

Question ID ef8f7d25

Assessment	Test	Domain	Skill	Difficulty
SAT	Reading and Writing	Information and Ideas	Inferences	Easy

ID: ef8f7d25

Archaeologists have been debating the origin of a rare form of lead found in Shang dynasty (1766–1046 BCE) bronze artifacts since its presence was discovered in China in the 1990s. Different researchers have proposed theories on which regions of the world would have had the raw materials containing the specific lead in these artifacts, but no conclusive evidence has been presented. What is intriguing is that bronze artifacts from China dated after the Shang dynasty do not contain this form of lead, suggesting that _____

Which choice most logically completes the text?

- A. Shang dynasty bronze pieces are rare and therefore more valuable than those from other time periods.
- B. the source of some of the raw materials used to make bronze was exploited only until the end of the Shang dynasty.
- C. bronze was used for a short time during the Shang dynasty before different metals were used to make artifacts.
- D. methods used to analyze bronze artifacts are not useful on pieces that are dated after the Shang dynasty.

ID: ef8f7d25 Answer

Correct Answer: B

Rationale

Choice B is the best answer. The passage tells us that Shang dynasty bronze artifacts contained "a rare form of lead," but that bronze artifacts after this time did not contain that lead. Although we don't know where that specific type of bronze came from, we can conclude that that source was not used after the end of the Shang dynasty—otherwise, post-Shang dynasty pieces would also contain that rare form of lead.

Choice A is incorrect. Despite these pieces containing "a rare form of lead," there is no direct claim in the passage that Shang dynasty bronze is itself more rare or valuable than bronze pieces from other periods. Therefore, there's no basis for this inference. Choice C is incorrect. Although the passage mentions that the nature of the bronze in Chinese artifacts changed after the Shang dynasty, bronze was still used to create artifacts after this time. The passage in fact explicitly states "bronze artifacts from China dated after the Shang dynasty...," indicating that bronze was still used in China after the Shang dynasty. Choice D is incorrect. There's no mention in the passage of methods used to analyze bronze artifacts, so there's no basis for this inference.

Question Difficulty: Easy

Question ID a9dc21de

Assessment	Test	Domain	Skill	Difficulty
SAT	Reading and Writing	Information and Ideas	Inferences	Medium

ID: a9dc21de

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 _____.

Which choice most logically completes the text?

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

ID: a9dc21de Answer

Correct Answer: C

Rationale

Choice C is the best answer because it most logically completes the text's discussion of Kristin Laidre's reasoning about the purpose of the tusk that many, but not all, narwhals have. The text explains that one group of scientists thinks the tusk may help narwhals detect the threat of freezing water and that Laidre disagrees with that idea, given the importance of avoiding a dangerous situation. It's logical to suggest that if the tusk serves such an important purpose for narwhals, the trait would be more common among them—specifically, that more narwhals would have a tusk.

Choice A is incorrect because there's no reason to think Laidre would say that if the tusk has the important function of helping narwhals detect when the water around them is about to freeze (meaning that it isn't always freezing), some narwhals would choose a different habitat altogether. Indeed, if it's true that the tusk helps narwhals avoid areas with dangerous conditions when they occur in their Arctic Ocean habitat, the tusk would likely enable the narwhals to continue living in that habitat rather than drive them elsewhere entirely. Choice B is incorrect because the text focuses only on narwhals and makes no mention of other marine animals or how having a tusk might affect them. And if anything, it would be more logical to expect a very important trait to be more widespread, not less common, among other similar types of animals. Choice D is incorrect. Although the text describes narwhals as shy, it doesn't indicate that the scientists' conclusion has anything to do with shyness. And because shyness and detection of the threat of freezing water aren't logically connected, there's no reason to think that Laidre would expect narwhals to become less shy over time if the tusk serves that important purpose.

Question Difficulty: Medium

Question ID f396849d

Assessment	Test	Domain	Skill	Difficulty
SAT	Reading and Writing	Information and Ideas	Inferences	Hard

ID: f396849d

During their larval phase, numerous species of coral reef fish are drawn toward areas where light is present. To better understand how artificial light at night (ALAN) might affect some coral reef fish, researchers explored the effect of exposure to low levels of ALAN on the reproductive success of the common clownfish (*Amphiprion ocellaris*). While exposure to low levels of ALAN had no significant effect on spawning frequency and egg fertilization in *A. ocellaris*, incubation in the presence of ALAN completely inhibited hatching. These findings suggest that _____.

Which choice most logically completes the text?

- A. *A. ocellaris* that settle in areas with low levels of ALAN have significantly higher rates of successful egg fertilization than *A. ocellaris* that settle in areas without ALAN do.
- B. the reproductive success of *A. ocellaris* would be at risk if they were to selectively settle in regions that are regularly exposed to low levels of ALAN.
- C. the reproductive success of *A. ocellaris* is more greatly affected by the presence of low levels of ALAN during incubation than the reproductive success of other species of coral reef fish is.
- D. the spawning frequency of *A. ocellaris* was more strongly affected by the presence of low levels of ALAN than egg fertilization was, though both were less affected than incubation.

