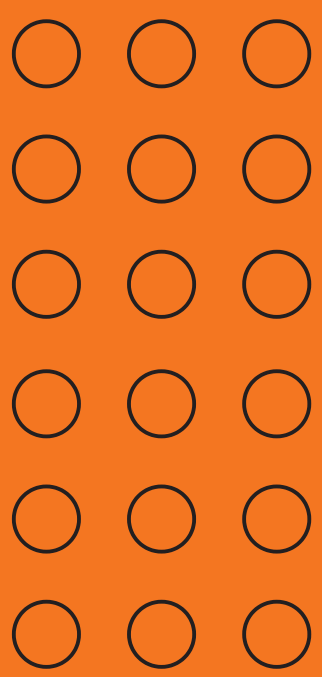


COMPANION WITH FAITH

READING GUIDE



INFERENCES

Mr. Abdulshafi
+966 54 387 0234

Companion With Faith

Reading Guide

4 INFERENCES

On the Reading and Writing section of your SAT, some questions will provide an unfinished passage that introduces information about an unfamiliar topic. Based on that information, you'll be asked to select the choice that most logically completes the text.

Inferences questions will look like this:

1

Adaptations to cold temperatures have high metabolic costs. It is expensive, in terms of energy use, for land plants and animals to withstand very cold temperatures, and it gets more expensive the colder it gets, which means that the lower the air temperature, the fewer species have evolved to survive it. This factor, in conjunction with the decline in air temperature with increasing elevation, explains the distribution of species diversity in mountain ecosystems: you find fewer species high up a mountain than at the mountain's base because

Which choice most logically completes the text?

- ☒ A. there are relatively few environments hospitable to species that are adapted to live in low air temperatures.
- ☒ B. there are relatively few species with the adaptations necessary to tolerate the temperatures at high elevations.
- ☒ C. adaptations that allow plants and animals to survive in rocky environments are metabolically costly.
- ☒ D. some mountain environments are at elevations so high that no plants or animals can survive them.

new claim

- ① Cold temperatures are costly for organisms.
- ② Few species have evolved to survive cold weather.
- ③ The temperature is colder at higher elevation.
- ④ fewer species live at the top of a mountain than at the base.

How should we think about questions involving inferences?

Consider using the following steps to answer a central ideas and details evidence question:

We can break arguments into two basic parts: **premises** and **conclusions**.

Premises

The facts on which an argument is based. When premises are connected, they should provide strong evidence for the argument's conclusion.

The conclusion

The heart of the argument. It's the overall claim that the argument's author is trying to support.

Our example question above presents the following pieces of information:

1. Cold temperatures are costly for organisms to survive in.
2. Few species have evolved to survive cold weather.
3. The temperature is colder at higher elevation.
4. Fewer species live at the top of a mountain than at the base of the mountain.

In this case, we've been provided three premises (statements 1, 2, and 3) and the argument's conclusion (statement 4).

Take note of the transition word "because" which comes before the blank. This indicates that we are seeking additional evidence rather than a new conclusion. Finding the answer that completes the premises and ties them together in a way that supports the already established conclusion is our task for this question.

Sometimes, an inferences passage will provide a list of premises; your job is to decide which conclusion is most appropriate. Sometimes an inferences passage will also include the conclusion; in this case, your goal will be to find a premise that is missing and has to be filled.

In either case, the primary goal is the same: you must determine what the argument is missing and then fill that void with one of the options.

How should you handle questions involving inferences?

Consider using the following steps to answer a inferences question:

Step 1: *Separate the text into bullet points*

The passage given contains all the information you need to correctly answer to an inferences question. As a result, in order to discover the answer, you must carefully read and examine the text's information.

Making each concept in the passage into its own bullet point is a wonderful method to accomplish this. This will lay out the argument in a step-by-step progression and help you identify any potential gaps.

Step 2: *Examine the argument.*

Take into account each detail presented in the passage. Then, think about how those components go together. Do they have a add up to something? What ties them together?

Each inferences question is a mystery in itself. You have everything you need to figure out that mystery. All you have to do is use your detective skills to put the pieces together!

You ought to have a thorough knowledge of the argument presented by the time you finish this stage. You should now have an idea of what could go there. You'll be more capable of identifying what doesn't fit in the blank, at the very least.

