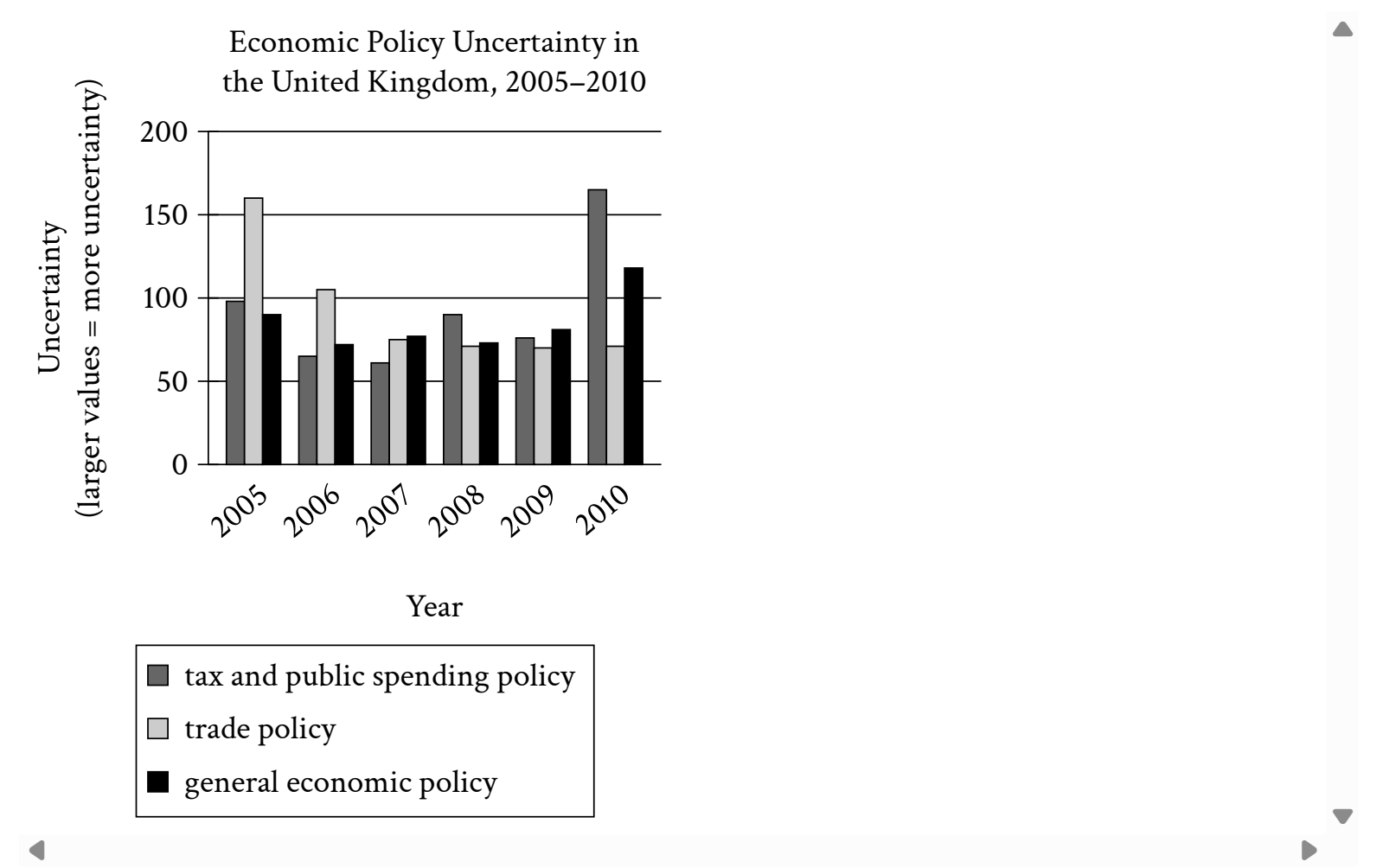


Assessment	Test	Domain	Skill	Difficulty
SAT	Reading and Writing	Information and Ideas	Command of Evidence	<div><div></div><div></div><div></div></div>

ID: a0120582



High levels of public uncertainty about which economic policies a country will adopt can make planning difficult for businesses, but measures of such uncertainty have not tended to be very detailed. Recently, however, economist Sandile Hlatshwayo analyzed trends in news reports to derive measures not only for general economic policy uncertainty but also for uncertainty related to specific areas of economic policy, like tax or trade policy. One revelation of her work is that a general measure may not fully reflect uncertainty about specific areas of policy, as in the case of the United Kingdom, where general economic policy uncertainty _____

Which choice most effectively uses data from the graph to illustrate the claim?

- A. aligned closely with uncertainty about tax and public spending policy in 2005 but differed from uncertainty about tax and public spending policy by a large amount in 2009.
- B. was substantially lower than uncertainty about tax and public spending policy each year from 2005 to 2010.
- C. reached its highest level between 2005 and 2010 in the same year that uncertainty about trade policy and tax and public spending policy reached their lowest levels.
- D. was substantially lower than uncertainty about trade policy in 2005 and substantially higher than uncertainty about trade policy in 2010.

Question ID d2b5e069

Assessment	Test	Domain	Skill	Difficulty
SAT	Reading and Writing	Information and Ideas	Command of Evidence	<div><div></div><div></div><div></div></div>

ID: d2b5e069

Psychologists Dacher Keltner and Jonathan Haidt have argued that experiencing awe—a sensation of reverence and wonder typically brought on by perceiving something grand or powerful—can enable us to feel more connected to others and thereby inspire us to act more altruistically. Keltner, along with Paul K. Piff, Pia Dietze, and colleagues, claims to have found evidence for this effect in a recent study where participants were asked to either gaze up at exceptionally tall trees in a nearby grove (reported to be a universally awe-inspiring experience) or stare at the exterior of a nearby, nondescript building. After one minute, an experimenter deliberately spilled a box of pens nearby.

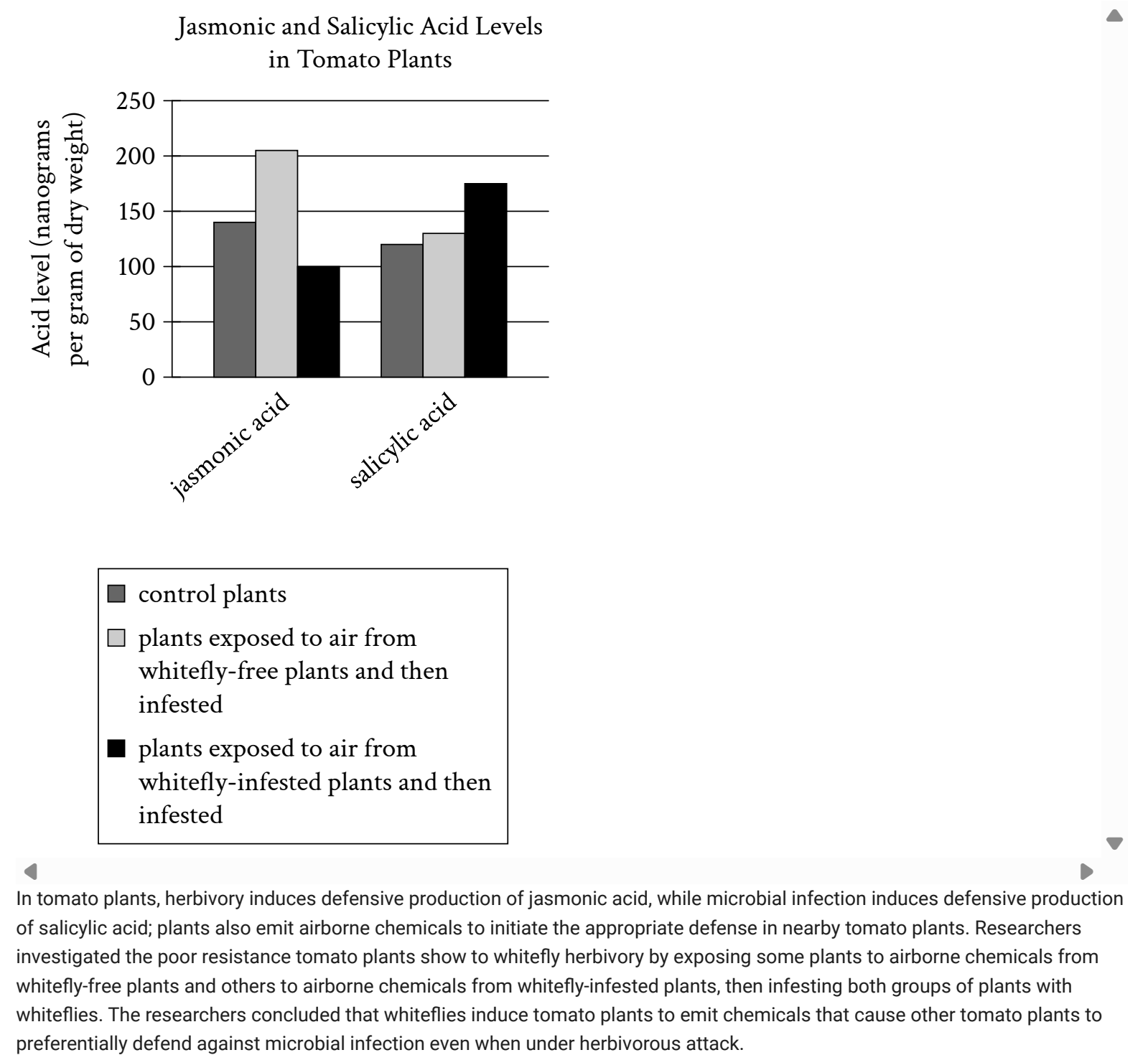
Which finding from the researchers’ study, if true, would most strongly support their claim?

- A. Participants who had been looking at the trees helped the experimenter pick up significantly more pens than did participants who had been looking at the building.
- B. Participants who helped the experimenter pick up the pens used a greater number of positive words to describe the trees and the building in a postexperiment survey than did participants who did not help the experimenter.
- C. Participants who did not help the experimenter pick up the pens were significantly more likely to report having experienced a feeling of awe, regardless of whether they looked at the building or the trees.
- D. Participants who had been looking at the building were significantly more likely to notice that the experimenter had dropped the pens than were participants who had been looking at the trees.

Question ID 92b43ac5

Assessment	Test	Domain	Skill	Difficulty
SAT	Reading and Writing	Information and Ideas	Command of Evidence	<div><div></div><div></div><div></div></div>

ID: 92b43ac5



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

- A. When plants exposed to air from whitefly-free plants were infested, they produced more jasmonic acid than did control plants, whereas when plants exposed to air from whitefly-infested plants were infested, they produced less jasmonic acid and more salicylic acid than did control plants.
- B. When plants exposed to air from whitefly-infested plants were infested, they produced less jasmonic acid than salicylic acid, whereas when plants exposed to air from whitefly-free plants were infested, they produced about the same amount of jasmonic acid and salicylic acid.
- C. When plants exposed to air from whitefly-free plants were infested, they produced both jasmonic acid and salicylic acid, whereas when plants exposed to air from whitefly-infested plants were infested, they exclusively produced salicylic acid.
- D. When plants exposed to air from whitefly-infested plants were infested, they produced less jasmonic acid than did control plants, whereas when plants exposed to air from whitefly-free plants were infested, they produced more jasmonic acid and salicylic acid than did control plants.

Question ID b89072a5

Assessment	Test	Domain	Skill	Difficulty
SAT	Reading and Writing	Information and Ideas	Command of Evidence	<div><div></div><div></div><div></div></div>

ID: b89072a5

Properties of TRAPPIST-1 Exoplanets Compared to Earth's Properties

Planet	Orbital period (days)	Planet radius (Earth radii)
Earth	365.26	1
TRAPPIST-1b	1.51	1.09
TRAPPIST-1d	4.05	0.77
TRAPPIST-1e	6.1	0.92
TRAPPIST-1f	9.21	1.04

TRAPPIST-1 is a planetary system with a central red dwarf star and several Earth-sized exoplanets. Each planet in this system is so close in orbit to the star that the gravitational forces acting between the planet and the star cause the planet’s rotational period around its axis and orbital period around the star to be equal. For example, the orbital period of TRAPPIST-1e is _____

Which choice most effectively uses data from the table to complete the example?

- A. 1.51 days, which is the shortest rotational period of any of the TRAPPIST planets.
- B. 6.1 days, and its rotational period is also 6.1 days.
- C. 9.21 days, which is the same as the rotational period of TRAPPIST-1f.
- D. 6.1 days, and its rotational period is 0.92 days.

Question ID 7e1dd168

Assessment	Test	Domain	Skill	Difficulty
SAT	Reading and Writing	Information and Ideas	Command of Evidence	<div><div></div><div></div><div></div></div>

ID: 7e1dd168

Neural networks are computer models intended to reflect the organization of human brains and are often used in studies of brain function. According to an analysis of 11,000 such networks, Rylan Schaeffer and colleagues advise caution when drawing conclusions about brains from observations of neural networks. They found that when attempting to mimic grid cells (brain cells used in navigation), while 90% of the networks could accomplish navigation-related tasks, only about 10% of those exhibited any behaviors similar to those of grid cells. But even this approximation of grid-cell activity has less to do with similarity between the neural networks and biological brains than it does with the rules programmed into the networks.

Which finding, if true, would most directly support the claim in the underlined sentence?

- A. The rules that allow for networks to exhibit behaviors like those of grid cells have no equivalent in the function of biological brains.
- B. The networks that do not exhibit behaviors like those of grid cells were nonetheless programmed with rules that had proven useful in earlier neural-network studies.
- C. Neural networks can often accomplish tasks that biological brains do, but they are typically programmed with rules to model multiple types of brain cells simultaneously.
- D. Once a neural network is programmed, it is trained on certain tasks to see if it can independently arrive at processes that are similar to those performed by biological brains.

Question ID bf1fe112

Assessment	Test	Domain	Skill	Difficulty
SAT	Reading and Writing	Information and Ideas	Command of Evidence	<div><div></div><div></div><div></div></div>

ID: bf1fe112

Researchers hypothesized that a decline in the population of dusky sharks near the mid-Atlantic coast of North America led to a decline in the population of eastern oysters in the region. Dusky sharks do not typically consume eastern oysters but do consume cownose rays, which are the main predators of the oysters.

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

- A. Declines in the regional abundance of dusky sharks’ prey other than cownose rays are associated with regional declines in dusky shark abundance.
- B. Eastern oyster abundance tends to be greater in areas with both dusky sharks and cownose rays than in areas with only dusky sharks.
- C. Consumption of eastern oysters by cownose rays in the region substantially increased before the regional decline in dusky shark abundance began.
- D. Cownose rays have increased in regional abundance as dusky sharks have decreased in regional abundance.

Question ID 7f8cec1c

Assessment	Test	Domain	Skill	Difficulty
SAT	Reading and Writing	Information and Ideas	Command of Evidence	<div><div></div><div></div><div></div></div>

ID: 7f8cec1c

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

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

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

Question ID 14ea5897

Assessment	Test	Domain	Skill	Difficulty
SAT	Reading and Writing	Information and Ideas	Command of Evidence	<div><div></div><div></div><div></div></div>

ID: 14ea5897

Icebergs generally appear to be mostly white or blue, depending on how the ice reflects sunlight. Ice with air bubbles trapped in it looks white because much of the light reflects off the bubbles. Ice without air bubbles usually looks blue because the light travels deep into the ice and only a little of it is reflected. However, some icebergs in the sea around Antarctica appear to be green. One team of scientists hypothesized that this phenomenon is the result of yellow-tinted dissolved organic carbon in Antarctic waters mixing with blue ice to produce the color green.

Which finding, if true, would most directly weaken the team’s hypothesis?

- A. White ice doesn’t change color when mixed with dissolved organic carbon due to the air bubbles in the ice.
- B. Dissolved organic carbon has a stronger yellow color in Antarctic waters than it does in other places.
- C. Blue icebergs and green icebergs are rarely found near each other.
- D. Blue icebergs and green icebergs contain similarly small traces of dissolved organic carbon.

Question ID a28d9514

Assessment	Test	Domain	Skill	Difficulty
SAT	Reading and Writing	Information and Ideas	Command of Evidence	<div><div></div><div></div><div></div></div>

ID: a28d9514

Jean-Bernard Caron and colleagues recently discovered a cache of jellyfish fossils in the Burgess Shale, a site in the Canadian Rockies that is rich in fossils from the Cambrian period (over 500 million years ago). Caron and colleagues claim that these are the oldest jellyfish fossils ever discovered. In the past twenty years, two sites in China and the United States have yielded fossils of a similar age that some experts believe are most likely jellyfish due to their shapes and the appearance of projecting tentacles. But Caron and colleagues argue that the apparent tentacles are in fact the comb rows of ctenophores, gelatinous animals that are only distantly related to jellyfish.

Which statement, if true, would most directly weaken the claim by Caron and colleagues about the fossils found in China and the United States?

- A. Sites in the Canadian Rockies from later periods than the Cambrian period have yielded fossils that have been conclusively identified as ctenophore fossils.
- B. The fossils found in China and the United States are so poorly preserved that though they cannot be conclusively identified as jellyfish, they cannot be conclusively identified as ctenophores either.
- C. While ctenophore fossils have been discovered in China and the United States, they have never been discovered in the Burgess Shale.
- D. The fossils discovered by Caron and colleagues in the Burgess Shale were better preserved than the fossils discovered by other researchers in China and the United States.

Question ID 5e6596a9

Assessment	Test	Domain	Skill	Difficulty
SAT	Reading and Writing	Information and Ideas	Command of Evidence	<div><div></div><div></div><div></div></div>

ID: 5e6596a9

Data Sources for Neptune Temperature Analysis

Instrument	Observatory	Data type	Observation years
TEXES (Texas Echelon Cross Echelle Spectrograph)	Gemini Observatory	spectroscopy	2007, 2019
T-ReCS (Thermal-Region Camera Spectrograph)	Gemini Observatory	infrared imaging	2007, 2010
LWS (Long Wavelength Spectrometer)	Keck Observatory	infrared imaging	2003
VISIR (VLT Imager and Spectrometer for mid-InfraRed)	European Southern Observatory	spectroscopy	2006

Julianne I. Moses and colleagues have reported that Neptune may have cooled significantly between 2003 and 2020. The team reached this conclusion by analyzing existing infrared imaging and spectroscopy data about the planet obtained from various instruments in different years. Of the team’s sources listed in the table, the earliest example of spectroscopy data included in the analysis was obtained in _____

Which choice most effectively uses data from the table to complete the text?

- A. 2007 using TEXES at the Gemini Observatory.
- B. 2007 using T-ReCS at the Gemini Observatory.
- C. 2006 using VISIR at the European Southern Observatory.
- D. 2003 using LWS at the W.M. Keck Observatory.

Question ID e55ded58

Assessment	Test	Domain	Skill	Difficulty
SAT	Reading and Writing	Information and Ideas	Command of Evidence	<div><div></div><div></div><div></div></div>

ID: e55ded58

Black beans (*Phaseolus vulgaris*) are a nutritionally dense food, but they are difficult to digest in part because of their high levels of soluble fiber and compounds like raffinose. They also contain antinutrients like tannins and trypsin inhibitors, which interfere with the body’s ability to extract nutrients from foods. In a research article, Marisela Granito and Glenda Álvarez from Simón Bolívar University in Venezuela claim that inducing fermentation of black beans using lactic acid bacteria improves the digestibility of the beans and makes them more nutritious.