ID: f396849d Answer

Correct Answer: B

Rationale

Choice B is the best answer because it most logically completes the text's discussion of artificial light at night (ALAN) and the common clownfish (*A. ocellaris*). The text indicates that researchers found that when *A. ocellaris* is exposed to low levels of ALAN, spawning frequency and egg fertilization aren't significantly affected but hatching is completely inhibited—that is, the eggs never hatch. Therefore, if *A. ocellaris* were to settle only in regions where the fish would be regularly exposed to low levels of ALAN, their eggs would stop hatching and their reproductive success would be at risk.

Choice A is incorrect because the text indicates that exposure to low levels of ALAN had no significant effect on egg fertilization for *A. ocellaris*, so there's no reason to expect there would be any significant difference in rates of successful egg fertilization between areas with low levels of ALAN and areas without ALAN. Choice C is incorrect because the text doesn't discuss the particular effects of low levels of ALAN on any species of coral reef fish besides *A. ocellaris*. For this reason, there's no support in the text for the idea that the reproductive success of *A. ocellaris* is more greatly affected by the presence of low levels of ALAN than the reproductive success of other species of coral reef fish is. Choice D is incorrect. The text does indicate that *A. ocellaris* incubation was most strongly affected by low levels of ALAN, but it doesn't indicate that

there was a greater effect on spawning frequency than on egg fertilization; in fact, the text states that there was no significant effect on either.

Question Difficulty: Hard

Question ID 8174f406

Assessment	Test	Domain	Skill	Difficulty
SAT	Reading and Writing	Information and Ideas	Inferences	Easy

ID: 8174f406

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

ID: 8174f406 Answer

Correct Answer: D

Rationale

Choice D is the best answer. The text says that *N. pudica*'s prey-catching pitchers are underground. It also says that the ridges where *N. pudica* lives don't have many plants and animals on the surface. This suggests that *N. pudica* evolved underground pitchers in order to catch more prey.

Choice A is incorrect. This inference isn't supported. The text never mentions the possibility of other undiscovered carnivorous plant species in Indonesia, so there's no basis to make this inference. Choice B is incorrect. This inference isn't supported. The text does say that the ridges where *N. pudica* lives are dry, but it also says that the purpose of carnivorous plant pitchers is to capture prey. It never suggests that these pitchers also absorb moisture, so there's no basis to make this inference. Choice C is incorrect. This inference isn't supported. The text never suggests that *N. pudica*'s underground pitcher can catch animals on the surface, so there's no basis to make this inference.

Question Difficulty: Easy

Question ID f8bcc659

Assessment	Test	Domain	Skill	Difficulty
SAT	Reading and Writing	Information and Ideas	Inferences	Medium

ID: f8bcc659

In 2016 biological anthropologist Heather F. Smith and her team investigated the evolution of the appendix, an intestinal organ that is present in some mammals, including humans, but is generally thought to have no function. Studying 533 mammal species, the team found that the appendix has emerged independently across multiple lineages in separate instances and, significantly, hasn't disappeared after emerging in specific lineages. Moreover, the team determined that species with the organ tend to have higher concentrations of lymphoid tissue, which supports immune responses, in the cecum, the organ the appendix is attached to. Therefore, the team hypothesized that the appendix likely _____

Which choice most logically completes the text?

- A. was once present in many nonmammal species but has since disappeared from those lineages.
- B. has been preserved in certain mammal species because it benefits their immune systems.
- C. will emerge in a greater number of mammal species because it may serve a necessary function in the immune system.
- D. produced higher concentrations of lymphoid tissue in mammals in the past than it does currently.

ID: f8bcc659 Answer

Correct Answer: B

Rationale

Choice B is the best answer because it most logically completes the text's discussion of Smith and colleagues' investigation of the evolution and biological role of the appendix. The text indicates that the team found several instances of the appendix emerging and not disappearing in the lineages of various mammal species the team examined. Furthermore, the text states that species that possess an appendix also tend to have relatively high amounts of lymphoid tissue—a type of tissue that supports immune system function. Taken together, these details strongly support the hypothesis that the appendix has persisted in some species because it has a function that contributes to effective immune responses in those species.

Choice A is incorrect because the text doesn't address any nonmammalian species. Choice C is incorrect because the text doesn't make predictions about the evolutionary future of the species Smith and colleagues examined, and although the implication of the text is that the appendix likely does serve a function for the immune system, nothing in the text indicates that the appendix will become more widespread in the future. Choice D is incorrect. Although the text does suggest an association between having an appendix and relatively high concentrations of lymphoid tissue, it doesn't claim that the appendix causes the tissue to grow, nor does it address the relative production of the tissue at different periods of time.