Step 3: *Explore the choices.*

Examine each option one at a time. Ask yourself if the details in the choice support the passage's argument.

Be cautious when making decisions that expand the topic or introduce concepts that aren't mentioned explicitly in the rest of the section. Inference texts frequently make quite precise arguments. Eliminate any options that deviate from or contradict the passage's ideas.

Step 4: *Select the choice that strengthens the argument.*

The answer you choose should be quite straightforward in relation to the information in the passage. Furthermore, the decision you make should strengthen and clarify the argument when taken together with the rest of the passage. Once you locate the choice, you can confidently choose it!

Back to the question, we should start by paraphrasing the information provided in the passage:

- Cold temperatures are costly for organisms to survive in.
- Few species have evolved to survive cold weather.
- The temperature is colder at higher elevation.
- Fewer species live at the top of a mountain than at the base of the mountain.

In order to logically complete the text, we need to connect the dots between these ideas. Which choice does that?

Choice A has a different focus than the provided information. It focuses on the number of environments instead of the number of species. **We can eliminate this choice.**

Choice C has a different focus than the provided information. It focuses on rocky environments instead of high elevations or cold temperatures. **We can eliminate this choice.**

Choice D doesn't explain the claim we want to focus on. Instead, it makes a new claim about elevation and species diversity. **We can eliminate this choice.**

Only choice B connects all the ideas provided in the passage. It uses the first few bullets we identified to explain the final bullet:

- Few species can survive cold weather.
- Weather is cold at high elevation.

So...

Few species can survive at high elevation.

Choice B is the answer.

Necessary Key Notes:

- **Stay specific.**

Don't stray beyond what can be inferred. Be cautious with words like "most" or "many" when a passage only discusses one thing in particular. And look out for small twists and turns that make a choice seem relevant when it actually changes the focus of the argument.

Look at the choices in our example question:

Choice C changes the focus of the argument. Instead of discussing cold environments, choice C introduces the idea of "rocky environments". We can eliminate this choice.

- **Lean on transitions.**

Keep an eye out for the transitional phrases employed in an inferred passage. These transitions will make it clear how the passage's ideas are connected. The transitional words used before the blank at the end of the passage, in particular, will give you a helpful hint as to the information you're looking for.

In our example question, the blank is introduced by the transition word "because".

This tells us that we're looking for further support for a conclusion that's already introduced in the passage.

Transitions like "therefore", "thus", and "this suggests/implies" will introduce conclusions.

Transitions like "because", "due to", and "since" will introduce further support.

- **Let the punctuation help.**

Punctuation shapes the concepts in the passage and demonstrates how those details are connected, just like transitions do. To insert conclusions, instances, and exceptions, use colons, semicolons, and dashes. Examine these punctuation marks more closely to determine what kind of information they represent in the text.

Your Turn:

2

Many animals, including humans, must sleep, and sleep is known to have a role in everything from healing injuries to encoding information in long-term memory. But some scientists claim that, from an evolutionary standpoint, deep sleep for hours at a time leaves an animal so vulnerable that the known benefits of sleeping seem insufficient to explain why it became so widespread in the animal kingdom. These scientists therefore imply that _____

Which choice most logically completes the text?

- ① X A. it is more important to understand how widespread prolonged deep sleep is than to understand its function. X X
- ② ✓ B. prolonged deep sleep is likely advantageous in ways that have yet to be discovered.
- X C. many traits that provide significant benefits for an animal also likely pose risks to that animal.
- X D. most traits perform functions that are hard to understand from an evolutionary standpoint.

3

Companies whose products are similar to competing products often pursue a marketing strategy of brand differentiation, trying to get consumers to associate their brand with unique attributes (e.g., to think of their brand of rice as the healthy brand, when in fact there is little difference among brands of the same type of rice). Jaywant Singh and Francesca Dall'Omo Riley investigated consumer perceptions of such products, finding that consumers view competing brands as having largely the same attributes and that any differences in the strength of consumers' associations of brands with attributes are explained by differences in market share—the more popular a brand is, the stronger people's associations with it are—suggesting that _____

Which choice most logically completes the text?

