pieces likely copied from a repertoire book belonging to a minstrel working in the area around Heege's home. Wade cites features of the texts indicative of live performance, such as politely addressing the audience, extensive use of simple rhyming (allowing for easy memorization), and requests for tips (payment) from listeners.

56

Which statement, if true, would most strongly support Wade's argument?

- A) The three pieces in question contain references that presume that the audience is familiar with Brackonwet and other small villages near where Heege lived.
- B) Features like simple rhyming also occur in other texts from the period that were widely read but are not known to have been performed for live audiences.
- C) Heege's collection contains the earliest examples of the three pieces in question, but each of those pieces occurs in other manuscript collections compiled after Heege's.
- D) Traveling minstrels are thought to have performed mainly for elite audiences, and other parts of Heege's collection reflect his interest in works with popular appeal.

Radamés Cordero et al. have confirmed that twenty mushroom species (including *Coprinellus micaceus* and species from the genus *Russula*) maintain subambient temperatures in both their fruited bodies and their mycelium (the root-like hyphae from which the fruited bodies grow), though the benefits of this hypothermic behavior are unclear. Noting that relative coldness was more pronounced in fruiting than in nonfruiting sites of the mycelium—a difference that persisted even after fruited bodies were detached—the researchers speculate that thermoregulation in the mycelium may influence reproductive success.

57

Which statement about the mycelium of the twenty mushroom species is best supported by the text?

- A) Variation in thermoregulation across the mycelium may occur independent of the presence or absence of fruited bodies.
- B) The correlation between higher mycelium temperature and greater fruit productivity indicates that successful reproduction may be dependent on thermoregulation in the mycelium.
- C) Temperatures in the fruiting areas of the mycelium are lower than in the nonfruiting areas due to differences in the depth and spread of the mycelium within soil or other organic matter.
- D) The mycelium generally maintains temperatures lower than those of the fruited bodies even when considering temperature variations between fruiting and nonfruiting sites.



Over the course of the 1900s, more and more Native Hawaiians spoke English instead of the Hawaiian language. To preserve their language, Native Hawaiian teachers founded the 'Aha Pūnana Leo preschool in 1984. They spoke Hawaiian while teaching, and their Native Hawaiian students were soon able to understand and speak it themselves. The school was a huge success. Eventually it opened locations around Hawai'i and started teaching Hawaiian to elementary and high school students too. Thanks to 'Aha Pūnana Leo, the number of young people who speak the language has increased.

58

Which statement, if true, would most directly support the underlined claim?

- A) Besides Native Hawaiians, tens of thousands of people from other Pacific Islander communities live in Hawai'i today, including over 37,000 Samoans.
- B) Fewer than fifty children could speak Hawaiian when 'Aha Pūnana Leo was founded, but now more than 2,000 students at 'Aha Pūnana Leo speak it
- C) Hawaiian is very similar to other languages that are spoken on the Polynesian Islands of the Pacific Ocean, including Tahitian, Samoan, and Maori.
- D) Roughly 680,000 Native Hawaiian people lived in the United States in 2020, and a little less than half of them lived in Hawai'i.

## Answers: Command of Evidence - Support

Number	Answer	Number	Answer
1	D	2	B
3	C	4	A
5	B	6	D
7	B	8	D
9	A	10	C
11	B	12	C
13	C	14	C
15	A	16	A
17	C	18	C
19	B	20	B
21	A	22	D
23	D	24	B
25	C	26	D
27	D	28	A
29	B	30	A
31	B	32	D
33	C	34	B
35	C	36	A
37	A	38	A
39	A	40	A
41	B	42	A

Number	Answer	Number	Answer
43	C	44	B
45	B	46	D
47	C	48	B
49	D	50	B
51	B	52	C
53	B	54	B
55	C	56	A
57	A	58	B

## Topic 5: Command of Evidence - Weaken

18 Questions

### DIRECTIONS

#### Must Know Tips:

- Use a visual map (e.g., if A rises, B goes down).
- Read the question prompt to know if it's a support or weaken question.
- The passage is always in two parts: Background information and Hypothesis.
- You should not support or weaken the entire passage but the claim itself (hunt the claim).

**Recommended time per question in this section:** min: 1 min, max: 1 min 35 sec, avg: 1 min 17.5 sec. (\*Exam level)

Hypothesizing that lullabies, characterized by their slow tempos, are universally calming to infants, Constance M. Bainbridge and colleagues played a lullaby sung in the Scottish Gaelic language and a non-lullaby sung in the Seri language to a group of infants. The team found that the infants' heart rates decreased more during the lullaby than during the non-lullaby. Since a decrease in heart rate is associated with relaxation, the team concluded that the lullaby relaxed the infants. Noting that reduced heart rate can also be associated with increased attention, one critic argues that instead, the lullaby simply attracted the infants' attention. Bainbridge and colleagues also measured pupil size, as pupils typically become larger when a stimulus captures a person's attention.

1

Which finding, if true, would most directly weaken critic's claim?

- A) Blinking, which indicates attention, was equally frequent whether infants were listening to the song in Scottish Gaelic or song in Seri.
- B) Neither the Scottish Gaelic language nor the melody of the traditional Scots lullaby was familiar to infants in the study.
- C) The infants' pupils were smaller when the infants were listening to lullabies than when they were listening to non-lullabies.
- D) Parents of infants in the study chose the lullaby over the non-lullaby when asked which song they would use to calm their child.

Dinosaurs, with the exception of the ancestors of birds, disappeared during a mass extinction 65 million years ago when an asteroid struck the Earth. Because a high metabolic rate has generally been suggested as one of the key advantages when it comes to surviving mass extinctions, some genetic palaeontologists have proposed that birds survived while non-avian dinosaurs did not because of the birds' increased metabolic capacity.

2

Which finding, if true, would undermine the genetic paleontologists' proposal?

- A) The metabolisms of non-avian dinosaurs may have decreased over time.
- B) Because some non-avian dinosaurs moved quickly, they likely had high metabolic rates.
- C) Birds have some of the highest metabolism rates of any creatures on Earth.
- D) Many dinosaurs with very high metabolic rates went extinct 65 million years ago.

Hypothesizing that lullabies, characterized by their lower melodic complexity, are universally calming to infants, Constance and colleagues played a lullaby sung in the Luk Saami language and a non-lullaby sung in the Tundra language to a group of infants. The team found that the infants' heart rates and pupil size both decreased more during the lullaby than during the non-lullaby. Since a decrease in heart rate is associated with relaxation, the team concluded that the lullaby relaxed the infants. However, noting that reduced heart rate can also be associated with increased attention, one critic argues that instead, the lullaby simply attracted the infants' attention.

3

Which finding, if true, would most weaken the critic's claim?

- A) More frequent blinking has also been found to be a reliable indication of attention.
- B) Parents of infants in the study preferred the Luk Saami lullaby over the other.
- C) Increased attention to a stimulus is usually accompanied by an increase in pupil size.
- D) Infants of the study had no familiarity with either of them.



Callie W Babbitt, Hema Madaka, and colleagues assembled a database of materials used in consumer electronics by studying products in the lab and by gathering data from similar product studies. The team gave each of these studies a rating for level of traceability (with a higher rating for clearer description of procedures) and for category consistency (with a higher rating for using materials categories more closely aligned with the categories in the team's database). Based on these ratings, a second research team concluded that the methodology was better explained in a study by Jaco Huisman and colleagues than it was in a study by Oguchi Masahiro and colleagues.

4

Which finding, if true, would most directly challenge the second research team's conclusion?

- A) The study by Huisman and colleagues had a lower traceability rating than the study by Oguchi and colleagues did.
- B) The study by Huisman and colleagues had a high consistency rating and a high traceability rating.
- C) The study by Huisman and colleagues had a lower consistency rating than the study by Oguchi and colleagues did.
- D) The study by Oguchi and colleagues had a low consistency rating and a low traceability rating.

Rafael Nunez and colleagues studied how members of the Yupno, an Indigenous group in Papua New Guinea, conceptualize time. The researchers recorded Yupno speakers explaining certain temporal words and phrases, such as kalip bishap, a past-oriented expression that translates to "past times," and coded each speaker's manual gestures. Previous research has found a tendency in many cultures to make temporal distinctions using spatial concepts and gestures, particularly along egocentric axes (i.e., relative to the orientation of the speaker): for instance, Spanish speakers often refer to the left/right axis to describe events in time. In an anthropology paper, a student claims that the tendency toward ego-based conceptualizations of time is universal.

5

Which finding, if true, would most directly weaken the student's claim?

- A) A Yupno speaker points in opposite directions when indicating a past event versus a future event.
- B) Some Yupno grammatical structures used when talking about time are also used in Spanish.
- C) Although Yupno speakers and Spanish speakers both use gestures to indicate orientation in time, Yupno speakers tend to use fewer gestures overall when speaking than Spanish speakers do.
- D) When Yupno speakers who are outdoors use gestures to refer to the future, they point uphill from their current location regardless of which way they are facing.

Callie W. Babbitt, Hema Madaka, and colleagues assembled a database of materials used in consumer electronics by studying products in the lab and by gathering data from similar product studies. The team gave each of these studies a rating for level of traceability (with a higher rating for clearer descriptions of procedures) and for category consistency (with a higher rating for using materials categories more closely aligned with the categories in the team's database). Based on these ratings, a second research team concluded that the methodology was better explained in a study by Greg L. Kozak and Gregory A. Keoleian than it was in a study by Martin Streicher-Porte and colleagues.

6

Which finding, if true, would most directly challenge the second research team's conclusion?

- A) The study by Kozak and Keoleian had a lower consistency rating than the study by Streicher-Porte and colleagues did.
- B) The study by Kozak and Keoleian had a high consistency rating and a high traceability rating.
- C) The study by Streicher-Porte and colleagues had a medium consistency rating and a medium traceability rating.
- D) The study by Kozak and Keoleian had a lower traceability rating than the study by Streicher-Porte and colleagues did.

Rafael Núñez and colleagues studied how members of the Yupno, an Indigenous group in Papua New Guinea, conceptualize time. The researchers recorded Yupno speakers explaining certain temporal words and phrases, such as *abjuk*, a present-oriented expression that translates to "now," and coded each speaker's manual gestures. Previous research has found a tendency in many cultures to make temporal distinctions using spatial concepts and gestures, particularly along egocentric axes (i.e., relative to the orientation of the speaker): for instance, English speakers often refer to the front/back axis to describe events in time. In an anthropology paper, a student claims that the tendency toward ego-based conceptualizations of time is universal.

7

Which finding, if true, would most directly weaken the student's claim?

- A) Some Yupno grammatical structures used when talking about time are also used in English.
- B) When Yupno speakers who are outdoors use gestures to refer to the past, they point downhill from their current location regardless of which way they are facing.
- C) A Yupno speaker points in opposite directions when indicating a past event versus a future event.
- D) Although Yupno speakers and English speakers both use gestures to indicate orientation in time, Yupno speakers tend to use fewer gestures overall when speaking than English speakers do.

Geneticist Elaine Ostrander led an international collaboration in which Norbert Benecke and other researchers investigated the evolutionary history of size variation in modern dogs. The researchers identified multiple versions of the gene regulating the production of IGF-1 (insulin-like growth factor 1) in dogs and found that dogs of the same breed consistently share the same version of the gene. In a discussion of the study, a student hypothesizes that small breeds of dogs (for example, Havanese) must share a version that represses IGF-1 production that would otherwise confer larger body size.

8

Which finding, if true, would most directly weaken the student's claim?

- A) The majority of the most prevalent dog breeds have limited activity in the gene that regulates IGF-1 production.
- B) The gene that regulates IGF-1 production is not the only gene that influences body size in dogs but is the only such gene that shows within-breed version consistency.
- C) The degree of size variation among dogs is greater than that of any other land-based mammal.
- D) Some breeds with small body sizes and low IGF-1 concentrations have a different version of the gene regulating IGF-1 production than do toy poodles.

Students in a biology class investigated why individual house mice (*Mus musculus*) can differ from one another in their susceptibility to cataracts in old age. The students compared wild-type mice and knockout mice, which are mice with specific genes deactivated, when mice of each type were raised in similar naturalistic environments and periodically tested for cataracts. Finding that knockout mice with the gene *Aasdh* deactivated tended to develop cataracts more frequently than did wild-type mice, the students concluded that differences in cataract frequency among house mice in nature are solely attributable to variations in the level of expression of *Aasdh*.

9

Which finding, if true, would most directly weaken the students' conclusion?

- A) Some wild-type mice were very similar to the knockout mice with regard to cataract frequency but showed a wide variety of expression of *Aasdh*.
- B) The level of expression of *Aasdh* does appear to affect the functioning of any other genes in house mice.
- C) A sampling of house mice captured in natural settings shows that individual mice can differ from one another in the level of expression *Aasdh*.
- D) The mice with *Aasdh* deactivated were identical to the wild-type mice except with regard to cataract frequency.

Rafael Núñez and colleagues studied how members of the Yupno, an Indigenous group in Papua New Guinea, conceptualize time. The researchers recorded Yupno speakers explaining certain temporal words and phrases, such as *kalip si ngan*, a past-oriented expression that translates to "a long time ago," and coded each speaker's manual gestures. Previous research has found a tendency in many cultures to make temporal distinctions using spatial concepts and gestures, particularly along egocentric axes (i.e., relative to the orientation of the speaker): for instance, English speakers often refer to the front/back axis to describe events in time. In an anthropology paper, a student claims that the tendency toward ego-based conceptualizations of time is universal.

10

Which finding, if true, would most directly weaken the student's claim?

- A) Some Yupno grammatical structures used when talking about time are also used in English.
- B) When Yupno speakers who are outdoors use gestures to refer to the future, they point uphill from their current location regardless of which way they are facing.
- C) A Yupno speaker points in opposite directions when indicating a past event versus a future event.
- D) Although Yupno speakers and English speakers both use gestures to indicate orientation in time, Yupno speakers tend to use fewer gestures overall when speaking than English speakers do.

Elaine Ostrander led an international collaboration with Greger Larson and other researchers to study the evolutionary history of size differences in modern dogs, including very small breeds such as Pomeranians. The researchers determined that among dogs as whole, there are many different variations of the gene that regulates the production of IGF-1 (insulin growth factor 1), a hormone that promotes growth. After reviewing the study, a student concludes that these variations must account for the observed variance in body size among dog breeds.

11

Which quotation from a scientist not involved in the study would most directly undermine the student's conclusion?

- A) The researcher's conclusions regarding the IGF-1 gene may not apply to other species given that dogs vary in size more than any other group of land mammals does.
- B) The gene that regulates IGF-1 production is one of multiple genes known to affect the size of dogs.
- C) In fact, only one third of the most prevalent dog breeds carry the same variant of the gene regulating IGF-1 production.
- D) Variations of the IGF-1 gene result in substantial body size variance among dog breeds and may influence additional characteristics as well.



Water flowing around an obstruction creates vortices (swirls) that vary in size with the obstruction's size and position, and fish sense these vortices in order to navigate around the obstructions. Using models of three fish-head shapes – narrow (low ratio of width to length), intermediate, and wide (high ratio of width to length) – Yuzo R. Yanagisuru, Otar Akanyeti, and James C. Liao showed that as vortex size increases, pressure fluctuations at the snout increase for narrow-headed and intermediate-headed fish but remain low for wide-headed fish. A second research team has therefore hypothesized that in low visibility conditions, a fish will be more likely to avoid an obstruction when the associated pressure fluctuations at the fish's snout are greater.

12

Which finding, if true, would most directly challenge the second research team's hypothesis?

- A) A study using obstructions that created large vortices in low-visibility conditions found that the *Synodontis macropunctata*, which has a relatively wide head, bumped into less than half of the obstructions.
- B) A study using obstructions that created large vortices in low-visibility conditions found that the intermediate-headed dusky smooth-hound (*Mustelus canis*) bumped into the obstructions just as often as the wide-headed *Synodontis macropunctata* did.
- C) A study using obstructions that created large vortices in low-visibility conditions found that the wide-headed *Synodontis macropunctata* bumped into obstructions more often than the intermediate headed dusky smooth-hound (*Mustelus canis*) did.
- D) A study using obstructions that created large vortices in low visibility conditions found that some specimens of the intermediate-headed dusky smooth-hound (*Mustelus canis*) bumped into the obstructions more often than others did.



Veronica L. Bura, Akito Y. Kawahara, and Jayne E. Yack investigated the evolution and function of sound production in silk moth and hawk moth caterpillars. They found that during harmless simulated attacks on caterpillars, 33% of the tested species produced sound, which ranged from clicks in *Antheraea pernyi* to whistles in *Phyllosphingia dissimilis*. A second research team has claimed that caterpillars use these sounds primarily to communicate with other members of their species.

13

Which finding, if true, would most directly challenge the second team's claim?

- A) Among the caterpillar species that produced sound in response to simulated attacks, no individuals produced sound in the minute before the attacks, but the vast majority of individuals produced sound once the simulated attacks began.
- B) Most of the caterpillar species that were found to not produce sound in response to simulated attacks have been observed producing sound during encounters with other members of their species.
- C) Caterpillars that were found to produce sounds in response to simulated attacks are typically solitary and were tested in isolation.
- D) The sounds caterpillars produced in response to the simulated attacks lacked acoustic characteristics that would make them audible to bats, lizards, or birds, some of the most frequent predators of caterpillars.

Elaine Ostrander led an international collaboration with Victor F. Zaibert and other researchers to study the evolutionary history of size differences in modern dogs, including very small breeds such as chihuahuas. The researchers determined that among dogs as a whole, there are many different variations of the gene that regulates the production of IGF-1 (insulin growth factor 1), a hormone that promotes growth. After reviewing the study, a student concludes that these variations must account for the observed variance in body size among dog breeds.

14

Which quotation from a scientist not involved in the study would most directly undermine the student's conclusion?

- A) In fact, only one-third of the most prevalent dog breeds carry the same variant of the gene regulating IGF-1 production.
- B) The researchers' conclusions regarding the IGF-1 gene may not apply to other species given that dogs vary in size more than any other group of land mammals does.
- C) Variations of the IGF-1 gene result in substantial body size variance among dog breeds and may influence additional characteristics as well.
- D) The gene that regulates IGF-1 production is one of multiple genes known to affect the size of dogs.

Hypothesizing that lullabies, characterized by their slow tempos, are universally calming to infants, Constance M. Bainbridge and colleagues played a lullaby sung in the Western Nahuatl language and a non-lullaby sung in the Serbian language to a group of infants. The team found that the infants' heart rates and pupil size both decreased more during the lullaby than during the non-lullaby. Since a decrease in heart rate is associated with relaxation, the team concluded that the lullaby relaxed the infants. However, noting that reduced heart rate can also be associated with increased attention, one critic argues that instead, the lullaby simply attracted the infants' attention.

15

Which finding, if true, would most directly weaken the critic's claim?

- A) Parents of infants in the study preferred the Western Nahuatl lullaby over the Serbian non-lullaby.
- B) Infants in the study had never heard the Western Nahuatl lullaby before.
- C) More frequent blinking has also been found to be a reliable indication of attention.
- D) Pupil size typically increases when a stimulus captures a person's attention.

In what is now southern Florida, the Calusa people (circa 1000-1600 CE) supported their relatively large population's dietary needs with hydrological engineering rather than terrestrial farming methods. They constructed watercourts (gated coastal enclosures) out of shells and sediments to trap a variety of fish as waters rose and fell with tides and seasonal sea-level shifts; watercourt pools then held the fish for later consumption. Archaeologist Theresa Schober has posited an additional purpose of these enclosures, suggesting that they were intended to foster conch. She ties this hypothesis to the high value the sea snails would have had for the Calusa, both nutritionally and as a building material (conch shells are highly durable).

16

Which finding, if true, would most directly weaken the Schober's claim?

- A) Samples of animal remains collected at Calusa sites reflect a greater diversity of marine species, particularly among sea snails, within the perimeter of watercourts than in locations known to have been devoted to the preparation and consumption of food.
- B) Historical population-size estimates suggest that the sea snails and fish most common in the Calusa diet were plentiful in open coastal waters when the watercourts were constructed but decreased in abundance in the years immediately after construction.
- C) Sediment layers excavated from Calusa watercourt sites contain heterogeneous mixtures of scales from multiple species of fish and fragments of shells from various types of sea snails, but conch shells do not constitute the majority of the mixture in most of those layers.
- D) Radar surveys of Calusa sites reveal watercourt dimensions suitable for sustaining fish of many local species but not conducive for maintaining the shallow environments with ample seagrasses that allow sea snails to thrive.

Paleontologist Amane Tajika and colleagues analyzed the shells of two marine mollusks called nautilids that were collected from waters near New Caledonia. Sample M25 and other shell sections formed during adulthood suggest that mature New Caledonian nautilids live at the same depths as mature Fijian nautilids. However, sample F02, which formed while the nautilid was still in its egg, had a chemical signature suggesting the egg had been laid in water 140 meters deep, while Fijian nautilids typically lay eggs at depths of at least 170 meters. Because water temperature decreases as depth increases, a biology student hypothesized that the New Caledonian nautilids lay their eggs in warmer water than Fijian nautilids do.

17

Which finding, if true, would most directly weaken the student's hypothesis?

- A) New Caledonia nautilids tend to migrate upward to warmer water immediately after hatching, whereas Fijian nautilids do not.
- B) There aren't enough suitable hatching areas at a depth of at least 170 meters in New Caledonia for nautilids to lay their eggs at that depth.
- C) The water temperature at a given depth tends to be lower in waters near Fiji than it is at that depth in waters near New Caledonia.
- D) The water temperature at a given depth tends to be higher in waters near Fiji than it is at that depth in waters near New Caledonia.

Some metals contain tungsten carbide nanoparticles (WC-NPs), which can leach into waterways and soils via wastewater. In a 2018 study, Mikael T. Ekvall and colleagues found that WC-NPs can accumulate in the bodies of water lice (*Asellus aquaticus*). While bioaccumulation of manufactured nanoparticles may be inherently worrisome, it has been hypothesized that WC-NP bioaccumulation in invertebrates like *A. aquaticus* could serve a valuable proxy role, obviating the need for manufacturers to conduct costly and intrusive sampling of vertebrate species—such as Perez's frogs (*Pelophylax perezi*), commonly used in regulatory compliance testing—for nanoparticle bioaccumulation, as environmental protection laws currently require.

18

Which finding, if true, would most directly weaken the hypothesis presented in the text?

- A) Compared with *P. perezi*, *A. aquaticus* can accumulate detectable WC-NP concentrations with significantly fewer negative effects.
- B) The rate of WC-NP uptake in *A. aquaticus* differs from the rate of WC-NP uptake in *P. perezi* in a way that is not yet well understood by researchers.
- C) *A. aquaticus* has been shown to accumulate several other types of manufactured nanoparticles in addition to WC-NPs, whereas *P. perezi* has been shown to accumulate only WC-NPs.
- D) When *A. aquaticus* and *P. perezi* are exposed to similar levels of WC-NPs, concentrations of WC-NPs in animals of both species show little variation from individual to individual.

## Answers: Command of Evidence - Weaken

Number	Answer	Number	Answer
1	C	2	B
3	C	4	A
5	D	6	D
7	B	8	D
9	A	10	B
11	B	12	B
13	A	14	D
15	D	16	D
17	D	18	A



## Topic 6: Quotation

72 Questions

### DIRECTIONS

#### Must Know Tips:

- Learn about the foundation of poems.
- Understand the “Show but don’t tell” technique.
- Look for synonyms of words and phrases between the passage and the correct option.
- To find something, you need to know what you’re searching for.

**Recommended time per question in this section:** min: 50 sec, max: 1 min 25 sec, avg: 1 min 7.5 sec. (\*Exam level)

Life Among the Paiutes is an 1882 autobiographical narrative by Sarah Winnemucca Hopkins. In the work, Winnemucca directly addresses the reader to establish her authority and credibility, writing\_\_\_\_\_

1

Which quotation from Life Among the Paiutes most effectively illustrates the claim?

- A) My dear reader, I have not lived in this world for over thirty or forty years for nothing, and I know what I am talking about.
- B) I was born somewhere near 1844, but am not sure of the precise time.
- C) Oh, dear readers, these soldiers had gone only sixty miles away to Muddy Lake, where my people were then living and fishing.
- D) But how can I describe the scene that followed? Some of you, dear readers, can imagine.

The Underdogs is a 1915 novel by Mariano Azuela, originally written in Spanish. In the novel, the town of Juchipila is depicted as a striking sight for a group of soldiers as they view it from afar: \_\_\_\_\_

2

Which quotation from a translation of *The Underdogs* most effectively illustrates the claim?

- A) All day long [the soldiers] rode through the canyon, up and down the steep, round hills, dirty and bald as a man's head, hill after hill in endless succession.
- B) The soldiers entered the streets of Juchipila as the church bells rang, loud and joyfully, with that peculiar tone that thrills every mountaineer.
- C) Juchipila rose in the distance, white, bathed in sunlight, shining in the midst of a thick forest at the foot of a proud, lofty mountain.
- D) The sierra is clad in gala colors. Over its inaccessible peaks the opalescent fog settles like a snowy veil on the forehead of a bride.

Frederick Douglass is an 1895 poem by Paul Laurence Dunbar. In the poem, Dunbar praises Douglass for his honesty and refusal to be intimidated, writing \_\_\_\_\_.

3

Which quotation from "Frederick Douglass" effectively illustrates the claim?

- A) No miser in the good he held was he,— His kindness followed his horizon's rim
- B) A hush is over all the teeming lists, And there is pause, a breath-space in the strife;
- C) And he was no soft-tongued apologist; He spoke straightforward, fearlessly uncowed;
- D) He was her champion thro' direful years, And held her weal all other ends above

I Know Why the Caged Bird Sings is a 1969 novel written by Maya Angelou. In the novel, the main character struggles to accept her African American race while growing up in the Southern United States.

4

Which quotation from I Know Why the Caged Bird Sings most effectively supports this claim?

- A) “The dress I wore was light purple. As I’d watched Momma make it, putting fancy stitching on the waist, I knew that when I put it on, I’d look like one of the sweet little white girls who were everyone’s dream of what was right with the world.”
- B) “When people saw me wearing it, they were going to run up to me and say, ‘Marguerite [sometimes it was ‘dear Marguerite’], forgive us, please, we didn’t know who you were,’ and I would answer generously, ‘No, you couldn’t have known. Of course I forgive you.’”
- C) “Wouldn’t they be surprised when one day I woke out of my black ugly dream, and my real hair, which was long and blonde, would take the place of the kinky mass that Momma wouldn’t let me straighten?”
- D) “If growing up is painful for the Southern Black girl, being aware of her difference is worse. It is an unnecessary insult.”

In her essay entitled, “Slouching Towards Bethlehem,” Joan Didion describes her experiences in California during the 1960s and 1970s while proving a darker side of this period existed even though it is often admired for its claimed pursuit of peace and love.

5

Which quotation from “Slouching Towards Bethlehem” most effectively supports the claim?

- A) “It was a country of bankruptcy notices and public-auction announcements and commonplace reports of casual killings and misplaced children and abandoned homes and vandals who misplaced even the four-letter words they scrawled.”
- B) “It was the United States of America in the cold late spring of 1967, and the market was steady and the G.N.P. high and a great many articulate people seemed to have a sense of high social purpose and it might have been a spring of brave hopes and national promise, but it was not, and more and more people had the uneasy apprehension that it was not.”
- C) “San Francisco was where the missing children were gathering and calling themselves ‘hippies.’ When I first went to San Francisco in that cold late spring of 1967, I did not even know what I wanted to find out, and so I just stayed around awhile, and made a few friends.”
- D) “Adolescents drifted from city to torn city, sloughing off both the past and the future as snakes shed their skins, children who were never taught and would never now learn the games that had held the society together.”

Cane is a 1932 novel by Jean. In one portion of the novel, Jean establishes a contrast between the narrator's attitude towards life and the attitude of the narrator's love interest, Avey, writing \_\_\_\_\_

6

Which quotation most effectively supports this claim?

- A) "I saw the dawn steel over Washington. The capitol dome looked like a gray ghost drifting in from sea."
- B) "Avey was as silent as those great trees whose tops we looked down upon. She has always been like that. At least, to me."
- C) "Avey slipped her hand in mine. Pillowed her head at best she could upon my arm. Kissed the hand that she was holding and listened, or so I thought, to what I had to say."
- D) "As time went on, Avey's indifference to things began to pique me; I was ambitious. I left out small hometown earlier than she did."

The Monster is an 1898 story by Stephen Crane. In the story, the character of Jim, a young boy, accidentally damages a peony (a flower) in the yard while his father is tending to the lawn. Crane depicts the dedication and care with which his father typically cares for his lawn, writing \_\_\_\_\_.

7

Which quotation from "The Monster" most effectively illustrates that claim?

- A) After some trouble (Jim's father) found the subject of the incident, the broken flower. Turning then, he saw the child lurking at the rear and scanning his countenance,
- B) "(Jim's father) was shaving this lawn as if it were a priest's chin. All during the season he had worked at it in the coolness and peace of the evenings after supper. Even in the shadow of the cherry trees the grass was strong and healthy."
- C) (Jim's father) paused, and with the howl of the machine no longer occupying the sense, one could hear the robins in the cherry trees arranging their affairs.
- D) "(Jim) went on to the lawn, very slowly and kicking wretchedly at the furt. Presently his father came along with the whirring machine, while the sweet, new grass blades spun from the knives."



The 2000 production of *The Green Bird* was the first Broadway show for which Constance Hoffman was credited as a costume designer. Hottman was among the Broadway costume designers interviewed by Sara Jabion-Roberts and Eulanda A Sanders for their study of historical accuracy in costume design for shows with a historical setting. They found that even designers who value historical accuracy will often include contemporary design elements that don't fit with the historical period. In a research paper about theatrical costume design, a student argues that costume designers for modern productions of Shakespeare's *A Midsummer Night's Dream* (set in ancient Greece) sometimes include such elements unintentionally.

8

Which quotation from an interview with a costume designer would most effectively support the student's claim?

- A) I tend to pay careful attention to a character's accessories like gloves, hats, and jackets. These elements help communicate information about how this person would have fit into society at the time.
- B) I aim to create a clear sense of the character and the world they inhabit. Sometimes this means adhering to the historical period's style, but frequently, as in stagings of *A Midsummer Night's Dream*, some flexibility is required to communicate an idea to the audience.
- C) "Costumes must always reflect the correct historical period. Too often, I've seen costumes that borrow from a wide span of periods, resulting in a production with a confusing visual style."
- D) In the 1980s I was costuming for a production of *A Midsummer Night's Dream*. Even though I focused on using the correct materials and techniques for the plays period in history, when looking back I can clearly see the influence of 1980s fashion in my designs.

The Underdogs is a 1915 novel by Mariano Azuela, originally written in Spanish. In the novel, a group of soldiers travel through a canyon, where their collective mood becomes strongly affected by the strenuous conditions of their journey: \_\_\_\_\_.

9

Which quotation from "The Underdogs" most effectively illustrates that claim?

- A) The sierra is clad in gold colors. Over its inaccessible peaks the opalescent fog settles like a snowy veil on the forehead of a bride."
- B) "Then, hurriedly, the soldiers took the Juchipila canyon northward, without halting to rest until nightfall."
- C) "The sun, beating down upon (the soldiers), dulled their minds and bodies and presently they were silent,"
- D) All day long (the soldiers) rode through the canyon, up and down the steep, round hills, dirty and bald as a man's head, hill after hill in in endless succession."

Poems is an 1895 collection of poetry by Frances E.W. Harper. In one of Harper's poems, the speaker criticizes activists who champion humanitarian causes in other countries while overlooking local concerns, saying \_\_\_\_\_.

10

Which quotation from Poems most effectively illustrates the claim?

- A) God bless our native land, / Her homes and children bless, / Oh may she ever stand / For truth and righteousness. (from "God Bless Our Native Land")
- B) Men may tread down the poor and lowly / May crush them in anger and hate / But surely the mills of God's justice / Will grind out the grist of their fate. (from "An Appeal to My Countrywomen")
- C) Say not the age is hard and cold- / I think it brave and grand / When men of diverse sects and creeds / Are clasping hand in hand. (from "The Present Age")
- D) When ye plead for the wrecked and fallen, / The exile from far-distant shores, / Remember that men are still wasting / Life's crimson around your own doors. (from "An Appeal to My Countrywomen")

In a paper for an art history class, a student claims that Gwen John's circa 1915 painting *Mère Poussepin* marks a significant change in John's artistic development.

11

Which quotation from an art history textbook would most effectively support the student's claim?

- A) *Mère Poussepin* has been analyzed extensively since it was first exhibited, as no two viewers seem to agree about exactly what the painting means.
- B) Of all John's paintings, none so clearly represents her abilities and ideas as *Mère Poussepin*.
- C) The paintings that John produced before *Mère Poussepin* can be thought of as belonging to her earlier style, to which she never returned.
- D) Although John was clearly influenced by other artists of her time, she was also an artist ahead of her time, as *Mère Poussepin* demonstrates.

Cane is a 1923 novel by Jean Toomer. In one portion of the novel, Toomer uses figurative language to connect the narrator's urban environment of Washington, DC, and the rural South of the narrator's past, writing,

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12

Which quotation from *Cane* most effectively illustrates the claim?

- A) And when the wind is from the South, soil of my homeland falls like a fertile shower upon the lean streets of [Washington, DC].
- B) The young trees had not outgrown their [planter] boxes then. V Street [in Washington, DC] was lined with them.
- C) The Capitol dome looked like a gray ghost ship drifting in from sea.
- D) The [train] engines of this valley have a whistle, the echoes of which sound like iterated gasps and sobs. I always think of them as crude music.

In a paper for an art history class, a student claims that Rosa Bonheur's 1855 painting *The Horse Fair* marks a significant change in Bonheur's artistic development.

13

Which quotation from an art history textbook would most effectively support the student's claim?

- A) The paintings that Bonheur produced before *The Horse Fair* can be thought of as belonging to her earlier style, to which she never returned.
- B) Of all Bonheur's paintings, none so clearly represents her abilities and ideas as *The Horse Fair*.
- C) *The Horse Fair* has been analyzed extensively since it was first exhibited, as no two viewers seem to agree about exactly what the painting means.
- D) Although Bonheur was clearly influenced by other artists of her time, she was also an artist ahead of her time, as *The Horse Fair* demonstrates.

Poetry is a 1919 poem by Marianne Moore. The poem highlights an ambivalence toward poetry as the speaker acknowledges its merits while also expressing a sense of displeasure, writing

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14

Which quotation from "Poetry" most effectively illustrates the claim?

- A) nor is it valid / to discriminate against 'business documents and / school-books'; all these phenomena are important.
- B) One must make a distinction / however: when dragged into prominence by half poets, the result is not / poetry
- C) when [poems] become so derivative as to become unintelligible, the / same thing may be said for all of us—that we / do not admire what / we cannot understand.
- D) Reading [poetry], however, with a perfect contempt for it, one discovers that there is in / it after all, a place for the genuine.

“The Bet” is an 1889 short story by Anton Chekhov. In the story, a banker is described as being very upset about something:

-----

15

Which quotation from “The Bet” most effectively illustrates the claim?

- A) “Then the banker cautiously broke the seals off the door and put the key in the keyhole.”
- B) “It struck three o’clock, the banker listened; everyone was asleep in the house and nothing could be heard outside but the rustling of the chilled trees.”
- C) “The banker, spoilt and frivolous, with millions beyond his reckoning, was delighted at the bet.”
- D) “When [the banker] got home he lay on his bed, but his tears and emotion kept him for hours from sleeping.”

Lines Written in Early Spring is a 1798 poem by William Wordsworth. In the poem, the speaker describes having contradictory feelings while experiencing the sights and sounds of a spring day:

16

Which quotation from "Lines Written in Early Spring" most effectively illustrates the claim?

- A) Through primrose-tufts, in that sweet bower, /The periwinkle trail’d its wreathes; /And ’tis my faith that every flower /Enjoys the air it breathes.
- B) The budding twigs spread out their fan, /To catch the breezy air; /And I must think, do all I can, /That there was pleasure there.
- C) The birds around me hopp’d and play’d: / Their thoughts I cannot measure, / But the least motion which they made, / It seem’d a thrill of pleasure.
- D) I heard a thousand blended notes, / While in a grove I [sat] reclined. / In that sweet mood when pleasant thoughts /Bring sad thoughts to the mind.



The Yellow Wallpaper is an 1892 short story by Charlotte Perkins Gilman. In the story, the narrator expresses mixed feelings about her surroundings: \_\_\_\_\_

17

Which quotation from "The Yellow Wallpaper" most effectively illustrates the claim?

- A) This wallpaper has a kind of sub-pattern in a different shade, a particularly irritating one, for you can only see it in certain lights, and not clearly then.
- B) By moonlight—the moon shines in all night when there is a moon—I wouldn't know it was the same paper.
- C) I'm really getting quite fond of the big room, all but that horrid [wall]paper.
- D) The color is repellant, almost revolting; a smouldering, unclean yellow, strangely faded by the slow-turning sunlight.

In a paper for an art history class, a student claims that Agnes Martin's 1957 painting *Harbor Number 1* marks a significant change in Martin's artistic development.

18

Which quotation from an art history textbook would most effectively support the student's claim?

- A) "*Harbor Number 1* has been analyzed extensively since it was first exhibited, as no two viewers seem to agree about exactly what the painting means."
- B) "Although Martin was clearly influenced by other artists of her time, she was also an artist ahead of her time, as *Harbor Number 1* demonstrates."
- C) "The paintings that Martin produced before *Harbor Number 1* can be thought of as belonging to her earlier style, to which she never returned."
- D) "Of all Martin's paintings, none so clearly represents her abilities and ideas as *Harbor Number 1*."

A Pair of Silk Stockings is an 1897 short story written by Kate Chopin. In the story, Chopin suggests that the protagonist, Mrs. Sommers, experiences a shift in her sense of self as a result of putting on certain articles of clothing, writing, \_\_\_\_\_.

19

Which quotation from "A Pair of Silk Stockings" most effectively illustrates the claim?

- A) "Mrs. Sommers was one who knew the value of bargains; who could stand for hours making her way inch by inch toward the desired object that was selling below cost."
- B) "She held back her skirts and turned her feet one way and her head another way as she glanced down at the polished pointed-tipped boots."
- C) "She would buy so and so many yards of percale for new shirt waists for the boys and Janie and Mag."
- D) "Her stockings and boots and well-fitting gloves had worked marvels in her bearing had given her a feeling of assurance, a sense of belonging to the well-dressed multitude."

Uncle Vanya: Scenes from Country Life in Four Acts is an 1898 play by Anton Chekhov. Originally written in Russian. In the play, Professor Serebrakoff and his wife Helena have come to stay at their country estate, which Vanya manages with the help of Sonia, the professor's daughter from a previous marriage. Chekhov portrays Helena as trying to ease tensions between Vanya and the professor, as is evident when \_\_\_\_\_

20

Which quotation from a translation of Uncle Vanya most effectively illustrates the claim?

- A) Helena says to Vanya, "I am absolutely exhausted by [Professor Serebrakoff], and can hardly stand."
- B) Helena says to Vanya, "You all abuse my husband and look on me with compassion: you think, 'Poor woman, she is married to an old man.' How well I understand your compassion!"
- C) Helena says to Vanya, "You are cultured and intelligent, [Vanya, and you surely understand that the world is not destroyed by villains and conflagrations, but by hate and malice and all this spiteful tattling. It is your duty to make peace [with Professor Serebrakoff], and not to growl at everything."
- D) Helena says to Sonia, "When you come to think of it, Sonia, I am really very, very unhappy."

Uncle Vanya: Scenes from Country Life in Four Acts is an 1898 play by Anton Chekhov, originally written in Russian. In the play, Professor Serebrakoff and his wife Helena have come to stay at their country estate, which Vanya manages with the help of Sonia, the professor's daughter from a previous marriage. Chekhov depicts Vanya's opinion of Professor Serebrakoff as having changed significantly, as is evident when \_\_\_\_\_

21

Which quotation from a translation of Uncle Vanya most effectively illustrates the claim?

- A) Vanya says to Professor Serebrakoff, "For twenty-five years I have managed [the country estate], and have sent you the returns from it like the most honest of servants, and you have never given me one single word of thanks for my work, not one-neither in my youth nor now."
- B) Professor Serebrakoff says to Helena, "It is funny that everybody listens to [Vanya] and his old idiot of a mother, but the moment I open my lips you all begin to feel ill-treated."
- C) Vanya says to Professor Serebrakoff, "This place [the country estate] could never have been bought had I not renounced my inheritance in favor of my sister [the professor's late wife], whom I deeply loved and what is more, I worked for ten years like an ox, and paid off the debt."
- D) Vanya says to himself, "I was proud of [Professor Serebrakoff] and of his learning; I received all his words and writings as inspired and now? Now he has retired, and what is the total of his life? A blank! He is absolutely unknown, and his fame has burst like a soap-bubble. I have been deceived; I see that now, basely deceived."

*Life Among the Paiutes* is an 1882 autobiographical narrative by Sarah Winnemucca Hopkins. In the work, Winnemucca creates suspense by emphasizing her physical response to an event, writing

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22

Which quotation from *Life Among the Paiutes* most effectively illustrates the claim?

- A) A. "Oh, how my heart jumped when I heard a noise close by. It was a horse running towards us. We had to lie down close to the ground. It came close to us and stopped. Oh, how my heart beat! I thought whoever it was would hear my heart beat."
- B) "Oh, how happy everybody was! One could hear laughter everywhere, and songs were sung by happy women and children."
- C) "Late in that fall, there came news that my grandfather was on his way home. Then my father took a great many of his men and went to meet his father, and there came back a runner, saying, that all our people must come together."
- D) "That same fall, after my grandfather came home, he told my father to take charge of his people and hold the tribe, as he was going back to California with as many of his people as he could get to go with him."

A student is writing an essay on the subject of cultured meat, which is grown in a laboratory and is intended to help reduce the number of livestock harvested for food. The student wishes to make the case that people have mixed feelings about cultured meat that may be a barrier to its worldwide adoption.

23

Which quotation from a publication by a researcher would most effectively support the student's claim?

- A) "Many consumers who were surveyed believed that cultured meat would be good for the environment if widely available, but few of those same consumers were willing to try eating cultured meat themselves."
- B) "Consumers tend to believe that using less packaging when selling meat products in stores would have a significant effect on the environment."
- C) "Advocates of lab-grown meat claim that it's safer than conventional meat because the means of its production can be tightly controlled."
- D) "The flavor of meat from livestock differs across species (from pig to chicken to cow), and is also influenced by farming conditions and the breeds and genders of animals."



A student is writing a research paper on the history of irrigation in the United States, situating the development of Hume Lake (created in Fresno County, California, in 1908) in a larger historical context. The student claims that California's climate renders irrigation an essential component of agriculture in some parts of the state but not in others.

24

Which quotation from a study of California agriculture best supports the student's claim?

- A) "The usefulness of irrigation infrastructure in California today cannot be overstated, since it is the most common means of conveying water for agricultural purposes."
- B) "Natural humidity, which renders irrigation unnecessary or reduces its importance in the northern reaches of California, gradually decreases toward the sun-scorched but nonetheless fertile valleys of the southern part of the state."
- C) "Sprinkler irrigation systems are a contemporary way of irrigating that requires machinery to spray water in all directions. These are currently used throughout the United States and are especially prevalent in California."
- D) "The irrigation system developed by the Hohokam people in the 7th century CE in what is now Arizona was simple, but this system applied hydraulic engineering design features that are in use today throughout California."

Treasure Island is an 1883 novel by Robert Louis Stevenson. When the narrator was a child his father ran a hotel. A mysterious sailor came to stay at the hotel. The narrator was frightened of the sailor, as can be seen when the narrator says, \_\_\_\_\_

25

Which quotation from *Treasure Island* most effectively illustrates the claim?

- A) "How [the sailor] haunted my dreams, I need scarcely tell you. On stormy nights, when the wind shook the four corners of the house and the surf roared along the cove and up the cliffs, I would see him in a thousand forms, and with a thousand diabolical expressions."
- B) "I remember [the sailor] as if it were yesterday, as he came plodding to the inn door, his sea-chest following behind him in a hand-barrow."
- C) "[The sailor] was a very silent man by custom. All day he hung round the cove or upon the cliffs with a brass telescope."
- D) "All the time he lived with us [the sailor] made no change whatever in his dress but to buy some stockings from a hawker. One of the (corners) of his hat having fallen down, he let it hang from that day forth, though it was a great annoyance when it blew."

Poems is an 1895 collection of poetry by Frances E.W. Harper. In one of Harper's poems, the speaker declares her intention to create art that has a universal appeal across generations, saying, \_\_\_\_\_.

26

Which quotation from Poems most effectively illustrates the claim?

- A) "Our world, so worn and weary, / Needs music, pure and strong, / To hush the jangle and discords / Of sorrow, pain, and wrong." (from Songs for the People)
- B) "Let me make the songs for the people, / Songs for the old and young; / Songs to stir like a battle-cry / Wherever they are sung." (from Songs for the People)
- C) "God bless our native land, / Land of the newly free, / Oh may she ever stand / For truth and liberty." (from God Bless Our Native Land)
- D) "My mother's kiss, my mother's kiss, / I feel its impress now; / As in the bright and happy days / She pressed it on my brow." (from My Mother's Kiss)

The Underdogs is a 1915 novel by Mariano Azuela, originally written in Spanish. In the novel, Azuela depicts a traveling group of soldiers as having a renewed sense of agency and authority as they set off on a new stage of their journey: \_\_\_\_\_.

27

Which quotation from a translation of *The Underdogs* most effectively illustrates the claim?

- A) "The sonorous, joyful bells rang again. From within the church, the honeyed voices of a female chorus rose melancholy and grave."
- B) "All day long [the soldiers] rode through the canyon, up and down the steep, round hills, dirty and bald as a man's head, hill after hill in endless succession. At last, late in the afternoon, they descried several stone church towers in the heart of a bluish ridge, and, beyond, the white road with its curling spirals of dust and its gray telegraph poles."
- C) "The men threw out their chests as if to breathe the widening horizon, the immensity of the sky, the blue from the mountains and the fresh air, redolent with the various odors of the sierra. They spurred their horses to a gallop as if in that mad race they laid claims of possession to the earth."
- D) "Before Juchipila was lost from sight, Valderrama got off his horse, bent down, kneeled, and gravely kissed the ground."

The Age of Innocence is a 1920 novel by Edith Wharton set in New York City in the 1870s. In the novel, Newland Archer attends an opera; in the audience is May Welland, with whom he is romantically involved. Newland visualizes the details of a future with May:

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28

Which quotation from *The Age of Innocence* best illustrates the claim?

- A) "[May] dropped her eyes to the immense bouquet of lilies-of-the-valley on her knee, and Newland Archer saw her white-gloved finger-tips touch the flowers softly."
- B) "Newland Archer, leaning against the wall at the back of the club box [where his seat was], turned his eyes from the stage and scanned the opposite side of the house."
- C) "Though there was already talk...of a new Opera House which should compete in costliness and splendour with those of the great European capitals, the world of fashion was still content to reassemble every winter in the shabby red and gold boxes of the sociable old Academy [of Music],"
- D) "Already [Newland's] imagination, leaping ahead of the engagement ring, the betrothal kiss and the [wedding] march from Lohengrin, pictured [May] at his side."

Cane is a 1923 novel by Jean Toomer. In the novel, Toomer mentions a road in rural Georgia called Dixie Pike and describes it as having a deep connection to faraway place, writing\_\_\_\_\_

29

Which quotation from *Cane* most effectively illustrates the claim?

- A) "And when the wind is from the South, soil of my homeland falls like a fertile shower upon the lean streets of Washington, DC."
- B) "From down the railroad track, the chug-chug of a gas engine announces that the repair gang is coming home."
- C) "The Dixie Pike has grown from a goat path in Africa."
- D) "Dixie Pike is what they call it."



The Age of Innocence is a 1920 novel by Edith Wharton set in New York City in the 1870s. In the novel, Newland Archer arrives late to an opera performance, which the narrator attributes to Newland's enjoyment of anticipation: \_\_\_\_\_

30

Which quotation from *The Age of Innocence* best illustrates the claim?

- A) "To come to the Opera in a [carriage for hire] was almost as honourable a way of arriving as in one's own carriage."
- B) "[T]hinking over a pleasure to come often gave [Newland] a subtler satisfaction than its realisation."
- C) "When Newland Archer opened the door at the back of the club box the curtain had just gone up on the garden scene. There was no reason why the young man should not have come earlier, for he had dined at seven, alone with his mother and sister."
- D) "No expense had been spared on the setting, which was acknowledged to be very beautiful even by people who shared [Newland's] acquaintance with the Opera houses of Paris and Vienna."

"The Bet" is an 1889 short story by Anton Chekhov. In the story, a banker is described as being very upset about something:  
\_\_\_\_\_

31

Which quotation from "The Bet" most effectively illustrates the claim?

- A) "Then the banker cautiously broke the seals off the door and put the key in the keyhole."
- B) "It struck three o'clock, the banker listened; everyone was asleep in the house and nothing could be heard outside but the rustling of the chilled trees."
- C) "The banker, spoilt and frivolous, with millions beyond his reckoning, was delighted at the bet."
- D) "When [the banker] got home he lay on his bed, but his tears and emotion kept him for hours from sleeping."

A Pair of Silk Stockings is an 1897 short story written by Kate Chopin. In the story, Mrs. Sommers becomes engrossed in the decision of how she should spend a recently obtained sum of money: \_\_\_\_\_

32

Which quotation from "A Pair of Silk Stockings" most effectively illustrates the claim?

- A) "The question of investment was one that occupied her greatly. For a day or two she walked about apparently in a dreamy state, but really absorbed in speculation and calculation."
- B) "She had learned to clutch a piece of goods and hold it and stick to it with persistence and determination till her turn came to be served, no matter when it came."
- C) "A young girl who stood behind the counter asked her if she wished to examine their line of silk hosiery. She smiled, just as if she had been asked to inspect a tiara of diamonds with the ultimate view of purchasing it."
- D) "It seemed to her a very large amount of money, and the way in which it stuffed and bulged her worn old porte-monnaie [small purse] gave her a feeling of importance such as she had not enjoyed for years."

The Clouds is a 423 BCE play by Aristophanes, originally written in ancient Greek. At the time, professional intellectuals called sophists taught customers rhetorical techniques to use in public speaking, along with providing instruction in other subjects. In the play, Aristophanes satirizes sophists as teaching people to speak dishonestly, as seen when the character \_\_\_\_\_

33

Which choice most effectively uses a quotation from a translation of *The Clouds* to illustrate the claim?

- A) Strepsiades encourages his son to learn to be a sophist, saying, "If you have any concern for your father's patrimony, become one of them."
- B) Pheidippides says, after taking lessons from a sophist, "How pleasant it is to be acquainted with new and clever things, and to be able to despise the established laws!"
- C) Strepsiades, taking lessons from a sophist, says he wants to become "a fabricator of falsehoods, inventive of words, a practiced knave in lawsuits..... a fox, a sharper, a slippery knave, a dissembler, a slippery fellow, an impostor."
- D) Socrates, a sophist, says to a potential customer, "I wish to briefly learn from you if you are possessed of a good memory."

*Memoirs of Elleanor Eldridge* is an 1838 historical account by Elleanor Eldridge and Frances Harriet Whipple Green. In the book, the authors assert that all people naturally have an emotional attachment to where they live, writing, \_\_\_\_\_

34

Which quotation from *Memoirs of Elleanor Eldridge* most effectively illustrates the claim?

- A) "This little book is published for the express purpose of giving a helping hand to suffering and persecuted merit."
- B) "To give some idea of the high esteem in which the subject of the following narrative is held, and the strong interest her misfortunes have excited, a few, from the great number of recommendations in her possession, are selected."
- C) "Blessed are the slumbers of the innocent! They are kindlier than balm, and they refresh and gladden the spirit of childhood, like ministrings from a better world."
- D) "Home is home, to the lowly as well as the great: and no rank, or color, destroys its sacred character, its power over the mind, and the affections."

Many music streaming services also function as social media platforms: by giving users the option to follow friends and share curated playlists or information about their listening history, these platforms allow people to convey their music preferences and listening activities directly to their social networks. In a 2023 study, researcher Michael James Walsh interviewed frequent users of a popular music streaming platform to investigate how its social media dimensions shape their listening habits. Walsh found that these dimensions tended to make study participants feel more mindful of how their listening activities may be perceived, which in turn influenced how they managed those activities.

35

Which quotation from a music streaming platform user would best illustrate Walsh's finding?

- A) "Listening to music through a streaming platform feels a lot more passive, since I don't need to make any deliberate choices about what music I'm going to consume, like I do when buying digital downloads or records and CDs."
- B) "When I create playlists or choose songs to listen to, I often pick songs that I think the friends who are following me might be interested in listening to, rather than what I might actually prefer listening to in that moment."
- C) "Because the predictions the platform makes about what new songs I might like depend on my past listening habits, at times its recommendations can feel overly repetitive and unvarying."
- D) "The social aspects of music streaming make it really easy to create a sense of a shared listening experience with my friends, even if we aren't in the same room."

A student is writing a research paper on the history of irrigation in the southwestern United States, situating the development of Searsville Lake (a man-made body of water created in San Mateo County, California, in 1890) in a larger historical context. The student claims that some modern-day irrigation methods used in southwestern states, such as California, Arizona, and New Mexico, have a lineage that long predates the completion of Searsville Lake.

36

Which quotation from a historian best supports the student's claim?

- A) "The irrigation system developed by the Hohokam people in what is now central Arizona in the 7th century CE was simple but made use of hydraulic engineering design principles that are still utilized by today's engineers."
- B) "The importance of the development of irrigation infrastructure in the American Southwest today cannot be overstated, since it is the most common means of conveying water for food production."
- C) "In the decades following the Second World War, irrigation of arid areas for agriculture increased to such a degree that it now accounts for roughly 70% of the world's water usage."
- D) "Sprinkler irrigation systems, which were developed in the late 20th century, are a convenient technique of irrigating that makes use of machinery in order to spray water in all directions. Many areas of the Southwestern United States are currently irrigated by this method."



*The Clouds* is a 423 BCE play by Aristophanes, originally written in ancient Greek. At the time, professional intellectuals called sophists taught customers rhetorical techniques to use in public speaking, along with providing instruction in other subjects. In the play, Aristophanes satirizes sophists as having an exaggerated sense of their own wisdom, as seen when the character.

37

Which choice most effectively uses a quotation from a translation of *The Clouds* to illustrate the claim?

- A) Socrates, a sophist, says to a customer, "You talk nonsense. Begone; I can't teach you any longer."
- B) Strepsiades says of a sophist business, "There dwell men who in speaking of the heavens persuade people that it is an oven, and that it encompasses us, and that we are the embers. These men teach, if one give them money, to conquer in speaking, right or wrong."
- C) "Because the predictions the platform makes about what new songs I might like depend on my past listening habits, at times its recommendations can feel overly repetitive and unvarying."
- D) Socrates, a sophist, says to a new customer, "Come, then, take care that, whenever I propound any clever dogma about abstruse matters, you [seize] immediately."

A student is writing a paper about classical composer Florence Beatrice Price for a music class. In the paper, the student claims that Price used African instruments in one of her compositions.

38

Which quotation from a work by a music historian would most directly support the underlined claim?

- A) "After moving to Chicago in 1927, Price continued her music studies."
- B) "In 2009, dozens of Price's compositions, including her Symphony no. 4, were found in an abandoned house outside of St. Anne, Illinois."
- C) "In her composition Symphony no. 1, Price included African drums."
- D) "Price's success as a composer was notable in part because before her, no African American woman had had a work performed by a major US orchestra."

"The Monster" is an 1898 story by Stephen Crane. In the story, the character of Jim, a young boy, is playing in his yard while his father mows the lawn; while Jim is pulling a cart behind him, he accidentally damages a peony (a flower). Crane depicts Jim's initial belief that the damage might be repaired or concealed:

\_\_\_\_\_

39

Which quotation from "The Monster" most effectively illustrates the claim?

- A) "Finally [Jim] went to the peony and tried to stand it on its pins, resuscitated, but the spine of it was hurt, and it could only hang limply from his hand."
- B) "Together [Jim and his father] crossed the lawn towards the flower-bed. At some yards from the broken peony Jimmie began to lag, 'There!' The word came [from Jim] almost breathlessly."
- C) "Little Jim was, for the time, engine Number 36, and he was making the run between Syracuse and Rochester. He was fourteen minutes behind time, and the throttle was wide open."
- D) "[Jim's father] had his back to the accident, and he continued to pace slowly to and fro, pushing the mower."

"No, Thank You, John" is an 1862 poem by Christina Rossetti. In the poem, Rossetti depicts a female speaker's rejection of the romantic advances of a man named John. The speaker encourages John to pursue another relationship rather than wait for her to change her mind, saying \_\_\_\_\_

40

Which quotation from "No, Thank You, John" most effectively illustrates the claim?

- A) "I never said I loved you, John: / Why will you tease me day by day, / And wax a weariness to think upon / With always 'do' and 'pray'?"
- B) "I dare say Meg or Moll would take / Pity upon you, if you'd ask. / And pray don't remain single for my sake / Who can't perform that task."
- C) "Here's friendship for you if you like; but love— / No, thank you, John."
- D) "Let's strike hands as hearty friends; / No more, no less; and friendship's good: / Only don't keep in view ulterior ends / And points not understood."

A student is writing an essay on the subject of cultured meat, which is grown in a laboratory and is intended to help reduce the number of livestock harvested for food. The student wants to make the case that cultured meat production may be useful in responding to an expected widespread change in the public's behavior .

41

Which quotation from a publication by a researcher would most effectively support the student's claim?

- A) "Researchers who advocate for the development of lab-grown meat claim that it's better for the environment than conventional meat because it requires less water consumption."
- B) "The flavor of meat from livestock differs across species (from pig to chicken to cow), and is also influenced by farming conditions and the breeds and genders of animals."
- C) "A growing population that is including significantly more meat in its diet will contribute to an increasing demand for meat products in the 21st century."
- D) "Consumers tend to believe that using less packaging when selling meat products in stores would have a significant effect on the environment."

Poems is an 1895 collection of poetry by Frances E.W. Harper. In one of Harper's poems, the speaker criticizes activists who champion humanitarian causes in other countries while overlooking local concerns, saying

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42

Which quotation from *Poems* most effectively illustrates the claim?

- A) "Men may tread down the poor and lowly,  
/ May crush them in anger and hate, /  
But surely the mills of God's justice / Will  
grind out the grist of their fate." (from  
"An Appeal to My Countrywomen")
- B) "When ye plead for the wrecked and fallen.  
/ The exile from far-distant shores./  
Remember that men are still wasting /  
Life's crimson around your own doors."  
(from "An Appeal to My Countrywomen\*")
- C) "God bless our native land, / Land of the  
newly free,? Oh may she ever stand / For  
truth and liberty." (from "God Bless Our  
Native Land")
- D) "Let me make the songs for the people. /  
Songs for the old and young: / Songs to  
stir like a battle-cry / Wherever they are  
sung." (from "Songs for the People")

In a paper for an art history class, a student claims that Rosa Bonheur's 1855 painting *The Horse Fair* marks a significant change in Bonheur's artistic development.

43

Which quotation from an art history textbook would most effectively support the student's claim?

- A) "The paintings that Bonheur produced before *The Horse Fair* can be thought of as belonging to her earlier style, to which she never returned."
- B) "Of all Bonheur's paintings, none so clearly represents her abilities and ideas as *The Horse Fair*."
- C) "The *Horse Fair* has been analyzed extensively since it was first exhibited, as no two viewers seem to agree about exactly what the painting means."
- D) "Although Bonheur was clearly influenced by other artists of her time, she was also an artist ahead of her time, as *The Horse Fair* demonstrates."

"Poetry" is a 1919 poem by Marianne Moore. The poem highlights an ambivalence toward poetry as the speaker acknowledges its merits while also expressing a sense of displeasure, writing \_\_\_\_\_

44

Which quotation from "Poetry" most effectively illustrates the claim?

- A) "nor is it valid / to discriminate against business documents and / school-books'; all these phenomena are important."
- B) "One must make a distinction / however: when dragged into prominence by half poets, the result is not / poetry "
- C) "when [poems] become so derivative as to become unintelligible, the / same thing may be said for all of us that we / do not admire what / we cannot understand."
- D) "Reading [poetry], however, with a perfect contempt for it, one discovers that there is in /it after all, a place for the genuine."

Cane is a 1923 novel by Jean Toomer. In one portion of the novel, Toomer uses figurative language to connect the narrator's urban environment of Washington, DC, and the rural South of the narrator's past, writing, \_\_\_\_\_

45

Which quotation from Cane most effectively illustrates the claim?

- A) "The [train] engines of this valley have a whistle, the echoes of which sound like iterated gasps and sobs. I always think of them as crude music."
- B) "I sang, with a strange quiver in my voice, a promise-song."
- C) "The young trees had not outgrown their [planter] boxes then. V Street lin Washington, DC] was lined with them."
- D) "And when the wind is from the South, soil of my homeland falls like a fertile shower upon the lean streets of [Washington, DC]."



"The Monster" is an 1898 story by Stephen Crane. In the story, whenever Jimmie, a young boy, has been scolded by his father for misbehavior, he seeks comfort from Henry Johnson, the man responsible for the care of Jimmie's father's horses. However, Henry does not always provide such comfort; Crane suggests this by writing \_\_\_\_\_

46

Which quotation from *The Monster* most effectively illustrates the claim?

- A) "For one thing, Jimmie was invariably overcome with reverence when he was told how beautifully a harness was polished or a horse groomed."
- B) "Henry... could usually provide a sin to place himself on a footing with the disgraced one. Perhaps he would remember that he had forgotten to put the hitching-strap in the back of the buggy on some recent occasion, and had been reprimanded by [Jimmie's father]."
- C) "Henry would sometimes choose to absolutely repudiate [Jimmie's behavior], and when Jimmie appeared in his shame would bully him most virtuously, preaching with assurance the precepts of [Jimmie's father's] creed, and pointing out to Jimmie all of his abominations."
- D) "Whenever Henry dwelt for a time in sackcloth [a symbol of guilt over wrongdoing], Jimmie did not patronize him at all."

Life Among the Paiutes is an 1882 autobiographical narrative by Sarah Winnemucca Hopkins, a Northern Paiute author, educator, and activist. In the work, Winnemucca directly addresses the reader to explain certain customs, writing

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47

Which quotation from *Life Among the Paiutes* most effectively illustrates the claim?

- A) "Now, my dear reader, there is no word so endearing as the word father, and that is why [my people] call all good people father or mother. "
- B) "We would all go in company to see if the flowers we were named for were yet in bloom, for almost all the girls are named for flowers."
- C) "During the time my grandfather was away in California, where he [stayed] till after the Mexican war, there was a girl-baby born in our family."
- D) "But how can I describe the scene that followed? Some of you, dear readers, can imagine. "

The Wonderful Wizard of Oz is a 1900 novel by L. Frank Baum. In the novel, the narrator describes a character's house as having become very faded in appearance over time:

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48

Which quotation from *The Wonderful Wizard of Oz* most effectively illustrates the claim?

- A) "Once more [Dorothy and her companions] could see fences built beside the road; but these were painted green, and when they came to a small house, in which a farmer evidently lived, that also was painted green. "
- B) "Then [Dorothy] went back to the house, and having helped herself and Toto to a good drink of the cool, clear water, she set about making ready for the journey to the City of Emeralds. "
- C) "Once the house had been painted, but the sun blistered the paint and the rains washed it away, and now the house was as dull and gray as everything else. "
- D) "When Dorothy stood in the doorway and looked around, she could see nothing but the great gray prairie on every side. Not a tree nor a house broke the broad sweep of flat country."

Life Among the Paiutes is an 1882 autobiographical narrative by Sarah Winnemucca Hopkins, a Northern Paiute author, educator, and activist. In the work, Winnemucca directly addresses the reader to explain certain customs, writing \_\_\_\_\_.

49

Which quotation from *Life Among the Paiutes* most effectively illustrates the claim?

- A) "Now, my dear reader, there is no word so endearing as the word father, and that is why [my people] call all good people father or mother. "
- B) "We would all go in company to see if the flowers we were named for were yet in bloom, for almost all the girls are named for flowers. "
- C) "During the time my grandfather was away in California, where he [stayed] till after the Mexican war, there was a girl-baby born in our family. "
- D) "But how can I describe the scene that followed? Some of you, dear readers, can imagine. "

"Aunt Sue's Stories" is a 1926 poem by Langston Hughes. In the poem, the speaker indicates that the stories Aunt Sue tells are based on Aunt Sue's personal experiences, saying that \_\_\_\_\_.

50

Which choice most effectively uses a quotation from "Aunt Sue's Stories" to illustrate the claim

- A) a listening child "knows that Aunt Sue / Never got her stories out of any book at all. / But that they came / Right out of her own life."
- B) the people in the stories "Mingle themselves softly / In the flow of old Aunt Sue's voice. / Mingle themselves softly."
- C) dark shadows "cross and recross / Aunt Sue's stories."
- D) the stories are told during "Summer nights on the front porch."

A student is writing a research paper on the history of irrigation in the United States, situating the development of the Bear River Reservoir (created in Amador County, California, in 1900) in a large historical context. The student claims that innovation in irrigation practices throughout the United States has led to designs with increased efficiency.

51

Which quotation from a study of irrigation best supports the student's claim?

- A) "While the low humidity of Southern California's desert areas makes irrigation a requirement if agriculture is to be a success there, the relatively high humidity in the northern parts of the state makes such practices less necessary."
- B) "The importance of irrigation infrastructure in the United States today cannot be overstated, since it is the most widely utilized means of conveying water for food production. Accordingly, any increase in the efficiency of irrigation, however small, would be of significant economic and social value."
- C) "The irrigation system developed by the Hohokam people in the 7th century CE in what is now Arizona was simple but applied hydraulic engineering design features that are still in use today."
- D) "Competition for water as a scarce economic resource inspired the development of sprinkler irrigation systems, which have contributed to the reduction of water used for irrigation in the United States to 45% of the total water usage of its population. Comparatively, 70% of the world's water usage is dedicated to irrigation."

Uncle Vanya: Scenes from Country Life in Four Acts is an 1898 play by Anton Chekhov, originally written in Russian. In the play, Professor Serebrakoff and his wife Helena have come to stay at their country estate, which Vanya manages with the help of Sonia, the professor's daughter from a previous marriage. Chekhov portrays the relationship between Vanya and Professor Serebrakoff as being much more strained than it once was, as is evident when \_\_\_\_\_

52

Which quotation from a translation of Uncle Vanya most effectively illustrates the claim?

- A) Professor Serebrakoff asks Vanya to leave the room, saying, "For the sake of our former friendship do not protest against going. We will talk some other time."
- B) Vanya says to Professor Serebrakoff, "For twenty-five years I have managed [the country estate], and have sent you the returns from it like the most honest of servants, and you have never given me one single word of thanks for my work, not or neither in my youth nor now."
- C) Vanya says of Professor Serebrakoff. "He is everlastingly whining about his hard lot, though, as a matter of fact, he is extraordinarily lucky."
- D) Professor Serebrakoff says to Helena, "It is funny that everybody listens to [Vanya] and his old idiot of a mother, but the moment I open my lips you all begin to feel ill-treated."