Question Difficulty: Medium

Question ID 21cdd49b

Assessment	Test	Domain	Skill	Difficulty
SAT	Reading and Writing	Information and Ideas	Inferences	Hard

ID: 21cdd49b

Conventional theories of rhetoric hold that presenting information as coming from credentialed experts increases that information's credibility. When communications researcher Sungkyoung Lee and her colleagues tested messages seeking volunteers for clinical trials, however, they found that participants in their study judged recruitment messages from former trial volunteers as significantly more credible than messages from doctors (i.e., credentialed experts). One reason for this may be that the doctors' status as credentialed experts wasn't ignored but rather was outweighed by participants' views of the experiential relevance of the two types of messengers; that is, participants may have reacted the way they did because

Which choice most logically completes the text?

- A. messages from former trial volunteers depicted clinical trials as being more positive experiences than did messages from doctors.
- B. participants did not have enough experience to evaluate the credibility of the doctors' messages but did have enough experience to evaluate the credibility of former trial volunteers' messages.
- C. the fact that former trial volunteers went through the same experience that participants were contemplating while doctors did not was more important to participants than the doctors' status as credentialed experts was.
- D. participants regarded the experiences of both the doctors and former trial volunteers as relevant to the subject of clinical trials but were skeptical of the doctors' status as credentialed experts.

ID: 21cdd49b Answer

Correct Answer: C

Rationale

Choice C is the best answer because it presents the conclusion that most logically follows from the text's discussion of how participants considered messages from former trial volunteers and doctors. The text first establishes that information coming from credentialed experts typically increases the credibility of that information. However, the text goes on to describe a situation that goes against this expectation: the messages from previous trial volunteers were judged as more credible than the messages from licensed doctors when recruiting clinic trial participants. The text then goes on to speculate as to why this may have been the case, stating that participants likely considered the messages from the former trial volunteers to be more convincing than the messages from the doctors because the former trial volunteers were perceived as having undergone the same experience that the participants were considering. It is reasonable to infer, then, that participants regarded the former trial volunteers' direct experience as more important to their decision-making than the doctors' status as credentialed experts.

Choice A is incorrect because the text does not provide any indication as to the content or the tone of the messages provided by either the doctors or the former trial volunteers regarding the clinical trials. Choice B is incorrect. Since the study participants had not themselves participated in the clinical trial, they could not rely on their experience to evaluate the credibility of either the former trial volunteers or the doctors. Choice D is incorrect. While the text does establish that the participants likely considered the messages from both the doctors and the former trial volunteers, it does not suggest that the participants doubted the doctors' credentials. Rather, the text speculates that participants may have given the experiences of the former trial volunteers more importance than the doctors' credentials when considering the recruitment messages.

Question Difficulty: Hard

Question ID 3f3fe0d9

Assessment	Test	Domain	Skill	Difficulty
SAT	Reading and Writing	Information and Ideas	Inferences	Easy

ID: 3f3fe0d9

In the South Pacific, New Caledonian crows use two different kinds of stick tools. One tool is complex. The crows shape a stick from a rare plant into a hook. The other tool is basic. The crows find a stick without a hook on the ground. The hooked tool is harder to get but is much better than the basic tool at removing prey from holes. When studying New Caledonian crows, ecologist Barbara Klump found that they hold the hooked tools in their claws when not using them, or they carefully put them in a safe place. The crows don't do the same with the basic tools. This suggests to Klump that the _____

Which choice most logically completes the text?

- A. hooked stick tools are more valuable to the crows than the stick tools without hooks.
- B. hooked stick tools are easier for most of the crows to hold than the stick tools without hooks.
- C. crows prefer to share their hooked stick tools but don't share the stick tools without hooks.
- D. crows realize that both kinds of stick tools are less effective than their claws are at removing prey from holes.

ID: 3f3fe0d9 Answer

Correct Answer: A

Rationale

Choice A is the best answer because it most logically completes the text's discussion of the two types of stick tools used by New Caledonian crows. The text indicates that the more effective type of tool has a hook that the crows make themselves, while the other type of tool is simply a stick without a hook that the crows find and don't shape in any way. According to the text, Klump found that the crows keep hooked tools—but not the tools without hooks—in their grasp or in safe places when they aren't using the tools. If the hooked tools are more effective than the tools without hooks are and the crows are more protective of the hooked tools than they are of the tools without hooks, it's reasonable to conclude that the hooked tools are more valuable to the crows than the tools without hooks are.

Choice B is incorrect because the text gives no indication of how easy it is for the crows to hold either the hooked tools or the tools without hooks. The text does state that crows hold the hooked tools and not the tools without hooks when the tools aren't in use. However, the text also indicates that the hooked tools require work from the crows to make and are more useful for helping the crows catch prey than the tools without hooks are. This context suggests that the crows hold the hooked tools because they're more valuable to the crows than the tools without hooks are, not because the hooked tools are easier to hold. Choice C is incorrect because the text makes no mention of the crows sharing tools. Additionally, the text indicates that when the crows aren't using the hooked tools, they either grasp the tools or store them safely, which suggests that the crows try to maintain possession of the hooked tools, not that crows prefer to share those tools. Choice D is incorrect because the text says nothing about the crows using their claws to remove prey from holes, so there's no evidence

that the crows perceive the stick tools to be less effective than their claws are.