- ① A. consumers tend to perceive products with high market share more positively than they perceive products with low market share. X
- B. marketing aimed at brand differentiation influences consumers' perceptions of branded products but not consumers' purchasing behavior. X
- ③ C. marketing efforts focused on brand differentiation do not have much effect on consumers' perceptions of branded products' attributes.
- D. differences in consumers' perceptions of products' attributes are less influenced by brand differentiation than by actual differences between products.

4

2) Biologist Natacha Bodenhausen and colleagues analyzed the naturally occurring bacterial communities associated with leaves and roots of wild *Arabidopsis thaliana*, a small flowering plant. The researchers found many of the same bacterial genera in both the plants' leaves and roots. To explain this, the researchers pointed to the general proximity of *A. thaliana* leaves to the ground and noted that rain splashing off soil could bring soil-based bacteria into contact with the leaves. Alternatively, the researchers noted that wind, which may be a source of bacteria in the aboveground portion of plants, could also bring bacteria to the soil and roots. Either explanation suggests that _____

1) Which choice most logically completes the text?

- A. *A. thaliana* leaves and roots are especially vulnerable to harmful bacteria. X
- B. bacteria carried by wind are typically less beneficial to *A. thaliana* than soil-based bacteria are. X
- 3) X C. many bacteria in *A. thaliana* leaves may have been deposited by means other than rain. X conflict
- ✓ D. some bacteria in *A. thaliana* leaves and roots may share a common source.

5

2) Arthur Conan Doyle's stories about detective Sherlock Holmes were published between 1887 and 1927. They have inspired countless successful adaptations, including comic strips, movies, and a television series *Sherlock Hound*, directed by Hayao Miyazaki, who is celebrated for his animated movies. Until 2014, these stories were copyrighted. The right to adapt was only available to those who could afford the copyright fee and gain approval from the strict copyright holders of Doyle's estate. Some journalists predict that the number of Sherlock Holmes adaptations is likely to increase since the end of copyright means that _____

1) Which choice most logically completes the text?

- ✓ A. producing adaptations will become easier and less expensive.
- X B. people will become more interested in detective stories than they were in the 1800s.
- 3) X C. the former copyright holders of Doyle's estate will return fees they collected.
- X D. Doyle's original stories will become hard to find. opposite

6

Tides can deposit large quantities of dead vegetation within a salt marsh, smothering healthy plants and leaving a salt panne—a depression devoid of plants that tends to trap standing water—in the marsh's interior. Ecologist Kathryn Beheshti and colleagues found that burrowing crabs living within these pannes improve drainage by loosening the soil, leading the pannes to shrink as marsh plants move back in. At salt marsh edges, however, crab-induced soil loosening can promote marsh loss by accelerating erosion, suggesting that the burrowing action of crabs _____

① Which choice most logically completes the text?

- A. can be beneficial to marshes with small pannes but can be harmful to marshes with large pannes.
- ✓ ③ B. may promote increases in marsh plants or decreases in marsh plants, depending on the crabs' location.
- ✗ C. tends to be more heavily concentrated in areas of marsh interiors with standing water than at marsh edges.
- ✗ D. varies in intensity depending on the size of the panne relative to the size of the surrounding marsh.

7

In her 2021 article "Throwaway History: Towards a Historiography of Ephemera," scholar Anne Garner discusses John Johnson (1882–1956), a devoted collector of items intended to be discarded, including bus tickets and campaign pamphlets. Johnson recognized that scholarly institutions considered his expansive collection of ephemera to be worthless—indeed, it wasn't until 1968, after Johnson's death, that Oxford University's Bodleian Library acquired the collection, having grasped the items' potential value to historians and other researchers. Hence, the example of Johnson serves to _____

① Which choice most logically completes the text?

- A. represent the challenge of incorporating examples of ephemera into the collections of libraries and other scholarly institutions.
- ③ B. illustrate both the relatively low scholarly regard in which ephemera was once held and the later recognition of ephemera's possible utility.
- C. lend support to arguments by historians and other researchers who continue to assert that ephemera holds no value for scholars.
- D. demonstrate the difficulties faced by contemporary historians in conducting research at the Bodleian Library without access to ephemera.