Which finding from Granito and Álvarez’s research, if true, would most directly support their claim?

- A. When cooked, fermented beans contained significantly more trypsin inhibitors and tannins but significantly less soluble fiber and raffinose than nonfermented beans.
- B. Fermented beans contained significantly less soluble fiber and raffinose than nonfermented beans, and when cooked, the fermented beans also displayed a significant reduction in trypsin inhibitors and tannins.
- C. When the fermented beans were analyzed, they were found to contain two microorganisms, *Lactobacillus casei* and *Lactobacillus plantarum*, that are theorized to increase the amount of nitrogen absorbed by the gut after eating beans.
- D. Both fermented and nonfermented black beans contained significantly fewer trypsin inhibitors and tannins after being cooked at high pressure.

Question ID f1be8b46

Assessment	Test	Domain	Skill	Difficulty
SAT	Reading and Writing	Information and Ideas	Command of Evidence	<div><div></div><div></div><div></div></div>

ID: f1be8b46

Number and Origin of Clamshell Tools Found at Different Levels Below the Surface in Neanderthal Cave

Depth of tools found below surface in cave (meters)	Clamshells that Neanderthals collected from the beach	Clamshells that Neanderthals harvested from the seafloor
3–4	99	33
6–7	1	0
4–5	2	0
2–3	7	0
5–6	18	7

Studying tools unearthed at a cave site on the western coast of Italy, archaeologist Paola Villa and colleagues have determined that prehistoric Neanderthal groups fashioned them from shells of clams that they harvested from the seafloor while wading or diving or that washed up on the beach. Clamshells become thin and eroded as they wash up on the beach, while those on the seafloor are smooth and sturdy, so the research team suspects that Neanderthals prized the tools made with seafloor shells. However, the team also concluded that those tools were likely more challenging to obtain, noting that _____

- Which choice most effectively uses data from the table to support the research team’s conclusion?
- A. at each depth below the surface in the cave, the difference in the numbers of tools of each type suggests that shells were easier to collect from the beach than to harvest from the seafloor.
 - B. the highest number of tools were at a depth of 3–4 meters below the surface, which suggests that the Neanderthal population at the site was highest during the related period of time.
 - C. at each depth below the surface in the cave, the difference in the numbers of tools of each type suggests that Neanderthals preferred to use clamshells from the beach because of their durability.
 - D. the higher number of tools at depths of 5–6 meters below the surface in the cave than at depths of 4–5 meters below the surface suggests that the size of clam populations changed over time.

Question ID 050d4a12

Assessment	Test	Domain	Skill	Difficulty
SAT	Reading and Writing	Information and Ideas	Command of Evidence	<div><div></div><div></div><div></div></div>

ID: 050d4a12

Initially observed in 2017, the interstellar object ‘Oumuamua is the first object of its kind to be seen in our solar system. Researchers have been puzzled because its acceleration cannot be entirely explained by the gravitational pull of nearby bodies: there must be a nongravitational influence on its velocity and trajectory. Some previously suggested explanations for this nongravitational acceleration involve mechanisms that are unlikely or unrealistic, such as geometric effects from ‘Oumuamua being potentially composed of several spatially separated bodies. Now, Jennifer Bergner and colleagues propose that the nongravitational acceleration is due to the gaseous expulsion of entrapped hydrogen from ‘Oumuamua’s water-rich icy body.

- Which statement, if true, would most strongly support the claim made by Bergner and colleagues about the cause of ‘Oumuamua’s acceleration?
- A. Existing proposed models of outgassing from ‘Oumuamua include the direct conversion of nitrogen or carbon monoxide from a solid to a gaseous state without becoming liquid, but these models have theoretical or observational inconsistencies.
 - B. ‘Oumuamua’s trajectory is inconsistent with a nongravitational acceleration that would be caused by the release of hydrogen gas resulting from the processing of water ice (H₂O), but the interstellar object’s observable properties can be explained if it has a significant component of molecular hydrogen ice (H₂).
 - C. Since nongravitational accelerations of interstellar objects are several orders of magnitude weaker than gravitational accelerations, deviation from behavior that could be fully attributed to gravitational pull has been detected on a limited number of objects similar to ‘Oumuamua.
 - D. Exposure to interstellar cosmic radiation can result in the formation of embedded pockets of hydrogen gas in water ice; moreover, when traveling through the solar system, ‘Oumuamua experienced warming sufficient to alter its icy structure and allow for outgassing.

Question ID d54126ab

Assessment	Test	Domain	Skill	Difficulty
SAT	Reading and Writing	Information and Ideas	Command of Evidence	<div><div></div><div></div><div></div></div>

ID: d54126ab

Tadpole Body Mass and Toxin Production after Three Weeks in Ponds

Population density	Average tadpole body mass (milligrams)	Average number of distinct bufadienolide toxins per tadpole	Average amount of bufadienolide per tadpole (nanograms)	Average bufadienolide concentration (nanograms per milligram of tadpole body mass)
High	193.87	22.69	5,815.51	374.22
Medium	254.56	21.65	5,525.72	230.10
Low	258.97	22.08	4,664.99	171.43

Ecologist Veronika Bókony and colleagues investigated within-species competition among common toads (*Bufo bufo*), a species that secretes various unpleasant-tasting toxins called bufadienolides in response to threats. The researchers tested *B. bufo* tadpoles’ responses to different levels of competition by creating ponds with different tadpole population densities but a fixed amount of food. Based on analysis of the tadpoles after three weeks, the researchers concluded that increased competition drove bufadienolide production at the expense of growth.

Which choice uses data from the table to most effectively support the researchers’ conclusion?

- A. The difference in average tadpole body mass was small between the low and medium population density conditions and substantially larger between the low and high population density conditions.
- B. Tadpoles in the low and medium population density conditions had substantially lower average bufadienolide concentrations but had greater average body masses than those in the high population density condition.
- C. Tadpoles in the high population density condition displayed a relatively modest increase in the average amount of bufadienolide but roughly double the average bufadienolide concentration compared to those in the low population density condition.
- D. Tadpoles produced approximately the same number of different bufadienolide toxins per individual across the population density conditions, but average tadpole body mass decreased as population density increased.

Question ID 84b290f2

Assessment	Test	Domain	Skill	Difficulty
SAT	Reading and Writing	Information and Ideas	Command of Evidence	<div><div></div><div></div><div></div></div>

ID: 84b290f2

In vertical inheritance, parents pass genes to their offspring, but in horizontal transfer (HT), one species, often bacteria, passes genetic material to an unrelated species. In a 2022 study, herpetologist Atsushi Kurabayashi and his team investigated HT in multicellular organisms—namely, snakes and frogs in Madagascar. The team detected *BovB*—a gene transmitted vertically in snakes—in many frog species. The apparent direction of gene transfer seems counterintuitive because frogs usually don’t survive encounters with snakes and so wouldn’t be able to transmit the newly acquired gene to offspring, but the team concluded that *BovB* is indeed transmitted from snakes to frogs, either directly or indirectly, via HT.

Which finding, if true, would most directly support the team’s conclusion?

- A. *BovB* can be transmitted across frog species through HT.
- B. Parasites known to feed on species of snakes and frogs in which the *BovB* gene occurs also carry *BovB*.
- C. *BovB* cannot be reliably transmitted from a snake species to bacteria that are usually encountered by frog species.
- D. Frog species with *BovB* show few discernible advantages as compared with frog species that do not carry *BovB*.

Question ID 6d3c4cbb

Assessment	Test	Domain	Skill	Difficulty
SAT	Reading and Writing	Information and Ideas	Command of Evidence	<div><div></div><div></div><div></div></div>

ID: 6d3c4cbb

Archaeologist Weiwei Wang and her colleagues analyzed footed grinding slabs and other food-preparation tools excavated from Óc Eo, a Southeast Asian port city that flourished between the first and sixth centuries CE. Wang and colleagues recovered microscopic remnants of turmeric and other spices from the surfaces of the tools. Turmeric is native to South Asia, more than a thousand miles west of Óc Eo, and the researchers showed that the footed grinding slabs at Óc Eo are very similar to footed grinding slabs common throughout South Asia from around 500 BCE to 300 CE. Wang and colleagues’ findings therefore indicate that there must have been a trade link, whether direct or indirect, between the two regions.

Which finding, if true, would directly weaken the conclusion about Wang and her colleagues’ findings that is presented in the text?

- A. Some of the spices recovered from Óc Eo are native to the Maluku Islands, which are located approximately 2,000 miles southeast of Óc Eo.
- B. In the first through third centuries CE, there was a significant migration of people from South Asia to Southeast Asia.
- C. Other types of artifacts originating in South Asia and dating to the first through sixth centuries CE have been found throughout Southeast Asia.
- D. The people of Óc Eo and several communities in South Asia regularly traded with people in the region that is now the Southeast Asian country of Malaysia no later than the first century CE.

Question ID ed043939

Assessment	Test	Domain	Skill	Difficulty
SAT	Reading and Writing	Information and Ideas	Command of Evidence	<div><div></div><div></div><div></div></div>

ID: ed043939

Boldly mixing elements of poetry, fiction, drama, philosophy, and manifesto, Puerto Rican writer Giannina Braschi creates cross-genre literature that explores themes such as immigration and independence. Her works have inspired responses from individuals across different fields and in a wide range of formats, from musical compositions and a comic book to architecture and furniture design. In an essay, a student asserts that the production of these diverse creations by others is reflective of Braschi’s own approach to crafting literature.

Which quotation from a scholarly review of Braschi’s work best supports the student’s claim?

- A. “Braschi is the focus of a 2020 collection of essays in which fifteen scholars from seven different countries delved into the linguistic and structural patterns of her writings.”
- B. “Braschi’s eagerness to push boundaries and blend genres within literature invites us to consider how other art forms might also engage with literature.”
- C. “Before settling in New York City, where she would go on to become a college professor, Braschi studied both literature and philosophy in several cities around the world.”
- D. “In addition to her creative literary works, Braschi has produced academic pieces analyzing writings by Miguel de Cervantes, Federico García Lorca, and other authors.”

Question ID 3b1e4cc1

Assessment	Test	Domain	Skill	Difficulty
SAT	Reading and Writing	Information and Ideas	Command of Evidence	<div><div></div><div></div><div></div></div>

ID: 3b1e4cc1

In Diné (Navajo) culture, *ikaah* (sandpaintings) are created and then erased as part of sacred healing ceremonies lasting no more than a few days, but Diné *hataalii* (chanter, healer, cultural guide) Fred Stevens developed fixatives to preserve desacralized sandpaintings. While on a US-sponsored cultural ambassadorial trip in Europe and the Americas in the 1960s, Stevens produced several such sandpaintings and gave them to cultural institutions. This may seem in tension with the role of cultural ambassador—how could static objects authentically represent an inherently ephemeral and dynamic practice?—but such a view is itself overly object-focused and neglects how Stevens strove to convey exactly those characteristics of *ikaah* as a cultural practice.

Which quotation from an art historian would most directly support the claim made in the text?

- A. “While Stevens’s ambassadorial sandpaintings are undoubtedly educative for audiences that have little exposure to Diné culture, they should not be confused with authentic *ikaah*, which cannot be extricated from a practice that is intentionally and necessarily transitory nor condensed into a single persistent object.”
- B. “The most compelling way to reconcile the apparent tension between the temporary and performative nature of *ikaah* and the persistent and static nature of Stevens’s ambassadorial sandpaintings is to recognize that Stevens was an ambassador not only of Diné culture but of a US art culture that tended to value permanent works over ephemeral ones.”
- C. “Stevens’s ambassadorial sandpaintings are best understood not as self-contained objects but as reminders of the public creations of the sandpaintings, during which Stevens conducted appropriate *ikaah* rituals and encouraged viewers to closely track his movements and subtle shifts in the sand throughout the process.”
- D. “It is important to recall Stevens’s own actions as a gift-giver—a temporary and performative role—of the sandpaintings, for by taking those actions, Stevens publicly enacted the transmission of knowledge of both traditional *ikaah* practices and cutting-edge chemistry (in the form of the preservative additives), a hybrid that reflects the dynamism of Diné culture.”

Question ID 1726d646

Assessment	Test	Domain	Skill	Difficulty
SAT	Reading and Writing	Information and Ideas	Command of Evidence	<div><div></div><div></div><div></div></div>

ID: 1726d646

“The Poet Walt Whitman” is an 1887 essay by José Martí, a Cuban author and political activist, originally written in Spanish. In the essay, Martí explores the value of literature, arguing that a society’s spiritual well-being depends on the character of its literary culture: _____

Which quotation from a translation of “The Poet Walt Whitman” most effectively illustrates the claim?

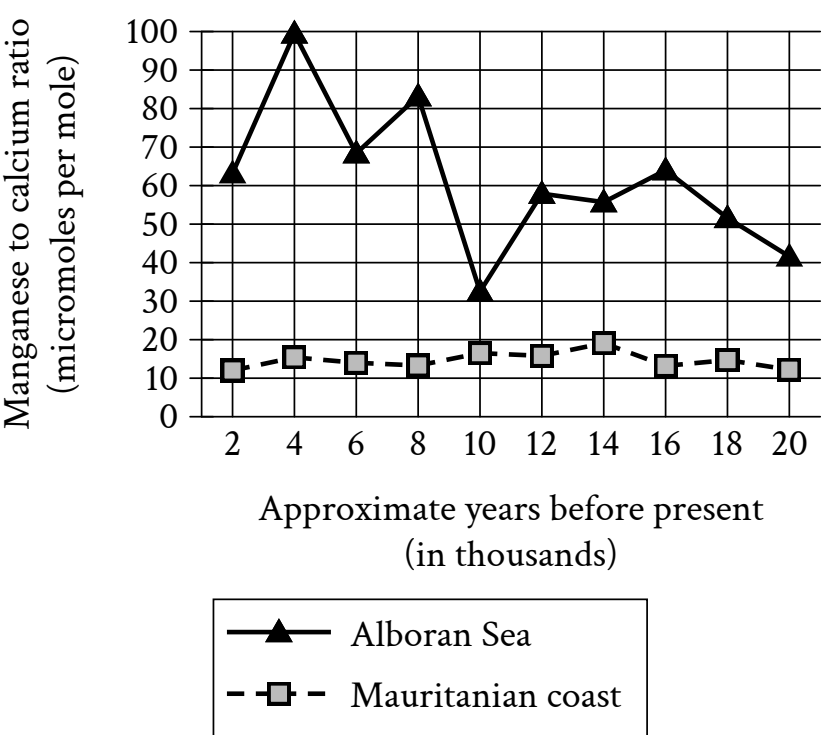
- A. “Poetry, which brings together or separates, which fortifies or brings anguish, which shores up or demolishes souls, which gives or robs men of faith and vigor, is more necessary to a people than industry itself, for industry provides them with a means of subsistence, while literature gives them the desire and strength for life.”
- B. “Every society brings to literature its own form of expression, and the history of the nations can be told with greater truth by the stages of literature than by chronicles and decades.”
- C. “Where will a race of men go when they have lost the habit of thinking with faith about the scope and meaning of their actions? The best among them, those who consecrate Nature with their sacred desire for the future, will lose, in a sordid and painful annihilation, all stimulus to alleviate the ugliness of humanity.”
- D. “Listen to the song of this hardworking and satisfied nation; listen to Walt Whitman. The exercise of himself exalts him to majesty, tolerance exalts him to justice, and order to joy.”

Question ID b97fa5dd

Assessment	Test	Domain	Skill	Difficulty
SAT	Reading and Writing	Information and Ideas	Command of Evidence	<div><div></div><div></div><div></div></div>

ID: b97fa5dd

Ratio of Manganese to Calcium in Samples from Alboran Sea and Mauritanian Coast



The population of the coral *Lophelia pertusa* declined significantly around 9,000 years ago in the Alboran Sea and around 11,000 years ago near the Mauritanian coast. Using the ratio of manganese to calcium, which inversely correlates with ocean oxygenation levels, marine scientist Rodrigo da Costa Portilho-Ramos and colleagues evaluated whether oxygenation played a role in the declines of *L. pertusa*. The researchers concluded that oxygenation may have been important in the Alboran Sea but not near the Mauritanian coast, since _____

Which choice most effectively uses data from the graph to complete the statement?

- A. a substantial increase in oxygenation in the Alboran Sea corresponded with the local decline in *L. pertusa*, but the opposite relationship between oxygenation and *L. pertusa* was found near the Mauritanian coast.
- B. *L. pertusa* declined in the Alboran Sea during a period of substantial local decline in oxygenation, but *L. pertusa* declined near the Mauritanian coast during a period of little local change in oxygenation.
- C. oxygenation in the Alboran Sea was higher before the decline in *L. pertusa* than after the decline, whereas oxygenation near the Mauritanian coast was relatively low both before and after the decline in *L. pertusa*.

D. oxygenation in the Alboran Sea tended to be substantially higher than oxygenation near the Mauritanian coast during the period studied.

Question ID eaba2692

Assessment	Test	Domain	Skill	Difficulty
SAT	Reading and Writing	Information and Ideas	Command of Evidence	<div><div></div><div></div><div></div></div>

ID: eaba2692

Percentages of New Year’s Resolution Makers Who Make Certain
Kinds of Resolutions

Type of resolution	Age 18-29	Age 30-49	Age 50-64	Age 65+
Health and exercise	79	80	79	76
Finances	68	63	56	47
Personal relationships	63	53	58	52
Hobbies	65	53	51	45

A Pew Research Center survey conducted in January 2024 found that three out of ten US adults make at least one New Year’s resolution (a promise for the year ahead), while half of those who make a resolution make more than one. The survey asked participants what kinds of resolutions they made and separated them into several categories. The table presents percentages of people who make particular kinds of New Year’s resolutions among those who choose to make them, indexed by age bracket.

Which choice best presents a conclusion about the habits of New Year’s resolution makers that is best supported by information in the text and the table?

- A. Resolution makers between the ages of 50 and 64 are more likely to make resolutions related to personal relationships and less likely to make resolutions related to finances than resolution makers between the ages of 30 and 49 are.
- B. Resolution makers between the ages of 18 and 29 are more likely to make resolutions about health and exercise than resolution makers between the ages of 30 and 49 are.
- C. The majority of US adults who make resolutions related to health and exercise also make resolutions in multiple additional categories.
- D. Among all US adults, people become less likely to make New Year’s resolutions as they age, regardless of the type of resolution.

Question ID 2b419893

Assessment	Test	Domain	Skill	Difficulty
SAT	Reading and Writing	Information and Ideas	Command of Evidence	<div><div></div><div></div><div></div></div>

ID: 2b419893

Given that stars and planets initially form from the same gas and dust in space, some astronomers have posited that host stars (such as the Sun) and their planets (such as those in our solar system) are composed of the same materials, with the planets containing equal or smaller quantities of the materials that make up the host star. This idea is also supported by evidence that rocky planets in our solar system are composed of some of the same materials as the Sun.