Question Difficulty: Easy

Question ID 0ce17852

Assessment	Test	Domain	Skill	Difficulty
SAT	Reading and Writing	Information and Ideas	Inferences	Medium

ID: 0ce17852

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.

ID: 0ce17852 Answer

Correct Answer: A

Rationale

Choice A is the best answer because it presents the conclusion that most logically follows from the text's discussion of military veterans working in civilian government jobs in the United States. The text indicates that the proportion of military veterans working in civilian government jobs is considerably higher than the proportion of military veterans in the population as a whole. The text also notes that the unusually high representation of military veterans in these jobs may be a result of the organizational structures shared by civilian government entities and the military. Hence, it's reasonable to infer that it's the familiarity of the structures of civilian government that makes jobs there particularly attractive to military veterans.

Choice B is incorrect because the text doesn't address what a typical relationship between military service and later career preferences would be, and there's no indication that it's atypical for veterans to work in civilian government jobs after they've left the military. On the contrary, the text suggests that many military veterans are drawn to such jobs. Choice C is incorrect because the text is focused on the high representation of military veterans in civilian government jobs and doesn't address nonveterans or their possible interest in military service. Choice D is incorrect because the text conveys that military veterans may be particularly interested in civilian government jobs due to the familiarity of organizational structures that are already in place, but there's no reason to think that this interest would mean that more civilian government jobs will start to require military experience.

Question Difficulty: Medium

Question ID 347e5a71

Assessment	Test	Domain	Skill	Difficulty
SAT	Reading and Writing	Information and Ideas	Inferences	Hard

ID: 347e5a71

Aerogels are highly porous foams consisting mainly of tiny air pockets within a solidified gel. These lightweight materials are often applied to spacecraft and other equipment required to withstand extreme conditions, as they provide excellent insulation despite typically being brittle and eventually fracturing due to degradation from repeated exposure to high heat. Now, Xiangfeng Duan of the University of California, Los Angeles, and colleagues have developed an aerogel with uniquely flexible properties. Unlike earlier aerogels, Duan's team's material contracts rather than expands when heated and fully recovers after compressing to just 5% of its original volume, suggesting that _____

Which choice most logically completes the text?

- A. the aerogel's remarkable flexibility results from its higher proportion of air pockets to solidified gel as compared to other aerogels.
- B. the aerogel's overall strength is greater than that of other insulators but its ability to withstand exposure to intense heat is lower.
- C. the aerogel will be more effective as an insulator for uses that involve gradual temperature shifts than for those that involve rapid heat increases.
- D. the aerogel will be less prone to the structural weakness that ultimately causes most other aerogels to break down with use.

ID: 347e5a71 Answer

Correct Answer: D

Rationale

Choice D is the best answer because it most logically completes the text's discussion of aerogels. The text states that aerogels—highly porous foams—offer "excellent insulation" but typically break down after prolonged exposure to high heat. However, according to the text, Duan and colleagues developed an aerogel that "contracts rather than expands when heated" and recovers its original volume after this contraction. Thus, it is logical to conclude that Duan's team's aerogel material will be less prone to the structural weakness that caused earlier aerogels to break down.

Choice A is incorrect. Although the text indicates that aerogels consist "mainly of tiny air pockets within a solidified gel," it doesn't mention the number or proportion of air pockets to solidified gel in typical aerogels or in the aerogel developed by Duan's team. Choice B is incorrect because the text suggests that the aerogel developed by Duan's team has a higher, not a lower, ability to withstand exposure to intense heat due to its contraction and subsequent recovery. Choice C is incorrect. Although the text discusses temperature tolerances of aerogels and says that they offer "excellent insulation despite typically being brittle and eventually fracturing," it doesn't discuss how different rates of temperature change can affect

aerogels.

Question Difficulty: Hard

Question ID fd29f9e5

Assessment	Test	Domain	Skill	Difficulty
SAT	Reading and Writing	Information and Ideas	Inferences	Easy

ID: fd29f9e5

Archaeologist Christiana Kohler and her team excavated the Egyptian tomb of Queen Merneith, the wife of a First Dynasty pharaoh. Some scholars claim that she also ruled Egypt on her own and was actually the first female pharaoh. The team found a tablet in Merneith's tomb with writing suggesting that she was in charge of the country's treasury and other central offices. Whether Merneith was a pharaoh or not, this discovery supports the idea that Merneith likely ____.

Which choice most logically completes the text?

- A. had an important role in Egypt's government.
- B. lived after rather than before the First Dynasty of Egypt.
- C. traveled beyond Egypt's borders often.
- D. created a new form of writing in Egypt.