8

2 In many cultures, a handshake can create trust between people. Engineer Jo?o Avelino and his team are designing a robot to shake hands with a human in order to improve human-robot interactions. The robot hand adjusts its movements and pressure to better imitate the feel of a human hand. The researchers want the robot's handshake to feel realistic because _____

1 Which choice most logically completes the text?

- A. people are less likely to interact with robots that don't look like humans.
- B. it's easier to program a robot to perform handshakes than it is to program a robot to perform some other types of greetings.
- 3 C. the robot in the researchers' study may have uses other than interacting with humans.
- ✓ D. lifelike handshakes may make people more comfortable interacting with robots.

9

2 Researchers Suchithra Rajendran and Maximilian Popfinger modeled varying levels of passenger redistribution from short-haul flights (flights of 50 to 210 minutes, from takeoff to landing) to high-speed rail trips. Planes travel faster than trains, but air travel typically requires 3 hours of lead time for security, baggage handling, and boarding that rail travel doesn't; so short-haul routes take similar amounts of time by air and by rail. However, the model suggests that as rail passenger volumes approach current capacity limits, long lead times emerge. Therefore, for rail to remain a viable alternative to short-haul flights, _____

1 Which choice most logically completes the text?

- A. rail systems should offer fewer long-haul routes and airlines should offer more long-haul routes.
- 3 ✓ B. rail systems may need to schedule additional trains for these routes.
- C. security, baggage handling, and boarding procedures used by airlines may need to be implemented for rail systems.
- D. passengers who travel by rail for these routes will need to accept that lead times will be similar to those for air travel.

10

As the name suggests, dramaturges originated in theater, where they continue to serve a variety of functions: conducting historical research for directors, compiling character biographies for actors, and perhaps most importantly, helping writers of plays and musicals to hone the works' stories and characters. Performance scholar Susan Manning observes that many choreographers, like playwrights and musical theater writers, are concerned with storytelling and characterization. In fact, some choreographers describe the dances they create as expressions of narrative through movement; it is therefore unsurprising that

① Which choice most logically completes the text?

- ✗ A. some directors and actors rely too heavily on dramaturges to complete certain research tasks.
- ✓ ③ B. choreographers developing dances with narrative elements frequently engage dramaturges to assist in refining those elements.
- C. dramaturges can have a profound impact on the artistic direction of plays and musicals.
- D. dances by choreographers who incorporate narrative elements are more accessible to audiences than dances by choreographers who do not.

11

Off-off-Broadway theaters emerged in the late 1950s as a rebellion against mainstream Broadway theaters in New York, freeing artists to create productions that were more experimental than typical Broadway shows. One such artist was playwright María Irene Fornés. Working with off-off Broadway theaters enabled Fornés not only to direct her own plays but also to direct them exactly as she intended them to be staged, regardless of how strange the results might have seemed to audiences accustomed to Broadway shows. In this way, Fornés _____

① Which choice most logically completes the text?

- A. would have been more famous if she had created plays that were mainstream instead of experimental.
- ③ B. recognized that staging an off-off-Broadway play was more complicated than staging a Broadway play.
- C. wrote plays that would have been too expensive to produce if someone else had directed the production.
- ✓ ④ D. illustrates the artistic opportunity offered by off-off Broadway theaters.

12

Gestures in painting are typically thought of as bold, expressive brushstrokes. In the 1970s, American painter Jack Whitten built a 12-foot (3.7-meter) tool he named the "developer" to apply paint to an entire canvas in one motion, resulting in his series of "slab" paintings from that decade. Whitten described this process as making an entire painting in "one gesture," signaling a clear departure from the prevalence of gestures in his work from the 1960s. Some art historians claim this shift represents "removing gesture" from the process. Therefore, regardless of whether using the developer constitutes a gesture, both Whitten and these art historians likely agree that _____

Which choice most logically completes the text?

- A. any tool that a painter uses to create an artwork is capable of creating gestures.
- B. Whitten's work from the 1960s exhibits many more gestures than his work from the 1970s does.
- C. Whitten became less interested in exploring the role of gesture in his work as his career progressed.
- D. Whitten's work from the 1960s is much more realistic than his work from the 1970s is.