Which finding, if true, would most directly weaken the astronomers' claim?

- A. Most stars are made of hydrogen and helium, but when cooled they are revealed to contain small amounts of iron and silicate.
- B. A nearby host star is observed to contain the same proportion of hydrogen and helium as that of the Sun.
- C. Evidence emerges that the amount of iron in some rocky planets is considerably higher than the amount in their host star.
- D. The method for determining the composition of rocky planets is discovered to be less effective when used to analyze other kinds of planets.

Question ID ad4aa769

Assessment	Test	Domain	Skill	Difficulty
SAT	Reading and Writing	Information and Ideas	Command of Evidence	<div><div></div><div></div><div></div></div>

ID: ad4aa769

Biologist Valentina Gómez-Bahamón and her team have investigated two subspecies of the fork-tailed flycatcher bird that live in the same region in Colombia, but one subspecies migrates south for part of the year, and the other doesn't. The researchers found that, due to slight differences in feather shape, the feathers of migratory forked-tailed flycatcher males make a sound during flight that is higher pitched than that made by the feathers of nonmigratory males. The researchers hypothesize that fork-tailed flycatcher females are attracted to the specific sound made by the males of their own subspecies, and that over time the females' preference will drive further genetic and anatomical divergence between the subspecies.

Which finding, if true, would most directly support Gómez-Bahamón and her team's hypothesis?

- A. The feathers located on the wings of the migratory fork-tailed flycatchers have a narrower shape than those of the nonmigratory birds, which allows them to fly long distances.
- B. Over several generations, the sound made by the feathers of migratory male fork-tailed flycatchers grows progressively higher pitched relative to that made by the feathers of nonmigratory males.
- C. Fork-tailed flycatchers communicate different messages to each other depending on whether their feathers create high-pitched or low-pitched sounds.
- D. The breeding habits of the migratory and nonmigratory fork-tailed flycatchers remained generally the same over several generations.

Question ID 48eeb0c3

Assessment	Test	Domain	Skill	Difficulty
SAT	Reading and Writing	Information and Ideas	Command of Evidence	<div><div></div><div></div><div></div></div>

ID: 48eeb0c3

A student performs an experiment testing her hypothesis that a slightly acidic soil environment is more beneficial for the growth of the plant *Brassica rapa parachinensis* (a vegetable commonly known as choy sum) than a neutral soil environment. She plants sixteen seeds of choy sum in a mixture of equal amounts of coffee grounds (which are highly acidic) and potting soil and another sixteen seeds in potting soil without coffee grounds as the control for the experiment. The two groups of seeds were exposed to the same growing conditions and monitored for three weeks.

Which finding, if true, would most directly weaken the student’s hypothesis?

- A. The choy sum planted in the soil without coffee grounds were significantly taller at the end of the experiment than the choy sum planted in the mixture of soil and coffee grounds.
- B. The choy sum grown in the soil without coffee grounds weighed significantly less at the end of the experiment than the choy sum grown in the mixture of soil and coffee grounds.
- C. The choy sum seeds planted in the soil without coffee grounds sprouted significantly later in the experiment than did the seeds planted in the mixture of soil and coffee grounds.
- D. Significantly fewer of the choy sum seeds planted in the soil without coffee grounds sprouted plants than did the seeds planted in the mixture of soil and coffee grounds.

Question ID 142975c2

Assessment	Test	Domain	Skill	Difficulty
SAT	Reading and Writing	Information and Ideas	Command of Evidence	<div><div></div><div></div><div></div></div>

ID: 142975c2

Art collectives, like the United States- and Vietnam-based collective The Propeller Group or Cuba’s Los Carpinteros, are groups of artists who agree to work together: perhaps for stylistic reasons, or to advance certain shared political ideals, or to help mitigate the costs of supplies and studio space. Regardless of the reasons, art collectives usually involve some collaboration among the artists. Based on a recent series of interviews with various art collectives, an arts journalist claims that this can be difficult for artists who are often used to having sole control over their work.

Which quotation from the interviews best illustrates the journalist’s claim?

- A. “The first collective I joined included many amazingly talented artists, and we enjoyed each other’s company, but because we had a hard time sharing credit and responsibility for our work, the collective didn’t last.”
- B. “We work together, but that doesn’t mean that individual projects are equally the work of all of us. Many of our projects are primarily the responsibility of whoever originally proposed the work to the group.”
- C. “Having worked as a member of a collective for several years, it’s sometimes hard to recall what it was like to work alone without the collective’s support. But that support encourages my individual expression rather than limits it.”
- D. “Sometimes an artist from outside the collective will choose to collaborate with us on a project, but all of those projects fit within the larger themes of the work the collective does on its own.”

Question ID c0d8e05f

Assessment	Test	Domain	Skill	Difficulty
SAT	Reading and Writing	Information and Ideas	Command of Evidence	<div><div></div><div></div><div></div></div>

ID: c0d8e05f

Percentage of Available Eggs Eaten by Cane Toad Tadpoles

Amphibian species (common name)	Percentage of eggs eaten	Native to Australia	Produces bufadienolide
Little red tree frog	1%	yes	no
Cane toad	90%	no	yes
Short-footed frog	7%	yes	no
Striped burrowing frog	10%	yes	no
Dainty green tree frog	1%	yes	no

Native to Latin America, the cane toad was introduced to Australia in the 1930s. In recent decades, tadpoles in the Australian population have been shown to consume eggs of their own species. A 2022 study showed that when presented with cane toad eggs as well as eggs of native Australian amphibians, cane toad tadpoles disproportionately consumed eggs of their own species. This behavior results from their attraction to bufadienolide, a chemical produced by the eggs of cane toads but not by the eggs of native amphibians. However, using data from this study, a student wishes to argue that the presence of bufadienolide doesn't entirely explain the cane toad tadpoles' preference for certain eggs over others.

Which choice best describes data from the table that support the student's argument?

- A. The tadpoles consumed a higher percentage of the striped burrowing frog eggs than they did of the eggs of the dainty green tree frog.
- B. The tadpoles left a certain percentage of the eggs of each of the five species unharmed, thus ultimately allowing them to hatch.
- C. The tadpoles consumed a lower percentage of the short-footed frog eggs than they did of the eggs of their own species.
- D. The tadpoles consumed the same percentage of the dainty green tree frog eggs as they did of the little red tree frog eggs.

Question ID 491f03f1

Assessment	Test	Domain	Skill	Difficulty
SAT	Reading and Writing	Information and Ideas	Command of Evidence	<div><div></div><div></div><div></div></div>

ID: 491f03f1

The ancient Greek concept of “mimesis,” a term used in the works of Plato, Aristotle, and other Greek philosophers in discussions of representational art—visual, performance, or literary art that aims to depict the real world—is a foundational concept of the Western philosophy of aesthetics. Mimesis is typically translated as “imitation” in modern editions of ancient Greek texts, but scholar Stephen Halliwell warns that this is overly reductive: “imitation” implies that art merely copies—and is thus by definition entirely derivative of—a reality that exists outside and prior to the work of art, and translating “mimesis” thusly obscures the multifaceted ways in which the ancient Greeks understood the relationship between art and reality.

Which statement, if true, would most directly support the claim by Halliwell presented in the text?

- A. One of the earliest appearances of mimesis’s root word, *mimos*, can be found in an ancient Greek tragedy in reference to dramatic impersonation, and the *mim-* root came to be generally associated with the musical and poetic arts by the fifth century BCE.
- B. Both Plato’s and Aristotle’s theorizations of mimesis examine the psychological effects that works of art induce in the viewer or listener.
- C. Although several of Plato’s earliest philosophical works discuss aesthetic ideas, the term “mimesis” doesn’t appear in Plato’s discussions of art until *Cratylus*, a relatively late work.
- D. Although Plato’s writings typically characterize representational art as an inferior reflection of the physical world, Aristotle suggests that mimesis can refer to art’s capacity to envision hypothetical conditions that could, but don’t yet, exist.

Question ID 81ca68a1

Assessment	Test	Domain	Skill	Difficulty
SAT	Reading and Writing	Information and Ideas	Command of Evidence	<div><div></div><div></div><div></div></div>

ID: 81ca68a1

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

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

- A.

Long-headed dogs accustomed to hearing Spanish tended to show more brain activity when hearing Spanish than long-headed dogs accustomed to hearing Hungarian showed when hearing Hungarian.
- B.

Compared with shorter-headed dogs, longer-headed dogs showed a greater difference in brain activity when hearing either Spanish or Hungarian than when hearing the scrambled recording.
- C.

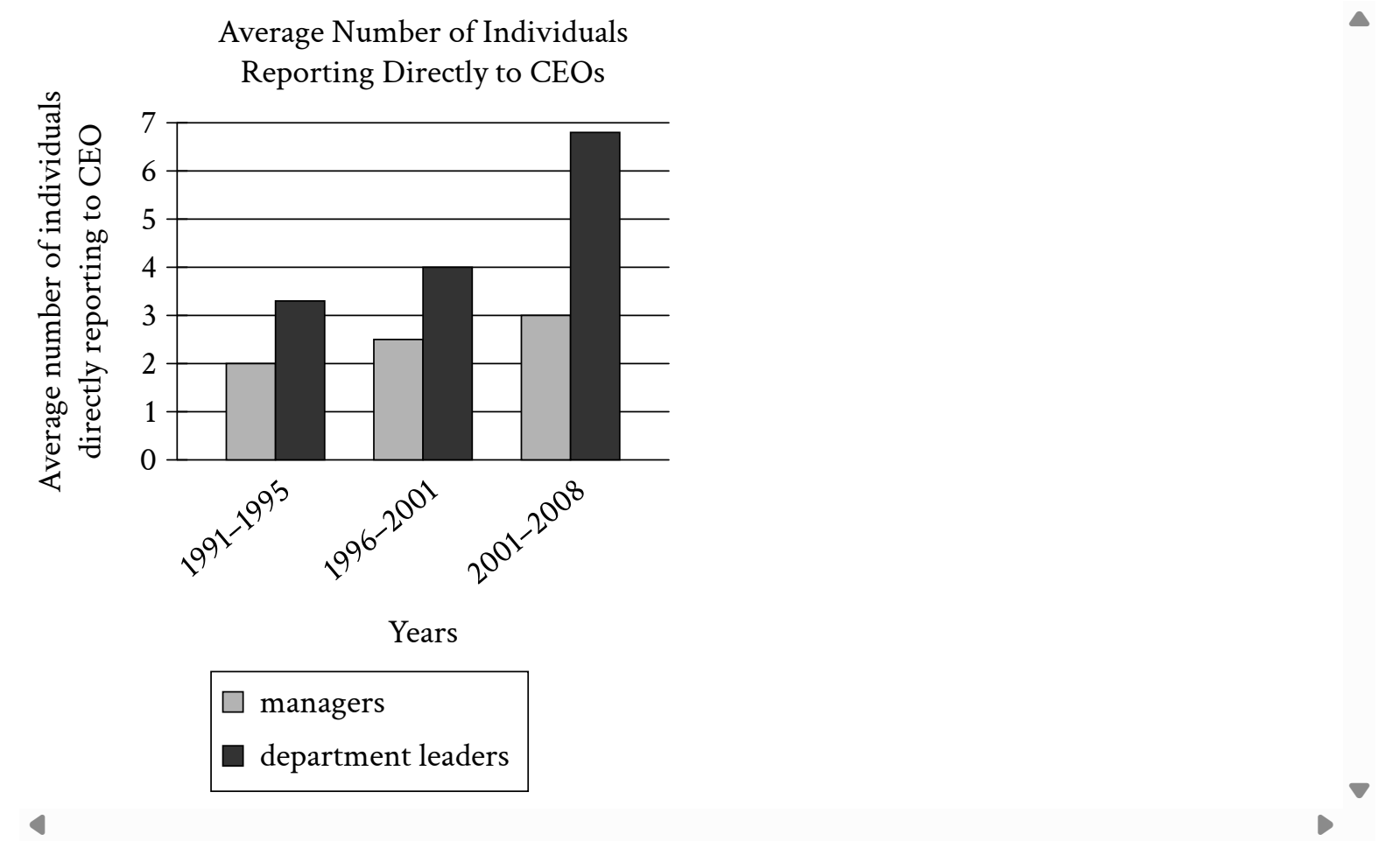
The pattern of brain activity that long-headed dogs showed when hearing the scrambled recording was different from the pattern of brain activity that short-headed dogs showed when hearing the language they were accustomed to.
- D.

Compared with shorter-headed dogs, longer-headed dogs showed a greater difference in brain activity when hearing the language they were accustomed to than when hearing the other language.

Question ID fb9a720d

Assessment	Test	Domain	Skill	Difficulty
SAT	Reading and Writing	Information and Ideas	Command of Evidence	<div><div></div><div></div><div></div></div>

ID: fb9a720d



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

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

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

Question ID 33e9b58a

Assessment	Test	Domain	Skill	Difficulty
SAT	Reading and Writing	Information and Ideas	Command of Evidence	<div><div></div><div></div><div></div></div>

ID: 33e9b58a

The novelist Toni Morrison was the first Black woman to work as an editor at the publishing company Random House, from 1967 to 1983. A scholar asserts that one of Morrison’s likely aims during her time as an editor was to strengthen the presence of Black writers on the list of Random House’s published authors.

Which finding, if true, would most strongly support the scholar’s claim?

- A. The percentage of authors published by Random House who were Black rose in the early 1970s and stabilized throughout the decade.
- B. Black authors who were interviewed in the 1980s and 1990s were highly likely to cite Toni Morrison’s novels as a principal influence on their work.
- C. The novels written by Toni Morrison that were published after 1983 sold significantly more copies and received wider critical acclaim than the novels she wrote that were published before 1983.
- D. Works that were edited by Toni Morrison during her time at Random House displayed stylistic characteristics that distinguished them from works that were not edited by Morrison.

Question ID d6623ffe

Assessment	Test	Domain	Skill	Difficulty
SAT	Reading and Writing	Information and Ideas	Command of Evidence	<div><div></div><div></div><div></div></div>

ID: d6623ffe

Credited Film Output of James Young Deer, Dark Cloud, Edwin Carewe, and Lillian St. Cyr

Individual	Years active	Number of films known and commonly credited
James Young Deer	1909–1924	33 (actor), 35 (director), 10 (writer)
Dark Cloud	1910–1920	35 (actor), 1 (writer)
Edwin Carewe	1912–1934	47 (actor), 58 (director), 20 (producer), 4 (writer)
Lillian St. Cyr (Red Wing)	1908–1921	66 (actor)

Some researchers studying Indigenous actors and filmmakers in the United States have turned their attention to the early days of cinema, particularly the 1910s and 1920s, when people like James Young Deer, Dark Cloud, Edwin Carewe, and Lillian St. Cyr (known professionally as Red Wing) were involved in one way or another with numerous films. In fact, so many films and associated records for this era have been lost that counts of those four figures’ output should be taken as bare minimums rather than totals; it’s entirely possible, for example, that _____

Which choice most effectively uses data from the table to complete the example?

- A. Dark Cloud acted in significantly fewer films than did Lillian St. Cyr, who is credited with 66 performances.
- B. Edwin Carewe’s 47 credited acting roles includes only films made after 1934.
- C. Lillian St. Cyr acted in far more than 66 films and Edwin Carewe directed more than 58.
- D. James Young Deer actually directed 33 films and acted in only 10.

Question ID b51b6e4e

Assessment	Test	Domain	Skill	Difficulty
SAT	Reading and Writing	Information and Ideas	Command of Evidence	<div><div></div><div></div><div></div></div>

ID: b51b6e4e

ALSOL is a microcredit program in Mexico that makes small loans to female entrepreneurs who lack the collateral and credit history to secure financing from conventional banks. Borrowers use their business proceeds to repay loans in equal weekly installments and incur no penalty for missed payments other than lack of access to larger loans. Economists Gustavo Barboza and Sandra Trejos analyzed ALSOL data and found that rural borrowers, who mostly make and sell handicrafts, miss payments more often than urban borrowers do, partly because they sell their goods less frequently than they could. Barboza and Trejos claim that this behavior reflects strategic decisions that enable rural women to increase their profits per unit sold.

Which finding, if true, would most directly support Barboza and Trejos’s claim?

- A. Many marketplaces require entrepreneurs to pay marketplace operators a fixed percentage of each day’s proceeds in exchange for permission to sell goods there.
- B. Rural entrepreneurs can typically sell their goods for higher prices in cities than in their home areas, but the number of people selling competing goods tends to be higher in cities.
- C. Due to the lower costs they incur, rural entrepreneurs tend to require smaller initial loans than urban entrepreneurs do.
- D. The cost to rural entrepreneurs to bring their goods to towns with marketplaces is high but largely independent of the number of goods they bring.

Question ID 172f5e8c

Assessment	Test	Domain	Skill	Difficulty
SAT	Reading and Writing	Information and Ideas	Command of Evidence	<div><div></div><div></div><div></div></div>

ID: 172f5e8c

Sense and Sensibility is an 1811 novel by Jane Austen. In the novel, Austen describes Marianne Dashwood’s ability to persuade others of the rightness of her artistic judgments, as is evident when Marianne visits with John Willoughby, a potential suitor:

Which quotation from *Sense and Sensibility* most effectively illustrates the claim?

- A. “Above all, when she heard him declare, that of music and dancing he was passionately fond, she gave him such a look of approbation as secured the largest share of his discourse to herself for the rest of his stay.”
- B. “Their taste was strikingly alike. The same books, the same passages were idolized by each—or if any difference appeared, any objection arose, it lasted no longer than till the force of her arguments and the brightness of her eyes could be displayed.”
- C. “It was only necessary to mention any favourite amusement to engage her to talk. She could not be silent when such points were introduced, and she had neither shyness nor reserve in their discussion.”
- D. “They speedily discovered that their enjoyment of dancing and music was mutual, and that it arose from a general conformity of judgment in all that related to either. Encouraged by this to a further examination of his opinions, she proceeded to question him on the subject of books.”

Question ID 3ef2af4f

Assessment	Test	Domain	Skill	Difficulty
SAT	Reading and Writing	Information and Ideas	Command of Evidence	<div><div></div><div></div><div></div></div>

ID: 3ef2af4f

“Poetry” is a 1919 poem by Marianne Moore. The poem highlights an ambivalence toward poetry as the speaker acknowledges its merits while also expressing a sense of displeasure, writing _____

Which quotation from “Poetry” most effectively illustrates the claim?

- A. “nor is it valid / to discriminate against ‘business documents and / school-books’; all these phenomena are important.”
- B. “One must make a distinction / however: when dragged into prominence by half poets, the result is not / poetry”
- C. “when [poems] become so derivative as to become unintelligible, the / same thing may be said for all of us—that we / do not admire what / we cannot understand.”
- D. “Reading [poetry], however, with a perfect contempt for it, one discovers that there is in / it after all, a place for the genuine.”