ID: fd29f9e5 Answer

Correct Answer: A

Rationale

Choice A is the best answer because it most logically completes the text's discussion of the evidence found in Queen Merneith's tomb. The text begins by mentioning archaeologists' efforts to excavate the tomb of Queen Merneith, the wife of a pharaoh who some scholars think was actually the first female pharaoh. The text states that a tablet discovered in her tomb suggests she "was in charge of the country's treasury and other central offices," which supports the idea that she had an important role in Egypt's government.

Choice B is incorrect because since the text explicitly states that Merneith's husband was a First Dynasty pharaoh, it can be inferred that she lived during the First Dynasty, not after it. Choice C is incorrect because the text does not provide any evidence that Merneith traveled beyond Egypt's borders often. The text is focused on the archaeological discovery in her tomb and the implications about her potential role as a ruler in Egypt but does not mention anything about her traveling habits. Choice D is incorrect because the text does not mention anything about Merneith creating a new form of writing in Egypt. The text discusses the discovery of a tablet with writing suggesting her governmental role but does not imply that this writing represented a new form created by Merneith.

Question Difficulty: Easy

Question ID 40aa7b00

Assessment	Test	Domain	Skill	Difficulty
SAT	Reading and Writing	Information and Ideas	Inferences	Medium

ID: 40aa7b00

Astronomers investigated the Arabia Terra region of Mars because it appears to contain irregularly shaped craters that may have been caused by massive volcanic explosions. In their investigations of Arabia Terra, the researchers found remnants of ash deposits in an amount and thickness that would result from a massive volcanic eruption. However, erosion and past resurfacing events could have modified the surface of the planet. Therefore, _____

Which choice most logically completes the text?

- A. the current makeup of the Arabia Terra region might not accurately reflect the volcanic activity of Mars's past.
- B. eruptions from Mars's volcanoes were likely not as massive as astronomers previously believed.
- C. ash was most likely expelled from multiple different volcanoes on Mars's surface.
- D. the craters found in the Arabia Terra region were necessarily created by events other than volcanic eruptions.

ID: 40aa7b00 Answer

Correct Answer: A

Rationale

Choice A is the best answer because it presents the conclusion that most logically follows from the text's discussion of the Arabia Terra region of Mars. According to the text, there are craters in Arabia Terra that could be the result of volcanic activity, and researchers have found evidence of ash deposits consistent with a large eruption. The text goes on to note, however, that erosion and other events could have altered the surface of Mars. This observation suggests that current conditions on Mars's surface are not necessarily a reliable guide to past events—some signs of past events could have been transformed or erased entirely—and thus the current makeup of Arabia Terra may not accurately reflect past volcanic activity.

Choice B is incorrect because the text suggests only that past events could have changed Mars's surface such that its current appearance isn't a reliable guide to past activity, not that it's likely that past eruptions were not as massive as astronomers previously believed. Nothing in the text supports a conclusion about the likely size of past eruptions. Choice C is incorrect because the observation that resurfacing events could have changed the appearance of Mars doesn't imply that the ash discussed in the text likely came from multiple volcanoes. Although it's possible that the ash came from different volcanoes, there's no information in the text supporting a conclusion about how likely that possibility is. Choice D is incorrect because nothing in the text suggests that the Arabia Terra craters had to have been created by something other than volcanic eruptions. Although the text does suggest that the evidence consistent with volcanic eruptions shouldn't be taken as definitive proof of past eruptions, that doesn't mean that the craters couldn't have been created by eruptions, only that we

can't be certain they were.

Question Difficulty: Medium

Question ID f4fbf306

Assessment	Test	Domain	Skill	Difficulty
SAT	Reading and Writing	Information and Ideas	Inferences	Hard

ID: f4fbf306

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, _____

Which choice most logically completes the text?

- A. rail systems should offer fewer long-haul routes and airlines should offer more long-haul routes.
- 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.

ID: f4fbf306 Answer

Correct Answer: B

Rationale

Choice B is the best answer. Air travel usually requires much more "lead time" than train travel, so short flights end up taking the same amount of time as a train trip to the same destination. But train travel starts to need more "lead time" when the trains approach their capacity limits. This suggests that train companies should add more trains for these routes if they want to encourage travelers to take a train instead of a plane.

Choice A is incorrect. This inference isn't supported. The text never discusses "long-haul routes" for either air travel or rail travel, so there is no basis to make this inference. Choice C is incorrect. This inference isn't supported. The text only mentions these procedures to explain why the "lead time" is so long for air travel. It never suggests that trains need to start implementing these procedures too. Choice D is incorrect. This inference isn't supported. The goal is to make sure that trains "remain a viable alternative" to short flights, which suggests that anything that makes train travel take longer should be avoided.