Memoirs of Elleanor Eldridge is an 1838 historical account by Elleanor Eldridge and Frances Harriet Whipple Green. In the book, the authors assert that all people naturally have an emotional attachment to where they live, writing, \_\_\_\_\_

53

Which quotation from Memoirs of Elleanor Eldridge most effectively illustrates the claim?

- A) “Having thus so comfortably established ourselves, with no evil-minded eaves-dropper to make us afraid, bend now, dear reader, thy most earnest and delicately adjusted ear; for I am going to tell thee a secret.”
- B) “Home is home, to the lowly as well as the great; and no rank, or color, destroys its sacred character, its power over the mind, and the affections.”
- C) “Blessed are the slumbers of the innocent! They are kindlier than balm, and they refresh and gladden the spirit of childhood, like ministrings from a better world.”
- D) “To give some idea of the high esteem in which the subject of the following narrative is held, and the strong interest her misfortunes have excited, a few, from the great number of recommendations in her possession, are selected.”

Many music streaming services also function as social media platforms: by giving users the option to follow friends and share curated playlists or information about their listening history, these platforms allow people to convey their music preferences and listening activities directly to their social networks. In a 2023 study, researcher Michael James Walsh interviewed frequent users of a popular music streaming platform to investigate how its social media dimensions shape their listening habits. Walsh found that these dimensions tended to make study participants feel more mindful of how their listening activities may be perceived, which in turn influenced how they managed those activities.

54

Which quotation from a music streaming platform user would best illustrate Walsh's finding?

- A) "Because the predictions the platform makes about what new songs I might like depend on my past listening habits, at times its recommendations can feel overly repetitive and unvarying."
- B) "Listening to music through a streaming platform feels a lot more passive, since I don't need to make any deliberate choices about what music I'm going to consume, like I do when buying digital downloads or records and CDs."
- C) "The social aspects of music streaming make it really easy to create a sense of a shared listening experience with my friends, even if we aren't in the same room."
- D) "When I create playlists or choose songs to listen to, I often pick songs that I think the friends who are following me might be interested in listening to, rather than what I might actually prefer listening to in that moment."

A student is writing a research paper on the history of irrigation in the southwestern United States, situating the development of Searsville Lake (a man-made body of water created in San Mateo County, California, in 1890) in a larger historical context. The student claims that some modern-day irrigation methods used in southwestern states, such as California, Arizona, and New Mexico, have a lineage that long predates the completion of Searsville Lake.

55

Which quotation from a historian best supports the student's claim?

- A) "Sprinkler irrigation systems, which were developed in the late 20th century, are a convenient technique of irrigating that makes use of machinery in order to spray water in all directions. Many areas of the Southwestern United States are currently irrigated by this method."
- B) "The irrigation system developed by the Hohokam people in what is now central Arizona in the 7th century CE was simple but made use of hydraulic engineering design principles that are still utilized by today's engineers."
- C) "The importance of the development of irrigation infrastructure in the American Southwest today cannot be overstated, since it is the most common means of conveying water for food production."
- D) "In the decades following the Second World War, irrigation of arid areas for agriculture increased to such a degree that it now accounts for roughly 70% of the world's water usage."

The Clouds is a 423 BCE play by Aristophanes, originally written in ancient Greek. At the time, professional intellectuals called sophists taught customers rhetorical techniques to use in public speaking, along with providing instruction in other subjects. In the play, Aristophanes satirizes sophists as having an exaggerated sense of their own wisdom, as seen when the character

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56

Which choice most effectively uses a quotation from a translation of *The Clouds* to illustrate the claim?

- A) Socrates, a sophist, says to a new customer, "Come, then, take care that, whenever I propound any clever dogma about abstruse matters, you [seize] immediately."
- B) Strepsiades says of a sophist business, "There dwell men who in speaking of the heavens persuade people that it is an oven, and that it encompasses us, and that we are the embers. These men teach, if one give them money, to conquer in speaking, right or wrong."
- C) Socrates, a sophist, says to a potential customer, "Is the power of speaking, pray, implanted in your nature?"
- D) Strepsiades encourages his son to learn to be a sophist, saying, "Reform your habits as quickly as possible, and go and learn what I advise."

A student is writing a paper about classical composer Florence Beatrice Price for a music class. In the paper, the student claims that Price used African instruments in one of her compositions.

57

Which quotation from a work by a music historian would most directly support the underlined claim?

- A) "After moving to Chicago in 1927, Price continued her music studies."
- B) "In 2009, dozens of Price's compositions, including her Symphony no. 4, were found in an abandoned house outside of St. Anne, Illinois."
- C) "In her composition Symphony no. 1, Price included African drums."
- D) "Price's success as a composer was notable in part because before her, no African American woman had had a work performed by a major US orchestra."

"The Monster" is an 1898 story by Stephen Crane. In the story, the character of Jim, a young boy, is playing in his yard while his father mows the lawn; while playing, Jim accidentally damages a peony (a flower). Crane emphasizes Jim's energy and his distracted absorption in his play by writing, \_\_\_\_\_

58

Which quotation from *The Monster* most effectively illustrates the claim?

- A) "Finally [Jim] went to the peony and tried to stand it on its pins, resuscitated, but the spine of it was hurt, and it could only hang limply from his hand."
- B) "Together [Jim and his father] crossed the lawn towards the flower-bed. At some yards from the broken peony Jimmie began to lag. 'There!' The word came [from Jim] almost breathlessly."
- C) "Little Jim was, for the time, engine Number 36, and he was making the run between Syracuse and Rochester. He was fourteen minutes behind time, and the throttle was wide open."
- D) "[Jim's father] had his back to the accident, and he continued to pace slowly to and fro, pushing the mower."

"No, Thank You, John" is an 1862 poem by Christina Rossetti. In the poem, Rossetti depicts a female speaker's rejection of the romantic advances of a man named John. The speaker encourages John to pursue another relationship rather than wait for her to change her mind, saying \_\_\_\_\_

59

Which quotation from "No, Thank You, John" most effectively illustrates the claim?

- A) "I never said I loved you, John: / Why will you tease me day by day, / And wax a weariness to think upon / With always 'do' and 'pray'?"
- B) "I dare say Meg or Moll would take / Pity upon you, if you'd ask. / And pray don't remain single for my sake / Who can't perform that task."
- C) "Here's friendship for you if you like; but love— / No, thank you, John."
- D) "Let's strike hands as hearty friends; / No more, no less; and friendship's good: / Only don't keep in view ulterior ends / and points not understood."



A student is writing an essay on the subject of cultured meat, which is grown in a laboratory and is intended to help reduce the number of livestock harvested for food. The student wants to make the case that cultured meat production may be useful in responding to an expected widespread change in the public's behavior.

60

Which quotation from a publication by a researcher would most effectively support the student's claim?

- A) "Researchers who advocate for the development of lab-grown meat claim that it's better for the environment than conventional meat because it requires less water consumption."
- B) "The flavor of meat from livestock differs across species (from pig to chicken to cow), and is also influenced by farming conditions and the breeds and genders of animals."
- C) "A growing population that is including significantly more meat in its diet will contribute to an increasing demand for meat products in the 21st century."
- D) "Consumers tend to believe that using less packaging when selling meat products in stores would have a significant effect on the environment."

Poems is an 1895 collection of poetry by Frances E.W. Harper. In one of Harper's poems, the speaker criticizes activists who champion humanitarian causes in other countries while overlooking local concerns, saying

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61

Which quotation from a publication by a researcher would most effectively support the student's claim?

- A) "God bless our native land, / Her homes and children bless, / Oh may she ever stand / For truth and righteousness." (from "God Bless Our Native Land")
- B) "Men may tread down the poor and lowly / May crush them in anger and hate / But surely the mills of God's justice / Will grind out the grist of their fate." (from "An Appeal to My Countrywomen")
- C) "Say not the age is hard and cold- / I think it brave and grand / When men of diverse sects and creeds / Are clasping hand in hand." (from "The Present Age")
- D) "When ye plead for the wrecked and fallen, / The exile from far-distant shores, / Remember that men are still wasting / Life's crimson around your own doors." (from "An Appeal to My Countrywomen")

In a paper for an art history class, a student claims that Rosa Bonheur's 1855 painting *The Horse Fair* marks a significant change in Bonheur's artistic development.

62

Which quotation from an art history textbook would most effectively support the student's claim?

- A) "The paintings that Bonheur produced before *The Horse Fair* can be thought of as belonging to her earlier style, to which she never returned."
- B) "Of all Bonheur's paintings, none so clearly represents her abilities and ideas as *The Horse Fair*."
- C) "The *Horse Fair* has been analyzed extensively since it was first exhibited, as no two viewers seem to agree about exactly what the painting means."
- D) "Although Bonheur was clearly influenced by other artists of her time, she was also an artist ahead of her time, as *The Horse Fair* demonstrates."

"Poetry" is a 1919 poem by Marianne Moore. The poem highlights an ambivalence toward poetry as the speaker acknowledges its merits while also expressing a sense of displeasure, writing \_\_\_\_\_

63

Which quotation from "Poetry" most effectively illustrates the claim?

- A) "nor is it valid / to discriminate against 'business documents and /school-books'; all these phenomena are important."
- B) "One must make a distinction / however: when dragged into prominence by half poets, the result is not / poetry"
- C) "when [poems] become so derivative as to become unintelligible, the / same thing may be said for all of us that we / do not admire what / we cannot understand."
- D) "Reading [poetry], however, with a perfect contempt for it, one discovers that there is in/ it after all, a place for the genuine."

Cane is a 1923 novel by Jean Toomer. In one portion of the novel, Toomer uses figurative language to connect the narrator's urban environment of Washington, DC, and the rural South of the narrator's past, writing, \_\_\_\_\_

64

Which quotation from *Cane* most effectively illustrates the claim?

- A) "The [train] engines of this valley have a whistle, the echoes of which sound like iterated gasps and sobs. I always think of them as crude music."
- B) "I sang, with a strange quiver in my voice, a promise-song."
- C) "The young trees had not outgrown their [planter] boxes then. V Street [in Washington, DC] was lined with them."
- D) "And when the wind is from the South, soil of my homeland falls like a fertile shower upon the lean streets of [Washington, DC]."

Life Among the Paiutes is an 1882 autobiographical narrative by Sarah Winnemucca Hopkins, a Northern Paiute author, educator, and activist. In the work, Winnemucca directly addresses the reader to explain certain customs, writing

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65

Which quotation from *Life Among the Paiutes* most effectively illustrates the claim?

- A) "Now, my dear reader, there is no word so endearing as the word father, and that is why [my people] call all good people father or mother. "
- B) "We would all go in company to see if the flowers we were named for were yet in bloom, for almost all the girls are named for flowers. "
- C) "During the time my grandfather was away in California, where he [stayed] till after the Mexican war, there was a girl-baby born in our family. "
- D) "But how can I describe the scene that followed? Some of you, dear readers, can imagine. "

The Wonderful Wizard of Oz is a 1900 novel by L. Frank Baum. In the novel, the narrator describes a character's house as having become very faded in appearance over time:

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66

Which quotation from *The Wonderful Wizard of Oz* most effectively illustrates the claim?

- A) "Once more [Dorothy and her companions] could see fences built beside the road; but these were painted green, and when they came to a small house, in which a farmer evidently lived, that also was painted green. "
- B) "Then [Dorothy] went back to the house, and having helped herself and Toto to a good drink of the cool, clear water, she set about making ready for the journey to the City of Emeralds. "
- C) "Once the house had been painted, but the sun blistered the paint and the rains washed it away, and now the house was as dull and gray as everything else. "
- D) "When Dorothy stood in the doorway and looked around, she could see nothing but the great gray prairie on every side. Not a tree nor a house broke the broad sweep of flat country."

"The Monster" is an 1898 story by Stephen Crane. In the story, whenever Jimmie, a young boy, has been scolded by his father for misbehavior, he seeks comfort from Henry Johnson, the man responsible for the care of Jimmie's father's horses. However, Henry does not always provide such comfort; Crane suggests this by writing,\_\_\_\_\_

67

Which quotation from "The Monster" most effectively illustrates the claim?

- A) "For one thing, Jimmie was invariably overcome with reverence when he was told how beautifully a harness was polished or a horse groomed."
- B) "Henry... could usually provide a sin to place himself on a footing with the disgraced one. Perhaps he would remember that he had forgotten to put the hitching-strap in the back of the buggy on some recent occasion, and had been reprimanded by [Jimmie's father]."
- C) "Henry would sometimes choose to absolutely repudiate [Jimmie's behavior], and when Jimmie appeared in his shame would bully him most virtuously, preaching with assurance the precepts of [Jimmie's father's] creed, and pointing out to Jimmie all of his abominations."
- D) "Whenever Henry dwelt for a time in sackcloth [a symbol of guilt over wrongdoing], Jimmie did not patronize him at all."

"Aunt Sue's Stories" is a 1926 poem by Langston Hughes. In the poem, the speaker indicates that the stories Aunt Sue tells are based on Aunt Sue's personal experiences, saying that\_\_\_\_\_

68

Which choice most effectively uses a quotation from "Aunt Sue's Stories" to illustrate the claim?

- A) a listening child "knows that Aunt Sue / Never got her stories out of any book at all./But that they came / Right out of her own life."
- B) the people in the stories "Mingle themselves softly/ In the flow of old Aunt Sue's voice./Mingle themselves softly."
- C) dark shadows "cross and recross/Aunt Sue's stories."
- D) the stories are told during "Summer nights on the front porch."



A student is writing a research paper on the history of Irrigation in the United States, situating the development of the Bear River Reservoir (created in Amador County, California, in 1900) in a larger historical context. The student claims that innovation in Irrigation practices throughout the United States has led to designs with increased efficiency.

69

Which quotation from a study of irrigation best supports the student's claim?

- A) "While the low humidity of Southern California's desert areas makes irrigation a requirement if agriculture is to be a success there, the relatively high humidity in the northern parts of the state makes such practices less necessary."
- B) "The importance of irrigation infrastructure in the United States today cannot be overstated, since it is the most widely utilized means of conveying water for food production. Accordingly, any increase in the efficiency of irrigation, however small, would be of significant economic and social value."
- C) "The irrigation system developed by the Hohokam people in the 7th century CE in what is now Arizona was simple but applied hydraulic engineering design features that are still in use today."
- D) "Competition for water as a scarce economic resource inspired the development of sprinkler irrigation systems, which have contributed to the reduction of water used for irrigation in the United States to 45% of the total water usage of its population. Comparatively, 70% of the world's water usage is dedicated to irrigation."

Uncle Vanya: Scenes from Country Life in Four Acts is an 1898 play by Anton Chekhov, originally written in Russian. In the play, Professor Serebrakoff and his wife Helena have come to stay at their country estate, which Vanya manages with the help of Sonia, the professor's daughter from a previous marriage. Chekhov portrays the relationship between Vanya and Professor Serebrakoff as being much more strained than it once was, as is evident when \_\_\_\_\_

70

Which quotation from a translation of Uncle Vanya most effectively illustrates the claim?

- A) Professor Serebrakoff asks Vanya to leave the room, saying, "For the sake of our former friendship do not protest against going. We will talk some other time."
- B) Vanya says to Professor Serebrakoff, "For twenty-five years I have managed [the country estate], and have sent you the returns from it like the most honest of servants, and you have never given me one single word of thanks for my work, not one—neither in my youth nor now."
- C) Vanya says of Professor Serebrakoff, "He is everlastingly whining about his hard lot, though, as a matter of fact, he is extraordinarily lucky."
- D) Professor Serebrakoff says to Helena, "It is funny that everybody listens to [Vanya] and his old idiot of a mother, but the moment I open my lips you all begin to feel ill-treated."

*The Wonderful Wizard of Oz* is a 1900 novel by L. Frank Baum. In the novel, Dorothy lives in Kansas with her aunt and uncle, but she later finds herself in a land called Oz. The narrator indicates that her aunt and uncle's house in Kansas is remote and solitary, writing that

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71

Which quotation from *The Wonderful Wizard of Oz* most effectively illustrates the claim?

- A) in Oz, "Dorothy [and her companions] passed through the rest of the forest in safety, and when they came out from its gloom saw before them a steep hill, covered from top to bottom with great pieces of rock."
- B) in Oz, "Dorothy fell asleep only once, and then she dreamed she was in Kansas, where Aunt Em was telling her how glad she was to have her little girl at home again."
- C) in Kansas, "Dorothy lived in the midst of the great Kansas prairies, with Uncle Henry, who was a farmer, and Aunt Em, who was the farmer's wife."
- D) in Kansas, "When Dorothy stood in the doorway and looked around, she could see nothing but the great gray prairie on every side. Not a tree nor a house broke the broad sweep of flat country."

Uncle Vanya: Scenes from Country Life in Four Acts is an 1898 play by Anton Chekhov, originally written in Russian. In the play, Professor Serebrakoff and his wife Helena have come to stay at their country estate, which Vanya manages with the help of Sonia, the professor's daughter from a previous marriage. Chekhov portrays Vanya as feeling underappreciated by the professor, as is evident when \_\_\_\_\_

72

Which quotation from a translation of Uncle Vanya most effectively illustrates the claim?

- A) Vanya says to Professor Serebrakoff, "For twenty-five years I have managed this place [the estate], and have sent you the returns from it like the most honest of servants, and you have never given me one single word of thanks for my work, not one—neither in my youth nor now."
- B) Professor Serebrakoff says to Helena, "Of course I see that it is foolish for me to live so long, but wait! I shall soon set you all free. My life cannot drag on much longer."
- C) Vanya says to Professor Serebrakoff, "We used to think of you as almost superhuman, but now the scales have fallen from my eyes and I see you as you are! You write an art without knowing anything about it. Those books of yours which I used to admire are not worth one copper kopeck. You are a hoax!"
- D) Vanya says to himself, "I was proud of [Professor Serebrakoff] and of his learning; I received all his words and writings as inspired and now? Now he has retired, and what is the total of his life? A blank!"

## Answers: Quotation

Number	Answer	Number	Answer
1	A	2	C
3	C	4	D
5	A	6	D
7	B	8	D
9	C	10	D
11	C	12	A
13	A	14	D
15	D	16	D
17	C	18	C
19	D	20	C
21	D	22	A
23	A	24	B
25	A	26	B
27	C	28	D
29	C	30	B
31	D	32	A
33	C	34	D
35	B	36	A
37	B	38	C
39	A	40	B
41	C	42	B



Number	Answer	Number	Answer
43	A	44	D
45	D	46	C
47	A	48	C
49	A	50	A
51	A	52	A
53	B	54	D
55	B	56	B
57	C	58	C
59	B	60	C
61	D	62	A
63	D	64	D
65	A	66	C
67	C	68	A
69	D	70	A
71	D	72	A

## Topic 7: Command of Evidence - Graphs

108 Questions

### DIRECTIONS

#### Must Know Tips:

- Pay attention to relevance (how the option supports or weakens the passage) and accuracy (how the option correctly represents the graph).
- Read the passage first, the options second, and the graph third.
- Don't overthink—it's easy but time-consuming.
- To find something, you need to know what you're searching for.

**Recommended time per question in this section:** min: 1 min, max: 2 min, avg: 1 min 30 sec (\*Exam level)

#### Pyramids in Egypt and the Americas

Pyramid	Country	Height (meters)	Age (years before present)
The Pyramid of Khafre	Egypt	143.5	4,500 to 4,600
La Danta	Guatemala	72	1,900 to 2,300
The Tikal Temple IV	Guatemala	70	1300
The Pyramid of Amenemhet I	Egypt	55	3,800 to 4,000

One student is writing an essay about four pyramids for a history class and wants to indicate how long ago each pyramid was built. Consulting the table, the student finds that the Tikal Temple IV was built \_\_\_\_\_

1

Which choice most effectively uses data from the table to complete the text?

- A) 1,900 to 2,300 years ago.
- B) 1,300 years ago.
- C) 4,500 to 4,600 years ago.
- D) 3,800 to 4,000 years ago.

### Women Judges and Magistrates on High Courts, 2009-2013



A report from an international organization that monitors the numbers of women serving as judges or magistrates on various nations' highest courts, such as the Supreme court in Finland and the Supreme Court in the Dominican republic. From 2009 to 2013, the number of women serving as justices or magistrates on highest courts in most countries increased. However, there are also countries where the number decreased or remained unchanged; for example, \_\_\_\_\_.

2

Which choice most effectively uses data from the graph to complete the example?

- A) Slovenia was greater in 2013 than in 2009, whereas the number in the Dominican Republic was lower in 2013 than in 2009.
- B) Slovenia was greater in 2013 than in 2009, whereas the number in Finland was the same in 2013 as in 2009
- C) Finland was the same in 2013 as in 2009, but it had more women on its high courts than either Slovenia or the Dominican republic did in 2013.
- D) the Dominican Republic was lower in 2013 than in 2009, whereas the number in Finland was the same in 2013 as in 2009.

## Studies of the Effects of Tilling vs. No Tilling on Crop Yields

Authors	Crop	Crop yield with tilling (Kilograms per hectare)	Crop yield with no tilling (Kilograms per hectare)
Bharat Sharma Achayara and colleagues	soybeans	3,062	2,670
Adrian Gracia-Romero and colleagues	maize	2,420	2,990
Daniel Jug and colleagues	winter wheat	4,860	3,910
Min Huang and colleagues	rice	2,534	5,226

Daniel Jug and colleagues found that tilling—the practice of turning soil with hoes, plows, or other machines before planting crops—was associated with an increased yield of winter wheat. But some studies of other crops have found the opposite effect; for example,

**3**

Which choice most effectively uses data from the table to complete the assertion?

- A) Min Huang and colleagues reported an even larger positive effect of no tilling on the yield of rice.
- B) Bharat Sharma Acharya and colleagues found a similar association in a study using soybeans.
- C) crop yields with tilling have ranged from 2,420 kilograms per hectare for maize to 4,860 kilograms per hectare for winter wheat
- D) a study using winter wheat yielded 4,860 kilograms per hectare with tilling and only 3,910 kilograms per hectare without tilling.

## Population and Area Data for Four Cities in 2018

City	Country	UN estimate	Reported city proper	Reported metropolitan	Metropolitan area (square kilometers)
Bangkok	Thailand	10,156,000	5,782,000	16,255,990	7,762
Toronto	Canada	6,082,000	2,731,571	5,928,040	5,906
Huston	United States	6,115,000	2,325,502	6,997,384	21,395
Bogota	Colombia	10,574,000	7,963,000	12,545,272	5,934

Population figures for a city can vary significantly depending on what areas are included in the count. Often, governments will report a value for the city proper (including only residents within the city limits) and another for the larger metropolitan area (including residents from nearby places beyond the city limits). Citing the data in the table, a journalist claims the population estimates from the United Nations (UN) most likely included people outside the cities proper.

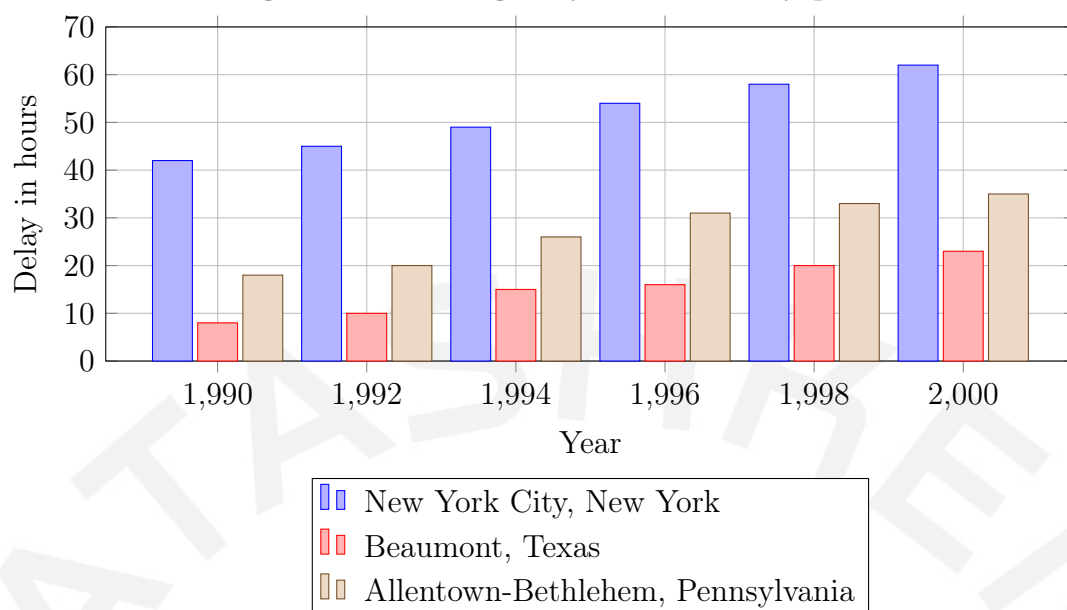
4

Which choice best describes data in the table that support the journalist's claim?

- A) The UN estimated Bogota's population to be 10,574,000, which is significantly larger than the reported population for the city proper.
- B) The metropolitan area of Bangkok is significantly larger than 1,569 square kilometers.
- C) The reported city proper population of Bogota is significantly larger than the reported city proper population of Houston.
- D) All the city proper areas are below 3,000 square kilometers.



Annual Average Hours of Highway Traffic Delay per Auto Commuter



In college course on urban affairs, a student asserts that increased traffic congestion in the 1990s in the United States was present both in very large cities such as New York City, New York, and smaller areas such as Allentown-Bethlehem, Pennsylvania, and Beaumont, Texas: though those smaller areas may have been less affected by traffic congestion than very large cities, this congestion also worsened in them over time.

5

Which choice best describes data from the graph that support the student's claim?

- A) While the number of hours of traffic delay per commuter per year was always lower in the Allentown-Bethlehem, Pennsylvania, area than in the New York City, New York, area for each year between 1990 and 2000, the amount of traffic delay rose in both areas during this period.
- B) In at least one of the three urban areas shown, the amount of traffic delay was less than 20 hours per person per year at one point between 1990 and 2000.
- C) In 1992, the amount of traffic delay in the New York City, New York, area was less than 30 hours per commuter per year.
- D) Throughout the period between 1990 and 2000, the annual amount of traffic delay per commuter was greater in the Allentown Bethichem, Pennsylvania, area than in the New York City, New York, area.

**Minimum and Maximum Depths of Stony Coral  
Species in Caribbean and Indo-Pacific Waters**

Species	Minimum	Maximum	Range
Acropota anthocercis	5	10	5
Cyphastrea herasepa	8	25	17
Agaricia Fragilis	10	102	92
Heliofungia fralinaea	3	27	24

The table is from a 2018 study in which Luiz Rocha and colleagues examined the ranges of depths at which certain stony coral species have been found in Caribbean and Indo-Pacific Waters. Among the corals in the table, the species with the greatest range between minimum and maximum depths is \_\_\_\_\_.

**6**

Which choice most effectively uses data from the table to complete the statement?

- A) Acropota anthocercis
- B) Cyphastrea herasepa
- C) Agaricia Fragilis
- D) Heliofungia fralinaea

Plant	State	Mode	Generators in Plant	Average Power Generation	Water Source
Scanlon	Minnesota	Run-of-river	4	7,511	St. Louis River
Kansas river	Kansas	Run-of-river	11	15,3451	Kansas river
Squa Pan Hydro Station	Maine	Peaking	1	881	Squa Pan Stream
Great Falls	Tennessee	Peaking	2	124,392	Caney Fork River

A run of river hydroelectric power plant, as the name suggests, uses the natural flow of a water source to generate electricity but is unable to start or stop that flow through its generators. In contrast, a peaking hydroelectric power plant (used when demand for electricity peaks) controls the flow of water through its generators: starting flow when demand is high enough, stopping it when demand is too low, and otherwise regulating it to keep pace with changing electricity needs. Although peaking plants do not typically operate continuously as run-of-river plants do, peaking plants can generate more megawatt hours of power per year than some run-of-river plants. For example, the \_\_\_\_\_

**7**

Which choice most effectively uses data from the table to complete the example?

- A) average power generated annually by the Great Falls plant is higher than that generated by any of the run-of-river plants in the table.
- B) Scanlon plant, which is a run-of-river plant, has more generators than any of the other plants in the table.
- C) Run-of-river plant with the highest average annual power generation in the table generates more electricity than the peaking plant with the highest annual power generation in the table.
- D) average power generated annually by the Kansas River plant is higher than that generated by the Scanlon plant.

### Impact of Four Key Industries on Oklahoma Economy in 2017

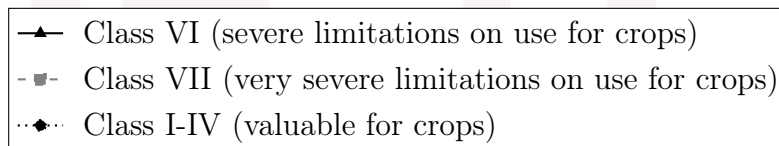
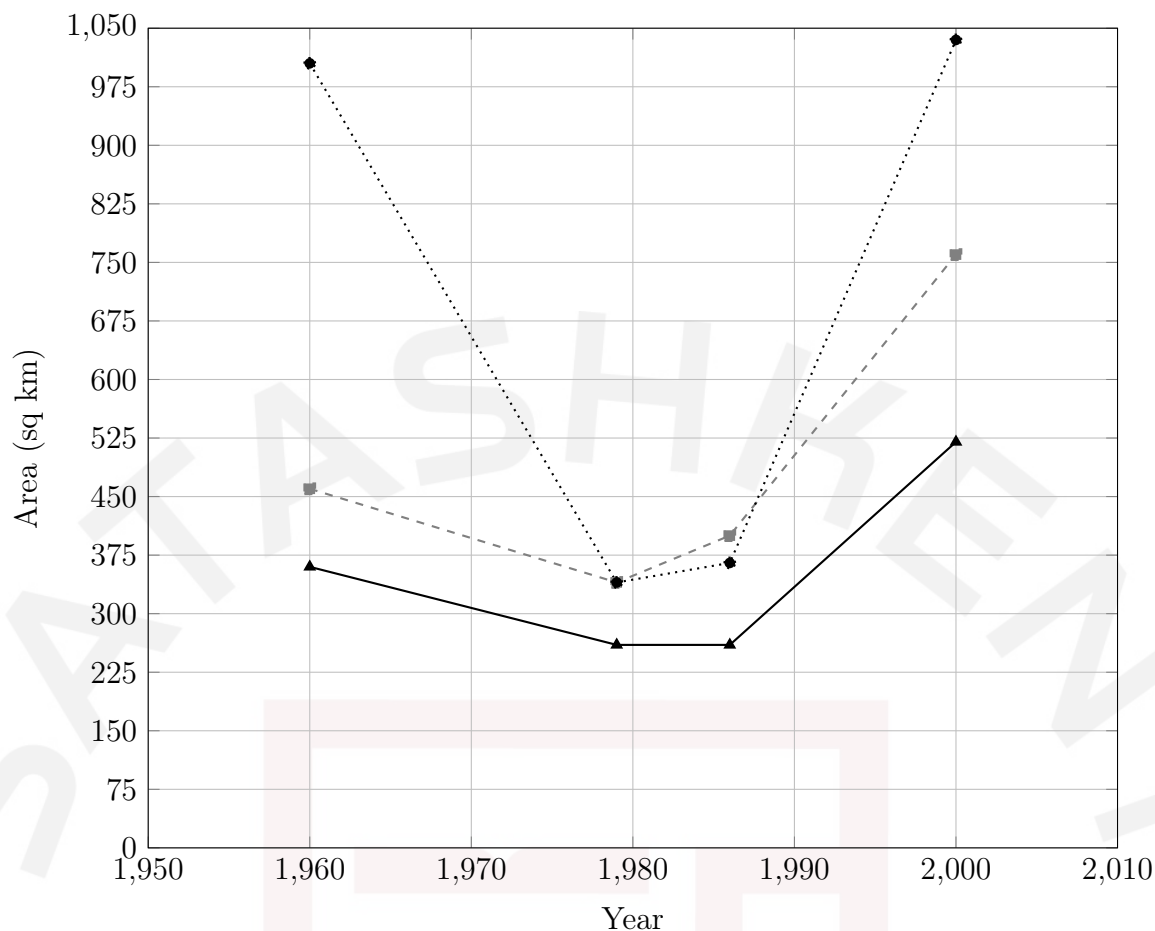
Industry	Approximate total contribution by industry	Number of people employed by industry	Average contribution per employee by industry
Professional services	\$7,694,000,000	69,846	\$110,157
Tribal economic activity	\$7,312,400,000	51,674	\$141,510
Administration/waste	\$5,830,600,000	96,964	\$60,132
Wholesale trade	\$10,723,400,000	58,346	\$183,790

The Cherokee Nation, the Seminole Nation, and the more than thirty other tribes in Oklahoma operate numerous businesses and generate billions of dollars in revenue. An economics student is researching the tribes' collective activity as a single industry. The student wants to compare the average amount that industry contributed per employee to Oklahoma's economy with the average amount contributed per employee by three other industries. Looking at the table, the student finds that tribal economic activity contributed over \$141,000 per employee, on average, ranking it \_\_\_\_\_

8

Which choice most effectively uses data from the table to complete the comparison?

- A) below wholesale trade but above both professional service and administration/waste.
- B) above all three of the four industries shown in the table.
- C) below all three of the four industries shown in the table.
- D) above either administration/waste or professional services and nearly equal to wholesale trade.



To understand the extent of deforestation in the Chorotega Region of Costa Rica, Juan Pablo Arroyo-Mora and colleagues used aerial photography and remote sensing data to track changes in the forest cover area across different land use capability class (categories that indicate possible uses of forest land.) Due to the Chorotega region's accessibility, various types of forest areas were converted to cattle practices as rising international meat prices drove a cattle ranching boom in the 1960s and 1970s. By the mid 1980s, however, increased public awareness and environmental reforms, along with a decline in meat prices, engendered a natural forest regrowth, as evident by the \_\_\_\_\_

9

Which choice most effectively uses data from the graph to complete the assertion?

- A) difference between the forest cover area in Class I-V and in Class VI in 2000.
- B) increase in the forest cover area for all classes from 1979 to 2000.
- C) decrease in the forest cover area for all classes from 1960 to 1979.
- D) similarity in forest cover area in Class I-V and Class VII in 1986.

## US Hydroelectric Power Plants, 2019

Plant	State	Mode	Generators in plant	Average power generation (MWh/yr)	Water source
Kaw Hydro	klahoma	run-of-river	1	103,163	Arkansas River
Kankakee Hydro Facility	Illinois	run-of-river	3	1,832	Kankakee River
Richard B. Russell	Georgia	peaking	8	394,195	Savannah River
Gaston Shoals	South Carolina	peaking	4	14,059	Broad River

A run-of-river hydroelectric power plant, as the name suggests, uses the natural flow of a water source to generate electricity but is unable to start or stop that flow through its generator. In contrast, a peaking hydroelectric power plant (used when demand for electricity peaks) controls the flow of water through its generators: starting flow when demand is high enough, stopping it when demand is too low, and otherwise regulating it to keep pace with changing electricity needs. Although peaking plants do not typically operate continuously as run-of-river plants do, peaking plants can generate more megawatt-hour of power per year (MWh/yr) than some run-of-river plants. For example, the \_\_\_\_\_

10

Which choice most effectively uses data from the table to complete the example?

- A) average power generated annually by the Richard B. Russell plant is higher than that generated by any of the run-of-river plants in the table.
- B) Gaston Shoals plant, which is a peaking plant, has more generators than any of the other plants in the table.
- C) average power generated annually by the Kaw Hydro plant is higher than that generated by the Gaston Shoals plant.
- D) run-of-river plant with the highest average annual power generation in the table generates more electricity than the peaking plant with the highest annual power generation in the table.



### Days per Winter That Lakes Have Surface Ice

Lake	Latitude (degrees)	1980-81	1985-86	1990-91	1995-96	2000-01	2005-06
Kalmarinjärvi	62.79	198	172	175	184	131	152
Lake Neusiedl	47.82	77	86	87	128	50	104
Mirror Lake	43.94	122	129	125	136	141	119

It is common for freshwater lakes near or above a latitude of 45° north of the equator, like Lake Mjosa in Norway, to accumulate surface ice in winter. The amount and duration of ice depends on many factors, including local weather conditions as well as the lake's depth, volume, and surface area, but a climate researcher claims that some lakes in these latitudes have seen a decline in the duration of ice between the early 1980s and the mid-2000s.

11

Which choice best describes data in the table that support the researcher's claim?

- A) Kalmarinjärvi had fewer days of ice in the winter of 2005-06 than it did in the winter of 1980-81.
- B) Kalmarinjärvi is at a higher latitude than Mirror Lake and typically had fewer days of ice per winter than Mirror Lake did.
- C) Kalmarinjärvi is at a higher latitude than Mirror Lake and typically had more days of ice per winter than Mirror Lake did.
- D) Lake Neusiedl had more days of ice in the winter of 2005-06 than it did in the winter of 1980-81.

### Pyramids in Egypt and the Americas

Pyramid	Country	Height (meters)	Age (years before present)
The Great Pyramid	Mexico	33	2,050 to 2,400
The Pyramid of Djoser	Egypt	60	4,600 to 4,700
The Pyramid of Sahure	Egypt	47	4,400 to 4,500
El Castillo	Belize	40	1,100 to 1,400

A student is writing an essay about four pyramids for a history class and wants to note how long ago each pyramid was built and how tall each pyramid is. Consulting the table, the student finds that the Pyramid of Djoser was built 4,600 to 4,700 years ago and is \_\_\_\_\_

12

Which choice most effectively uses data from the table to complete the text?

- A) 60 meters tall.
- B) 47 meters tall.
- C) 33 meters tall.
- D) 40 meters tall.

## Monthly Temperatures and Wing Centroid Sizes of Fruit Fly Specimens

Month	Average high (°F)	Average low (°F)	Average male wing centroid size (mm)	Average female wing centroid size (mm)
October	67	44	1.98	2.29
May	73	50	1.98	2.27
July	87	62	2.02	2.31
September	80	54	1.98	2.27

*Drosophila* (fruit flies) have generation times of 10-12 days, so seasonal changes in humidity and other environmental conditions can drive seasonal fluctuations in chromosome rearrangements in species such as *D. persimilis* and *D. subobscura*. *Drosophila* body size (for which wing centroid size serves as a proxy measure) correlates with life span. Banu Sebnem Önder and Cansu Fidan Aksoy measured the wing sizes of members of a *D. melanogaster* population in Yesilöz, Turkey, that were collected monthly between May and October over three years. Their research suggests that *Drosophila* collected in relatively warmer months should tend to have a longer life span, as is illustrated by the finding that \_\_\_\_\_

**13**

Which choice most effectively uses data from the table to complete the assertion?

- A) the average female wing centroid size was consistently larger than the average male wing centroid size in all four months in the table.
- B) the average male wing centroid size was larger in July than in October.
- C) the average female wing centroid size was 2.02 mm in July but was 2.27 mm in September.
- D) the average monthly low temperature was higher in September than in May.

## Brown Bears in Katmai National Park, Alaska

Bear Identification number	Sex	Age (years)	Approximate weight number (pounds)
106	female	6	400
119	male	10	800
183	female	13	375
122	male	3	200

Scientists collected information about brown bears in Katmai National Park in Alaska. This information Included each bear's sex, age, and approximate weight. The bear with the lowest approximate weight shown in the table was a \_\_\_\_\_

**14**

Which choice most effectively uses data from the table to complete the statement?

- A) female that was 13 years old.
- B) female that was 6 years old.
- C) male that was 10 years old.
- D) male that was 3 years old.

Cumulative Counts of fish in Three Taiwanese Tide Pools, 1999-2018

Species	Station 1	Station 2	Station 3
barred flagtail	249	64	16
streaky rockskipper	125	139	610
blackspotted rockskipper	83	74	31
cocos frillgoby	50	64	90

Lin-Tai Ho and colleagues tracked fish populations in three tide pool-monitoring stations in Taiwan from 1999 to 2018. The streaky rockskipper was especially common at station 3: there, the researchers counted

15

Which choice most effectively uses data from the table to complete the assertion?

- A) 90 streaky rockskippers.
- B) 610 streaky rockskippers.
- C) 125 streaky rockskippers.
- D) 249 streaky rockskippers.

Members of the Girls Scouts of America,  
by Age Category, 1992-1995 (in thousands)

Category	1992	1993	1994	1995
Juniors (8–11 years)	870	791	756	727
Ambassadors (older than 17)	863	826	802	784
Cadettes (11–14 years)	188	168	174	172
Seniors (14–17 years)	50	43	45	52

The Girl Scouts of America is a youth organization that had just over 1 million members in 2021. A student is writing an essay on the history of the organization and wishes to determine which of four categories of Girl Scouts had the most members in 1993. (Girl Scout categories correspond roughly with ages.) According to the table, the category with the most members in 1993 was the

16

Which choice most effectively uses data from the table to complete the statement?

- A) Cadettes
- B) Juniors
- C) Seniors
- D) Ambassadors

### Volcanoes in Ecuador

Name of volcano	Year of last eruption	Volcano type
Imbabura	5550 BCE	compound
Reventador	2022 CE	stratovolcano
Pululahua	290 CE	caldera
Darwin	1813 CE	shield

A student is researching volcanoes in Ecuador. The student claims that Ecuador is home to several different types of volcanoes.

17

Which choice best describes data from the table that support the student's claim?

- A) Darwin is a shield volcano, Reventador is a stratovolcano, Imbabura is a compound volcano, and Pululahua is a caldera volcano.
- B) Darwin, Reventador, Imbabura, and Pululahua each most recently erupted in different years.
- C) Darwin and Reventador are both shield volcanoes, whereas Imbabura and Pululahua are both compound volcanoes.
- D) Darwin, Reventador, and Imbabura are all stratovolcanoes, whereas Pululahua is the only caldera volcano.

Nation	Percentage working in agricultural sector	Percentage living in urban areas
Belize	16.80	45.87
Costa Rica	11.97	80.08
El Salvador	16.29	72.75
Panama	14.41	68.06

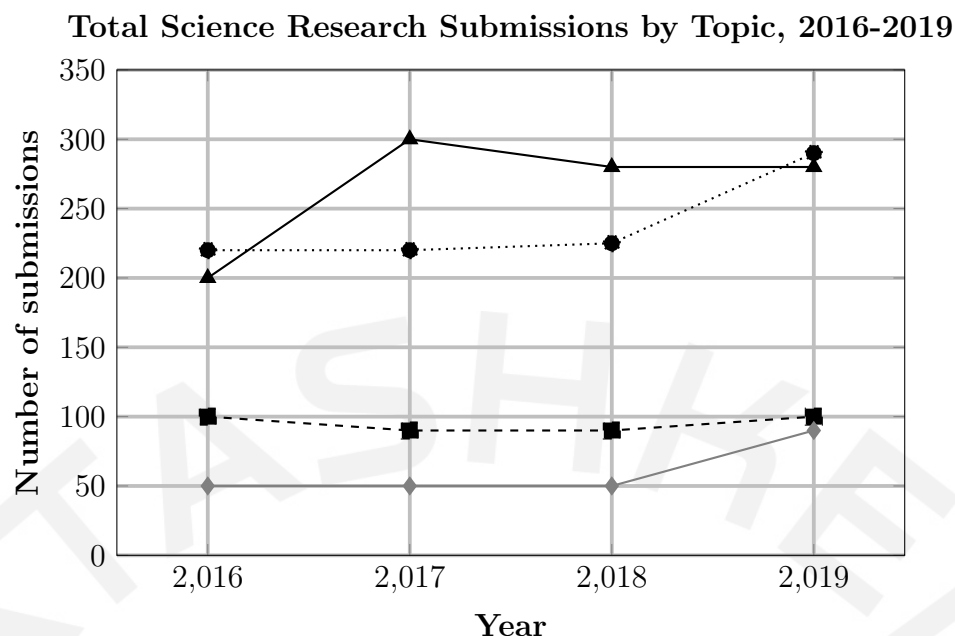
A group of researchers conducted a study of four Central American nations to explore the relationship between the percentage of the population working in the agricultural sector and the percentage of the population living in urban areas. Although the percentages of those living in urban areas varied significantly, the percentages of those working in the agricultural sector did not vary as greatly. The group claimed that, for these four nations, there is not a strong correlation between where people work and where they live.

18

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

- A) For these four nations, Costa Rica and Panama had the lowest percentage of people working in the agricultural sector and the lowest percentage of people living in urban areas.
- B) For these four nations, the nation with the highest percentage of people in the agricultural sector also had the highest percentage of people in urban areas.
- C) Belize demonstrated a similar percentage of people in the agricultural sector to El Salvador's despite having a lower percentage of people in urban areas.
- D) El Salvador and Panama have similar percentages of people in the agricultural sector, but Panama has a higher percentage of people in urban areas than El Salvador does.





A student is researching the trends in the topics submitted to a national science fair for high school students. The graph shows the number of submissions by topic that were made each year. Based on the data in the graph, the student claims that there were more medicine and health research topics submitted in 2019 than in any other year.

19

Which choice most effectively uses data from the graph to support the underlined claim?

- A) In 2016, the number of cellular and molecular biology topic submissions was the same as the number of animal science topic submissions.
- B) In 2019, there were more physics and space science topic submissions than there were medicine and health topic submissions.
- C) The lowest number of animal science topic submissions in a year was approximately 95 in 2016.
- D) The highest number of medicine and health topic submissions during the period shown is approximately 285 in 2019.

**Minimum and Maximum Depths of Stony Coral Species  
in Caribbean and Indo-Pacific Waters**

Species	Minimum depth (meters)	Maximum depth (meters)
<i>Acropora striata</i>	10	25
<i>Porites nodifera</i>	5	15
<i>Pocillopora meandrina</i>	1	27
<i>Agaricia grahamae</i>	20	115

Some scientists have suggested that as ocean temperatures rise, many fish and corals found in the shallow zone (less than 30 meters below the surface) could take refuge in the cooler, darker mesophotic zone (30 to 150 meters below the surface). However, it isn't clear that all such species will be able to tolerate mesophotic conditions. In 2018, Luiz Rocha and colleagues studied stony corals in the two zones in Caribbean and Indo-Pacific waters. Based on the depths at which those corals are now found, the species that seems least suited to a full migration to the mesophotic zone is \_\_\_\_\_

20

Which choice most effectively uses data from the table to complete the statement?

- A) *Acropora striata*, because its maximum depth of 25 meters is close to but doesn't reach the mesophotic zone.
- B) *Porites nodifera*, because its maximum depth of 15 meters is furthest from the mesophotic zone.
- C) *Agaricia grahamae*, because its minimum depth of 20 meters is in the shallow zone.
- D) *Pocillopora meandrina*, because its minimum depth of 1 meter is the shallowest of those listed.

Annual Car Production in the United States, 1910-1925

Year	Number of cars produced	Number of companies producing cars
1910	123,990	320
1915	548,139	224
1920	1,651,625	197
1925	3,185,881	80

A student is using the table as part of a social studies class presentation on the US auto industry in the early twentieth century. The student notes that, according to the table, from 1910 to 1925 -----

21

Which choice most effectively uses data from the table to complete the statement?

- A) the number of cars produced increased but the number of companies producing cars decreased.
- B) both the number of cars produced and the number of companies producing cars remained unchanged.
- C) the number of cars produced decreased but the number of companies producing cars remained unchanged.
- D) both the number of cars produced and the number of companies producing cars increased.

### Total Areas of Five Tribal Nations around the United States

Tribal nation	Location	Area (square miles)
Tohono O'odham Nation	Arizona	4,453
Crow Tribe	Montana	3,606
Leech Lake Band of Ojibwe	Minnesota	1,311
Yakama Nation	Washington	2,188
Muscogee Nation	Oklahoma	4,867

In terms of total area, the Muscogee Nation is one of the largest tribal nations in the United States. It covers 4,867 square miles in what is now eastern Oklahoma. In comparison, the total area of the Leech Lake Band of Ojibwe in Minnesota is only \_\_\_\_\_

22

Which choice most effectively uses data from the table to complete the comparison?

- A) 1,311 square miles.
- B) 2,188 square miles.
- C) 4,453 square miles.
- D) 3,606 square miles.

### Dated Ages of Lunar Samples from Select Missions

Mission name	Year	Landing site	Approximate age of lunar samples (billions of years)
Apollo 11	1969	Mare Tranquillitatis	3.6
Apollo 15	1971	Mare Imbrium	3.3
Apollo 17	1972	Mare Serenitatis	3.8
Chang'e 5	2020	Oceanus Procellarum	2.0

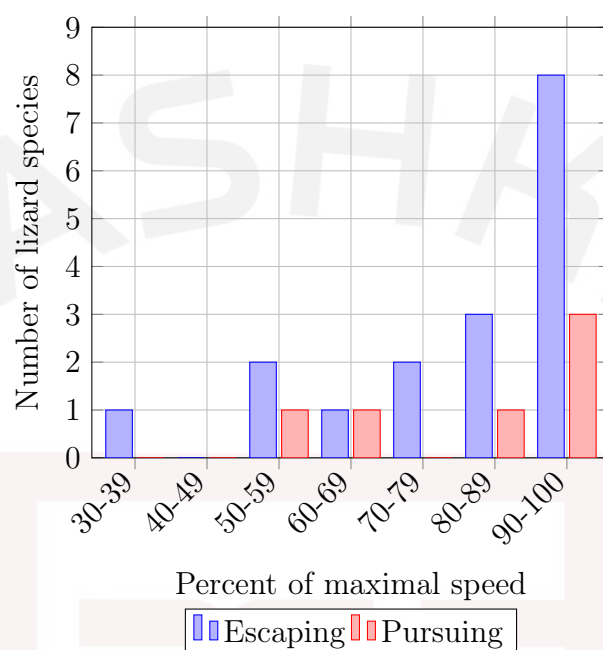
The Apollo program missions were spaceflights to the moon led by the United States during the 1960s and 1970s during which astronauts collected some samples of the moon's surface. More recently, China launched the Chang'e 5 mission, which returned additional lunar surface samples. Researchers have analyzed and dated each of the samples, concluding that the lunar samples collected during the Chang'e 5 mission are significant because \_\_\_\_\_

23

Which choice most effectively uses data from the table to complete the claim?

- A) they are much younger than the samples brought back from any of the Apollo missions.
- B) they were collected from the same landing site as the Apollo 11 mission.
- C) they are closest in age to the samples brought back by the Apollo 17 mission.
- D) they helped confirm the predicted ages of the lunar samples from the Apollo missions.

**Number of Lizard Species by Average Percent of Maximal Speed Used When Pursuing Prey or Escaping Predators**



It may seem that the optimal strategy for an animal pursuing prey or escaping predators is to move at maximal speed, but the energy expense of exploiting full speed capacity can disfavor such a strategy even in escape contexts, as evidenced by the fact that \_\_\_\_\_

24

Which choice most effectively uses data from the graph to complete the text?

- A) most lizard species use about the same percentage of their maximal speed when escaping predation as they do when pursuing prey.
- B) multiple lizard species move at an average of less than 90% of their maximal speed while escaping predation.
- C) more lizard species use, on average, 90-100% of their maximal speed while escaping predation than use any other percentage of their maximal speed.
- D) at least 4 lizard species use, on average, less than 100% of their maximal speed while pursuing prey.



## Impact of Four Key Industries on Oklahoma Economy in 2017

Industry	Approximate total contribution by industry	Number of people employed by industry	Average contribution per employee by industry
Administration/waste	\$5,830,600,000	96,964	\$60,132
Construction	\$6,797,300,000	77,247	\$87,994
Transportation/warehousing	\$12,414,600,000	52,891	\$234,720
Tribal economic activity	\$7,312,400,000	51,674	\$141,510

The Cherokee Nation, the Quapaw Tribe, and the more than thirty other tribes in Oklahoma operate numerous businesses and generate billions of dollars in revenue. An economics student is researching the tribes' collective activity as a single industry. The student wants to compare the average amount that industry contributed per employee to Oklahoma's economy with the average amount contributed per employee by three other industries. Looking at the table, the student finds that tribal economic activity contributed over \$141,000 per employee, on average, ranking it \_\_\_\_\_

25

Which choice most effectively uses data from the table to complete the text?

- A) above all three of the other industries listed in the table.
- B) above either administration/waste or construction and nearly equal to transportation/warehousing.
- C) below all three of the other industries listed in the table.
- D) below transportation/warehousing but above both construction and administration/waste.

## Pyramids in Egypt and the Americas

Pyramid	Country	Height (meters)	Age (years before present)
The Pyramid of the Sun	Mexico	71.2	2,100
The Pyramid of Djedefre	Egypt	67	4,500 to 4,600
The Pyramid of Userkaf	Egypt	49	4,400 to 4,500
El Castillo	Belize	40	1,100 to 1,400

A student is writing an essay about four pyramids for a history class and wants to note how long ago each pyramid was built and how tall each pyramid is. Consulting the table, the student finds that el Castillo was built 1,100 to 1,400 years ago and is \_\_\_\_\_

26

Which choice most effectively uses data from the table to complete the text?

- A) 67 meters tall.
- B) 40 meters tall.
- C) 49 meters tall.
- D) 71.2 meters tall

Studies of the Effects of Tilling vs. No Tilling on Crop Yields

Authors	Crop	Crop yield with tilling (kilograms per hectare)	Crop yield with no tilling (kilograms per hectare)
Salem Alhaji Ali and colleagues	winter wheat	3,700	5,300
Nayasha Kafesu and colleagues	maize	3,078	3,574
G.F. Botta and colleagues	soybeans	3,300	2,700
Laila Nazirah and colleagues	rice	4,370	2,450

Laila Nazirah and colleagues found that tilling-the practice of turning soil with hoes, plows, or other machines before planting crops was associated with an increased yield of rice. But some studies of other crops have found the opposite effect, raising the question of whether the increase in yield found by Nazirah and colleagues is specific to their study crop. However, this doesn't seem to be the case:

27

Which choice most effectively uses data from the table to complete the assertion?

- A) Salem Alhajj Ali and colleagues reported an even larger positive effect of tilling on the yield of winter wheat.
- B) a study using rice yielded 4,370 kilograms per hectare with tilling and only 2,450 kilograms per hectare without tilling.
- C) crop yields with tilling have ranged from 3,078 kilograms per hectare for maize to 4,370 kilograms per hectare for rice.
- D) G.F. Botta and colleagues found a similar association in a study using soybeans.

**Total Areas of five Tribal Nations  
around the United States**

Tribal Nation	Location	Area (square miles)
Cherokee Nation	Oklahoma	6,963
Northern Cheyenne Tribe	Montana	707
Mandan, Hidatsa, and Arikara Nation	North Dakota	1,583
Colville Tribes	Washington	2,185
Muscogee Nation	Oklahoma	4,867

In terms of total area, the Navajo Nation is the largest tribal nation in the United States. It covers 24,425 square miles in Arizona, Colorado, and New Mexico. Most tribal nations in the US are much smaller. For example, the total area of the Muscogee Nation in Oklahoma is 4,867 square miles. And in Washington, the total area of the Colville Tribes is \_\_\_\_\_

**28**

Which choice most effectively uses data from the table to complete the statement?

- A) 2,185 square miles
- B) 707 square miles
- C) 6,963 square miles
- D) 1,583 square miles

**Millions of Metric Tons of Copper Mined in 1995 and 2020**

Country	1995	2020
Poland	0.38	0.39
Kazakhstan	0.26	0.55
Chile	2.49	5.73
Canada	0.73	0.59

While doing research for a paper about copper mining, a student finds a table with information about four different countries. The student notes that the country that mined 0.55 million metric tons of copper in 2020 had mined \_\_\_\_\_

**29**

Which choice most effectively uses data from the table to complete the statement?

- A) 0.26 million metric tons of copper in 1995
- B) 0.59 million metric tons of copper in 1995
- C) 2.49 million metric tons of copper in 1995
- D) 0.38 million metric tons of copper in 1995

**Average Hours Worked per Person per Year  
in 1950 and 2017**

Country	1995	2017	Change in hours	Percent change in hours
Argentina	2,034	1,692	-342	-17%
Ireland	2,419	1,746	-674	-28%
Mexico	2,432	2,255	-177	-7%
United Kingdom	2,184	1,670	-514	-24%

A student in an economics course is examining the decline since 1950 in average hours worked per person per year in various nations due to both increased productivity and the adoption of policies that limit working hours. The first task in this investigation is to determine how the decline in Argentina compares to that in other countries. The student finds that \_\_\_\_\_

**30**

Which choice most effectively uses data from the table to complete the student's conclusion?

- A) the decline in number of hours worked was greater in Argentina than it was in Ireland, the United Kingdom, or Mexico
- B) while the number of hours worked rose in Argentina between 1950 and 2017, it declined in Ireland, the United Kingdom, and Mexico
- C) though the percent decrease in hours worked in Argentina was greater than that in Ireland and Mexico, it was less than that in the United Kingdom
- D) though the percent decrease in hours worked in Argentina was less than that in Ireland and the United Kingdom, it was greater than that in Mexico

**Total Areas of five Pueblo nations in New Mexico**

<b>Tribal nation</b>	<b>Area (square miles)</b>
Pueblo of Tesuque	26.9
Pueblo of Santa Ana	101.1
Pueblo de San Ildefonso	47.3
Pueblo of Acoma	595.7
Santa Clara Pueblo	77.1

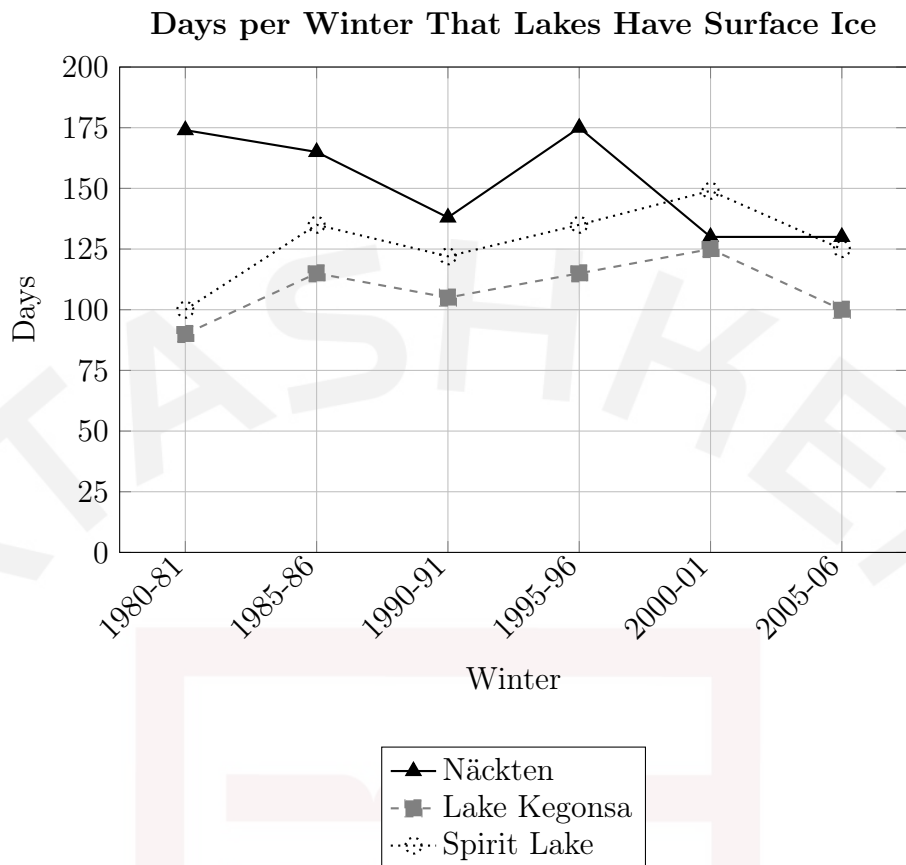
There are nineteen Pueblo tribal nations in New Mexico. A student in a geography class is a citizen of the Pueblo of Santa Ana in the north-central part of the state. The student wants to compare the total area covered by the Pueblo of Santa Ana with the total areas of various other Pueblo nations in the state. Looking at the table, the student finds that the total area of the Pueblo of Santa Ana is 101.1 square miles, while the total area of the Pueblo of Tesuque is \_\_\_\_

**31**

Which choice most effectively uses data from the table to complete the comparison?

- A) 77.1 square miles.
- B) 595.7 square miles.
- C) 26.9 square miles.
- D) 47.3 square miles.





It is common for freshwater lakes near or above a latitude of  $45^\circ$  north of the equator, like Lake Mjøsa in Norway, to accumulate surface ice in winter. The amount and duration of ice depends on many factors, including local weather conditions as well as the lake's depth, volume, and surface area, but a climate researcher claims that some lakes in these latitudes have seen a decline in the duration of ice between the early 1980s and the mid-2000s.

**32**

Which choice best describes data from the graph that support the researcher's claim?

- A) Näckten had approximately 175 days of ice in the winter of 1980-81 and approximately 135 days of ice in the winter of 2005-06.
- B) None of the three lakes had fewer days of ice in the winter of 1980-81 than they did in the winter of 2005-06.
- C) Spirit Lake had approximately 100 days of ice in the winter of 1980-81 and approximately 125 days of ice in the winter of 2005-06.
- D) The highest number of days of ice a lake in the graph had in the winter of 2005-06 was approximately 135.

## Highest-Grossing Films in a Language Other than English at US Box Office

Title	Lifetime gross earnings	Opening weekend box office gross earnings	US release date	Director	Oscar nominated?
<i>The Lives of Others</i>	\$11,286,112	\$223,000	February 9, 2007	Florian Henckel von Donnersmarck	Yes
<i>Baahubali 2: The Conclusion</i>	\$20,186,659	\$10,430,497	April 28, 2017	S.S. Rajamouli	No
<i>Pan's Labyrinth</i>	\$37,634,615	\$568,541	December 29, 2006	Guillermo del Toro	Yes
<i>Huevo's Little Rooster's Egg-cellent Adventure</i>	\$9,080,818	\$3,124,702	September 4, 2015	Gabriel Riva Palacio Alatraste and Rodolfo Riva Palacio Alatraste	No

Many films in a language other than English grow to be financially successful over the course of their time in movie theaters in the United States, but some become immediate successes in their opening weekends. A journalist claims that a film's reception can greatly influence its long-term success. Indications that the film is of high quality, such as an Oscar nomination, can dramatically boost public interest in the film and thus its overall earnings, even with a relatively modest opening weekend performance.

33

Which choice best describes data from the table that support the journalist's claim?

- A) *The Lives of Others* was recognized by the Oscars, but *Baahubali 2: The Conclusion*, which was not recognized by the Oscars, had higher lifetime earnings.
- B) Although the opening weekend earnings were \$10,430,497 for *Baahubali 2: The Conclusion* and \$3,124,702 for *Huevos: Little Rooster's Egg-cellent Adventure*, neither film was recognized by the Oscars.
- C) *Pan's Labyrinth*, which was recognized by the Oscars, earned less money in its opening weekend but had higher lifetime earnings than *Huevos: Little Rooster's Egg-cellent Adventure*, which was not recognized by the Oscars.
- D) Although *Pan's Labyrinth* and *The Lives of Others* were both recognized by the Oscars, *Pan's Labyrinth* had higher lifetime and opening weekend earnings.

## Home Video Games and Computer Games of the 1980s

Title	System(s)	Genre	Developer
<i>The Last Ninja</i>	Commodore 64	adventure	System 3
<i>Donkey Kong</i>	multiple systems	platformer	Nintendo R&D1
<i>Frogger</i>	multiple systems	action	Konami
<i>Super Mario Brothers 2</i>	Nintendo Entertainment System	platformer	Nintendo EAD

A student is writing a research paper on the global rise of the home video game industry during the 1980s. The student wants to know the developer of the game Frogger. The student finds that the developer was \_\_\_\_\_

**34**

Which choice most effectively uses data from the table to complete the statement?

- A) Konami.
- B) Nintendo EAD.
- C) Nintendo R&D1.
- D) System 3.

## Days per Winter That Lakes Have Surface ice

Lake	Latitude (degrees)	1980-81	1985-86	1990-91	1995-96	2000-01	2005-06
Spirit Lake	43.46	102	135	121	134	147	126
Lake Kegonsa	42.97	94	116	104	113	124	101
Näcken	62.913	177	168	144	174	133	134

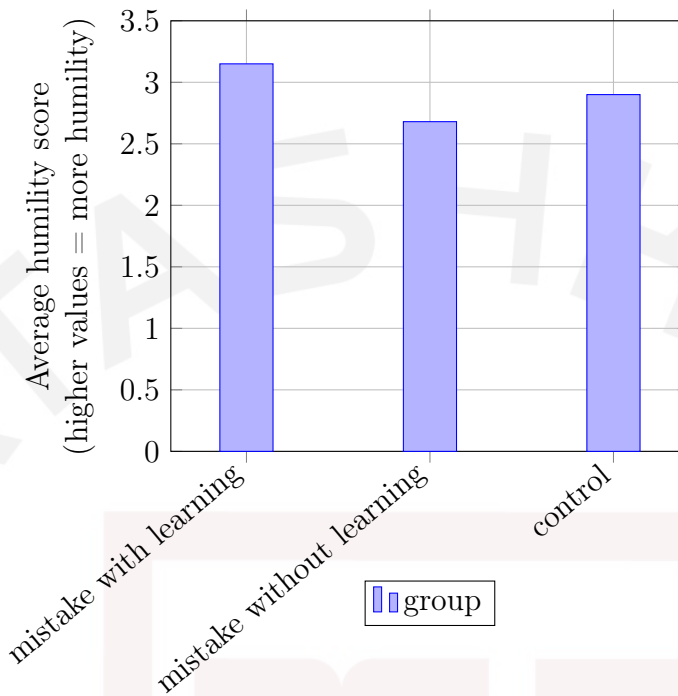
It is common for freshwater lakes near or above a latitude of 45° north of the equator, like Lake Stechlin in Germany, to accumulate surface ice in winter. The amount and duration of ice depends on many factors, including local weather conditions as well as the lake's depth, volume, and surface area, but a climate researcher claims that the higher a lake's latitude, the more days per winter it will typically have measurable amounts of surface ice.

**35**

Which choice best describes data in the table that support the researcher's claim?

- A) Näckten is at a higher latitude than Lake Kegonsa and typically had fewer days of ice per winter than Lake Kegonsa did.
- B) Spirit Lake had 102 days of ice in the winter of 1980-81 and 126 days of ice in the winter of 2005-06.
- C) Näckten had 177 days of ice in the winter of 1980-81 and 134 days of ice in the winter of 2005-06.
- D) Näckten is at a higher latitude than Lake Kegonsa and typically had more days of ice per winter than Lake Kegonsa did.