Question ID e72b75ba

Assessment	Test	Domain	Skill	Difficulty
SAT	Reading and Writing	Information and Ideas	Command of Evidence	<div><div></div><div></div><div></div></div>

ID: e72b75ba

Global Strontium
Seawater Curve

$^{87}\text{Sr}/^{86}\text{Sr}$	Age (Ma)
0.708980	6.20
0.709000	5.86
0.709020	5.40
0.709040	4.75
0.709060	3.00

The late Hemphillian (Hh) North American Land Mammal Age includes the subdivisions Hh3, 6.8 million years ago (Ma) to 6 Ma, and Hh4, 6 Ma to 4.75 Ma. While mammalian fossils have indicated that Florida’s Montbrook Fossil Site (MFS) and Palmetto Fauna of the Bone Valley Region (PFBV) date to Hh4, a more precise determination of the sites’ ages has proved challenging. Stephanie R. Killingsworth et al. compared average ratios of strontium-87 to strontium-86 ($^{87}\text{Sr}/^{86}\text{Sr}$) in fossil shark teeth from MFS and PFBV—0.709000 and 0.709028, respectively—to $^{87}\text{Sr}/^{86}\text{Sr}$ ratios in the global strontium seawater curve, a record that shows how $^{87}\text{Sr}/^{86}\text{Sr}$ ratios in seawater correspond to numerical ages and that is used to date fossils and, by extension, fossil sites. The researchers concluded that _____

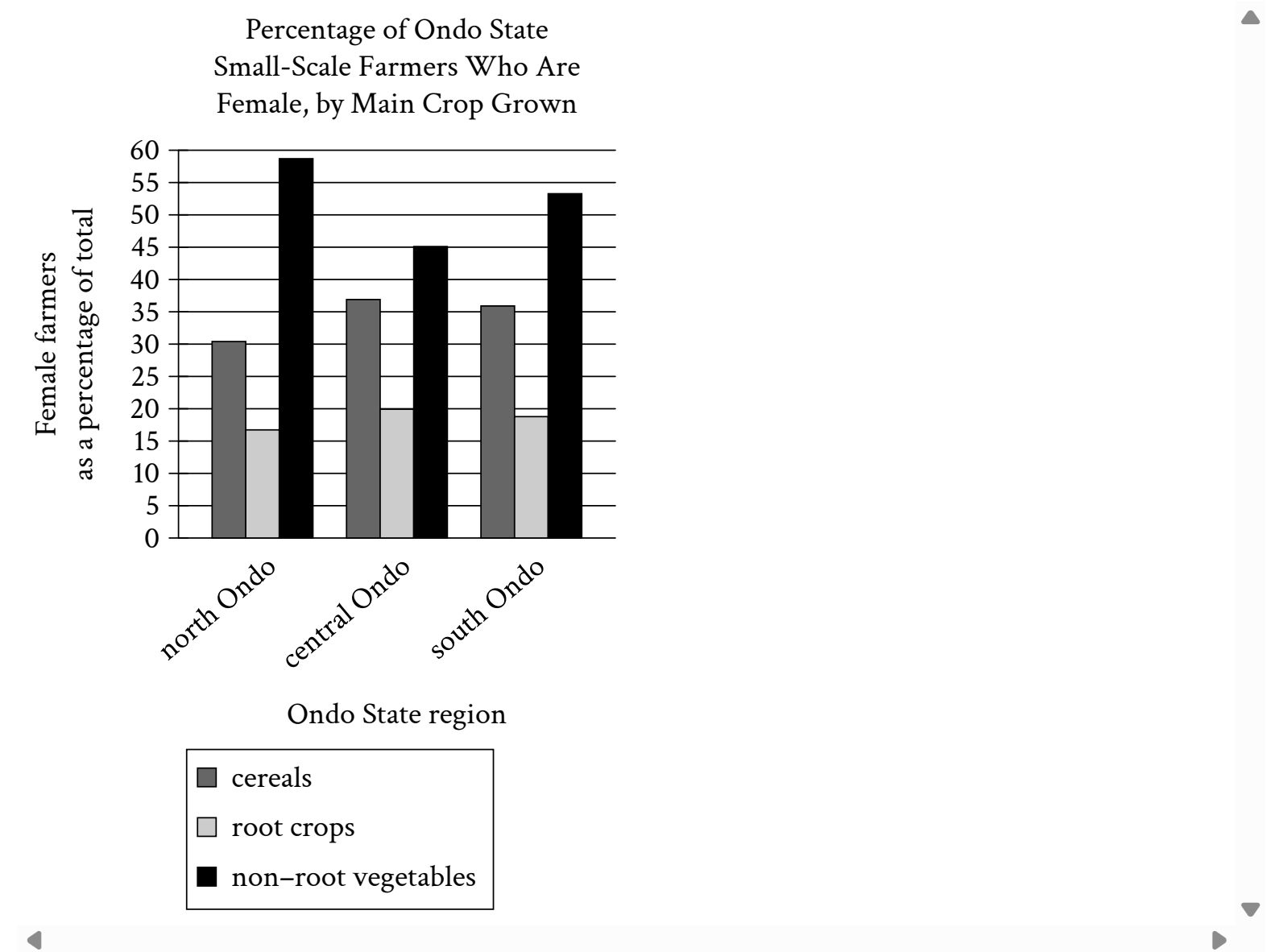
Which choice most effectively uses data from the table to complete the statement?

- A. mammalian fossil evidence offers less dating precision than do $^{87}\text{Sr}/^{86}\text{Sr}$ ratios in fossil shark teeth and that PFBV likely was deposited closer to the Hh3-Hh4 boundary than was MFS.
- B. the average $^{87}\text{Sr}/^{86}\text{Sr}$ ratios in the fossil shark teeth from MFS and PFBV only partially support the site age estimates previously established through mammalian fossil evidence.
- C. the average $^{87}\text{Sr}/^{86}\text{Sr}$ ratios in the fossil shark teeth from MFS and PFBV resolve previous uncertainty about the sites’ relative ages by indicating that both sites were deposited contemporaneously during the late Hh.
- D. the average $^{87}\text{Sr}/^{86}\text{Sr}$ ratios in the fossil shark teeth from MFS and PFBV corroborate that both MFS and PFBV fall within Hh4 but suggest that PFBV was likely deposited more recently than MFS.

Question ID 0eeef1e7

Assessment	Test	Domain	Skill	Difficulty
SAT	Reading and Writing	Information and Ideas	Command of Evidence	<div><div></div><div></div><div></div></div>

ID: 0eeef1e7



Geographer Adebayo Oluwole Eludoyin and his colleagues surveyed small-scale farmers in three locations in Ondo State, Nigeria—which has mountainous terrain in the north, an urbanized center, and coastal terrain in the south—to learn more about their practices, like the types of crops they mainly cultivated. In some regions, female farmers were found to be especially prominent in the cultivation of specific types of crops and even constituted the majority of farmers who cultivated those crops; for instance,

Which choice most effectively uses data from the graph to complete the example?

- A. most of the farmers who mainly cultivated cereals and most of the farmers who mainly cultivated non-root vegetables in south Ondo were women.

- B. more women in central Ondo mainly cultivated root crops than mainly cultivated cereals.
- C. most of the farmers who mainly cultivated non-root vegetables in north and south Ondo were women.
- D. a relatively equal proportion of women across the three regions of Ondo mainly cultivated cereals.

Question ID 9bc23dd4

Assessment	Test	Domain	Skill	Difficulty
SAT	Reading and Writing	Information and Ideas	Command of Evidence	<div><div></div><div></div><div></div></div>

ID: 9bc23dd4

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

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

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

Question ID 263c330a

Assessment	Test	Domain	Skill	Difficulty
SAT	Reading and Writing	Information and Ideas	Command of Evidence	<div><div></div><div></div><div></div></div>

ID: 263c330a

The variety of species with adaptations to produce toxins is matched by the variety of uses of those toxins: northern stargazers, for example, use toxins for defense, whereas tiger snakes use toxins for predation and skeleton shrimp use toxins for intraspecific competition. In fact, a species may have adaptations enabling it to produce a toxin with multiple uses. Finding that the venom used by the Panamanian scorpion *Centruroides granosus* to subdue prey also inhibits growth of the pathogenic bacteria *Escherichia coli*, Dumas Gálvez and colleagues conclude that the particular form of venom production observed in *C. granosus* may have propagated through the species because it mitigates risk during feeding in addition to enhancing predation success.

Which finding, if true, would most directly support Gálvez and colleagues’ conclusion?

- A. *E. coli* does not appear to be virulent for *C. granosus* even when transmitted from prey captured without the use of venom.
- B. *E. coli* is frequently found in species preyed on by *C. granosus* and can survive exposure to the digestive juices of *C. granosus*.
- C. *C. granosus* appears to be chemically sensitive to prey infected with *E. coli* and tends to favor uninfected individuals.
- D. Exposure to *C. granosus* venom also inhibits the growth of nonpathogenic bacteria species common in the native environment of *C. granosus*.

Question ID bff52e96

Assessment	Test	Domain	Skill	Difficulty
SAT	Reading and Writing	Information and Ideas	Command of Evidence	<div><div></div><div></div><div></div></div>

ID: bff52e96

In the twentieth century, ethnographers made a concerted effort to collect Mexican American folklore, but they did not always agree about that folklore’s origins. Scholars such as Aurelio Espinosa claimed that Mexican American folklore derived largely from the folklore of Spain, which ruled Mexico and what is now the southwestern United States from the sixteenth to early nineteenth centuries. Scholars such as Américo Paredes, by contrast, argued that while some Spanish influence is undeniable, Mexican American folklore is mainly the product of the ongoing interactions of various cultures in Mexico and the United States.

Which finding, if true, would most directly support Paredes’s argument?

- A. The folklore that the ethnographers collected included several songs written in the form of a *décima*, a type of poem originating in late sixteenth-century Spain.
- B. Much of the folklore that the ethnographers collected had similar elements from region to region.
- C. Most of the folklore that the ethnographers collected was previously unknown to scholars.
- D. Most of the folklore that the ethnographers collected consisted of *corridos*—ballads about history and social life—of a clearly recent origin.

Question ID be184fba

Assessment	Test	Domain	Skill	Difficulty
SAT	Reading and Writing	Information and Ideas	Command of Evidence	<div><div></div><div></div><div></div></div>

ID: be184fba

Correlations Between Congestion Ratings and Features of the Crowd in Raters’ Immediate Vicinity

Crowd feature	Before obstacle	After obstacle	Overall
Density	0.8592	0.7308	0.7447
Velocity	−0.9357	−0.9518	−0.8587

Researcher Xiaolu Jia and colleagues monitored individuals’ velocity and the surrounding crowd density as a group of study participants walked through a space and navigated around an obstacle. Participants rated how congested it seemed before the obstacle, after the obstacle, and overall, and the researchers correlated those ratings with velocity and density. (Correlations range from −1 to 1, with greater distance from 0 indicating greater strength). The researchers concluded that the correlations with velocity are stronger than those with density.

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

- A. The correlation between congestion ratings before the obstacle and density is further from 0 than the correlation between overall congestion rating and velocity is.
- B. The correlation between congestion ratings before the obstacle and velocity is further from 0 than the correlation between congestion overall and velocity is.
- C. For each of the three ratings, the correlation with velocity is negative while the correlation with density is positive.
- D. For each of the three ratings, correlations with velocity are further from 0 than the corresponding correlations with density are.

Question ID 5f5deac5

Assessment	Test	Domain	Skill	Difficulty
SAT	Reading and Writing	Information and Ideas	Command of Evidence	<div><div></div><div></div><div></div></div>

ID: 5f5deac5

Effects of Mycorrhizal Fungi on 3 Plant Species

Plant species	Mycorrhizal host	Average mass of plants grown in soil containing mycorrhizal fungi (in grams)	Average mass of plants grown in soil treated to kill fungi (in grams)
Corn	yes	15.1	3.8
Marigold	yes	10.2	2.4
Broccoli	no	7.5	7

Mycorrhizal fungi in soil benefits many plants, substantially increasing the mass of some. A student conducted an experiment to illustrate this effect. The student chose three plant species for the experiment, including two that are mycorrhizal hosts (species known to benefit from mycorrhizal fungi) and one nonmycorrhizal species (a species that doesn't benefit from and may even be harmed by mycorrhizal fungi). The student then grew several plants from each species both in soil containing mycorrhizal fungi and in soil that had been treated to kill mycorrhizal and other fungi. After several weeks, the student measured the plants' average mass and was surprised to discover that _____

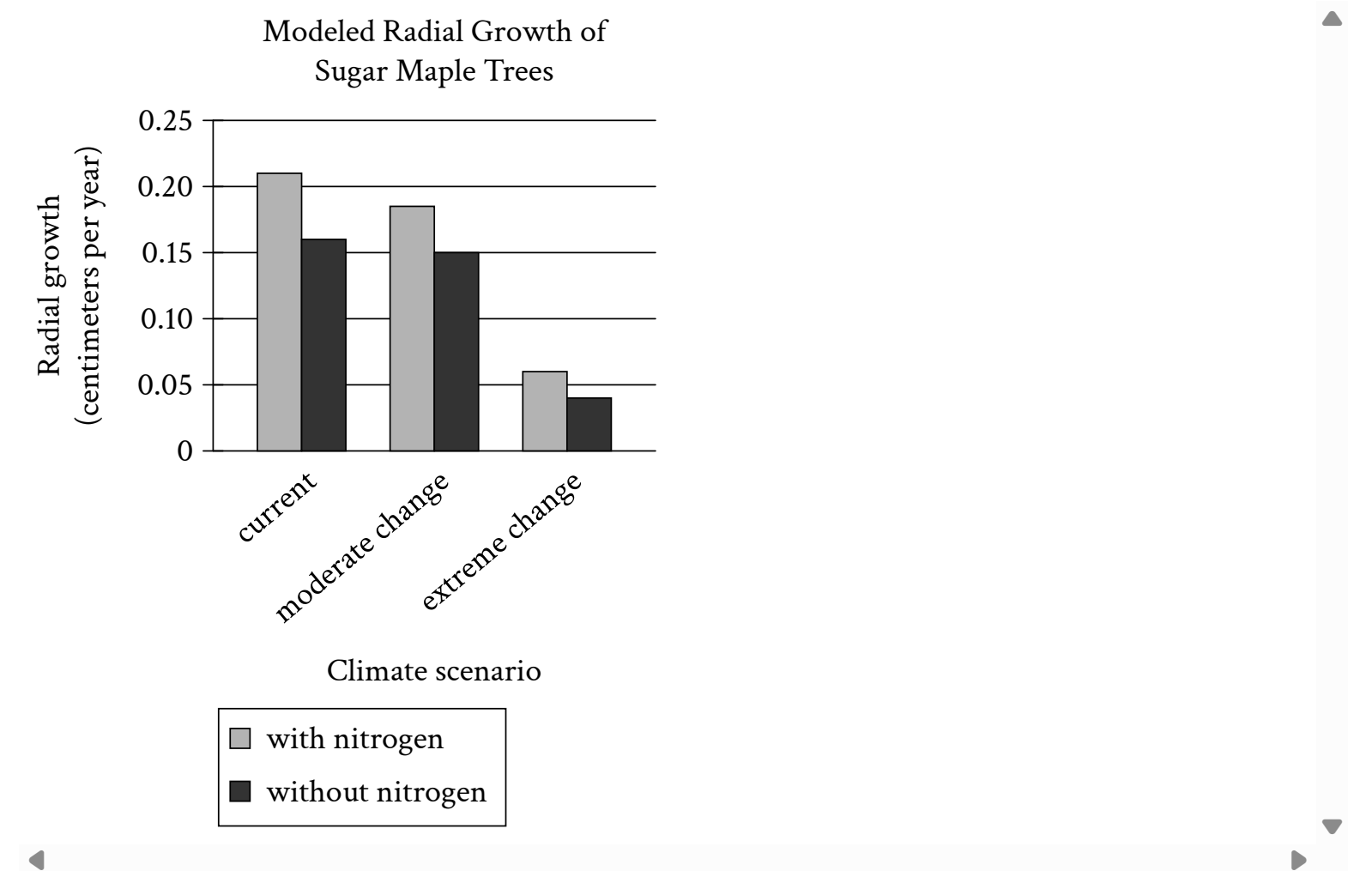
Which choice most effectively uses data from the table to complete the statement?

- A. broccoli grown in soil containing mycorrhizal fungi had a slightly higher average mass than broccoli grown in soil that had been treated to kill fungi.
- B. corn grown in soil containing mycorrhizal fungi had a higher average mass than broccoli grown in soil containing mycorrhizal fungi.
- C. marigolds grown in soil containing mycorrhizal fungi had a much higher average mass than marigolds grown in soil that had been treated to kill fungi.
- D. corn had the highest average mass of all three species grown in soil that had been treated to kill fungi, while marigolds had the lowest.

Question ID 3a3281a9

Assessment	Test	Domain	Skill	Difficulty
SAT	Reading and Writing	Information and Ideas	Command of Evidence	<div><div></div><div></div><div></div></div>

ID: 3a3281a9



Inés Ibáñez and colleagues studied a forest site in which some sugar maple trees receive periodic fertilization with nitrogen to mimic the broader trend of increasing anthropogenic nitrogen deposition in soil. Ibáñez and colleagues modeled the radial growth of the trees with and without nitrogen fertilization under three different climate scenarios (the current climate, moderate change, and extreme change). Although they found that climate change would negatively affect growth, they concluded that anthropogenic nitrogen deposition could more than offset that effect provided that change is moderate rather than extreme.

Which choice best describes data from the graph that support Ibáñez and colleagues’ conclusion?

- A. Growth with nitrogen under the current climate exceeded growth with nitrogen under moderate change, but the latter exceeded growth without nitrogen under extreme change.
- B. Growth without nitrogen under the current climate exceeded growth without nitrogen under moderate change, but the latter exceeded growth with nitrogen under extreme change.
- C. Growth with nitrogen under moderate change exceeded growth without nitrogen under moderate change, but the latter exceeded growth without nitrogen under extreme change.

D. Growth with nitrogen under moderate change exceeded growth without nitrogen under the current climate, but the latter exceeded growth with nitrogen under extreme change.

Question ID 453fdf25

Assessment	Test	Domain	Skill	Difficulty
SAT	Reading and Writing	Information and Ideas	Command of Evidence	<div><div></div><div></div><div></div></div>

ID: 453fdf25

Archaeologist Petra Vaiglova, anthropologist Xinyi Liu, and their colleagues investigated the domestication of farm animals in China during the Bronze Age (approximately 2000 to 1000 BCE). By analyzing the chemical composition of the bones of sheep, goats, and cattle from this era, the team determined that wild plants made up the bulk of sheep’s and goats’ diets, while the cattle’s diet consisted largely of millet, a crop cultivated by humans. The team concluded that cattle were likely raised closer to human settlements, whereas sheep and goats were allowed to roam farther away.

Which finding, if true, would most strongly support the team’s conclusion?