Question Difficulty: Hard

Question ID ce0b0126

Assessment	Test	Domain	Skill	Difficulty
SAT	Reading and Writing	Information and Ideas	Inferences	Easy

ID: ce0b0126

If an animal has been extinct for a long time, how can scientists learn what color it was? One group of scientists came up with a possible answer. When the scientists examined the fossilized feather of an extinct bird, they found melanosomes in it. Melanosomes produce pigment, or grains of color, inside cells. Because melanosomes are shaped differently depending on which colors they produce, the scientists hypothesized that they could _____.

Which choice most logically completes the text?

- A. show how melanosomes can be found in fossils belonging to animals from other extinct species.
- B. determine the colors of the bird based on the appearance of the melanosomes in the feather.
- C. explain why the melanosomes in the feather were so well preserved.
- D. identify the colors of extinct animals whose fossils lack melanosomes.

ID: ce0b0126 Answer

Correct Answer: B

Rationale

Choice B is the best answer because it most logically completes the text's discussion of a hypothesis by one group of scientists about how to determine the colors of a long-extinct animal. The text explains that the scientists found melanosomes in the fossilized feather of an extinct bird and that melanosomes are responsible for producing color inside cells. The text also explains that melanosomes have different shapes depending on the colors they produce. Given this information, it follows that the scientists hypothesized that they could determine the colors of the extinct bird by examining the shapes of the melanosomes in the feather.

Choice A is incorrect because the text never suggests that the scientists were seeking to show how melanosomes can be found in fossils belonging to animals from other extinct species. Rather, the text indicates that the scientists were seeking to identify an extinct bird's colors, and the text strongly suggests that the scientists hypothesized that they could achieve their goal by examining the shapes of the melanosomes in the bird's fossilized feather. Choice C is incorrect because the text never suggests that the scientists were seeking to explain why the melanosomes in the feather were so well preserved. Rather, the text indicates that the scientists were seeking to identify an extinct bird's colors, and the text strongly suggests that the scientists hypothesized that they could achieve their goal by examining the shapes of the melanosomes in the bird's fossilized feather. Choice D is incorrect because the text suggests only one method of identifying the colors of extinct animals: by examining the shapes of melanosomes found in fossils. The text doesn't discuss other methods for learning the colors of extinct animals and therefore provides no support for the idea that the scientists could identify the colors of extinct animals whose fossils lack melanosomes.

Question Difficulty: Easy

Question ID 02e95b9b

Assessment	Test	Domain	Skill	Difficulty
SAT	Reading and Writing	Information and Ideas	Inferences	Medium

ID: 02e95b9b

The practice of logging (cutting down trees for commercial and other uses) is often thought to be at odds with forest conservation (the work of preserving forests). However, a massive study in forest management and preservation spanning 700,000 hectares in Oregon's Malheur National Forest calls that view into question. So far, results of the study suggest that forest plots that have undergone limited logging (the careful removal of a controlled number of trees) may be more robust than plots that haven't been logged at all. These results, in turn, suggest that _____.

Which choice most logically completes the text?

- A. logging may be useful for maintaining healthy forests, provided it is limited.
- B. other forest management strategies are more effective than limited logging.
- C. as time passes, it will be difficult to know whether limited logging has any benefits.
- D. the best way to support forest health may be to leave large forests entirely untouched.

ID: 02e95b9b Answer

Correct Answer: A

Rationale

Choice A is the best answer because it most logically completes the text's discussion of the potential effects of logging on forest conservation. The text begins by stating that logging practices are often thought of as being contrary to forest conservation efforts. Then, the text presents the results of a research study examining the effect of limited logging practices on specific forest plots, finding that the plots with limited logging may be "more robust" (healthier) than the plots that hadn't been logged at all. Given these results, it follows that logging may be a useful practice for maintaining healthy forests if it is practiced in a limited way.

Choice B is incorrect because the study referenced in the text only provides information on limited logging as a potential forest management strategy. There is no information in the text about how other forest management strategies support forest conservation efforts. Therefore, the text does not support the assertion that other forest management strategies are more successful than limited logging. Choice C is incorrect because the text presents a research study with findings that specific plots of forest with limited logging may be more robust than the forest plots that were not logged. Rather than suggesting that it is hard to know whether limited logging might be beneficial, the text suggests that the practice could be useful in forest conservation efforts. Choice D is incorrect. The text discusses the results of a research study that compares the health of forest plots with limited logging to forest plots that were not logged. It does not take a position on the best way to support forest health but rather presents a research study with findings that question conventionally held thoughts regarding the practice of logging.

Question Difficulty: Medium

Question ID 780331f8

Assessment	Test	Domain	Skill	Difficulty
SAT	Reading and Writing	Information and Ideas	Inferences	Hard

ID: 780331f8

Aptamers—synthetic DNA or RNA molecules that bind to target molecules—can be used to test for foodborne bacterial pathogens, though their specificity (the probability of returning a negative result in the absence of the focal pathogen) in real-world foods has been unclear. Sandeep Somvanshi et al. fabricated test paper incorporating aptamers targeting strain O157:H7 of the bacteria *Escherichia coli*; the paper shifts from pink to purple as the aptamers bind to target molecules. Somvanshi et al. tested the paper in store-bought pear juice they treated with *E. coli* O157:H7, other strains of *E. coli*, or other bacteria species. Following exposure, the paper from the O157:H7 test was purple while papers from the other tests were pink, suggesting that _____.