**Humility Scores for Participants' Scenario Responses**



Jia Hu and colleagues hypothesized that workplace leaders who reflect on lessons learned from past mistakes are likely to exhibit more humility than leaders who don't engage in such reflection. To test this, the team placed 301 managers in one of three groups. Participants in two experimental groups were asked to reflect on a mistake, one group focusing on a mistake that resulted in learning and the other group focusing on a mistake that didn't result in learning. Participants in a control group were asked to reflect on their daily routine. All the participants then described how they would respond to a workplace scenario. After evaluating the responses for evidence of humility, the researchers concluded that their hypothesis was correct.

**36**

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

- A) The managers who reflected on a past mistake that resulted in learning exhibited more humility on average than the managers in the other two groups did
- B) None of the three groups' average humility scores exceeded 3.5.
- C) The managers in the control group exhibited only slightly less humility on average than the managers in the two experimental groups did
- D) All three groups exhibited less humility on average than the researchers expected.

### Examples of Hoards found in Ireland and Northern Ireland

Hoard name	Date of contents	Year of discovery	Description
Carrick-on-Suir Hoard	17th century CE	2013	gold coins
Coggalbeg Hoard	24th–19th century BCE	1945	gold pieces
Brighter Hoard	1st century BCE	1896	gold pieces

For centuries, people in Ireland and Northern Ireland have been finding deposits of valuable objects, called hoards, that earlier people buried. These discoveries have persisted into the 2000s; for example, \_\_\_\_\_

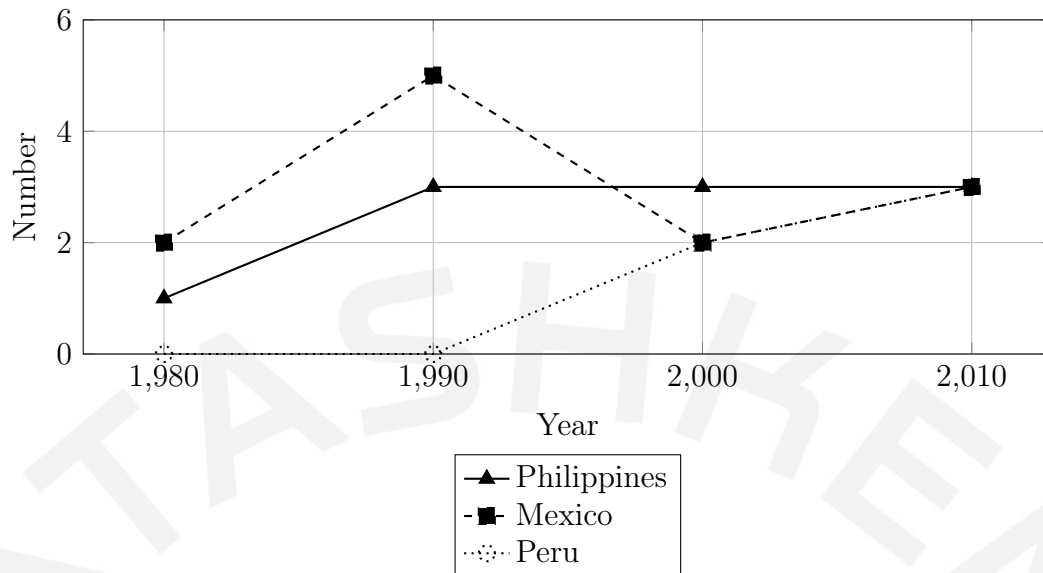
37

Which choice most effectively uses data from the table to complete the statement?

- A) the Brighter Hoard, Coggalbeg Hoard, and Carrick-on-Suir Hoard have all been found since 1896.
- B) the Carrick-on-Suir Hoard was found in 2013.
- C) the Carrick-on-Suir Hoard was found after the Brighter Hoard.
- D) the Brighter Hoard and Coggalbeg Hoard were both found after 2000.



Women Judges and Magistrates on the High Courts, 1980–2010



A report from an international organization that monitors the numbers of women serving as judges or magistrates on various nations' highest courts, such as the Supreme Court of Justice in Mexico and the Supreme Court in the Philippines, found that the overall trend is toward more women serving on the high courts in 2010 than in 1980. For example, none of the countries in the graph had more than 2 women in these positions in 1980, but \_\_\_\_\_

38

Which choice most effectively uses data from the graph to complete the example?

- A) in 2010, Peru had 3 women on its high courts, the Philippines had 3, and Mexico had 3.
- B) the increase in the number of women on the high courts from 1980 to 2010 in Peru was greater than that in either the Philippines or Mexico.
- C) neither Peru nor the Philippines saw a reduction in the women on their high courts in any of the years shown on the graph, but Mexico did after 1990.
- D) Mexico had 2 women on its high courts in 1980 and 3 in 2010.

**Members of the Girls Scouts of America,  
by Age Category, 1992-1995 (in thousands)**

Category	1992	1993	1994	1995
Juniors (8–11 years)	870	791	756	727
Ambassadors (older than 17)	863	826	802	784
Cadettes (11–14 years)	188	168	174	172
Seniors (14–17 years)	50	43	45	52

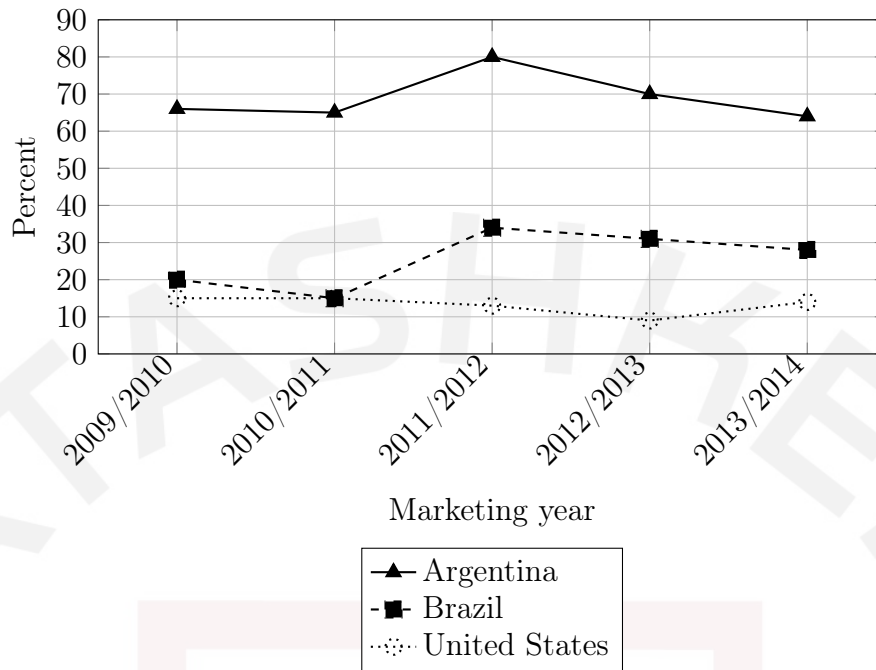
The Girl Scouts of America is a youth organization that had just over 1 million members in 2021. A student is writing an essay on the history of the organization and wishes to determine the number of members from 14 to 17 years old who were in the Girl Scouts in 1995. According to the table, the number (in thousands) is \_\_\_\_\_

**39**

Which choice most effectively uses data from the table to complete the statement?

- A) 185.
- B) 727.
- C) 45.
- D) 52.

Marketing Years by Three Countries for Marketing,  
Years 2009/2010–2013/2014

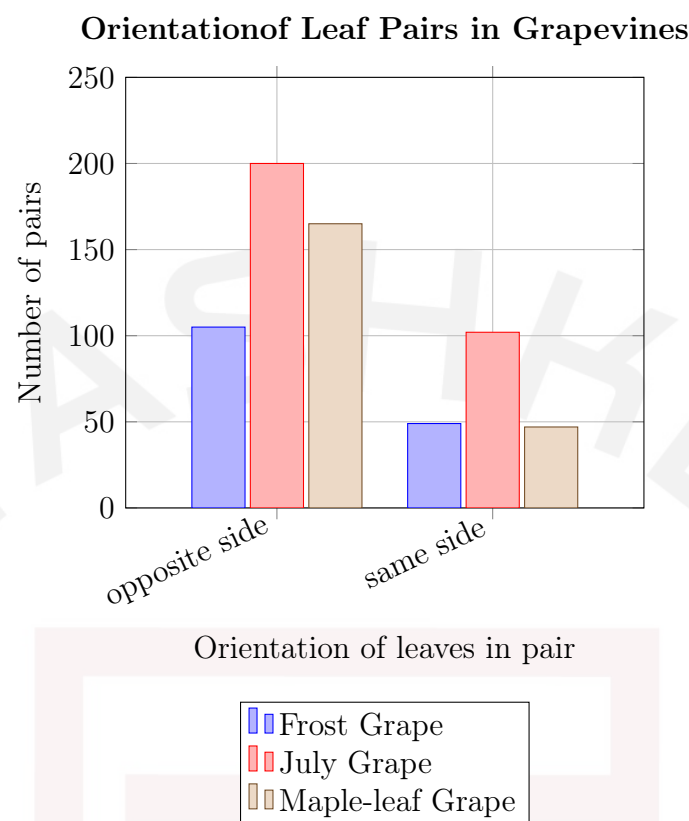


Argentina, Brazil, and the United States are among the world's leading producers of maize (corn), and each country exports a certain percentage of maize each marketing year, which runs from March to February in Argentina and Brazil and from September to August in the United States. A student is researching those percentages and finds that for the marketing year 2012/2013, the percentage of maize exported by \_\_\_\_\_

40

Which choice most effectively uses data from the graph to complete the text?

- A) Brazil exceeded the percentage exported by Argentina for the first time.
- B) Brazil increased from the previous marketing year but remained lower than the percentage exported by the United States.
- C) the United States reached its highest point during the five marketing years.
- D) Argentina decreased from the previous marketing year but remained the highest among the three countries.



Auxins are a class of hormones that influence plant growth, including leaf orientation (the tendency of leaves to be larger on one side of their long central axis than the other). University of California, Berkeley biologist Ciera Martinez and colleagues noted that in certain plants in which leaves grow in pairs, auxins will typically be concentrated in opposite sides of each leaf in the pair (e.g., on the left side of one leaf in the pair and the right side of the other). Accordingly, they hypothesized that paired leaves should tend to show opposite-side orientation, and they tested their hypothesis by examining paired leaves from several species of grapevines.

41

Which choice best describes data from the graph that support Martinez and colleagues' hypothesis?

- A) In the maple-leaf grape, frost grape, and July grape, all the leaf pairs show opposite-side orientation.
- B) Although the number of leaf pairs showing same-side orientation is fairly high in the July grape, it is much lower in both the maple-leaf grape and frost grape.
- C) Although the exact ratio varies by species, the maple-leaf grape, frost grape, and July grape all show more leaf pairs with opposite-side orientations than with same-side orientations.
- D) The number of leaf pairs showing opposite-side orientation is fairly high in the maple-leaf grape, but not as high as it is in the July grape.

### Studies of the Effects of Tilling vs. No Tilling on Crop Yields

Authors	Crop	Crop yield with tilling (kilograms per hectare)	Crop yield with no tilling (kilograms per hectare)
Danijel Jug and colleagues	winter wheat	4,860	3,910
Carlos Cantero-Martínez and colleagues	winter barley	2,693	3,136
R.K. Jat and colleagues	maize	3,000	5,200
Gevan Behnke and colleagues	soybeans	4,285	3,798

Danijel Jug and colleagues found that tilling—the practice of turning soil with hoes, plows, or other machines before planting crops—was associated with an increased yield of winter wheat. But some studies of other crops have found the opposite effect, raising the question of whether the increase in yield found by Jug and colleagues is specific to their study crop. However, this doesn't seem to be the case:

-----

42

Which choice most effectively uses data from the table to complete the assertion?

- A) crop yields with tilling have ranged from 2,693 kilograms per hectare for winter barley to 4,860 kilograms per hectare for winter wheat.
- B) Gevan Behnke and colleagues found a similar association in a study using soybeans.
- C) a study using winter wheat yielded 4,860 kilograms per hectare with tilling and only 3,910 kilograms per hectare without tilling.
- D) R.K. Jat and colleagues reported an even larger positive effect of tilling on the yield of maize.



### Effect of Neighboring Species on Pollinator Visits to Target Species

Neighboring species	Target species	Effect value
Creeping thistle	Wild radish	0.2523
Elands sourfig	Montpellier cistus	0.3580
leafy spurge	Lewis flax	-0.3238

Researchers Carolina Laura Morales and Anna Traveset gathered data about flowering plants growing alongside each other in various locations. In each case, the researchers identified one plant as a "target species" and a nearby plant as a "neighboring species." The researchers then calculated a positive or negative value to show how the neighboring species affected pollinator visits to the target species. One example of a neighboring species with a negative effect value is the \_\_\_\_\_

43

Which choice most effectively uses data from the table to complete the example?

- A) Elands sourfig.
- B) creeping thistle.
- C) wild radish.
- D) leafy spurge.

### Pyramids in Egypt and the Americas

Pyramid	Country	Height (meters)	Age (years before present)
The Pyramid of Userkaf	Egypt	49	4,400 to 4,500
The Mask Temple	Belize	17	1,100 to 2,300
El Castillo	Belize	40	1,100 to 1,400
The Pyramid of Djedefre	Egypt	67	4,500 to 4,600

A student is writing an essay about four pyramids for a history class and wants to note how long ago each pyramid was built and how tall each pyramid is. Consulting the table, the student finds that el Castillo was built 1,100 to 1,400 years ago and is \_\_\_\_\_

44

Which choice most effectively uses data from the table to complete the text?

- A) 49 meters tall.
- B) 17 meters tall.
- C) 40 meters tall.
- D) 67 meters tall.

**Total Areas of Five Tribal Nations around the United States**

Tribal nation	Location	Area (square miles)
Tohono O'odham Nation	Arizona	4,453
Standing Rock Sioux Tribe	North and South Dakota	3,662
Hopi Tribe	Arizona	2,533
Yakama Nation	Washington	2,188
Choctaw Nation	Oklahoma	10,864

A citizen of the Standing Rock Sioux Tribe is a student in a geography class. The student wants to compare the total area covered by his tribal nation in North and South Dakota with the total areas covered by certain tribal nations in other states. Looking at the table, he finds that the area of the Standing Rock Sioux Tribe is 3,662 square miles, while the area of the Yakama Nation in Washington is \_\_\_\_\_

**45**

Which choice most effectively uses data from the table to complete the comparison?

- A) 10,864 square miles.
- B) 2,533 square miles.
- C) 4,453 square miles.
- D) 2,188 square miles.

**Numbers of the 23 Non-native Tree Species Reported and the Insect and Fungus Threats to Them**

Country	Trees	Fungi	Insects
Italy	14	57	42
Poland	10	25	105
Finland	6	11	28

Elisabeth Pötzelsberger and colleagues gathered data on 23 non-native tree species grown in Europe. They analyzed reports from Poland, Italy, and Finland about the number of these species grown in those countries as well as the numbers of insect and fungus species that damage those trees. The researchers concluded that Poland reported a greater number of damaging insect species than either of the other countries did.

**46**

Which choice best describes data from the table that support Pötzelsberger and colleagues' conclusion?

- A) Italy reported 57 damaging fungus species and 42 damaging insect species, while both Poland and Finland reported more insect species than fungus species.
- B) Poland reported 105 damaging insect species, which is more than either Italy or Finland reported.
- C) Italy reported 57 damaging fungus species, which is more than either Poland or Finland reported.
- D) Italy and Finland reported 14 and 6 damaging insect species, respectively, which is far fewer than Poland reported.

### Impact of Four Key Industries on Oklahoma Economy in 2017

Industry	Approximate total contribution by industry	Number of people employed by industry	Average contribution per employee by industry
Tribal economic activity	\$7,312,400,000	51,674	\$141,510
Finance/insurance	\$7,281,900,000	56,163	\$129,657
Wholesale trade	\$10,723,400,000	58,346	\$183,790
Administration/waste	\$5,830,600,000	96,964	\$60,132

The Chickasaw Nation and the nearly forty other tribes in Oklahoma operate numerous businesses and collectively generate billions of dollars in revenue. Mining, including oil and natural gas production, is a key industry in the state as well. While researching other key industries in Oklahoma for an economics class, a student finds that the average amount contributed to the state's economy in 2017 by each individual employed in wholesale trade was

47

Which choice most effectively uses data from the table to complete the statement?

- A) \$141,510
- B) \$56,163
- C) \$183,790
- D) \$96,964

**Minimum and Maximum Depths of Stony Coral Species  
in Caribbean and Indo-Pacific Waters**

Species	Location	Minimum depth (meters)	Maximum depth (meters)
<i>Agaricia grahamae</i>	Caribbean	20	115
<i>Acropora bushyensis</i>	Indo-Pacific	0	5
<i>Mussa angulosa</i>	Caribbean	5	30
<i>Indophyllia macassarcensis</i>	Indo-Pacific	20	25

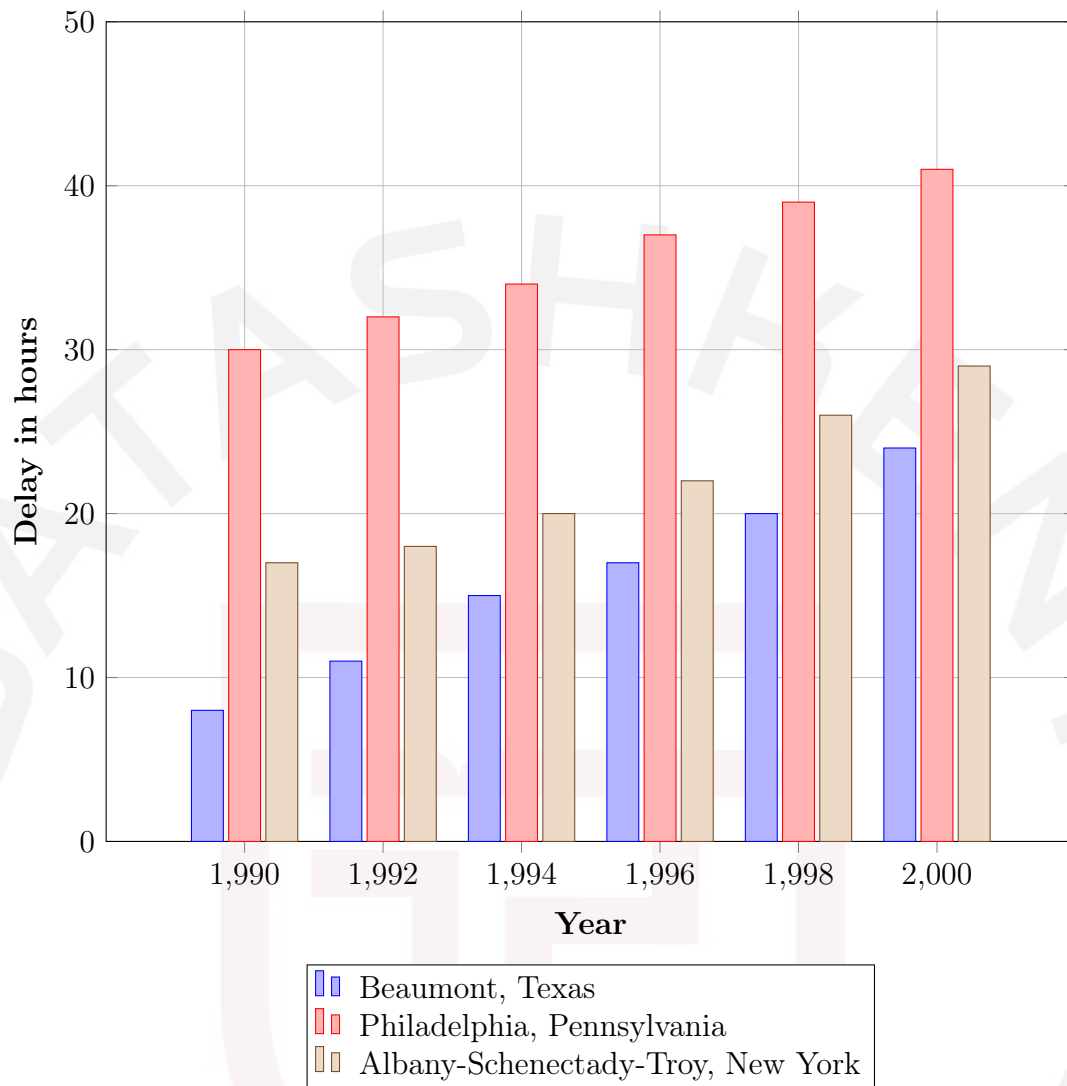
A marine biologist is researching four stony coral species in Caribbean and Indo-Pacific waters, focusing on sightings of these species in the shallow zone (less than 30 meters below the surface) and the mesophotic zone (30 to 150 meters below the surface). Consulting the table, she notes that the smallest maximum depth is located in \_\_\_\_\_

48

Which choice effectively uses data from the table to complete the statement?

- A) Indo-Pacific waters in the shallow zone.
- B) Caribbean waters in the shallow zone.
- C) Indo-Pacific waters in the mesophotic zone.
- D) Caribbean waters in the mesophotic zone.

Annual Average Hours of Highway Traffic  
Delay per Auto Commuter



In a college course on urban affairs, a student asserts that increased traffic congestion in the United States in the 1990s was present both in very large cities such as Philadelphia, Pennsylvania, and smaller areas such as Albany-Schenectady-Troy, New York, and Beaumont, Texas, though those smaller areas may have been less affected by traffic congestion than very large cities, this congestion also worsened in them over time.

49

Which choice best describes data from the graph that support the student's claim?

- A) Even though the amount of traffic delay per commuter per year was greater in the Albany-Schenectady-Troy, New York, area than in the Philadelphia, Pennsylvania, area throughout the period from 1990 to 2000, the amounts were nearly identical in 1996.
- B) In 1992, the amount of traffic delay in the Philadelphia, Pennsylvania, area was less than 30 hours per commuter per year.
- C) In at least one of the three urban areas



shown, the amount of traffic delay was less than 20 hours per commuter per year at one point between 1990 and 2000.

- D) While the annual number of hours of traffic delay per commuter was always lower in the Albany-Schenectady-Troy, New York, area than in the Philadelphia, Pennsylvania, area for each year between 1990 and 2000, the amount of traffic delay rose in both areas during this period.

**Home Video Games and Computer Games of the 1980s**

Title	Approximate number of units sold worldwide	Release year	Genre	Developer
<i>Excitebike</i>	4,160,000	1984	racine	Nintendo R&D1
<i>The Last Ninja 2</i>	5,500,000	1988	action-adventure	System 3
<i>Zelda II: The Adventure of Link</i>	4,380,000	1987	action-adventure	Nintendo EAD
<i>Frogger</i>	4,100,000	1982	action	Konami

A student is writing a paper on the global rise of the home video game industry during the 1980s. The student wants to know the release year of the video game *Zelda II: The Adventure of Link*, developed by Nintendo EAD. The student finds that this game was released in \_\_\_\_\_

50

Which choice most effectively uses data from the table to complete the statement?

- A) 1982.  
B) 1987.  
C) 1984.  
D) 1988.

### Total Areas of Five Tribal Nations around the United States

Tribal nation	Location	Area (square miles)
Crow Tribe	Montana	3,606
White Earth Nation	Minnesota	1,167
Tohono O'odham Nation	Arizona	4,453
Choctaw Nation	Oklahoma	10,864
Yakama Nation	Washington	2,188

In terms of total area, the Choctaw Nation is one of the largest tribal nations in the United States. It covers 10,864 square miles in what is now southeastern Oklahoma. In comparison, the total area of the White Earth Nation in Minnesota is only \_\_\_\_\_

51

Which choice most effectively uses data from the table to complete the comparison?

- A) 1,167 square miles.
- B) 4,453 square miles.
- C) 3,606 square miles.
- D) 2,188 square miles.

### Pyramids in Egypt and the Americas

Pyramid	Country	Height (meters)	Age (years before present)
The Great Pyramid	Mexico	33	2,050 to 2,400
The Pyramid of Djoser	Egypt	60	4,600 to 4,700
The Pyramid of Sahure	Egypt	47	4,400 to 4,500
El Castillo	Belize	40	1,100 to 1,400

A student is writing an essay about four pyramids for a history class and wants to note how long ago each pyramid was built. Consulting the table, the student finds that El Castillo was built \_\_\_\_\_

52

Which choice most effectively uses data from the table to complete the text?

- A) 4,400 to 4,500 years ago.
- B) 4,600 to 4,700 years ago.
- C) 1,100 to 1,400 years ago.
- D) 2,050 to 2,400 years ago.

Name	Right ascension (hours)	Period (seconds)	Frequency (hertz)
J0545-03	5:45	1.074	0.931
J1654-2335	16:54:03	0.545	1.834
J0103+54	1:03:37	0.354	2.822
J0121+53	1:21	2.725	0.367
J0614-03	6:15	0.136	7.353

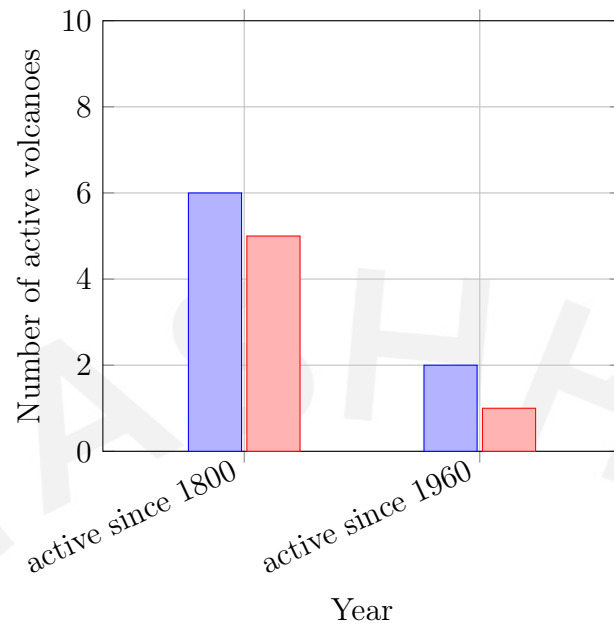
A student is researching rotating radio transients (RRATs), a subclass of pulsar stars characterized by short pulses of radio waves. The time between consecutive pulses of an RRAT is referred to as a period. Looking at the table, the student determines that \_\_\_\_\_

53

Which choice most effectively uses data from the table to complete the statement?

- A) J0545-03 and J0121+53 have the same amount of time between consecutive pulses.
- B) J0103+54 and J0121+53 both have more than one second of time between consecutive pulses.
- C) J0614-03 has the shortest amount of time between consecutive pulses of all the RRATs in the table.
- D) J1654-2335 has the longest amount of time between consecutive pulses of all the RRATs in the table.

Volcanoes Active since 1800 and since 1960 in Two Countries



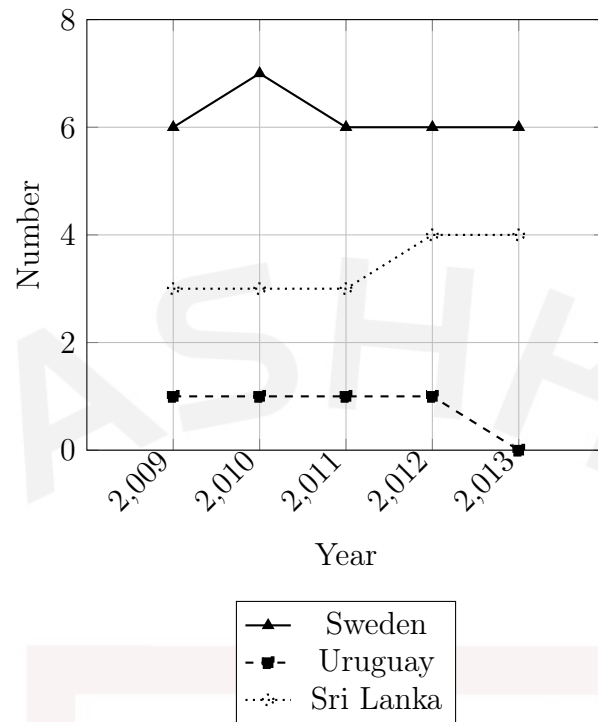
A student is collecting data about countries with volcanoes that have been active in the time since 1800 and in the time since 1960. The student record that Nicaragua has \_\_\_\_\_

54

Which choice most effectively uses data from the graph to complete the statement?

- A) no volcanoes that have been active since 1800.
- B) the same number of volcanoes that have been active since 1800 as Tanzania has.
- C) more volcanoes that have been active since 1960 than Tanzania has.
- D) fewer volcanoes that have been active since 1960 than Tanzania has.

Number of occurrences by Sweden, Uruguay, and Sri Lanka (2009-2013)



A report from an international organization that monitors the numbers of women serving as judges or magistrates on various nations' highest courts, such as the Supreme Court in Sweden and the Supreme Court of Justice in Uruguay, indicates that among the countries that had a different number of women on these courts in 2013 than they had in 2009, the number increased in some countries but decreased in others. For instance, the number of women judges and magistrates on high courts in -----.

55

Which choice most effectively uses data from the graph to complete the example?

- A) Sri Lanka was greater in 2013 than in 2009, whereas the number in Sweden was the same in 2013 as in 2009.
- B) Uruguay was lower in 2013 than in 2009, whereas the number in Sweden was the same in 2013 as in 2009.
- C) Sri Lanka was greater in 2013 than in 2009, whereas the number in Uruguay was lower in 2013 than in 2009.
- D) Sweden was the same in 2013 as in 2009, but it had more women on its high courts than either Sri Lanka or Uruguay did in 2013.



### Monthly Temperatures and Wing Centroid Sizes of Fruit Fly Specimens

Month	Average high (°F)	Average low (°F)	Average male wing centroid size (mm)	Average female wing centroid size (mm)
October	67	44	1.98	2.29
May	73	50	1.98	2.27
July	87	62	2.02	2.31
September	80	54	1.98	2.27

*Drosophila* (fruit flies) have generation times of 10–12 days, so seasonal changes in humidity and other environmental conditions can drive seasonal fluctuations in chromosome rearrangements in species such as *D. persimilis* and *D. subobscura*. *Drosophila* body size (for which wing centroid size serves as a proxy measure) correlates with reproductive fitness. Banu Şebnem Önder and Cansu Fidan Aksoy measured the wing sizes of members of a *D. melanogaster* population in Yeşilöz, Turkey, that were collected monthly between May and October over three years. Their research suggests that *Drosophila* collected in relatively warmer months should tend to have greater reproductive fitness, as is illustrated by the finding that \_\_\_\_\_

56

Which choice most effectively uses data from the table to complete the assertion?

- A) the average male wing centroid size was 1.98 mm in September but was 2.31 mm in July.
- B) the average female wing centroid size was consistently larger than the male wing centroid size in all four months in the table.
- C) the average monthly low temperature was higher in September than in May.
- D) the average female wing centroid size was larger in July than in May.

**Percentages of New Year's Resolution Makers  
Who Make Certain Kinds of Resolutions**

Type of resolution	Age 18-29	Age 30-49	Age 50-64	Age 65+
Health and exercise	79	80	79	76
Finances	68	63	56	57
Personal relationships	63	53	58	52
Hobbies	65	53	51	45

A Pew Research Center survey conducted in January 2024 found that three out of ten US adults make at least one New Year's resolution (a promise for the year ahead), while half of those who make a resolution make more than one. The survey asked participants what kinds of resolutions they made and separated them into several categories. The table presents percentages of people who make particular kinds of New Year's resolutions among those who choose to make them, indexed by age bracket.

57

Which choice best presents a conclusion about the habits of New Year's resolution makers that is best supported by information in the text and the table?

- A) The majority of US adults who make resolutions related to health and exercise also make resolutions in multiple additional categories.
- B) Among all US adults, people become less likely to make New Year's resolutions as they age, regardless of the type of resolution.
- C) Resolution makers between the ages of 50 and 64 are more likely to make resolutions related to personal relationships and less likely to make resolutions related to finances than resolution makers between the ages of 30 and 49 are.
- D) Resolution makers between the ages of 18 and 29 are more likely to make resolutions about health and exercise than resolution makers between the ages of 30 and 49 are.

### Highest-Grossing Films in a Language Other than English at US Box Office

Title	Lifetime gross earnings	Opening weekend box office gross earnings	US release date	Director	Oscar nominated?
<i>Instructions Not Included</i>	\$44,467,206	\$7,846,462	August 30, 2013	Eugenio Derbez	No
<i>The Girl Who Played with Fire</i>	\$7,638,241	\$904,998	July 9, 2010	Daniel Alfredson	No
<i>Amélie</i>	\$33,225,499	\$136,470	November 2, 2001	Jean-Pierre Jeunet	Yes
<i>All About My Mother</i>	\$8,272,296	\$50,362	November 5, 1999	Pedro Almodóvar	Yes

Many films in a language other than English grow to be financially successful over the course of their time in movie theaters in the United States, but some become immediate successes in their opening weekends. A journalist claims that a film's reception can greatly influence its long-term success. Indications that the film is of high quality, such as an Oscar nomination, can dramatically boost public interest in the film and thus its overall earnings, even with a relatively modest opening weekend performance: for example, \_\_\_\_\_

58

Which choice most effectively uses data from the table to complete the example?

- A) The opening weekend earnings for *Instructions Not Included* were \$7,846,426 and \$904,998 for *The Girl Who Played with Fire*.
- B) *The Girl Who Played with Fire* earned more money in its opening weekend than *Amélie* earned, but *Amélie* had higher lifetime earnings.
- C) Both *Amélie* and *All About My Mother* were recognized by the Oscars, but *Amélie* had higher lifetime earnings.
- D) *All About My Mother* was recognized by the Oscars, but *Instructions Not Included*, which was not recognized, had higher lifetime earnings.

Millions of Metric Tons of  
Copper Mined in 1995 and 2020

Country	1995	2020
Mexico	0.33	0.73
United States	1.80	1.20
Peru	0.38	2.15
Poland	0.38	0.39

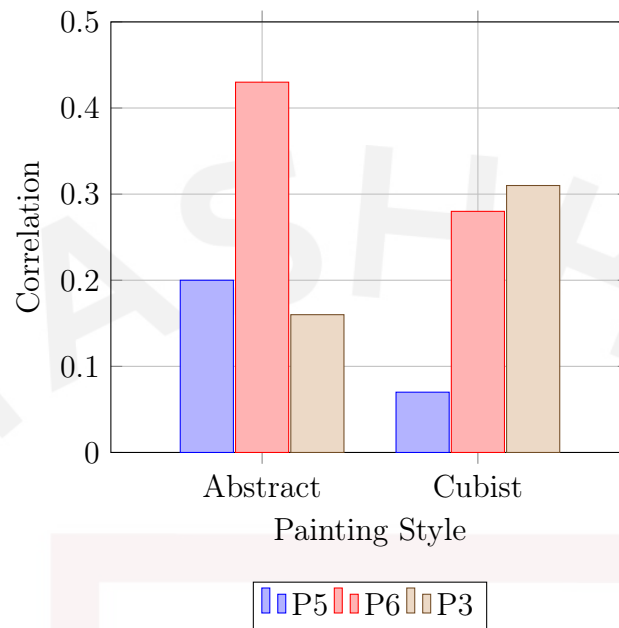
While doing research for a paper about metal exports, a student finds information about copper mining in different countries in 1995 and 2020. The student notes that Peru produced 0.38 million metric tons of copper in 1995 and

59

Which choice most effectively uses data from the table to complete the statement?

- A) 1.20 million metric tons of copper in 2020.
- B) 0.39 million metric tons of copper in 2020.
- C) 2.15 million metric tons of copper in 2020.
- D) 0.73 million metric tons of copper in 2020.

**Correlation between Model-Predicted and Participant-Reported  
Enjoyment Ratings, by Painting Style**



Neuroscientist Kiyohito Iigaya and colleagues developed a computational model to predict how much a person will enjoy a particular work of art on a scale from 1 (not at all) to 4 (very much). They then recruited participants to use the same scale to rate several sets of paintings in various styles and calculated the correlation between the ratings predicted by the model and those reported by the participants. Assuming participant P6 gave equal ratings to the abstract and cubist paintings, the data in the graph indicate the model predicted that \_\_\_\_\_

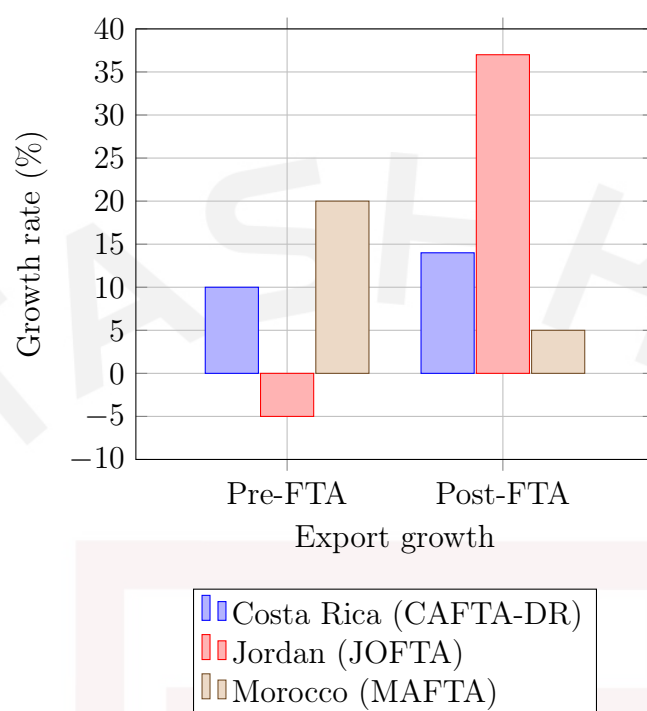
60

Which choice most effectively uses data from the graph to complete the example?

- A) P6 would derive more aesthetic pleasure from abstract paintings than from cubist paintings.
- B) P6's ratings for abstract and cubist paintings would differ from one another.
- C) P6's rating for abstract and cubist paintings would equal one another.
- D) P6 would derive less aesthetic pleasure from abstract paintings than from cubist paintings.



**Average Total Agricultural Export Growth Rate,  
Five Years Pre- and Post-FTA with the United States**



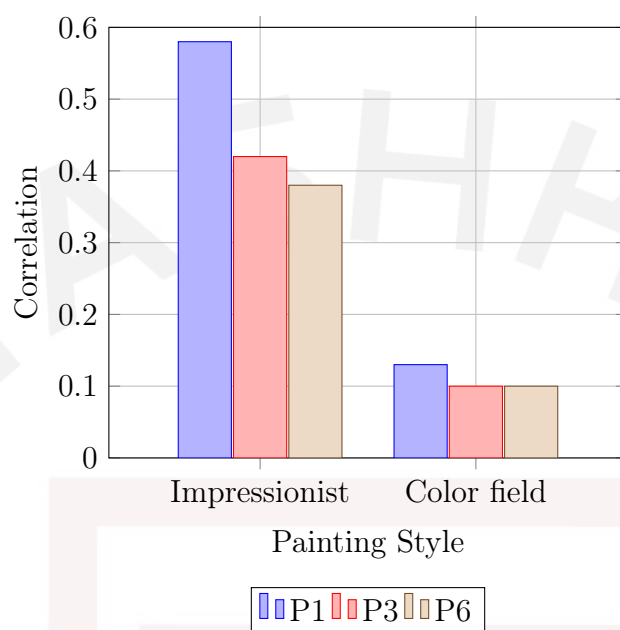
To measure whether countries in free trade agreements (FTAs)—agreements among nations to reduce tariffs, duties, and other trade barriers—experience changes in total agricultural exports, economist Kayode Ajewole and colleagues calculated average export growth rates for several countries over the five years before and the five years after entering an FTA with the United States. The graph shows the results for three countries in the study. Consulting the graph, a student claims that joining an FTA increases the rate of growth of a country's total agricultural exports.

61

Which choice best describes data from the graph that weaken the student's claim?

- A) Over the five years after Costa Rica joined CAFTA-DR, agricultural exports from Costa Rica grew at a rate of about 13.5 percent, which is higher than the rate over the five years before Costa Rica joined the agreement.
- B) All the countries shown had positive growth in agricultural exports over the five years after joining their respective FTAs, but their rates of export growth varied.
- C) Although agricultural exports from Jordan decreased over the five years before JOFTA, a reversal in this trend was observed over the five years after Jordan joined JOFTA.
- D) Although agricultural exports from Morocco grew over the five years after Morocco joined MAFTA, their growth rate was even higher in the five years before MAFTA.

**Correlation between Model-Predicted and Participant-Reported  
Enjoyment Ratings, by Painting Style**



Neuroscientist Kiyohito Igaya and colleagues developed a computational model to predict how much a person will enjoy a particular work of art on a scale from 1 (not at all) to 4 (very much). They then recruited participants to use the same scale to rate several sets of paintings in various styles and calculated the correlation between the ratings predicted by the model and those reported by the participants. Assuming participant P1 gave equal ratings to the impressionist and color-field paintings, the data in the graph suggest that the model predicted that \_\_\_\_\_

62

Which choice most effectively uses data from the graph to complete the statement?

- A) P1 would derive more aesthetic pleasure from impressionist paintings than from color-field paintings.
- B) P1's ratings for impressionist and color-field paintings would differ from one another.
- C) P1 would derive less aesthetic pleasure from impressionist paintings than from color-field paintings.
- D) P1's ratings for impressionist and color-field paintings would equal one another.

**Average Ratings of Perceived Personality Traits of  
Dogs and Human Willingness to Keep or Interact with Them**

Image ID number	Irises	Not friendly (0)-Friendly (5)	Immature (0)-Mature (5)	Would not keep (0)-Would keep (3)	Would not interact with (0)-Would interact with (3)
20	light	2.08	4.06	1.5	1.75
16	light	1.61	3.64	1.3	1.6
11	dark	3.18	2.94	1.85	2.05
2	dark	3.46	2.74	1.85	2.45

Interested in how differences in the color of dogs' irises affect human responses to dogs, Akitsugu Konno et al. showed close-up images of dogs' faces to human participants and asked them to rate the dogs' traits and their own attitudes toward the dogs. Konno et al. suggest that differences in iris color led participants to view some dogs as more vulnerable and in need of protection than others and that this phenomenon could help explain the association the researchers observed between iris color and participants' inclinations to interact with or keep dogs, as illustrated by the finding that \_\_\_\_\_

**63**

Which choice most effectively uses data from the table to complete the statement?

- A) the more mature a dog was perceived to be, the more likely participants were to rate it as having lighter irises.
- B) participants favored the dogs in images 2 and 11, which they rated as less mature than the dogs in images 20 and 16.
- C) participants rated the dog in image 2 as less mature than the dog in image 11 and rated the dog in image 16 as less mature than the dog in image 20.
- D) dogs that participants rated friendlier were also dogs that participants indicated a stronger willingness to interact with or keep.

### Monthly Temperatures and Wing Centroid Sizes of Fruit Fly Specimens

Month	Average high (°F)	Average low (°F)	Average male wing centroid size (mm)	Average female wing centroid size (mm)
October	67	44	1.98	2.29
July	87	62	2.02	2.31
June	80	56	2.01	2.31
May	73	50	1.98	2.27

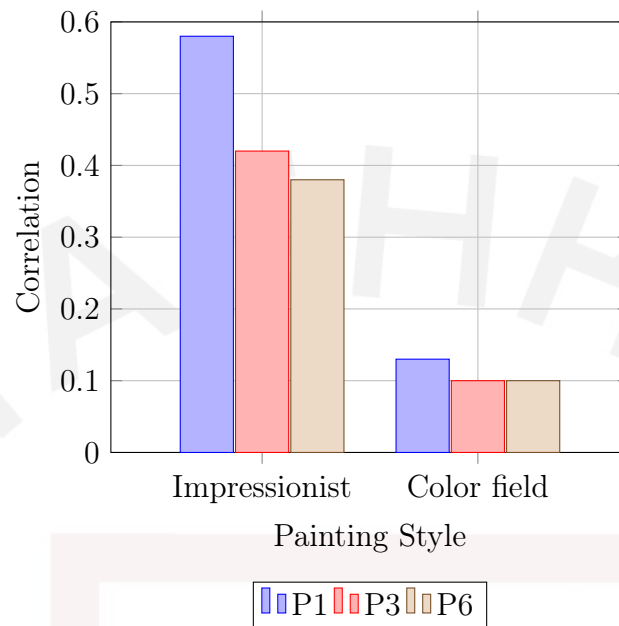
*Drosophila* (fruit flies) have generation times of 10–12 days, so seasonal changes in humidity and other environmental conditions can drive seasonal fluctuations in chromosome rearrangements in species such as *D. persimilis* and *D. mediopunctata*. *Drosophila* body size (for which wing centroid size serves as a proxy measure) correlates with life span. Banu Şebnem Önder and Cansu Fidan Aksoy measured the wing sizes of members of a *D. melanogaster* population in Yeşilöz, Turkey, that were collected monthly between May and October over three years. Their research suggests that *Drosophila* collected in relatively warmer months should tend to have a longer life span, as is illustrated by the finding that -----

64

Which choice most effectively uses data from the table to complete the assertion?

- A) the average monthly low temperature was higher in June than in May.
- B) the average male wing centroid size was larger in July than in October.
- C) the average female wing centroid size was 2.02 mm in July but was 2.31 mm in June.
- D) the average female wing centroid size was consistently larger than the average male wing centroid size in all four months in the table.

**Correlation between Model-Predicted and Participant-Reported  
Enjoyment Ratings, by Painting Style**



Neuroscientist Kiyohito Igaya and colleagues developed a computational model to predict how much a person will enjoy a particular work of art on a scale from 1 (not at all) to 4 (very much). They then recruited participants to use the same scale to rate several sets of paintings in various styles and calculated the correlation between the ratings predicted by the model and those reported by the participants. Assuming participant P1 gave equal ratings to the impressionist and color-field paintings, the data in the graph suggest that the model predicted that \_\_\_\_\_

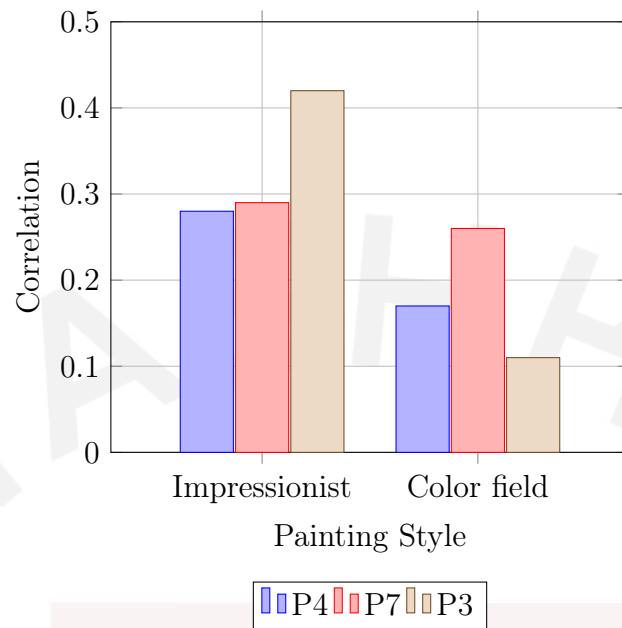
65

Which choice most effectively uses data from the graph to complete the statement?

- A) P1 would derive less aesthetic pleasure from impressionist paintings than from color-field paintings.
- B) P1 would derive more aesthetic pleasure from impressionist paintings than from color-field paintings.
- C) P1's ratings for impressionist and color-field paintings would differ from one another.
- D) P1's ratings for impressionist and color-field paintings would equal one another.



Correlation between Model-Predicted and Participant-Reported  
Enjoyment Ratings, by Painting Style



Neuroscientist Kiyohito Igaya and colleagues developed a computational model to predict how much a person will enjoy a particular work of art on a scale from 1 (not at all) to 4 (very much). They then recruited participants to use the same scale to rate several sets of paintings in various styles and calculated the correlation between the ratings predicted by the model and those reported by the participants. Assuming participant P3 gave equal ratings to the impressionist and color-field paintings, the data in the graph suggest that \_\_\_\_\_

66

Which choice most effectively uses data from the graph to complete the statement?

- A) P3's ratings for impressionist and color-field paintings would differ from one another.
- B) P3's ratings for impressionist and color-field paintings would equal one another.
- C) P3 would derive less aesthetic pleasure from impressionist paintings than from color-field paintings.
- D) P3 would derive more aesthetic pleasure from impressionist paintings than from color-field paintings.

## Defensive Behavior and Reproductive Traits of Select Bird Species

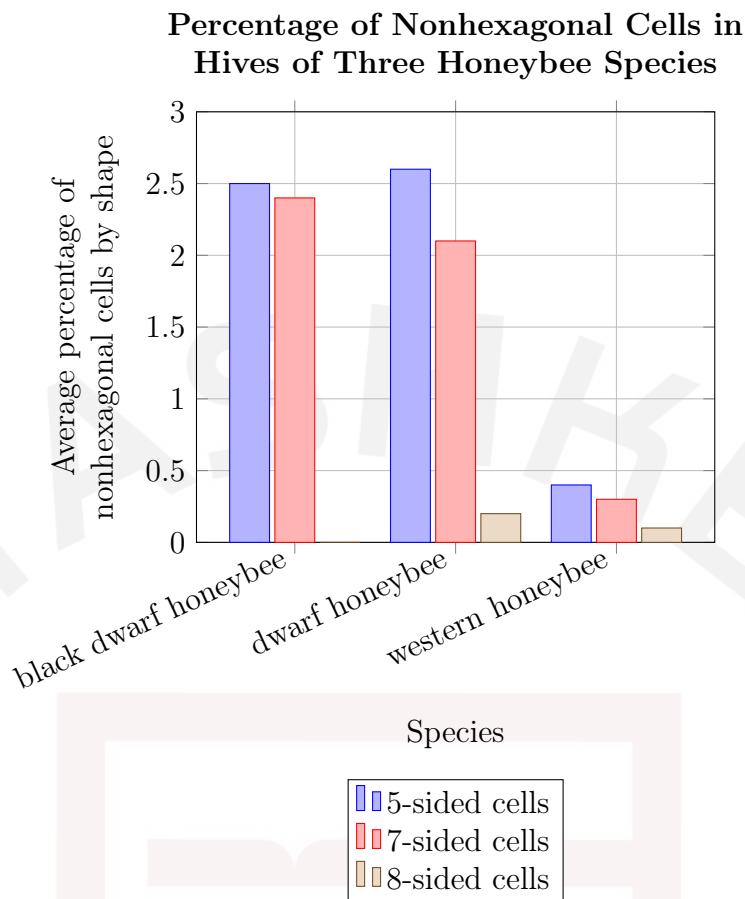
Scientific name	Common name	Performs broken-wing display?	Length of incubation (days)	Incubation duty	Maximum number of broods per year
<i>Spatula cyanoptera</i>	cinnamon teal	No	25	2 parents	1
<i>Numenius arquata</i>	Eurasian curlew	No	30	1 parent	1
<i>Eremophila alpestris</i>	horned lark	Yes	12	1 parent	3
<i>Coccyzus americanus</i>	yellow-billed cuckoo	Yes	14	2 parents	2

In an extensive review of existing literature, Léna de Framond and team cataloged the prevalence of broken-wing display—a defensive behavior observed in *Pluvialis dominica* (American golden plover) and many other species—throughout the Aves class. Documentation of the display in 285 species across 52 families suggests the behavior likely evolved independently multiple times, prompting the team to consider ecological and life-history characteristics with hypothesized associations to the behavior’s emergence, including traits related to reproduction investment and future reproduction potential. Based on their review of those traits, the team concluded that \_\_\_\_\_

67

Which choice most effectively uses data from the table to complete the conclusion?

- A) incubation duration and capacity for multiple broods are more strongly associated with the use of broken-wing display than the number of parental incubators is.
- B) among species with more than one parental incubator, the use of broken-wing display is associated with greater incubation duration.
- C) capacity for multiple broods, number of parental incubators, and incubation duration are equally associated with the use of broken-wing display.
- D) broken-wing display is most often observed in species with less opportunity to reproduce in a year due to longer incubation periods.



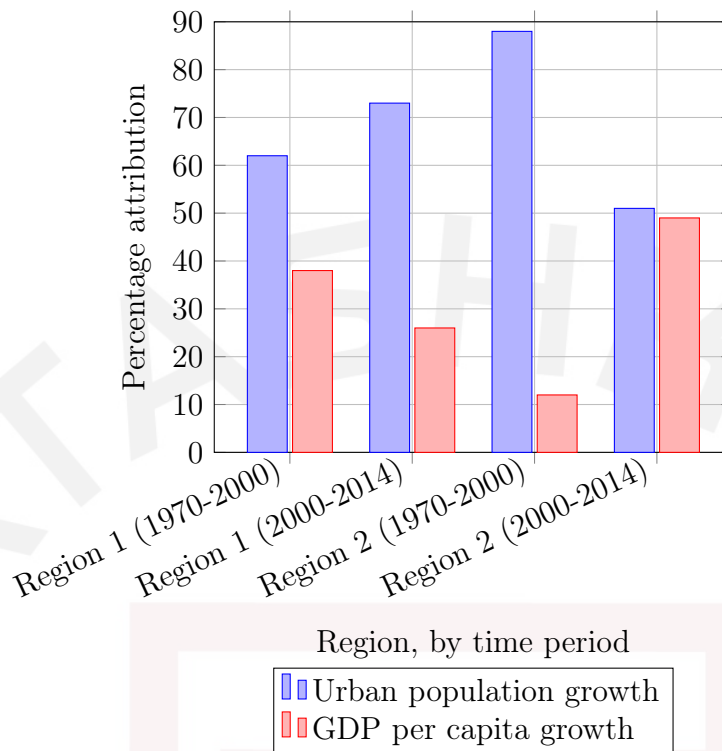
Honeybee hives consist mainly of hexagonal (six-sided) units called cells, in which queens lay eggs. Hexagonal cells for eggs that develop into non reproductive workers are smaller than those for eggs that develop into reproductive drones, though the size difference varies by species. Difference in cell size results in a construction problem—it’s hard to neatly connect sections of small cells to sections of large cells—that worsens as the difference increases. To fill in gaps between the sections when building a hive, bees rely on cells that have more or fewer than six sides. A student studying beehive structure consults data on three species, concluding that -----

68

Which choice most effectively uses data from the graph to complete the student’s conclusion?

- A) incubation duration and capacity for multiple broods are more strongly associated with the use of broken-wing display than the number of parental incubators is.
- B) among species with more than one parental incubator, the use of broken-wing display is associated with greater incubation duration.
- C) capacity for multiple broods, number of parental incubators, and incubation duration are equally associated with the use of broken-wing display.
- D) broken-wing display is most often observed in species with less opportunity to reproduce in a year due to longer incubation periods.

Percentage of ULE Attributed to Population Growth and GDP per Capita Growth in Two World Regions



In a study of urban physical expansion, Richa Mahtta et al. conducted a meta-analysis of more than 300 cities worldwide to determine whether urban land expansion (ULE) was more strongly influenced by urban population growth or by growth in gross domestic product (GDP) per capita, a measure of economic activity. Because efficient national government is necessary to provide urban services and infrastructure that attract economic investment, Mahtta et al. propose that absent other factors, the importance of GDP per capita growth to ULE would likely increase relative to the importance of population growth as governments become more efficient. If true, this suggests the possibility that \_\_\_\_\_

69

Which choice most effectively uses data from the graph to complete the statement?

- A) countries in Region 1 experienced a slower rate of economic growth in the period from 2000 to 2014 than countries in Region 2 did, despite increasing national government efficiency in Region 1
- B) national governments of countries in Region 1 experienced declines in efficiency in the period from 2000 to 2014, relative to the period from 1970 to 2000.
- C) national governments of countries in Region 1 and in Region 2 generally became more efficient in the period from 2000 to 2014 than they had been in the period from 1970 to 2000, but at different rates.
- D) National governments of most countries in Region 2 became more efficient in the period from 2000 to 2014 than they had been in the period from 1970 to 2000, but those of several countries in this region did not.

Monthly Temperatures and Wing Centroid Sizes of Fruit Fly Specimens

Month	Average high (°F)	Average low (°F)	Average male wing centroid size (mm)	Average female wing centroid size (mm)
October	67	44	1.98	2.29
July	87	62	2.02	2.31
June	80	56	2.01	2.31
May	73	50	1.98	2.27

*Drosophila* (fruit flies) have generation times of 10–12 days, so seasonal changes in humidity and other environmental conditions can drive seasonal fluctuations in chromosome rearrangements in species such as *D. persimilis* and *D. mediopunctata*. *Drosophila* body size (for which wing centroid size serves as a proxy measure) correlates with life span. Banu Şebnem Önder and Cansu Fidan Aksoy measured the wing sizes of members of a *D. melanogaster* population in Yeşilöz, Turkey, that were collected monthly between May and October over three years. Their research suggests that *Drosophila* collected in relatively cooler months should tend to have a shorter life span, as is illustrated by the findings that \_\_\_\_\_

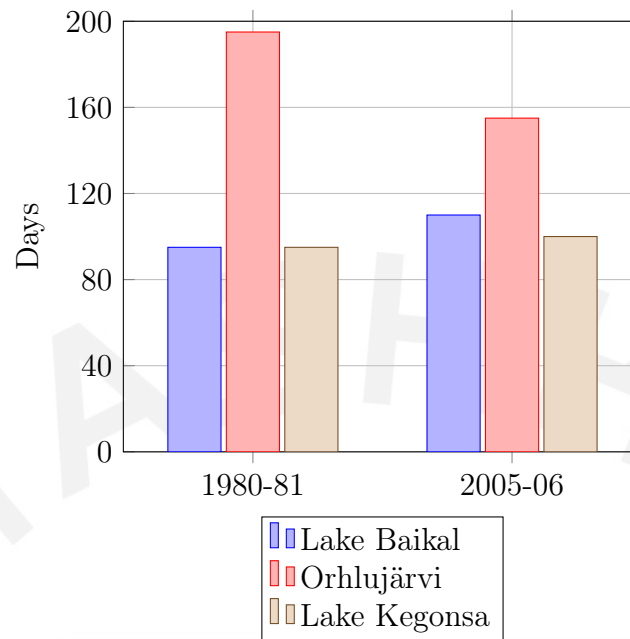
70

Which choice most effectively uses data from the table to complete the assertion?

- A) the average female wing size was smaller in May than in June.
- B) the average male wing centroid size was consistently smaller than the average female wing centroid size in all four months in the table.
- C) the average monthly low temperature was lower in May than in June.
- D) the average male wing centroid size was 1.98 mm in May but was 2.31 mm in July.



Days per Winter That Lakes Have Surface Ice

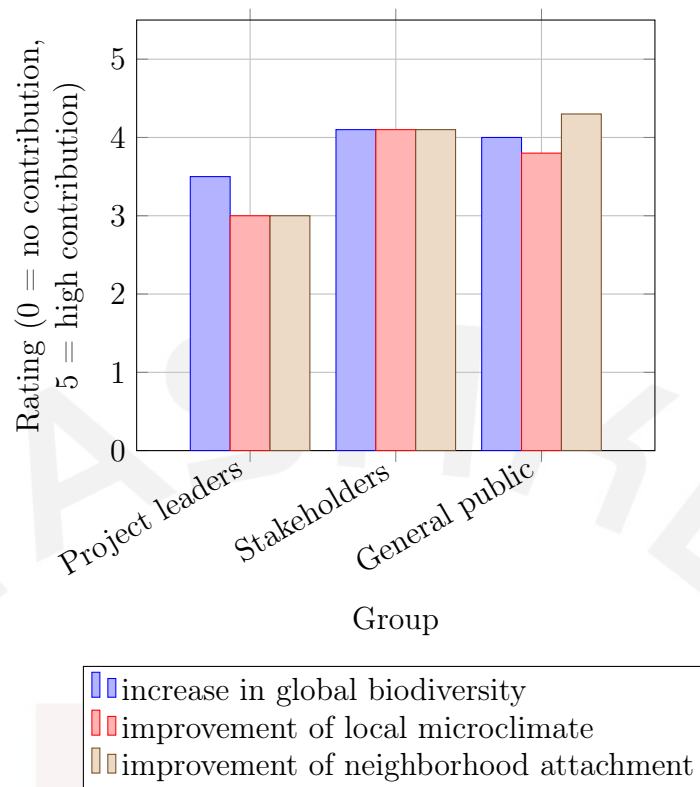


It is common for freshwater lakes near or above a latitude of  $45^{\circ}$  north of the equator, like Lake Stechlin in Germany, to accumulate surface ice in winter. A study from 1980 to 2006 showed that, in general, the number of days per winter that such lakes have measurable amounts of surface ice is declining. However, a researcher claimed that some lakes have instead seen an increase in the duration of ice, citing as an example \_\_\_\_\_

71

Which choice most effectively uses data from the graph to complete the researcher's example?

- A) both Lake Baikal and Orhlujärvi, which had more than 100 days of ice in the winter of 2005-2006.
- B) Lake Baikal, which had more days of ice in the winter of 2005-06 than it did in the winter of 1980-81.
- C) both Lake Baikal and Orhlujärvi, which had fewer than 195 days of ice in the winter of 1980-81.
- D) both Lake Kegonsa and Orhlujärvi, which had more days of ice in the winter of 2005-06 than they did in the winter of 1980-81.



Urban agriculture is the practice of growing plant- or animal-based products in urban settings such as community gardens and rooftop farms. Esther Sanye-Mengual, Kathrin Specht, and their team surveyed three groups of people in Bologna, Italy – leaders of urban agriculture projects, stakeholders in urban agriculture (e.g., food researchers and urban farming associations), and the general public – to compare their views about the extent to which urban agriculture contributes to 25 social or ecological services that the team identified. The survey results show that, on average, project leaders rated urban agriculture as contributing less to \_\_\_\_\_

72

Which choice most effectively uses data from the graph to complete the assertion?

- A) improving the local microclimate than to increasing global biodiversity.
- B) increasing global biodiversity than to providing tourist attractions.
- C) improving community members' sense of attachment to the neighborhood than to offering educational opportunities.
- D) increasing global biodiversity than to improving the local microclimate.

### Home Video Game Systems of the 1970s and 1980s

System	Manufacturer	System type	Approximate number of units sold worldwide
Amiga	Commodore	computer	1,600,000
MSX	ASCII Corp.	computer	4,000,000
TurboGrafx-16	NEC	console	2,650,000
Atari 2600	Atari	console	18,450,000

A student is writing a research paper on the global rise of the home video game industry during the 1970s and 1980s. The student wants to know the approximate number of units sold worldwide of the MSX, manufactured by ASCII Corp. The student finds that the number sold was approximately \_\_\_\_\_

73

Which choice most effectively uses data from the table to complete the statement?

- A) 18,450,000 units.
- B) 4,000,000 units.
- C) 1,600,000 units.
- D) 2,650,000 units.

Millions of Metric Tons of Copper  
Mined in 1995 and 2020

Country	1995	2020
Kazakhstan	0.26	0.55
Indonesia	0.44	0.51
United States	1.85	1.20
Chile	2.49	5.73

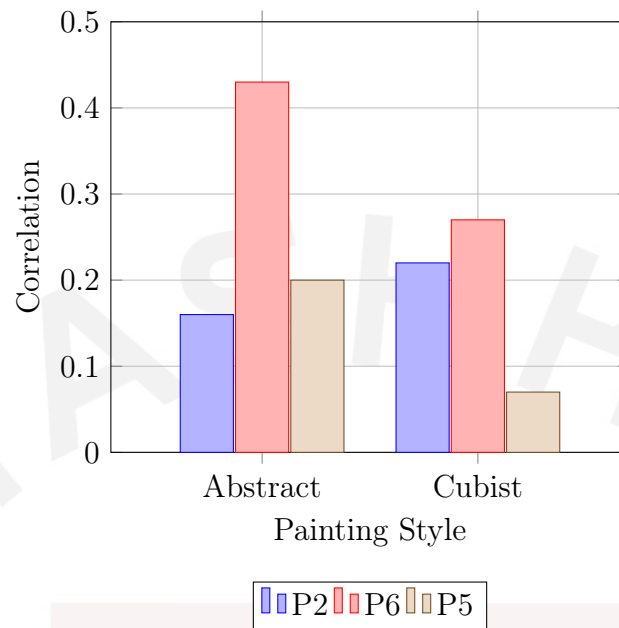
A student is researching copper mining. The student learns that the total amount of copper mined worldwide increased from 10.00 million metric tons in 1995 to 20.60 million metric tons in 2020. Considering a table with information about four countries, the student notes that the global increase in mined copper occurred even though \_\_\_\_\_

74

Which choice most effectively uses data from the table to complete the statement?

- A) each of the four countries mined less than 0.25 million metric tons of copper in 1995.
- B) the United States mines less copper in 2020 than in 1995.
- C) Chile mined more copper in 2020 than in 1995.
- D) each of the four countries mined more than 1 million metric tons of copper in 2020.

Correlation between Model-Predicted and Participant-Reported  
Enjoyment Ratings, by Painting Style



Neuroscientist Kiyohito Iigaya and colleagues developed a computational model to predict how much a person will enjoy a particular work of art on a scale from 1 (not at all) to 4 (very much). They then recruited participants to use the same scale to rate several sets of paintings in various styles and calculated the correlation between the ratings predicted by the model and those reported by the participants. Assuming participant P6 gave equal ratings to the abstract and cubist paintings, the data in the graph indicate the model predicted that \_\_\_\_\_

75

Which choice most effectively uses data from the graph to complete the example?

- A) P6's ratings for abstract and cubist paintings would differ from one another.
- B) P6 would derive less aesthetic pleasure from abstract paintings than from cubist paintings.
- C) P6's rating for abstract and cubist paintings would equal one another.
- D) P6 would derive more aesthetic pleasure from abstract paintings than from cubist paintings.



### Orientation of Paired Leaves in Grapevines and Related Species

Species	Total leaf pairs examined	Pairs with opposite-side orientation	Pairs with same-side orientation	Ratio of opposite-side orientations to same-side orientations (n to 1)
<i>Vitis amurensis</i>	207	146	61	2.39
<i>Vitis rupestris</i>	303	201	102	1.97
<i>Ampelopsis glandulosa</i>	47	38	9	4.22
<i>Vitis × champinii</i>	32	26	6	4.33

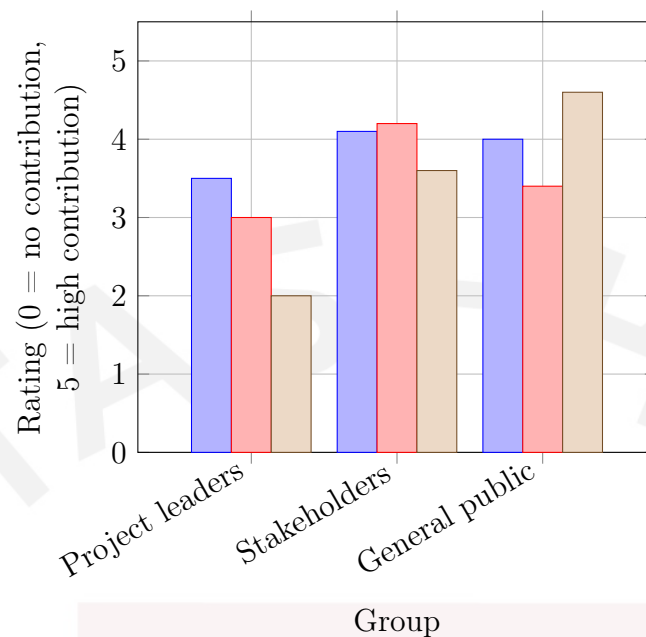
Many plants have leaves that are larger on one side of their long central axis than the other, a phenomenon known as asymmetrical orientation. University of California, Berkeley biologist Ciera Martinez and colleagues examined several species of grapevines and closely related plants, which have leaves that grow in pairs, to see if both leaves in a pair tend to be oriented toward the same side (that is, have more tissue on the same side) or not. They found that opposite-side orientations are more common than same-side orientations by ratios as high as -----

76

Which choice most effectively uses data from the table to complete the assertion?