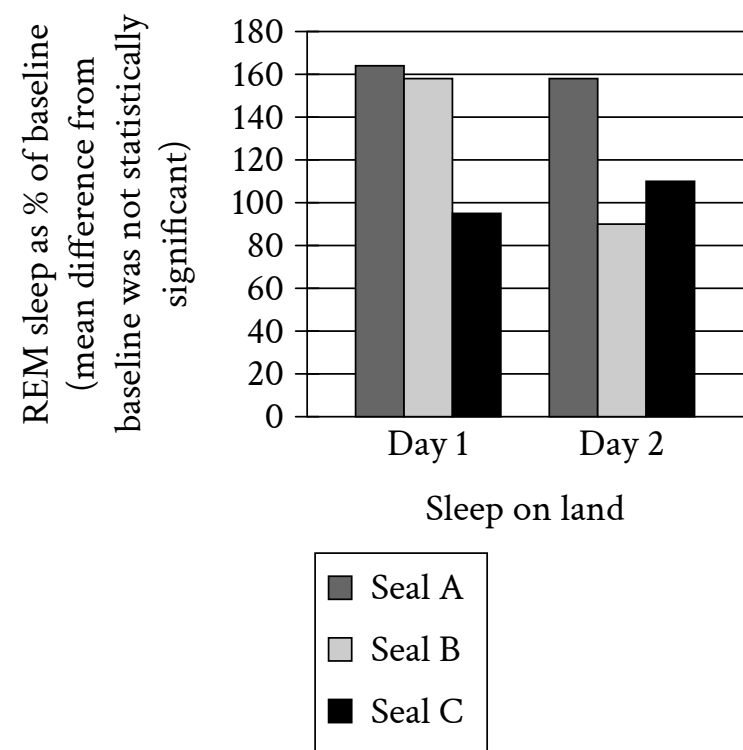
- A. Analysis of the animal bones showed that the cattle’s diet also consisted of wheat, which humans widely cultivated in China during the Bronze Age.
- B. Further investigation of sheep and goat bones revealed that their diets consisted of small portions of millet as well.
- C. Cattle’s diets generally require larger amounts of food and a greater variety of nutrients than do sheep’s and goats’ diets.
- D. The diets of sheep, goats, and cattle were found to vary based on what the farmers in each Bronze Age settlement could grow.

Question ID 17f65415

Assessment	Test	Domain	Skill	Difficulty
SAT	Reading and Writing	Information and Ideas	Command of Evidence	<div><div></div><div></div><div></div></div>

ID: 17f65415

Fur Seal REM Sleep on Land
after an Extended Period
in Water



Research suggests that REM sleep in animals is homeostatically regulated: animals compensate for periods of REM sleep deprivation by increasing subsequent REM sleep. When on land, fur seals get enough REM sleep, but during the weeks they're in the water, they get almost none. In a study of fur seals' sleep habits, researchers recorded the REM sleep (as a percentage of baseline) of fur seals once they had returned to land. They concluded that REM sleep may not be homeostatically regulated in fur seals, citing as evidence the fact that the seals in the study _____

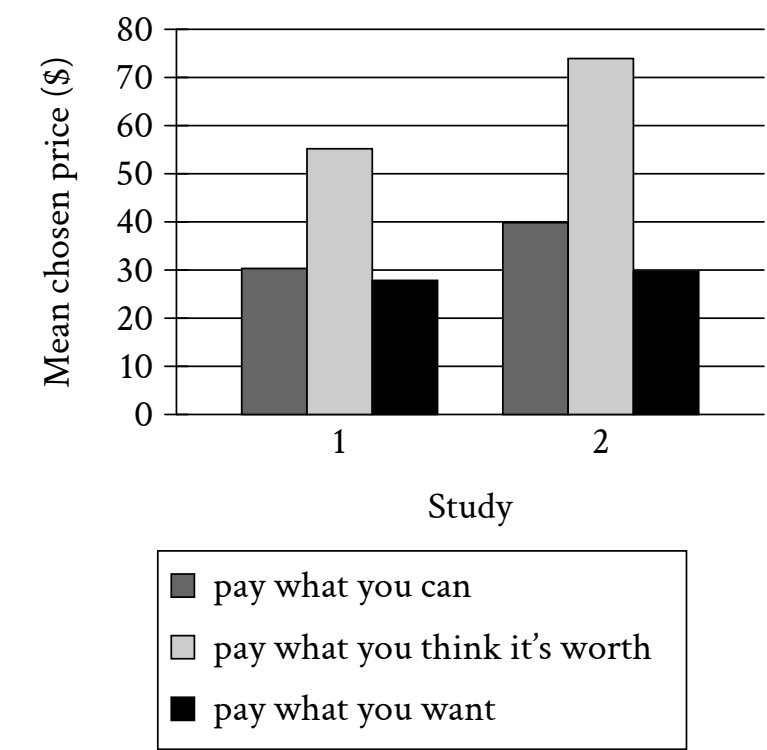
- Which choice most effectively uses data from the graph to complete the text?
- A. didn't consistently demonstrate a significant increase in REM sleep after their period of deprivation in the water.
 - B. showed no significant difference between REM sleep after returning to land and REM sleep while in the water.
 - C. didn't show significantly less REM sleep during the second day after returning to land than they did during the first day.
 - D. showed no significant differences from one another in baseline levels of REM sleep.

Question ID c4bc50cd

Assessment	Test	Domain	Skill	Difficulty
SAT	Reading and Writing	Information and Ideas	Command of Evidence	<div><div></div><div></div><div></div></div>

ID: c4bc50cd

Mean Ticket Prices Chosen in Two Studies of Participative Pricing Messaging



Participative pricing, in which purchasers choose the prices they pay for products, can enable sellers to capitalize on the heterogeneous values consumers assign to the same goods and services, but doing so requires careful messaging. Annie Peng Cui and Jennifer Wiggins recruited 171 participants (ages 18–60) online for an initial study and 83 students (ages 18–31) at a state university for a second study to test the effect of three different messages—“pay what you can,” “pay what you think it’s worth,” and “pay what you want”—on how much participants would pay for concert tickets. Their results illustrate both the heterogeneity of consumer valuations and how sellers can benefit by prompting consumers to consider their own valuations:

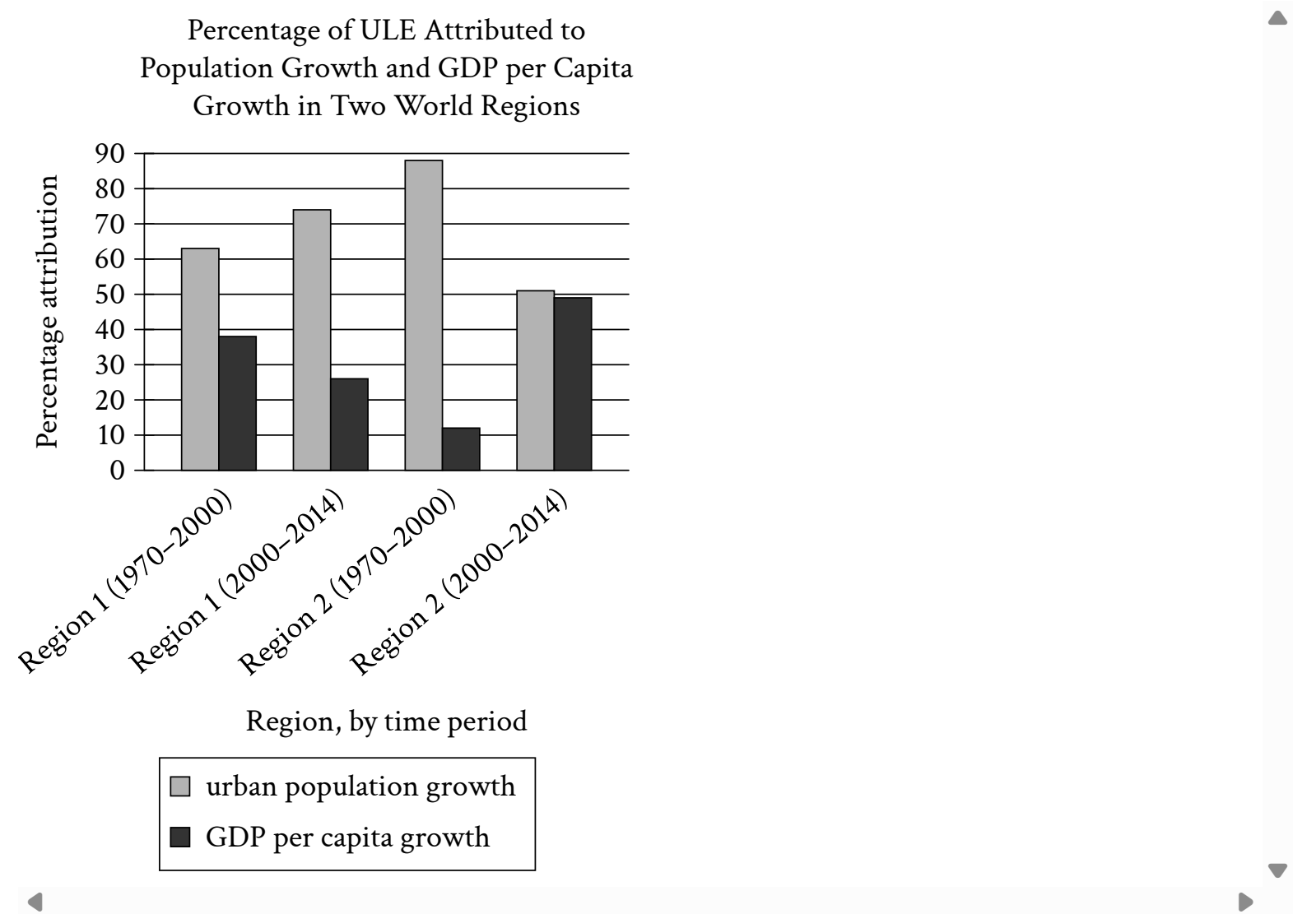
- Which choice most effectively uses data from the graph to complete the text?
- A. the students tended to value the concert tickets more highly than did the more age-diverse group recruited online, but when considering what they could afford to pay, the students tended to choose a lower price than did the other group.
 - B. in all three messaging conditions, the group of participants recruited online tended to choose lower prices than did the students, but both groups tended to choose prices closest to the actual cost of the tickets when prompted to consider the tickets’ value.

- C. the students tended to value the concert tickets more highly than did the more age-diverse group recruited online, but both groups tended to choose a higher price when considering the value of the tickets than when considering what they could afford or wanted to pay.
- D. within each group of participants, there was wide variation in the value that individuals assigned to the concert tickets, but the students tended to assign a higher value to the tickets than did the more age-diverse group recruited online.

Question ID fd88c8b1

Assessment	Test	Domain	Skill	Difficulty
SAT	Reading and Writing	Information and Ideas	Command of Evidence	<div><div></div><div></div><div></div></div>

ID: fd88c8b1



In a study of urban physical expansion, Richa Mahtta et al. conducted a meta-analysis of more than 300 cities worldwide to determine whether urban land expansion (ULE) was more strongly influenced by urban population growth or by growth in gross domestic product (GDP) per capita, a measure of economic activity. Because efficient national government is necessary to provide urban services and infrastructure that attract economic investment, Mahtta et al. propose that absent other factors, the importance of GDP per capita growth to ULE would likely increase relative to the importance of population growth as governments become more efficient. If true, this suggests the possibility that _____

- Which choice most effectively uses data from the graph to complete the statement?
- A. national governments of countries in Region 1 experienced declines in efficiency in the period from 2000 to 2014, relative to the period from 1970 to 2000.

- B. countries in Region 1 experienced a slower rate of economic growth in the period from 2000 to 2014 than countries in Region 2 did, despite increasing national government efficiency in Region 1.
- C. national governments of most countries in Region 2 became more efficient in the period from 2000 to 2014 than they had been in the period from 1970 to 2000, but those of several countries in this region did not.
- D. national governments of countries in Region 1 and in Region 2 generally became more efficient in the period from 2000 to 2014 than they had been in the period from 1970 to 2000, but at different rates.

Question ID 2e057093

Assessment	Test	Domain	Skill	Difficulty
SAT	Reading and Writing	Information and Ideas	Command of Evidence	<div><div></div><div></div><div></div></div>

ID: 2e057093

Mosasaurs were large marine reptiles that lived in the Late Cretaceous period, approximately 100 million to 66 million years ago. Celina Suarez, Alberto Pérez-Huerta, and T. Lynn Harrell Jr. examined oxygen-18 isotopes in mosasaur tooth enamel in order to calculate likely mosasaur body temperatures and determined that mosasaurs were endothermic—that is, they used internal metabolic processes to maintain a stable body temperature in a variety of ambient temperatures. Suarez, Pérez-Huerta, and Harrell claim that endothermy would have enabled mosasaurs to include relatively cold polar waters in their range.

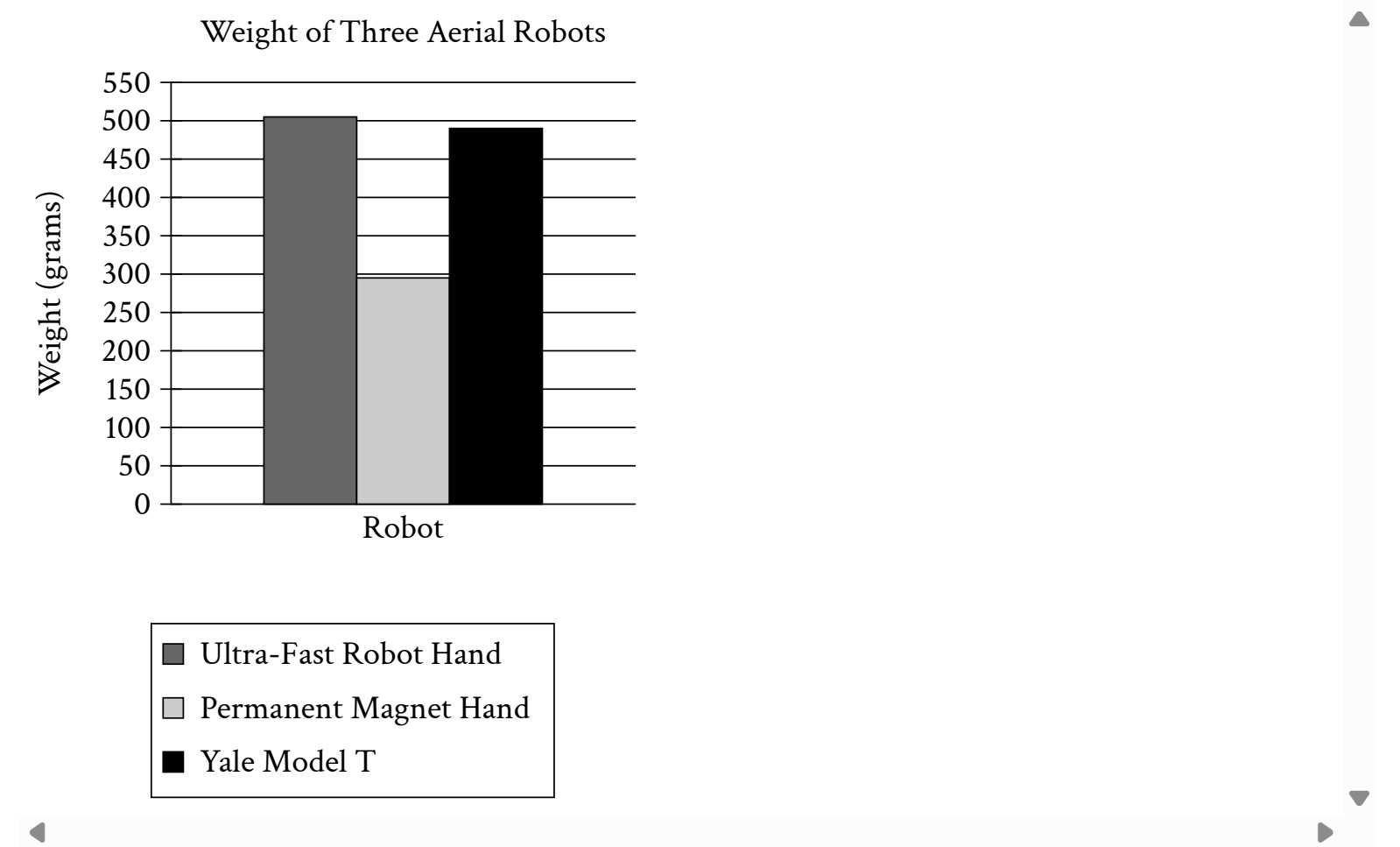
Which finding, if true, would most directly support Suarez, Pérez-Huerta, and Harrell’s claim?

- A. Mosasaurs’ likely body temperatures are easier to determine from tooth enamel oxygen-18 isotope data than the body temperatures of nonendothermic Late Cretaceous marine reptiles are.
- B. Fossils of both mosasaurs and nonendothermic marine reptiles have been found in roughly equal numbers in regions known to be near the poles during the Late Cretaceous, though in lower concentrations than elsewhere.
- C. Several mosasaur fossils have been found in regions known to be near the poles during the Late Cretaceous, while relatively few fossils of nonendothermic marine reptiles have been found in those locations.
- D. During the Late Cretaceous, seawater temperatures were likely higher throughout mosasaurs’ range, including near the poles, than seawater temperatures at those same latitudes are today.

Question ID b355bef7

Assessment	Test	Domain	Skill	Difficulty
SAT	Reading and Writing	Information and Ideas	Command of Evidence	<div><div></div><div></div><div></div></div>

ID: b355bef7



Aerial robots vary considerably in their holding force; the Ultra-Fast Robot Hand, for example, has a holding force of 56 newtons, more than twice that of the Permanent Magnet Hand and more than four times that of the Yale Model T. Since an aerial robot must lift its own weight along with its cargo, engineer Jiawei Meng and colleagues used a ratio of each robot’s holding force to the robot’s weight to calculate payload capacity, with higher ratios corresponding to greater capacity, concluding that the Ultra-Fast Robot Hand has a higher payload capacity than the Yale Model T.

Which choice best describes data in the graph that support Meng and colleagues’ conclusion?

- A. The Ultra-Fast Robot Hand and the Yale Model T each weigh more than 450 grams.
- B. The Ultra-Fast Robot Hand and the Yale Model T each weigh more than the Permanent Magnet Hand does.
- C. The Yale Model T has a lower holding force than the Permanent Magnet Hand despite weighing more.
- D. The Ultra-Fast Robot Hand weighs only slightly more than the Yale Model T does.

Question ID 1404e2a3

Assessment	Test	Domain	Skill	Difficulty
SAT	Reading and Writing	Information and Ideas	Command of Evidence	<div><div></div><div></div><div></div></div>

ID: 1404e2a3

Juvenile Plants Found Growing on Bare Ground and in Patches of Vegetation for Five Species

Species	Bare ground	Patches of vegetation	Total	Percent found in patches of vegetation
<i>T. moroderi</i>	9	13	22	59.1%
<i>T. libanitis</i>	83	120	203	59.1%
<i>H. syriacim</i>	95	106	201	52.7%
<i>H. squamatum</i>	218	321	539	59.6%
<i>H. stoechas</i>	11	12	23	52.2%

Alicia Montesinos-Navarro, Isabelle Storer, and Rocío Perez-Barrales recently examined several plots within a diverse plant community in southeast Spain. The researchers calculated that if individual plants were randomly distributed on this particular landscape, only about 15% would be with other plants in patches of vegetation. They counted the number of juvenile plants of five species growing in patches of vegetation and the number growing alone on bare ground and compared those numbers to what would be expected if the plants were randomly distributed. Based on these results, they claim that plants of these species that grow in close proximity to other plants gain an advantage at an early developmental stage.