13

In their book *Smart Pricing*, Jagmohan Raju and Z. John Zhang consider musicians' use of the nontraditional "pay as you wish" pricing model. This model generally offers listeners the choice to pay more or less than a suggested price for a song or album—or even to pay nothing at all. As the authors note, that's the option most listeners chose for an album by the band Harvey Danger. Only about 1% opted to pay for the album, resulting in earnings below the band's expectations. But the authors also discuss musician Jane Siberry, who saw significant earnings from her "pay as you wish" online music store as a result of many listeners choosing to pay more than the store's suggested prices. Hence, the "pay as you wish" model may _____

Which choice most logically completes the text?

- A. hold greater financial appeal for bands than for individual musicians.
- B. cause most musicians who use the model to lower the suggested prices of their songs and albums over time.
- C. prove financially successful for some musicians but disappointing for others.
- D. more strongly reflect differences in certain musicians' popularity than traditional pricing models do.

14

Martin Dančák, Wewin Tjiasmanto, and colleagues have identified a new carnivorous plant species (*Nepenthes pudica*) in Indonesia. Like other carnivorous plants, *N. pudica* has pitfall traps, or pitchers, that capture prey, but unlike others, the pitchers of *N. pudica* are located underground. The researchers unearthed the new species on fairly dry ridges with surfaces that host few other plants and animals. Therefore, the researchers hypothesize that the *N. pudica* species likely _____

Which choice most logically completes the text?

- A. is buried by nearby animals as they forage along the ridges for food.
- B. evolved to have underground traps to access more prey than would surface traps.
- C. formed pitchers early in development to absorb more moisture.
- D. represents one of many undiscovered carnivorous plant species in the region.

15

Herbivorous sauropod dinosaurs could grow more than 100 feet long and weigh up to 80 tons, and some researchers have attributed the evolution of sauropods to such massive sizes to increased plant production resulting from high levels of atmospheric carbon dioxide during the Mesozoic era. However, there is no evidence of significant spikes in carbon dioxide levels coinciding with relevant periods in sauropod evolution, such as when the first large sauropods appeared, when several sauropod lineages underwent further evolution toward gigantism, or when sauropods reached their maximum known sizes, suggesting that _____

Which choice most logically completes the text?

- A. fluctuations in atmospheric carbon dioxide affected different sauropod lineages differently.
- B. the evolution of larger body sizes in sauropods did not depend on increased atmospheric carbon dioxide.
- C. atmospheric carbon dioxide was higher when the largest known sauropods lived than it was when the first sauropods appeared.
- D. sauropods probably would not have evolved to such immense sizes if atmospheric carbon dioxide had been even slightly higher

16

In documents called judicial opinions, judges explain the reasoning behind their legal rulings, and in those explanations, they sometimes cite and discuss historical and contemporary philosophers. Legal scholar and philosopher Anita L. Allen argues that while judges are naturally inclined to mention philosophers whose views align with their own positions, the strongest judicial opinions consider and rebut potential objections, discussing philosophers whose views conflict with judges' views could therefore _____

Which choice most logically completes the text?

- A. allow judges to craft judicial opinions without needing to consult philosophical works.
- B. help judges improve the arguments they put forward in their judicial opinions.
- C. make judicial opinions more comprehensible to readers without legal or philosophical training.
- D. bring judicial opinions in line with views that are broadly held among philosophers.

17

Although military veterans make up a small proportion of the total population of the United States, they occupy a significantly higher proportion of the jobs in the civilian government. One possible explanation for this disproportionate representation is that military service familiarizes people with certain organizational structures that are also reflected in the civilian government bureaucracy, and this familiarity thus _____

Which choice most logically completes the text?

- A. makes civilian government jobs especially appealing to military veterans.
- B. alters the typical relationship between military service and subsequent career preferences.
- C. encourages nonveterans applying for civilian government jobs to consider military service instead.
- D. increases the number of civilian government jobs that require some amount of military experience to perform.