- A) 4.33 to 1, as in the case of *Vitis × champinii*.
- B) 201 to 1, as in the case of *Vitis rupestris*.
- C) 4.22 to 1, as in the case of *Ampelopsis glandulosa*.
- D) 32 to 1, as in the case of *Vitis × champinii*.

**Average Ratings of Urban Agriculture's Contribution  
to Various Social or Ecological Services**



Urban agriculture is the practice of growing plant- or animal-based products in urban settings such as community gardens and rooftop farms. Esther Sanyé- Mengual, Kathrin Specht, and their team surveyed three groups of people in Bologna, Italy – leaders of urban agriculture projects, stakeholders in urban agriculture (e.g., food researchers and urban farming associations), and the general public – to compare their views about the extent to which urban agriculture contributes to 25 social or ecological services that the team identified. The survey results show that, on average, project leaders rated urban agriculture as contributing less to \_\_\_\_\_

**77**

Which choice most effectively uses data from the graph to complete the assertion?

- A) increasing global biodiversity than to providing medicinal plants.
- B) preventing soil erosion than to offering educational opportunities.
- C) providing medicinal plants than to increasing global biodiversity.
- D) increasing global biodiversity than to providing tourist attractions.

### Monthly Temperatures and Wing Centroid Sizes of Fruit Fly Specimens

Month	Average high (°F)	Average low (°F)	Average male wing centroid size (mm)	Average female wing centroid size (mm)
June	80	56	2.01	2.31
October	67	44	1.98	2.29
July	87	62	2.02	2.31
May	73	50	1.98	2.27

*Drosophila* (fruit flies) have generation times of 10-12 days, so seasonal changes in humidity and other environmental conditions can drive seasonal fluctuations in chromosome rearrangements in species such as *D. robusta* and *D. subobscura*. *Drosophila* body size (for which wing centroid size serves as a proxy measure) correlates with reproductive fitness. Banu Şebnem Önder and Cansu Fidan Aksoy measured the wing sizes of members of a *D. melanogaster* population in Yeşilöz, Turkey, that were collected monthly between May and October over three years. Their research suggests that *Drosophila* collected in relatively cooler months should tend to have lower reproductive fitness, as is illustrated by the finding that \_\_\_\_\_

78

Which choice most effectively uses data from the table to complete the assertion?

- A) the average female wing centroid size was smaller in May than in July.
- B) the average male wing centroid size was consistently smaller than the average female wing centroid size in all four months in the table.
- C) the average male wing centroid size was 1.98 mm in May but was 2.31 mm in June.
- D) the average monthly low temperature was lower in May than in June.

### Total Areas of Five Hawaiian Home Lands

Home land	Area (square miles)
Nanakuli	3.61
Kawaiahae	15.99
Kamoku-Kapulena	7.47
Kahikinui	37.26
Waimea	23.57

Hawaiian home lands are areas of public land in the state of Hawaii that have been reserved for use by the Kanaka Maoli, or the Native Hawaiian people. The largest of the home lands, Homuula-Upper Piihonua, covers nearly 100 square miles on the island of Hawai'i. Most of the home lands are much smaller. For example, the total area of Kamoku-Kapulena is 7.47 square miles, and the total area of Nanakuli is \_\_\_\_\_

79

Which choice most effectively uses data from the table to complete the example?

- A) 37.26 square miles.
- B) 3.61 square miles.
- C) 23.57 square miles.
- D) 15.99 square miles.

Population and Population Density of African Countries in 2015

Country	Density (inhabitants/km <sup>2</sup> )	Area (km <sup>2</sup> )	Estimated population
Lesotho	70.3	30,355	2,135,000
Mali	14.2	1,240,000	17,600,000
Zambia	21.5	752,614	16,212,000
Benin	96.6	112,620	10,880,000

As the second-most populous continent in the world, Africa was home to an estimated 1.186 billion people in 2015. In a paper for a social studies class, a student nonetheless notes that countries with very large populations may be less densely populated than are countries with much smaller populations, as can be seen by comparing \_\_\_\_\_

80

Which choice most effectively uses data from the table to complete the example?

- A) Zambia, which has a low density, with Benin, which has a similar density despite both countries having different geographic sizes.
- B) the geographic size of Mali (1,240,000 square kilometers) with its relatively high population of 17,600,000 inhabitants.
- C) Mali, which has a high population of 17,600,000 inhabitants and a relatively low density of 14.2 inhabitants/square kilometer, with Lesotho, which has a much lower population and a higher density.
- D) the populations of both Lesotho and Benin in 2015 with their populations in 2010.

### Studies of Cougar Population Density

Study authors	Location	Methods	Minimum density (cougars per 100 square kilometers)	Maximum density (cougars per 100 square kilometers)	Density range (difference between minimum and maximum density, cougars per 100 square kilometers)
P. Ian Ross and Marin G. Jalkotzy	Alberta (Canada)	radio collar tracking	2.70	4.70	2.00
Gregory A. Davidson et al.	Oregon (United States)	scat-detecting dogs	2.31	5.50	3.19
David M. Choate et al.	Utah (United States)	helicopter surveying	5.59	10.24	4.65
Rahel Solmann et al.	Florida (United States)	infrared camera trapping, GPS tracking of collars	1.46	1.51	0.05

Researchers have used several different methods to determine the population density of cougars (*Puma concolor*). A student claims that the use of scat-detecting dogs produces the most precise results, with the smallest difference between minimum and maximum densities.

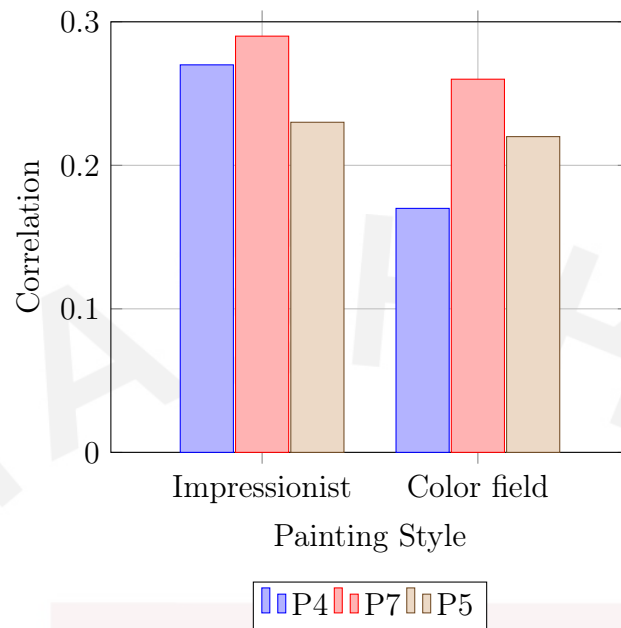
81

Which choice best describes the data from the table that weaken the student's claim?

- A) David M. Choate et al. reported a density range of 4.65 individuals per 100 square kilometers despite the use of helicopter surveying.
- B) Rahel Sollmann et al. reported a density range that was substantially smaller than that reported by David M. Choate et al.
- C) Gregory A. Davidson et al. reported a density range greater than that reported by some studies that used other methods.
- D) Gregory A. Davidson et al. reported a maximum density of 5.50 individuals per 100 square kilometers, which differed from that reported by some studies that used other methods.



**Correlation between Model-Predicted and Participant-Reported  
Enjoyment Ratings, by Painting Style**



Neuroscientist Kiyohito Iigaya and colleagues developed a computational model to predict how much a person will enjoy a particular work of art on a scale from 1 (not at all) to 4 (very much). They then recruited participants to use the same scale to rate several sets of paintings in various styles and calculated the correlation between the ratings predicted by the model and those reported by the participants. Assuming participant P7 gave equal ratings to the impressionist and color-field paintings, the data in the graph suggest that the model predicted that \_\_\_\_\_

82

Which choice most effectively uses data from the graph to complete the statement?

- A) P7's ratings for impressionist and color-field paintings would differ from one another.
- B) P7 would derive more aesthetic pleasure from impressionist paintings than from color-field paintings.
- C) P7's ratings for impressionist and color-field paintings would equal one another.
- D) P7 would derive less aesthetic pleasure from impressionist paintings than from color field paintings.

**Names and Movements of Snakes during Trials**

Name of snake	Species name	Common name	Direction of movement
Glory	<i>Acanthophis antarcticus</i>	common death adder	away from sound
Bitey Boy	<i>Aspidites ramsayi</i>	woma python	toward sound
Boss	<i>Oxyuranus scutellatus</i>	coastal taipan	away from sound

Biologists Christina Zdenek, Damian Candusso, and their team exposed various snakes to airborne sound and recorded whether they moved toward or away from the sound. The table shows the results for three of the snakes observed in the study. Based on the table, a student concludes that Glory and Boss behaved similarly in the sound trials.

**83**

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

- A) Boss moved toward the sound, while Bitey Boy moved away from it.
- B) Bitey Boy and Glory both moved toward the sound.
- C) Glory and Boss both moved away from the sound.
- D) Boss moved toward the sound, while Glory moved away from it.

### Monthly Temperatures and Wing Centroid Sizes of Fruit Fly Specimens

Month	Average high (°F)	Average low (°F)	Average male wing centroid size (mm)	Average female wing centroid size (mm)
May	73	50	1.98	2.27
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October	67	44	1.98	2.29

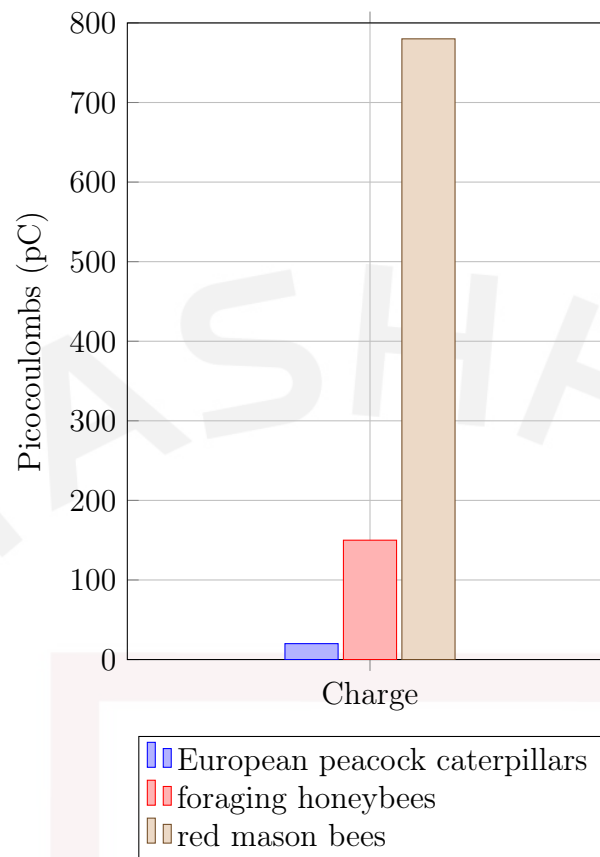
*Drosophila* (fruit flies) have generation times of 10-12 days, so seasonal changes in rainfall and other environmental conditions can drive seasonal fluctuations in chromosome rearrangements in species such as *D. persimilis* and *D. mediopunctata*. *Drosophila* body size (for which wing centroid size serves as a proxy measure) correlates with life span. Banu Şebnem Önder and Cansu Fidan Aksoy measured the wing sizes of members of a *D. melanogaster* population in Yeşilöz, Turkey, that were collected monthly between May and October over three years. Their research suggests that *Drosophila* collected in relatively warmer months should tend to have a longer life span, as is illustrated by the finding that -----

84

Which choice most effectively uses data from the table to complete the assertion?

- A) the average male wing centroid size was larger in July than in May.
- B) the average female wing centroid size was consistently larger than the average male wing centroid size in all four months in the table.
- C) the average monthly low temperature was higher in September than in May.
- D) the average female wing centroid size was 2.02 mm in July but was 2.29 mm in October.

Maximum Charge Measured for Various Pollinators



*Hemerocallis sp.* plants typically carry a negative electrical charge, while bees and other pollinators tend to accumulate a positive charge. Given that negatively and positively charged objects attract, a research team hypothesized that the difference in charges could attract *Hemerocallis sp.* stamens to the plants' pollinators. Based on the team's experiments, the hypothesis was well supported for positive charges above a certain threshold. The team found that foraging honeybees exceeded that threshold, which suggests that -----

85

Which choice most effectively uses data from the graph to complete the text?

- A) red mason bees can also attract the stamens.
- B) red mason bees and European peacock caterpillars, with greater maximum charges than foraging honeybees have, cannot attract the stamens.
- C) European peacock caterpillars tend to repel the stamens.
- D) the threshold positive charge for a pollinator to attract the stamens must be greater than 100 pC.

### Effect of Neighboring Species on Pollinator Visits to Target Species

Neighboring species	Target species	Effect value
sticky catchfly	common cow-wheat	0.2379
leafy spurge	purple locoweed	-0.8428
prickly pear	sea heath	-0.4703
Canadian wood betony	mayapple	0.4729

Researchers Carolina Laura Morales and Anna Traveset gathered data about flowering plants growing alongside each other in various locations. In each case, the researchers identified one plant as a "target species" and a nearby plant as a "neighboring species." The researchers then calculated a value to show how the neighboring species affected pollinator visits to the target species. A negative effect value indicates that the neighboring species had a harmful effect on the target species. Based on the table, two neighboring species that had a harmful effect on target species are the

86

Which choice most effectively uses data from the table to complete the statement?

- A) prickly pear and the Canadian wood betony.
- B) leafy spurge and the prickly pear.
- C) leafy spurge and the sticky catchfly.
- D) Canadian wood betony and the sticky catchfly.



### Composition and Fracture Toughness Five HEAs

HEA identification number	Composition (%)	Fracture toughness (megapascals times the square root of crack length)
15	chromium (33.33), cobalt (33.33), nickel (33.33)	265.20
7	chromium (20), cobalt (20), iron (20), manganese (20), nickel (20)	219.00
25	aluminum (1.07), carbon (46.78), chromium (1.07), cobalt (1.07), copper (1.07), iron (1.07), nickel (1.07), tungsten (46.78)	10.41
95	aluminum (20), cobalt (20), copper (20), nickel (20), zinc (20)	4.45
51	molybdenum (25), niobium (25), tantalum (25), tungsten (25)	3.30

High-entropy alloys (HEAs) have been observed to have greater fracture toughness – greater resistance to crack propagation – than conventional alloys. It has been proposed that fracture toughness increases with the proportion of an HEA consisting of cobalt, but data on HEAs compiled by engineer Xuesong Fan show that this is not the case; for example,

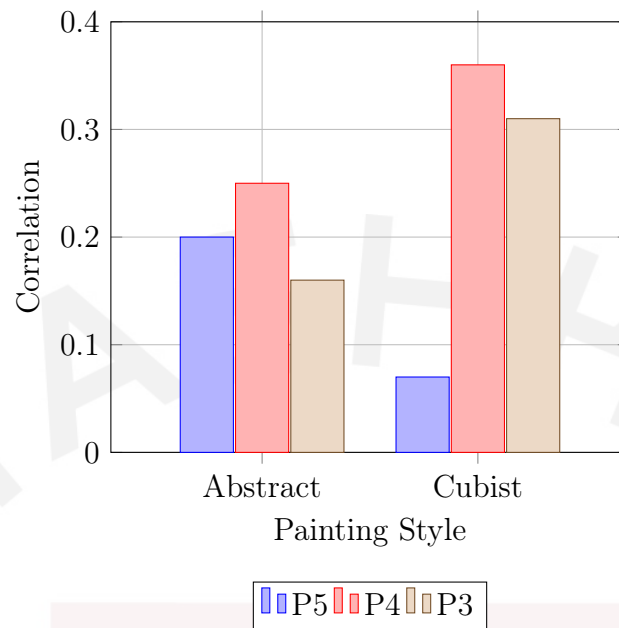
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87

Which choice most effectively uses data from the table to complete the text?

- A) cobalt constitutes the same proportion of HEA 7 as it does of HEA 95.
- B) cobalt constitutes a higher proportion of HEA 15 than it does of HEA 7.
- C) cobalt constitutes a substantial proportion of HEA 15 but does not constitute any of HEA 51.
- D) cobalt constitutes a different proportion of HEA 25 than it does of HEA 7.

**Correlation between Model-Predicted and Participant-Reported  
Enjoyment Ratings, by Painting Style**



Neuroscientist Kiyohito Iigaya and colleagues developed a computational model to predict how much a person will enjoy a particular work of art on a scale from 1 (not at all) to 4 (very much). They then recruited participants to use the same scale to rate several sets of paintings in various styles and calculated the correlation between the ratings predicted by the model and those reported by the participants. Assuming participant P4 gave equal ratings to the abstract and cubist paintings, the data in the graph indicate the model predicted that \_\_\_\_\_

88

Which choice most effectively uses data from the graph to complete the example?

- A) P4's ratings for abstract and cubist paintings would differ from one another.
- B) P4 would derive less aesthetic pleasure from cubist paintings than from abstract paintings.
- C) P4 would derive more aesthetic pleasure from cubist paintings than from abstract paintings.
- D) P4's rating for abstract and cubist paintings would equal one another.

**Number of the 23 Non-native Tree  
Species Reported and the Insect and  
Fungus Threats to Them**

Country	Trees	Fungi	Insects
Great Britain	18	290	120
Hungary	1	18	13
Switzerland	11	43	78

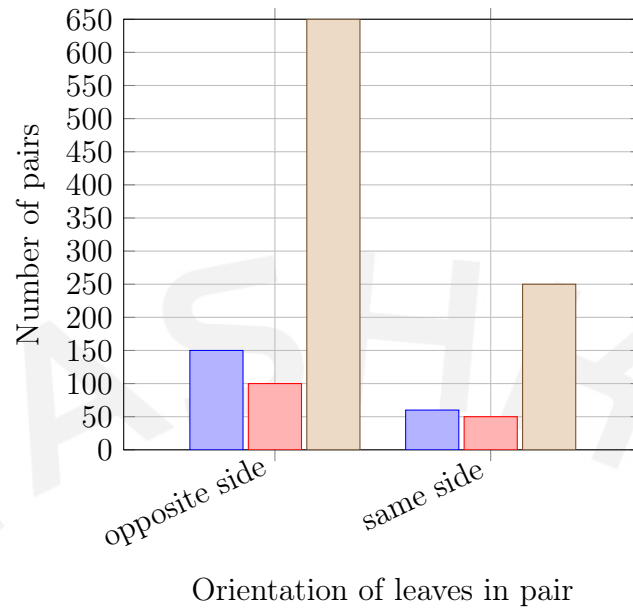
Elisabeth Pötzelsberger and colleagues gathered data on 23 non-native tree species grown in Europe. They analyzed reports from Great Britain, Switzerland, and Hungary about the number of these species grown in those countries as well as the numbers of insect and fungus species that damage those trees. The researchers concluded that Great Britain had a greater number of damaging fungus species than either of the other countries did.

89

Which choice best describes data from the table that support Pötzelsberger and colleagues' conclusion?

- A) Hungary reported 18 damaging fungus species but only 13 damaging insect species.
- B) Great Britain reported 290 damaging fungus species, whereas Switzerland reported 78 damaging insect species.
- C) Great Britain reported 290 damaging fungus species, which is more than either Switzerland or Hungary reported.
- D) Switzerland and Hungary reported 11 and 1 damaging fungus species, respectively, which is far fewer than Great Britain reported.

Orientation of Leaf Pairs in Grapevines



Many plants have leaves that are larger on one side of their long central axis than the other, a phenomenon known as asymmetrical orientation. University of California, Berkeley biologist Ciera Martinez and colleagues examined several species of grapevines and closely related plants, which have leaves that grow in pairs, to see if both leaves in a pair tend to be oriented toward the same side (that is, have more tissue on the same side) or not. They found that opposite side orientation was much more common than same side orientation; in the Amur grape, for example, approximately \_\_\_\_\_

90

Which choice most effectively uses data from the graph to complete the example?

- A) 150 leaf pairs show opposite side orientation, whereas approximately 60 pairs show same side orientation.
- B) 110 leaf pairs show opposite-side orientation, whereas approximately 45 pairs show same-side orientation.
- C) 650 leaf pairs show opposite side orientation, whereas no pairs show same-side orientation.
- D) 110 leaf pairs show opposite-side orientation, whereas no pairs show same-side orientation.

## Home Video Game Systems of the 1970s and 1980s

System	Manufacturer	Approximate number of units sold worldwide
ColecoVision	Coleco	2,000,000
Game & Watch	Nintendo	12,600,000
Intellivision	Mattel	3,000,000
Apple II	Apple Inc.	4,487,000

A student is researching the ColecoVision and other important gaming systems that were part of the global rise of the home video game industry during the 1970s and 1980s. The student is surprised to find that the ColecoVision sold relatively few units worldwide, with only about \_\_\_\_\_.

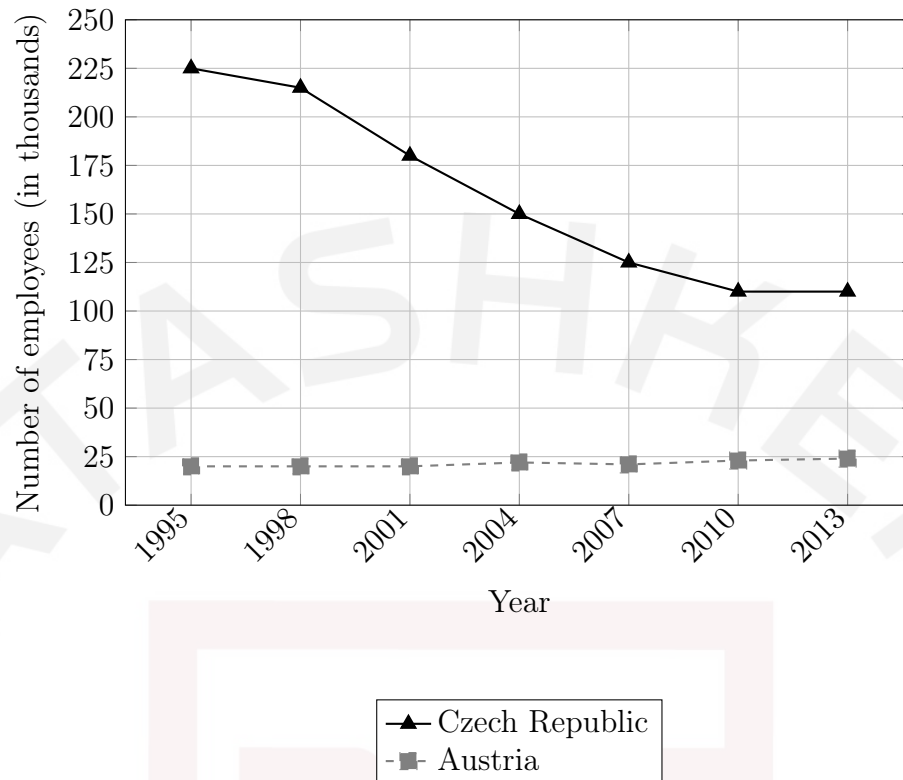
91

Which choice most effectively uses data from the table to complete the statement?

- A) 3,000,000 units sold compared to the approximately 4,487,000 units sold of the Game & Watch.
- B) 2,000,000 units sold compared to the approximately 12,600,000 units sold of the Game & Watch.
- C) 2,000,000 units sold compared to the approximately 18,600,000 units sold of the Intellivision.
- D) 3,000,000 units sold compared to the approximately 4,487,000 units sold of the Apple II.



Employment in Agriculture, Hunting, and Forestry  
in the Czech Republic and Austria, 1995-2013



A student is using the graph for a class presentation on historic employment trends in the agriculture, hunting, and forestry sectors in two European countries. The student notes that from 1995 to 2007 \_\_\_\_\_.

92

Which choice most effectively uses data from the table to complete the example?

- A) the majority of employees in Austria were working in these sectors.
- B) the number of employees working in these sectors decreased in the Czech Republic while remaining relatively steady in Austria.
- C) employment in these sectors remained stable in both Austria and the Czech Republic.
- D) the number of employees working in these sectors increased in the Czech Republic.

**Average Annual Percent Change in US-Bound and Total Agricultural Exports for Five Countries with FTAs with the US**

Country	Percent change in exports to US, pre-FTA	Percent change in exports to US, post-FTA	Percent change in total exports, pre-FTA	Percent change in total exports, post-FTA
Australia	8.8	-2.3	6.8	7.1
Guatemala	13.5	16.7	13.8	20.1
Jordan	-5.3	42.1	-5.5	36.7
Morocco	12.7	42.8	19.6	4.9
Panama	-6.8	7.3	10.0	11.0

A 2022 US Department of Agriculture report by Kayode Ajewole et al. calculated average annual growth rates of agricultural exports from countries over the five years before and the five years following the creation of a free trade agreement (FTA) with the US. The table shows data for five countries in the study. (Post-FTA calculations included some anticipatory effects preceding the agreements' official start.) Ajewole et al. note that an increase in the rate of exports to the US in the post-FTA period does not necessarily indicate that a country produced more goods for export as a result of the FTA. Rather, FTAs sometimes incentivize countries to redirect existing trade from nonmember countries to FTA partners, as is most likely the case with \_\_\_\_\_.

**93**

Which choice most effectively uses data from the table to complete the statement?

- A) Jordan, because the post-FTA period coincided with increasing rates of both its agricultural exports to the US and its total agricultural exports to countries not participating in the FTA.
- B) Australia, because its rate of agricultural exports to the US and its rate of total agricultural exports both decreased in the post-FTA period relative to the pre-FTA period.
- C) Morocco, because its rate of agricultural exports to the US increased in the post-FTA period relative to the pre-FTA period, while its rate of total agricultural exports decreased during the same period.
- D) Panama, because the post-FTA period saw a decrease in its rate of agricultural exports to the US but not in its rate of total agricultural exports.

### Volcanoes in Ecuador

Name of volcano	Year of last eruption	Volcano type
Wolf	2022 CE	shield
Imbabura	5550 BCE	compound
Chacana	1773 CE	caldera
Tungurahua	216 CE	stratovolcano

A student is researching volcanoes in Ecuador. The student claims that Ecuador is home to several different types of volcanoes.

94

Which choice best describes information from the table that supports the student's claim?

- A) Wolf is a shield volcano, Tungurahua is a stratovolcano, Imbabura is a compound volcano, and Chacana is a caldera volcano.
- B) Wolf, Tungurahua, and Imbabura are all stratovolcanoes, whereas Chacana is the only caldera volcano.
- C) Wolf, Tungurahua, Imbabura, and Chacana each most recently erupted in different years.
- D) Wolf and Tungurahua are both shield volcanoes, whereas Imbabura and Chacana are both compound volcanoes.

**Average Annual Percent Change in US-Bound and Total Agricultural  
Exports for Five Countries with FTAs with the US**

Planet	Orbital period	Planet radius (Earth radii)
Earth	365.26	1
TRAPPIST-1b	1.51	1.09
TRAPPIST-1d	4.05	0.77
TRAPPIST-1e	6.1	0.92
TRAPPIST-1f	9.21	1.04

TRAPPIST-1 is a planetary system with a central red dwarf star and several Earth-sized exoplanets. Each planet in this system is so close in orbit to the star that the gravitational forces acting between the planet and the star cause the planet's rotational period around its axis and orbital period around the star to be equal. For example, the orbital period of TRAPPIST-1e is \_\_\_\_\_.

95

Which choice most effectively uses data from the table to complete the example?

- A) 6.1 days, and its rotational period is 0.92 days.
- B) 1.51 days, which is the shortest rotational period of any of the TRAPPIST planets.
- C) 6.1 days, and its rotational period is also 6.1 days.
- D) 9.21 days, which is the same as the rotational period of TRAPPIST-1f.

### Highest Major Summits in India

Summit	Elevation (meters)	Mountain range	Prominence(meters)
Rimo I	7,385	Rimo Karakoram	1,438
Nanda Devi	7,816	Himalayas	3,139
Panchchuli II	6,904	Garhwa I Himalaya	1,614
Saser Kangri I/K22	7,672	Saser Karakoram	2,304
Langpo	6,965	Sikkim Himalaya	560

Mountain summits are often described in terms of their elevation, or height above sea level. But a summit's elevation may not be as good an indication of how high the mountain appears to observers as is the summit's prominence, or its height above its surroundings, and these values can differ significantly. For example, the Indian mountain of \_\_\_\_\_.

96

Which choice most effectively uses data from the table to complete the example?

- A) Saser Kangri I/ K22 has an elevation of 7,672 meters and is considered the highest mountain from the Saser Karakoram range.
- B) Nanda Devi has a much higher prominence than does Langpo.
- C) Nanda Devi has a high prominence but is from a different mountain range than Rimo I, which has a lower prominence.
- D) Nanda Devi has an elevation of 7,816 meters but a considerably lower prominence of 3,139 meters.



Copper Mining Production (1995 vs. 2020)

Country	1995	2020
United States	1.85	1.20
Chile	2.49	5.73
Zambia	0.33	0.85
Indonesia	0.44	0.51

A student is researching changes in copper mining from 1995 to 2020. The student learns that most copper-mining countries mined more in 2020 than in 1995, but some did not. For example, one country that produced less copper through mining in 2020 than in 1995 is \_\_\_\_\_.

97

Which choice most effectively uses data from the table to complete the example?

- A) the United States
- B) Zambia
- C) Chile
- D) Indonesia

## Examples of Hoards found in Ireland and Northern Ireland

Hoard name	Date of contents	Year of discovery	Description
Coleraine Hoard	5th century CE	1854	silver pieces
Derrynaflan Hoard	10th century CE	1980	silver and bronze pieces
Dooyork Hoard	3rd century BCE-2nd century CE	2001	gold, bronze, and beads

Deposits of valuable objects, called hoards, have been unearthed in many different parts of Ireland and Northern Ireland. Technological advancements in the twenty-first century have made it easier to locate hoards, but plenty of hoards were found earlier. For example,

-----.

98

Which choice most effectively uses data from the table to complete the statement?

- A) the Derrynaflan Hoard was found in 1854.
- B) the Coleraine Hoard, Derrynaflan Hoard, and Dooyork Hoard have all been found since 1854.
- C) the Coleraine Hoard and Derrynaflan Hoard were both found before 2000.
- D) Derrynaflan Hoard and Dooyork Hoard were both discovered in the 1900s.

**Number of the 23 Non-native Tree  
Species Reported and the Insect and  
Fungus Threats to Them**

Country	Trees	Fungi	Insects
Great Britain	18	290	120
Hungary	1	18	13
Switzerland	11	43	78

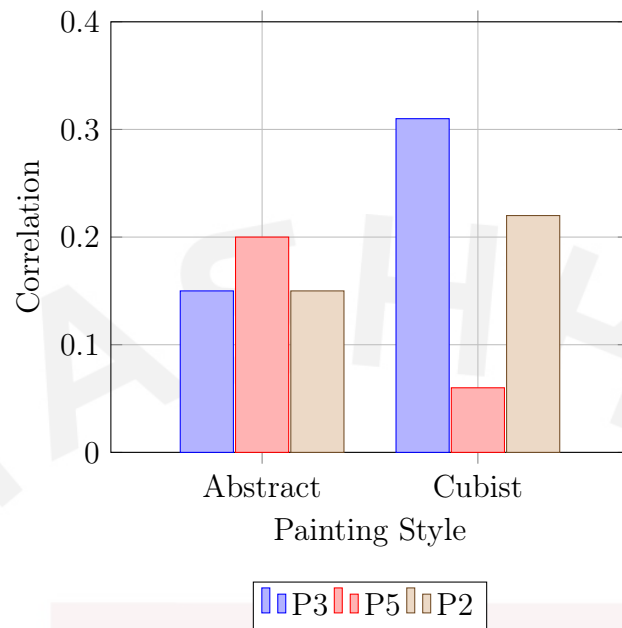
Elisabeth Pötzelsberger and colleagues gathered data on 23 non-native tree species grown in Europe. They analyzed reports from Great Britain, Switzerland, and Hungary about the number of these species grown in those countries as well as the numbers of insect and fungus species that damage those trees. The researchers concluded that Great Britain had a greater number of damaging fungus species than either of the other countries did.

99

Which choice best describes data from the table that support Pötzelsberger and colleagues conclusion?

- A) Hungary reported 18 damaging fungus species but only 13 damaging insect species,
- B) Great Britain reported 290 damaging fungus species, whereas Switzerland reported 78 damaging insect species.
- C) Great Britain reported 290 damaging fungus species, which is more than either Switzerland or Hungary reported.
- D) Switzerland and Hungary reported 11 and 1 damaging fungus species, respectively, which is far fewer than Great Britain reported.

### Correlation between Model-Predicted and Participant-Reported Enjoyment Ratings, by Painting Style

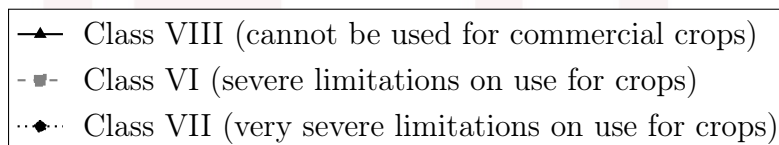
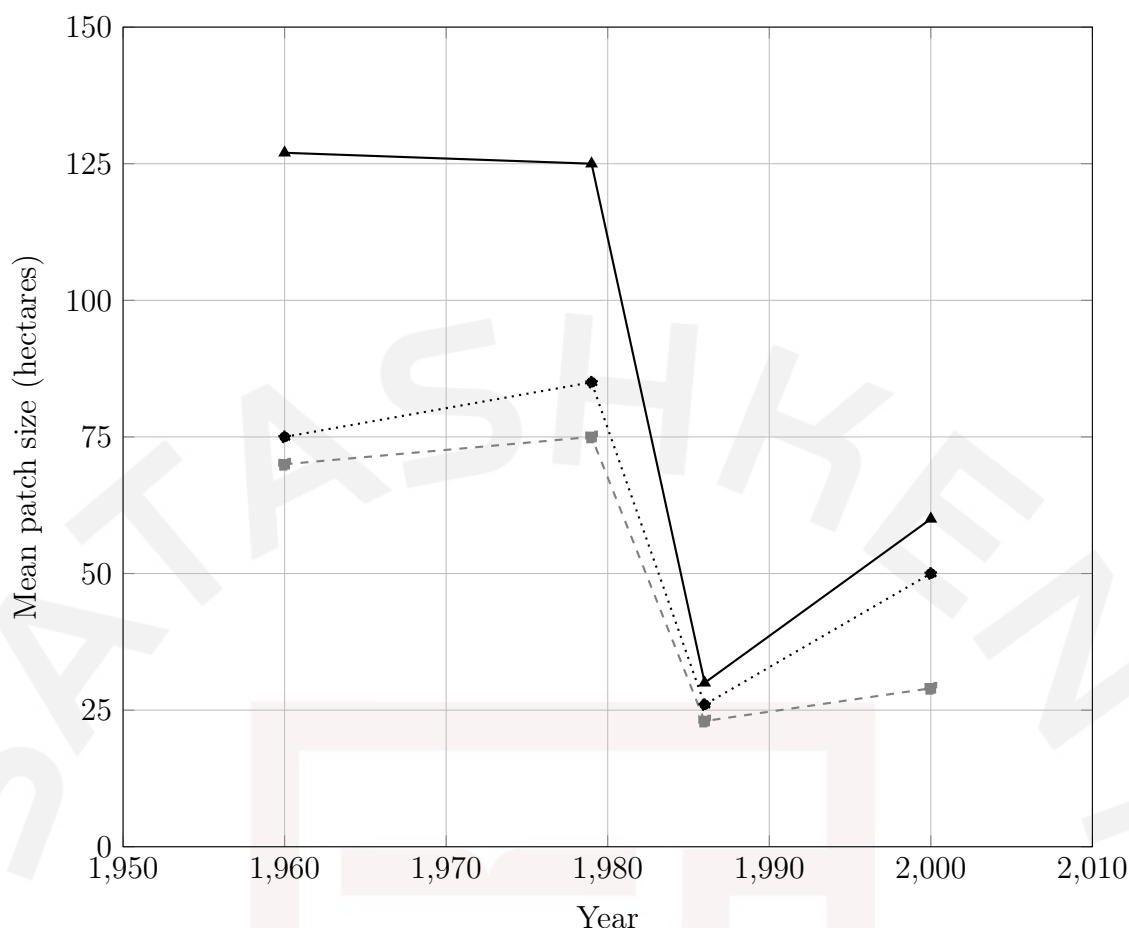


Neuroscientist Kiyohito Iigaya and colleagues developed a computational model to predict how much a person will enjoy a particular work of art on a scale from 1 (not at all) to 4 (very much). They then recruited participants to use the same scale to rate several sets of paintings in various styles and calculated the correlation between the ratings predicted by the model and those reported by the participants. Assuming participant P3 gave equal ratings to the abstract and cubist paintings, the data in the graph indicate the model predicted that \_\_\_\_\_

100

Which choice most effectively uses data from the graph to complete the example?

- A) P3's ratings for abstract and cubist paintings would differ from one another.
- B) P3 would derive less aesthetic pleasure from cubist paintings than from abstract paintings.
- C) P3 would derive more aesthetic pleasure from cubist paintings than from abstract paintings.
- D) P3's rating for abstract and cubist paintings would equal one another.



To understand the extent of deforestation in the Chorotega Region of Costa Rica, Juan Pablo Arroyo-Mora and colleagues used aerial photography and remote sensing data to track changes in the annual mean size of forest patches across different land use capability class (categories that indicate possible uses of forest land.) Due to the Chorotega region's accessibility, various types of forest areas were converted to cattle practices as rising international meat prices drove a cattle ranching boom in the 1960s and 1970s. By the mid 1980s, however, increased public awareness and environmental reforms, along with a decline in meat prices, engendered a natural forest regrowth, as evident by the \_\_\_\_\_

101

Which choice most effectively uses data from the graph to complete the assertion?

- A) difference between the forest patch size in Class VIII and in Class VI in 2000.
- B) steady increase in the forest patch size from 1960 to 1979, followed by a more sudden increase in 1986 for all classes.
- C) increase in mean forest patch size after 1986 in all classes
- D) similarity in mean forest patch size in Class VIII and Class VII in 1986.

**Average Monetized Productivity Loss at  
Two points after programs began, in  
Australian dollars**

Type of training	12 weeks	12 months
EET	268	171
EHP	282	436

Michelle Pereira et al. hypothesized that introducing health improvements into workplaces would increase productivity by reducing absenteeism (sick employees not working) and presenteeism (sick workers working less productively due to illness). Pereira's team enrolled groups of Australian workers in two programs: one that gave employees exercise training (EET) and one that enrolled employees in health promotion seminars (EHP). They then calculated the productivity loss of those groups at 12 weeks and 12 months after the programs began (based on the 28 days preceding each point). They concluded that exercise training was more effective at restraining productivity loss than health promotion seminars were, though this result took time to become apparent.

**102**

Which choice best describes data from the table that most effectively strengthen Pereira and colleagues' conclusion?

- A) Productivity loss for the EET group barely decreased between 12 weeks and 12 months after the program began, while productivity loss for the EHP group significantly increased during the same time period.
- B) Productivity loss was largely due to absenteeism for the EHP group at 12 months after the program began, while productivity loss was largely due to presenteeism for the EET group at 12 months after the program began.
- C) Productivity loss was consistently higher for the EHP group than for the EET group over the twelve months that it was measured, though the size of the difference between the two decreased over that time.
- D) Productivity loss was fairly similar for the EET and EHP groups 12 weeks after each program began, but at 12 months afterward it had significantly increased for the EHP group and significantly decreased for the EET group



**Minimum and Maximum Depth of Stony Coral Species in Caribbean and Indo-Pacific Waters**

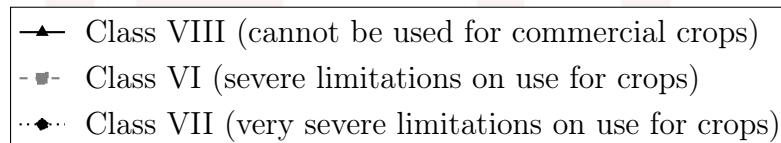
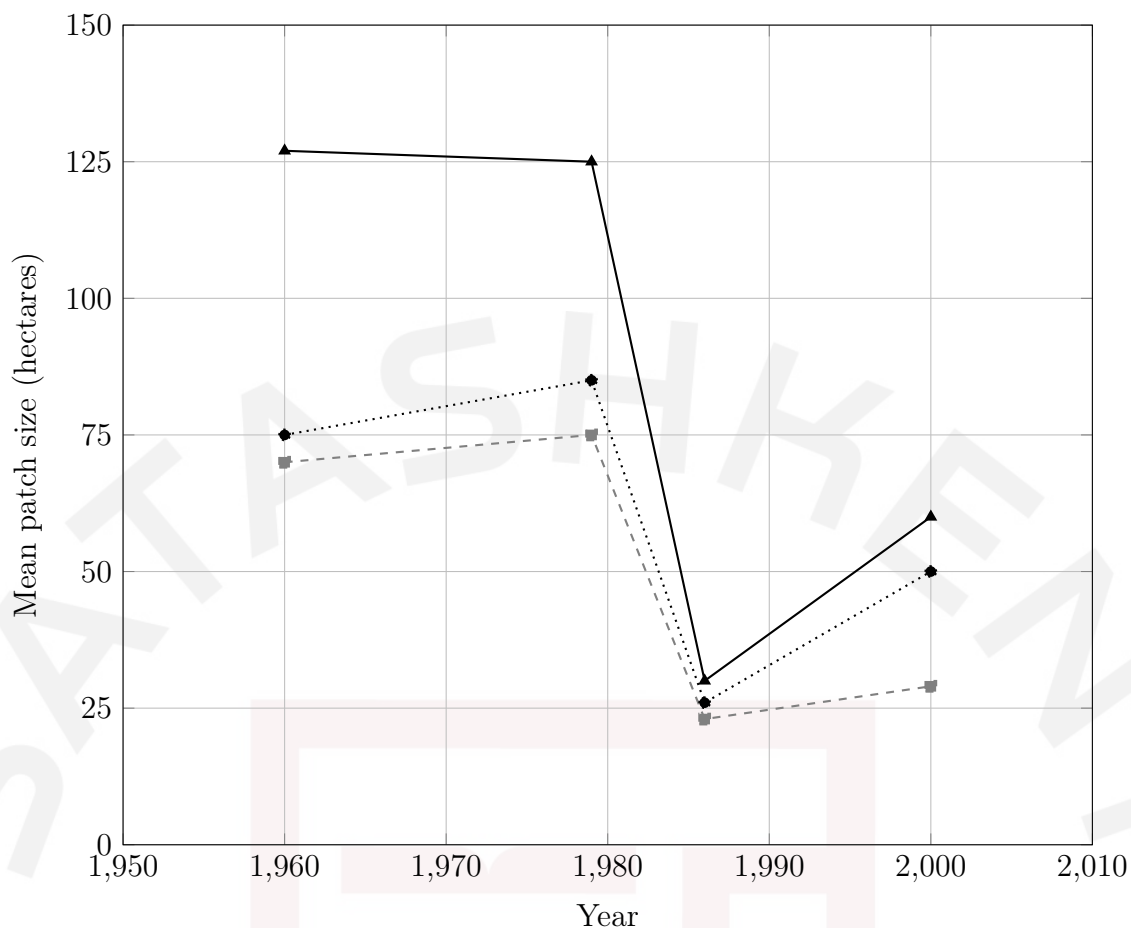
Species	Minimum depth (meters)	Maximum depth (meters)
<i>Psammocora albopicta</i>	1	28
<i>Agaricia grahamae</i>	20	115
<i>Astreopora gracilis</i>	5	15
<i>Acropora echinata</i>	8	25

Some scientists have suggested that as ocean temperatures rise, many fish and corals found in the shallow zone (less than 30 meters below the surface) could take refuge in the cooler, darker mesophotic zone (30 to 150 meters below the surface). However, it isn't clear that all such species will be able to tolerate mesophotic conditions. In 2018, Luiz Rocha and colleagues studied stony corals in the two zones in Caribbean and Indo-Pacific waters. Based on the depths at which those corals are now found, the species that seems least suited to a full migration to the mesophotic zone is \_\_\_\_\_.

**103**

Which choice most effectively uses data from the table to complete the statement?

- A) *Astreopora expansa*, because its maximum depth of 15 meters is furthest from the mesophotic zone.
- B) *Scolymia lacera*, because its minimum depth of 10 meters is in the shallow zone.
- C) *Acropora echinata*, because its maximum depth of 25 meters is close to but doesn't reach the mesophotic zone.
- D) *Heliofungia fralinae*, because its minimum depth of 3 meters is the shallowest of those listed.



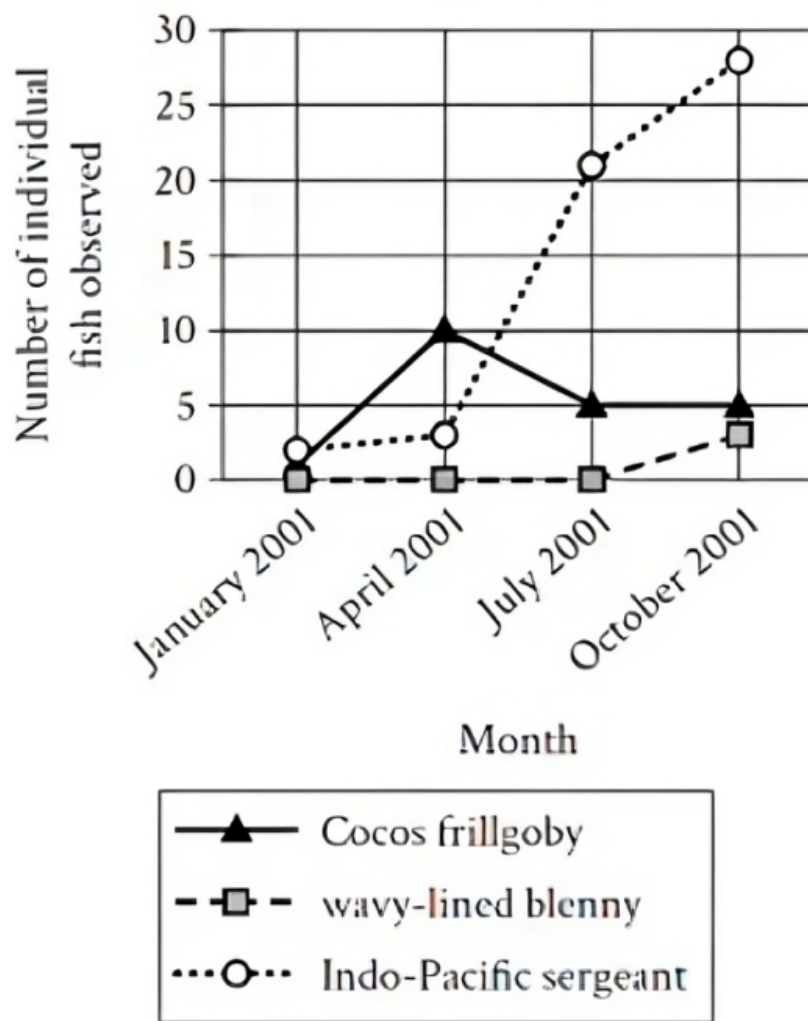
To understand the extent of deforestation in the Chorotega Region of Costa Rica, Juan Pablo Arroyo-Mora and colleagues used aerial photography and remote sensing data to track changes in the annual mean size of forest patches across different land use capability class (categories that indicate possible uses of forest land.) Due to the Chorotega region's accessibility, various types of forest areas were converted to cattle practices as rising international meat prices drove a cattle ranching boom in the 1960s and 1970s. By 1986s, mean forest patch sizes had dropped considerably. In that year, they were between \_\_\_\_\_

104

Which choice most effectively uses data from the graph to complete the assertion?

- A) 100 and 125 hectares
- B) 125 and 150 hectares
- C) 200 and 250 hectares
- D) 0 and 50 hectares

# Fish Population in a Taiwanese Tide Pool, January 2001 to October 2001

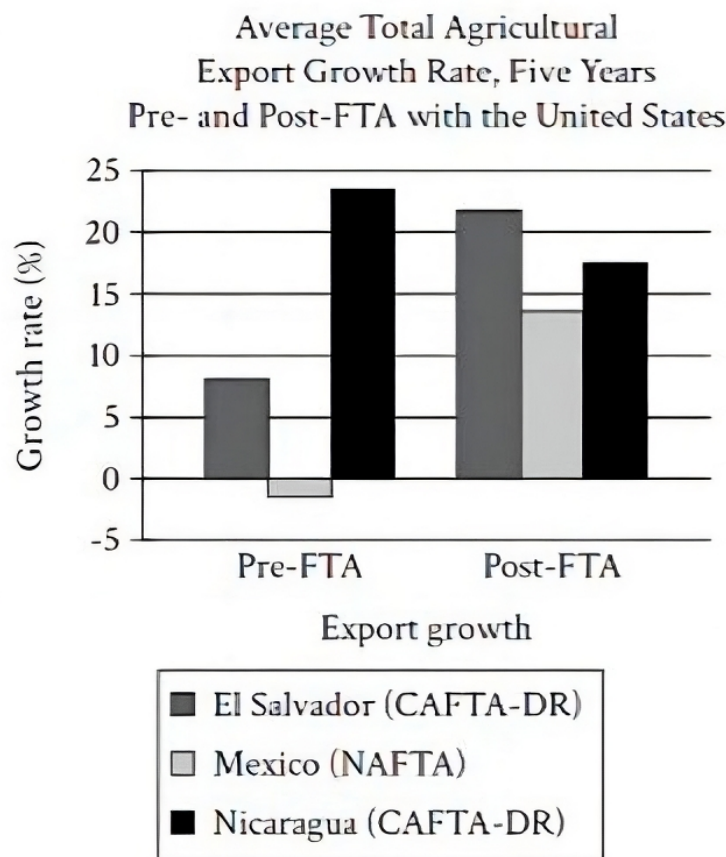


Lin-Tai Ho and colleagues monitored fish populations in a tide pool in Taiwan. They found that some species were entirely absent from the tide pool at particular times of the year; for example, they did not observe even one -----

105

Which choice most effectively uses data from the graph to complete the example?

- A) wavy lined blenny in January, April, and July of 2001.
- B) Indo-Pacific sergeant in October of 2001.
- C) Indo-Pacific sergeant in July of 2001
- D) Cocos friligoby in April of 2001.



To measure whether countries in free trade agreements (FTAs)—agreements among nations to reduce tariffs, duties, and other trade barriers—experience changes in total agricultural exports, economist Kayode Ajewole and colleagues calculated average export growth rates for several countries over the five years before and the five years after entering an FTA with the United States. The graph shows the results for three countries in the study. Consulting the graph, a student claims that joining an FTA increases the rate of growth of a country's total agricultural exports.

106

Which choice best describes data from the graph that weaken the student's claim?

- A) All the countries shown had positive growth in agricultural exports over the five years after joining their respective FTAs, but their rates of export growth varied.
- B) Although agricultural exports from Nicaragua grew over the five years after Nicaragua joined CAFTA-DR, their growth rate was even higher in the five years before CAFTA-DR.
- C) Although agricultural exports from Mexico decreased over the five years before NAFTA, a reversal in this trend was observed over the five years after Mexico joined NAFTA.
- D) Over the five years after El Salvador joined CAFTA-DR, agricultural exports from El Salvador grew at a rate of about 21.8 percent, which is higher than the rate over the five years before El Salvador joined the agreement.

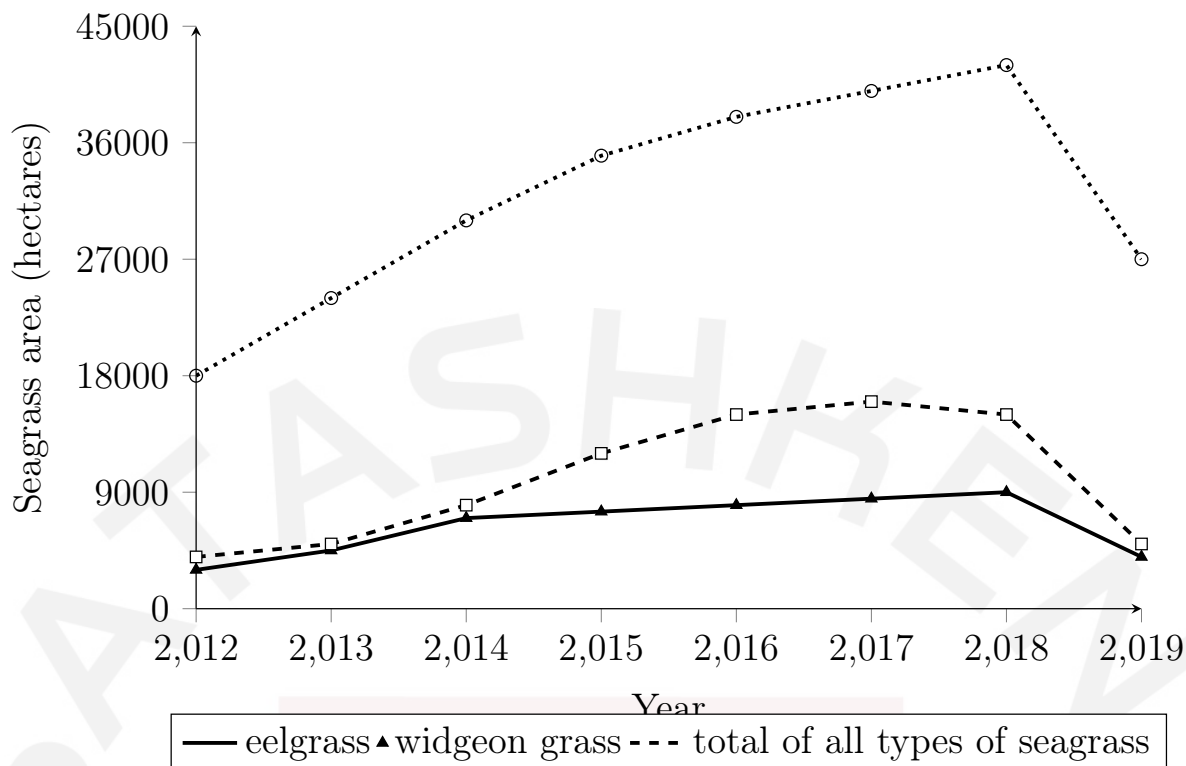
Planet	Mass (Earth masses)	Density ratio	Temperature (kelvins)
HD 80653 b	5.6	7.4	2,300
Kepler-10 b	3.6	6.0	2,130
K2-265 b	0.8	7.1	1,400

If a planet orbits in close proximity to a star and lacks an atmosphere, the planet can become so hot that magma oceans form on its surface. For three planets that could plausibly harbor magma oceans, the table shows mass, density (expressed as the ratio of the material's volume at its current density to its maximum possible density, with higher numbers indicating lower densities), and surface temperature according to a model that assumes the absence of atmosphere.

107

Which choice best describes how data in the table for HD 80653 b would likely differ if it had an atmosphere?

- A) It would have a mass below 5.6 Earth masses.
- B) Its surface temperature would be around 1,400 kelvins.
- C) It would have a mass above 5.6 Earth masses.
- D) Its surface temperature would be below 2,300 kelvins.



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.

108

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

- A) In early 2019, unusually heavy rains washed excessive nutrients into the bay, leading to algal blooms that prevented sunlight from reaching many seagrass species.
- B) In early 2018, a fungal infection that affects widgeon grass and eelgrass but does not affect other types of seagrass spread through the bay.
- C) 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.
- D) 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.



## Answers: Command of Evidence - Graphs

Number	Answer	Number	Answer
1	B	2	D
3	A	4	A
5	A	6	C
7	A	8	A
9	B	10	A
11	A	12	A
13	B	14	D
15	B	16	D
17	A	18	C
19	D	20	B
21	A	22	A
23	A	24	B
25	D	26	B
27	D	28	A
29	A	30	D
31	C	32	A
33	C	34	A
35	D	36	A
37	B	38	A
39	D	40	D
41	C	42	B

Number	Answer	Number	Answer
43	D	44	C
45	D	46	B
47	C	48	A
49	D	50	B
51	A	52	C
53	C	54	C
55	C	56	D
57	C	58	B
59	C	60	B
61	D	62	B
63	B	64	B
65	C	66	A
67	A	68	C
69	B	70	D
71	B	72	A
73	B	74	B
75	A	76	A
77	C	78	A
79	B	80	C
81	C	82	A
83	C	84	A
85	A	86	B

Number	Answer	Number	Answer
87	A	88	A
89	C	90	A
91	B	92	B
93	C	94	A
95	C	96	D
97	A	98	C
99	C	100	A
101	C	102	D
103	A	104	D
105	A	106	B
107	D	108	D



# II Craft and Structure

## Topic 8: Main Purpose

43 Questions

### DIRECTIONS

#### Must Know Tips:

- The correct answer choice should cover all points of the passage.
- Use the “True, False, Not Given” technique.
- Eliminate options that are partly correct and partly incorrect.
- Be cautious with options that are too extreme (e.g., “only,” “first,” “last,” “most/best”).
- Don’t read the question prompt (it’s static).

**Recommended time per question in this section:** min: 45 sec, max: 1 min 30 sec, avg: 1 min 12.5sec. (\*Exam level)

When people think of dinosaurs with feathers, they typically think of winged dinosaurs, such as the bat-like *Ambopteryx*. However, many dinosaurs that didn’t have wings also had feathers on their bodies. For instance, research indicates that the wingless large *Yutyranus* likely had feathers.

1

Which choice best states the main purpose of the text?

- A) To discuss the presence of feathers on certain types of dinosaurs.
- B) To point out the differences between dinosaur feathers and bird feathers.
- C) To explain why feathered dinosaurs went extinct.
- D) To argue that only one species of dinosaur had feathers.

Smartwatches and fitness trackers currently available to the public claim to be able to provide data on VO2 max, a measurement of an individual's fitness level that indicates heart disease and mortality risk. However, whether or not these measurements are accurate is still unproven. Meanwhile, Cambridge developed a model that can provide more accurate tracking of one's heart rate and can also monitor fitness changes leading to better indications of health risks.

2

Which choice best states the main purpose of the text?

- A) To prove that currently available smartwatches are not an accurate indicator of overall health.
- B) To introduce a new fitness tracker model that may provide more accurate data on health than current products.
- C) To argue that individuals should not rely on fitness trackers or smartwatches to monitor their health.
- D) To summarize the findings of a new fitness tracker model that will be available to the public soon.

Researchers have found what they believe to be a cause behind mice being motivated to exercise: gut microbes. The specific molecules in these microbes appear to stimulate the desire in the brain to run and continue running. It has been postulated that if this bacteria could be given to people in pill form, they too could experience the same motivation to exercise.

3

Which choice best states the main purpose of the text?

- A) To understand better what makes mice motivated to move.
- B) To suggest that the findings in mice could be used to increase human activity.
- C) To explain research in mice that will be used to support people.
- D) To imply that a lack of motivation to work out is not controllable.



Eden Robinson is a novelist and a member of the Haisia Nation in western Canada. Critics and fellow writers have praised her work for combining traditional Haisia stories with popular genres of literature, such as fantasy and mystery fiction. But Robinson is not the only Indigenous writer to blend traditional stories with popular literature. In the 2019 novel *Empire of wild*, Cherie Dimaline successfully blended the oral storytelling tradition of her people, The Metis, with horror fiction.

4

Which choice best states the main purpose of the text?

- A) To discuss two writers who blend traditional indigenous stories with popular genres.
- B) To urge younger Indigenous authors to avoid writing in popular genres.
- C) To argue that traditional Indigenous stories are more memorable than most novels are.
- D) To explain why one indigenous author has achieved more success than another has.

Luang Prabang has high pedestrian traffic, but simply replicating a feature of Luang Prabang associated with walkability—e.g., its human-scaled architecture—may be insufficient to induce increased walking in other cities. As urbanist Mariela Alfonzo argues, our understanding of individuals' decision-making about whether to walk is insufficiently robust: some studies emphasize the role of local norms, others the role of demographic characteristics, and so on, but walking decisions are made in complex context in which multiple conditions and needs inform individuals' choices.

5

Which choice best states the main purpose of the text?

- A) To describe the effect of human-scaled architecture on any given city's walkability.
- B) To explain why it is challenging to compare the amount of pedestrian traffic in different cities.
- C) To present a claim about how individuals' decision-making about walking can be improved.
- D) To discuss the difficulty of identifying a reliable way to increase walking in any given city.

Researchers have long hypothesized that woolly mammoths were hunted to extinction in North America by humans using spears with grooved tips known as Clovis points. One anthropologist set out to test this hypothesis. Using a mechanical spear-thrower, he launched spears with Clovis points into mounds of clay—substitutes for the animals' large bodies. The projectiles generally penetrated only a few inches into the clay, an amount insufficient to have harmed most woolly mammoths. This led the anthropologist to conclude that hunters using spears with Clovis points likely weren't the principal drivers of the extinction.

6

Which choice best states the main purpose of the text?

- A) To argue for the significance of new findings amid an ongoing debate among researchers.
- B) To discuss the advantages and disadvantages of the method used in an experiment.
- C) To summarize two competing hypotheses and a major finding associated with each one.
- D) To describe an experiment whose results cast doubt on an established hypothesis.

Scholarly interest in literary juvenilia—writings by children and teenagers—tends to focus on unpublished works by authors who became famous as adults, such as Charles Dickens's poem "The Bill of Fare," which he wrote around the ages of 18-20, because they offer insights into their authors' artistic development. But some scholars also argue that recovering juvenilia by lesser-known writers is essential to understanding literary history: Daisy Ashford's novels, which she published as a child, were widely read by contemporaries and are therefore deserving of closer attention.

7

Which choice best states the main purpose of the text?

- A) To describe the challenges famous writers encountered when seeking to publish works written in their childhood.
- B) To present reasons why literary scholars consider juvenilia to be valuable resources.
- C) To compare the accomplishments of young writers with those of their adult contemporaries.
- D) To argue that Ashford's novels have more literary merit than Dickens's juvenilia do.

The following text is adapted from Jean Webster's 1912 novel *Daddy-Long-Legs*. The narrator is a young college student writing letters detailing her weekly experiences.

(The college is) organizing the Freshman basketball team and there's just a chance that I shall make it. I'm little of course, but terribly quick and wiry and tough. While the others are hopping about in the air, I can dodge under their feet and grab the ball.

8

Which choice best states the main purpose of the text?

- A) To compare basketball with other sports.
- B) To provide details of how to play basketball.
- C) To state how players will be chosen for the basketball team.
- D) To explain why the narrator thinks she might make the basketball team.

In the late 1800s, Spanish-language newspapers flourished in cities across Texas. San Antonio alone produced eleven newspapers in Spanish between 1890 and 1900. But El Paso surpassed all other cities in the state. This city produced twenty-two newspapers in Spanish during that period. El Paso is located on the border with Mexico and has always had a large population of Spanish speakers. Thus, it is unsurprising that this city became such a rich site for Spanish-language journalism.

9

Which choice best states the main purpose of the text?

- A) To compare Spanish-language newspapers published in Texas today with ones published there during the late 1800s.
- B) To explain that Spanish-language newspapers thrived in Texas and especially in El Paso during the late 1800s.
- C) To argue that Spanish-language newspapers published in El Paso influenced the ones published in San Antonio during the late 1800s.
- D) To explain why Spanish-language newspapers published in Texas were so popular in Mexico during the late 1800s.

The following text is from Betty Smith's 1943 novel *A Tree Grows in Brooklyn*. Francie, a young girl, visits the library often.

Francie thought that all the books in the world were in that library and she had a plan about reading all the books in the world. She was reading a book a day in alphabetical order and not skipping the dry ones. She remembered that the first author had been Abbott. She had been reading a book a day for a long time now and she was still in the B's. Already she had read about bees and buffaloes, Bermuda vacations and Byzantine architecture. For all her enthusiasm, she had to admit that some of the B's had been hard going. But Francie was a reader.

10

Which choice best states the main purpose of the text?

- A) To illustrate Francie's enjoyment of an unusual topic.
- B) To explain why Francie prefers reading over other activities.
- C) To portray Francie's determination to meet a goal.
- D) To describe a book that Francie greatly admires.

Gus Edwards's atmospheric play *Black Body Blues* was produced in 1978 by the groundbreaking Negro Ensemble Company (NEC). NEC cofounder Douglas Turner Ward, who worked as an actor, director, and playwright, had met actor and producer Robert Hooks while they were performing in a 1960 touring production of Lorraine Hansberry's play *A Raisin in the Sun*. Together, they envisioned a theater company that would nurture and showcase the work of Black theater professionals. Since NEC's founding in 1967, its workshops and performances have given Black playwrights, including Edwards, a forum for their compelling stories.

11

Which choice best states the main purpose of the text?

- A) To show how the play *A Raisin in the Sun* influenced Ward and Hooks.
- B) To bring attention to a work by Gus Edwards.
- C) To describe how Ward and Hooks's creative partnership changed over time.
- D) To discuss the origin and importance of the NEC.

Today composer Scott Joplin is mainly celebrated for his catchy ragtime pieces "Maple Leaf Rag" and "The Entertainer." However, by overlooking his less famous works, listeners will miss the full range of Joplin's creativity. For instance, his waltz "Pleasant Moments" and his opera "Treemonisha" skillfully blend ragtime and classical music. These masterpieces deserve as much fame as Joplin's biggest hits.

12

Which choice best states the main purpose of the text?

- A) To argue that more attention should be given to Joplin's lesser-known works.
- B) To describe the similarities and differences between ragtime music and opera.
- C) To explain how Joplin learned to compose and perform ragtime music.
- D) To encourage music lovers to listen to music by many different composers.

Desolation Island, first published in 1978, is a novel in Patrick O'Brian's Aubrey/Maturin series, which includes twenty completed books. Some critics have found fault with the abrupt endings of Desolation Island and other books in the series, saying that they do not finish conclusively but arbitrarily stop. But other critics argue that the books should not be thought of as discrete texts with traditional beginnings and endings but as a single incredibly long work, similar to other multivolume stories, such as John Galsworthy's *The Forsyte Saga*.