Which choice best describes data from the table that support the researchers’ claim?

- A. For all five species, less than 75% of juvenile plants were growing in patches of vegetation.
- B. The species with the greatest number of juvenile plants growing in patches of vegetation was *H. stoechas*.
- C. For *T. libanitis* and *T. moroderi*, the percentage of juvenile plants growing in patches of vegetation was less than what would be expected if plants were randomly distributed.
- D. For each species, the percentage of juvenile plants growing in patches of vegetation was substantially higher than what would be expected if plants were randomly distributed.

Question ID 552d75fe

Assessment	Test	Domain	Skill	Difficulty
SAT	Reading and Writing	Information and Ideas	Command of Evidence	<div><div></div><div></div><div></div></div>

ID: 552d75fe

The interiors of many temples in the ancient Middle East needed to satisfy a precise set of acoustic demands: the sounds of chants and hymns should travel with clarity, while profound silences should be fully felt and appreciated. In a research paper, a student claims that the users of one such temple were aware of how the materials that were used within the structure could affect sound quality and that they deliberately applied this knowledge to influence how sound was experienced in the space.

Which quotation from a work by a historian would most directly support the student’s claim?

- A. “Many researchers believe that the central chamber of the temple had a high ceiling, a feature that has since become essential to the acoustic design of modern concert halls.”
- B. “The innermost room of the temple was likely among the quietest spaces in the interior of the temple.”
- C. “The acoustic environment of the temple was best suited for music that eschewed ornamentation in favor of simple melodies, harmonies, and rhythms.”
- D. “During special occasions, curtains were placed inside the temple to minimize reverberation and confine the sound to designated locations.”

Question ID 6760c788

Assessment	Test	Domain	Skill	Difficulty
SAT	Reading and Writing	Information and Ideas	Command of Evidence	<div><div></div><div></div><div></div></div>

ID: 6760c788

In the 1980s, many musicians and journalists in the English-speaking world began to draw attention to music from around the globe—such as mbaqanga from South Africa and quan họ from Vietnam—that can’t be easily categorized according to British or North American popular music genres, typically referring to such music as “world music.” While some scholars have welcomed this development for bringing diverse musical forms to prominence in countries where they’d previously been overlooked, musicologist Su Zheng claims that the concept of world music homogenizes highly distinct traditions by reducing them all to a single category.

Which finding about mbaqanga and quan họ, if true, would most directly support Zheng’s claim?

- A. Mbaqanga and quan họ developed independently of each other and have little in common musically.
- B. Mbaqanga is significantly more popular in the English-speaking world than quan họ is.
- C. Mbaqanga and quan họ are now performed by a diverse array of musicians with no direct connections to South Africa or Vietnam.
- D. Mbaqanga and quan họ are highly distinct from British and North American popular music genres but similar to each other.

Question ID 5dc00440

Assessment	Test	Domain	Skill	Difficulty
SAT	Reading and Writing	Information and Ideas	Command of Evidence	<div><div></div><div></div><div></div></div>

ID: 5dc00440

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

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

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

Question ID e13b7650

Assessment	Test	Domain	Skill	Difficulty
SAT	Reading and Writing	Information and Ideas	Command of Evidence	<div><div></div><div></div><div></div></div>

ID: e13b7650

In a series of experiments, Julio Sevilla and Claudia Townsend showed that manipulating the space between products in store displays can influence consumers’ views of those products. Participants in several of the experiments regarded the same products in the same (generic) retail settings as significantly more valuable when the product-to-space ratio was low than when it was high. But in one of the experiments, Sevilla and Townsend arranged the same jewelry with different levels of intervening space at an upscale retailer (Tiffany & Co.) and a relatively inexpensive retailer (Forever 21). The result of this experiment suggests that a store context associated with inexpensive products may moderate the effect Sevilla and Townsend observed in their other experiments.

Which finding from the experiment with Tiffany & Co. and Forever 21, if true, would most directly support the conclusion presented in the text?

- A. At Tiffany & Co., participants judged jewelry spaced far apart to be substantially more valuable than jewelry spaced close together, but at Forever 21, participants judged jewelry spaced far apart to be only slightly more valuable than jewelry spaced close together.
- B. At both Tiffany & Co. and Forever 21, participants judged jewelry spaced far apart to be less valuable than jewelry spaced close together, but the difference in perceived value was significantly greater at Tiffany & Co. than at Forever 21.
- C. Participants judged jewelry spaced far apart at Tiffany & Co. to be similar in value to jewelry spaced far apart at Forever 21, but participants judged jewelry spaced close together at Tiffany & Co. to be more valuable than jewelry spaced close together at Forever 21.
- D. When jewelry was spaced far apart, participants judged the jewelry at Tiffany & Co. to be more valuable than the jewelry at Forever 21, but when jewelry was spaced close together, participants judged the jewelry at Tiffany & Co. to be less valuable than the jewelry at Forever 21.

Question ID c83508f3

Assessment	Test	Domain	Skill	Difficulty
SAT	Reading and Writing	Information and Ideas	Command of Evidence	<div><div></div><div></div><div></div></div>

ID: c83508f3

Corn-Related Vocabulary in Various Southeastern Languages

Language family	Word (language)	English translation	Proposed origin in vocabulary of the Totozoquean language family
Muskogean	tanchi' (Chickasaw); tanchi (Choctaw); vce (Muscogee, pronounced "uh-chi")	corn	no
Iroquoian	se-lu (Cherokee)	corn	no
Caddoan	-k'as- (Caddo)	dried corn	yes
Chitimacha	k'asma (Chitimacha)	corn	yes

In Caddo, a language from what is now the US Southeast, vocabulary pertaining to corn cultivation resembles equivalent vocabulary in the Totozoquean language family in Mexico. This resemblance is perhaps attributable to cultural contact: such words could have entered Caddo through the intermediary of the neighboring but unrelated Chitimacha language, concurrent with the dissemination of corn itself from Mexico into the Southeast after 700 CE. That the vocabulary pertaining to domestic crops accompanies them as they diffuse into new regions is an established phenomenon globally. Crops may also be decoupled from vocabulary altogether: corn cultivation became ubiquitous among the Southeastern tribes, yet _____

- Which choice most effectively uses data from the table to complete the statement?
- A. the origins of vocabulary pertaining to the crop vary across languages in the region, with the words for corn in Cherokee and the Muskogean languages showing no demonstrable relationship to Totozoquean vocabulary.
 - B. the region is linguistically diverse, being home not only to Chitimacha and Caddo, but also to the Muskogean language family (including Chickasaw, Choctaw, and Muscogee) and to one Iroquoian language (Cherokee).
 - C. corn-related vocabulary underwent changes when entering other, unrelated languages, as can be seen by the divergence of the Caddo word from the Chitimacha word it originated in.
 - D. words for corn in the languages of the Muskogean family evolved from a common root, with the Muscogee word having lost certain consonant sounds still present in the Chickasaw and Choctaw words.

Question ID 02cac697

Assessment	Test	Domain	Skill	Difficulty
SAT	Reading and Writing	Information and Ideas	Command of Evidence	<div><div></div><div></div><div></div></div>

ID: 02cac697

A student is writing a paper about *One Night in Miami...*, a 2020 film directed by Regina King and written by Kemp Powers. Powers adapted the film’s screenplay from his 2013 play, which he wrote after learning about a 1964 meeting that took place in Miami, Florida, between four prominent figures of the Civil Rights movement: Malcolm X, Muhammad Ali, Jim Brown, and Sam Cooke. The student claims that although Powers was inspired by this meeting, the film is best understood not as a precise retelling of historical events but rather as a largely imagined but informed representation of them.

Which quotation from an article about *One Night in Miami...* would be the most effective evidence for the student to include in support of this claim?

- A. “When Powers learned of the meeting, he initially planned to write a much longer work about its four famous participants rather than focusing on the meeting itself.”
- B. “*One Night in Miami...* received numerous awards and nominations, including an Academy Award nomination for Powers for Best Adapted Screenplay.”
- C. “Powers has described *One Night in Miami...* as the story of four friends encouraging and supporting one another while engaged in a crucial political debate about how best to achieve equality for Black people in the United States.”
- D. “Powers could find only the most superficial historical details about the meeting, so he read extensively about the four individuals and their thinking at the time in an effort to portray what might have happened between them.”

Question ID e92c75a8

Assessment	Test	Domain	Skill	Difficulty
SAT	Reading and Writing	Information and Ideas	Command of Evidence	<div><div></div><div></div><div></div></div>

ID: e92c75a8

Barchester Towers is an 1857 novel by Anthony Trollope. In the novel, Trollope’s portrayal of Dr. Proudie underscores the character’s exaggerated sense of his own abilities: _____

Which quotation from *Barchester Towers* most effectively illustrates the claim?

- A. “It must not...be taken as proved that Dr. Proudie was a man of great mental powers, or even of much capacity for business, for such qualities had not been required in him.”
- B. “[Dr. Proudie] was comparatively young, and had, as he fondly flattered himself, been selected as possessing such gifts, natural and acquired, as must be sure to recommend him to a yet higher notice.”
- C. “[Dr. Proudie’s] residence in the metropolis, rendered necessary by duties thus entrusted to him, his high connexions, and the peculiar talents and nature of the man, recommended him to persons in power.”
- D. “[Dr. Proudie] was certainly possessed of sufficient tact to answer the purpose for which he was required without making himself troublesome.”

Question ID 5ead8efc

Assessment	Test	Domain	Skill	Difficulty
SAT	Reading and Writing	Information and Ideas	Command of Evidence	<div><div></div><div></div><div></div></div>

ID: 5ead8efc

Matthew D. Rocklage and team examined whether consumer ratings of movies can predict box office success. The team considered both numeric star ratings and written reviews in their research. To analyze the written reviews, the team measured the emotionality—the degree to which a written review expresses an emotional reaction—of user reviews on a movie rating website, assigning each review an emotionality score. After reviewing this research, a student argues that the emotionality of movie reviews is unrelated to a movie’s success at the box office.

Which finding, if true, would most directly weaken the student’s conclusion?

- A. Movies that had the highest average emotionality scores received the lowest average star ratings on the movie rating website.
- B. The average emotionality score of a movie’s reviews was a positive predictor of that movie’s box office earnings.
- C. More than half of the movies that the team examined received an average star rating of 3 out of 5 stars.
- D. The movies that were most successful at the box office tended to have high average star ratings.

Question ID 0a5e8e10

Assessment	Test	Domain	Skill	Difficulty
SAT	Reading and Writing	Information and Ideas	Command of Evidence	<div><div></div><div></div><div></div></div>

ID: 0a5e8e10

Economists have demonstrated that herding—in which individuals converge on the same action by imitating the economic decisions of one or more peers—occurs among investors. Investigating whether herding also occurs among nations in matters of economic policy, Maru Etta-Nkwelle examined changes in the foreign currency reserves of emerging economies in various world regions in the years following the widespread financial crisis of 1997. Etta-Nkwelle posited that herding would manifest in regional peer countries converging on the same foreign currency accumulation rate regardless of each country’s observable circumstances. She found that Asian countries showed evidence of herding but African countries did not.

Based on the text, which finding, if true, would best account for the discrepancy Etta-Nkwelle observed?

- A. The majority of the currency held in reserves by the African countries was foreign currency, whereas the majority of the currency held in reserves by the Asian countries was domestic currency.
- B. Most of the African countries belonged to international economic unions that set individual foreign-currency accumulation policies for each member, whereas the Asian countries were largely free to set their own policies.
- C. The 1997 financial crisis resulted in immediate declines in many of the African countries’ foreign currency reserves, whereas the crisis had few short-term effects on the foreign currency reserves of most of the Asian countries.
- D. The African countries tended to accumulate a variety of foreign currencies for their reserves, whereas the Asian countries tended to favor a single foreign currency for their reserves.

Question ID 9ba747e1

Assessment	Test	Domain	Skill	Difficulty
SAT	Reading and Writing	Information and Ideas	Command of Evidence	<div><div></div><div></div><div></div></div>

ID: 9ba747e1

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

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

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

Question ID a01cc156

Assessment	Test	Domain	Skill	Difficulty
SAT	Reading and Writing	Information and Ideas	Command of Evidence	<div><div></div><div></div><div></div></div>

ID: a01cc156

“The Young Girl” is a 1920 short story by Katherine Mansfield. In the story, the narrator takes an unnamed seventeen-year-old girl and her younger brother out for a meal. In describing the teenager, Mansfield frequently contrasts the character’s pleasant appearance with her unpleasant attitude, as when Mansfield writes of the teenager, _____

Which quotation from “The Young Girl” most effectively illustrates the claim?

- A. “I heard her murmur, ‘I can’t bear flowers on a table.’ They had evidently been giving her intense pain, for she positively closed her eyes as I moved them away.”
- B. “While we waited she took out a little, gold powder-box with a mirror in the lid, shook the poor little puff as though she loathed it, and dabbed her lovely nose.”
- C. “I saw, after that, she couldn’t stand this place a moment longer, and, indeed, she jumped up and turned away while I went through the vulgar act of paying for the tea.”
- D. “She didn’t even take her gloves off. She lowered her eyes and drummed on the table. When a faint violin sounded she winced and bit her lip again. Silence.”

Question ID b74860b2

Assessment	Test	Domain	Skill	Difficulty
SAT	Reading and Writing	Information and Ideas	Command of Evidence	<div><div></div><div></div><div></div></div>

ID: b74860b2

A member of the Otomi, an Indigenous people in Central Mexico, Octavio Medellín immigrated to the United States as a child, and his sculpture bears the impress of traditions on both sides of the border: US-based modernist sculpture, Mexican modernist painting, Otomi art, and the ancient sculpture of other Mexican Indigenous peoples, including the Maya. In his 1950 masterpiece *History of Mexico*, Medellín fuses these influences into a style so idiosyncratic that it resists efforts to view his work through the lens of nationality or cultural identity. Artists, he insisted, should strive for individual expression, even as they draw inspiration from their heritage and the communities where they live and work.

Which quotation from an art critic most directly challenges the underlined claim in the text?

- A. "Although a number of ancient Indigenous artistic traditions pictured human forms in profile, the forms populating the surface of *A History of Mexico* suggest a specifically Maya influence."
- B. "In *A History of Mexico*, the synthesis of ancient and modernist traditions functions as a stylistic parallel to the work's subject matter: a survey of centuries of Mexican history."
- C. "Many critics focus on Indigenous influences in *A History of Mexico* and other key works by Medellín to the exclusion of influences from non-Indigenous art."
- D. "While *A History of Mexico* features modernist motifs, it relies primarily on angular human forms in profile—a staple of Maya sculpture—and thus invites classification as Indigenous art."

Question ID 7c196241

Assessment	Test	Domain	Skill	Difficulty
SAT	Reading and Writing	Information and Ideas	Command of Evidence	<div><div></div><div></div><div></div></div>

ID: 7c196241

In the mountains of Brazil, *Barbacenia tomentosa* and *Barbacenia macrantha*—two plants in the Velloziaceae family—establish themselves on soilless, nutrient-poor patches of quartzite rock. Plant ecologists Anna Abrahão and Patricia de Britto Costa used microscopic analysis to determine that the roots of *B. tomentosa* and *B. macrantha*, which grow directly into the quartzite, have clusters of fine hairs near the root tip; further analysis indicated that these hairs secrete both malic and citric acids. The researchers hypothesize that the plants depend on dissolving underlying rock with these acids, as the process not only creates channels for continued growth but also releases phosphates that provide the vital nutrient phosphorus.

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

- A. Other species in the Velloziaceae family are found in terrains with more soil but have root structures similar to those of *B. tomentosa* and *B. macrantha*.
- B. Though *B. tomentosa* and *B. macrantha* both secrete citric and malic acids, each species produces the acids in different proportions.
- C. The roots of *B. tomentosa* and *B. macrantha* carve new entry points into rocks even when cracks in the surface are readily available.
- D. *B. tomentosa* and *B. macrantha* thrive even when transferred to the surfaces of rocks that do not contain phosphates.

Question ID 65462442

Assessment	Test	Domain	Skill	Difficulty
SAT	Reading and Writing	Information and Ideas	Command of Evidence	<div><div></div><div></div><div></div></div>

ID: 65462442

Swahili Speakers in Three African Countries

Country	Approximate number of speakers (in millions)	Estimated % of population
Democratic Republic of the Congo	22	25
Kenya	55	100
Tanzania	61	100

Swahili is estimated to be the first language of up to 15 million people worldwide. It’s also an officially recognized language in Tanzania, Kenya, and the Democratic Republic of the Congo, which means these countries use Swahili in government documents and proceedings. But even in countries where almost everyone speaks Swahili, for many it isn’t their first language but is instead their second, third, or even fourth language.

Which choice most effectively uses data from the table to support the underlined claim?

- A. Tanzania has approximately 61 million Swahili speakers, which is much more than the estimated total number of people worldwide for whom Swahili is their first language.
- B. Tanzania is estimated to have at most 15 million Swahili speakers, while the country’s total population is approximately 61 million people.
- C. Approximately 100 percent of the people who speak Swahili as their first language live in Kenya, which has a total population of approximately 55 million people.
- D. Approximately 100 percent of Kenya’s population speaks Swahili, while only about 25 percent of the Democratic Republic of the Congo’s population speaks Swahili.

Question ID 94da9acc

Assessment	Test	Domain	Skill	Difficulty
SAT	Reading and Writing	Information and Ideas	Command of Evidence	<div><div></div><div></div><div></div></div>

ID: 94da9acc

In the “language nest” model of education, Indigenous children learn the language of their people by using it as the medium of instruction and socialization at pre-K or elementary levels. In their 2016 study of a school in an Anishinaabe community in Ontario, Canada, scholars Lindsay Morcom and Stephanie Roy (who are Anishinaabe themselves) found that the model not only imparted fluency in the Anishinaabe language but also enhanced students’ pride in Anishinaabe culture overall. Given these positive effects, Morcom and Roy predict that the model increases the probability that as adults, former students of the school will transmit the language to younger generations in their community.

Which finding, if true, would most strongly support the researchers’ prediction?

- A. Anishinaabe adults who didn’t attend the school feel roughly the same degree of cultural pride as the former students of the school feel.
- B. After transferring to the school, new students experience an increase in both fluency and academic performance overall.
- C. As adults, former students of the school are just as likely to continue living in their community as individuals who didn’t attend the school.
- D. As they complete secondary and higher education, former students of the school experience no loss of fluency or cultural pride.

Question ID 717a76c4

Assessment	Test	Domain	Skill	Difficulty
SAT	Reading and Writing	Information and Ideas	Command of Evidence	<div><div></div><div></div><div></div></div>

ID: 717a76c4

In subtropical Asia, *Apis dorsata* (giant honeybee) plays an essential role in pollinating a wide variety of crops and wild plants. To study how different agricultural land covers affect the species, Rika Raffiudin and colleagues monitored the foraging activity of the bees as well as the pollen content of the honey from *A. dorsata* colonies at two sites in Indonesia: Kampar, characterized by its surrounding monoculture farms (growing a single crop), and Kerinci, a forest-agriculture site where multiple crops, including hot peppers and coffee, are grown nearby. The researchers concluded that a lack of crop variety may reduce total pollen collection by *A. dorsata*.