18

Birds of many species ingest foods containing carotenoids, pigmented molecules that are converted into feather coloration. Coloration tends to be especially saturated in male birds' feathers, and because carotenoids also confer health benefits, the deeply saturated colors generally serve to communicate what is known as an honest signal of a bird's overall fitness to potential mates. However, ornithologist Allison J. Shultz and others have found that males in several species of the tanager genus *Ramphocelus* use microstructures in their feathers to manipulate light, creating the appearance of deeper saturation without the birds necessarily having to maintain a carotenoid-rich diet. These findings suggest that _____

Which choice most logically completes the text?

- A. individual male tanagers can engage in honest signaling without relying on carotenoid consumption.
- B. feather microstructures may be less effective than deeply saturated feathers for signaling overall fitness.
- C. scientists have yet to determine why tanagers have a preference for mates with colorful appearances.
- D. a male tanager's appearance may function as a dishonest signal of the individual's overall fitness.

19

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

Which choice most logically completes the text?

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

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

Which choice most logically completes the text?

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

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

Which choice most logically completes the text?

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

22

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

Which choice most logically completes the text?

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

23

Several artworks found among the ruins of the ancient Roman city of Pompeii depict a female figure fishing with a cupid nearby. Some scholars have asserted that the figure is the goddess Venus, since she is known to have been linked with cupids in Roman culture, but University of Leicester archaeologist Carla Brain suggests that cupids may have also been associated with fishing generally. The fact that a cupid is shown near the female figure, therefore, _____

Which choice most logically completes the text?

- A. is not conclusive evidence that the figure is Venus.
- B. suggests that Venus was often depicted fishing.
- C. eliminates the possibility that the figure is Venus.
- D. would be difficult to account for if the figure is not Venus.

24

Many of William Shakespeare's tragedies address broad themes that still appeal to today's audiences. For instance, *Romeo and Juliet*, which is set in the Italy of Shakespeare's time, tackles the themes of parents versus children and love versus hate, and the play continues to be read and produced widely around the world. But understanding Shakespeare's so-called history plays can require a knowledge of several centuries of English history. Consequently, _____

Which choice most logically completes the text?

- A. many theatergoers and readers today are likely to find Shakespeare's history plays less engaging than the tragedies.
- B. some of Shakespeare's tragedies are more relevant to today's audiences than twentieth-century plays.
- C. *Romeo and Juliet* is the most thematically accessible of all Shakespeare's tragedies.
- D. experts in English history tend to prefer Shakespeare's history plays to his other works.

25

Ancestral Puebloans, the civilization from which present-day Pueblo tribes descended, emerged as early as 1500 B.C.E. in an area of what is now the southwestern United States and dispersed suddenly in the late 1200s C.E., abandoning established villages with systems for farming crops and turkeys. Recent analysis comparing turkey remains at Mesa Verde, one such village in southern Colorado, to samples from modern turkey populations in the Rio Grande Valley of north central New Mexico determined that the latter birds descended in part from turkeys cultivated at Mesa Verde, with shared genetic markers appearing only after 1280. Thus, researchers concluded that _____

Which choice most logically completes the text?

- A. conditions of the terrains in the Rio Grande Valley and Mesa Verde had greater similarities in the past than they do today.
- B. some Ancestral Puebloans migrated to the Rio Grande Valley in the late 1200s and carried farming practices with them.
- C. Indigenous peoples living in the Rio Grande Valley primarily planted crops and did not cultivate turkeys before 1280.
- D. the Ancestral Puebloans of Mesa Verde likely adopted the farming practices of Indigenous peoples living in other regions.

26

One challenge when researching whether holding elected office changes a person's behavior is the problem of ensuring that the experiment has an appropriate control group. To reveal the effect of holding office, researchers must compare people who hold elected office with people who do not hold office but who are otherwise similar to the officeholders. Since researchers are unable to control which politicians win elections, they therefore _____

Which choice most logically completes the text?

- A. struggle to find valid data about the behavior of politicians who do not currently hold office.
 - B. can only conduct valid studies with people who have previously held office rather than people who presently hold office.
 - C. should select a control group of people who differ from office holders in several significant ways.
 - D. will find it difficult to identify a group of people who can function as an appropriate control group for their studies.
-

27

In the early nineteenth century, some Euro-American farmers in the northeastern United States used agricultural techniques developed by the Haudenosaunee (Iroquois) people centuries earlier, but it seems that few of those farmers had actually seen Haudenosaunee farms firsthand. Barring the possibility of several farmers of the same era independently developing techniques that the Haudenosaunee people had already invented, these facts most strongly suggest that _____

Which choice most logically completes the text?