Which choice most logically completes the text?

- A. aptamer-based tests in real-world foods are more likely to show a high degree of specificity if the focal pathogen is *E. coli* O157:H7 than if the focal pathogen is another strain of *E. coli* or another species.
- B. uncertainty about the specificity of aptamer-based tests for pathogens in real-world foods may be due to the similarity between *E. coli* O157:H7 and other *E. coli* strains.
- C. the specificity of the tests in a real-world food was unaffected by the aptamers' tendency to bind to different strains of *E. coli*.
- D. the aptamers successfully bound to *E. coli* O157:H7 and the tests displayed a high degree of specificity in a real-world food.

ID: 780331f8 Answer

Correct Answer: D

Rationale

Choice D is the best answer because it most logically completes the text's discussion of aptamers' capacity to test for pathogens in food. The text explains that although synthetic aptamer molecules can be used to test for foodborne bacterial pathogens because they bind to target molecules, it hasn't been clear how likely it is that they will indicate a negative result when a target pathogen is absent in real-world foods. The text then indicates that Somvanshi et al. created test paper that changes from pink to purple when aptamers in it bind to a particular strain of *E. coli* bacteria, O157:H7, and tested it with store-bought pear juice (that is, a real-world food); the paper changed to purple when exposed to juice to which the target pathogen *E. coli* O157:H7 had been added, but it remained pink when exposed to juice treated with other *E. coli* strains or other bacteria species. Based on this result, it seems the aptamers in the paper successfully bound to the target (O157:H7) and the tests had a high degree of specificity (providing negative results for samples where the target was absent even though other bacteria were present) when applied to a real-world food.

Choice A is incorrect because nothing in the text suggests that *E. coli* O157:H7 differs from other pathogens in a way that makes it more suitable for aptamer-based testing of any kind and that specificity is likely to be lower when aptamer-based tests target other bacteria; the text simply indicates that Somvanshi et al. used O157:H7 as the target for aptamer-based test paper in their study and suggests that the paper had a high degree of specificity. Choice B is incorrect because the text indicates that the specificity of aptamer-based tests in real-world foods is uncertain for pathogens broadly, not just for *E. coli*, and similarity between strains (of *E. coli* or of other pathogens) isn't mentioned. Moreover, the results presented in the text suggest that aptamers are actually capable of distinguishing between strains of *E. coli*, since Somvanshi et al.'s paper turned purple when exposed to *E. coli* O157:H7 and remained pink when exposed to other strains. Choice C is incorrect because the text suggests that the aptamers in the test papers didn't bind to different strains of *E. coli*. The text explains that the test papers turn purple when the aptamers bind to the targeted pathogen and that in the pear juice tests, the test papers turned purple when exposed to samples with the targeted strain of *E. coli* (O157:H7) but remained pink when exposed to samples with other strains of *E. coli*. In other words, the aptamers bound only to the targeted strain, not to the other strains. Further, specificity would be affected if the aptamers had bound to multiple strains and not just the targeted one; that result would cause the specificity to be low.

Question Difficulty: Hard

Question ID 47fe6ee1

Assessment	Test	Domain	Skill	Difficulty
SAT	Reading and Writing	Information and Ideas	Inferences	Easy

ID: 47fe6ee1

The Nacional tree is a rare variety of cacao. Nacionals were thought to have gone extinct by the twentieth century due to a fungus. This fungus can spread from tree to nearby tree through the air and causes disease. But around 2013, cacao expert Servio Pachard located some of these Nacional trees. The trees were in the Piedra de Plata coastal forest, within a hard-to-reach valley in Ecuador. Conservationists inferred that the Nacional trees in Piedra de Plata might have avoided the diseases that wiped out the other Nacionals because _____.

Which choice most logically completes the text?

- A. early twentieth-century scientists did not know why so many Nacionals were becoming infected.
- B. the ability of the fungus to travel through the air was only recently discovered.
- C. they were too far from the other Nacional trees infected by the fungus to become infected themselves.
- D. the chocolate made from their pods was highly valued.

ID: 47fe6ee1 Answer

Correct Answer: C

Rationale

Choice C is the best answer because it most logically completes the text's discussion of the Nacional trees' survival in Piedra de Plata. The text states that the fungus that caused Nacional trees elsewhere to become diseased spreads from tree to nearby tree through the air. The text also mentions that the surviving Nacional trees were found in a hard-to-reach valley in Ecuador. Given this information, it's logical to conclude that these trees might have avoided infection because they were geographically isolated from infected Nacional trees, which prevented the airborne fungus from reaching them.