13

Which choice best states the main purpose of the text?

- A) To explain why many critics find the Aubrey/Maturin novels to be remarkably entertaining despite flaws in the novels' structures.
- B) To describe a characteristic of the Aubrey/Maturin novels and offer two differing viewpoints on this characteristic.
- C) To argue that the Aubrey/Maturin series should have the literary renown of *The Forsyte Saga*.
- D) To present a reason the unusual structure that O'Brian uses for *Desolation Island* makes it one of his most complex books.

President Richard Nixon is most famous for his participation in the 1970s Watergate political scandal, a convoluted tale of criminality and eroded ethics involving a constellation of associates such as Chief of Staff H.R. "Bob" Haldeman and Nixon's personal friend Charles "Bebe" Rebozo. But Nixon's legacy is complex: he has been praised for his role in opening relations between the United States and China, and he once made an attempt at reforming United States health care policy that is arguably a precursor to the Affordable Care Act, which became law during the Barack Obama administration.

14

Which choice best states the main purpose of the text?

- A) It catalogs the most notable achievements of a historical figure.
- B) It argues that the seeming prominence of a historical figure is largely due to the actions of others.
- C) It assesses a historical figure's significance by considering both his achievements and failings.
- D) It explains how a historical figure's reputation has improved significantly with the passage of time.



Thermal technologies have been used in the food industry for over 100 years, providing a way of preserving food in large batches. Recent advancements in ohmic heating were made through research in Chile on the preservation of strawberries. Ohmic heating is generally considered to be an improvement over more conventional thermal preservation methods: whereas conventional methods transfer energy from the surface of a food to its interior, ohmic heating passes electric current through food products to generate heat within the food itself.

15

Which choice best states the main purpose of the text?

- A) It provides an overview of the research into ohmic heating both globally and in a specific country.
- B) It introduces ohmic heating as a food preservation technology and identifies one of its advantages.
- C) It explains why conventional heating methods are popular in commercial applications and proposes a shift away from these methods.
- D) It suggests that there are possible flaws in ohmic heating technologies that have not yet been well researched.

In 2020, rap artist and professor A.D. Carson published the first peer-reviewed rap album about his experiences with Black masculinity called "i used to love to dream." Typically in peer review, experts evaluate scholarly articles prior to publication. For Carson's album, dubbed a "mixtape/e/ssay," peer review involved both scholars and rap artists. In combining elements of a mixtape album with scholarly essays that connect Carson's lyrics to historical and contemporary contexts for listeners both inside and outside academia, Carson's album helped redefine how scholarship is created and shared.

16

Which choice best states the main purpose of the text?

- A) To compare the relative public impact of scholarly articles and albums.
- B) To describe how each step of the peer review process unfolds.
- C) To capture one scholar's opinion of a new rap album.
- D) To explain why a certain rap album is particularly innovative.



The following text is adapted from Adib Khorram's 2018 novel *Darius the Great Is Not Okay*. Darius, a teenager from the United States, is visiting his grandparents, Babou and Mamou, in Iran. They are preparing for a holiday celebration.

I felt like a tourist. But Babou fussed with my cap a little more, even though Mamou had already gotten it settled. He looked me in the eye from time to time, like he was looking for something, and thought maybe just maybe I had it in me after all. Babou hummed to himself as he smoothed out my shoulder seams and rested his hands on them. "I am glad you are here to see this, Darioush-jan." Maybe I wasn't such a tourist.

17

Which choice best states the main purpose of the text?

- A) To demonstrate that Babou and Darius aren't very interested in going to new places.
- B) To emphasize that Darius has been looking forward to an event.
- C) To suggest that Babou is planning to visit Darius in the United States soon.
- D) To show that Babou affects the way Darius thinks of himself.

In 2011 Brynn M. Devine and colleagues published a study concluding that ocean acidification has a strong effect on the behavior of *Cheilodipterus quinquelineatus*, a species of fish. However, Devine and colleagues' study relied on a mean sample size of only about 25 fish. In a 2022 review of various scientists' conclusions about the impacts of ocean acidification on fish behavior, Timothy D. Clark and colleagues caution that relying on such a relatively small sample size can increase the potential for biased analysis. Such analysis, in turn, can contribute to reports of exaggerated effects.

18

Which choice best states the main purpose of the text?

- A) To note a potential concern about the findings of a scientific study.
- B) To discuss an aspect of ocean acidification that is frequently overlooked.
- C) To present a debate between two research teams about a cause of ocean acidification.
- D) To explain how the behavior of a fish species has changed over time.

San Francisco has high pedestrian traffic, but simply replicating a feature of San Francisco associated with walkability—e.g. its high density of storefronts—may be insufficient to induce increased walking in other cities. As urbanist Mariela Alfonzo argues, our understanding of individuals decision-making about whether to walk is insufficiently robust: some studies emphasize the role of demographic characteristics, others the role of public transit availability, and so on, but walking decisions are made in complex contexts in which multiple conditions and needs inform individuals' choices.

19

Which choice best states the main purpose of the text?

- A) To discuss the difficulty of identifying a reliable way to increase walking in any given city.
- B) To explain why it is challenging to compare the amount of pedestrian traffic in different cities.
- C) To describe the effect of a high density of storefronts on any given city's walkability.
- D) To present a claim about how individual's decision-making about walking can be improved.

Can field mustard plants grow on Mars? Can pea plants? You might think the answer to these questions is obviously no, but researchers in the Netherlands recently showed that the seeds of many common plant species can germinate in soil designed to simulate Martian conditions, as long as water is supplied. In fact, some species actually did better in Martian soil than in Earth soil: 30 percent of field mustard seeds sprouted when planted in simulated Martian soil, compared with 4 percent that did when planted in soil from their home planet.

20

Which choice best states the main purpose of the text?

- A) To answer long-standing questions about how Martian soil conditions can be simulated on Earth.
- B) To present a surprising finding about plants grown in soil intended to be similar to Martian soil.
- C) To discuss an unexpected result about the role of water in plants grown in simulated Martian soil.
- D) To explain an important study of differences in the composition of Martian soil and the composition of Earth soil.

During Rome's republican period, which ended in the first century BCE, libraries were predominantly owned by wealthy individuals who tightly controlled access to their book collections. The first public library became available in Rome in 28 BCE and was soon followed by one commissioned by Emperor Augustus. As modern scholar Fabio Fernandes notes, however, these two traditions aren't as distinct as they seem, as both the emperor and the private library owners viewed their libraries as extensions of their personal patronage, just on vastly differing scales.

21

Which choice best states the main purpose of the text?

- A) To call into question the notion that private Roman libraries disappeared during the first century BCE.
- B) To contend that early imperial leaders in Rome wielded too much influence over libraries.
- C) To give a brief overview of public access to libraries throughout Rome's republican period.
- D) To assert that private and early public libraries in ancient Rome had an essential similarity.

The following text is from George Marion McClellan's 1895 poem "Eternity."

My spirit swoons, and all my senses cry  
For Ocean's breast and covering of the sky.  
Rock me to sleep, ye waves, and outward bound,  
Just let me drift far out from toil and care,  
Where lapping of the waves shall be the sound.  
Which mingled with the winds that gently bear  
Me on between a peaceful sea and sky,  
To make my soothing slumberous lullaby.

22

Which choice best states the main purpose of the text?

- A) To justify the speaker's qualms about being transported by the ocean to a quiet destination.
- B) To contrast the demands of the speaker's everyday life with the serenity of being rocked to sleep by the ocean.
- C) To illustrate the increasing intensity of the speaker's desire to escape ongoing hardship by gliding on the ocean.
- D) To convey the speaker's longing for the ocean to impart a sense of inner tranquility.

Archaeologists studying the ancient city of Pompeii in Italy recently discovered a well-preserved food shop known as a thermopolium. The site contains food remains, artworks, and decorations. These items give researchers a better understanding of what daily life in Pompeii may have been like. For example, the archaeologists found a ceramic jar that they believe likely contained a meat and seafood stew.

23

Which choice best states the main purpose of the text?

- A) To discuss the political system of Italy
- B) To present a recent archaeological discovery
- C) To describe a region's climate
- D) To compare ancient artworks with modern ones

The following text is adapted from Daniel Defoe's 1704 nonfiction book *The Storm*.

The sermon is a sound of words spoken to the ear, and prepared only for present meditation, and extends no farther than the strength of memory can convey it; a book printed is a record, remaining in every man's possession, always ready to renew its acquaintances with his memory, and always ready to be produced as an authority or voucher to any reports he makes out of it, and conveys its contents for ages to come, to eternity of mortal time, when the author is forgotten in his grave.

24

Which choice best states the main purpose of the text?

- A) It recounts why the works of some artists are still discussed by critics after the artists' deaths while others are not.
- B) It analyzes the contributions to society of two different groups of scholars.
- C) It demonstrates that one form of communication is more commonly used than another.
- D) It describes differences in the characteristics of two kinds of communication.

The following text is adopted from Pam Munoz Ryan's 2020 novel *Mananaland*. In the village where Max lives, there is an old fortress called La Reina. Children in the village say that the fortress is haunted.

For as long as he could remember, Max had begged Papa (his father) to take him to see La Reina and the ruins up close. He'd be a hero among his friends if he was the first boy to cross the haunted gates! Just because Papa didn't believe in ghosts didn't mean they weren't there. Maybe this summer Papa would finally take him. He was almost twelve.

25

Which choice best describes the overall purpose of the text?

- A) To show how much Max wants to visit La Reina.
- B) To portray how proud Max's father is of Max.
- C) To criticize Max for disliking summer.
- D) To explain why Max doesn't want to grow up yet.

Argyroxiphium sandwicense is a species in a family of plants known collectively as the silversword alliance, all of which grow only on the Hawaiian Islands. Members of this alliance exhibit an extraordinary range of phenotypes, with some species maturing into vines and others into shrubs and trees. All species in the alliance descended from a single ancestral tarweed plant that arrived on the islands around 5 million years ago. The tarweed's descendants diversified into distinct species as they adapted to live in the wide variety of habitats found on the Hawaiian Islands.

26

Which choice best states the main purpose of the text?

- A) To advance the claim that all plants on the Hawaiian Islands are part of the silversword alliance and list possible ancestors of the plants that make up the alliance.
- B) To indicate the specific tarweed ancestor of all plants that grow on the Hawaiian Islands and explain why the plants have such varied physical characteristics.
- C) To describe the silversword alliance and explain how the plant family became so varied.
- D) To describe the specific habitat where *Argyroxiphium sandwicense* are found and identify other plants that share a common ancestor with them.

In 1879, in an effort to determine the longevity of certain seeds left in soil, botanist William Beal buried 20 glass bottles filled with sand and seeds from a variety of plants, including *Verbascum*, *Lepidium virginicum*, and *Stellaria media*. Since then, some of the bottles have been retrieved in the periodic checks of seed viability researchers are conducting. After 60 years had elapsed, most of the seeds in those bottles stopped germinating, but *Verbascum* seeds have remained viable, including those from a bottle dug up in 2021 by Margaret Fleming, Lars Brudvig, and colleagues.

27

Which choice best states the main purpose of the text?

- A) To discuss an ongoing experiment.
- B) To explain how to get rid of certain plants.
- C) To compare two experiments addressing the same questions.
- D) To describe challenges associated with preserving seeds.



Karl Polanyi and other historians of capitalism rarely discuss domestic capitalism in Africa before the period of European colonization, implicitly presenting capitalism as external to and imposed on Africa. Mariana Candido and other Africanist scholars have shown, however, that in parts of Africa, centrally administered industrial production, the legal treatment of land as private property, and other features of capitalism predated colonization. One reason for this discrepancy is that historians of capitalism tend to focus on longitudinal economic data drawn from archival records, which do not exist for much of precolonial Africa.

28

Which choice best describes the main purpose of the text?

- A) To explain why historians of capitalism and Africanist scholars disagree about which activities are features of capitalism
- B) To present and account for a potentially misleading characteristic of the work of historians of capitalism
- C) To describe and evaluate a method used by Africanist scholars that distinguishes their work from that of historians of capitalism
- D) To summarize a debate between historians of capitalism and Africanist scholars about how to interpret longitudinal economic data from archival records

Roy McLendon's *Moonlit St. Lucie*, a riverscape featuring the silhouette of a single palm tree against the backdrop of shimmering water and a brilliant moonlit sky, is typical of paintings by the Florida Highwaymen, loosely affiliated landscape artists mainly active in Fort Pierce, Florida, during the 1950s and '60s. Some art historians suggest that Highwaymen paintings played a role in shaping popular perceptions of the state that persist today: the natural iconography that McLendon and colleagues constantly revisited—placid inland rivers, windswept palm trees—is now seen as classically Floridian.

29

Which choice best states the main purpose of the text?

- A) To describe the historical circumstances in which paintings by the Florida Highwaymen experienced a resurgence in popularity.
- B) To explain that a particular painting by Roy McLendon has had greater influence on the broader culture of the state of Florida than is generally acknowledged.
- C) To contrast the public's reaction during the 1950s and '60s to a particular painting by Roy McLendon with more recent reactions to it.
- D) To present the argument that paintings by the Florida Highwaymen likely helped to create a particular widespread impression of Florida.



In Egypt, use of solid fuel (e.g., coal, wood) as a share of total household fuel use fell by more than 90 percent between 2000 and 2015; such shifts are often explained by appeal to the energy ladder, a model holding that fuel choice is mediated mainly by household income (specifically, high-technology fuels displace solid fuels as incomes rise). Alemu Mekonnen and Gunnar Köhlin study of fuel use in Ethiopia shows this model to be reductive, however: household fuel use was heterogeneous, flexible, and influenced by several factors, including the local availability of different fuel sources.

30

Which choice best describes the main purpose of the text?

- A) To contrast patterns in household fuel use in two countries.
- B) To account for the effect of fuel use on household income.
- C) To critique a frequently used model of changes in household fuel prices.
- D) To challenge a common explanation for households' fuel choices.

Popularized in sixteenth- and seventeenth-century England by such poets as William Shakespeare and Edmund Spenser, the sonnet sequence (a series of fourteen-line poems unified by overarching thematic concerns) remains a prevalent poetic genre. Although the sonnet's intricate, rule-bound structure makes writing even one sonnet—let alone an entire series—intrinsically challenging, more recent poets from Gwendolyn Brooks to Marilyn Nelson have undertaken sonnet sequences, likely in part because of the opportunity the genre presents for showcasing a poet's virtuosity and ingenuity.

31

Which choice best states the main purpose of the text?

- A) To describe some of the innovations Brooks and Nelson have introduced to the sonnet sequence.
- B) To contrast the more creative sonnet sequences of Brooks and Nelson with the more conventional ones of Shakespeare and Spenser.
- C) To enumerate the structural features of sonnet sequences that make them challenging to compose.
- D) To suggest a reason for the enduring appeal of the sonnet sequence among poets despite its challenging form.

Scholarly interest in literary juvenilia-writings by children and teenagers-tends to focus on unpublished works by authors who became famous as adults, such as Charles Dickens's poem "The Bill of Fare," which he wrote around the ages of 18-20, because they offer insights into their authors' artistic development. But some scholars also argue that recovering juvenilia by lesser-known writers is essential to understanding literary history: Daisy Ashford's novels, which she published as a child, were widely read by contemporaries and are therefore deserving of closer attention.

32

Which choice best states the main purpose of the text?

- A) To describe the challenges famous writers encountered when seeking to publish works written in their childhood
- B) To present reasons why literary scholars consider juvenilia to be valuable resources
- C) To compare the accomplishments of young writers with those of their adult contemporaries
- D) To argue that Ashford's novels have more literary merit than Dickens's juvenilia do

Founded in New York City in 1969, El Museo del Barrio is dedicated to the visual arts and cultures of Latin America and of Latino communities in the United States. Since its founding, it has acquired more than 8,500 objects for its permanent collection. More recently founded US-based institutions devoted to Latino cultures include the Emma S. Barrientos Mexican American Cultural Center. Located in Austin, Texas, it focuses on Mexican American art and culture.

33

Which choice best states the main purpose of the text?

- A) To trace the founding of two institutions, including how they acquired funding to purchase artworks
- B) To trace a historical development that encouraged the founding of two institutions
- C) To present information about two institutions, including each institution's area of focus
- D) To draw a contrast between the collection sizes of two institutions

The following text is from Bram Stoker's 1911 novel *The Lair of the White Worm*. Adam is meeting his great-uncle Richard at a port.

The meeting so auspiciously begun proceeded well. Adam, seeing that the old man was interested in the novelty of the ship, suggested that he should stay the night on board, and that he would himself be ready to start at any hour and go anywhere that the other suggested. This affectionate willingness to fall in with his own plans quite won the old man's heart. He warmly accepted the invitation, and at once they became not only on terms of affectionate relationship, but almost like old friends.

34

Which choice best states the main purpose of the text?

- A) It showcases how Adam's flexibility and consideration strengthen his relationship with his great-uncle Richard.
- B) It states the reasons why Adam and his great-uncle Richard decide to sleep on the ship rather than finding lodging on land.
- C) It describes why Adam and his great-uncle Richard are excited for their upcoming journey on the ship.
- D) It contrasts great-uncle Richard's wary first impressions of Adam with his ultimate affection toward him.

Though John Crowley, author of *Endless Things*, is perhaps not as well known as the most widely read American writers of the past fifty years, influential figures have championed his work, including the poet James Merrill and the literary critic Harold Bloom. In his afterword to Crowley's book *Little, Big*, Bloom praises the novel's adroit blend of what playwright Friedrich Schiller termed the naive and sentimental modes—while Schiller thought works could be classified as either naive (seeking to describe reality) or sentimental (seeking to develop ideas), *Little, Big* demonstrates that a work can be both.

35

Which choice best states the main purpose of the text?

- A) To explain what inspired an author to write a particular work.
- B) To present a reason why a literary critic is impressed by a certain novel.
- C) To compare the work of a writer with the work of a poet who admired him.
- D) To argue that all writing must be classified as belonging to one of two categories.

The following text is adapted from Matthew Arnold's 1869 nonfiction book *Culture and Anarchy*.

The Times (a British newspaper), replying to some foreign strictures on the dress, looks, and behaviour of the English abroad, urges that the English ideal is that every one should be free to do and to look just as he likes. But culture indefatigably tries, not to make what each raw person may like, the rule by which he fashions himself; but to draw ever nearer to a sense of what is indeed beautiful, graceful, and becoming, and to get the raw person to like that.

36

Which choice best states the main purpose of the text?

- A) It makes a claim about one of the principal effects of culture.
- B) It asserts that what is beautiful is a matter of objective truth rather than subjective perception.
- C) It implies that opinions regarding culture evolve over time.
- D) It explains differences in matters of taste between the English and others.

Founded in Long Beach, California, in 1996, the Museum of Latin American Art is dedicated to modern and contemporary art by Latin American artists and Latino artists in the United States. Since its founding, it has acquired more than 1,300 objects for its permanent collection. More recently founded US-based institutions devoted to Latino cultures include the National Hispanic Cultural Center. Located in Albuquerque, it focuses on the literature, art, and cultures of Latin America as well as Latino communities in the United States.

37

Which choice best states the main purpose of the text?

- A) To trace the founding of two institutions, including how they acquired funding to purchase artworks.
- B) To draw a contrast between the collection sizes of two institutions.
- C) To present information about two institutions, including each institution's area of focus.
- D) To trace a historical development that encouraged the founding of two institutions.

The following text is adapted from D.A. Lozano's 1844 poem "A Remembrance of Puerto Cabello-The Mangle" (translated by Agnes Blake Poor in 1918). The poem is a dedication to Puerto Cabello, a town on the northern coast of Venezuela.

And while outside the tempest is raving o'er the ocean,  
And the ship is madly driving on some lone and desert shore;  
Thy warm and land-locked waters swell with an easy motion,  
And gently glides the light pirogue [canoe] at dipping of the oar.

38

Which choice best states the main purpose of the text?

- A) It describes the speaker's attitude towards the day-to-day life in Puerto Cabello.
- B) It contrasts the tranquility of the waters near Puerto Cabello with the roughness of waters elsewhere.
- C) It emphasizes the severity of a storm that is expected to arrive soon in Puerto Cabello.
- D) It compares the appearance of two types of boats.

*The Hundred Days*, first published in 1998, is a novel in Patrick O'Brian's Aubrey/Maturin series, which includes twenty completed books. Some critics have found fault with the abrupt endings of *The Hundred Days* and other books in the series, saying that they do not finish conclusively but arbitrarily stop. But other critics argue that the books should not be thought of as discrete texts with traditional beginnings and endings but as a single incredibly long work, similar to other multivolume stories, such as Marcel Proust's *In Search of Lost Time*.

39

Which choice best states the main purpose of the text?

- A) To present a reason the unusual structure that O'Brian uses for *The Hundred Days* makes it one of his most complex books
- B) To argue that the Aubrey/Maturin series should have the literary renown of *In Search of Lost Time*
- C) To describe a characteristic of the Aubrey/Maturin novels and offer two differing viewpoints on this characteristic
- D) To explain why many critics find the Aubrey/Maturin novels to be remarkably entertaining despite flaws in the novels' structures



Founded in New York City in 1904, the Hispanic Society of America is dedicated to the arts and cultures of Spanish-speaking and Portuguese-speaking regions around the world. Since its founding, it has acquired more than 18,000 objects for its permanent collection. More recently founded US-based institutions devoted to Latino cultures include the Latino Cultural Center. Located in Dallas, it focuses on Latino cultures and art in the United States.

40

Which choice best states the main purpose of the text?

- A) To trace the founding of two institutions, including how they acquired funding to purchase artworks
- B) To present information about two institutions, including each institution's area of focus
- C) To trace a historical development that encouraged the founding of two institutions
- D) To draw a contrast between the collection sizes of two institutions

The following text is adapted from Matthew Arnold's 1869 nonfiction book *Culture and Anarchy*.

The Times (a British newspaper), replying to some foreign strictures on the dress, looks, and behaviour of the English abroad, urges that the English ideal is that every one should be free to do and to look just as he likes. But culture indefatigably tries, not to make what each raw person may like, the rule by which he fashions himself; but to draw ever nearer to a sense of what is indeed beautiful, graceful, and becoming, and to get the raw person to like that.

41

Which choice best states the main purpose of the text?

- A) It argues that what is beautiful is a matter of fact rather than opinion.
- B) It analyzes the unique sense of taste of the English.
- C) It indicates that opinion regarding culture shift over time.
- D) It makes a claim about one of the principal effects of culture.



In 2011 Ingrid L. Cripps and colleagues published a study concluding that ocean acidification has a strong effect on the behavior of *Pseudochromis fuscus*, a species of fish. However, Cripps and colleagues' study relied on a mean sample size of only about 9 fish. In a 2022 review of various scientists' conclusions about the impacts of ocean acidification on fish behavior, Josefin Sundin and colleagues caution that relying on such a relatively small sample size can increase the potential for biased analysis. Such analysis, in turn, can contribute to reports of exaggerated effects.

42

Which choice best states the main purpose of the text?

- A) To explain how the behavior of a fish species has changed over time
- B) To note a potential concern about the findings of a scientific study
- C) To present a debate between two research teams about a cause of ocean acidification
- D) To discuss an aspect of ocean acidification that is frequently overlooked

The following text is from Louise Erdrich's 1986 novel *The Beet Queen*. The narrator discusses her relationship with her young niece, Dot. Celestine, the narrator's sister-in-law, is Dot's mother.

Dot and I had a mental connection, I was sure of it. I understood things about the baby that her mother could not accept. For instance, she was never meant to be a baby. Dot was as impatient with babyhood as I. She tried at once to grow out of it. Celestine never saw that, because she, and only she, took pleasure in Dot's helpless softness. Only Celestine was saddened by her daughter's fierce progress. Day by day, Dot grew stronger. In her shopping-cart stroller she exercised to exhaustion, bouncing for hours to develop her leg muscles.

43

Which choice best states the main purpose of the text?

- A) To present the narrator's belief that she understands Dot better than Celestine does
- B) To speculate that when Dot is older, her personality will be like Celestine's
- C) To discuss what the narrator and Celestine do to amuse Dot
- D) To compare the narrator's physical appearance to the physical appearance of Celestine

## Answers: Main Purpose

Number	Answer	Number	Answer
1	A	2	B
3	B	4	A
5	D	6	D
7	B	8	D
9	B	10	C
11	D	12	A
13	B	14	C
15	B	16	D
17	D	18	A
19	A	20	B
21	D	22	D
23	B	24	D
25	A	26	C
27	A	28	B
29	D	30	D
31	D	32	B
33	B	34	A
35	B	36	B
37	D	38	B
39	C	40	C
41	A	42	B

Number	Answer	Number	Answer
43	A		



## Topic 9: Overall Structure

38 Questions

### DIRECTIONS

#### Must Know Tips:

- Passage and options should match in sequence. The first act in the passage should correspond to the first point in the options.
- Remove any options that are out of order compared to the passage.
- Don't read the entire passage.
- Don't read the question prompt (it's static).

**Recommended time per question in this section:** min: 45 sec, max: 1 min, avg: 52.5sec.  
(\*Exam level)

Horizontal gene transfer involves the exchange of genetic material between organisms not in a parent-offspring relationship. It is common among prokaryotes (single-celled organisms, such as the bacteria *Carnobacterium viridans* and *Lactococcus lactis*). The process can have the effect of increasing bacterial resistance to antibiotics; as such, an understanding of how to prevent horizontal gene transfer might result in the mitigation of dangerous pathogens (organisms that cause disease).

1

Which choice best describes the overall structure of the text?

- A) It provides a history of research into a biological process and suggests a direction for further investigation.
- B) It explains why an organism poses a threat and then suggests how that threat might be avoided.
- C) It depicts two organisms and presents their similarities and differences.
- D) It describes a biological process and explains why researching it is important.

In what is now Washington state, the Tulalip Tribes operate the Hibulb Cultural Center. Relying on traditional knowledge to guide the design of exhibits, this institution presents Tulalip history and culture to the tribes' citizens. The Turtle Mountain Band of Chippewa, a tribe in North Dakota, employs a similar strategy in its own cultural center. Both centers contrast with museums that aren't Indigenous-led; when displaying Indigenous artifacts, such museums tend to anticipate mainly non-Indigenous audiences and rely on Euro-centric strategies for designing exhibits.

2

Which choice best describes the overall structure of the text?

- A) It describes how tribal cultural centers designed exhibits of a particular set of artifacts, then analyzes how non-Indigenous institutions designed exhibits of the same artifacts.
- B) It examines how tribal citizens respond to exhibits at tribal cultural centers, then speculates how non-Indigenous audiences would respond to the same exhibits.
- C) It discusses two cultural centers operated by tribes, then compares them with non-Indigenous institutions that present Indigenous exhibits.
- D) It outlines an early strategy for exhibit design used by one tribal cultural center, then explains a newer strategy used by a different tribal cultural center.

Why do rusty-spotted cats purr but jaguars roar? Researchers hypothesize that this difference between the two feline species may be partly due to a U-shaped bone in their throats called the hyoid. Rusty-spotted cats, which are much smaller than jaguars, have a rigid hyoid that rumbles when the cat's larynx vibrates, resulting in a purr. By contrast, jaguars have a somewhat flexible hyoid, and the bone is attached to the skull with a stretchy ligament that rusty-spotted cats lack. These traits allow jaguars and most other species of big cats to produce powerful roars. The same traits may also prevent most big cats from purring.

3

Which choice best describes the overall structure of the text?

- A) The text compares the habitats of two species, then explains how those habitats are changing.
- B) The text presents a theory about two species, then discusses facts that weaken it.
- C) The text poses a question about two species, then presents a possible answer.
- D) The text describes a behavior shared by two species, then discusses other behaviors shared by them.

Community science, which involves professional scientists collaborating with amateur science enthusiasts to study a topic, is often an effective and engaging way to conduct research. It can allow people to assist with conservation efforts, spark youth interest in science, and increase the amount of data researchers can collect. This approach was essential to the success of a study by biologist Abbigail Merrill and colleagues of how butterfly color relates to flower choice, which included findings from hundreds of students and community members in northwestern Arkansas.

4

Which choice best describes the overall structure of the text?

- A) It introduces the topic of a scientific study, describes the study's importance, and then presents the study's results.
- B) It identifies a particular approach to research, lists some benefits of that approach, and then mentions a study in which that approach was used.
- C) It argues for a new approach to scientific research, comments on the public's opinion about the approach, and then describes how that approach was applied in a certain study.
- D) It describes the development of a type of scientific collaboration, shows how that type of collaboration has been used in a particular field of study, and then suggests future collaborative projects.



Joel Brown and colleagues showed that high moonlight intensity inhibits the activity of the Arizona pocket mouse (*Perognathus amplus*), a result explicable in terms of benefits and costs: greater lunar intensity may not enable the mice to increase foraging success enough to offset the higher chance of detection by predatory owls or hawks. Most other nocturnal mammals respond to lunar intensity variations similarly to Arizona pocket mice, but Azara's night monkeys (*Aotus azarae*) display the opposite pattern, as their heavy reliance on visual foraging results in a different balance of reward and risk.

5

Which choice best describes the overall structure of the text?

- A) It introduces an observation of a behavioral pattern, presents an explanation for the pattern, and then describes an exception to the pattern that casts doubt on that explanation.
- B) It describes and accounts for a finding, characterizes the finding as representative of a general pattern, and then describes and accounts for an exception to that pattern.
- C) It discusses two different responses to the same natural phenomenon, explains why one of those responses occurs, and then suggests that the other response still needs to be explained.
- D) It presents and explains a study result, indicates that the result is similar to the results of many other studies, and then attributes a conflicting study result to a difference in that study's methods.

The following text is from the 1895 poem "Marshlands" by Emily Pauline Johnson, a Kanienkahagen (Mohawk) writer also known as Tekahionwake.

Among the wild rice in the still lagoon,  
In monotone the lizard shrills his tune.  
The wild goose, homing, seeks a sheltering,  
Where rushes grow, and oozing lichens cling.  
Late cranes with heavy wing, and lazy flight,  
Sail up the silence with the nearing night.  
And like a spirit, swathed in some soft veil,  
Steals twilight and its shadows o'er the swale.  
Hushed lie the sedges, and the vapours creep,  
Thick, grey and humid, while the marshes sleep.

6

Which choice best describes the overall structure of the text?

- A) It identifies a location, then refers to a person living there.
- B) It sketches a setting by presenting a series of images of nature.
- C) It makes an extended comparison of nature to human emotions.
- D) It names animal species found in a place, then names plant species there.

Founded in Denver in 1991, the Museo de Las Americas is dedicated to art from Latin America, including the art of Indigenous peoples. Since its founding, it has acquired more than 4,800 objects for its permanent collection. More recently founded US-based institutions devoted to Latino cultures include the Latino Cultural Center. Located in Dallas, it focuses on Latino cultures and art in the United States.

7

Which choice best describes the overall structure of the text?

- A) It explains how one cultural institution was founded, then explains its plans to expand further.
- B) It describes a trend among cultural institutions in the United States, then identifies an institution that rejects that trend.
- C) It defines a certain type of cultural institution, then argues that this type of institution decisively influences society.
- D) It discusses one cultural institution, then discusses a more recently founded cultural institution.

With a shell that measured 1.7 meters, the extinct mollusk *Parapuzosia seppenradensis* is the largest ammonite in the fossil record. Ever since fossilized remains of this species were discovered in 1895, scientists have been perplexed by its size. After examining 154 ammonite fossils including some of *P. seppenradensis* from Montana and *Parapuzosia leptophylla* (a smaller ammonite species) from England, paleontologist Christina Ifrim, Andrew S. Gale, and colleagues concluded that *P. seppenradensis* may have evolved from *P. leptophylla* and gradually increased in size as larger ammonites were better able to escape being preyed on by mosasaurs.

8

Which choice best describes the overall structure of the text?

- A) It states a long-standing scientific assumption and then shows how recent research has overturned that assumption.
- B) It describes a scientific mystery and then discusses a research team's attempt to solve that mystery.
- C) It compares fossils found in Montana and England and then points out which of those fossils provides more information.
- D) It notes the discovery of a new ammonite species and then remarks on the importance of that discovery.

Like all species of baleen whales, the humpback whale feeds on tiny creatures known as krill by filtering water through bristlelike keratin structures called baleen plates. In this way, baleen whales can eat up to 30 percent of their total mass per day. And while no one would call the humpback whale small—it can have a mass as high as 30,000 kg—it is one of the smaller baleen whales and is much smaller than the northern right whale, which can weigh a whopping 80,000 kg and consume as much as 24,000 kg of krill per day.

9

Which choice best describes the overall structure of the text?

- A) It describes a characteristic shared by all baleen whales and then illustrates a difference between the humpback whale and the northern right whale that is relevant to that characteristic.
- B) It discusses a unique feature of the humpback whale and how the lack of that feature in the northern right whale explains differences in the two species' behavior.
- C) It draws a distinction between the sizes of the humpback whale and the northern right whale and then presents a feature that they have in common.
- D) It details a relationship between humpback and northern right whales and krill and then discusses an unexpected consequence of a change in baleen whale populations.

In 2011 Brynn M. Devine and colleagues published a study concluding that ocean acidification has a strong effect on the behavior of *Cheilodipterus quinquelineatus*, a species of fish. However, Devine and colleagues' study relied on a mean sample size of only about 25 fish. In a 2022 review of various scientists' conclusions about the impacts of ocean acidification on fish behavior, Timothy D. Clark and colleagues caution that relying on such a relatively small sample size can increase the potential for biased analysis. Such analysis, in turn, can contribute to reports of exaggerated effects.

10

Which choice best describes the overall structure of the text?

- A) It presents the result of a study, then raises a potential concern related to that result.
- B) It describes a characteristic of a fish species, then explains why that characteristic is noteworthy.
- C) It states a similarity between two scientific studies, then notes a difference between them.
- D) It summarizes a problem that scientists are investigating, then provides a possible solution to that problem.

The San Pedro is just one of approximately three million known historical shipwrecks spread throughout the world's oceans, and their impact on sea life and underwater ecosystems is of great interest to researchers. Leila Hamdan and colleagues were particularly curious about the effects of wooden shipwrecks on seafloor microbial communities. The researchers studied two wooden shipwrecks in the Gulf of Mexico by placing pieces of pine and oak between zero and 200 meters away from each shipwreck to collect samples of three kinds of microbes: bacteria, archaea, and fungi. They found that across the three microbial communities, peak diversity and richness was observed on pine and oak samples placed approximately 125 meters from the shipwrecks.

11

Which choice best describes the overall structure of the text?

- A) It introduces a study of microbial communities near shipwrecks that has received significant scholarly attention, summarizes the results of that study, and then describes a research team's reaction to the study.
- B) It notes a general scientific interest in shipwrecks' ecological effects, describes a specific study related to that interest, and then states one of the study's findings.
- C) It states the number of known shipwrecks, describes the historical significance of one of those shipwrecks, and then comments on the various microbes found at the shipwreck site.
- D) It names a famous historical shipwreck, describes the type of wood used to build that ship, and then explains how that wood type influences underwater microbial communities.

The Federalist Papers are a collection of 85 essays written by Alexander Hamilton, John Jay, and James Madison. They were published pseudonymously in the Independent Journal and other New York newspapers in 1787–88 and argue that New Yorkers should vote to ratify the proposed United States Constitution. Though the authorship of most of the individual essays is certain, that of a few is in question; for instance, while No. 15, "The Insufficiency of the Present Confederation to Preserve the Union," was surely penned by Hamilton, No. 52, "The House of Representatives," may have been written by either Hamilton or Madison.

12

Which choice best describes the overall structure of the text?

- A) The text mentions a collection of essays and then points out something about these essays that is not completely known.
- B) The text summarizes an argument made in a collection of essays and then suggests that the essays' authors didn't unanimously agree with the argument.
- C) The text lists the authors of a collection of essays and then notes that some of the essays were written by one person, while others were written by two people.
- D) The text describes why a collection of essays is notable and then details its publication history.

Community science, which involves professional scientists collaborating with amateur science enthusiasts to study a topic, is often an effective and engaging way to conduct research. It can offer insight into the daily life of a scientist, spark youth interest in science, and increase the amount of data researchers can collect. This approach was essential to the success of a study by biologist Abbigail Merrill and colleagues of how weather relates to a butterfly's flower choice, which included findings from hundreds of students and community members in northwestern Arkansas.

13

Which choice best describes the overall structure of the text?

- A) It describes the development of a type of scientific collaboration, shows how that type of collaboration has been used in a particular field of study, and then suggests future collaborative projects.
- B) It introduces the topic of a scientific study, describes the study's importance, and then presents the study's results.
- C) It identifies a particular approach to research, lists some benefits of that approach, and then mentions a study in which that approach was used.
- D) It argues for a new approach to scientific research, comments on the public's opinion about the approach, and then describes how that approach was applied in a certain study.

Jessica Murray is a researcher who studies canopy soil. Canopy soil is formed in a tree's branches (its canopy) when dead leaves and other falling things collect. This material breaks down, becoming canopy soil. Canopy soil helps preserve healthy nutrient cycling (how nutrients move through the environment) in rainforests. This benefit is one reason Murray is interested in the canopy soils in large bully trees in rainforests in Costa Rica.

14

Which choice describes the text's overall structure?

- A) It presents an idea and mentions a researcher who disagrees with that idea.
- B) It introduces a researcher and gives information about what she researches.
- C) It explains a disagreement between researchers and how it was resolved.
- D) It compares the sizes of two types of trees over several years.



President Richard Nixon is most famous for his participation in the 1970s Watergate political scandal, a convoluted tale of criminality and eroded ethics involving a constellation of associates such as political operative Jeb Stuart Magruder and Nixon's secretary Rose Mary Woods. But Nixon's legacy is complex: he has been praised for his role in affirming the sovereignty of tribal nations, and he once made an attempt at reforming United States health care policy that is arguably a precursor to the Affordable Care Act, which became law during the Barack Obama administration.

15

Which choice best describes the overall structure of the text?

- A) An achievement of a historical figure is described, and then reasons why that achievement is often disregarded by historians are suggested.
- B) Information supporting a particular perception of a historical figure is provided, and then additional facts are offered suggesting that this perception is an oversimplification.
- C) A list of historical figures is presented, followed by reasons why one should be considered more significant than the others.
- D) An assertion about a historical figure is made, and then evidence both for and against that assertion is presented.

In a study by Mika R. Moran, Daniel A. Rodriguez, and colleagues, residents of Panama City, Panama, and Caracas, Venezuela, were surveyed about parks in their cities. Of the 318 respondents from Panama City, 53.5% indicated that they use the city's parks, and of the 1,043 respondents from Caracas, 44.7% indicated using city parks. Given that the percentage of Panama City respondents who reported having access to desired nonpark amenities near parks was much lower than that reported by Caracas respondents, the difference in park use can't be explained by Panama City residents having more access to desired nonpark amenities near parks.

16

Which choice best describes the overall structure of the text?

- A) An unexpected finding is described, and then that finding is attributed to the method used to collect survey data in Panama City and Caracas.
- B) An unresolved question about park planning is described, and then examples from a study of Panama City and Caracas are used to answer that question.
- C) A study involving surveys in Panama City and Caracas is introduced, and then a possible explanation for some of the results is considered and rejected.
- D) A study of park use in Panama City is described, and then a similar study of park use in Caracas is analyzed to corroborate the findings of the Panama City study.



Catherine L. Cardelús is a researcher who studies canopy soil. Canopy soil is formed in a tree's branches (its canopy) when dead leaves and other falling things collect. This material breaks down, becoming canopy soil. Canopy soil helps preserve a healthy water cycle (how water moves through the environment) in rainforests. This benefit is one reason Cardelús is interested in the canopy soils in large bully trees in rainforests in Costa Rica.

17

Which choice best describes the text's overall structure?

- A) It introduces a researcher and gives information about what she researches.
- B) It presents an idea and mentions a researcher who disagrees with that idea.
- C) It compares the sizes of two types of trees over several years.
- D) It explains a disagreement between researchers and how it was resolved.

Mexican textile artist Victoria Villasana weaves stories of triumph, using her unique method of applying colorful yarn to photographs of people. In some works, Villasana focuses on celebrating cultural icons who are people of color, as she does in her depiction of musician and composer Prince. However, in other works, Villasana honors ordinary people, as she does in her captivating portrayal of a young girl sitting on a sidewalk. Villasana sees both of these approaches as ways of depicting the power and interconnectedness of all people.

18

Which choice best describes the overall structure of the text?

- A) It introduces Villasana's cultural background, describes how this background influences her art, and then outlines some of her ideas for future projects.
- B) It compares Villasana to other contemporary artists, indicates how two of her works are similar, and then emphasizes Villasana's enthusiasm for artistic collaboration.
- C) It explains how yarn has historically been used in art, details how Villasana uses yarn in her artworks, and then comments on the popularity of her work.
- D) It provides details about Villasana's artworks, discusses specific examples of her work, and relates them to one of her artistic goals.

Companies are providing consumers with more opportunities to purchase customized products than ever before. Whether buying customized sneakers, jewelry, or clothing, consumers can participate in the design of products to meet their specific needs and tastes. In turn, companies profit too: studies have shown that consumers are willing to pay more and wait longer for a customized product. Still, it can be difficult for companies to offer customization while keeping costs low, as the standard methods of mass production may not be able to accommodate making a unique product each time.

19

Which choice best describes the overall structure of the text?

- A) It discusses several recent innovations in product manufacturing and then suggests some potential applications of those innovations.
- B) It describes a company's recent success with new products and then explains multiple factors that may have contributed to that success.
- C) It presents two contrasting product-marketing techniques and then provides examples of one of those techniques.
- D) It introduces a trend in consumer products and then explains how the trend both benefits and poses a challenge to companies.

Spanning the 1920s to the 1980s, Mexican architect Luis Barragán's prolific career evolved through distinct phases. As epitomized by the house in Calle Pedro Loza in Guadalajara, many of Barragán's first projects integrated traditional Mexican building techniques into Mediterranean designs. Extensive travels abroad later sparked an engagement with modernist and functionalist aesthetics – styles whose emphasis on utility and whose repudiation of traditional architecture's more ornamental elements are readily apparent in Barragán's Pizarro Suárez House.

20

Which choice best describes the overall structure of the text?

- A) It presents a general claim about a particular architect's career, describes a design approach that typified the early stages of that career, and then explains a later shift in that career.
- B) It names a famous architect, outlines the primary aesthetic model evident in his work, and then offers examples illustrating his commitment to that model.
- C) It provides famous examples of an architect's projects, describes the original inspiration for those projects, and then suggests that lesser-known projects by that architect arose from other sources of inspiration.
- D) It summarizes the career of a particular architect, states how that architect's heritage influenced his career choice, and then emphasizes the impact of that architect's career.

In Ojibwe, an Indigenous language from the Great Lakes region of what are now the United States and Canada, wása means "far," whereas wa-wasa means "far apart." This phenomenon, in which an element of a root word is repeated, sometimes with modification, within another word that is related to the root word, is called reduplication. In this case, the element "wa" in wása gets repeated in wa-wasa. There are many examples of this type of reduplication in Ojibwe.

21

Which choice best describes the overall structure of the text?

- A) It describes the relationship between Ojibwe and several other languages, raises a question about the nature of that relationship, and then answers that question.
- B) It identifies the most frequently occurring words in Ojibwe, explains why it is difficult to translate those words into English, and then provides examples of languages other than English into which those words can be translated.
- C) It presents some specific words in Ojibwe, describes the general linguistic phenomenon exemplified by those words, and then states that this phenomenon occurs frequently in Ojibwe.
- D) It explains the phenomenon of reduplication, discusses why reduplication has been controversial among scholars, and then argues that an analysis of Ojibwe could help resolve that controversy.

The following text is adapted from George Eliot's 1857 short story "The Sad Fortunes of the Rev. Amos Barton." Mr. Ely is a clergyman in the town of Milby.

By the laity of Milby and its neighbourhood [Mr. Ely] was regarded as a man of quite remarkable powers and learning, who must make a considerable sensation in London pulpits and drawing-rooms on his occasional visit to the metropolis; and by his brother clergy he was regarded as a discreet and agreeable fellow. Mr. Ely never got into a warm discussion; he suggested what might be thought, but rarely said what he thought himself; he never let either men or women see that he was laughing at them, and he never gave any one an opportunity of laughing at him.

22

Which choice best describes the overall structure of the text?

- A) It relates how Mr. Ely had initially earned the respect of his colleagues and then recounts the circumstances under which their views of him began to change.
- B) It implies that Mr. Ely's neighbors are more naïve in their estimation of him than people in London are and then explains why his neighbors have been so easily misled.
- C) It presents the favorable opinion of Mr. Ely that other people hold and then describes the behaviors of Mr. Ely that enable him to maintain that favorable opinion.
- D) It highlights the disparity between Mr. Ely's public and private behavior and then conveys why he labors to obscure his true self from other people.

Mexican architect Luis Barragán's prolific career, which spanned the 1920s to the 1980s, evolved through distinct phases. After traveling to the United States and Europe in the early 1930s and immersing himself in a broader architectural discourse, Barragán shifted his style to incorporate principles of modernism, as seen in the Pizarro Suárez House. The project's unadorned geometric forms, typical of the modernist aesthetic, contrasted with the historically inspired architecture seen in his earlier projects in Guadalajara, such as the house in Calle Pedro Loza.

23

Which choice best describes the overall structure of the text?

- A) It summarizes the career of a particular architect, states how a journey influenced that architect's career, and then emphasizes how influential that architect's career has been.
- B) It presents a general claim about a particular architect's career, describes the early stages of the architect's career, and then explains a later shift in that career.
- C) It explains the design aesthetic of a particular architect, acknowledges the sources of those design choices, and then contrasts that aesthetic with the designs of earlier architects.
- D) It provides a general statement about the career of a particular architect, highlights a transition in that career, and then expounds on the ways that transition is evident in the architect's work.

Researchers César A. Hidalgo, Elisa Castañer, and Andres Sevtsuk created a computer model to predict the mix of hotels, bicycle stores, and other businesses found in a given neighborhood. How we define a neighborhood and its boundaries is subjective, so the team used a clustering algorithm to locate dense groupings of amenities that represent human-identified neighborhoods like Boston's North End. The predictive model, which incorporates this algorithm, is sure to be invaluable in determining the optimal mix of a city's amenities.

24

Which choice best describes the overall structure of the text?

- A) It describes how an algorithm can predict the success of certain businesses, discusses an example of a use of that algorithm, and suggests potential uses of the algorithm in other fields.
- B) It explains why urban planners are interested in understanding the locations of certain businesses, details a study that has addressed this question, and identifies one key finding.
- C) It summarizes trends in recent urban development, describes a potential problem for urban planners, and suggests a computational tool that can be used to solve that problem.
- D) It introduces a research team's study of urban neighborhoods, describes an aspect of the study's methodology, and suggests a potential application of the team's research.



Elio Sucena and colleagues have explored how convergent evolution—a phenomenon that occurs when the same trait evolves independently in two reproductively separate lineages—can result from a genetic mechanism shared by both lineages. Meanwhile, Patricia J. Wittkopp and colleagues have investigated how convergence occurs through different genetic mechanisms, but the relative prevalence of convergence through shared and different genetic processes is still poorly understood. This motivated biologists Delbert A. Green II and Cassandra G. Extavour to evaluate both types of convergence in a single study for their 2012 paper.

25

Which choice best describes the overall structure of the text?

- A) It explains a widespread assumption about a phenomenon, describes two studies that are based on that assumption, and explains why the assumption is unfounded.
- B) It discusses a particular study of a phenomenon, elaborates on how two other studies have approached this phenomenon in the past, and critiques the first study's approach.
- C) It details the development of a field of scientific inquiry, gives examples of three studies that were important to this development, and speculates on how future studies can develop these ideas.
- D) It describes a phenomenon, provides examples of two studies of that phenomenon, and mentions a third study of that phenomenon.

Paintings by the Florida Highwaymen—an informal collective of prolific landscape artists active in Florida during the 1950s and '60s—are recognizable by their reiteration of the same general compositional structures and subjects: breaking waves and backcountry pines, to name two. But there was room for individuation: Sam Newton's *Tangerine Sky*, for example, may resemble other Highwaymen paintings at first glance, but his works stand out for their more realistic and less impressionistic qualities.

26

Which choice best describes the overall structure of the text?

- A) It describes an aesthetic framework shared by a particular group of artists and then makes and illustrates the claim that individuals introduced variations within that framework.
- B) It describes the common perception that a particular group of artists' works are derivative and then provides a specific piece of evidence that reinforces that perception.
- C) It offers historical context that accounts for a particular group of artists' shared style and then indicates the circumstances under which several members of that group began exploring more unconventional themes.
- D) It explains how a particular group of artists began collaborating and then recounts how one member of that group became especially influential among them.

Spoken in Northern California, Karuk is an isolate, or a language that has no demonstrated relationship to other documented languages. The Haida language in Alaska is an isolate as well. However, most Native languages belong to language families, or groups of languages whose similarities can be attributed to shared descent from a single language spoken thousands of years ago. Curiously, isolates are more prevalent in regions where numerous nonisolates are also spoken. Thus, the geographical circumstances that favor the development of isolates may also drive diversification within language families.

27

Which choice best describes the overall structure of the text?

- A) It provides examples of isolates, distinguishes isolates from most other Native languages, then discusses a point of correspondence between isolates and nonisolates.
- B) It compares two isolates, sketches the process by which nonisolates evolve from isolates, then discusses how geography affects the development of isolates and nonisolates alike
- C) It defines the concepts of isolate languages and nonisolate languages, distinguishes between the regions where isolates and nonisolates are found, then accounts for this geographical distribution.
- D) It names several isolates and nonisolates, proposes a similarity between the two categories of languages, then identifies the respective regions where languages belonging to each category are likely to be found.

A team of researchers discovered that Matabele ants can identify an infected wound in a member of the colony and then treat the infection by covering the wound with antimicrobial secretions that the ants produce. The team found that the mortality rate for Matabele ants with infected injuries was reduced by 90% with this treatment, and they are hopeful that this discovery could aid in the development of new antibiotics for human use.

28

Which choice best describes the overall structure of the text?

- A) It identifies an issue concerning Matabele ants and then proposes a solution to address the issue.
- B) It describes unique properties of Matabele ants and then speculates on how those properties evolved.
- C) It summarizes research findings on Matabele ants and then identifies an area for further research.
- D) It introduces a study of Matabele ants and then explains the research methods used in the study.

In what is now Washington state, the Tulalip Tribes operate the Hibulb Cultural Center: relying on traditional knowledge to guide the design of exhibits, this institution presents Tulalip history and culture to the tribes' citizens. The Turtle Mountain Band of Chippewa, a tribe in North Dakota, employs a similar strategy in its own cultural center. Both centers contrast with museums that aren't Indigenous-led; when displaying Indigenous artifacts, such museums tend to anticipate mainly non-Indigenous audiences and rely on Eurocentric strategies for designing exhibits.

29

Which choice best describes the overall structure of the text?

- A) It describes how tribal cultural centers designed exhibits of a particular set of artifacts, then analyzes how non-Indigenous institutions designed exhibits of the same artifacts.
- B) It examines how tribal citizens respond to exhibits at tribal cultural centers, then speculates how non-Indigenous audiences would respond to the same exhibits.
- C) It discusses two cultural centers operated by tribes, then compares them with non-Indigenous institutions that present Indigenous exhibits.
- D) It outlines an early strategy for exhibit design used by one tribal cultural center, then explains a newer strategy used by a different tribal cultural center.

Why do rusty-spotted cats purr but jaguars roar? Researchers hypothesize that this difference between the two feline species may be partly due to a U-shaped bone in their throats called the hyoid. Rusty-spotted cats, which are much smaller than jaguars, have a rigid hyoid that rumbles when the cat's larynx vibrates, resulting in a purr. By contrast, jaguars have a somewhat flexible hyoid, and the bone is attached to the skull with a stretchy ligament that rusty-spotted cats lack. These traits allow jaguars and most other species of big cats to produce powerful roars. The same traits may also prevent most big cats from purring.

30

Which choice best describes the overall structure of the text?

- A) The text compares the habitats of two species, then explains how those habitats are changing.
- B) The text presents a theory about two species, then discusses facts that weaken it.
- C) The text poses a question about two species, then presents a possible answer.
- D) The text describes a behavior shared by two species, then discusses other behaviors shared by them.

The Lartington is just one of approximately three million known historical shipwrecks spread throughout the world's oceans, and their impact on sea life and underwater ecosystems is of great interest to researchers. Rachel Mugge and colleagues were particularly curious about the effects of wooden shipwrecks on seafloor microbial communities. The researchers studied two wooden shipwrecks in the Gulf of Mexico by placing pieces of pine and oak between zero and 200 meters away from each shipwreck to collect samples of three kinds of microbes: bacteria, archaea, and fungi. They found that across the three microbial communities, peak diversity and richness was observed on pine and oak samples placed approximately 125 meters from the shipwrecks.

31

Which choice best describes the overall structure of the text?

- A) It notes a general scientific interest in shipwrecks' ecological effects, describes a specific study related to that interest, and then states one of the study's findings.
- B) It states the number of known shipwrecks, describes the historical significance of one of those shipwrecks, and then comments on the various microbes found at the shipwreck site.
- C) It names a famous historical shipwreck, describes the type of wood used to build that ship, and then explains how that wood type influences underwater microbial communities.
- D) It introduces a study of microbial communities near shipwrecks that has received significant scholarly attention, summarizes the results of that study, and then describes a research team's reaction to the study.



Community science, which involves professional scientists collaborating with amateur science enthusiasts to study a topic, is often an effective and engaging way to conduct research. It can allow people to assist with conservation efforts, spark youth interest in science, and increase the amount of data researchers can collect. This approach was essential to the success of a study by biologist Abbigail Merrill and colleagues of how butterfly color relates to flower choice, which included findings from hundreds of students and community members in northwestern Arkansas.

32

Which choice best describes the overall structure of the text?

- A) It introduces the topic of a scientific study, describes the study's importance, and then presents the study's results.
- B) It identifies a particular approach to research, lists some benefits of that approach, and then mentions a study in which that approach was used.
- C) It argues for a new approach to scientific research, comments on the public's opinion about the approach, and then describes how that approach was applied in a certain study.
- D) It describes the development of a type of scientific collaboration, shows how that type of collaboration has been used in a particular field of study, and then suggests future collaborative projects.

With its combination of country and pop influences, "Here You Come Again" is typical of Dolly Parton's recordings in the late 1970s and first half of the 1980s. Through songs bridging these two genres, she achieved her greatest commercial successes. A decade earlier, however, Dolly had first established herself as a songwriter steeped in the traditional folk music of the Blue Ridge Mountains, where she was born and raised. The influence of the ballads of this region can be heard in the word choice and subject matter of the lyrics to "Jolene," one of her best songs from this period.

33

Which choice best describes the overall structure of the text?

- A) It explores Dolly's lifelong interest in folk music, then debates whether pop music influenced "Jolene."
- B) It discusses a particular period in Dolly's recording career, then considers the music in an earlier period of her career
- C) It enthusiastically recommends Dolly's earliest recordings, then expresses disappointment with her later recordings
- D) It praises "Here You Come Again," then notes how remarkably similar that song is to a song that Dolly recorded earlier in her career



In a study by Mika R. Moran, Daniel A. Rodriguez, and colleagues, residents of Bogotá, Colombia, and Fortaleza, Brazil, were surveyed about parks in their cities. Of the 1,121 respondents from Bogotá, 71.9% indicated that they use the city's parks, and of the 938 respondents from Fortaleza, 35.7% indicated using city parks. Given that the percentage of Bogotá respondents who reported having access to desired nonpark amenities near parks was much lower than that reported by Fortaleza respondents, the difference in park use can't be explained by Bogotá residents having more access to desired nonpark amenities near parks.

34

Which choice best describes the overall structure of the text?

- A) A study of park use in Bogotá is described, and then a similar study of park use in Fortaleza is analyzed to corroborate the findings of the Bogotá study.
- B) A study involving surveys in Bogotá and Fortaleza is introduced, and then a possible explanation for some of the results is considered and rejected.
- C) An unexpected finding is described, and then that finding is attributed to the method used to collect survey data in Bogotá and Fortaleza.
- D) An unresolved question about park planning is described, and then examples from a study of Bogotá and Fortaleza are used to answer that question.

Some researchers posit that the species inhabiting the South Pacific island of Grande Terre belong to clades that predate the island's split from remnants of the former supercontinent Gondwana around 80 million years ago. A study conducted by Michael A. Sundue et al. found, however, that the crown age (the age of the most recent common ancestor of all living and extinct species in the clade) of the clade of Grammitis ferns on Grande Terre is 8.5 million years; Sundue et al. further found that the crown age of the clade of Grammitis ferns in the South Pacific generally is approximately 10.0 million years.

35

Which choice best describes the overall structure of the text?

- A) It presents a possibility that some researchers have raised, then describes a study that clarifies their reasons for doing so.
- B) It explains a view some researchers have advanced, then discusses study results that led them to reconsider that view.
- C) It identifies a discrepancy between a hypothesis some researchers have proposed and related research findings, then explains that discrepancy.
- D) It describes an idea that some researchers have put forward, then presents study results that are incompatible with that idea.

Adelaide is one of many cities that have installed pontoons or other hardening structures to protect their shorelines against coastal hazards. To assess how birds respond to shoreline hardening and other landscape alterations, Diann Prosser et al. used a tool known as the Index of Waterbird Community Integrity to survey bird communities consisting of sixty-four species, including the tundra swan and the great blue heron, in the Chesapeake Bay on the US East Coast. The researchers concluded that shoreline hardening more negatively affects birds than does land development for uses such as housing.

36

Which choice best describes the overall structure of the text?

- A) It introduces a certain technique, mentions the hypothesis of a study into an ecological consequence of that technique, and presents evidence in support of that study's hypothesis.
- B) It provides an example of a location that has adopted a particular approach, explains the methodology of a study into an ecological effect of that approach, and describes a finding of that study.
- C) It makes a claim about the use of a specific strategy, describes field observations of a consequence of that strategy in a particular ecosystem, and makes a supposition based on those observations.
- D) It presents a solution to a commonly occurring problem, summarizes the procedures used by a group of researchers studying the environmental impact of that solution, and notes the significance of the researchers' findings.

*The Reckoning and Resilience* (2022) exhibition at Duke University's Nasher Museum of Art in Durham, North Carolina, was curated to feature the work of thirty North Carolina artists. The included artists represent a wide variety of artistic disciplines, from painters such as Juan Logan to the sculptor Stephen Hayes. In its inclusion of many borrowed works, the exhibition is atypical for the Nasher Museum, which tends to curate its exhibitions around the permanent collection of contemporary art that it owns.

37

Which choice best describes the overall structure of the text?

- A) It explains how an art exhibition differs from many other exhibitions, then analyzes the significance of that difference.
- B) It presents the unusual goals curators had for an art exhibition, then evaluates whether the curators achieved those goals.
- C) It provides an overview of an art exhibition, then explains what makes the exhibition unusual for the institution that organized it.
- D) It discusses the wide range of disciplines represented in an art exhibition, then explains why curators included works in those disciplines.

The following text is adapted from William Shakespeare's 1597 play *The Tragedy of King Richard III*. Richard is reflecting on the recent arrest of his brother, the Duke of Clarence, on suspicion of treason against King Edward IV. Derby, Hastings, Buckingham, Rivers, Dorset, and Grey are also members of the English nobility.

RICHARD: I do the wrong, and first begin to brawl.

The secret mischiefs that I set [flowing]  
I lay unto the grievous charge of others.  
Clarence, whom I indeed have cast in darkness,  
I do bewep to many simple [gullible people],  
Namely, to Derby, Hastings, Buckingham;  
And tell them 'tis the Queen and her allies  
That stir the King against the Duke my brother.  
Now they believe it, and withal whet me  
To be revenged on Rivers, Dorset, Grey.

38

Which choice best describes what happens in the text?

- A) Richard attributes Clarence's troubles to both his own secret plotting and the distrust of Clarence that the queen and her allies Derby, Hastings, and Buckingham have planted in the king's mind.
- B) Richard describes having wept as he informed Derby, Hastings, and Buckingham that the queen and her allies convinced the king to act against Clarence, and says that the earnestness of his grief caused them to accept his version of events.
- C) Richard acknowledges that his mischievous nature has spurred him to commit misdeeds in the past, including instigating enmity between the king and Clarence, but he reports that he has hitherto not lost the trust of the queen and her allies.
- D) Richard indicates that he has pretended to be aggrieved about Clarence's situation and has proclaimed it to be the fault of the queen and her allies, but in reality, he has caused the hostility the king feels toward Clarence.

## Answers: Overall Structure

Number	Answer	Number	Answer
1	D	2	C
3	C	4	B
5	B	6	B
7	D	8	B
9	C	10	A
11	B	12	A
13	C	14	B
15	B	16	C
17	A	18	D
19	D	20	A
21	C	22	C
23	D	24	D
25	D	26	A
27	A	28	C
29	C	30	C
31	A	32	B
33	B	34	B
35	D	36	B
37	C	38	D

## Topic 10: Underlined Purpose

74 Questions

### DIRECTIONS

#### Must Know Tips:

- Try to find the purpose of the underlined part, as well as all other sentences around it.
- Different options tell the purpose of different sentences in the passage.
- Pay attention to the words before, after, and following the underlined part in the options.
- Don't read the question prompt (it's static).

**Recommended time per question in this section:** min: 45 sec, max: 1 min 25 sec, avg: 1 min 5 sec. (\*Exam level)

The following text is adapted from Matthew Arnold's 1869 nonfiction book "Culture and Anarchy".

The Times [a British newspaper], replying to some foreign strictures on the dress, looks, and behavior of the English abroad, urges that the English ideal is that everyone should be free to do and to look just as he likes. But culture indefatigably tries, not to make what each raw person may like the rule by which he fashions himself; but to draw ever nearer to a sense of what is indeed beautiful, graceful, and becoming, and to get the raw person to like that.

1

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

- A) It suggests that opinions regarding culture change over time.
- B) It asserts that the English are not as well known for their sense of taste as they ought to be.
- C) It details an example that supports the author's primary claim.
- D) It presents an opinion with which the author disagrees.

The following text is Rainer Maria Rilke's 1897 poem "Evening" (translated by Jessie Lamont in 1918).

The bleak fields are asleep,  
My heart alone wakes;  
The evening in the harbour  
Down his red sails takes.  
Night, guardian of dreams,  
Now wanders through the land;  
The moon, a lily white,  
Blossoms within her hand.

2

Which choice best states the function of the undeclined portion in the text as a whole?

- A) It conveys the speaker's sense that he is alone while experiencing the evening.
- B) It shows that the speaker would rather look at the fields than at the water.
- C) It indicates the speaker's disappointment that other people dislike rural settings.
- D) It explains why the speaker has woken up from sleeping.



The following text is from Mark Twain's 1881 novel, *The Prince and the Pauper*.

"In the ancient city of London, on a certain autumn day in the second quarter of the sixteenth century, a boy was born to a poor family of the name of Canty, who did not want him. On the same day another English child was born to a rich family of the name of Tudor, who did want him. All England wanted him too. England had so longed for him, and hoped for him, and prayed God for him, that, now that he was really come, the people went nearly mad for joy. Mere acquaintances hugged and kissed each other and cried."

3

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

- A) It establishes a contrast with the previous character description.
- B) It introduces a character description continued in the following sentences.
- C) It demonstrates the setting that is explored in the rest of the paragraph.
- D) It expands upon the characterization in the former sentence.

Known for the albums *Quiet Nights* and *Miles Ahead*, jazz trumpeter Miles Davies collaborated several times with pianist Gil Evans. Their 1958 adaptation of George Gershwin's opera *Porgy and Bliss* bears little resemblance to the 1935 original. Davies and Evans felt no desire to please listeners expecting an exact duplication of the opera. They omitted parts, such as the aria "I got plenty of Nuthin'," and sometimes made only brief gestures toward Gershwin's melodies. But Davies and Evans' willingness to recompose Gershwin's work led to one of the most enduring albums in Davis's catalog.

4

Which choice best describes the function of the underlined part?

- A) It shows how two artists benefited from ignoring certain conventions.
- B) It proposes a reason why one work of art is widely thought to be more successful than another.
- C) It underlines an assertion made later in the text.
- D) It presents examples to support a claim made earlier in the text.



In Hoocak, an Indigenous language from the Mid-Atlantic region of what is now the United States, okayeke means "bad," whereas ati okayeye'tesel means "bad houses." This phenomenon, in which an element of a root word is repeated, sometimes with modification, within another word that is related to the root word, is called reduplication. In this case, the element "ye" in okayake gets repeated in ati okayeye'tesel. There are many examples of this type of reduplication in Hoocak.

5

Which choice best describes the function of the underlined part?

- A) It elaborates on the description of reduplication by exemplifying how it works in the specific Hoocak word mentioned earlier.
- B) It provides English translation of the Hoocak word mentioned earlier.
- C) It acknowledges that Hoocak has some important exceptions to the general pattern described earlier.
- D) It emphasizes how frequently reduplication occurs in Hoocak.

Mexican textile artist Victoria Villasana weaves stories of triumph, using her unique method of applying colorful yarn to photographs of people. In some works, Villasana focuses on celebrating cultural icons who are people of color, as she does in her depiction of activist Ryu Gwansun. However, in other works, Villasana honors ordinary people, as she does in her captivating portrayal of young girl sitting on a sidewalk. Villasana sees both of these approaches as ways of depicting the power and interconnectedness of all people

6

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

- A) To emphasize that Villasana prefers to focus on famous figures in her work.
- B) To offer an overview of Villasana's artistic style.
- C) To demonstrate that the Villasana collaborates frequently with other artists.
- D) To provide an example of an everyday individual whom Villasana has portrayed in her work.

The following text is from Lady Gregory's 1904 play *Spreading the News*. Mrs. Tarpey, Bartley, and Mrs. Fallon have been buying and selling goods at the local fair.

MRS. TARPEY: Good morrow, Bartley Fallon; good morrow, Mrs. Fallon. Well, Bartley, you'll find no cause for complaining to-day; they are all saying it was a good fair.

BARTLEY: (Raising his voice.) It was not a good fair. Mrs. Tarpey. It was a scattered sort of a fair. If we didn't expect more, we got less. That's the way with me always; whatever I have to sell goes down and whatever I have to buy goes up. If there's ever any misfortune coming to this world, it's on myself it pitches, like a flock of crows on seed potatoes.

7

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

- A) It presents a vivid image to emphasize a claim that Bartley makes.
- B) It describes an event that Bartley observed at the fair.
- C) It expresses doubt about the truth of a claim that Bartley made.
- D) It indicates the degree to which Mrs. Tarpey doubts a certain event will occur.

When people think of dinosaurs with feathers, they typically think of winged dinosaurs, such as the four-winged Microraptor. However, many dinosaurs that didn't have wings also had feathers on their bodies. For instance, research indicates that the wingless, speedy Ornithomimus likely had feathers.