- A. those farmers learned the techniques from other people who were more directly influenced by Haudenosaunee practices.
- B. the crops typically cultivated by Euro-American farmers in the northeastern United States were not well suited to Haudenosaunee farming techniques.
- C. Haudenosaunee farming techniques were widely used in regions outside the northeastern United States.
- D. Euro-American farmers only began to recognize the benefits of Haudenosaunee farming techniques late in the nineteenth century.

28

If some artifacts recovered from excavations of the settlement of Kuulo Kataa, in modern Ghana, date from the thirteenth century CE, that may lend credence to claims that the settlement was founded before or around that time. There is other evidence, however, strongly supporting a fourteenth century CE founding date for Kuulo Kataa. If both the artifact dates and the fourteenth century CE founding date are correct, that would imply that _____

Which choice most logically completes the text?

- A. artifacts from the fourteenth century CE are more commonly recovered than are artifacts from the thirteenth century CE.
- B. the artifacts originated elsewhere and eventually reached Kuulo Kataa through trade or migration.
- C. Kuulo Kataa was founded by people from a different region than had previously been assumed.
- D. excavations at Kuulo Kataa may have inadvertently damaged some artifacts dating to the fourteenth century CE.

29

A team of biologists led by Jae-Hoon Jung, Antonio D. Barbosa, and Stephanie Hutin investigated the mechanism that allows *Arabidopsis thaliana* (thale cress) plants to accelerate flowering at high temperatures. They replaced the protein ELF3 in the plants with a similar protein found in another species (stiff brome) that, unlike *A. thaliana*, displays no acceleration in flowering with increased temperature. A comparison of unmodified *A. thaliana* plants with the altered plants showed no difference in flowering at 22° Celsius, but at 27° Celsius, the unmodified plants exhibited accelerated flowering while the altered ones did not, which suggests that _____

Which choice most logically completes the text?

- A. temperature-sensitive accelerated flowering is unique to *A. thaliana*.
- B. *A. thaliana* increases ELF3 production as temperatures rise.
- C. ELF3 enables *A. thaliana* to respond to increased temperatures.
- D. temperatures of at least 22° Celsius are required for *A. thaliana* to flower.

Ratified by more than 90 countries, the Nagoya Protocol is an international agreement ensuring that Indigenous communities are compensated when their agricultural resources and knowledge of wild plants and animals are utilized by agricultural corporations. However, the protocol has shortcomings. For example, it allows corporations to insist that their agreements with communities to conduct research on the commercial uses of the communities' resources and knowledge remain confidential. Therefore, some Indigenous advocates express concern that the protocol may have the unintended effect of _____

Which choice most logically completes the text?

- A. diminishing the monetary reward that corporations might derive from their agreements with Indigenous communities.
- B. limiting the research that corporations conduct on the resources of the Indigenous communities with which they have signed agreements.
- C. preventing independent observers from determining whether the agreements guarantee equitable compensation for Indigenous communities.
- D. discouraging Indigenous communities from learning new methods for harvesting plants and animals from their corporate partners.

The domestic sweet potato (*Ipomoea batatas*) descends from a wild plant native to South America. It also populates the Polynesian Islands, where evidence confirms that Native Hawaiians and other Indigenous peoples were cultivating the plant centuries before seafaring first occurred over the thousands of miles of ocean separating them from South America. To explain how the sweet potato was first introduced in Polynesia, botanist Pablo Muñoz-Rodríguez and colleagues analyzed the DNA of numerous varieties of the plant, concluding that Polynesian varieties diverged from South American ones over 100,000 years ago. Given that Polynesia was peopled only in the last three thousand years, the team concluded that _____

Which choice most logically completes the text?

- A. the cultivation of the sweet potato in Polynesia likely predates its cultivation in South America.
- B. Polynesian peoples likely acquired the sweet potato from South American peoples only within the last three thousand years.
- C. human activity likely played no role in the introduction of the sweet potato in Polynesia.
- D. Polynesian sweet potato varieties likely descend from a single South American variety that was domesticated, not wild.