Choice A is incorrect because early twentieth-century scientists' lack of knowledge about the infection that affected many Nacionals doesn't explain how the trees in the Piedra de Plata coastal forest survived. The text is concerned with the physical factors that allowed certain trees to avoid infection, not with scientists' understanding of the disease. Choice B is incorrect. Although the text mentions that the fungus spreads through the air, it doesn't indicate when this ability was discovered. Moreover, even if the ability to move through the air was recently discovered, that wouldn't explain how the trees in Piedra de Plata avoided infection in the past. Choice D is incorrect because the value of the chocolate made from Nacional pods doesn't explain how the trees in the Piedra de Plata coastal forest avoided disease. The text focuses on the physical spread of the fungus that caused most Nacionals to become diseased, not on economic factors related to the trees' products.

Question Difficulty: Easy

Question ID b1f9718b

Assessment	Test	Domain	Skill	Difficulty
SAT	Reading and Writing	Information and Ideas	Inferences	Medium

ID: b1f9718b

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.

ID: b1f9718b Answer

Correct Answer: B

Rationale

Choice B is the best answer because it most logically completes the text's discussion of Zelda Fitzgerald's contributions to literature. The text begins by saying that many scholars view Zelda mainly in terms of her marriage to F. Scott Fitzgerald and "don't recognize Zelda as a writer in her own right." The text then mentions a novel and "numerous short stories" that she wrote and that such scholars tend to ignore. Therefore, those scholars who focus on Zelda only as an inspiration for F. Scott's writings risk misrepresenting the full range of Zelda's contributions to literature.

Choice A is incorrect. Although the text does mention that Zelda Fitzgerald "likely influenced" her husband's literary work, its focus is on Zelda's own writing, not on her husband's writing or factors that might have influenced it. Choice C is incorrect because the text does not discuss F. Scott and Zelda Fitzgerald's opinions of each other's works. Choice D is incorrect. Although the text does suggest that F. Scott Fitzgerald's works were "likely influenced in part" by his marriage to Zelda, it does not discuss autobiographical interpretations of the works of either F. Scott or Zelda.

Question Difficulty: Medium

Question ID 03d9c538

Assessment	Test	Domain	Skill	Difficulty
SAT	Reading and Writing	Information and Ideas	Inferences	Hard

ID: 03d9c538

Mosses can struggle in harsh desert conditions because these plants require enough sunlight for photosynthesis but not so much that they risk drying out. Researchers Jenna Ekwealor and Kirsten M. Fisher found several species of *Syntrichia caninervis*, a type of desert moss, growing under quartz crystals in California's Mojave Desert. To evaluate whether these semitransparent rocks benefited the moss, the researchers compared the shoot tissue, a measure of plant growth, of *S. caninervis* when growing on the soil surface versus when the moss was growing under the quartz rocks. They found that the shoot tissue was 62% longer for moss growing under the quartz as compared to moss on the soil surface, suggesting that

Which choice most logically completes the text?

- A. *S. caninervis* is one of the few types of moss that can survive under semitransparent rocks.
- B. quartz crystals do not transmit the necessary sunlight for photosynthesis in *S. caninervis*.
- C. *S. caninervis* growing under quartz crystals experience lower light intensity and are thus able to retain more moisture.
- D. quartz crystals are capable of supporting *S. caninervis* growth if the crystals are not too thin.

ID: 03d9c538 Answer

Correct Answer: C

Rationale

Choice C is the best answer because it most logically completes the text. The text explains that while desert moss species need sufficient sunlight for photosynthesis, exposure to sunlight can also affect the plants negatively by drying them out. Ekwealor and Fisher's team found specimens of *S. caninervis* moss growing under quartz crystals that were semitransparent, allowing some but not all sunlight to pass through them, and the shoot tissue of these specimens was longer than that of *S. caninervis* specimens found growing on the surface that were unprotected by such crystals. Since, as the text explains, the length of shoot tissue is an indicator of plant growth, and since greater exposure to sunlight results in greater loss of moisture, it can be inferred that *S. caninervis* growing under quartz crystals experience lower light intensity and are thus able to retain more moisture.

Choice A is incorrect because the text doesn't mention another moss species besides *S. caninervis* or discuss whether other such species are able to grow under transparent crystals, as *S. caninervis* is. Choice B is incorrect because, as the text explains, specimens of *S. caninervis* were found growing under quartz crystals and exhibited more plant growth than specimens growing on the soil surface. This wouldn't have been the case if the crystals transmitted insufficient light for the moss's photosynthesis. Choice D is incorrect. The text contrasts the growth of *S. caninervis* specimens found beneath

semitransparent quartz crystals with that of specimens found on the soil surface absent such crystals, but it doesn't make a comparison among specimens growing beneath crystals of different degrees of thickness or consider how the relative thickness of the crystals affects the growth of the moss.

Question Difficulty: Hard