8

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

- A) It points out several weaknesses in the theory presented in the previous sentence.
- B) It provides a specific example of the dinosaurs described in the previous sentence.
- C) It identifies the researchers who made the discovery mentioned in the previous sentence.
- D) It explains the scientific debate about the finding discussed in the previous sentence.

The novel “My Heart Is a Chainsaw” confirmed that Stephen Graham Jones is one of the most talented writers of horror fiction today. By featuring main characters who are Blackfeet, like Jones himself, the novel also helped to ensure that Indigenous people have a place within the horror genre. But Jones is hardly the only Indigenous voice in horror: Métis author Cherie Dimaline has also written in the genre. Her acclaimed 2019 novel *Empire of Wild* is set in a Métis community in southern Canada

9

Which choice best describes the function of the underlined sentence?

- A) It highlights the significance of the portrayal of Indigenous people in *My Heart Is a Chainsaw*.
- B) It challenges the widely held view that Stephen Graham Jones based *My Heart Is a Chainsaw* on events in his own life.
- C) It asks why so many readers who don't enjoy the horror genre have purchased *My Heart Is a Chainsaw*.
- D) It predicts that non-Indigenous authors will include more Indigenous characters in their work.

*Dubautia waialealae* is a species in a family of plants known collectively as the silversword alliance, all of which grow only on the Hawaiian Islands. Members of this alliance exhibit an extraordinary range of phenotypes, with some species maturing into vines and others into shrubs and trees. All species in the alliance descended from a single ancestral tarweed plant that arrived on the islands around 5 million years ago. The tarweed's descendants diversified into distinct species as they adapted to live in the wide variety of habitats found on the Hawaiian Islands.

10

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

- A) It lists species from a family of plants found only on the Hawaiian Islands.
- B) The sentence explains the unique nature of the researchers' hypothesis.
- C) The sentence summarizes the debate presented in the text.
- D) The sentence identifies the location of a bone in felines.

The Card Game is a painting by Jacob Lawrence, dated 1953. It's part of the full collection of the SCAD Museum of Art in Savannah, Georgia. A digital image of it can also be found in an online collection. In a paper, a student claims that people usually spend more time viewing a work of art in a museum than they do online.

11

Which finding, if true, would most directly support the underlined claim?

- A) Most people spend about three minutes viewing The Card Game at the museum and only about one minute viewing it online.
- B) The Card Game isn't the only work of art by Jacob Lawrence that has been put online.
- C) Most people who go to museums in Savannah are visiting from other places.
- D) More than one museum has works of art by Jacob Lawrence in its full collection.

In Hoocak, an Indigenous language from the Midwest region of what is now the United States, *paras* means "flat," whereas *paraparać* means "square." This phenomenon, in which an element of a root word is repeated, sometimes with modification, within another word that is related to the root word, is called reduplication. In this case, the element "para" in *paras* gets repeated in *paraparać*. There are many examples of this type of reduplication in Hoocak.

12

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

- A) It emphasizes how frequently reduplication occurs in Hoocak.
- B) It acknowledges that Hoocak has some important exceptions to the general pattern described earlier.
- C) It elaborates on the discussion of reduplication by explaining how it works in the specific Hoocak words introduced earlier.
- D) It provides English translations of the Hoocak words mentioned earlier.

In a study by Mika R. Moran, Daniel A. Rodriguez, and colleagues, residents of Mexico City, Mexico, and Buenos Aires, Argentina, were surveyed about parks in their cities. Of the 562 respondents from Mexico City, 77.6% indicated that they use the city's parks, and of the 683 respondents from Buenos Aires, 69.9% indicated using city parks. Given that the percentage of Mexico City respondents who reported living within a 10-minute walk of a park was much lower than that of reported by Buenos Aires respondents, greater proximity alone can't explain the difference in park use.

13

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

- A) It marks a shift from a discussion of the researchers' conclusion to a discussion of their methods.
- B) It identifies the nature of a relationship that is significant to the text's conclusion.
- C) It provides context to help readers understand the scope of the researchers' survey.
- D) It introduces a counterexample to the scenario described earlier in the text.

The Paul Laurence Dunbar House in Dayton, Ohio, is the house where Paul Laurence Dunbar lived for two years and wrote his later poetry collections. Now the house is a museum dedicated to Dunbar's life and writings, visitors travel to this museum to feel more connected to an author they admire. To encourage that sense of connection, the museum's curators have set up exhibits with furnishings owned by Dunbar. Such exhibits help visitors understand day-to-day life in the house where Dunbar felt inspired.

14

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

- A) It states the current purpose of a building mentioned in the previous sentence.
- B) It summarizes the career of an author mentioned in the previous sentence.
- C) It recommends the works of an author mentioned in the previous sentence.
- D) It recounts the history of a place mentioned in the previous sentence.



On painter William H. Johnson's return to the United States in 1938 after a decade in Europe, his style underwent an abrupt transformation. Turning away from landscapes painted in an expressionist style—a style that often involves using fluid, distorted shapes and thick, textured brushstrokes to express the artist's subjective experience of reality—Johnson began painting portraits of Black Americans in a bold new way. Evocative of African sculpture and American and Scandinavian folk art, these portraits feature flat, deliberately oversimplified figures in a vibrant but limited color palette.

15

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

- A) It elaborates on the previous sentence's statement about a transitional moment in Johnson's artistic career.
- B) It provides information about Johnson's travels in support of a claim about his artistic influences, which is advanced in the following sentence.
- C) It recounts a moment in Johnson's personal life that enabled the success of his subsequent career, which is summarized in the following sentence.
- D) It presents evidence that calls into question the previous sentence's characterization of Johnson's artistic development.

When people think of dinosaurs with feathers, they typically think of winged dinosaurs, such as the four-winged Microraptor. However, many dinosaurs that didn't have wings also had feathers on their bodies. For instance, research indicates that the wingless, speedy Ornithomimus likely had feathers.

16

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

- A) It reveals that the dinosaurs mentioned earlier in the text used their feathers for an important purpose.
- B) It gives an example of a dinosaur with the characteristics mentioned earlier in the text.
- C) It defines a term related to the type of dinosaur feathers mentioned earlier in the text.
- D) It indicates that the dinosaurs mentioned earlier in the text weren't the only ones that had feathers.



The following text is from Annie Dillard's 1987 autobiographical novel *An American Childhood*. The narrator is a young girl living in Pittsburgh.

I walked. My mother had given me the freedom of the streets as soon as I could say our telephone number. I walked and memorized the neighborhood. I made a mental map and located myself upon it. At night in bed, I rehearsed the small world's scheme and set challenges: find the store using backyards only; imagine a route from the school to my friend's house.

17

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

- A) It describes the narrator trying to memorize her telephone number.
- B) It provides examples of what the narrator thinks about at night.
- C) It gives directions to the narrator's favorite local store.
- D) It portrays the narrator's relationship with her mother.

Researchers Narelle Haworth and Amy Schramm studied bicycling behavior in Queensland, Australia. Haworth and Schramm asked adult bike riders questions about their level of experience, reasons for riding a bike, and route preferences. The researchers claim that experienced riders who mainly bike to work tend to prefer routes that reduce their travel time.

18

Which survey response from a bike rider in Queensland would best support the underlined claim?

- A) "I have a bike, but I don't ride it very often. When the weather is nice, I sometimes use my bike to go into town to do some shopping."
- B) "I usually bike to work, but I'm taking the bus now because my bike has a broken part that needs to be fixed."
- C) "I just got a new bike, and I'm looking forward to going on rides with my friends soon."
- D) "I bike to my job every day. There's a nice bike path that goes through a park, but I use the bike lane on the main road because it's faster."

Amsterdam has high pedestrian traffic, but simply replicating a feature of Amsterdam associated with walkability-e.g., its high number of relatively short blocks-may be insufficient to induce increased walking in other cities. As urbanist Mariela Alfonzo argues, our understanding of individuals' decision-making about whether to walk is insufficiently robust: some studies emphasize the role of climate conditions, others the role of recreational amenities, and so on, but walking decisions are made in complex contexts in which multiple conditions and needs inform individuals' choices.

19

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

- A) It illustrates a scholarly disagreement described earlier in the sentence.
- B) It summarizes the findings of studies whose methods are discussed earlier in the sentence.
- C) It acknowledges a potential objection to the argument presented earlier in the sentence.
- D) It elaborates on a claim presented earlier in the sentence.

The following text is from Anne Spencer's 1922 poem "Translation."

We trekked into a far country,  
My friend and I.  
Our deeper content was never spoken,  
But each knew all the other said.  
He told me how calm his soul was laid  
By the lack of anvil and strife.  
"The wooing kestrel," I said, "mutes his mating-note  
To please the harmony of this sweet silence."

20

Which choice best describes the function of the reference to the "wooing kestrel" (a type of bird) in the text as a whole?

- A) It emphasizes the speaker's belief that her friend is not sharing his true feelings with her.
- B) It suggests that nature has secrets that humans are fundamentally incapable of discovering.
- C) It illustrates the assertion that peace is a subjective state rather than an objective one.
- D) It presents the natural world as aligning with the experience of the speaker and her friend.

Why do ocelots purr but jaguars roar? Researchers hypothesize that this difference between the two feline species may be partly due to a U-shaped bone in their throats. This bone is called the hyoid. Ocelots, which are much smaller than jaguars, have a rigid hyoid that rumbles when the cat's larynx vibrates, resulting in a purr. By contrast, jaguars have a somewhat flexible hyoid, and the bone is attached to the skull with a stretchy ligament that ocelots lack. These traits allow jaguars and most other species of big cats to roar. The same traits may also prevent most big cats from purring.

21

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

- A) The sentence explains the unique nature of the researchers' hypothesis.
- B) The sentence identifies the location of a bone in felines.
- C) The sentence introduces a term that is used in the discussion that follows.
- D) The sentence summarizes the debate presented in the text.

Humans aren't the only ones who use tools. Other animals also find tools helpful. Octopuses use two halves of a seashell to provide protection or a place to hide, and despite sometimes being thought of as simple, many birds make clever use of tools as well. Striated herons have been observed using breadcrumbs and other lures to attract fish to the water's surface, making it easier for the herons to catch them.

22

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

- A) It explains that humans use tools for many different tasks.
- B) It argues that octopuses use tools more often than other animals do.
- C) It provides one example of tool use in a nonhuman animal.
- D) It emphasizes that octopuses are smarter than birds.

The food industry has long used thermal technologies to preserve food in large batches. Recent advancements in infrared heating were made through research in Mexico on the preservation of bean flour. Infrared heating is generally considered to be an improvement over more conventional thermal preservation methods: whereas conventional methods transfer energy from the surface of a food to its interior, infrared heating uses high-intensity infrared light to generate heat within the food itself, thus reducing industrial cooking times.

23

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

- A) It emphasizes the simplicity of infrared heating technologies.
- B) It explains why conventional heating methods are popular in commercial applications and proposes a shift away from these methods.
- C) It suggests that there are possible flaws in infrared heating technologies that have not yet been well researched.
- D) It identifies an advantage that infrared heating has over conventional thermal preservation methods.

Historians have argued that a crucial component of the Civil Rights Movement's success in the 1960s was the Southern Christian Leadership Conference's Citizen Education Program (CEP), which invited promising activists from across the South to its one-week training sessions in Dorchester, Georgia. Led by experienced organizers such as Dorothy Cotton and Septima Clark, CEP attendees— more than 7,000 in all— participated in workshops on topics ranging from public speaking to legal doctrine before returning home and using their newly acquired knowledge to spearhead local civil rights initiatives.

24

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

- A) It establishes that criticism of the CEP was limited to a few individuals in the Southern Christian Leadership Conference.
- B) It underscores the extent of the CEP's impact on the Civil Rights Movement of the 1960s.
- C) It illustrates the CEP organizers' efforts to educate participants on a wide variety of topics.
- D) It suggests that CEP attendees held a diverse array of opinions about the Southern Christian Leadership Conference's political philosophy.

Shedding light on the thermal biology of fungi, research by Radamés Cordero et al. indicates that certain mushrooms (including *Marasmius capillaris* and species from the genus *Russula*) can achieve a hypothermic state through evaporative cooling. Effects of this thermoregulation were not limited to the fungi's fruiting bodies and root-like hyphae: temperature reductions were observed in the air immediately surrounding the mushrooms. Though slight, the reductions inspired an air-cooling device; using approximately 400 grams of mushrooms, the team's prototype lowered the air temperature in a controlled environment by 10°C in forty minutes.

25

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

- A) It presents a tangential finding about thermoregulation in certain fungal species that the experiment described later in the text was designed to explain.
- B) It provides empirical evidence to bolster the claim made earlier in the text that certain fungal species maintain a hypothermic state.
- C) It identifies an unexpected observation that motivated the study of evaporative cooling in fungi that is discussed earlier in the text.
- D) It establishes a finding central to the text's discussion of a practical application resulting from the team's study of fungal thermal biology.

The following text is from Virginia Woolf's 1919 novel *Night and Day*. The text describes a gathering of young artists and intellectuals.

One person after another rose, and, as with an ill-balanced axe, attempted to hew out his conception of art a little more clearly, and sat down with the feeling that, for some reason which he could not grasp, his strokes had gone away. As they sat down they turned almost invariably to the person sitting next them, and rectified and continued what they had just said in public.

26

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

- A) To reveal individuals' uncertainty about the meaning of a particular artwork.
- B) To emphasize the extent of individuals' struggles to articulate thoughts on art
- C) To highlight the physical effort involved in individuals' construction of large-scale works of art
- D) To draw attention to individuals' discontent with the group's conversation about art



In Egypt, use of solid fuel (e.g., coal, wood) as a share of total household fuel use fell by more than 90 percent between 2000 and 2015; such shifts are typically explained by appeal to the energy ladder, a model holding that fuel choice is mediated mainly by household income (specifically, high-technology fuels displace solid fuels as incomes rise). Alemu Mekonnen and Gunnar Köhlin's study of fuel use in Ethiopia shows how reductive this model is, however: although income of course constrained fuel choice, several circumstances, including the local availability of different fuel sources, influenced decisions.

27

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

- A) It anticipates a potential objection to the description of a model that the text provides.
- B) It admits the superficial plausibility of an assumption that the text presents as lacking any empirical support.
- C) It acknowledges the role played by a factor whose importance the text suggests has been overstated.
- D) It concedes that a finding may not appear to support the main view that the text advances.

In Nuxalk, an Indigenous language from the Pacific Northwest region of what are now the United States and Canada, wats' means "a dog," whereas wawats'ii means "a small or cute dog." This phenomenon, in which an element of a root word is repeated, sometimes with modification, within another word that is related to the root word, is called reduplication. In this case, the element "wa" in wats' gets repeated in wawats'ii. There are many examples of this type of reduplication in Nuxalk.

28

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

- A) It explains where the language discussed in the text is from.
- B) It provides English translations of the Nuxalk words discussed in the text.
- C) It contrasts the language discussed in the text with other languages.
- D) It provides a general definition of the phenomenon discussed in the text.



Joseph A. Walker's award-winning play *The River Niger* was produced in 1972 by the groundbreaking Negro Ensemble Company (NEC). NEC cofounder Douglas Turner Ward, who worked as an actor, director, and playwright, had met actor and producer Robert Hooks while they were performing in a 1960 touring production of Lorraine Hansberry's play *A Raisin in the Sun*. Together, they envisioned a theater company that would nurture and showcase the work of Black theater professionals. Since NEC's founding in 1967, its workshops and performances have given Black playwrights, including Walker, a forum for their compelling stories.

29

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

- A) It illustrates the importance of an organization mentioned in the text.
- B) It compares the achievements of two people discussed later in the text.
- C) It argues against the claim made earlier in the text.
- D) It provides additional information about a person discussed in the text.

In 2023 literary scholar Jeremy Douglass cautioned technology investors and enthusiasts who predict conventional books' ultimate displacement by newer forms of media. Douglass observed that the concept of an "interactive" text is much older than technologists assume, extending back to the first time readers scratched notes into a text's margins. In addition, newer media, such as video games, haven't replaced older forms of entertainment, such as comic books, but rather exist alongside them. Douglass believes that rather than supplanting books, technology is simply making new forms of expression possible.

30

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

- A) It explains the basis for the claim made by the technologists mentioned in the text.
- B) It suggests that academics are better suited than investors to see the potential uses of contemporary interactive texts.
- C) It challenges the stance of the investors and enthusiasts who are mentioned earlier in the text.
- D) It provides a historical anecdote about the technological challenges involved in reading the earliest interactive texts.

The following text is from Sarojini Naidu's 1896 poem "Alabaster."

Like this alabaster box whose art  
Is frail as a cassia-flower, is my heart,  
Carven with delicate dreams and wrought  
With many a subtle and exquisite thought.

31

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

- A) They indicate potential reactions, one hoped for and one feared, to a decision the speaker considers throughout the text.
- B) They provide examples, one literal and one figurative, of a change that the speaker describes throughout the text.
- C) They describe the subjects, one physical and one abstract, of a comparison that extends throughout the text.
- D) They symbolize two viewpoints, one cautious and one impulsive, that are contrasted throughout the text.

The Reckoning and Resilience (2022) exhibition at Duke University's Nasher Museum of Art in Durham, North Carolina, is dedicated to the work of thirty North Carolina artists, including Juan Logan, Cornell Watson, and Stephen Hayes. Although the Nasher Museum has focused exhibitions entirely on North Carolina artists before, as it did previously in the photography exhibition Across County Lines, the breadth of disciplines in Reckoning and Resilience sets it apart.

32

Which finding, if true, would most directly support the underlined claim?

- A) Reckoning and Resilience and Across County Lines were curated to emphasize works that are not owned by the Nasher Museum.
- B) The Nasher Museum has a world-class collection of contemporary art that includes many paintings and sculptures from artists both inside and outside North Carolina.
- C) Logan is a painter, Watson is a photographer, and Hayes is a sculptor.
- D) Watson is a North Carolina photographer, as were all of the artists featured in Across County Lines.

When people think of dinosaurs with feathers, they typically think of winged dinosaurs, such as the bat-like Yi qi. However, many dinosaurs that didn't have wings also had feathers on their bodies. For instance, research indicates that the wingless, peacock-sized *Caudipteryx* likely had feathers.

33

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

- A) It gives an example of a dinosaur with the characteristics mentioned earlier in the sentence.
- B) It states the main argument about dinosaurs presented in the text.
- C) It contrasts the two dinosaurs discussed in the text.
- D) It describes features of the feathers of the dinosaurs mentioned earlier in the sentence

The Last Report on the Miracles at Little No Horse is a 2001 novel by Ojibwe writer Louise Erdrich. It explores how historical events affect families on a reservation in rural North Dakota. The Last Report on the Miracles at Little No Horse is typical of Erdrich's work. Her writing usually focuses on portrayals of everyday life in Ojibwe communities. Yet some of her novels have fantastical plots and take place outside Ojibwe communities. For example, her 1991 novel The Crown of Columbus is essentially adventure fiction, and the thrilling events in its plot are set largely on a Caribbean island.

34

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

- A) It recommends that readers avoid a particular novel by Erdrich.
- B) It lists the many similarities between two novels by Erdrich.
- C) It offers an example of a novel that differs from most of Erdrich's work.
- D) It discusses what inspired Erdrich to write one of her novels.

The Far Side of the World, first published in 1984, is a novel in Patrick O'Brian's Aubrey/Maturin series, which includes twenty books plus an unfinished fragment of a twenty-first. Like the rest of the books in the series, The Far Side of the World has a rather abrupt ending, but the following book, The Reverse of the Medal, picks up neatly where The Far Side of the World leaves off. Thus, the sudden ending is only an issue if one considers the books as independent texts—the Aubrey/Maturin series is best thought of as a single incredibly long work, similar to other multivolume stories, such as John Galsworthy's The Forsyte Saga.

35

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

- A) It offers a detail that helps explain why it is not necessarily the case that a certain characteristic of The Far Side of the World should be considered a flaw.
- B) It presents a reason The Far Side of the World and The Reverse of the Medal are considered to be two of O'Brian's most engaging novels.
- C) It argues that the Aubrey/Maturin series deserves the critical renown of works like The Forsyte Saga.
- D) It demonstrates that those readers who most enjoy reading The Reverse of the Medal will be those who have just finished reading The Far Side of the World.

The following text is adapted from Adib Khorram's 2018 novel Darius the Great Is Not Okay. The narrator, Darius, is a teenager visiting family in Iran. He and his friend Sohrab are at the entrance of the ruins of the ancient city of Persepolis.

"The Gate of All Nations," Sohrab said. He gestured to the lamassus [sculptures] and pillars surrounding us. "That's the name in English." It wasn't much of a gate anymore, since anyone of any nation could have easily stepped around it instead of walking through. But it was still amazing. Behind the lamassu, more columns sprouted from the ground like ancient trees in a petrified forest, forty feet tall, spindly but still miraculously upright. Giant stone slabs formed the remains of what must once have been a breathtaking structure.

36

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

- A) It presents an image to illustrate what one part of the ruins looks like.
- B) It emphasizes that the narrator already knows a lot about the city.
- C) It suggests that the narrator had expected to visit a forest.
- D) It indicates the specific time in the past when the buildings became ruins.

Puerto Rico is an island in the Caribbean Sea. Indigenous people there started raising guinea pigs about 1,700 years ago. Guinea pigs had originally been domesticated much earlier in both Colombia and Peru. So were guinea pigs brought to Puerto Rico from Colombia or from Peru? Ancient Caribbean trade routes connected Puerto Rico with Colombia but not with Peru. Therefore, guinea pigs in Puerto Rico probably came from Colombia and descended from Colombian guinea pigs.

37

Which finding, if true, would most directly weaken the underlined claim?

- A) Guinea pigs are common in ancient Puerto Rican art, especially in pottery.
- B) Ancient guinea pigs in Puerto Rico were genetically less similar to ancient guinea pigs in Colombia than to ancient guinea pigs in Peru.
- C) The guinea pig population of ancient Colombia was much larger than the guinea pig population of ancient Peru.
- D) Modern breeds of guinea pigs don't look like images of guinea pigs in ancient art from Puerto Rico, Colombia, and Peru.

Known for the albums *Someday My Prince Will Come* and *Milestones*, jazz trumpeter Miles Davis collaborated several times with pianist Gil Evans. Their 1958 adaptation of George Gershwin's opera *Porgy and Bess* bears little resemblance to the 1935 original. Davis and Evans felt no desire to please listeners expecting an exact duplication of the opera. They omitted parts, such as the aria "I Got Plenty of Nothin'," and sometimes made only brief gestures toward Gershwin's melodies. But Davis and Evans's willingness to recompose Gershwin's work led to one of the most enduring albums in Davis's catalog.

38

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

- A) It presents examples to support a claim made earlier in the text.
- B) It shows how two artists benefited from ignoring certain conventions.
- C) It proposes a reason why one work of art is widely thought to be more successful than another.
- D) It undermines an assertion made later in the text.



Zurich has high pedestrian traffic, but simply replicating a feature of Zurich associated with walkability—e.g., its high number of street crossings—may be insufficient to induce increased walking in other cities. As urbanist Mariela Alfonzo argues, our understanding of individuals' decision-making about whether to walk is insufficiently robust: some studies emphasize the role of demographic characteristics, others the role of neighborhood type, and so on, but walking decisions are made in complex contexts in which multiple conditions and needs inform individuals' choices.

39

Which choice best describes the function of the references to "demographic characteristic" and "neighborhood type" in the text as a whole?

- A) They illustrate factors that researchers believe people consider when making walking decisions in most contexts but that the text argues are unique to walking decisions made by people in Zurich.
- B) They are examples of factors that studies suggest are important in people's decision-making about walking but that the text claims most people rarely consider when making walking decisions.
- C) They represent factors that have been identified as important influences on walking decisions but that the text suggests are merely some of the many factors that may contribute to people's decision-making about walking.
- D) They identify factors that Alfonzo argues have been overemphasized in studies of decision-making about walking but that the text asserts are relevant to most people's walking decisions.



Copenhagen has high pedestrian traffic, but simply replicating a feature of Copenhagen associated with walkability—e.g., its human-scaled architecture—may be insufficient to induce increased walking in other cities. As urbanist Mariela Alfonzo argues, our understanding of individuals' decision-making about whether to walk is insufficiently robust; some studies emphasize the role of population density, others the role of average commuting distance, and so on, but walking decisions are made in complex contexts in which multiple conditions and needs inform individuals' choices.

40

Which choice best describes the function of the references to "population density" and "average commuting distance" in the text as a whole?

- A) They identify factors that Alfonzo argues have been overemphasized in studies of decision-making about walking but that the text asserts are relevant to most people's walking decisions.
- B) They illustrate factors that researchers believe people consider when making walking decisions in most contexts but that the text argues are unique to walking decisions made by people in Copenhagen.
- C) They are examples of factors that studies suggest are important in people's decision-making about walking but that the text claims most people rarely consider when making walking decisions.
- D) They represent factors that have been identified as important influences on walking decisions but that the text suggests are merely some of the many factors that may contribute to people's decision-making about walking.

Driven to sell as many paintings as possible, Alfred Hair, an influential figure among the landscape artists known as the Florida Highwaymen, pioneered "fast painting," a technique (which in part involved swift applications of paint) that many Highwaymen, including Isaac Knight, adopted. To conclude that this approach accounts for the ethereal qualities now synonymous with the Highwaymen aesthetic is tempting but inaccurate, as Hair's methods weren't universally practiced by his affiliates: Roy McLendon, for example, painted with greater deliberateness but achieved the same effects.

41

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

- A) It details evidence that contradicts a claim mentioned earlier in the text about a long-standing disagreement within a group of artists.
- B) It explains how an artist mentioned earlier in the text developed a distinctive style by adapting a particular approach to painting originated by his colleagues.
- C) It considers and rebuts an interpretation of the effect of a painting technique mentioned earlier in the text on the perception of work by a group of artists.
- D) It establishes a contrast between the aesthetic qualities of works by artists who were central to a movement introduced earlier in the text and those of an artist who was more peripheral to that movement.

The following text is from Louise Erdrich's 1986 novel *The Beet Queen*. Narrator discusses her relationship with her young niece, Dot. Celestine, the narrator's sister-in-law, is Dot's mother.

Dot was as impatient with babyhood as I. She tried at once to grow out of it. Celestine never saw that, because she, and only she, took pleasure in Dot's helpless softness. Only Celestine was saddened by her daughter's fierce progress. Day by day, Dot grew stronger. In her shopping cart stroller she exercised to exhaustion, bouncing for hours to develop her leg muscles.

42

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

- A) It makes a prediction about how Celestine will change as she grows older.
- B) It explores some of the narrator's psychological characteristics.
- C) It offers a detail that shows how Dot is growing stronger.
- D) It indicates how sad Celestine is by describing a behavior she engages in.

Wakako Yamauchi is best known for *And the Soul Shall Dance*, her 1977 play about a Japanese American family in Southern California. The play is based on a short story Yamauchi had published three years earlier. Adapting the story wasn't easy. Theater relies on dialogue between characters, but the original story features little dialogue and instead describes its characters' silent thoughts. To transform the story into a play, Yamauchi created situations where characters reveal their thoughts by speaking them aloud during conversations with each other.

43

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

- A) It describes how Yamauchi chose the actors who performed in the play.
- B) It offers information about how Yamauchi adapted her short story into a play.
- C) It argues that Yamauchi's play influenced later playwrights.
- D) It explains why Yamauchi's short story is better known than the play adaptation is

The following text is from Jose Rizal's 1891 novel *The Reign of Greed* (translated by Charles Derbyshire in 1912).

A lady accompanied by her husband entered at that moment and took her place in one of the two vacant boxes. She had the air of a queen and gazed disdainfully at the whole house, as if to say, "I've come later than all of you, you crowd of upstarts and provincials, I've come later than you!" There are persons who go to the theater like the contestants in a mule-race: the last one in, wins, and we know very sensible men who would ascend the scaffold rather than enter a theater before the first act.

44

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

- A) It conveys the urgency some theater patrons feel to be the first ones to arrive at a performance.
- B) It emphasizes a character's desire to be an actor.
- C) It helps explain why some people dislike attending theatrical performances.
- D) It illustrates the lady's contemptuous attitude toward the other people in the theater.

Master and Commander, first published in 1969, is a novel in Patrick O'Brian's Aubrey/Maturin series, which includes twenty books plus an unfinished fragment of a twenty-first. Like the rest of the books in the series, Master and Commander has a rather abrupt ending, but the following book, Post Captain, picks up neatly where Master and Commander leaves off. Thus, the sudden ending is only an issue if one considers the books as independent texts – the Aubrey/Maturin series is best thought of as a single incredibly long work, similar to other multivolume stories, such as John Galsworthy's The Forsyte Saga.

45

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

- A) It demonstrates that those readers who most enjoy reading Post Captain will be those who have just finished reading Master and Commander.
- B) It argues that the Aubrey/Maturin series deserves the critical renown of works like The Forsyte Saga.
- C) It offers a detail that helps explain why it is not necessarily the case that a certain characteristic of Master and Commander should be considered a flaw.
- D) It presents a reason Master and Commander and Post Captain are considered to be two of O'Brien's most engaging novels.

Mexican architect Luis Barragán's prolific career, which spanned the 1920s to the 1980s, evolved through distinct phases. As epitomized by the Aguilar House in Guadalajara, many of Barragán's first projects integrated traditional Mexican building techniques into Mediterranean designs. Extensive travels abroad later sparked an engagement with modernist and functionalist aesthetics – styles whose emphasis on utility and whose repudiation of traditional architecture's more ornamental elements are readily apparent in Barragán's house in Calle Guadiana.

46

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

- A) It presents biographical information that accounts for the transition in Barragán's career that is discussed in the text.
- B) It notes why the two architectural projects described in the text constitute major departures from Barragán's typical style.
- C) It lends support to an argument about the Mediterranean design aesthetic that is made in the previous sentence.
- D) It explains why the architectural project discussed later in the sentence was highly regarded by Barragán's contemporaries.

In 2015 Filipa Faleiro and colleagues published a study concluding that ocean acidification has a strong effect on the behavior of *Hippocampus guttulatus*, a species of fish. However, Faleiro and colleagues' study relied on a mean sample size of only 6 fish. In a 2022 review of various scientists' conclusions about the impacts of ocean acidification on fish behavior, Jeff C. Clements and colleagues caution that relying on such a relatively small sample size can increase the potential for biased analysis. Such analysis, in turn, can contribute to reports of exaggerated effects.

47

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

- A) It summarizes a shift in scientists' understanding of how *Hippocampus guttulatus* has responded to ocean acidification.
- B) It elaborates on a potential consequence of Faleiro and colleagues' reliance on a relatively small sample size.
- C) It emphasizes the magnitude of the effect reported by Faleiro and colleagues of ocean acidification on *Hippocampus guttulatus*.
- D) It counters the objection of Clements and colleagues to studies that rely on relatively small sample sizes.

A microgenre is a specialized genre consisting of a comparatively small number of stylistically similar artists. The microgenre of electronic music known as hyperpop emerged in the 2010s, with American singer Dorian Electra as an early exponent. Their combination of lush synthesizer arrangements and propulsive beats with vocals electronically shifted in pitch below their natural range exemplifies the hyperpop sound. More recently, Japanese-British recording artist Rina Sawayama has contributed to the microgenre by incorporating pop melodies into hyperpop songs.

48

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

- A) It anticipates an objection to the text's endorsement of hyperpop.
- B) It notes an exception to the text's description of hyperpop.
- C) It defines a term used in the text's discussion of hyperpop.
- D) It states that the text's intended audience mainly consists of hyperpop fans.



Cuttlefish and toads see in three dimensions (3D) by combining two images in their brains, one from each eye. This produces a sense of depth, helping the animals judge how close or far away an object is. Researchers have investigated 3D vision in praying mantises as well. In one study, Vivek Nityananda and his team fitted mantises' faces with two different color filters, one covering each eye, much like the filters in 3D glasses once worn at movies. By observing the mantises reaction to projected images, the team confirmed that mantises do indeed have 3D vision, but it's unlike that of other animals.

49

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

- A) It identifies a potential problem that the researchers faced while studying the praying mantises.
- B) It offers a comparison meant to aid understanding of the praying mantis study.
- C) It emphasizes a difference between the research on praying mantis vision and research on other animals' vision.
- D) It describes an earlier use of a tool the researchers used in the praying mantis study

Benjamin Prud'homme and colleagues have explored how convergent evolution – a phenomenon that occurs when the same trait evolves independently in two reproductively separate lineages – can result from a genetic mechanism shared by both lineages. KP Johan Meanwhile, Patricia J. Wittkopp and colleagues have investigated how convergence occurs through different genetic mechanisms, but the relative prevalence of convergence through shared and different genetic processes is still poorly understood. This motivated biologists Delbert A. Green II and Cassandra G. Extavour to evaluate both types of convergence in a single study for their 2012 paper.

50

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

- A) It provides examples of how a phenomenon was studied by scientists in the field before Green and Extavour's study.
- B) It gives a basic description of a phenomenon that is central to the discussion that follows.
- C) It clarifies a concept that the author Implies was unclear in the studies mentioned in the text.
- D) It introduces a method of scientific analysis that is discussed in greater detail later in the text.



Vancouver has high pedestrian traffic, but other cities cannot increase their pedestrian traffic simply by replicating a single feature of Vancouver – e.g., its high number of pedestrian amenities – that is associated with walkability. As urbanist Mariela Alfonzo Johan argues, many factors influence people’s decision-making about whether to walk: some studies have shown the importance of demographic characteristics, others have shown the importance of average commuting distance, and so on, and it is clear that none of these factors in isolation fully explains pedestrian habits in a given city.

51

Based on the text, the author would most likely agree with which statement about Vancouver’s “high number of pedestrian amenities”?

- A) It may increase walkability in Vancouver but is known to reduce walkability in other cities.
- B) It is better understood as an effect of the high level of pedestrian traffic in Vancouver than as a cause of that pedestrian traffic.
- C) It affects walking decisions in Vancouver less than demographic characteristics and average commuting distance do.
- D) It should be understood as just one of several factors that influence pedestrian activity in Vancouver.

The following text is from Sara Teasdale’s 1922 poem “Two Songs for Solitude.”

My heart has grown rich with the passing of years,  
I have less need now than when I was young  
To share myself with every comer,  
Or shape my thoughts into words with my tongue.

52

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

- A) It explains speaker’s views about proper conduct toward new acquaintances.
- B) It provides examples of behaviors the speaker is less inclined toward than she once was.
- C) It presents an episode from the speaker’s youth that she remembers fondly.
- D) It emphasizes the social habits the speaker has developed over her lifetime.

A student is studying how woma pythons, eastern brown snakes, and rough-scaled death adders react to sound. The student knew that many snakes display movement of more than 20 cm in response to sound traveling through the ground, but assumed that snakes do not detect sound traveling through the air until reading a study by Christina Zdenek, Timothy Staples, and their team.

53

Which finding from Christian Zdenek, Timothy Staples, and their team's study, if true, would most directly challenge the underlined assumption?

- A) Neither eastern brown snakes nor rough-scaled death adders display movement of more than 20 cm in response to airborne sound.
- B) Woma pythons have better overall hearing than do rough-scaled death adders.
- C) Both woma pythons and eastern brown snakes react only to sounds traveling through the ground.
- D) Woma pythons, eastern brown snakes, and rough-scaled death adders display movement of more than 20 cm in response to both ground and airborne sound waves.

The Hundred Days, first published in 1998, is a novel in Patrick O'Brian's Aubrey/Maturin series, which includes twenty completed books. Some critics have found fault with the abrupt endings of The Hundred Days and other books in the series, saying that they do not finish conclusively but arbitrarily stop. But other critics argue that the books should not be thought of as discrete texts with traditional beginnings and endings but as a single incredibly long work, similar to other multivolume stories, such as Marcel Proust's In Search of Lost Time.

54

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

- A) It presents a reason most critics think the Aubrey/Maturin series should have the literary renown of similar works like In Search of Lost Time.
- B) It explains why many critics find the Aubrey/Maturin novels to be entertaining despite flaws in the novels' structures.
- C) It argues that the unusual structure that O'Brian uses for The Hundred Days makes it one of his most entertaining books.
- D) It summarizes a positive assessment of a particular characteristic of the Aubrey/Maturin novels.

In the early days of television in the 1940s, many people thought that US television programs would rely on the financial support of ad agencies and commercial sponsors, much like radio did. But advertisers hesitated to jump into a new space, particularly at a time when the manufacturing of new television sets was stalled due to the US's involvement in World War II. Broadcasters, like the National Broadcasting Company (NBC), needed to persuade advertisers to support their programming despite not knowing whether there would be a robust television audience to begin with.

55

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

- A) It describes how broadcasters attempted to convince advertisers to support television.
- B) It explains why a type of television programming was popular at the time.
- C) It identifies a specific reason behind some advertisers' hesitation to support television.
- D) It compares the beginnings of radio programming with the beginnings of television programming in the United States.

Dubautia raillardioides is a species in a family of plants known collectively as the silversword alliance, all of which grow only on the Hawaiian Islands. Members of this alliance exhibit an extraordinary range of phenotypes, with some species maturing into vines and others into shrubs and trees. All species in the alliance descended from a single ancestral tarweed plant that arrived on the islands around 5 million years ago. The tarweed's descendants diversified into distinct species as they adapted to live in the wide variety of habitats found on the Hawaiian Islands.

56

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

- A) It lists species from a family of plants found only on the Hawaiian Islands.
- B) It explains why Dubautia raillardioides is unique among members of the silversword alliance.
- C) It supplies the name used to refer to a group of related plant species.
- D) It provides the common name for the Dubautia raillardioides plant.

Individual elephants and Arctic herbivores such as caribou tend to have fixed geographic ranges throughout their lifetimes, which had prompted some researchers to speculate that the Arctic woolly mammoth, an extinct elephantid, might have exhibited similar behavior. Mammoth tusks grew in sequential layers, incorporating ingested minerals and organics, and so each ivory stratum reflects the ratio of strontium isotopes ( $^{87}\text{Sr}/^{86}\text{Sr}$ ) in the local environment; thus, the sequence of strata shows where the animal roamed during life. Recent analysis of the strontium ratios in the strata of one Arctic woolly mammoth tusk in relation to the geographic distribution of strontium ratios in the environment shows the animal's range began to expand as it reached sexual maturity, only to contract again in its final 1.5 years.

57

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

- A) It discusses a characteristic shared by certain animals in order to explain why researchers raised a possibility that turned out not to be supported by data described later in the text.
- B) It illustrates a pattern of behavior among certain animals in order to present a theory about exceptions to that pattern that is weakened by a finding described later in the text.
- C) It describes a similarity in the behavior of certain animals in order to show why a method described later in the text did not reveal whether another animal also showed that behavior.
- D) It introduces a trait shared by certain animals in order to contextualize a hypothesis about the origin of that trait that is advanced later in the text.

*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.

58

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

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

Can tomato plants grow on Mars? Can pea plants? You might think the answer to these questions is obviously no, but researchers in the Netherlands recently showed that the seeds of many common plant species can germinate in soil designed to simulate Martian conditions, as long as water is supplied. In fact, some species actually did better in Martian soil than in Earth soil: 90 percent of tomato seeds sprouted when planted in simulated Martian soil, compared with 66 percent that did when planted in soil from their home planet.

59

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

- A) It signals the surprising nature of the findings discussed in the text
- B) It acknowledges that readers may object to the method used in the experiment discussed in the text
- C) It clarifies a potential point of confusion about the hypothesis tested in the study discussed in the text
- D) It draws a distinction between the two species discussed in the text

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.

60

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

- A) 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.
- 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 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*.



Benjamin Prud'homme and colleagues have explored how convergent evolution—a phenomenon that occurs when the same trait evolves independently in two reproductively separate lineages—can result from a genetic mechanism shared by both lineages. Meanwhile, Patricia J. Wittkopp and colleagues have investigated how convergence occurs through different genetic mechanisms, but the relative prevalence of convergence through shared and different genetic processes is still poorly understood. This motivated biologists Delbert A. Green II and Cassandra G. Extavour to evaluate both types of convergence in a single study for their 2012 paper.

61

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

- A) It provides examples of how a phenomenon was studied by scientists in the field before Green and Extavour's study.
- B) It gives a basic description of a phenomenon that is central to the discussion that follows.
- C) It clarifies a concept that the author implies was unclear in the studies mentioned in the text.
- D) It introduces a method of scientific analysis that is discussed in greater detail later in the text.

Shedding light on the thermal biology of fungi, research by Radamés Cordero et al. indicates that certain mushrooms (including *Coprinellus micaceus* and species from the genus *Cantharellus*) can achieve a hypothermic state through evaporative cooling. Effects of this thermoregulation were not limited to the fungi's fruiting bodies and root-like hyphae: temperature reductions were observed in the air immediately surrounding the mushrooms. Though slight, the reductions inspired an air-cooling device; using approximately 400 grams of mushrooms, the team's prototype lowered the air temperature in a controlled environment by 10°C in forty minutes.

62

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

- A) It establishes a finding central to the text's discussion of a practical application resulting from the team's study of fungal thermal biology.
- B) It provides empirical evidence to bolster the claim made earlier in the text that certain fungal species maintain a hypothermic state.
- C) It presents a tangential finding about thermoregulation in certain fungal species that the experiment described later in the text was designed to explain.
- D) It identifies an unexpected observation that motivated the study of evaporative cooling in fungi that is discussed earlier in the text.



In Algeria, use of solid fuel (eg, coal, wood) as a share of total household fuel use fell by approximately three-fourths between 2000 and 2019; such shifts are often explained by appeal to the energy ladder, a model holding that fuel choice is mediated mainly by household income (specifically, high-technology fuels displace solid fuels as incomes rise). Rasmus Heltberg's study of fuel use in Ghana shows this model to be reductive, however: household fuel use was heterogeneous, flexible, and influenced by several factors, including the stability of the local electrical grid.

63

Which choice best describes the function of the information about Algeria in the text as a whole?

- A) It provides an example of a type of change that the text goes on to suggest is poorly suited for evaluating whether the energy ladder is a viable model.
- B) It introduces a finding that the text goes on to suggest can be explained in two different ways that are equally compelling.
- C) It describes a trend that the text goes on to suggest has a similar cause as a seemingly unrelated trend observed in Ghana.
- D) It illustrates the kind of phenomenon that the text goes on to suggest is frequently but inadequately accounted for by the energy ladder.

In 2011 Stephen D. Simpson and colleagues published a study concluding that ocean acidification has a strong effect on the behavior of *Amphiprion percula*, a species of fish.

However, Simpson and colleagues' study relied on a mean sample size of only about 26 fish. In a 2022 review of various scientists' conclusions about the impacts of ocean acidification on fish behavior, Timothy D. Clark and colleagues caution that relying on such a relatively small sample size can increase the potential for biased analysis. Such analysis, in turn, can contribute to reports of exaggerated effects.

64

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

- A) It states the conclusion reached by Simpson and colleagues in their 2011 study.
- B) It presents a criticism of the results reported by Simpson and colleagues in their 2011 study.
- C) It lists several traits of *Amphiprion percula* discovered by Simpson and colleagues while conducting their 2011 study.
- D) It emphasizes a detail about where Simpson and colleagues conducted their 2011 study.

Vertical gene transfer involves the transmission of genetic material from a parent to offspring: horizontal gene transfer, on the other hand, involves the exchange of genetic material between organisms not in a parent-offspring relationship. While horizontal gene transfer is common among prokaryotes, single-celled organisms such as the bacteria *Carnobacterium viridans* and *Moraxella caviae*, it has rarely been observed among eukaryotes (typically multicellular organisms). However, new studies suggest that horizontal gene transfer is more common in eukaryotes than originally thought.

65

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

- A) It argues that a particular direction of research concerning horizontal gene transfer is likely to be fruitless.
- B) It indicates a distinction between horizontal gene transfer and vertical gene transfer.
- C) It implies that a common perception of horizontal gene transfer may be inaccurate.
- D) It compares the frequencies with which horizontal gene transfer has been detected in two categories of organisms.

Vertical gene transfer involves the transmission of genetic material from a parent to offspring: horizontal gene transfer, on the other hand, involves the exchange of genetic material between organisms not in a parent-offspring relationship. While horizontal gene transfer is common among prokaryotes-single-celled organisms, such as the bacteria *Brevundimonas diminuta* and *Lactobacillus curvatus*-it has rarely been observed among eukaryotes (multicellular organisms). However, new studies suggest that horizontal gene transfer is more common in eukaryotes than originally thought.

66

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

- A) It proposes a direction for future research into a biological phenomenon.
- B) It explains a biological process by contrasting it with a somewhat similar process.
- C) It argues that two biological phenomena are more similar than they may initially appear to be.
- D) It explains why a common perception of a biological process is flawed.

The following text is from Anne Spencer's 1922 poem "Translation."

We trekked into a far country,  
My friend and I.  
Our deeper content was never spoken,  
But each knew all the other said.  
He told me how calm his soul was laid  
By the lack of anvil and strife.  
"The wooing kestrel," I said, "mutes his  
mating-note  
To please the harmony of this sweet silence."

67

Which choice best describes the function of the reference to "anvil and strife" in the text as a whole?

- A) It symbolizes the speaker's friend's view that meaningful work and social engagement are core components of a fulfilling life.
- B) It illustrates how the speaker and her friend can feel a close connection even though they do not talk about their feelings.
- C) It emphasizes an opposition between nature and the relationship of the speaker and her friend.
- D) It represents a strong contrast to the speaker's friend's current experience of tranquility.

The scenario of a dwarf mongoose engaging in territorial conflict with an outgroup dwarf mongoose illustrates a major dimension of social life across animal species, from the solitary to those with complex sociality: intraspecific contact with perceived outsiders. Though one prominent hypothesis posits that sophisticated cognitive adaptations are primarily driven by the demands of various behaviors within established social groups (e.g., cooperative response to predation), interactions with same-species outsiders arguably contribute comparably by favoring nuanced analysis (e.g., evaluation of relative physical status).

68

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

- A) It establishes that perceiving an individual of the same species as an outsider exemplifies the kind of analysis mentioned later in the text.
- B) It identifies a particular type of social interaction whose relevance to higher cognition in animals is the overall focus of the text.
- C) It narrows the text's focus from the full complement of social life dimensions across species to one applicable to only a subset of species.
- D) It defines a scientific term central to the text's discussion of the role of complex sociality in driving cognitive adaptations in animals.

The following text is adapted from Akwaeke Emezi's 2019 novel *Pet*. Jam is a teenager who lives with her father, Aloe, and her mother, Bitter, who is a painter.

Bitter finished the painting in the dark morning of a day—it was well past midnight when Jam heard the studio door creak open. She stared into the velvet black of her room and listened to her mother's footsteps walking in her [mother] and Aloe's bedroom. There was a weight thrumming through the floorboards in a low song, and that was how Jam knew the painting was done. Bitter's feet were singing the news.

69

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

- A) It adds to the idea that Bitter's footsteps reveal something to Jam.
- B) It indicates that Jam is more interested in music than in art.
- C) It indicates that Bitter always sings when working on a painting.
- D) It describes Aloe's reaction upon seeing the painting for the first time.

The Museum of Modern Art (MOMA) in New York City has an exhibition of video games that includes *Vib-Ribbon* from 1999, which museum visitors can play on site, and *SimCity 2000* from 1994, which visitors can see only in a video presentation. MOMA claims the video presentations are only for games that would be impractical to display in a playable form, but video games are an inherently interactive medium, a feature that is grossly absent in a video-only presentation.

70

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

- A) It provides MOMA's rationale for a decision that the author critiques.
- B) It introduces a fact about video games that the author thinks MOMA did not appropriately consider when choosing which video games to exhibit.
- C) It details a criticism of MOMA that the author defends against in the remainder of the sentence.
- D) It presents a misconception about video games that the author believes is evident in MOMA's choice about which video games to exhibit.

Several sociologists have observed that the word "culture," though commonly used in academic literature, is an ultimately hazy concept—for example, Victoria Bonnell and Lynn Hunt have noted that "many critics have pointed to the vagueness of the concept of culture." Does the concept of culture encompass knowledge, or laws, or both these things and others? For casual usage, such haziness is permissible—we know culture when we see it—but for researchers, a standardization of the term is called for if sociology is to truly progress.

71

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

- A) It lists two essential components of what is referred to by Bonnell and Hunt as "culture."
- B) It presents a point regarding the definition of "culture" on which nonspecialists and specialists tend to disagree.
- C) It describes the questions first raised by Bonnell and Hunt's inquiry into the meaning of the word "culture."
- D) It illustrates a difficulty associated with the meaning of "culture" that the author believes holds back an academic field.

Scientists discovered a 390-million-year-old fossilized forest of *Calamophyton* trees in modern-day England. The scientists believe the emergence of these *Calamophyton* forests changed the land significantly. For example, the tree roots would have greatly reduced soil erosion, and the accumulated twigs the trees shed likely created new habitats for animal life.

72

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

- A) It suggests that there are likely fossilized *Calamophyton* forests from before 390 million years ago.
- B) It provides two competing views of when the *Calamophyton* forest likely merged.
- C) It illustrates how *Calamophyton* forests likely changed conditions on the land."
- D) It indicates how fast the *Calamophyton* forest spread.



Over the course of the 1900s, more and more Native Hawaiians spoke English instead of the Hawaiian language. To preserve their language, Native Hawaiian teachers founded the 'Aha Pūnana Leo preschool in 1984. They spoke Hawaiian while teaching, and their Native Hawaiian students were soon able to understand and speak it themselves. The school was a huge success. Eventually it opened locations around Hawai'i and started teaching Hawaiian to elementary and high school students too. Thanks to 'Aha Pūnana Leo the number of young people who speak the language has increased.

73

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

- A) Besides Native Hawaiians, tens of thousands of people from other Pacific Islander communities live in Hawai'i today, including over 37,000 Samoans.
- B) Fewer than fifty children could speak Hawaiian when 'Aha Pūnana Leo was founded, but now more than 2,000 students at 'Aha Pūnana Leo speak it
- C) Hawaiian is very similar to other languages that are spoken on the Polynesian Islands of the Pacific Ocean, including Tahitian, Samoan, and Maori.
- D) It illustrates a difficulty associated with the meaning of "culture" that the Roughly 680,000 Native Hawaiian people lived in the United States in 2020, and a little less than half of them lived in Hawai'i

The Heege Manuscript (HM) is a collection of booklets of once-unbound paper sheets on which Richard Heege copied various texts at his fifteenth-century home between Derbyshire and Nottinghamshire in England. Most other contemporaneous personal manuscripts like the Findern Anthology (FA) consist primarily of pieces by celebrated medieval authors like Hoccleve and other readings favored by elites, whereas the HM has a distinctive emphasis on the popular, including entertainments like crude comedies, and the practical, with advice about manners.

74

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

- A) To suggest that the FA is a poor point of comparison for a collection like the HM
- B) To emphasize the ubiquity of hand-copied collections like the FA and the HM in medieval England
- C) To provide context for the text's suggestion that the HM is an outlier among collections of its time
- D) To illustrate how the discussion of the HM earlier in the text can improve historians' understanding of the FA



## Answers: Underlined Purpose

Number	Answer	Number	Answer
1	D	2	A
3	A	4	D
5	A	6	D
7	A	8	B
9	A	10	A
11	A	12	C
13	B	14	A
15	A	16	D
17	B	18	D
19	D	20	D
21	C	22	C
23	D	24	B
25	D	26	B
27	C	28	D
29	D	30	C
31	C	32	C
33	A	34	C
35	A	36	A
37	B	38	A
39	C	40	C
41	D	42	C

Number	Answer	Number	Answer
43	B	44	D
45	C	46	A
47	B	48	C
49	B	50	A
51	D	52	B
53	D	54	D
55	C	56	C
57	A	58	D
59	A	60	C
61	B	62	C
63	D	64	A
65	C	66	B
67	D	68	B
69	A	70	A
71	D	72	C
73	B	74	C

# Topic 11: Cross-Text Connections

37 Questions

## DIRECTIONS

### Must Know Tips:

- Read the passages first (1st then 2nd).
- Pay attention to the questions.
- Know or guess the relationship between the passages before looking at the answer choices.
- To find something, you need to know what you're searching for.

**Recommended time per question in this section:** min: 1 min, max: 2 min, avg: 1 min 30 sec.  
(\*Exam level)

### Text 1:

Odaham farmers in Sonoran desert of the southwestern US and Northern Mexico plant different species in the same plot of land to help protect against the effect of drought. For example, while organ pipe cacti can tolerate extended periods of low moisture in the upper soil, Chia flowers cannot. So, planting both species helps ensure that even in growing seasons too dry for Chia flowers, a farmer might still be able to harvest a pipe organ fruit.

### Text 2:

Chia flowers are well adapted to growing in the desert but are highly dependent on having sufficient moisture in the upper soil. Inspired by Odaham farmers, who often plant some crop species in the shade of more drought-tolerant species such as organ pipe cacti to help prevent the sun from drying the upper soil, Gray and colleagues planted Chia flowers in the shade of solar panels in Sonoran Desert and found that the chia flowers grew well.

1

Based on the texts, the author of text 1 and the author of text 2 most likely agree on what point?

- A) Gray's team's method could be refined to prevent soil moisture more actively from evaporating.
- B) Organ pipe and solar panels both provide adequate shade to help protect the moisture in the upper soil.
- C) The Odaham approach has an advantage over Gray's team's approach in that is capable of producing chia seeds.
- D) Chia flowers require more moisture in the upper soil than organ pipe cacti do.

**Text 1:**

For decades, ornithologists assumed that if they saw a singing Bell's vireo—a bird species found in temperate North America—they must be observing a male. That's because birdsong has long been considered a male trait; researchers have argued that males to attract mates and claim territory.

**Text 2:**

Recent evidence shows that a female Bell's vireo is as capable of song as a male is. In fact, Karan J. Odom and colleagues found evidence of female song in 71% of the 323 species they examined. They claim that the historical mischaracterization of birdsong as a male trait is largely the result of bias: much of the research ornithologists have carried out has been near universities in the temperate northern hemisphere, where female birdsong is less common than it is in the tropics.

**2**

Based on the text, how would Odom and colleagues (Text 2) most likely respond to the view of birdsong presented in Text 1?

- A) They would suggest that it reflects a tendency to study male birds rather than female birds.
- B) They would claim that other factors than mate attraction and territorial defense have driven that evolution of singing in male birds.
- C) They would underscore that male songbirds in temperature zones are likely using their songs for different purposes than are male songbirds in the tropics.
- D) They would argue that it was influenced by the kinds of study sites researchers tended to select.

**Text 1:**

According to a study by a conservation group representing 11 tribal nations in the Great Lakes region, the northern pike (ginoozhe in the Ojibwe language) will have significantly worse outcomes over the next 50 years if temperatures increase as much as some models suggest. By contrast, the white-tailed deer (waawaashkeshi in Ojibwe) should be able to withstand the highest predicted warming without much harm and so likely won't require the conservation efforts that the northern wild pike will.

**Text 2:**

US government agencies involved in conservation are unfortunately not able to address every possible threat to natural resources. They must use the best information available to decide which species are most threatened and therefore most in need of conservation efforts.

**3**

Based on the texts, both authors would most likely agree with which statement?

- A) A collaborative approach is necessary to keep temperatures in the Great Lakes region from increasing to the highest predicted levels.
- B) Agencies involved in natural-resource management in the Great Lakes region should focus their conservation efforts more on the northern pike than on the white-tailed deer.
- C) Conservation efforts focused on the northern pike are more likely to be successful if they incorporate state and federal agency resources with the knowledge of tribal groups in those efforts.
- D) State, federal, and tribal groups involved in natural resource management in the Great Lakes region should immediately begin conservation programs for both the northern pike and white-tailed deer.

**Text 1:**

In 2019 Arequipa, Peru, was named a City of Gastronomy by UNESCO in recognition of the city's unique food culture. The honor is well known among both residents of the city and tourists who visit. Simply by selecting Arequipa, UNESCO has helped bring awareness to local recipes, cooking practices, and chefs and has provided a significant boost to the city's tourism industry.

**Text 2:**

Many people in Arequipa's restaurant industry hoped that food tourism would increase after the city was chosen as a City of Gastronomy in 2019. However, as researcher Eerang Park and colleagues argue, cities must still create effective marketing strategies to benefit fully from being named a City of Gastronomy. Without the intentional effort that was made to promote the city's food scene, many current and potential visitors to Arequipa would not even be aware that it's home to uniquely delicious food.

4

Which choice best describes a difference in how the authors of the texts view the benefits of being named a City of Gastronomy?

- A) The author of Text 1 considers the effects of Arequipa's City of Gastronomy status to be less permanent than the author of Text 2 considers them to be.
- B) The author of Text 1 states that the benefits are automatic, while the author of Text 2 states that effort is required to fully achieve the benefits.
- C) The author of Text 1 views Arequipa's status as a City of Gastronomy as having been beneficial for the city, but the author of Text 2 questions whether there's been a benefit.
- D) The author of Text 1 assumes that a city's restaurant owners and chefs are most likely to benefit from a city being named a City of Gastronomy, but the author of Text 2 states that the honor most affects tour guides and tour operators.

**Text 1:**

Scholarship today overrepresents formal experimentation, such as William Carlos Williams's use of minimalistic, image-based structures, well beyond the degree to which it actually influenced US poetry during the modernist period (roughly 1900-1945). Meanwhile, the work of Countee Cullen, who relied on conventional poetic forms associated with previous literary periods, attracts woefully little attention from scholars of modernism.

**Text 2:**

Distant reading, or computer-assisted quantitative analysis of massive collections of digitized texts, can reveal stylistic elements that have heretofore escaped notice, despite being shared by numerous texts from the modernist period. For too long, scholars have focused on experimental versus conventional poetic forms, inhibiting inquiry into other points of stylistic correspondence among poems that would enrich our understanding of the modernist canon.

5

Based on the texts, how would the author of Text 2 most likely regard the emphasis that Text 1 places on poetic form during the modernist period?

- A) As having the effect of forestalling consideration of the full stylistic dimensions of poetry written in the period.
- B) As overestimating the impact that poetic form, whether experimental or conventional, has on the reading experience.
- C) As being founded on a misconception about modernist poetry that has been called into question by distant reading.
- D) As complementing the study of other stylistic features that distinguish the modernist period.

**Text 1:**

Attempts to automate classification of music into genres have not been very successful. It is also unclear whether categorizing music by genre is useful, since genre categories are ambiguous, subjective, and simplistic. As Jin Ha Lee and Anh Thu Nguyen argue in their study of the South Korean band BTS, relationships between pieces of music may be best understood with concepts other than genre.

**Text 2:**

Forró is a genre of music originally from Brazil that shares some harmonic and rhythmic similarities with the bolero genre. Automated genre classification systems typically struggle to draw distinctions in situations like this, but Yandre Costa and colleagues solved that problem by converting sound to images and having computers compare features of those images. Their approach could improve genre classification, which could have many benefits for users.

6

Based on the texts, how would the author of Text 1 most likely respond to the claim about the potential benefits of Costa and colleagues' research in Text 2?

- A) By suggesting that future research may provide substantial advancements in the field of automated genre classification.
- B) By asserting that genre classifications may not be the most helpful way to think about music.
- C) By arguing that some genres are more easily recognized by classification systems than others.
- D) By emphasizing that humans do not necessarily enjoy every recording in a genre they claim to prefer.



**Text 1:**

Toni Morrison's 1973 novel *Sula*, a tale of two women's lives set in small-town Ohio from the 1910s to the 1960s, has been described as historical fiction. While it's inarguable that Morrison's book takes place in the past rather than in her own time, *Sula* is much richer and more complicated than the mere re-creation of the past suggested by the term "historical fiction."

**Text 2:**

Some literary critics dismiss historical fiction as a shallow genre in which writers show off their knowledge of period details rather than tell meaningful stories. But historical fiction can be used to explore profound themes and complex characters. In fact, many writers find that writing about the past gives them a creative freedom they'd lack if they wrote about the present.

**7**

Based on the texts, how would the author of Text 2 most likely respond to the claim about *Sula* advanced by the author of Text 1?

- A) By arguing that Morrison displays a thorough knowledge of historical details in *Sula*.
- B) By asserting that dissatisfaction with describing *Sula* as historical fiction reflects a misunderstanding of the genre.
- C) By conceding that the genre of historical fiction contains many works that are less sophisticated than *Sula* is.
- D) By claiming that the author of Text 1 has underestimated the richness and complexity of *Sula*.

**Text 1:**

In southern and central Georgia, many buildings and other structures rest on soil that is expansive, meaning that it swells or shrinks as its moisture level changes. Civil engineer Jay X. Wang has noted that the effects of expansive soil appear slowly in the form of gradually growing cracks in foundations, walls, and pavements. Because these effects are incremental and can generally be repaired (though at some cost), structures in southern and central Georgia are typically not built to resist them.

**Text 2:**

In a 2021 study, Rubayet Bin Mostafiz and colleagues calculated that in the state of Louisiana alone, the annual cost of damage caused by expansive soils reaches nearly \$90 million. But they note that this damage can be mitigated: building vapor barriers between structural foundations and the soil can significantly reduce the effects of soil swelling and shrinking.

**8**

Based on the texts, how would Rubayet Bin Mostafiz and colleagues (Text 2) most likely respond to the information presented in Text 1?

- A) They would encourage engineers in southern and central Georgia to insert vapor barriers between new structures' foundations and the surrounding soil.
- B) They would argue that engineers in southern and central Georgia have misjudged the effectiveness of the techniques they use to reduce the effects of expansive soil.
- C) They would suggest that engineers in southern and central Georgia consider the cost of reinforcing the vapor barriers between existing structural foundations and the soil.
- D) They would recommend that engineers in southern and central Georgia measure the moisture level in the soil beneath proposed structures before beginning construction.

**Text 1:**

Isaac Asimov, author of *Robots and Empire* and *I, Robot*, is highly regarded despite his mediocre writing style. His prose is workmanlike; his characters are flat and discuss ideas rather than emotions. That his work is enjoyable despite this is a testament to his prodigious imagination even if people read his books only for the ideas, they will have plenty to consider.

**Text 2:**

Asimov is critiqued for his style, but it is wrong to fault a writer for failing to do what he never intended to do. For example, although most of his novel *Foundation* consists of people discussing science and politics and we find out little about his characters' lives, Asimov wanted to convey the vast sweep of human history over centuries, and one of his points is that at such a timescale, individuals don't matter. Thus his lack of characterization is central to his thematic aims.

9

Based on the texts, how would the author of Text 2 most likely respond to the description of Asimov's characters in the underlined portion of Text 1?

- A) The flatness of Asimov's characters is a feature of *Robots and Empire* and *I, Robot* but not of *Foundation*.
- B) Asimov's characterizations would have been more believable if his writing had discussed fewer ideas.
- C) Asimov's characterizations would have been richer if he had possessed a deeper understanding of history.
- D) The flatness of Asimov's characters should not necessarily be considered a flaw in his writing.

**Text 1:**

In northern and western Nebraska, many buildings and other structures rest on soil that is expansive, meaning that it swells or shrinks as its moisture level changes. Civil engineer Jay X. Wang has noted that the effects of expansive soil appear slowly in the form of gradually growing cracks in foundations, walls, and pavements. Because these effects are incremental and can generally be repaired (though at some cost), structures in northern and western Nebraska are typically not built to resist them.

**Text 2:**

In a 2021 study, Rubayet Bin Mostafiz and colleagues calculated that in the state of Louisiana alone, the annual cost of damage caused by expansive soils reaches nearly \$90 million. But they note that this damage can be mitigated: building structures on pile supports can significantly reduce the effects of soil swelling and shrinking.

10

Based on the texts, how would Rubayet Bin Mostafiz and colleagues (Text 2) most likely respond to the information presented in Text 1?

- A) They would recommend that engineers in northern and western Nebraska measure the moisture level in the soil beneath proposed structures before beginning construction.
- B) They would argue that engineers in northern and western Nebraska have misjudged the effectiveness of the techniques they use to reduce the effects of expansive soil.
- C) They would encourage engineers in northern and western Nebraska to use pile supports when building new structures.
- D) They would suggest that engineers in northern and western Nebraska consider the cost of replacing the pile supports on which existing structures rest.

**Text 1:**

A conservation group representing 11 tribal nations in the Great Lakes region reported to various state and federal natural resources agencies operating in the region that the firefly (waawaatesi in the Ojibwe language) will likely fare significantly worse than the black bear (makwa in Ojibwe) due to rising temperatures over the next 50 years. This collaborative approach has helped build trust between government and tribal groups, which will likely improve the quality of any joint conservation projects.

**Text 2:**

State and federal natural resources agencies are increasingly incorporating traditional ecological knowledge from tribal groups in the agencies' plans to address threats to natural resources due to increasing temperatures. This approach has helped build positive relationships between tribal groups and these agencies and furthermore tends to lead to better conservation outcomes.

**11**

Based on the texts, both authors would most likely agree with which statement?

- A) Natural resources conservation projects are likely to benefit from collaboration between tribal and government groups.
- B) A collaborative approach to conservation is likely to help reduce the predicted temperature increases in the Great Lakes region.
- C) In the Great Lakes region, it is more important to focus conservation efforts on the firefly than it is to focus on the black bear.
- D) In the Great Lakes region, conservation efforts focused on the firefly are likely to be more effective than those focused on the black bear.

**Text 1:**

When the 50-second-long film *Arrival of the Train*—which depicts what its title says, a train pulling into a station—was first shown publicly in 1896, spectators, naïve to the new medium of film and seeing a train appearing to come directly at them, leaped from their seats and fled the room. This moment marks a major cultural shift: a new way of representing and seeing the world had arrived with that train, and nothing would ever be the same.

**Text 2:**

The fact that there is no contemporary evidence that the first audience of *Arrival of the Train* was alarmed has not stopped the story from becoming canonical, even among film historians. But that phenomenon itself is highly revealing. Our belief that the coming of film was transformative is so strong that we invented and keep retelling a founding myth that divides cultural history into a (naïve) "before" and (sophisticated) "after."

**12**

Based on the texts, the author of Text 2 would most likely agree with which statement about the description of the first showing of *Arrival of the Train* in Text 1?

- A) It is not based on evidence and reflects film historians' belief that they are more sophisticated than today's audiences.
- B) It expresses a view about the transformative nature of film that film historians tend to regard as naïve.
- C) It is more motivated by a perception of the significance of the invention of film than by facts.
- D) It reflects a misconception that is widely believed because it captures early film audiences' sense that the new medium was alarming.

**Text 1:**

According to a study by a conservation group representing 11 tribal nations in the Great Lakes region, the lake trout (namegos in the Ojibwe language) will have significantly worse outcomes over the next 50 years if temperatures increase as much as some models suggest. By contrast, the bald eagle (migizi in Ojibwe) should be able to withstand the highest predicted warming without much harm and so likely won't require the conservation efforts that the lake trout will.

**Text 2:**

US government agencies involved in conservation are unfortunately not able to address every possible threat to natural resources. They must use the best information available to decide which species are most threatened and therefore most in need of conservation efforts.