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

- A. Pollen in honey samples from Kampar bee colonies was predominantly sourced from a single plant species, whereas pollen in honey samples from Kerinci bee colonies was sourced from multiple different plant species.
- B. In one Kerinci bee colony, a greater proportion of bees returned to their nests with pollen than returned without pollen, whereas the inverse was observed in a second Kerinci bee colony.
- C. Significantly fewer bees were observed engaging in foraging activities with the crops surrounding Kerinci than with the crops surrounding Kampar.
- D. Honey samples from Kerinci bee colonies contained significantly higher concentrations of pollen than honey samples from Kampar bee colonies did.

Question ID 84961b46

Assessment	Test	Domain	Skill	Difficulty
SAT	Reading and Writing	Information and Ideas	Command of Evidence	<div><div></div><div></div><div></div></div>

ID: 84961b46

Richard II is a play from the 1590s by William Shakespeare. Although King Richard has been vanquished by his cousin Henry Bolingbroke, he intimates that he is not entirely ready to show subservience to his cousin, saying, _____

Which quotation from *Richard II* most effectively illustrates the claim?

- A. "I have no name, no title,— / No, not that name was given me at the font,— / But 'tis usurp'd:— Alack the heavy day, / That I have worn so many winters out, / And know not now what name to call myself!"
- B. "Alack, why am I sent for to a king, / Before I have shook off the regal thoughts / Wherewith I reign'd? I hardly yet have learn'd / To insinuate, flatter, bow, and bend my knee."
- C. "Still my griefs are mine. / You may my glories and my state depose, / But not my griefs; still am I king of those."
- D. "Am I both priest and clerk? Well then, amen. / God save the King! although I be not he; / And yet, amen, if heaven do think him me."

Question ID 6a94c678

Assessment	Test	Domain	Skill	Difficulty
SAT	Reading and Writing	Information and Ideas	Command of Evidence	<div><div></div><div></div><div></div></div>

ID: 6a94c678

Three Studies' Estimated Average Velocity of LMC

Researchers	Study year	Estimated average velocity
Murai and Fujimoto	1980	344 km/s
Kallivayalil and colleagues	2006	378 km/s
Gardiner and colleagues	1994	297 km/s

In 2006, Nitya Kallivayalil and colleagues calculated the most accurate estimate yet of the average velocity (in kilometers per second) of the Large Magellanic Cloud (LMC) galaxy. Before the 2006 study, estimates of the average velocity were low enough for the LMC to maintain an orbit around the Milky Way galaxy, but according to an analysis by Gurtina Besla and colleagues, the estimated velocity from the 2006 study is too high for the LMC to maintain such an orbit. Therefore, if Besla and colleagues are correct, the maximum average velocity for the LMC that would allow it to maintain orbit around the Milky Way is likely _____

Which choice most effectively uses data from the table to complete the statement?

- A. above 344 km/s but below 378 km/s.
- B. above 297 km/s but below 344 km/s.
- C. above 378 km/s.
- D. below 297 km/s.

Question ID 1b422cf9

Assessment	Test	Domain	Skill	Difficulty
SAT	Reading and Writing	Information and Ideas	Command of Evidence	<div><div></div><div></div><div></div></div>

ID: 1b422cf9

Estimates of Tyrannosaurid Bite Force

Study	Year	Estimation method	Approximate bite force (newtons)
Cost et al.	2019	muscular and skeletal modeling	35,000–63,000
Gignac and Erickson	2017	tooth-bone interaction analysis	8,000–34,000
Meers	2002	body-mass scaling	183,000–235,000
Bates and Falkingham	2012	muscular and skeletal modeling	35,000–57,000

The largest tyrannosaurids—the family of carnivorous dinosaurs that includes *Tarbosaurus*, *Albertosaurus*, and, most famously, *Tyrannosaurus rex*—are thought to have had the strongest bites of any land animals in Earth’s history. Determining the bite force of extinct animals can be difficult, however, and paleontologists Paul Barrett and Emily Rayfield have suggested that an estimate of dinosaur bite force may be significantly influenced by the methodology used in generating that estimate.

Which choice best describes data from the table that support Barrett and Rayfield’s suggestion?

- A. The study by Meers used body-mass scaling and produced the lowest estimated maximum bite force, while the study by Cost et al. used muscular and skeletal modeling and produced the highest estimated maximum.
- B. In their study, Gignac and Erickson used tooth-bone interaction analysis to produce an estimated bite force range with a minimum of 8,000 newtons and a maximum of 34,000 newtons.
- C. The bite force estimates produced by Bates and Falkingham and by Cost et al. were similar to each other, while the estimates produced by Meers and by Gignac and Erickson each differed substantially from any other estimate.
- D. The estimated maximum bite force produced by Cost et al. exceeded the estimated maximum produced by Bates and Falkingham, even though both groups of researchers used the same method to generate their estimates.

Question ID f36559aa

Assessment	Test	Domain	Skill	Difficulty
SAT	Reading and Writing	Information and Ideas	Command of Evidence	<div><div></div><div></div><div></div></div>

ID: f36559aa

The Souls of Black Folk is a 1903 book by W.E.B. Du Bois. In the book, Du Bois suggests that upon hearing Black folk songs, he felt an intuitive and sometimes unexpected sense of cultural recognition: _____

Which quotation from *The Souls of Black Folk* most effectively illustrates the claim?

- A. “[Black folk music] still remains as the singular spiritual heritage of the nation and the greatest gift of the Negro people.”
- B. “Ever since I was a child these songs have stirred me strangely. They came out of the South unknown to me, one by one, and yet at once I knew them as of me and of mine.”
- C. “Caricature has sought again to spoil the quaint beauty of the music, and has filled the air with many debased melodies which vulgar ears scarce know from the real. But the true Negro folk-song still lives in the hearts of those who have heard them truly sung and in the hearts of the Negro people.”
- D. “The songs are indeed the siftings of centuries; the music is far more ancient than the words, and in it we can trace here and there signs of development.”

Question ID a2641e5f

Assessment	Test	Domain	Skill	Difficulty
SAT	Reading and Writing	Information and Ideas	Command of Evidence	<div><div></div><div></div><div></div></div>

ID: a2641e5f

Although many transposons, DNA sequences that move within an organism’s genome through shuffling or duplication, have become corrupted and inactive over time, those from the long interspersed nuclear elements (LINE) family appear to remain active in the genomes of some species. In humans, they are functionally important within the hippocampus, a brain structure that supports complex cognitive processes. When the results of molecular analysis of two species of octopus—an animal known for its intelligence—were announced in 2022, the confirmation of a LINE transposon in *Octopus vulgaris* and *Octopus bimaculoides* genomes prompted researchers to hypothesize that that transposon family is tied to a species’ capacity for advanced cognition.

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

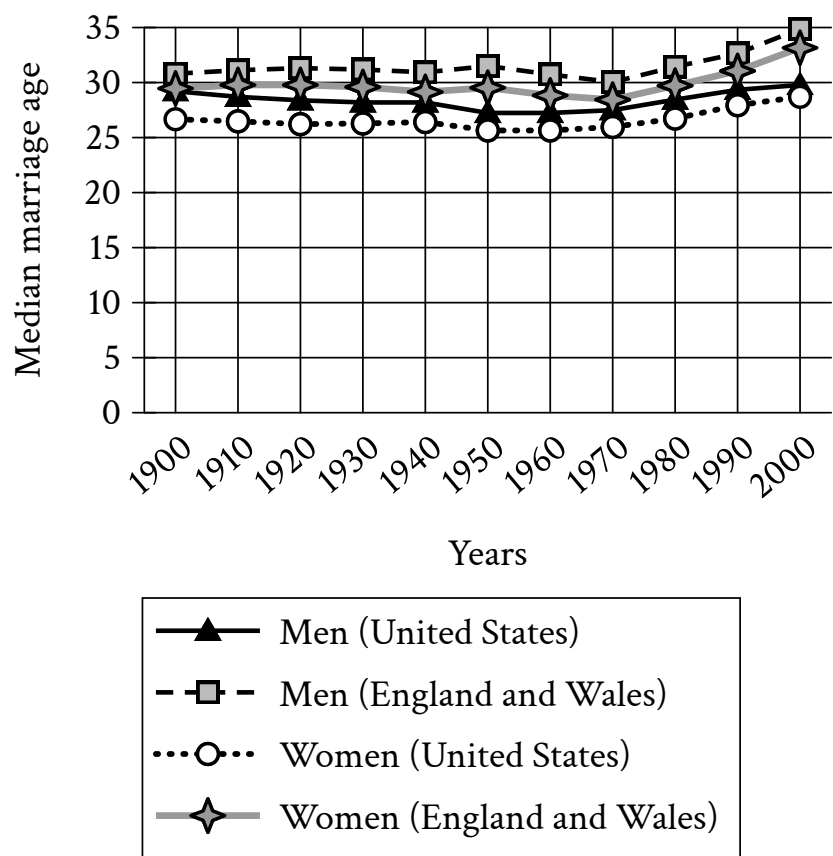
- A. The LINE transposon in *O. vulgaris* and *O. bimaculoides* genomes is active in an octopus brain structure that functions similarly to the human hippocampus.
- B. The human genome contains multiple transposons from the LINE family that are all primarily active in the hippocampus.
- C. A consistent number of copies of LINE transposons is present across the genomes of most octopus species, with few known corruptions.
- D. *O. vulgaris* and *O. bimaculoides* have smaller brains than humans do relative to body size, but their genomes contain sequences from a wider variety of transposon families.

Question ID 835d21b2

Assessment	Test	Domain	Skill	Difficulty
SAT	Reading and Writing	Information and Ideas	Command of Evidence	<div><div></div><div></div><div></div></div>

ID: 835d21b2

Median Ages of First Marriage for Men and Women in the United States and in England and Wales, 1900–2000



A sociology student is reading an essay on the median age of first marriage in Western countries throughout the twentieth century. The author of the essay cites factors common to these countries that the author believes caused an increase in the median age of first marriage, such as new technologies that shortened the time needed for domestic chores, making two-person households less necessary and living alone more viable. The student asserts that beyond these factors there must be additional ones specific to particular Western countries that influenced the increase of age at first marriage.

Which choice most effectively uses data from the graph that support the student’s assertion?

- A. Between 1970 and 2000, the median age of first marriage rose more sharply for men in England and Wales than it did for men in the United States.
- B. The median age of first marriage for men in England and Wales was lower in 1970 than in 1950 or 1990.

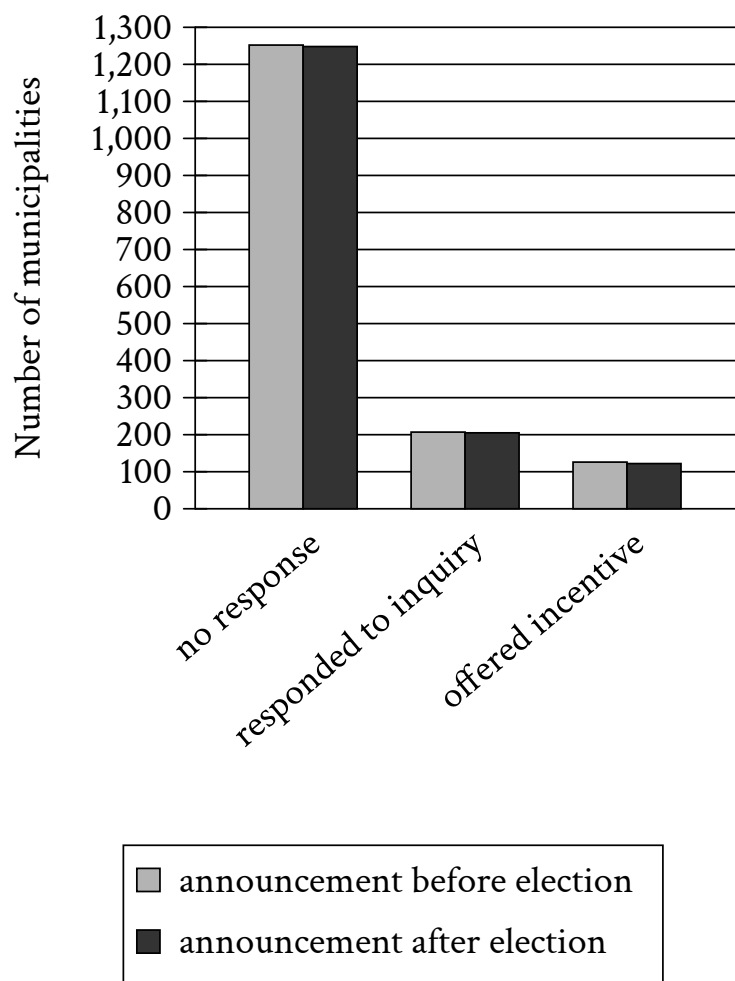
- C. Between 1900 and 2000, the median age of first marriage for women in England and Wales was consistently higher than for women in the United States, as was the case for men.
- D. In England and Wales, the median age of first marriage was consistently higher for men than for women between 1900 and 2000, but this was not always the case in the United States.

Question ID e038ac56

Assessment	Test	Domain	Skill	Difficulty
SAT	Reading and Writing	Information and Ideas	Command of Evidence	<div><div></div><div></div><div></div></div>

ID: e038ac56

Municipalities’ Responses to Inquiries about Potential Incentives for Firm



In the United States, firms often seek incentives from municipal governments to expand to those municipalities. A team of political scientists hypothesized that municipalities are much more likely to respond to firms and offer incentives if expansions can be announced in time to benefit local elected officials than if they can’t. The team contacted officials in thousands of municipalities, inquiring about incentives for a firm looking to expand and indicating that the firm would announce its expansion on a date either just before or just after the next election.

Which choice best describes data from the graph that weaken the team’s hypothesis?

- A. A large majority of the municipalities that received an inquiry mentioning plans for an announcement before the next election didn’t respond to the inquiry.

- B. The proportion of municipalities that responded to the inquiry or offered incentives didn't substantially differ across the announcement timing conditions.
- C. Only around half the municipalities that responded to inquiries mentioning plans for an announcement before the next election offered incentives.
- D. Of the municipalities that received an inquiry mentioning plans for an announcement date after the next election, more than 1,200 didn't respond and only around 100 offered incentives.

Question ID d014df3c

Assessment	Test	Domain	Skill	Difficulty
SAT	Reading and Writing	Information and Ideas	Command of Evidence	<div><div></div><div></div><div></div></div>

ID: d014df3c

The Intertropical Convergence Zone (ITCZ), a band of clouds that encircles Earth in the tropics and is a major rainfall source, shifts position in response to temperature variations across Earth’s hemispheres. Data from Huagapo Cave in Peru suggest the ITCZ shifted south during the Little Ice Age (circa 1300–1850), but a shift as far into South America as Huagapo should have led to dry conditions in Central America, which is inconsistent with climate models. To resolve the issue, geologist Yemane Asmerom and colleagues collected data from Yok Balum Cave in Central America and compared them with the Huagapo data. They concluded that during the Little Ice Age, the ITCZ may have expanded northward and southward rather than simply shifted.

Which finding from Asmerom and colleagues’ study, if true, would most directly support their conclusion?

- A. Neither the Yok Balum data nor the Huagapo data show significant local variations in temperature during the Little Ice Age.
- B. Both the Yok Balum data and the Huagapo data show increased temperatures and prolonged dry conditions during the Little Ice Age.
- C. The Yok Balum data show prolonged dry conditions during the same portions of the Little Ice Age in which the Huagapo data show heightened levels of rainfall.
- D. The Yok Balum data and the Huagapo data show strongly correlated patterns of high rainfall during the Little Ice Age.

Question ID 2ee45938

Assessment	Test	Domain	Skill	Difficulty
SAT	Reading and Writing	Information and Ideas	Command of Evidence	<div><div></div><div></div><div></div></div>

ID: 2ee45938

Gorgets, or necklaces with large pendants, have been part of the ceremonial attire of tribes from the US Southeast for centuries. One of the oldest examples, the Fairfield Gorget, was found in Fairfield, Missouri, in 1958. Its overall design resembles that of other art from the region during the Mississippian period (900–1600 CE). Yet the image on the gorget is of a jaguar—a species whose range doesn’t extend to Missouri. Jaguar images are common in ancient Mexican art, and Mexico lies squarely in the species’ range. Therefore, some scholars argue that long-distance trade in Mexican art objects brought the imagery to Missouri, where a local artist could have adopted it and incorporated it into the Fairfield Gorget.

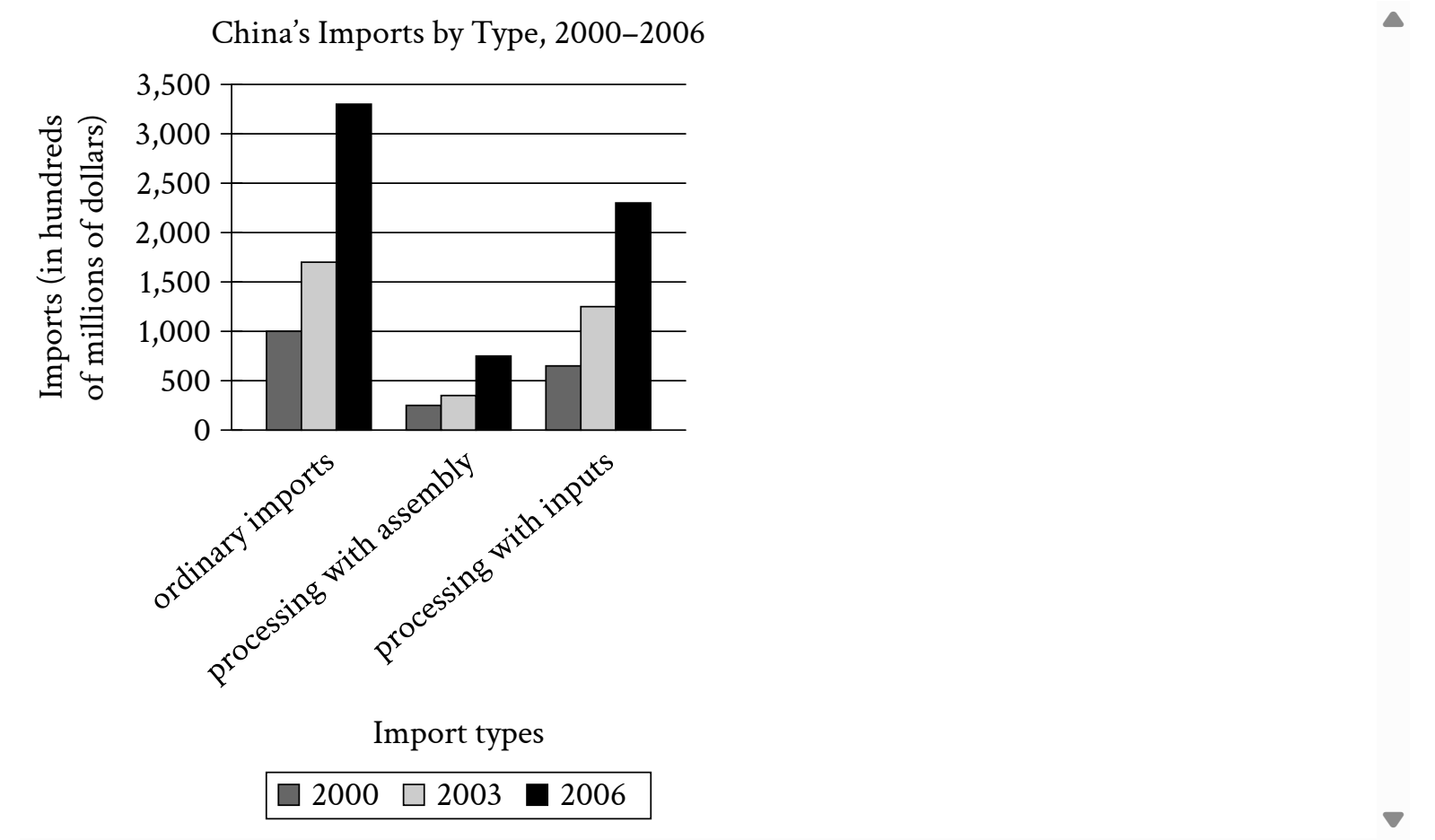
Which finding, if true, would most strongly support the underlined explanation?