**13**

Based on the texts, both authors would most likely agree with which statement?

- A) A collaborative approach is necessary to keep temperatures in the Great Lakes region from increasing to the highest predicted levels.
- B) Agencies involved in natural-resource management in the Great Lakes region should focus their conservation efforts more on the lake trout than on the bald eagle.
- C) State, federal, and tribal groups involved in natural-resource management in the Great Lakes region should immediately begin conservation programs for both the lake trout and bald eagle.
- D) Conservation efforts focused on the lake trout are more likely to be successful if they incorporate state and federal agency resources with the knowledge of tribal groups in those efforts.

**Text 1:**

In separate studies, Stephen Meding and Robert J. Zasoski and Xinhua He and colleagues examined whether plants transfer nutrients to one another using a common mycorrhizal network (CMN)—a lattice of fungal strands in the soil. Meding and Zasoski excluded all pathways other than the CMN by using barriers to keep the plants' root systems separate while allowing mycorrhizal strands through—a crucial step He and colleagues' study did not take.

**Text 2:**

Meding and Zasoski took the necessary precaution of separating the plants' root systems (thereby excluding root-to-root transmission). However, any barrier used must allow the thread-like hyphae of a CMN to pass through, and this permeability would also allow liquids through. Thus, the researchers' experimental design cannot ensure that any nutrient transfer observed can be attributed to a CMN and not to some other pathway.

**14**

Based on the texts, which choice best describes a point on which the author of Text 1 and the author of Text 2 would most likely agree?

- A) Meding and Zasoski's study effectively excluded any explanation for nutrient transfer other than via a CMN.
- B) Excluding root-to-root transfer of nutrients between plants is sufficient to ensure that any observed nutrient transfer must involve a CMN.
- C) He and colleagues' study was not designed in a way that would allow it to produce compelling evidence that nutrient transfer occurred via a CMN.
- D) A barrier that is impervious to both roots and fungal strands is necessary to evaluate nutrient transfer via a CMN.



**Text 1:**

In parts of New Zealand, the stoat is a major predator of the house mouse. Researcher G.L. Blackwell and colleagues found that when this predation pressure on house mice was temporarily reduced, their numbers significantly increased. This finding illustrates a foundational ecological principle: predators control prey population numbers.

**Text 2:**

William D. Gulsby and colleagues found that excluding coyotes from a site in the state of Georgia where they typically prey on white-tailed deer had no significant effect on white-tailed deer abundance. Many other predation relief studies show an increase in prey abundance, but those studies often focus on small, rapidly reproducing prey, like birds, mice, and frogs, rather than large, slowly reproducing prey, like white-tailed deer, which could account for the difference between those results and Gulsby and colleagues' results.

15

Based on the texts, the author of Text 2 would most likely agree with which statement about the “principle” mentioned in Text 1?

- A) It is plausible, but many of the studies that support it have methodological flaws.
- B) It has been challenged by some studies, but the findings of those studies have not been widely accepted.
- C) It may be true for some predators but only because those predators share certain physical characteristics.
- D) It has some evidential support, but it should not be regarded as universally applicable.

**Text 1:**

In parts of Australia, the feral cat is a major predator of the ash-grey mouse. Researcher Danielle A. Risbey and colleagues found that when this predation pressure on ash-grey mice was temporarily reduced, their numbers significantly increased. This finding illustrates a foundational ecological principle: predators control prey population numbers.

**Text 2:**

Michel Crête and Hélène Jolicoeur found that excluding wolves from a site in Quebec, Canada, where they typically prey on moose had no significant effect on moose abundance. Many other predation relief studies show an increase in prey abundance, but those studies often focus on small, rapidly reproducing prey, like birds, mice, and rabbits, rather than large, slowly reproducing prey, like moose, which could account for the difference between those results and Crête and Jolicoeur's results.

16

Based on the texts, the author of Text 2 would most likely agree with which statement about Risbey and colleagues' findings (Text 1)?

- A) They may be partially attributable to physical characteristics of ash-grey mice that are not shared by moose.
- B) They may have been different if the ratio of the body size of feral cats to that of ash-grey mice was greater than it is.
- C) They may be partially explained by the fact that feral cats are smaller and reproduce more rapidly than wolves.
- D) They may reflect a response that does not tend to be observed in prey species other than ash-grey mice.

**Text 1:**

In parts of Yukon, Canada, the lynx is a major predator of the arctic ground squirrel. Researcher Andrea E. Byrom and colleagues found that when this predation pressure on arctic ground squirrels was temporarily reduced, their numbers significantly increased. This finding illustrates a foundational ecological principle: predators control prey population numbers.

**Text 2:**

Mark A. Hurley and colleagues found that excluding coyotes from a site in the state of Idaho where they typically prey on mule deer had no significant effect on mule deer abundance. Many other predation relief studies show an increase in prey abundance, but those studies often focus on small, rapidly reproducing prey, like birds, squirrels, and rabbits, rather than large, slowly reproducing prey like mule deer, which could account for the difference between those results and Hurley and colleagues' results.

**17**

Based on the texts, the author of Text 2 would most likely agree with which statement about Byrom and colleagues' findings (Text 1)?

- A) They may be partially explained by the fact that lynxes are smaller and reproduce more rapidly than coyotes.
- B) They may have been different if the ratio of the body size of lynxes to that of arctic ground squirrels was greater than it is.
- C) They may reflect a response that does not tend to be observed in prey species other than arctic ground squirrels.
- D) They may be partially attributable to physical characteristics of arctic ground squirrels that are not shared by mule deer.

**Text 1:**

For thousands of years, O'odham farmers in the Sonoran desert of the southwestern US and northern Mexico have cultivated elderberries and chia seeds, sometimes planting these species together so that the elderberry bushes provide shade for chia flowers. Doing so helps protect chia flowers from the harshest heat and light and thereby helps prevent soil moisture from evaporating.

**Text 2:**

Chia flowers are well adapted to growing in the desert but grow best when shaded. Inspired by O'odham farmers, who often strategically plant chia flowers in the shade of sun-hardy species like elderberry bushes for protection from the sun and heat, Gary Nabhan and colleagues planted chia flowers in the shade of solar panels in the Sonoran desert and found that the plants grew well, suggesting to Nabhan and colleagues that the panels provide a benefit similar to that provided by elderberry bushes.

**18**

Based on the texts, the author of Text 1 and the author of Text 2 would most likely agree on which point?

- A) Elderberry bushes can provide shade that protects chia flowers from high-intensity heat and light.
- B) Nabhan's team's method could be refined to more actively prevent soil moisture from evaporating.
- C) Compared with Nabhan's approach, the O'odham approach has the advantage of producing chia seeds.
- D) Elderberry bushes grow best when planted in shaded areas, while chia flowers do not require shade to thrive.



**Text 1:**

The poet Audre Lorde once claimed that poetry is the most inexpensive of art forms to practice. While people who pursue other art forms – painting, architecture, theater – require large blocks of uninterrupted time as well as money to complete their work, poets can write, as Lorde said, "between shifts, in the hospital pantry, on the subway, and on scraps of surplus paper." So poets can practice their art even if they must earn their living in another way.

**Text 2:**

Any assessment of the state of contemporary poetry must reckon with the professionalization of the field. While it is possible in theory for anyone to publish in *Virginia Quarterly Review*, *Kenyon Review*, or a similar major poetry outlet, many people who do so have professional training in poetry and extensive practice writing it, which requires time not often available to those who must also work full-time jobs. Thus, financial security indirectly affects which people become poets.

**19**

Based on the texts, Lorde (Text 1) and the author of Text 2 would most likely disagree about the answer to which of the following questions?

- A) Do other art forms than poetry require substantial investments of time and money?
- B) Should poets try to gain experience working in nonartistic fields as a way of improving their poetry?
- C) Does professional training in poetry affect the quality of poet's work?
- D) Is working a full-time job a major impediment to practicing the art of poetry?

**Text 1:**

One challenge faced by researchers studying global urbanization is that countries may define urban settlements differently. Many countries define urban settlements based on the number of people living in them. However, countries do not all use the same number; for example, Greenland uses a minimum population of 200, while the Netherlands uses 20,000. Other countries use a combination of population and other factors. This variation makes it difficult for researchers to compare aspects of urbanization in different countries.

**Text 2:**

Recently, a group of six international organizations developed global definitions of common types of settlements. The group developed a new measure called the "degree of urbanization." This new measure establishes global criteria used to define three types of settlements (cities, towns, and rural areas) and allows researchers to better understand global urbanization rates.

**20**

Based on the text, how would the author of Text 2 most likely respond to the problem presented in Text 1?

- A) By suggesting that researchers focus on topics besides urbanization.
- B) By noting that a possible solution to the problem is available.
- C) By recommending that a specific institution should further investigate the problem.
- D) By supplying additional ways in which urbanization research is difficult.

**Text 1:**

The island of Grande Terre split from the former supercontinent Gondwana around 80 million years ago, carrying Gondwanan species from a variety of clades with it. The island was periodically submerged until 37 million years ago, but some researchers suggest that its current biota includes species from clades predating the split that took refuge on islands near Grande Terre during submergence events and then returned.

**Text 2:**

Thomas R. Buckley et al. found that the crown age – the age of the most recent common ancestor of all species in the clade (i.e., the clade's founder) – of Grande Terre's clade of stick insects is 41.1 million years, which is among the oldest clade crown ages of species inhabiting the island today. Nearly all of Grande Terre's living species belong to clades that originated much more recently: for example, the crown age of the island's clade of Goodeniaceae plants is 2.0 million years.

**21**

Based on the texts, the author of Text 2 would most likely agree with which statement about the "Gondwanan species" discussed in Text 1?

- A) Most of them began recolonizing Grande Terre from nearby islands around 2.0 million years ago.
- B) Clades to which they belong originated no earlier than 41.1 million years ago.
- C) Few if any of them were members of a clade that includes species currently inhabiting Grande Terre.
- D) Although most of them have living descendants on Grande Terre, the stick insects and Goodeniaceae plants do not.

**Text 1:**

According to a study by a conservation group representing 11 tribal nations in the Great Lakes region, the northern wild rice (manoomin in the Ojibwe language) will have significantly worse outcomes over the next 50 years if temperatures increase as much as some models suggest. By contrast, the white-tailed deer (waawaashkeshi in Ojibwe) should be able to withstand the highest predicted warming without much harm and so likely won't require the conservation efforts that the northern wild rice will.

**Text 2:**

US government agencies involved in conservation are unfortunately not able to address every possible threat to natural resources. They must use the best information available to decide which species are most threatened and therefore most in need of conservation efforts.

**22**

Based on the texts, both authors would most likely agree with which statement?

- A) State, federal, and tribal groups involved in natural-resource management in the Great Lakes region should immediately begin conservation programs for both the northern wild rice and white-tailed deer.
- B) Agencies involved in natural-resource management in the Great Lakes region should focus their conservation efforts more on the northern wild rice than on the white-tailed deer.
- C) A collaborative approach is necessary to keep temperatures in the Great Lakes region from increasing to the highest predicted levels.
- D) Conservation efforts focused on the northern wild rice are more likely to be successful if they incorporate state and federal agency resources with the knowledge of tribal groups in those efforts.

**Text 1:**

Uisdean Nicholson and his team have discovered evidence in seismic data of a 40-kilometer-wide subsurface crater beneath nearly a kilometer of water off the coast of West Africa that is consistent with a 400-meter wide asteroid striking the seafloor. This structure, which the team named Nadir, exhibits all the telltale signs of a high-velocity impact crater: an elevated rim, a circular shape, a terraced floor, and a pronounced area of uplift at its center.

**Text 2:**

Both carbonate dissolution and subsurface salt withdrawal can cause craterlike depressions without the need for a high-velocity impact. However, carbonate dissolution is very unlikely to have occurred in the vicinity of Nadir, and although subsurface salt withdrawal could have plausibly occurred in this area and would result in a depression with a terraced floor or a circular shape, it would not exhibit the area of central uplift seen at Nadir.

23

Which choice best describes a difference between the approach of Text 1 and the approach of Text 2?

- A) Text 1 dispassionately describes Nicholson and colleagues' findings and conclusions, whereas Text 2 attempts to convey the researchers' excitement on discovering Nadir.
- B) Text 1 focuses on features Nadir lacks, whereas Text 2 indicates features it shares with other geological depressions.
- C) Text 1 discusses a single plausible cause of Nadir, whereas Text 2 evaluates two possible causes.
- D) Text 1 emphasizes the evidence supporting an asteroid impact as the cause of Nadir, whereas Text 2 argues against that explanation.

**Text 1:**

In 2015 Rasht, Iran, was named a City of Gastronomy by UNESCO in recognition of the city's unique food culture. The honor is well known among residents of the city as well as tourists who visit. It's obvious that the selection of Rasht by UNESCO has brought awareness to local recipes, cooking practices, and chefs and has provided a boost to the city's tourism industry.

**Text 2:**

Many people in Rasht's restaurant industry hoped that food tourism would increase after the city was chosen as a City of Gastronomy in 2015. However, as researcher Eerang Park and colleagues argue, cities must still create effective marketing strategies to benefit fully from being named a City of Gastronomy. Without an intentional effort to promote the city's food scene, many current and potential visitors to Rasht may not even be aware that it's home to uniquely delicious food.

24

Based on the texts, both authors would most likely agree with which statement?

- A) The benefits of Rasht having been named a City of Gastronomy extend well beyond increased tourism.
- B) Increased tourism isn't guaranteed after a city has been named a City of Gastronomy.
- C) A city's food scene can benefit from the city being named a City of Gastronomy.
- D) A significant number of visitors to Rasht may not know that it was named a City of Gastronomy.

**Text 1:**

In separate studies, Stephen Meding and Robert J. Zasoski and Xinhua He and colleagues examined whether plants transfer nutrients to one another using a common mycorrhizal network (CMN) – a lattice of fungal strands in the soil. Meding and Zasoski excluded all pathways other than the CMN by using barriers to keep the plants' root systems separate while allowing mycorrhizal strands through – a crucial step He and colleagues' study did not take.

**Text 2:**

Meding and Zasoski took the necessary precaution of separating the plants' root systems (thereby excluding root-to-root transmission). However, any barrier used must allow the thread-like hyphae of a CMN to pass through, and this permeability would also allow liquids through. Thus, the researchers' experimental design cannot ensure that any nutrient transfer observed can be attributed to a CMN and not to some other pathway.

**Text 1:**

French Impressionist artist Edgar Degas insisted that his paintings be kept in their original frames after they were sold. Like many Impressionist painters, Degas used painted frames that stood in contrast to the gold frames frequently seen at the Paris Salon, a prestigious art exhibition that was sponsored by the French government and promoted traditional painting styles. Impressionist painters likely chose these colorful frames to distinguish themselves from what was considered conventional at the time.

**Text 2:**

Impressionist painters often focused on the interplay of color and light in their works. As such, those Impressionists who placed their works in painted frames instead of the more traditional gold ones did so for aesthetic reasons: a frame's color was likely chosen because it would harmonize with the colors or subjects in a painting. Gold, conversely, could distract from the subtleties in a painted scene.

**25**

Based on the texts, the author of Text 1 and the author of Text 2 would most likely agree with which statement?

- A) The barriers used in Meding and Zasoski's study effectively excluded root-to-root transmission of nutrients.
- B) A barrier that is impervious to both roots and fungal strands is necessary to evaluate nutrient transfer via a CMN.
- C) Excluding root-to-root transfer of nutrients between plants is sufficient to ensure that any observed nutrient transfer must involve a CMN.
- D) He and colleagues' study did not find convincing evidence of nutrient transfer between individual plants.

**26**

Based on the texts, both authors would most likely agree with which statement?

- A) Many Impressionist painters were intentional about the frames they selected for their works.
- B) Degas's preferred framing style was different from that of most Impressionist painters.
- C) The colors in an Impressionist painting were often chosen to complement the colors of the frame it would be placed in.
- D) Gold frames were considered especially desirable by those who purchased works from Impressionist painters.



Text 1

In 2019 Belo Horizonte, Brazil, was named a City of Gastronomy by UNESCO in recognition of the city's unique food culture. The honor is well known among residents of the city as well as tourists who visit. It's obvious that the selection of Belo Horizonte by UNESCO has brought awareness to local recipes, cooking practices, and chefs and has provided a boost to the city's tourism industry.

Text 2

Many people in Belo Horizonte's restaurant industry hoped that food tourism would increase after the city was chosen as a City of Gastronomy in 2019. However, as researcher Eerang Park and colleagues argue, cities must still create effective marketing strategies to benefit fully from being named a City of Gastronomy. Without an intentional effort to promote the city's food scene, many current and potential visitors to Belo Horizonte may not even be aware that it's home to uniquely delicious food.

Text 1

Uisdean Nicholson and his team have discovered evidence in seismic data of a 40 kilometer-wide subsurface crater beneath nearly a kilometer of water off the coast of West Africa that is consistent with a 400 meter wide asteroid striking the seafloor. This structure, which the team named Nadir, exhibits all the telltale signs of a high-velocity impact crater: an elevated rim, a circular shape, a terraced floor, and a pronounced area of uplift at its center

Text 2

Both carbonate dissolution and subsurface salt withdrawal can cause craterlike depressions without the need for a high-velocity impact. However, carbonate dissolution is very unlikely to have occurred in the vicinity of Nadir, and although subsurface salt withdrawal could have plausibly occurred in this area and would result in a depression with a terraced floor or a circular shape, it would not exhibit the area of central uplift seen at Nadir

27

Based on the texts, what would the author of Text 2 most likely say in response to the underlined claim in Text 1?

- A) Many people worked together to help Belo Horizonte be recognized by UNESCO, but chefs deserve the most credit for Belo Horizonte's selection as a City of Gastronomy.
- B) Belo Horizonte may have benefited from being selected by UNESCO, but tourism can likely be further increased by making more potential visitors aware of the city's status as a City of Gastronomy.
- C) The naming of Belo Horizonte as a City of Gastronomy was long overdue, given the city's unique and delicious food.
- D) The benefits of being named a City of Gastronomy extend well beyond tourism.

28

Which choice best describes a difference between the approach of Text 1 and the approach of Text 2?

- A) Text 1 dispassionately describes Nicholson and colleagues findings and conclusions, whereas Text 2 attempts to convey researchers' excitement on discovering Nadir
- B) Text 1 focuses on features Nadir lacks, Text 2 indicates features it shares with other geological depressions.
- C) Text 1 discusses a single plausible cause of Nadir, whereas Text 2 evaluates two possible causes.
- D) Text 1 emphasizes the evidence supporting an asteroid impact as the cause of Nadir, whereas Text 2 argues against that explanation.



### Text 1

Chemically analyzing bulk rock-core samples from Australia's Mount McRae Shale, Ariel Anbar et al. found a transient but significant increase in molybdenum (Mo) at a point corresponding to roughly 2.5 billion years ago (Ga). On Earth, Mo is released mainly through oxidative weathering of minerals; Anbar et al. therefore concluded that atmospheric oxygen briefly increased 2.5 Ga, then returned to its earlier negligible level.

### Text 2

Sarah Slotznick et al. reexamined the Mount McRae Shale core. Since chemically analyzing bulk samples can occlude contextual details, Slotznick et al. also employed high-resolution microscopy, which revealed volcanic debris—a known Mo host—around 2.5 Ga and microfractures in the surrounding matrix. The researchers assert that fluid could have reached the debris through the microfractures and initiated oxidative weathering long after debris deposition.

### Text 1

Hycean planets are a class of exoplanets (planets outside our solar system) with oceans of liquid water—critical to supporting life and atmospheres rich in hydrogen. Computer models have determined that for potential hycean planets, the range of the habitable zone (HZ), the distance from a star that allows a planet to retain liquid water on its surface, begins at about 1 astronomical unit (AU). In 2021, Nikku Madhusudhan et al. identified K2-18b as a hycean candidate, noting that the planet is located right on the inner edge of the HZ.

### Text 2

In a 2023 paper, Shang-Min Tsai et al. claimed that the hydrogen-rich atmospheres of K2-18b and other hycean candidates admit wavelengths of light that cause elevated surface temperatures and increased water evaporation. Unlike earlier assessments, Tsai et al.'s calculations therefore placed the inner edge for these planets' HZ as far out as 3.85 AU.

29

Based on the texts, Anbar et al. (Text 1) and Slotznick et al. (Text 2) would most likely disagree about the answer to which question about the portion of the Mount McRae Shale rock-core corresponding to 2.5 Ga?

- A) Is the increase in Mo in that portion attributable to oxidative weathering of the material found in that portion?
- B) Is the increase in Mo in that portion indicative of an increase in atmospheric oxygen dating to the same time?
- C) Did chemically analyzing bulk samples lead to a false impression that there is an increase in Mo in that portion?
- D) Is the increase in Mo in that portion suggest that atmospheric oxygen levels were not negligible before 2.5 Ga?

30

Based on the texts, how would Tsai et al. (Text 2) most likely respond to Madhusudhan et al.'s research, as presented in Text 1?

- A) By arguing that K2-18 b and other hycean candidates are unlikely to support life because these planets are located too far from the stars they orbit.
- B) By stating that the chemical composition of the atmosphere of the hycean candidate Madhusudhan et al. identified suggests that this planet's surface is unlikely to harbor liquid water.
- C) By maintaining that Madhusudhan et al. relied on a model whose estimates of surface temperatures on hycean candidates are likely too high.
- D) By observing that unlike the hycean candidate Madhusudhan et al. discovered, most other types of planets with hydrogen-rich atmospheres are likely located within the HZ.

### Text 1

Studies contributing to the body of evidence that people generally enjoy socializing have routinely focused on interactions in ongoing relationships (from spouses to classmates), but psychologist Selin Salman-Engin and colleagues have demonstrated the benefit of making connections with strangers. Greater positive affect was reported by participants in their study who warmly thanked a shuttle driver than by those who didn't speak to the driver.

### Text 2

Social relations research commonly draws on a model that centers an individual within three concentric circles. The innermost circle holds one's strongest ties (e.g., a treasured friend), the next holds close but less important ties (e.g., a teammate), and the outermost holds weak ties (those more distant but important enough to be counted as part of one's social network).

31

Based on the texts, what would Salman-Engin and colleagues (Text 1) most likely say about the discussion of the model in Text 2?

- A) It underscores that most research on social interactions fails to capture a category of connection that has the capacity to contribute positively to individuals' sense of well-being.
- B) It reflects an overemphasis on relationship longevity in researchers' evaluations of the relative importance of various connections in an individual's social network.
- C) It explains researchers' observations that individuals typically expect interactions with familiar people to be more positive than their interactions with unfamiliar people would be.
- D) It emphasizes distinctions among types of close connections that aren't adequately represented in social relations research, since most studies categorize relationships as either close or casual.

Text 1

In a seminal 1979 study, Daniel Kahneman and Amos Tversky presented students and college faculty from Israel, Sweden, and the United States with hypothetical questions involving financial decisions. Finding that participants' responses indicated that losses have a greater psychological impact than equivalent gains do, the researchers formulated the concept of loss aversion, which has since informed research in fields ranging from marketing to law.

Text 2

Dana Zeif and Eldad Yechiam conducted an experiment in which study participants from five countries were exposed to financial choices that involved potential losses of either relatively minor sums of money, such as 20 US dollars (low stakes contexts), or more substantial sums, such as 100 US dollars (high-stakes contexts). The researchers concluded that only the latter contexts were associated with loss aversion.

32

Based on the texts, how would Zeif and Yechiam (Text 2) most likely respond to Kahneman and Tversky's finding (Text 1)?

- A) By contending that the attitude toward financial losses that Kahneman and Tversky observed is contingent on the magnitude of outcomes
- B) By agreeing that experimental results support the idea that some people tend to be more cognizant of financial losses than of gains
- C) By observing that ability to assess feelings about financial decisions is contingent on gathering adequate data about gains and losses
- D) By disputing Kahneman and Tversky's claim that a tendency to place excessive emphasis on financial losses accounts for the loss aversion observed in fields such as marketing and law

Text 1

From the extinct greater Haitian ground sloth to the living Hoffmann's two-toed sloth, sloths are among the most appealing animals native to the Americas. But scientists still have a lot to learn about them. Unlike their ancient ground-dwelling relations, today's sloths spend most of their time high up in trees. The sloths' inaccessibility has made it hard for scientists to study them. Text 2

By using a hat-like monitor, biologist Bryson Voirin and colleagues can at last discover the previously hidden activities of sloths. Such monitors can provide information to correct misconceptions. It was long believed that sloths sleep all day. But, in fact, in the wild sloths sleep about nine hours a day.

33

The author of Text 1 and the author of Text 2 both discuss which topic?

- A) How extinct sloths compare with living sloths
- B) Scientists' efforts to understand sloths
- C) The benefits of putting monitoring devices on sloths
- D) Changes in sloths' habitats

Text 1

In separate studies, Marine Fernandez and colleagues and Xinhua He and colleagues examined whether plants transfer nutrients to one another using a common mycorrhizal network (CMN)—a lattice of fungal strands in the soil. Fernandez and colleagues excluded all pathways other than the CMN by using barriers to keep the plants' root systems separate while allowing mycorrhizal strands through—a crucial step He and colleagues' study did not take.

Text 2

Fernandez and colleagues took the necessary precaution of separating the plants' root systems (thereby excluding root-to-root transmission). However, any barrier used must allow the thread-like hyphae of a CMN to pass through, and this permeability would also allow liquids through. Thus, the researchers' experimental design cannot ensure that any nutrient transfer observed can be attributed to a CMN and not to some other pathway.

Text 1

For decades, ornithologists assumed that if they saw a singing white-eyed vireo—a bird species found in temperate North America—they must be observing a male. That's because birdsong has long been considered a male trait; researchers have argued that singing enables males to attract mates and claim territory.

Text 2

Recent evidence shows that a female white-eyed vireo is as capable of song as a male is. In fact, Karan J. Odom and colleagues found evidence of female song in 71% of the 323 species they examined. They claim that the historical mischaracterization of birdsong as a male trait is largely the result of bias: much of the research ornithologists have carried out has been near universities in the temperate northern hemisphere, where female birdsong is less common than it is in the tropics.

34

Based on the texts, which choice best describes a similarity in the points of view presented in Text 1 and Text 2?

- A) Each text attempts to dispel a common misunderstanding about the likelihood of plant-to-plant nutrient transfer.
- B) Each text assumes that most nutrient transfer between plants is via a CMN.
- C) Each text analyzes methods for studying CMN nutrient transfer in order to propose an alternative method of study.
- D) Each text critiques the methodology of a study about nutrient transfer via a CMN.

35

Based on the texts, how would Odom and colleagues (Text 2) most likely respond to the view of birdsong presented in Text 1?

- A) They would claim that other factors than mate attraction and territorial defense have driven the evolution of singing in male birds.
- B) They would underscore that male songbirds in temperate zones are likely using their songs for different purposes than are male songbirds in the tropics.
- C) They would argue that it was influenced by the kinds of study sites researchers tended to select.
- D) They would suggest that it reflects a tendency to study male birds rather than female birds.

Text 1

The land that became Grande Terre island split from remnants of the former supercontinent Gondwana approximately 80 million years ago, carrying Gondwanan biota with it, and experienced periodic submersion until 37 million years ago. Some researchers posit that the island's current biota includes members of Gondwanan clades (i.e., clades predating the split) that persisted by seeking temporary refuge on nearby islands during submergence events.

Text 2

In a recent study, Prashant Sharma and Gonzalo Giribet found that the crown age -the age of the most recent common ancestor of all species in the clade (i.e., the clade's founder)-is 48.9 million years for Grande Terre's clade of harvest spiders. Most of the island's extant biota belong to clades with younger crown ages, however: Jérôme Murienne et al. found that the crown age of Grande Terre's clade of cockroaches is 2.7 million years, for example.

36

Taken together, Text 1 and Text 2 best support which statement about the clades of harvest spiders and cockroaches on Grande Terre?

- A) The clade of harvest spiders must have originated on Gondwana, but the clade of cockroaches may or may not have.
- B) Both the clade of harvest spiders and the clade of cockroaches originated elsewhere and colonized Grande Terre.
- C) Neither the clade of harvest spiders nor the clade of cockroaches originated on Gondwana.
- D) The clade of harvest spiders originated before Grande Terre split from Gondwana, whereas the clade of cockroaches originated after the split but before the periodic submergence events began.



Text 1 is T.L. Hulme's 1912 poem "Above the Dock." Text 2 is from Amy Lowell's 1912 poem "The Crescent Moon."

**Text 1**

Above the quiet dock in mid night,  
Tangled in the tall mast's corded height,  
Hangs the moon. What seemed so far away  
Is but a child's balloon, forgotten after play.

**Text 2**

Slipping softly through the sky  
Little horned, happy moon,  
Can you hear me up so high?  
Will you come down soon?

37

Which choice best describes a notable difference in how the speaker of Text 1 and the speaker of Text 2 portray the moon?

- A) While both speakers characterize the moon as an entrapped figure, only the speaker of Text 2 describes the moon as being content with this fate.
- B) While both speakers present the moon as a tangible object, only the speaker of Text 1 addresses the moon's beauty.
- C) While the speaker of Text 1 presents the moon as an object of play, the speaker of Text 2 presents the moon as an object of serious study.
- D) While the speaker of Text 1 presents the moon as seeming to be very close, the speaker of Text 2 emphasizes the moon's distance from the speaker.

## Answers: Cross-Text Connections

Number	Answer	Number	Answer
1	D	2	D
3	B	4	B
5	A	6	B
7	B	8	A
9	D	10	C
11	A	12	C
13	B	14	C
15	D	16	A
17	D	18	A
19	D	20	B
21	C	22	B
23	C	24	C
25	A	26	A
27	B	28	C
29	B	30	B
31	A	32	A
33	B	34	D
35	C	36	C
37	D		

## Topic 12: Words in Context - Gap Filling

248 Questions

### DIRECTIONS

#### Must Know Tips:

- This is not only a vocabulary question but also a logic question.
- Learn about statement and restatement.
- A group or pair of words can be restated with one word.
- Don't read the question prompt (it's static).
- Pay attention to fillers (e.g., "unlike," "by no means," "without").

**Recommended time per question in this section:** min: 25 sec, max: 1 min, avg: 42.5 sec.  
(\*Exam level)

The Lascaux Cave paintings-detailed paintings of animals found in what is now France and dating from around 17,000 years ago-are sometimes said to be emotionally powerful despite their age, but in fact the paintings are \_\_\_\_\_ precisely because of their age. It is the link of shared humanity with the artists across so many centuries that gives the Lascaux Cave paintings such resonance.

1

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

- A) ingenious
- B) meticulous
- C) pristine
- D) affecting

The Al-Fattah Al-Aleem Mosque in the New Administrative Capital, Egypt, is a massive mosque that can accommodate approximately 17,000 people at once, making it an \_\_\_\_\_ sight to behold.

2

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

- A) idealized
- B) intricate
- C) illusory
- D) imposing

Some robots such as Surena (developed in 2008) and COMAN (developed in 2012) feature humanoid characteristics like bipedal locomotion so that people will find it easier to interact with them. While these features can help to

\_\_\_\_\_ feelings of comfort in people, a robot that looks too like human can fall into the 'uncanny valley,' meaning that its appearance unintentionally unsettles those who encounter it.

3

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

- A) engender
- B) constrict
- C) counterbalance
- D) repudiate

Text corpora such as the International Corpus of English are enormous collections of electronically stored texts that can be used for empirical testing of hypotheses regarding how

\_\_\_\_\_ a word is in spoken and written English. For instance, one might have a guess about the incidence of the word 'first,' but only an analysis of a corpus can prove that 'first' is the third most commonly used adjective.

4

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

- A) pervasive
- B) credible
- C) assertive
- D) profound

Initially, upon entering the United States in the 1900s, the majority of European immigrants had a lower education level than the U.S. average. However, surveys \_\_\_\_\_ from 1940–2017, show that European immigrants advanced further in their education by the third generation than United States born whites.

5

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

- A) managed
- B) administered
- C) delivered
- D) supplied

To avoid conflict with incoming Europeans attempting to colonize North America, the Cherokee nation

\_\_\_\_\_ many of the settler's culture, including language, religion, and economics. Despite this, when gold was discovered in their territory, the Indian Removal Act was passed in 1830 to remove the tribe from their lands and gain access to their resources.

6

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

- A) learned
- B) mimicked
- C) adopted
- D) rejected

Although the knowledge of the Pleistocene epoch and the lives of the hominids during this time was once \_\_\_\_\_, recent analyses of fossils like that of the individual known as Misliya -1, discovered in Israel in 2002, have sharpened our picture of what a day in the life of Misliya-1 may have looked like.

7

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

- A) intricate
- B) unprecedented
- C) concrete
- D) nebulous

Whether the reign of a French monarchs such as Louis Philippe I or Philip II was considered historically significant or, conversely, relatively \_\_\_\_\_, its trajectory was shaped by question of legitimacy and therefore cannot be understood without a corollary understanding of the factors that allowed the monarch to assert a claim to the throne successfully.

8

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

- A) benevolent
- B) momentous
- C) inconsequential
- D) genuine

The A2X Markets in Johannesburg, South Africa, connects companies operating in South Africa with potential investors. This is a valuable service since the time and expense necessary to find individual investors might otherwise be \_\_\_\_\_ for these companies: many of the companies could not operate if they had to do everything necessary to find investors for themselves.

9

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

- A) misconstrued
- B) distinctive
- C) prohibitive
- D) beneficial



Indigenous Photograph is an organization whose mission is to ensure that images of Indigenous peoples in the media are presented from Indigenous perspectives. The Organization \_\_\_\_\_ this commitment by promoting the works of artist Geremew Tigabu (Ethiopian, Ambara, and Tigre) and other prominent Indigenous photographers who document and reflect indigenous lives and experiences.

10

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

- A) concludes
- B) explains
- C) precedes
- D) shows

Although fewer companies trade their stocks on the Cambodia Securities Exchange in Phnom Penh, Cambodia, than on the stock exchanges in London, Mumbai, or Tokyo, the Cambodia Securities Exchange has the advantage of being able to \_\_\_\_\_ relatively small companies in Cambodia: by connecting those companies to investors with expertise about the country's economic conditions, the Cambodia Securities Exchange can help those companies thrive.

11

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

- A) designate
- B) nurture
- C) preclude
- D) assess

The emphasis on accurately representing the experiences of average working people that is characteristic of the realist style can be seen in *The Gleaners*, painted by Jean-François Millet, which depicts peasants picking stray wheat from a field after the harvest. This style can thus be seen as an effort to \_\_\_\_\_ what were regarded as the excesses of the romantic style evident in many paintings by Horace Vernet, which instead exaggerated their subjects' beauty or heroism while hiding imperfection.

12

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

- A) understand
- B) advance
- C) counteract
- D) accentuate

The swordfish can swim very fast- up to 97 kilometers per hour (km/hr) but it is significantly slower than the frigatebird, which can fly at speeds up to 153 km/hr. The difference between these speeds is largely \_\_\_\_\_ of the fact that the features that make flight possible do less to limit top speeds than the features suitable for swimming through water.

13

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

- A) a consequence
- B) an explanation
- C) a repudiation
- D) an objective

Whether the reign of a French monarch such as Louis VII or Henry V was historically consequential or relatively uneventful, its trajectory was shaped by questions of legitimacy and therefore cannot be understood without a corollary understanding of the characteristics without which the monarch would have been forced to \_\_\_\_\_ the throne.

14

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

- A) reciprocate
- B) annotate
- C) abandon
- D) equalize

With his widely celebrated portraits of poet Seamus Heaney, molecular biologist Struther Arnott, and other prominent figures in different fields, British painter Peter Edwards has \_\_\_\_\_ substantial prestige as an artist.

15

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

- A) required
- B) remembered
- C) achieved
- D) avoided

Though many \_\_\_\_\_ studies of the effect of altitude on blood chemistry focus on people who live above sea level, researchers Suleiman A. Al Sweedan and Moath Alhaj recently chose the novel path of focusing on people who live below sea level, in locations such as the California towns of Salton City and Coachella.

16

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

- A) eccentric
- B) meager
- C) conventional
- D) random

The Caves of Gargas paintings-stencils of human hands found in what is now France and dating from around 27,000 years ago-are thought of as art today, but the question of whether the people of the time understood the paintings as something akin to art in one modern sense or in some other way entirely is \_\_\_\_\_: we will never be able to answer it.

17

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

- A) irresolvable
- B) self-contradictory
- C) imperative
- D) unavoidable

The Gleaners, painted in the realist style by Jean-François Millet, depicts peasants picking stray wheat from a field after the harvest. The realists' emphasis on accurately portraying the experiences of average working people was largely a rejection of the romantic style evident in many paintings by Jérôme-Martin Langlois, which instead \_\_\_\_\_ their subjects' beauty or heroism while hiding all imperfection.

18

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

- A) counteract
- B) accentuate
- C) rectify
- D) obscure

Though most studies of the effect of altitude on blood chemistry usually concentrated on people who live above sea level, researchers Suleiman A. Al-Sweedan and Moath Alhaj have instead chosen the \_\_\_\_\_ path in their recent work of studying the blood of people who live below sea level, in locations such as the California towns of Salton City and Imperial.

19

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

- A) predictable
- B) timeworn
- C) innovative
- D) idealistic

Although our knowledge of the Pliocene epoch and the lives of the hominids during this time was once \_\_\_\_\_ recent analyses of fossils like that of the individual known as KNM-KP 271, discovered in Kenya in 1963, have sharpened our picture of what a day in the life of KNM-KP 271 may have looked like.

20

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

- A) nebulous,
- B) intricate,
- C) unprecedented,
- D) concrete,

Text corpora such as the British National Corpus are enormous collections of electronically stored texts that can be used for empirical testing of hypotheses regarding how

\_\_\_\_\_ a word is in spoken and written English. For instance, one might have a guess about the incidence of the word 'world,' but only an analysis of a corpus can prove that 'world' is the eighth most commonly used noun.

21

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

- A) pervasive
- B) credible
- C) assertive
- D) profound

\_\_\_\_\_ though it seemed to many mathematicians, the honeycomb conjecture, posited in the first century BCE, eventually yielded to the efforts of Thomas C. Hales, who presented a proof of it in 1999.

22

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

- A) Irreproachable
- B) Unequivocal
- C) Insuperable
- D) Ineluctable

A number of recording artists \_\_\_\_\_ distinctions between Indigenous music and other musical style. For example, Inuit singer-songwriter Tanya Tagaq incorporated Inuit throat singing into electronic music on her album *Tongue*, and Swinomist/Inupiaq musician Black Belt Eagle Scout combined powwow-style melodies with rock on her album *At the Party with My Brown Friends*.

23

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

- A) disguise
- B) reject
- C) replace
- D) observe

Béla Mocsáry, who traveled solo to four continents in the early 1900s, undoubtedly accomplished much, but her place in our historical memory is perhaps more \_\_\_\_\_ than that of a noteworthy 'first' such as Adeline and Augusta Van Buren, who were the first women to ride solo motorcycles across the continental United States, a deed for which they will always be remembered.

24

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

- A) enduring
- B) conspicuous
- C) deserving
- D) uncertain

From sculptures like Miró's Chicago by Joan Miró, found at Brunswick Plaza, to street art like Justus Roe's mural South Shore on South Exchange Avenue, Chicago offers an array of works to \_\_\_\_\_ the tastes of art lovers.

25

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

- A) supplant
- B) mitigate
- C) venerate
- D) satiate

Writer Lydia Davis observed that while traditional literary forms, such as the novel, are recognizable as such even as they evolve, there are rarer 'intergeneric' forms that might, for example, use elements of both fiction and essays to create something \_\_\_\_\_. The late-period pieces of James Tate arguably fit this description, since they straddle the line between prose and poetry.

26

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

- A) orthodox
- B) unequivocal
- C) recurrent
- D) unclassifiable

Alfred Nobel intended for the Nobel Prize to be an award honoring those who have contributed 'the greatest benefit to mankind.' Indeed, the work of Richard Laurence Millington Synge represented a significant \_\_\_\_\_ the field of chemistry, and in 1952 he was among those awarded the Nobel Prize in Chemistry for 'their invention of partition chromatography.'

27

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

- A) exposure to
- B) advancement in
- C) dependence on
- D) controversy in



British painter Peter Edwards has a \_\_\_\_\_ painting portraits of notable figures from a variety of different fields. These characteristic works include his esteemed portraits of poet Seamus Heaney and casting director Ruth Lambert.

28

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

- A) reputation for
- B) requirement for
- C) complaint about
- D) question about

Ji-li Jiang's book *Red Kite, Blue Kite* has earned a lot of praise. In fact, the book \_\_\_\_\_ the Asian/Pacific American Award for Literature.

29

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

- A) guessed
- B) blamed
- C) received
- D) forgot

The equipment from the Apollo Moon landings (1969-1972), such as solar wind sensors and seismic sensors, remains there to this day, but the data from these missions were mostly inaccessible until a recent data-transfer project made them \_\_\_\_\_. This project has allowed researcher Renee Weber to make use of the information in investigating tectonic activity on the Moon.

30

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

- A) complicated
- B) representative
- C) available
- D) predictable

One way to \_\_\_\_\_ the importance of a scholar's research is to track how often other scholars refer to that research. For example, University of California-Berkeley economist Ulrike Malmendier, who studies behavioral economics, is among the world's most frequently cited researchers in her field, indicating that her work has been quite significant.

31

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

- A) assess
- B) utilize
- C) influence
- D) undermine

The reception of Uma Krishnaswami's book *Step Up to the Plate*, Maria Singh has been very good. Many reviewers have \_\_\_\_\_ the book, and it won the Asian/Pacific American Award for Literature.

32

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

- A) overlooked
- B) misunderstood
- C) praised
- D) attacked

Few religious buildings can be said to \_\_\_\_\_ the astonishing size of Al Saleh Mosque in Yemen, which, with the capacity to accommodate approximately 44,000 people at once, is one of the largest mosques in the world.

33

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

- A) symbolize
- B) conceal
- C) minimize
- D) match

A number of recording artists \_\_\_\_\_ Indigenous music with other musical styles. For example, Choctaw singer-songwriter Samantha Crain incorporated elements of Choctaw hymns into folk-pop on her single 'When We Remain,' and Wayuu singer-songwriter Lido Pimienta combined Afro-Indigenous music from Colombia with Latin pop on her album *Miss Colombia*.

34

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

- A) acquire
- B) fuse
- C) exaggerate
- D) analyze

Though most hoaxes perpetrated as jokes by mischievous users of Wikipedia, an online encyclopedia that almost anyone can freely edit, have quickly been detected and removed, a few fictitious entries, such as those for the French opera singer Lollie Alexi Devereaux and the Belgian major general Théophile Figeys, persisted on the site for many years before they were finally recognized as \_\_\_\_\_ and deleted.

35

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

- A) enhancement
- B) revelations
- C) pranks
- D) analyses

From sculptures like *Agora* by Magdalena Abakanowicz, found at Grant Park, to street art like Justus Roe's mural *Standing Wave* on South State Street, Chicago offers an array of works to \_\_\_\_\_ the tastes of art lovers.

36

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

- A) mitigate
- B) satiate
- C) venerate
- D) supplant

When discussing literary movements in Spain, scholars regularly characterize the works of Antonio Machado as especially representative of the Generation of '98. The reasons for this characterization may seem \_\_\_\_\_ but linking Machado with the Generation of '98 risks disregarding the subtleties in his style that do not neatly conform to the conventions of this literary movement.

37

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

- A) incongruous
- B) irrefutable
- C) pretentious
- D) provocative

The Baiturrahman Grand Mosque in Banda Aceh, Indonesia, is a massive mosque that can accommodate approximately 30,000 people at once, making it an \_\_\_\_\_ sight to behold.

38

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

- A) illusory
- B) idealized
- C) intricate
- D) imposing

Despite stated claims of global relevance, much major research on income inequality performed in the 2010s suffered from a myopic focus on a few countries in North America and Western Europe, partly due to limited data availability. Researchers would later

\_\_\_\_\_ this shortcoming after gaining new access to banking records located in nations in Africa, such as Tunisia, and Eastern Europe, such as Poland.

39

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

- A) mitigate
- B) validate
- C) presuppose
- D) categorize

Portable video game consoles and wireless speakers tend to contain batteries that can't be easily \_\_\_\_\_. Environmental policy researcher Jessika Richter warns that because new batteries can't be put in once the old ones no longer work, the gadgets stop functioning and are usually disposed of as trash.

40

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

- A) rated
- B) invented
- C) prevented
- D) replaced

Whether Carmen Lomas Garza is creating small paintings and illustrations or large public artworks—such as Baile, a copper cutout of traditional Mexican dance in the San Francisco International Airport—she is \_\_\_\_\_ direct experience, drawing from memories of her childhood in Texas or details of her current surroundings in California.

41

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

- A) complimented by
- B) uncertain about
- C) unbothered by
- D) inspired by

Domesticated thousands of years ago by Indigenous people in South America, the potato deviates structurally from the wild plant it is descended from. Summer squash, another crop domesticated by Indigenous Americans, shows so little resemblance to any wild plant that genetic research was necessary to \_\_\_\_\_ the wild Johnny ground as its ancestor.

42

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

- A) confirm
- B) acquire
- C) develop
- D) attract

When considering which plays and musicals to produce, theaters in San Francisco often favor keeping audiences happy over taking risks. So while they might be eager to produce an established classic like Amadeus, for example, most would be \_\_\_\_\_ to stage a work from a relatively unknown playwright.

43

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

- A) determined
- B) hesitant
- C) fortunate
- D) surprised

Excavating a dilophosaur fossil is a \_\_\_\_\_ process, since it can take weeks or even months of hard, physically tiring work to clear away the dirt and rock covering the specimen.

44

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

- A) cheap
- B) common
- C) rapid
- D) difficult



The minor planet 1061 Paeonia was named after the plant genus that includes peonies. But most minor planets are given only an identification number, both because there are over 500,000 such bodies known at present and because any name chosen needs to be \_\_\_\_\_ that body: no two minor planets are allowed to have the same name.

45

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

- A) exclusive to
- B) evocative of
- C) typical for
- D) superseded by

The National Heritage Fellowship was created to publicly \_\_\_\_\_ exceptional folk and traditional artists in the United States. In 1995, the fellowship was given to the Navajo (Diné) basket weaver Mary Holiday Black to celebrate her lifetime contributions to the arts.

46

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

- A) startle
- B) recognize
- C) familiarize
- D) convey

Text corpora such as the Bank of English are enormous collections of electronically stored texts that can be used for empirical testing of hypotheses regarding how \_\_\_\_\_ a word is in spoken and written English. For instance, one might have a guess about the incidence of the word 'get,' but only an analysis of a corpus can prove that 'get' is the fifth most commonly used verb.

47

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

- A) pervasive
- B) profound
- C) credible
- D) assertive

British painter Peter Edwards is known for his portraits of notable figures in different fields, from poet Wendy Cope to mathematician Christopher Zeeman. Widespread admiration of these works has helped Edwards gain substantial \_\_\_\_\_ as an artist.

48

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

- A) sympathy
- B) prestige
- C) assistance
- D) tolerance

The Apalachicola River delta system is located in Florida, where the river drains into the Gulf of Mexico, and is shaped by

\_\_\_\_\_ factors: for example, the geography of the coastline influences sedimentary deposition, which over time alters coastal geography.

49

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

- A) tenuous
- B) interdependent
- C) unyielding
- D) comprehensive

Though not closely related, the hedgehog tenrecs of Madagascar share basic

\_\_\_\_\_ true hedgehogs, including protective spines, pointed snouts, and small body size-traits the two groups of mammals independently developed in response to equivalent roles in their respective habitats.

50

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

- A) examples of
- B) concerns about
- C) indications of
- D) similarities with

Sarah Marquis, who walked 16,000 kilometers across Asia, Siberia, and Australia, undoubtedly accomplished much, but her place in our historical memory is perhaps more

\_\_\_\_\_ than that of a noteworthy 'first' such as Anésia Pinheiro Machado, who was the first female pilot in Brazil to carry passengers and the first to make stunt flights, a deed for which she will always be remembered.

51

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

- A) enduring
- B) uncertain
- C) conspicuous
- D) deserving

When considering which plays and musicals to produce, theaters in Miami often favor keeping audiences happy over taking risks. So while they might be eager to produce an established classic like *Crazy for You*, for example, most would be \_\_\_\_\_ to stage a work from a relatively unknown playwright.

52

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

- A) surprised
- B) determined
- C) fortunate
- D) hesitant

Some robots such as Surena (developed in 2008) and COMAN (developed in 2012) are designed to resemble humans so that people will find it easier to interact with them. To that end, certain features such as the ability to respond to voice commands can help to \_\_\_\_\_ people's feelings of comfort, but a robot that looks too human can fall into the 'uncanny valley,' meaning that its appearance unintentionally unsettles those who encounter it.

53

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

- A) constrict
- B) repudiate
- C) buttress
- D) mitigate

While recent scholarship has undermined claims that the works of twelfth-century Islamic philosopher Ibn Rushd were \_\_\_\_\_ other Muslim philosophers of his time, it is indisputable that his location in the Muslim-ruled area of what is now Spain meant that his works were primarily available thousands of miles west of the era's center of Islamic thought.

54

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

- A) controversial among
- B) antagonistic toward
- C) imitated by
- D) inconsequential to

The National Heritage Fellowship was created to honor exceptional folk and traditional artists in the United States for their \_\_\_\_\_. The Irish American accordionist Joe Derrane was chosen for the fellowship because he has contributed so much to the arts.

55

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

- A) achievements
- B) suspicions
- C) assumptions
- D) predictions

Some pieces of music might have many meanings the compositions of Albertale Caron-Legris can \_\_\_\_\_ as many different interpretations as there are people to listen to them- and so as long as a listener's interpretation isn't willfully absurd or the result of inattention, it is difficult to justify the claim that the listener has misunderstood the piece.

56

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

- A) yield
- B) refute
- C) counteract
- D) partition

The organizers specifically indicated that the conference was intended to focus on children's literature, so despite the education specialist's \_\_\_\_\_ her expertise on the subject in general, she found that she could speak authoritatively about the works of author Mildred Pitts Walter, particularly Justin and the Best Biscuits in the World, which she had used effectively in classroom instruction for many years.

57

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

- A) exceptions to
- B) insight into
- C) hesitancy about
- D) affinity for

In 1891, design artist William Morris cofounded the Kelmscott Press, which printed editions of books using preindustrial methods. Historians argue that Morris's repudiation of industrialization is \_\_\_\_\_ the Kelmscott editions' use of handmade materials and intricate ornamentation reminiscent of medieval manuscripts: these meticulously handcrafted elements exemplify the artistry involved.

58

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

- A) insensible to
- B) manifest in
- C) scrutinized by
- D) complicated by

It is tempting to treat the clustering of car manufacturing firms in Detroit, Michigan, as representative of industrial agglomeration generally, but Guilia Faggio et al caution against \_\_\_\_\_ this one example: the existence of labor pools, a dominant driver of collocation in this industry, was largely absent from the game and toy manufacturing industry.

59

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

- A) convening with
- B) extrapolating from
- C) corroborating
- D) scrutinizing

A number of recording artists \_\_\_\_\_ distinctions between Indigenous music and other musical styles. For example, the Haudenosaunee group the Halluci Nation incorporated powwow music into electronic dance music on its album *One More Saturday Night*, and Swinomish/Anupiaq musician Black Belt Eagle Scout combined powwow-style melodies with rock on her album *At the Party with My Brown Friends*.

60

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

- A) disguise
- B) reject
- C) replace
- D) observe

Karam Kang has demonstrated that lobbying does little to alter probability that a particular energy policy under consideration by the United States Congress will be enacted, but lobbying is not as \_\_\_\_\_ finding seems to suggest. As Kang herself notes, lobbying can shape which policy proposals members of Congress bring forward for consideration in the first place.

61

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

- A) counterproductive
- B) cynical
- C) biased
- D) ineffectual

The percentage of US forest land that a 2023 federal report identified as being either mature or old growth exceeds other recent estimates. Given how little \_\_\_\_\_ there is among scientists regarding the scope of these categories, this discrepancy shouldn't be surprising: forest researchers regularly dispute one another's classifications.

62

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

- A) interest
- B) deliberation
- C) vigilance
- D) consensus



Though it does not guarantee a book's commercial success, \_\_\_\_\_ can play a big role in that success a well-executed marketing campaign helped to make Danielle Steel's novel *The Gift*, the fourth-best-selling novel of 1994.

63

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

- A) originality
- B) publicity
- C) complexity
- D) practicality

People sometimes dismiss a claim if it comes from a source they regard as self-interested, but from a strictly logical perspective, the source of a claim is \_\_\_\_\_: it has no direct bearing on whether the claim is true.

64

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

- A) implicit
- B) indisputable
- C) indistinct
- D) irrelevant

Although Oscar Micheaux's 1920 film *Within Our Gates* and Ossie Davis's 1970 film *Cotton Comes to Harlem* may have had some \_\_\_\_\_ at the time of their initial release, their place in critics' estimations is now more secure. In 2018, for example, critics for the *New York Times* described the former as 'stunning' and the latter as 'especially pointed.'

65

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

- A) collaborators
- B) imitators
- C) precursors
- D) detractors

Political scientists have found that although voters claim to prefer candidates who have nuanced perspectives on issues and who show a willingness to compromise, when asked to compare speeches expressing such views with speeches expressing \_\_\_\_\_ views, voters tend to regard the unyielding rhetoric of the latter more favorably.

66

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

- A) dogmatic
- B) vacillating
- C) banal
- D) disingenuous

A number of recording artists \_\_\_\_\_ distinctions between Indigenous music and other musical styles. For example, Choctaw singer-songwriter Samantha Crain incorporated elements of Choctaw hymns into folk-pop on her single 'When We Remain,' and Oji-Cree/Mi'kmaq musician Anachnid combined Indigenous flute and powwow vocals with electronic music on her album Dreamweaver.

67

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

- A) disguise
- B) reject
- C) observe
- D) replace

The swordfish can swim very fast-up to 97 kilometers per hour (km/hr)- but it is significantly slower than the golden eagle, which can fly at speeds up to 320 km/hr. The \_\_\_\_\_ between these two speeds is not surprising, however, because the features that are most useful for swimming through water tend to be more limiting on top speeds than the features that are best suited for flying through the air.

68

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

- A) competition
- B) equivalence
- C) interaction
- D) disparity

The early British postal system required the cost of mail delivery to be paid upon receipt, a system which encouraged inventive strategies by the intended recipient to avoid payment. To improve this system, \_\_\_\_\_ were proposed in 1837, including the use of a postage stamp, a small receipt pasted to the mail indicating that delivery costs had been paid by the sender.

69

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

- A) investigations
- B) expansions
- C) reforms
- D) possessions

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.

70

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

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

Cuttlefish appear to be surprisingly \_\_\_\_\_ at exercising self-control: in a 2021 study conducted by behavioral ecologist Alexandra Schnell, these cephalopods routinely demonstrated restraint by delaying gratification, waiting for a favorite treat instead of instantly devouring a readily available meal.

71

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

- A) awkward
- B) imaginative
- C) manageable
- D) competent

Radiocarbon dating can help scientists determine whether the extinction of the giant short-faced bear around 8000 BCE \_\_\_\_\_ the arrival of humans in the same region of the Americas. If instead the giant short-faced bear died out before humans could have altered its habitat, that suggests that its extinction was the result of some other factor, such as change in sea levels as a result of glaciers retreating.

72

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

- A) compensated for
- B) coincided with
- C) developed into
- D) clashed with

Economists often assert that countries looking to increase their reliance on solar energy should expand their capacity for storage: having an ample reserve of stored energy can mitigate the effects of \_\_\_\_\_ solar energy collection caused by unpredictable shifts in cloud cover and haze.

73

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

- A) calibrations with
- B) developments of
- C) fluctuations in
- D) incentives for

Few religious buildings can be said to \_\_\_\_\_ the astonishing size of Sultan Salahuddin Abdul Aziz Mosque in Malaysia, which, with the capacity to accommodate approximately 24,000 people at once, is one of the largest mosques in the world.

74

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

- A) conceal
- B) symbolize
- C) minimize
- D) match

In the United States, historians of the American Revolution once had a tendency to approach their subject with \_\_\_\_\_: they had so much admiration for the people who carried out the revolution that they were far from objective in their scholarship.

75

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

- A) curiosity
- B) candor
- C) reverence
- D) prudence

A number of recording artists combine Indigenous music with other musical styles. Choctaw singer-songwriter Samantha Crain masterfully incorporated elements of Choctaw hymns into folk-pop on her single 'When We Remain.' Similarly, Wayuu singer-songwriter Lido Pimienta \_\_\_\_\_ Afro-Indigenous music from Colombia with Latin pop on her album Miss Colombia.

76

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

- A) confused
- B) compared
- C) blended
- D) replaced

Barring major archaeological discoveries, we are unlikely to ever have \_\_\_\_\_ account of ancient Egypt under the female pharaoh Hatshepsut, as much of the evidence of her reign was deliberately destroyed by her successors.

77

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

- A) an exhaustive
- B) a superficial
- C) an imaginative
- D) a questionable

The Roc-aux-Sorciers frieze—a group of relief carvings of animals found in what is now France and dating from around 14,000 years ago—is sometimes said to be emotionally powerful despite its age, but in fact the frieze is \_\_\_\_\_ precisely because of its age. It is the link of shared humanity with the artist across so many centuries that gives the Roc-aux-Sorciers frieze such resonance.

78

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

- A) ingenious
- B) pristine
- C) meticulous
- D) affecting

Although the government of the Soviet Union attempted to \_\_\_\_\_ Georgi Vladimov's novel *Faithful Ruslan*, copies of the book circulated in secret among readers in several parts of the country.

79

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

- A) replicate
- B) import
- C) suppress
- D) critique



Although the clustering of information technology firms in Northern California is often cited as typical of industrial agglomeration, Giulia Faggio et al. use UK data to show that the mix of factors driving the phenomenon is \_\_\_\_\_ across industries: while the potential for knowledge spillovers can prompt agglomeration, collocation among tube manufacturers occurs for different reasons.

80

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

- A) credible
- B) heterogeneous
- C) imperative
- D) decisive

Manul cats are small, shy felines. They live mostly alone in out-of-the-way parts of Asia, such as on Mount Everest. These cats have been difficult to research because their habitats are so \_\_\_\_\_ large populations of humans.

81

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

- A) drawn to
- B) full of
- C) distant from
- D) responsible for

Some paleontologists thought that a sudden shift toward an arid climate on the Australian continent may have brought about the rapid extinction of several species of large kangaroos around 200,000 years ago. However, new evidence that the change in conditions occurred well before those species went extinct is forcing paleontologists to \_\_\_\_\_ that hypothesis.

82

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

- A) revise
- B) interpret
- C) recollect
- D) introduce

The invention in 1958 of the integrated circuit (or microchip) radically altered the semiconductor industry. In fact, some historians argue that it fundamentally \_\_\_\_\_ the industry by enabling it to take advantage of mass production methods for the first time.

83

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

- A) obstructed
- B) transformed
- C) bypassed
- D) overwhelmed

Text corpora such as the Corpus of Contemporary American English are enormous collections of electronically stored texts that can be used for empirical testing of hypotheses regarding how \_\_\_\_\_ a word is in spoken and written English. For instance, one might have a guess about the incidence of the word 'day,' but only an analysis of a corpus can prove that 'day' is the fifth most commonly used noun.

84

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

- A) assertive
- B) credible
- C) pervasive
- D) profound

Excavating a pachycephalosaur fossil is a \_\_\_\_\_ process, since it can take weeks or even months of hard, physically tiring work to clear away the dirt and rock covering the specimen.

85

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

- A) cheap
- B) rapid
- C) common
- D) difficult

British painter Peter Edwards has a \_\_\_\_\_ painting portraits of notable figures from a variety of different fields. These characteristic works include his esteemed portraits of writer Maud Sulter and soccer player Bobby Charlton.

86

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

- A) complaint about
- B) question about
- C) requirement for
- D) reputation for

Though it does not guarantee a book's commercial success, \_\_\_\_\_ can play a big role in that success a well-executed marketing campaign helped to make Richard Bachman's novel *The Regulators* the fifth-best-selling novel of 1996.

87

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

- A) originality
- B) publicity
- C) complexity
- D) practicality

A unique dialect, or regional variety, of Spanish is spoken in Puerto Rico. It contains many words borrowed from the language of the Tainos, the Indigenous people of Puerto Rico. African languages also made important contributions to the Puerto Rican dialect. For example, the way certain vowel sounds are pronounced in it can be \_\_\_\_\_ to how they are pronounced in Yoruba, a West African language.

88

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

- A) traced
- B) announced
- C) offered
- D) surrendered

Though most hoaxes perpetrated as jokes by mischievous users of Wikipedia, an online encyclopedia that almost anyone can freely edit, have quickly been detected and removed, a few fictitious entries, such as those for the town of Stone Ridge, Maryland, and the 18th-century forestry magnate Guillermo Garcia, persisted on the site for many years before they were finally recognized as \_\_\_\_\_ and deleted.

89

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

- A) analyses
- B) fabrications
- C) enhancements
- D) revelations

Portable video game consoles and wireless speakers tend to contain batteries that can't be easily \_\_\_\_\_. Environmental policy researcher Jean-Pierre Schweitzer warns that because new batteries can't be put in once the old ones no longer work, the gadgets stop functioning and are usually disposed of as trash.

90

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

- A) invented
- B) prevented
- C) rated
- D) replaced

There is no doubt that Irving Langmuir must have proved himself to be extraordinarily \_\_\_\_\_ understanding some of the most advanced concepts in the field of chemistry—in 1932 his remarkable talent and hard work was recognized when he was awarded the Nobel Prize in Chemistry for 'his discoveries and investigations in surface chemistry.'

91

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

- A) modest about
- B) dispassionate in
- C) adept at
- D) lighthearted about

Economists have long observed that firms in related industries tend to cluster in the same area, as is the case in Leeds, UK, where many thread and yarn spinning firms as well as textile weaving firms are located. The factors causing such clustering are \_\_\_\_\_ : what drives firms in certain industries to cluster may not be especially relevant among other industries.

92

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

- A) unknown
- B) impressive
- C) focused
- D) variable

The results of randomized clinical trials testing the efficacy of common medical interventions sometimes fail to \_\_\_\_\_ conclusions that practitioners reach based on their real-world observations of patients. While there are several possible reasons for this, one is that practitioners may overlook confounding variables that account for the results they attribute to the interventions in question.

93

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

- A) implement
- B) disseminate
- C) circumvent
- D) corroborate

Dervla Murphy, who cycled solo through Europe, Iran, Afghanistan, Pakistan, and India, undoubtedly accomplished much, but her place in our historical memory is perhaps more \_\_\_\_\_ than that of a noteworthy 'first' such as Ynes Mexia, who was the first to discover the botanical genus Mexianthus, a deed for which she will always be remembered.

94

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

- A) enduring
- B) uncertain
- C) deserving
- D) conspicuous

In the 2010s, the price of vintage My Little Pony figures rose dramatically, which had the counterintuitive effect of \_\_\_\_\_ demand: buyers who hadn't previously wanted to purchase old toys suddenly thronged the market, believing prices would continue to rise and the toys could be resold later at a profit.

95

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

- A) exploiting
- B) stabilizing
- C) monetizing
- D) precipitating

Wireless headphones and other small electronic devices sometimes use batteries that can't be taken out and swapped for new ones. Environmental policy researcher Jessika Richter warns that once these internal batteries stop working, the devices become \_\_\_\_\_ and are typically thrown away, creating harmful waste.

96

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

- A) useless
- B) valuable
- C) familiar
- D) attractive

It is hardly an exaggeration to characterize modern Hawaiian literature as having \_\_\_\_\_ the traditional stories of the Kanaka Maoli, the Native Hawaiian people. In a variety of ways, Samuel Kamakau, Kristiana Kahakauwila, and other acclaimed writers have drawn on these stories to craft a rich portrait of the Hawaiian Islands and their people.

97

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

- A) brooded on
- B) supplanted
- C) anticipated
- D) derived from



The Dhaka Stock Exchange in Dhaka, Bangladesh, is a dedicated exchange for investing in companies operating in Bangladesh, ensuring those companies receive certain regulatory oversight. Knowing this can \_\_\_\_\_ potential investors' worries about bureaucratic minutiae and thereby allow them to instead focus on identifying sound business opportunities.

98

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

- A) amplify
- B) designate
- C) convey
- D) assuage

Some cities track pedestrian activity to map their sidewalks, but this method often \_\_\_\_\_ sidewalks few pedestrians use, resulting in incomplete maps. Maryam Hosseini and her team found that a computer program trained to identify sidewalks in aerial images of Boston could also accurately identify sidewalks in aerial images of Philadelphia and even distinguished between concrete and granite.

99

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

- A) neglects
- B) oversees
- C) approves
- D) detects

The tendency to group authors together into distinct literary movements often encourages literary scholars to \_\_\_\_\_ subtleties in an author's style. Those studying the works of William Ellery Channing, for instance, may inadvertently overlook nuances in his work by focusing only on the most obvious ways in which his style corresponds to transcendentalism.

100

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

- A) discount
- B) scrutinize
- C) magnify
- D) denounce

In the 2010s, the price of vintage She-Ra action figures rose dramatically, which had the counterintuitive effect of \_\_\_\_\_ demand: buyers who hadn't previously wanted to purchase old action figures thronged the market, believing prices would continue to rise and the toys could be resold later at a profit.

101

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

- A) exploiting
- B) engendering
- C) appraising
- D) monetizing

Novelist Leon Forrest admired William Faulkner's writing style. Forrest's novel *Divine Days* contains a long passage in tribute to Faulkner that is a perfect of \_\_\_\_\_ of Faulkner's style: anyone familiar with Faulkner's writing would see the resemblance.

102

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

- A) forgetting
- B) rejection
- C) imitation
- D) opinion

The Stock Exchange of Thailand in Bangkok, Thailand, is a dedicated exchange for investing in companies operating in Thailand, ensuring those companies receive certain regulatory oversight. Knowing this can \_\_\_\_\_ potential investors' worries about bureaucratic minutiae and thereby allow them to instead focus on identifying sound business opportunities.

103

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

- A) designate
- B) amplify
- C) assuage
- D) convey

The tendency to group authors together into distinct literary movements often encourages literary scholars to \_\_\_\_\_ subtleties in an author's style. Those studying the works of Amos Bronson Alcott, for instance, may inadvertently overlook nuances in his work by focusing only on the most obvious ways in which his style corresponds to transcendentalism.

104

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

- A) magnify
- B) scrutinize
- C) discount
- D) denounce

Though it does not guarantee a book's commercial success, \_\_\_\_\_ can play a big role in that success a well-executed marketing campaign helped to make Richard Bachman's novel *The Regulators* the fifth-best-selling novel of 1996.

105

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

- A) originality
- B) publicity
- C) complexity
- D) practicality

The reception of Many Ly's book *Roots and Wings* has been very good. Many reviewers, booksellers, and librarians have \_\_\_\_\_ the book, and it won the Asian/Pacific American Award for Literature.

106

1Which choice completes the text with the most logical and precise word or phrase?

- A) attacked
- B) recommended
- C) overlooked
- D) misunderstood

Kelp forests grow underwater along the eastern Pacific Coast. These underwater forests are important to fish and other marine animals. Ocean currents can be powerful and rough, making it difficult for animals to find safe places to hide from predators. The underwater forests slow down the currents. This creates a more \_\_\_\_\_ environment with calmer waters where animals can take shelter.

107

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

- A) surprising
- B) dangerous
- C) tranquil
- D) imaginative

The recently observed gamma ray burst GRB 230307A lasted for 200 seconds, \_\_\_\_\_ for a burst generated by the merger of neutron stars. Bursts caused by neutron mergers typically last fewer than 2 seconds.

108

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

- A) an oddity
- B) a coincidence
- C) a reprieve
- D) an incident

Smartphones and other small electronic devices tend to use batteries that can't be easily taken out and swapped for new ones. Environmental policy researcher Jean-Pierre Schweitzer warns that when these internal batteries stop working, the devices are usually thrown away, becoming harmful \_\_\_\_\_.

109

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

- A) advice
- B) waste
- C) rewards
- D) positions

Jean Batten, who was the first person to fly between England and New Zealand solo, and Ynes Mexia, who was the first to discover the botanical genus Mexianthus, are ensured lasting places in our historical memory. No matter what others may do in the future, nobody can ever \_\_\_\_\_ the standing of these women as the first to accomplish these feats.

110

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

- A) undermine
- B) imply
- C) extend
- D) promote

Whatever the general attitude toward Madeline Anderson's 1970 film *I Am Somebody* and Reginald Hudlin's 1990 film *House Party* when they were initially released, both films now tend to be regarded quite \_\_\_\_\_. In 2018, for example, critics for the *New York Times* praised the former as 'galvanizing' and the latter as 'exuberant.'

111

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

- A) favorably
- B) skeptically
- C) neutrally
- D) strangely

To evaluate their ideas about environmental conditions in the Pliocene epoch, paleontologists must turn to \_\_\_\_\_ evidence. Only material objects—such as the fossil remains of the individual known as AL 200-1, discovered in Ethiopia in 1975—can show whether a particular idea about the Pliocene is defensible.

112

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

- A) physical
- B) convenient
- C) creative
- D) inconclusive

Building additional road capacity may seem like an obvious solution to traffic congestion, but numerous studies have cast doubt on the \_\_\_\_\_ of that approach. Not only does additional road capacity often fail to relieve congestion, but it can also make traffic worse by encouraging more people to drive.

113

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

- A) efficacy
- B) aesthetics
- C) originality
- D) popularity

Though many \_\_\_\_\_ studies of the effect of altitude on blood chemistry focus on people who live above sea level, researchers Suleiman A. Al-Sweedan and Moath Alhaj recently chose the novel path of focusing on people who live below sea level, in locations such as the California towns of Bombay Beach and Imperial.

114

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

- A) eccentric
- B) traditional
- C) meager
- D) random



Whatever the general attitude toward Spike Lee's 1992 film *Malcolm X* and Carl Franklin's 1995 film *Devil in a Blue Dress* when they were initially released, both films now tend to be regarded quite \_\_\_\_\_. In 2018, for example, critics for the *New York Times* praised the former as 'electrifying' and the latter as 'picture-perfect.'

115

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

- A) strangely
- B) neutrally
- C) skeptically
- D) favorably

At the turn of the twentieth century, Black residents of Richmond, Virginia, had few formal options for banking and other financial services. To \_\_\_\_\_ this situation, Maggie Lena Walker chartered the St. Luke Penny Savings Bank in 1903. The bank went on to provide home loans and savings opportunities to thousands of Black families over the following decades.

116

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

- A) retain
- B) highlight
- C) prolong
- D) rectify

The fossil remains of the individual known as LH 4, discovered in Tanzania in 1974, can help paleoanthropologists not only identify steps in the evolution of hominids but also \_\_\_\_\_ Pliocene epoch generally, revealing important details about the time in which LH 4 lived.

117

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

- A) substitute
- B) imitate
- C) illuminate
- D) design

Before the Mariner 2 mission completed a successful flyby of Venus in 1962, astronomers' ideas about the planet were little more than \_\_\_\_\_. Venus's atmosphere is so thick that Earth-based observations had yielded very little information about the planet.

118

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

- A) conclusions
- B) summations
- C) conjectures
- D) exemplifications

The work of Tobias Gerstenberg et al. on tracking eye movements supports a theory that people engage in \_\_\_\_\_ thinking when making causal judgments; when subjects were asked to look at two colliding billiard balls and judge whether one caused or prevented the other's movement through a gate, their eyes looked at where the target ball would have gone if the ball that altered its path did not exist.

119

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

- A) counterfactual
- B) analogical
- C) ambivalent
- D) associative

To assist with the development of new water-repellant materials for aviation and other applications, a team including both engineers and entomologists conducted a study of the water-repellant properties of cicada wings. The team explained that the \_\_\_\_\_ experts in these two disciplines resulted in a more comprehensive approach than independent efforts by experts in either discipline could have achieved.

120

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

- A) skepticism toward
- B) exaggeration of
- C) distrust among
- D) collaboration between

Both sharks and crayfish can detect electrical fields around them, but the \_\_\_\_\_ of their sensitivities differs substantially. Whereas crayfish can detect fields emitted by household electronics, those are many times stronger than the fields created by water moving through Earth's magnetic field, which sharks are sensitive enough to detect.

121

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

- A) magnitude
- B) fineness
- C) gathering
- D) orientation

New and interesting research conducted by Suleiman A. Al-Sweedan and Moath Alhaj is inspired by their observation that though studies of the effect of high altitude on blood chemistry are \_\_\_\_\_, the effect on blood chemistry of living in locations below sea level, such as the California towns of Niland and Heber, has received comparatively little notice.

122

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

- A) abundant
- B) equivocal
- C) sporadic
- D) preliminary

Despite stated claims of global relevance, much major research on income inequality performed in the 2010s suffered from a myopic focus on a few countries in North America and Western Europe, partly due to limited data availability. Researchers would later \_\_\_\_\_ this shortcoming after gaining new access to administrative records located in nations in South America, such as Brazil, and Eastern Europe, such as Russia.

123

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

- A) validate
- B) presuppose
- C) categorize
- D) mitigate

One popular theory of the origin of the Moon, the 'big whack,' posits that a protoplanet called Theia collided with Earth, flinging debris into orbit that eventually coalesced into the Moon. Until recently, Theia was \_\_\_\_\_, but researcher Qian Yuan and colleagues now claim to have identified pieces of the protoplanet in the lowermost section of Earth's mantle.

124

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

- A) desultory
- B) notional
- C) veritable
- D) spurious

Political blogs with conspicuous ideological alignments became an integral component of US media in the early 2000s. While some commentators lauded this development, asserting that such blogs had a welcome transparency missing from traditional news, less \_\_\_\_\_ observers countered that such blogs tended to ideological extremes that exacerbated political polarization to problematic levels.

125

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

- A) recalcitrant
- B) earnest
- C) sanguine
- D) misanthropic

As a member of Indigenous Photograph, artist Tshepiso Mabula ka Ndongeni (Xhosa) can \_\_\_\_\_ her work more broadly than she could without the organization's reach. Photography editors around the world can search for Indigenous photographer members on the organization's website to find images that document and reflect the lives of Indigenous communities.

126

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

- A) empty
- B) promote
- C) alter
- D) discover

Originating in the traditional stories of the Kanaka Maoli, the Native Hawaiian people, the literature of Hawaii has a rich history that was later brought to international prominence by writers such as Mary Kawena Pukui. Now, by producing acclaimed works, Gary Pak has \_\_\_\_\_ his place in that literary tradition.

127

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

- A) contemplated
- B) subverted
- C) solidified
- D) extricated

Cybersecurity experts often encourage users to create passwords that are fairly complicated and therefore difficult to guess. Nonetheless, research has shown that the more \_\_\_\_\_ approach to password selection seems to favor convenience over security: for example, the eighth most commonly used password in 2019 was the easily remembered 'iloveyou.'

128

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

- A) creative
- B) popular
- C) complex
- D) useful

The fossil remains of the individual known as Denisova 8, discovered in Russia in 2010, can help paleoanthropologists not only \_\_\_\_\_ steps in the evolution of hominids but also illuminate the Pleistocene epoch generally, revealing important details about the time in which Denisova 8 lived.

129

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

- A) yield
- B) exploit
- C) prioritize
- D) discern

The Indian antelope can run very fast—up to 80 kilometers per hour (km/hr)—but it is significantly slower than the peregrine falcon, which can fly at speeds up to 389 km/hr. The difference between these speeds is largely \_\_\_\_\_ of the fact that the features that make flight possible do less to limit top speeds than the features suitable for running on land.

130

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

- A) a consequence
- B) an objective
- C) a repudiation
- D) an explanation

Some social scientists say that while an emphasis on preserving civil liberties is key to democracy, public understanding of history is also central to public comprehension of state politics, and if a citizenry is to function, historical issues cannot remain the domain only of experts. In short, knowledge of history is not \_\_\_\_\_ and must not be left to historians alone.

131

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

- A) unattainable
- B) superfluous
- C) commonplace
- D) equitable

Mauricio Drelichman and Hans-Joachim Voth's analysis of the overall debt and revenue of the government of Philip II (who ruled an empire including Spain and Sicily from 1556 to 1598) found an intriguing \_\_\_\_\_: although the government regularly defaulted on debt, it ran an even larger overall surplus than did the government of eighteenth-century Britain, which historians consider a model of fiscal virtue.

132

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

- A) harbinger
- B) exemplar
- C) sanction
- D) incongruity



Folk and traditional art can take a wide variety of forms, including arts as \_\_\_\_\_ one another as storytelling and quilting. The National Heritage Fellowship was created to honor people for their accomplishments in these diverse arts and includes among its winners the gospel singer Willie Mae Ford Smith.

133

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

- A) useful to
- B) humble about
- C) different from
- D) confused with

Possessing an outstanding collection of public art, Chicago has everything from monumental sculptures like Anish Kapoor's Cloud Gate at sites like Millennium Park to innovative street art like Amuse 126's mural High Tide located on South State Street. The \_\_\_\_\_ public art on display in the city can thus satisfy any art lover.

134

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

- A) controversy over
- B) breadth of
- C) apathy toward
- D) confusion about

As with other river deltas, the Danube River delta is \_\_\_\_\_: it is a constantly evolving network of channels and strips of land that change in size and shape as the river deposits new sedimentary particles where the river meets the waters of the Black Sea.

135

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

- A) immutable
- B) unrivaled
- C) sustainable
- D) dynamic

A survey found that in April 2022, 7.6 percent of subscribers to fashion and apparel services canceled their subscriptions. Reducing this kind of subscriber turnover is especially challenging for subscription sellers; customers' initial enthusiasm for a subscription is often quick to \_\_\_\_\_, and sellers must thus devise other incentives to bolster retention.

136

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

- A) subside
- B) rejuvenate
- C) converge
- D) resolve

The fossil remains of the individual known as Oase 1, discovered in Romania in 2002, can help paleoanthropologists not only \_\_\_\_\_ steps in the evolution of hominids but also illuminate the Pleistocene epoch generally, revealing important details about the time in which Oase 1 lived.

137

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

- A) exploit
- B) prioritize
- C) yield
- D) discern

The pronghorn can run very fast—up to 89 kilometers per hour (km/hr)—but it is significantly slower than the frigatebird, which can fly at speeds up to 153 km/h. The difference between these speeds is largely \_\_\_\_\_ of the fact that the features that make flight possible do less to limit top speeds than the features suitable for running on land.

138

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

- A) a consequence
- B) an objective
- C) a repudiation
- D) an explanation

Folk and traditional art can take a wide variety of forms, including arts as \_\_\_\_\_ one another as storytelling and quilting. The National Heritage Fellowship was created to honor people for their accomplishments in these diverse arts and includes among its winners the Puerto Rican stringed-instrument maker Diomedes Matos.

139

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

- A) confused with
- B) humble about
- C) useful to
- D) different from

Possessing an outstanding collection of public art, Chicago has everything from monumental sculptures like Joan Miró's Miró's Chicago at sites like Brunswick Plaza to innovative street art like Justus Roe's mural South Shore located on South Exchange Avenue. The \_\_\_\_\_ public art on display in the city can thus satisfy any art lover.

140

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

- A) breadth of
- B) controversy over
- C) confusion about
- D) apathy toward

As with other river deltas, the Paraná River delta is \_\_\_\_\_; it is a constantly evolving network of channels and strips of land that change in size and shape as the river deposits new sedimentary particles where the river meets the waters of the Atlantic Ocean.

141

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

- A) dynamic
- B) immutable
- C) sustainable
- D) unrivaled

The fossil remains of the individual known as LD 350-1, discovered in Ethiopia in 2013, can help paleoanthropologists not only \_\_\_\_\_ steps in the evolution of hominids but also illuminate the Pliocene epoch generally, revealing important details about the time in which LD 350-1 lived.

142

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

- A) yield
- B) exploit
- C) discern
- D) prioritize

Although oil shocks—such as the 16% rise in oil prices from April to September of 1973—can strongly affect individual consumers, Gbadebo Oladosu and colleagues have shown that at the level of national economies, their effects are often quite \_\_\_\_\_. The effect of recent oil shocks on the gross domestic product of China, for example, was only slightly greater than zero.

143

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

- A) subdued
- B) variable
- C) beneficial
- D) persistent

Maryam Hosseini and her team used aerial images of well-mapped areas of Marthattan to train a computer program to identify sidewalks. When it was tested on images of Brooklyn, it \_\_\_\_\_ identified sidewalks in the vast majority of cases and even whether sidewalks were concrete or cobblestone. Hosseini believes the program will improve on this already strong performance as it gets used more.

144

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

- A) reliably
- B) clumsily
- C) rarely
- D) slowly

The Chao Phraya River delta is a constantly changing landform made up of a network of distributaries, small channels that branch off from the main river. The delta is shaped and reshaped over time as sediments carried by the river \_\_\_\_\_ where the river meets the Gulf of Thailand, eventually forming new portions of land.

145

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

- A) accumulate
- B) dissolve
- C) accelerate
- D) thrive

The Third-Class Carriage, painted in the realist style by Honore Daumier, depicts working-class travelers in a third-class railway car. The realists' emphasis on accurately portraying the experiences of average working people was largely a rejection of the romantic style evident in many paintings by Emmanuel Amaury Pineux Duval, which instead \_\_\_\_\_ their subjects' beauty or heroism while hiding all imperfection.

146

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

- A) exaggerate
- B) correct
- C) undermine
- D) mock

The decline of the giant pika, a species found throughout northern North America before it became extinct around 8000 BCE, surely had a number of \_\_\_\_\_ the larger ecosystem in which it existed. The giant pika was part of a complex food web with other organisms, and its disappearance likely affected several other species.

147

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

- A) similarities to
- B) precedents in
- C) sources in
- D) consequences for

Web developers often encourage users to create passwords that are fairly complicated and therefore difficult to guess. Nonetheless, researchers have shown that the more \_\_\_\_\_ approach to password selection seems to favor convenience over security: for example, the fifth most commonly used password in 2013 was the easily remembered 'abc123.'

148

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

- A) complex
- B) useful
- C) creative
- D) popular

Writer Lydia Davis observed that while traditional literary forms, such as the poem, are recognizable as such even as they evolve, there are more \_\_\_\_\_ forms that might, for example, borrow elements from both fables and narratives to make something unconventional. Davis's own very short literary pieces arguably fit in this category, since they straddle the line between prose and poetry.

149

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

- A) neutral
- B) customary
- C) amorphous
- D) dispersed



The fact that publications by University of Minnesota economist Ellen R. McGrattan, who studies financial policy, are so frequently cited in other scholars' work \_\_\_\_\_ the usefulness of her research for her peers - other economists clearly find her studies valuable for their own scholarship.

150

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

- A) overshadows
- B) underscores
- C) belies
- D) forestalls

The sloping tile roofs and picturesque facade of Mission San Luis Rey de Francia in Oceanside, California, exemplify the Spanish contribution to Californian architecture, and influence that is \_\_\_\_\_ throughout the state - architectural tourists visiting Los Angeles Union Station in Los Angeles, for example, can easily recognize how its style draws inspiration from the Spanish missions.

151

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

- A) palpable
- B) understated
- C) disputed
- D) corroborated

In the 1990s, conservationists began planting more than 500,000 native trees in the habitat of the Azores bullfinch to boost the bird's numbers. This approach was apparently \_\_\_\_\_: the Azores bullfinch's population size increased from as few as 100 birds at the end of the 1980s to around 1,300 in 2023.

152

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

- A) successful
- B) disastrous
- C) amusing
- D) costly

The discoverers of the minor planet 713 Luscinia named it after the animal genus that includes nightingales. Most of the recently discovered minor planets, however, are given only an identification number, largely due to there being over 500,000 such bodies known at present, which makes the already challenging task of finding a unique name for each nearly \_\_\_\_\_.

153

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

- A) substantial
- B) insurmountable
- C) unnecessary
- D) feasible

Posed in 1970, McMullen's g-conjecture \_\_\_\_\_ many mathematicians before yielding to the efforts of Karim Adiprasito, who presented a proof of it in 2018.

154

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

- A) appeased
- B) disregarded
- C) confounded
- D) indoctrinated

Although Hawaiian literature is highly heterogenous in many ways, it is also characterized by considerable thematic \_\_\_\_\_: scholars have drawn connections linking works by writers such as David Malo and Lisa Linn Kanae to the traditional stories of the Kanaka Maoli, the Native Hawaiian people.

155

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

- A) innovation
- B) continuity
- C) subtlety
- D) sophistication

The decline of the giant ground sloth, a species found throughout South America before it became extinct around 8500 BCE, surely had a number of \_\_\_\_\_ the larger ecosystem in which it existed. The giant ground sloth was part of a complex food web with other organisms, and its disappearance likely affected several other species.

156

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

- A) sources in
- B) consequences for
- C) similarities to
- D) precedents in

When minor planets are discovered, each is given a unique identification number, and some may be given a unique name, as in the case of 1083 Salvia, which was named after the plant genus that includes sages. Under current astronomical conventions, it is \_\_\_\_\_ for the discoverers to name their discoveries, but they are not required to do so; whether to assign a minor planet a name is entirely the choice of whoever discovers it.

157

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

- A) permissible
- B) infeasible
- C) selective
- D) mandatory

The sloping tile roofs and picturesque façade of Mission San José in Fremont, California, exemplify the Spanish contribution to Californian architecture, an influence that is \_\_\_\_\_ throughout the state – architectural tourists visiting the Santa Fe Depot in San Diego, for example, can easily recognize how its style draws inspiration from the Spanish missions.

158

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

- A) corroborated
- B) palpable
- C) disputed
- D) understated

The National Heritage Fellowship was created to honor exceptional folk and traditional artists in the United States. One artist who received the fellowship is Navajo (Dine) basket weaver Mary Holiday Black. Black was chosen for her lifetime \_\_\_\_\_ the arts.

159

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

- A) contributions to
- B) doubts about
- C) imitations of
- D) misunderstandings of

The Fly River delta is a remarkably \_\_\_\_\_ landscape: it is a constantly evolving network of channels and strips of land that change in size and shape as the river deposits new sedimentary particles where the river meets the waters of the Gulf of Papua.

160

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

- A) mutable
- B) habitable
- C) secluded
- D) homogeneous

In the mid-1980s, the price of vintage and even new baseball cards rose dramatically, which had the counterintuitive effect of \_\_\_\_\_ demand: buyers who hadn't previously wanted to purchase baseball cards thronged the market, believing prices would continue to rise and the cards could be resold later at a profit.

161

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

- A) capitalizing
- B) exploiting
- C) eliciting
- D) satisfying

Jessica Watson, who was the youngest person to sail nonstop and unassisted around the world, undoubtedly accomplished much, but to gain a lasting place in our historical memory, there is little that can \_\_\_\_\_ being the first to do something. For example, people will always remember that Jeanne Bare was the first woman to circumnavigate the world.

162

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

- A) overreach by
- B) prevail over
- C) fluctuate with
- D) constrain within

The fact that publications by University of California-Berkeley economist Bronwyn Hughes Hall, who studies innovation and economics, are so frequently cited in other scholars' work \_\_\_\_\_ the usefulness of her research for her peers—other economists clearly find her studies valuable for their own scholarship.

163

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

- A) belied
- B) underscores
- C) forestalls
- D) overshadows

The sloping tile roofs and picturesque façade of Mission San Carlos Borromeo de Carmelo in Carmel, California, are enduring symbols of the Spanish contribution to Californian architecture. Elements of this style have been reproduced throughout the state the design of Santa Clara University in Santa Clara, for example, is considered to \_\_\_\_\_ the style of the Spanish missions.

164

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

- A) renovate
- B) imitate
- C) neglect
- D) reject

In a garden, \_\_\_\_\_ the spread of unwelcome weeds such as nutgrass can be difficult because weeds usually spread easily and quickly become unmanageable, making it hard to remove them completely.

165

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

- A) retrieving
- B) saving
- C) halting
- D) pretending

Certain features are almost always included in the designs of mosques, like the minaret (or tower), which is considered to be a \_\_\_\_\_ of mosque architecture. Even mosques that exhibit elements of multiple architectural styles, such as the Shah Jahan Mosque, which Incorporates elements from the Mughal, Safavid, and Timurid styles, will also include several of these standard features.

166

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

- A) hallmark
- B) rejection
- C) motivation
- D) duplication

Lessons from previous declines in biodiversity can help shape policy recommendations aimed at preserving species at risk. The factors that contributed to the extinction of the shrub-ox around 9500 BCE may also be \_\_\_\_\_ endangered species today.

167

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

- A) concealed from
- B) applicable to
- C) integrated with
- D) dependent on



In a 2018 article celebrating films depicting the Black experience, critics for the New York Times \_\_\_\_\_ Ossie Davis's 1970 film *Cotton Comes to Harlem* and Cheryl Dunye's 1996 film *The Watermelon Woman*, praising the former as 'especially pointed' and the latter as 'heartbreaking and inspiring.'

168

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

- A) inspired
- B) satirized
- C) overlooked
- D) commended

The American continents are home to a huge diversity of languages, from Mayo, found in places like Mexico in North America, to Koreguaje, found in places like Colombia in South America. Much like the continents themselves, the variety of native languages in the Americas is \_\_\_\_\_.

169

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

- A) immense
- B) unknown
- C) ordinary
- D) limited

The minor planet 1095 Tulipa was named after the plant genus that includes tulips, but given the sheer number of minor planets that have been discovered (more than 500,000 so far), most are given only an identification number. Because any name given to a minor planet needs to be unique to that body, naming each would be \_\_\_\_\_.

170

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

- A) impractical
- B) presumptuous
- C) ambiguous
- D) customary

Drivers who strongly believe that the toll they must pay to use the San Luis Pass-Vacek Toll Bridge, which spans the San Luis Pass in Texas, is currently too high are likely to be

\_\_\_\_\_ arguments for increasing the toll. Advocates for a higher toll are likely to have more success if they instead direct their arguments toward a more persuadable segment of the population.

171

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

- A) cited in
- B) appraised of
- C) unsympathetic to
- D) placated by

Possessing an outstanding collection of public art, Chicago has everything from monumental mosaics like Marc Chagall's Four Seasons at sites like Chase Tower to innovative street art like Kashink's mural Be The Change You Wish To See located on South Wabash Avenue. The \_\_\_\_\_ public art on display in the city can thus satisfy any art lover.

172

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

- A) breadth of
- B) controversy over
- C) confusion about
- D) apathy toward

In a 2018 article about films depicting the experiences of Black Americans, critics for the New York Times praise Madeline Anderson's 1970 film *I Am Somebody* as 'galvanizing' and Carl Franklin's 1995 film *Devil in a Blue Dress* as 'picture perfect.' Fans of the two films hope that such \_\_\_\_\_ will attract new audiences to these works.

173

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

- A) ambivalence
- B) acclaim
- C) foresight
- D) impartiality

The fossil remains of the individual known as Misliya-1, discovered in Israel in 2002, can help paleoanthropologists not only \_\_\_\_\_ steps in the evolution of hominids but also illuminate the Pleistocene epoch generally, revealing important details about the time in which Misliya-1 lived.

174

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

- A) exploit
- B) yield
- C) prioritize
- D) discern

The Village Politicians, painted in the realist style by Wilhelm Leibl, depicts a group of peasants clustered together in conversation and emphasizes accuracy in its portrayal of the experiences of ordinary working people. This style largely \_\_\_\_\_ the conventions of the romantic style evident in many paintings by Thomas Couture, which instead accentuated their subjects' positive traits by, for example, placing them in staged settings with expensive looking decorations and presenting them with smooth, unblemished skin.

175

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

- A) rejected
- B) imitated
- C) epitomized
- D) extended

The National Heritage Fellowship was created to \_\_\_\_\_ exceptional folk and traditional artists in the United States. One artist who received the fellowship, the Mexican American rodeo tailor Manuel Cuevas, was chosen for his lifetime contributions to the arts.

176

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

- A) begin
- B) overshadow
- C) distract
- D) honor

Some cities estimate where sidewalks are located using road maps, which is not very accurate. Maryam Hosseini and her team trained a computer program to identify sidewalks in aerial images of Manhattan and used it on images of Brooklyn. The program's performance was \_\_\_\_\_ to that of the road-map method: it more accurately identified sidewalks, and it even distinguished between cobblestone and brick.

177

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

- A) superior
- B) supportive
- C) similar
- D) changed

Often, the Nobel Prize in Chemistry is given to a single person, such as George de Hevesy in 1943. But recognition isn't restricted to \_\_\_\_\_ individuals. Instead, success in fields like chemistry is usually achieved through collaboration with other experts, as was the case for Max Ferdinand Perutz, who was among those awarded for "their studies of the structures of globular proteins."

178

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

- A) solitary
- B) coordinated
- C) considerate
- D) coincidental

The Apollo Moon landings (1969-1972) brought atmospheric sensors and soil sensors to the Moon and produced large amounts of data, much of which was stored on outdated technologies. A data-transfer project is making the data available again, thereby \_\_\_\_\_ the Apollo data's usefulness, as the data are used to study the geology of the Moon.

179

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

- A) persisting
- B) installing
- C) renewing
- D) exceeding

Postcranial skeletal pneumaticity (PSP) refers to the presence of extensions of an animal's lungs and air sacs inside its bones. Though such structures do not typically fossilize, they are believed to have been present in *Tyrannosaurus*, *Euhelopus*, and other Cretaceous theropods and sauropods. To \_\_\_\_\_ PSP from fossils, researchers look for indicators such as large foramina (holes in bones).

180

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

- A) infer
- B) acquire
- C) isolated
- D) preserve

In 2017, Belgium, which has strong democratic institutions, experienced an inflation rate of 2.12%, much higher than the 0.74% rate seen in Equatorial Guinea, which has relatively weak democratic institutions. Such a result is \_\_\_\_\_ however: Raj Desai et al. have shown that democratic institution strength tends to restrain inflationary pressures.

181

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

- A) inexplicable
- B) unfounded
- C) facetious
- D) anomalous

Some robots such as Saika (developed in 1996) and Poppy (developed in 2013) are designed to resemble humans so that people will find it easier to interact with them. To that end, certain features such as bipedal locomotion can help to \_\_\_\_\_ the effect of the more unnatural aspects of a robot's appearance, but a robot that looks too human can fall into the "uncanny valley," meaning that its appearance unintentionally unsettles those who encounter it.

182

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

- A) ameliorate
- B) coalesce
- C) augment
- D) substantiate

Demosthenes, a prominent fourth-century BCE Athenian orator, is said to have been \_\_\_\_\_ of *parrhesia*, or speaking freely and openly to ensure productive civic deliberation. He is noted for characterizing *parrhesia* in several public addresses as the foundation of democracy in classical Athens rather than, more simply, as a facilitator of the political system.

183

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

- A) a proponent
- B) a steward
- C) an apprentice
- D) a harbinger

Ancient Inca inhabiting the Andes Mountains used terraces, rows of flattened land with built-in irrigation systems, to grow crops at different altitudes. This method of farming proved to be highly \_\_\_\_\_, as evidenced by the great number and variety of crops grown at that time.

184

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

- A) uniform
- B) effective
- C) chaotic
- D) burdensome



Geomagnetic storms can disturb Earth's ionosphere, causing the models underlying the Global Positioning System (GPS) to produce inaccurate calculations. This illustrates the effect that space weather events can have on the \_\_\_\_\_ of GPS and other systems that are dependent on satellite navigation.

185

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

- A) significance
- B) reliability
- C) extent
- D) complexity

The sloping tile roofs and picturesque façade of Mission San Carlos Borromeo de Carmelo in Carmel, California, are enduring symbols of the Spanish contribution to Californian architecture. Elements of this style have been reproduced throughout the state—the design of Santa Clara University in Santa Clara, for example, is considered to \_\_\_\_\_ the style of the Spanish missions.

186

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

- A) renovate
- B) imitate
- C) neglect
- D) reject

In a garden, \_\_\_\_\_ the spread of unwelcome weeds such as nutgrass can be difficult because weeds usually spread easily and quickly become unmanageable, making it hard to remove them completely.

187

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

- A) retrieving
- B) saving
- C) halting
- D) pretending

Certain features are almost always included in the designs of mosques, like the minaret (or tower), which is considered to be a \_\_\_\_\_ of mosque architecture. Even mosques that exhibit elements of multiple architectural styles, such as the Shah Jahan Mosque, which incorporates elements from the Mughal, Safavid, and Timurid styles, will also include several of these standard features.

188

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

- A) hallmark
- B) rejection
- C) motivation
- D) duplicate

Nancy Bird-Walton, who was an aviation pioneer, undoubtedly accomplished much, but to gain a lasting place in our historical memory, there is little that can \_\_\_\_\_ being the first to do something. For example, people will always remember that Aloha Wanderwell was the first woman to drive herself around the world.

189

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

- A) overreach by
- B) fluctuate with
- C) constrain within
- D) prevail over

Despite stated claims of global relevance, much major research on income inequality performed in the 2010s suffered from a myopic focus on a few countries in North America and Western Europe, partly due to limited data availability. Researchers would later \_\_\_\_\_ this shortcoming after gaining new access to administrative records located in nations in Africa, such as Ivory Coast, and Eastern Europe, such as Poland.

190

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

- A) postulate
- B) ameliorate
- C) sanction
- D) rationalize

In the 2010s, the price of vintage G.I. Joe action figures rose dramatically, which had the counterintuitive effect of \_\_\_\_\_ demand: buyers who hadn't previously wanted to purchase old action figures thronged the market, believing prices would continue to rise and the toys could be resold later at a profit.

191

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

- A) satisfying
- B) capitalizing
- C) exploiting
- D) eliciting

The fact that publications by University of Minnesota economist Ellen R. McGrattan, who studies financial policy, are so frequently cited in other scholars' work \_\_\_\_\_ the usefulness of her research for her peers—other economists clearly find her studies valuable for their own scholarship.

192

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

- A) forestalls
- B) belies
- C) underscores
- D) overshadows

Dragon against Tiger is an important work of Nihonga, or classical Japanese painting. Unlike Wada Eisaku, who adopted traditional European methods such as painting with oil on canvas, Hashimoto Gaho \_\_\_\_\_ traditional Japanese approaches. For instance, Hashimoto produced Dragon against Tiger by applying color pigments to a silk surface.

193

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

- A) overlooked
- B) distrusted
- C) embraced
- D) released

The Fly River delta is a remarkably \_\_\_\_\_ landscape: it is a constantly evolving network of channels and strips of land that change in size and shape as the river deposits new sedimentary particles where the river meets the waters of the Gulf of Papua.

194

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

- A) mutable
- B) habitable
- C) secluded
- D) homogeneous

Whether the reign of a French monarch such as Francis II or Louis XI was considered historically significant or, conversely, relatively \_\_\_\_\_, its trajectory was shaped by questions of legitimacy and therefore cannot be understood without a corollary understanding of the factors that allowed the monarch to assert a claim to the throne successfully.

195

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

- A) momentous
- B) inconsequential
- C) benevolent
- D) genuine

In the 2010s, the price of vintage Teenage Mutant Ninja Turtles action figures rose dramatically, which had the counterintuitive effect of \_\_\_\_\_ demand: buyers who hadn't previously wanted to purchase old action figures thronged the market, believing prices would continue to rise and the toys could be resold later at a profit.

196

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

- A) monetizing
- B) appraising
- C) engendering
- D) exploiting

Studying wrappers from discontinued candies, menus from nineteenth-century restaurants, and flyers promoting long-forgotten sporting events may seem like a frivolous pursuit, but ephemeral objects like these are useful as markers of cultural change: they can \_\_\_\_\_ shifts in norms, values, and concerns that traditional objects of historical inquiry may not.

197

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

- A) register
- B) vindicate
- C) preclude
- D) induce

\_\_\_\_\_ though it seemed to many mathematicians, the Marden tameness conjecture, posed in 1974, eventually yielded to the efforts of Ian Agol, who presented a proof of it in 2004.

198

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

- A) Insuperable
- B) Unequivocal
- C) Irreproachable
- D) Ineluctable

Cognitive science research has found that people tend to be biased against art when they think it was generated by artificial intelligence (AI) software. One hypothesis for the preference for human-created art is that people

\_\_\_\_\_ the effort behind a piece of art: the more work they believe went into a piece's creation, the more likely they are to appreciate it.

199

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

- A) value
- B) perform
- C) prevent
- D) neglect

During film's early years, those who worked in the industry had a vested interest in convincing the public to embrace the new medium. As Sumiko Higashi argues, some filmmakers relied on film critics to influence the public's

\_\_\_\_\_ the world of cinema. Critics who drew similarities between film and traditional art forms, like drama, could help legitimize film as an art form.

200

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

- A) contribution to
- B) perception of
- C) reproduction of
- D) application to

Difficulties of documenting nocturnal pollinator visits and a general focus on diurnal invertebrate pollinators, such as *Volucella bombylans*, have resulted in \_\_\_\_\_ of information on nocturnal moth pollination of plants such as *Rubus fruticosus* L. aggregate, but Max Anderson et al. have addressed this by utilizing infrared technology.

201

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

- A) an abatement
- B) an aggregation
- C) a dearth
- D) a dissonance

In some of his sculptures, Allan Houser uses abstract geometric shapes to depict his subjects rather than portraying them in realistic detail. For instance, his 1989 work *Embrace* is highly abstract and therefore differs strikingly from some of his other pieces in which the viewer can easily \_\_\_\_\_ familiar objects.

202

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

- A) ignore
- B) identify
- C) reveal
- D) remember



Agglomeration economies arise when multiple firms in related industries \_\_\_\_\_ an area, as with knitted fabrics manufacturers and knitted clothing manufacturers in Derby, UK.

Economists have assumed that companies cluster for the same reasons, but Giulia Faggio et al. found that factors driving agglomeration in some cases are only weakly correlated with agglomeration in others.

203

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

- A) intercede in
- B) amass in
- C) concur with
- D) appeal to

The familial structure of the black swan (*Cygnus atratus*) shows tremendous \_\_\_\_\_; breeding pairs with demonstrated success in rearing cygnets (young swans) have been observed to foster those of less successful pairs, and while rearing by female-male pairs is most common, male-male pairs sometimes rear cygnets too, achieving a significantly higher rate of survival to adulthood than female-male pairs.

204

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

- A) elasticity
- B) reciprocity
- C) cohesion
- D) affection

Any effort to raise the toll that drivers must pay to use the Ogdensburg-Prescott Bridge, which spans the Saint Lawrence River to connect New York State and Ontario, Canada, should explain why a higher toll is necessary; no amount of justification, however, is likely to persuade some drivers who believe the current toll is \_\_\_\_\_.

205

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

- A) contentious
- B) exorbitant
- C) warranted
- D) equivocal

During the 2007-2010 financial crisis, the United States furnished billions of dollars to selected countries' central banks via mechanisms called swap lines. Aditi Sahasrabuddhe found that countries' policy environments seem to have been \_\_\_\_\_ swap-line decisions: the probability that banks could be granted swap lines was 0.20 in countries open to foreign-capital inflows and 0.03 in countries with policies restricting such inflows.

206

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

- A) predicted on
- B) decoupled from
- C) material to
- D) mediated by

During his career, Cuban composer and pianist Ernesto Lecuona produced hundreds of compositions. Especially impressive is how \_\_\_\_\_ his body of work is: Lecuona showcased a diverse range of musical talents in different areas, from orchestral pieces and operas to popular film scores.

207

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

- A) outdated
- B) lonely
- C) forgotten
- D) varied

As with other river deltas, the Indus River delta is \_\_\_\_\_: it is a constantly evolving network of channels and strips of land that change in size and shape as the river deposits new sedimentary particles where the river meets the waters of the Arabian Sea.

208

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

- A) dynamic
- B) sustainable
- C) immutable
- D) unrivaled

Literary scholars often encourage those studying authors and their literary movements to understand how certain qualities of an author's writings were perceived by his or her immediate audience. While most would not consider the works of Miguel de Unamuno to be especially controversial today, one should consider whether there are aspects of his work that may have been seen as \_\_\_\_\_ to some readers of his time.

209

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

- A) provocative
- B) irrefutable
- C) pretentious
- D) irrelevant

The Historical Dictionary of Science Fiction is a crowdsourced project started in 2001 by lexicographer Jesse Sheidlower to record terms that originated in science fiction. Volunteers share digitized excerpts from personal collections of sci-fi magazines not typically preserved in libraries — \_\_\_\_\_ that allow the earliest uses of phrases such as "warp speed" (1952) to be identified and added to the dictionary

210

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

- A) justifications
- B) contributions
- C) resolutions
- D) negotiations

Despite stated claims of global relevance, much major research on income inequality performed in the 2010s suffered from a myopic focus on a few countries in North America and Western Europe, partly due to limited data availability. Researchers would later \_\_\_\_\_ this shortcoming after gaining new access to administrative records located in nations in Asia, such as India, and Eastern Europe, such as Hungary.

211

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

- A) presuppose
- B) categorize
- C) validate
- D) mitigate

Because cyanobacteria and other microphytobenthos (MPB) microscopic organisms inhabiting tidal flats—are consumed by mussels as well as by certain shorebirds and fish. MPB are \_\_\_\_\_ estuary ecosystems. Decreased MPB abundance, which may be caused by environmental stressors, thus has a direct, negative impact on coastal food webs.

212

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

- A) imperative for
- B) emblematic of
- C) subordinate to
- D) interchangeable with

Some pieces of music might have many meanings—the compositions of Charlotte Moorman can \_\_\_\_\_ as many different interpretations as there are people to listen to them and so as long as a listener’s interpretation isn’t willfully absurd or the result of inattention, it is difficult to justify the claim that the listener has misunderstood the piece.

213

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

- A) refute
- B) omit
- C) support
- D) evade

The inventories of consonant sounds among the Polynesian languages of the Pacific tend toward the \_\_\_\_\_: Sikaiana in the South Pacific has a total of nine consonants, and 'Olelo Hawai'i, the language of the Native Hawaiian people, has one fewer, while the global median per language is over twenty-two.

214

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

- A) minimal
- B) static
- C) replicable
- D) melodic

Despite stated claims of global relevance, much major research on income inequality performed in the 2010s suffered from a myopic focus on a few countries in North America and Western Europe, partly due to limited data availability. Researchers would later \_\_\_\_\_ this shortcoming after gaining new access to administrative records located in nations in South America, such as Brazil, and Eastern Europe, such as Russia.

215

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

- A) validate
- B) mitigate
- C) categorize
- D) presuppose

Though the thermoregulation mechanisms of fungi, such as *Amanita brunnescens*, have received little formal study, anecdotal evidence has suggested that fungal surface temperatures tend to be cooler than ambient temperatures. Experimental findings by Radamés Cordero et al. now \_\_\_\_\_ this idea: colonies of various fungi maintained temperatures below those at which they were incubated in a lab.

216

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

- A) obscure
- B) corroborate
- C) encapsulate
- D) curtail

Andrei Tarkovsky's *Solaris* has the measured pace typical of slow-cinema films. Thai slow-cinema director Apichatpong Weerasethakul (*Uncle Boonmee Who Can Recall His Past Lives*) even states that his own work induces sleep in audiences. This might suggest his films are boring, but boredom does not always cause sleep: boredom creates an anxious tension in the absence of a place to fix attention, and thus induces not somnolence but

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217

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

- A) fortitude
- B) perturbation
- C) nonchalance
- D) indolence

As with other river deltas, the Krishna River delta is \_\_\_\_\_: it is a constantly evolving network of channels and strips of land that change in size and shape as the river deposits new sedimentary particles where the river meets the waters of the Bay of Bengal.

218

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

- A) sustainable
- B) unrivaled
- C) immutable
- D) dynamic

Many of late nineteenth-century artist James McNeill Whistler's oil paintings and lithographs depict the streets of European cities. While his contemporaries' approaches to these subjects were often sentimental, Whistler's eye seemed \_\_\_\_\_. In this way, he anticipated the early twentieth-century photographs of Walker Evans, which create the illusion of being objective documentations of life.

219

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

- A) tranquil
- B) peculiar
- C) nostalgic
- D) dispassionate



The dinosaur displays at museums such as the Field Museum of Natural History in Chicago (which has a mounted Apatosaurus skeleton among its holdings) are notable for the \_\_\_\_\_ of the research behind them—the museum staff consulted numerous sources to ensure the accuracy of the displays.

220

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

- A) rigor
- B) obscurity
- C) shallowness
- D) novelty

Today's theater stages are frequently filled with props and scenery to immerse the audience in a play's world. Because theatergoers have grown used to carefully designed sets, plays with few visual elements can surprise audiences. But simple, unadorned stages were likely \_\_\_\_\_ audiences in the very distant past; highly decorated and detailed sets were not common until the 1600s.

221

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

- A) disliked by
- B) confusing to
- C) expected by
- D) exciting to

As with other river deltas, the Shatt al-Arab River delta is \_\_\_\_\_ : it is a constantly evolving network of channels and strips of land that change in size and shape as the river deposits new sedimentary particles where the river meets the waters of the Persian Gulf.

222

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

- A) dynamic
- B) immutable
- C) unrivaled
- D) sustainable

Lucian of Samosata (modern-day Turkey) was a second-century satirist who mostly published critiques of philosophers of the time. His work *True History*, however, is \_\_\_\_\_: featuring tropes that are hallmarks of present-day science fiction (e.g., space travel, interplanetary conflict), it is regarded by some scholars as the earliest known work in the genre.

223

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

- A) authorized
- B) applicable
- C) sarcastic
- D) visionary

The Apollo Moon landings (1969-1972) brought atmospheric sensors and equipment too heavy for liftoff to the Moon and produced large amounts of data. Researcher Philip Metzger, who is investigating the long-term effects of being on the Moon, continues to use Apollo's data, demonstrating that the missions' value to science is \_\_\_\_\_

224

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

- A) controversial
- B) displaced
- C) original
- D) ongoing

The social structure of medieval Bremen was heavily influenced by hierarchical institutions (e.g., kinship groups) within the settlement, a condition that some researchers suggest potentially \_\_\_\_\_ not just social but also economic fluidity—and by extension, urban growth—by constraining the range of contacts available to individuals in the settlement.

225

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

- A) protracted
- B) disseminated
- C) inhibited
- D) catalyzed

Some pieces of music might have many meanings—the compositions of Marion Bauer can \_\_\_\_\_ as many different interpretations as there are people to listen to them—and so as long as a listener's interpretation isn't willfully absurd or the result of inattention, it is difficult to justify the claim that the listener has misunderstood the piece.

226

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

- A) evade
- B) refute
- C) support
- D) omit

Run by researchers in multiple countries, the Study on Global Ageing and Adult Health (SAGE) is an examination of aging that has attempted to track approximately 66,000 people for several years. Long-running studies like this need a lot of participants not merely for statistical robustness but also because of \_\_\_\_\_: over such a length of time, a substantial number of participants will withdraw or fall out of contact with the researchers.

227

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

- A) impartiality
- B) replicability
- C) attrition
- D) circumspection

Traditionally, certain features of mosque architecture are nearly \_\_\_\_\_, such as the mihrab (or niche), which almost all mosques include. But mosques can also be built to reflect a multitude of different architectural styles, as in the case of the Great Mosque of Central Java, which includes elements from the Javanese and Greek revival styles.

228

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

- A) universal
- B) elaborate
- C) illusory
- D) idealized

The dates that archaeologists assign to most of the colossal sculptures of human heads produced by the Olmec civilization of Mesoamerica are necessarily \_\_\_\_\_. The majority of the sculptures have been moved from their original context, making precise dating impossible.

229

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

- A) uncontroversial
- B) irrelevant
- C) applicable
- D) approximate

\_\_\_\_\_ traditional descriptions of pollination syndromes (suites of floral traits, such as nectar composition and symmetry, hypothesized to have independently evolved as a result of selection pressure exerted by pollinators) and recent empirical observations of floral-trait combinations have led some ecologists to express reservations about the utility of those descriptions.

230

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

- A) Discrepancies between
- B) Proclamations of
- C) Recurrences of
- D) Affinities between

Studying menus from nineteenth-century restaurants, old coupons clipped out of newspapers, and posters promoting concerts by long-forgotten musicians may seem like a frivolous pursuit, but ephemeral objects like these are useful as evidence of cultural change: they can \_\_\_\_\_ shifts in norms, values, and concerns that traditional objects of historical inquiry may not.

231

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

- A) dissociate from
- B) collude with
- C) compensate for
- D) attest to

In the architectural process called modular construction, a building is manufactured in modules under controlled conditions and then assembled at its intended location.

\_\_\_\_\_ this approach cite the production of less material waste and a faster return on investment. of

232

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

- A) Components
- B) Safeguards
- C) Proponents
- D) Epitomes

Run by researchers in Europe, the Survey of Health, Ageing, and Retirement in Europe (SHARE) is an examination of aging that has attempted to track approximately 120,000 people for several years. Long-running studies like this need a lot of participants not merely for statistical robustness but also because of \_\_\_\_\_: over such a length of time, a substantial number of participants will withdraw or fall out of contact with the researchers.

233

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

- A) attrition
- B) circumspection
- C) impartiality
- D) replicability

Some ethicists challenge the concept of personal character, claiming that if it were meaningful, situational factors could not, as they clearly can, induce behavior contrary to that character. As Rachana Kamtekar observes, this argument is difficult to reconcile with our lay conception of character: we expect a person of helpful character to be frequently helpful, not \_\_\_\_\_ helpful.

234

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

- A) self-servingly
- B) sporadically
- C) grudgingly
- D) unfailingly

Run by researchers in Australia, the Longitudinal Study of Indigenous Children (LSIC) is an examination of childhood development that has attempted to track approximately 1,700 people for several years. Long-running studies like this need a lot of participants not merely for statistical robustness but also because of \_\_\_\_\_: over such a length of time, a substantial number of participants will withdraw or fall out of contact with the researchers.

235

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

- A) impartiality
- B) replicability
- C) attrition
- D) circumspection

Disproportionate emphasis on instances of invention, such as the emergence of potter's wheels circa 4500 BCE, contributes to a pro-innovation bias that \_\_\_\_\_ studies of the history of technology. More attention to technological discontinuance (e.g., the loss of various hunting and fishing implements in Tasmania over thousands of years) is thus a necessary corrective to the dominant view that innovations are steadily and inevitably adopted.

236

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

- A) supersedes
- B) pervades
- C) abridges
- D) foments

Paleontologists think that Tyrannosaurus, Sauroposeidon, and other long-extinct theropods and sauropods may have breathed using air sacs connected to tubelike extensions inside the animals' bones. Such structures are found in modern birds, which is why some paleontologists treat the respiratory systems of birds as \_\_\_\_\_ those of Tyrannosaurus, Sauroposeidon, and other theropods and sauropods.

237

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

- A) harbingers of
- B) emissaries for
- C) proxies for
- D) subordinates of



The metal displayed in the structure of House in Kamiaraya by Kazuto Nishi Architects and the metal hardware in UE House by GENETO are representative aspects of a juxtaposition common in contemporary Japanese architecture: the \_\_\_\_\_ of sleek, contemporary elements and traditional organic materials in a single design is a trend with both aesthetic and highly practical purposes.

238

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

- A) designation
- B) analysis
- C) diffusion
- D) synthesis

A rising author of children's books spoke at a recent publishing conference about what motivated her to pursue a career in children's literature. The presenter credited much of her inspiration to \_\_\_\_\_ Ellease Southerland's work in *Let the Lion Eat Straw*, which was among the presenter's favorite books as a child.

239

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

- A) an affinity for
- B) a stipulation about
- C) an ambivalence toward
- D) a complacency about

The Art Institute of Chicago houses nearly 300,000 works from around the world. Museum visitors looking to \_\_\_\_\_ their art-viewing experience should turn to Chicago's streets, where they can find works ranging from Magdalena Abakanowicz's sculpture *Agora* at Grant Park to Justus Roe's mural *Standing Wave* on South State Street.

240

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

- A) mitigate
- B) satisfy
- C) provoke
- D) supplement

The people inhabiting the Ice Age sites now known as Shuidonggou 2 and Potočka Cave likely began wearing clothing as a defense against the cold, but Ian Gilligan et al. argue that as clothing became \_\_\_\_\_, its purpose shifted from the purely practical. Once wearing clothing turned into a widespread, familiar practice, differences in clothes could take on social and cultural significance.

241

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

- A) divisive
- B) provisional
- C) ubiquitous
- D) feasible

The unique subak water management system used to irrigate the rice paddy fields of the Indonesian island of Bali has a rich cultural, philosophical, and historical significance dating back to the ninth century. The many elements of subakterraces, canals, and water temples are \_\_\_\_\_: they are joined together into a single cohesive unit.

242

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

- A) interconnected
- B) outmoded
- C) optional
- D) informal

The mihrab (or niche) is one of many features that are foundational to traditional mosque architecture and is therefore considered \_\_\_\_\_ aspect of mosque design. Even mosques that exhibit elements of multiple architectural styles, such as the KH Hasyim Asy'ari Grand Mosque, which incorporates elements from the Betawi a

243

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

- A) an imposing
- B) an embellished
- C) a quintessential
- D) an unprecedented

The Egyptian plover—a bird native to Africa—has a symbiotic relationship with the Nile crocodile. While a crocodile rests on land with its mouth open for extended periods of time, the plover eats the food that is stuck in the crocodile's teeth. This \_\_\_\_\_ relationship provides a nutritious meal for the bird and removes potentially dangerous bacteria from the crocodile's mouth.

244

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

- A) inefficient
- B) reciprocal
- C) interchangeable
- D) unequal

Until 1917, there was no formal measure in the United States Senate that could be \_\_\_\_\_ to end a debate that had been excessively prolonged as a tactic to block voting on a matter. In that year, a procedure was created to allow a majority of senators to curtail deliberation and force a vote.

245

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

- A) improvised
- B) invoked
- C) abolished
- D) partitioned

Because blue holes (such as the Lost Blue Hole in the Bahamas) and cenotes (such as Cenote Dos Ojos in Mexico) differ in their size, water composition, and type of location, they are not usually viewed as being \_\_\_\_\_ but both are water-filled sinkholes typically produced by the natural dissolution and collapse of rocks.

246

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

- A) distinct
- B) explicable
- C) analogous
- D) incongruous

The discoveries of natural satellites by Scott S. Sheppard's team of astronomers have been \_\_\_\_\_: Carpo, which the group of researchers found orbiting Jupiter in 2003, is just one of over one hundred that they have spotted, while many astronomers have been happy to discover only one or two.

247

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

- A) inferior
- B) random
- C) plentiful
- D) likely

Certain features are almost always included in the designs of mosques, like the ablution (ritual cleansing) area, which is considered to be a \_\_\_\_\_ of mosque architecture. Even mosques that exhibit elements of multiple architectural styles, such as the Al-Fattah Al-Aleem Mosque, which incorporates elements from the Islamic and Fatimid styles, will also include several of these standard features.

248

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

- A) duplicate
- B) motivation
- C) rejection
- D) hallmark

## Answers: Words in Context - Gap Filling

Number	Answer	Number	Answer
1	D	2	D
3	A	4	A
5	B	6	C
7	D	8	C
9	C	10	D
11	B	12	C
13	A	14	C
15	C	16	C
17	A	18	B
19	C	20	A
21	A	22	C
23	B	24	D
25	D	26	D
27	B	28	A
29	C	30	C
31	A	32	C
33	D	34	B
35	C	36	B
37	B	38	D
39	A	40	D
41	D	42	A



Number	Answer	Number	Answer
43	B	44	D
45	A	46	B
47	A	48	B
49	B	50	D
51	B	52	D
53	C	54	D
55	A	56	A
57	C	58	B
59	B	60	B
61	D	62	D
63	B	64	D
65	D	66	A
67	B	68	D
69	C	70	C
71	D	72	B
73	C	74	D
75	C	76	C
77	A	78	D
79	C	80	B
81	C	82	A
83	B	84	C
85	D	86	D

Number	Answer	Number	Answer
87	B	88	A
89	B	90	D
91	C	92	D
93	D	94	B
95	D	96	A
97	D	98	D
99	A	100	A
101	B	102	C
103	C	104	C
105	B	106	B
107	C	108	A
109	B	110	A
111	A	112	A
113	A	114	B
115	D	116	D
117	C	118	C
119	A	120	D
121	A	122	A
123	D	124	B
125	C	126	B
127	C	128	B
129	D	130	A

Number	Answer	Number	Answer
131	B	132	D
133	C	134	B
135	D	136	A
137	D	138	A
139	D	140	A
141	A	142	C
143	A	144	A
145	A	146	A
147	D	148	D
149	C	150	B
151	A	152	A
153	B	154	C
155	B	156	B
157	A	158	B
159	A	160	A
161	C	162	B
163	B	164	B
165	C	166	A
167	B	168	D
169	A	170	A
171	C	172	A
173	B	174	D

Number	Answer	Number	Answer
175	A	176	D
177	A	178	A
179	C	180	A
181	D	182	A
183	A	184	B
185	B	186	B
187	C	188	A
189	D	190	B
191	D	192	C
193	C	194	A
195	B	196	C
197	A	198	A
199	A	200	B
201	C	202	B
203	B	204	A
205	B	206	C
207	D	208	A
209	A	210	B
211	D	212	A
213	C	214	A
215	B	216	B
217	B	218	D

Number	Answer	Number	Answer
219	D	220	A
221	C	222	A
223	D	224	D
225	C	226	C
227	C	228	A
229	D	230	A
231	D	232	C
233	A	234	D
235	C	236	B
237	C	238	D
239	A	240	D
241	C	242	A
243	C	244	B
245	B	246	C
247	C	248	D

## Topic 13: Words in Context — Synonyms

26 Questions

### DIRECTIONS

#### Must Know Tips:

- Look for synonyms of the meaning of the word in that setting, not just the word itself.
- Pay attention to fillers (e.g., "unlike," "by no means," "without").
- To find something, you need to know what you're searching for.

**Recommended time per question in this section:** min: 25 sec, max: 1 min, avg: 42.5 sec.  
(\*Exam level)

The following text is adapted from Anton Chekhov's 1904 play *The Cherry Orchard* (translated by Julius West in 1916).

TROFIMOV: Believe me, Anya, believe me! I'm not thirty yet, I'm young, I'm still a student, but I have undergone a great deal! I'm as hungry as the winter, I'm ill, I'm shaken...and where haven't I been- -fate has tossed me everywhere!

1

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

- A) Neglected
- B) Enjoyed
- C) Conveyed
- D) Endured

The following text is adapted from John Matheus's 1926 short story, "Mr. Bradford Teaches Sunday School." Mr. Bradford is driving through the countryside in Florida.

The moss in the towering water oaks had become enlivened with a verdant sheen of silver and hung like festoons of carnival or like funeral decorations for the mourning of the dead. The pine cones were pungent, the pine green was resplendent. The bald cypresses spread themselves along the water courses while the willows wept as they always did. Mr. Bradford was conscious of this gorgeous display of nature.

2

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

- A) Spectacle
- B) Reproduction
- C) Pretentiousness
- D) Disguise



The following text is adapted from Kenneth Grahame's 1908 novel *The Wind in the Willows*. The Mole is dazed after briefly meeting a stranger while traveling with a friend.

(The) Mole stood still a moment, held in thought. As one awakened suddenly from a beautiful dream, who struggles to recall it, and can re-capture nothing but a dim sense of the beauty of it, the beauty! Till that, too, fades away in its turn.

3

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

- A) Abruptly
- B) Repeatedly
- C) Voluntarily
- D) Tenderly

The following text is from Mark Twain's 1876 novel *The Adventures of Tom Sawyer*. Tom, a child, has been told by his aunt to paint their house's fence.

Tom appeared on the sidewalk with a bucket of whitewash and a long-handled brush. He surveyed the fence, and all gladness left him and a deep melancholy settled down upon his spirit. Thirty yards of board fence nine feet high.

4

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

- A) Complimented
- B) Examined
- C) Converted
- D) Organized

The following text is from Lilliam Rivera's 2020 novel *Never Look Back*. The text describes the narrator looking around his father's apartment.

Pops's pride and joy is his wall of towering bookshelves. He once said you can tell a man's worth by the number of books he owns. I guess this means Pops is overflowing with riches because ever since I can remember I was never without a book within reach.

5

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

- A) Judge
- B) Urge
- C) Adore
- D) Teach

The following text is from Virginia Woolf's 1919 novel *Night and Day*. The text describes a gathering of aspiring young artists and intellectuals.

One person after another rose, and, as with an ill-balanced axe, attempted to hew out his conception of art a little more clearly, and sat down with the feeling that, for some reason which he could not grasp, his strokes had gone awry. As they sat down they turned almost invariably to the person sitting next them, and rectified and continued what they had just said in public.

6

As used in the text, what does the figurative phrase "hew out" most nearly mean?

- A) Visualize
- B) Emulate
- C) Vacate
- D) Define

The following text is from Rudolfo Anaya's 1972 novel *Bless Me, Ultima*. The young narrator is eating breakfast with his two sisters in their home in rural New Mexico.

I sat across the table from Deborah and Teresa and ate my atole and the hot tortilla with butter. I said very little. I usually spoke very little to my two sisters. They were older than I and they were very close. They usually spent the entire day in the attic, playing dolls and giggling. I did not concern myself with those things.

7

As used in the text, what does the phrase "concern myself with" most nearly mean?

- A) craft
- B) get angry about
- C) care about
- D) earn

The following text is adapted from Willa Cather's 1912 novel *Alexander's Bridge*.

For the next few days Alexander was very busy. He took a desk in the office of a [Scottish] engineering firm on Henrietta Street, and was at work almost constantly. He avoided the clubs and usually dined alone at his hotel.

8

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

- A) Hastily
- B) Carefully
- C) Nonstop
- D) Enough

The following text is from Mark Oshiro's 2018 novel *Anger Is a Gift*. In the novel, Moss and his friends are on a subway train in Northern California.

Lights from the outside world then filled the train car as it rose out of the ground and climbed the elevated track. As long as Moss had lived in West Oakland, he'd never tired of this specific view, so he pointed toward the windows. "Check it," he said, and the Port of Oakland began to pass by them.

9

As used in the text, what does the word 'specific' most nearly mean?

- A) Imaginary
- B) Correct
- C) Energetic
- D) Particular

The following text is adapted from John Matheus's 1925 short story "Fog."

The fog extended its tentacles over city and river, gradually obliterating traces of familiar landscapes. At five-thirty the old Panhandle bridge, supported by massive sandstone pillars, stalwart, as when erected fifty years before to serve a generation now passed behind the portals of life, had become a spectral outline against the sky.

10

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

- A) Cherished
- B) Defended
- C) Held up
- D) Improved on

The following text is from Charles Chesnutt's 1905 novel *The Colonel's Dream*.

Mr. French and Mr. Kirby work together. Mr. French, the senior partner, who sat opposite Kirby, was an older man—a safe guess would have placed him somewhere in the debatable ground between forty and fifty; of a good height, as could be seen even from the seated figure, the upper part of which was held erect with the unconscious ease which one associates with military training.

11

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

- A) Estimated
- B) Modified
- C) Contracted
- D) Arranged

The following text is from Jhumpa Lahiri's 2003 novel *The Namesake*. Gogol, a child, is at a beach in Massachusetts with his father.

He watches his father raise a kite within minutes into the wind, so high that Gogol must tip his head back in order to see, a rippling speck against the sky. The wind whips around their ears, turning their faces cold.

12

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

- A) Create
- B) Congratulate
- C) Strengthen
- D) Lift

The following text is adapted from Mary Seacole's 1857 autobiography *Wonderful Adventures of Mrs. Seacole in Many Lands*.

That journey across the Isthmus [of Panama], insignificant in distance as it was, was by no means an easy one. It seemed as if nature had determined to throw every conceivable obstacle in the way of those who should seek to join the two great oceans of the world.

13

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

- A) Visible
- B) Steady
- C) Easy
- D) Possible

The following text is adapted from Kenneth Grahame's 1908 novel *The Wind in the Willows*. The Mole has been found by a friend after getting lost in the woods.

It is beginning to snow. The Mole saw the wood that had been so dreadful to him in quite a changed aspect. Holes, hollows, pools, pitfalls, and other menaces to the wayfarer were vanishing fast, and a gleaming carpet was springing up everywhere, that looked too delicate to be trodden upon by rough feet.

14

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

- A) Generous
- B) Fragile
- C) Accurate
- D) Empty

The following text is adapted from Virginia Woolf's 1919 novel *Night and Day*. Katharine is the granddaughter of a celebrated poet.

[Katharine's] descent from [a celebrated poet] was no surprise to her, but matter for satisfaction, until, as the years wore on, certain drawbacks made themselves very manifest. Perhaps it is a little depressing to inherit not lands but an example of intellectual virtue; perhaps the conclusiveness of a great ancestor is a little discouraging to those who run the risk of comparison with him.

15

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

- A) Anticipated
- B) Particular
- C) Complex
- D) Evident

The following text is from Kenneth Grahame's 1908 novel *The Wind in the Willows*. The Mole is returning home after a visit to Mr. Badger's house.

As he hurried along, eagerly anticipating the moment when he would be at home again among the things he knew and liked, the Mole saw Clearly that he was an animal of tiled field and hedge-row, linked to the ploughed furrow, the frequented pasture, the lane of evening lingerings, the cultivated garden-plot.

16

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

- A) Managing
- B) Getting ahead of
- C) Revealing
- D) Looking forward to

The following text is adapted from John Matheus's 1925 short story "Fog." A train has stopped at a station, where heavy fog has set in.

The little conductor stood on tiptoe in an effort to keep one hand on the signal rope, craning his neck in a vain and dissatisfied endeavor to pierce the miasma of the fog. The motorman chafed in his box, thinking of the drudging lot of the laboring man. He registered discontent.

17

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

- A) Bypassed
- B) Enrolled
- C) Valued
- D) Displayed

The following text is adapted from Yone Noguchi's 1914 memoir *The Story of Yone Noguchi*. Noguchi is returning home after eleven years abroad.

I reached Tsushima, my native town, at evening. I frightened my old father at the station, who was actually trying to find me among some other people. There is no wonder that he could not recognise me; I must have changed a great deal.

18

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

- A) Reveal
- B) Persuade
- C) Judge
- D) Locate

The following text is from Charles Chesnutt's 1905 novel *The Colonel's Dream*. Mr. French and Mr. Kirby work together.

Mr. French, the senior partner, who sat opposite Kirby, was an older man—a safe guess would have placed him somewhere in the debatable ground between forty and fifty; of a good height, as could be seen even from the seated figure, the upper part of which was held erect with the unconscious ease which one associates with military training.

19

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

- A) Well-behaved
- B) Considerable
- C) Capable
- D) Reliable

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.

20

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

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

The following text is from Jhumpa Lahiri's 2003 novel *The Namesake*. Gogol, a child, is at a beach in Massachusetts with his father.

He watches his father raise a kite within minutes into the wind, so high that Gogol must tip his head back in order to see a rippling speck against the sky. The wind whips around their ears, turning their faces cold.

21

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

- A) Lean
- B) Inform
- C) Pay
- D) Produce



The following text is adapted from Jhumpa Lahiri's 2003 novel *The Namesake*. Gogol is an elementary school student in Massachusetts.

In art class, his favorite hour of the week, he carves his name with paper clips into the bottoms of clay cups and bowls. He pastes uncooked pasta to cardboard, and leaves his signature in fat brush strokes below paintings.

22

As used in the text, what do the words "carves" and "leaves" most nearly mean?

- A) Marks
- B) Passes
- C) Turns
- D) Follows

The following text is from Kenneth Grahame's 1908 novel *The Wind in the Willows*. The Mole is returning home after a visit to Mr. Badger's house.

As he hurried along, eagerly anticipating the moment when he would be at home again among the things he knew and liked, the Mole saw clearly that he was an animal of tilled field and hedgerow, linked to the ploughed furrow, the frequented pasture, the lane of evening lingerings, the cultivated garden-plot.

23

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

- A) Describing
- B) Getting ahead of
- C) Looking forward to
- D) Instructing

The following text is from Amy Tan's 1989 novel *The Joy Luck Club*. The narrator describes practicing the piano when she was a child.

For the talent show, I was to play a piece called "Pleading Child" from Schumann's *Scenes from Childhood*. It was a simple, moody piece that sounded more difficult than it was. I was supposed to memorize the whole thing, playing the repeat parts twice to make the piece sound longer. But I dawdled over it, playing a few bars and then cheating, looking up to see what notes followed. I never really listened to what I was playing. I daydreamed about being somewhere else, about being someone else.

24

Based on the text, when the narrator describes herself as "cheating," what does she most likely mean?

- A) She was violating an expectation about how to perform the piece.
- B) She was deceiving her piano teacher.
- C) She was gaining an unfair advantage over other contestants in the talent show.
- D) She was lying to herself about her musical ability.

The following text is from Lilliam Rivera's 2020 novel *Never Look Back*. The text describes the narrator's friend Pheus, a young musician, after finishing a performance during a church service.

Pheus pulls a handkerchief from his back pocket and wipes his forehead. I mime a quiet clap for him. He does a slight bow and flashes his dimples. This is where Pheus truly shines. When Pheus is in front of an audience, it's as if he becomes another person, a more heightened version of himself.

25

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

- A) Obediently
- B) Scarcely
- C) Impolitely
- D) Really

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.

26

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 gathering sources of information to use in her writing.
- D) She is being soothed by immersing herself in creative works by other people.

## Answers: Words in Context - Synonyms

Number	Answer	Number	Answer
1	D	2	A
3	A	4	B
5	A	6	D
7	C	8	C
9	D	10	C
11	A	12	D
13	D	14	B
15	D	16	D
17	D	18	D
19	D	20	D
21	A	22	A
23	C	24	A
25	D	26	B

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*\*This book is the **SECOND EDITION**. New questions and new ideas are yet to come! Stay tuned!*





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*— The Research and Development  
Department of @satashkent*