- A. The Fairfield Gorget is dated not to the Mississippian period but instead to the earlier Woodland period, which ended around 900 CE.
- B. The range of the jaguar is shown to have expanded dramatically after the Mississippian period came to a close around 1600 CE.
- C. An ancient Mexican art object is found at a site that dates to the Mississippian period and is close to where the Fairfield Gorget was found.
- D. Certain works by present-day artists from Southeastern tribes reflect outside cultural influences, including contemporary Mexican art.

Question ID 11c970bc

Assessment	Test	Domain	Skill	Difficulty
SAT	Reading and Writing	Information and Ideas	Command of Evidence	<div><div></div><div></div><div></div></div>

ID: 11c970bc



A student is researching the Chinese government’s 1992 shift to a market economy that emphasizes trade liberalization. One means of trade liberalization involves expanding from ordinary imports into an emphasis on processing imports, which have two types: processing with assembly (in which a firm obtains raw materials from a foreign trading partner without payment and sells the final goods to that partner, charging for assembly) and processing with inputs (in which a firm expends capital to buy raw materials from a trading partner, processes them into final goods, and sells those goods to whichever trading partner it chooses). The student asserts that while initial efforts at trade liberalization were shaped by Chinese firms’ limited capital, this situation resolved during the 2000s.

- Which choice best describes data from the graph that support the student’s assertion?
- A. Processing imports with inputs were greater than both ordinary imports and processing imports with assembly in 2006.
 - B. From 2000 to 2006, processing imports with inputs rose much more sharply than processing imports with assembly did.
 - C. From 2000 to 2006, neither processing imports with inputs nor processing imports with assembly were greater than ordinary imports.

D. Processing imports with assembly were greater in 2006 than processing imports with inputs in 2000.

Question ID fb2bb280

Assessment	Test	Domain	Skill	Difficulty
SAT	Reading and Writing	Information and Ideas	Command of Evidence	<div><div></div><div></div><div></div></div>

ID: fb2bb280

Simulated Change in Annual Aquifer Input and Irrigation Output if Precipitation Concentration Increases as Climate Models Predict

Baseline concentration of annual precipitation	% change in water entering aquifers	% change in surface water used for irrigation	% change in groundwater used for irrigation
Precipitation is currently somewhat concentrated	4.9	0.4	0.9
Precipitation is currently evenly distributed	11.0	9.0	7.9

Some climate models for the western United States predict that while total annual precipitation may remain unchanged from the present level, precipitation will become concentrated into fewer but more intense rain and snow events. University of Texas climate scientist Geeta Persad and her colleagues simulated how the amount of water entering aquifers and the amount being used for irrigation purposes would change if this were to occur. Persad and her colleagues concluded that concentration of precipitation into fewer events would result in a higher number of dry days, triggering more irrigation, but that this change in irrigation output is highly sensitive to the baseline concentration of precipitation that currently exists in an area.

Which choice best describes data from the table that support Persad and her colleagues’ conclusion?

- A. If baseline precipitation is somewhat concentrated, the amount of water being used for irrigation will increase 0.4% for surface water and 0.9% for groundwater, whereas the amount of water entering aquifers will increase 11.0% if baseline precipitation is evenly distributed.
- B. If baseline precipitation is somewhat concentrated, water use for irrigation will increase only slightly, whereas it will increase 9.0% for surface water and 7.9% for groundwater if baseline precipitation is evenly distributed.
- C. If baseline precipitation is somewhat concentrated, the amount of water entering aquifers will increase 4.9%, while the amount being used for irrigation will increase 0.4% for surface water and 0.9% for groundwater.
- D. If baseline precipitation is somewhat concentrated, water use for irrigation will decline by a small amount, whereas it will increase 11.0% for surface water and 9.0% for groundwater if baseline precipitation is evenly distributed.

Question ID f5251eec

Assessment	Test	Domain	Skill	Difficulty
SAT	Reading and Writing	Information and Ideas	Command of Evidence	<div><div></div><div></div><div></div></div>

ID: f5251eec

Under normal atmospheric pressure at Earth’s surface, water molecules form a tetrahedral network stabilized by hydrogen bonds between adjacent molecules. Extreme high pressure, such as can be found in deep ocean waters, destabilizes these bonds and compresses water’s structure, allowing water molecules within organisms to permeate proteins and impede crucial biological functions; yet deep-sea organisms known as piezophiles have adapted to extreme pressure. Studies have found a positive correlation between the depths that various piezophiles inhabit and concentrations of a compound called trimethylamine N-oxide (TMAO) in their muscle tissues, which has led a team of researchers to hypothesize that TMAO reduces water’s compressibility.

- Which finding, if true, would most directly support the researchers’ hypothesis?
- A. Water molecules are found to be impervious to TMAO even when the water molecules’ tetrahedral configuration has been distorted by high pressure.
 - B. Examination of TMAO’s molecular structure shows that TMAO molecules retain their shape even as pressure increases.
 - C. A positive correlation is found between concentrations of TMAO and the rate at which water’s molecular structure compresses as pressure increases.
 - D. Analysis of water’s molecular structure under high pressure reveals that hydrogen bonds are more stable when TMAO is present than when it is not.

Question ID 828e9662

Assessment	Test	Domain	Skill	Difficulty
SAT	Reading and Writing	Information and Ideas	Command of Evidence	<div><div></div><div></div><div></div></div>

ID: 828e9662

While attending school in New York City in the 1980s, Okwui Enwezor encountered few works by African artists in exhibitions, despite New York’s reputation as one of the best places to view contemporary art from around the world. According to an arts journalist, later in his career as a renowned curator and art historian, Enwezor sought to remedy this deficiency, not by focusing solely on modern African artists, but by showing how their work fits into the larger context of global modern art and art history.

Which finding, if true, would most directly support the journalist’s claim?

- A. As curator of the Haus der Kunst in Munich, Germany, Enwezor organized a retrospective of Ghanaian sculptor El Anatsui’s work entitled *El Anatsui: Triumphant Scale*, one of the largest art exhibitions devoted to a Black artist in Europe’s history.
- B. In the exhibition *Postwar: Art Between the Pacific and the Atlantic, 1945–1965*, Enwezor and cocurator Katy Siegel brought works by African artists such as Malangatana Ngwenya together with pieces by major figures from other countries, like US artist Andy Warhol and Mexico’s David Siqueiros.
- C. Enwezor’s work as curator of the 2001 exhibition *The Short Century: Independence and Liberation Movements in Africa, 1945–1994* showed how African movements for independence from European colonial powers following the Second World War profoundly influenced work by African artists of the period, such as Kamala Ibrahim Ishaq and Thomas Mukarobgwa.
- D. Enwezor organized the exhibition *In/sight: African Photographers, 1940 to the Present* not to emphasize a particular aesthetic trend but to demonstrate the broad range of ways in which African artists have approached the medium of photography.

Question ID 9f901f94

Assessment	Test	Domain	Skill	Difficulty
SAT	Reading and Writing	Information and Ideas	Command of Evidence	<div><div></div><div></div><div></div></div>

ID: 9f901f94

Ablation Rates for Three Elements in
Cosmic Dust, by Dust Source

Element	SPC	AST	HTC	OCC
iron	20%	28%	90%	98%
potassium	44%	74%	97%	100%
sodium	45%	75%	99%	100%

Earth’s atmosphere is bombarded by cosmic dust originating from several sources: short-period comets (SPCs), particles from the asteroid belt (ASTs), Halley-type comets (HTCs), and Oort cloud comets (OCCs). Some of the dust’s material vaporizes in the atmosphere in a process called ablation, and the faster the particles move, the higher the rate of ablation. Astrophysicist Juan Diego Carrillo-Sánchez led a team that calculated average ablation rates for elements in the dust (such as iron and potassium) and showed that material in slower-moving SPC or AST dust has a lower rate than the same material in faster-moving HTC or OCC dust. For example, whereas the average ablation rate for iron from AST dust is 28%, the average rate for _____

Which choice most effectively uses data from the table to complete the example?

- A. iron from SPC dust is 20%.
- B. sodium from OCC dust is 100%.
- C. iron from HTC dust is 90%.
- D. sodium from AST dust is 75%.

Question ID c9bdb464

Assessment	Test	Domain	Skill	Difficulty
SAT	Reading and Writing	Information and Ideas	Command of Evidence	<div><div></div><div></div><div></div></div>

ID: c9bdb464

Linguist Deborah Tannen has cautioned against framing contentious issues in terms of two highly competitive perspectives, such as pro versus con. According to Tannen, this debate-driven approach can strip issues of their complexity and, when used in front of an audience, can be less informative than the presentation of multiple perspectives in a noncompetitive format. To test Tannen’s hypothesis, students conducted a study in which they showed participants one of three different versions of local news commentary about the same issue. Each version featured a debate between two commentators with opposing views, a panel of three commentators with various views, or a single commentator.

Which finding from the students’ study, if true, would most strongly support Tannen’s hypothesis?

- A. On average, participants perceived commentators in the debate as more knowledgeable about the issue than commentators in the panel.
- B. On average, participants perceived commentators in the panel as more knowledgeable about the issue than the single commentator.
- C. On average, participants who watched the panel correctly answered more questions about the issue than those who watched the debate or the single commentator did.
- D. On average, participants who watched the single commentator correctly answered more questions about the issue than those who watched the debate did.

Question ID a36910a5

Assessment	Test	Domain	Skill	Difficulty
SAT	Reading and Writing	Information and Ideas	Command of Evidence	<div><div></div><div></div><div></div></div>

ID: a36910a5

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

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

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

Question ID 75b8b0d2

Assessment	Test	Domain	Skill	Difficulty
SAT	Reading and Writing	Information and Ideas	Command of Evidence	<div><div></div><div></div><div></div></div>

ID: 75b8b0d2

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

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

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

Question ID fe1dff2c

Assessment	Test	Domain	Skill	Difficulty
SAT	Reading and Writing	Information and Ideas	Command of Evidence	<div><div></div><div></div><div></div></div>

ID: fe1dff2c

Political scientists who favor the traditional view of voter behavior claim that voting in an election does not change a voter’s attitude toward the candidates in that election. Focusing on each US presidential election from 1976 to 1996, Ebonya Washington and Sendhil Mullainathan tested this claim by distinguishing between subjects who had just become old enough to vote (around half of whom actually voted) and otherwise similar subjects who were slightly too young to vote (and thus none of whom voted). Washington and Mullainathan compared the attitudes of the groups of subjects toward the winning candidate two years after each election.

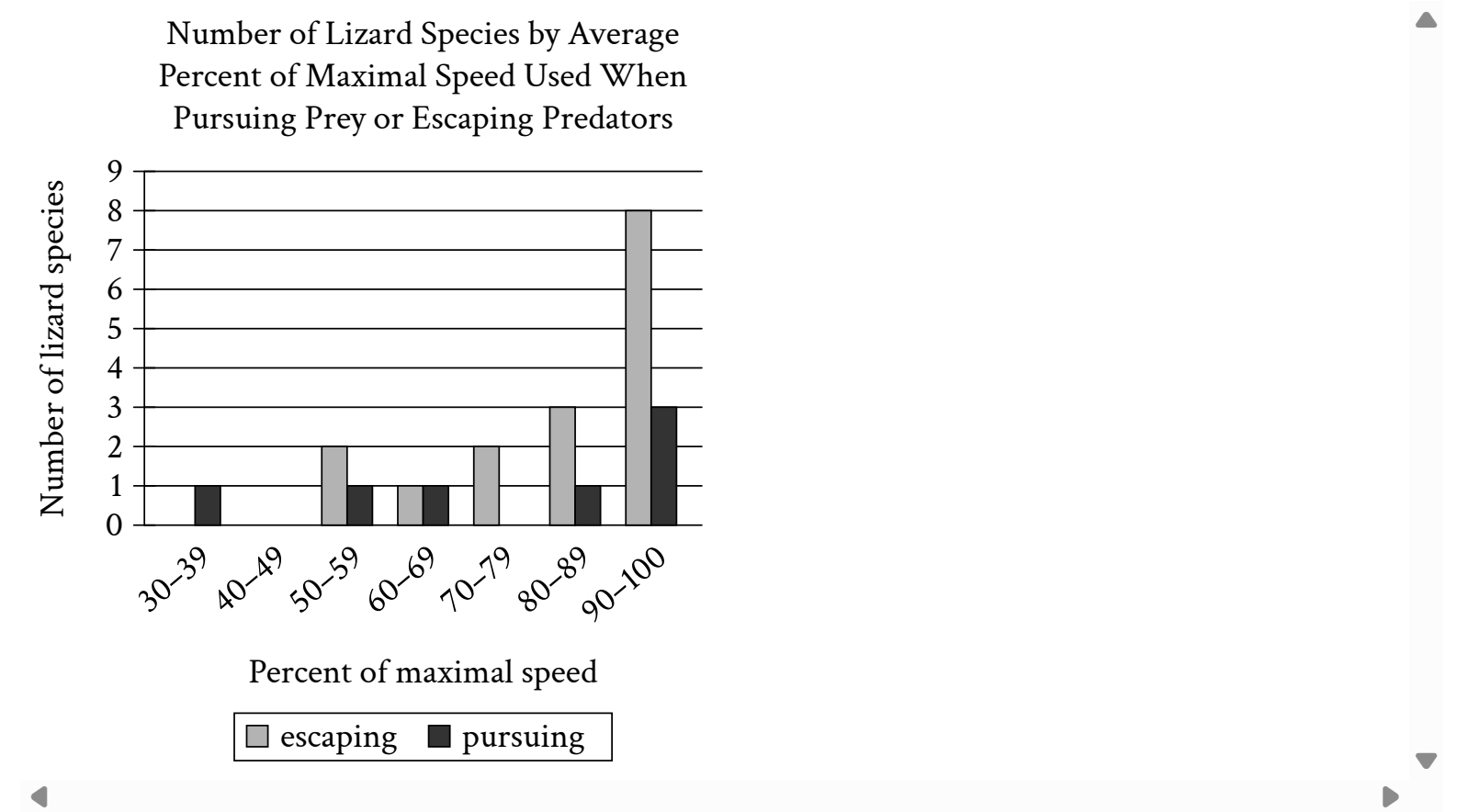
Which finding from Washington and Mullainathan’s study, if true, would most directly weaken the claim made by people who favor the traditional view of voter behavior?

- A. Subjects’ attitudes toward the winning candidate two years after a given election were strongly predicted by subjects’ general political orientation, regardless of whether subjects were old enough to vote at the time of the election.
- B. Subjects who were not old enough to vote in a given election held significantly more positive attitudes towards the winning candidate two years later than they held at the time of the election.
- C. Subjects who voted in a given election held significantly more polarized attitudes toward the winning candidate two years later than did subjects who were not old enough to vote in that election.
- D. Two years after a given election, subjects who voted and subjects who were not old enough to vote were significantly more likely to express negative attitudes than positive attitudes toward the winning candidate in that election.

Question ID cc4badba

Assessment	Test	Domain	Skill	Difficulty
SAT	Reading and Writing	Information and Ideas	Command of Evidence	<div><div></div><div></div><div></div></div>

ID: cc4badba



It may seem that the optimal strategy for an animal pursuing prey or escaping predators is to move at maximal speed, but the energy expense of exploiting full speed capacity can disfavor such a strategy even in escape contexts, as evidenced by the fact that _____

- Which choice most effectively uses data from the graph to complete the text?
- A. most lizard species use about the same percentage of their maximal speed when escaping predation as they do when pursuing prey.
 - B. multiple lizard species move at an average of less than 90% of their maximal speed while escaping predation.
 - C. more lizard species use, on average, 90%–100% of their maximal speed while escaping predation than use any other percentage of their maximal speed.
 - D. at least 4 lizard species use, on average, less than 100% of their maximal speed while pursuing prey.

Question ID 0b28cf7c

Assessment	Test	Domain	Skill	Difficulty
SAT	Reading and Writing	Information and Ideas	Command of Evidence	<div><div></div><div></div><div></div></div>

ID: 0b28cf7c

Mean Time (in Seconds) Spent per Flower for Four Pollinator Genera

Pollinator genus	Seconds per intact pin flower	Seconds per damaged pin flower	Seconds per intact thrum flower	Seconds per damaged thrum flower
<i>Habropoda</i>	2.7	5.4	4.1	9.5
<i>Osmia</i>	5.2	8.2	7.1	8.3
<i>Pierid</i>	2.6	4.0	2.4	1.9
<i>Xylocopa</i>	2.3	2.8	2.5	2.2

To study how floral damage affects the behavior of pollinators, such as bees, a team of researchers punched holes in the floral tissue of flowers from the vine yellow jessamine (*Gelsemium sempervirens*), a plant that produces flowers that have either a long pistil and a short stamen (pin morphs) or a short pistil and a long stamen (thrum morphs). The researchers then compared the time different insect pollinators spent visiting intact pin and thrum flowers to the time such pollinators spent visiting the artificially damaged pin and thrum flowers. The researchers concluded that the effect of floral damage on time spent per flower varied by both floral morph and the genus of the pollinator.

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

- A. For pin flowers, damage led to longer times per flower in all pollinator genera, whereas for thrum flowers, damage led to longer times per flower only in *Habropoda* and *Osmia*.
- B. Compared with pollinators belonging to the genus *Osmia*, pollinators belonging to the genus *Xylocopa* spent less time on damaged pin flowers but more time on damaged thrum flowers.
- C. Damage led to shorter times per thrum flower in three pollinator genera (*Osmia*, *Pierid*, and *Xylocopa*), whereas it led to longer times per thrum flower in one pollinator genus (*Habropoda*).
- D. Pollinators belonging to the genus *Habropoda* spent 2.7 seconds on intact pin flowers and 4.1 seconds on intact thrum flowers.

Question ID db864d5f

Assessment	Test	Domain	Skill	Difficulty
SAT	Reading and Writing	Information and Ideas	Command of Evidence	<div><div></div><div></div><div></div></div>

ID: db864d5f

O Pioneers! is a 1913 novel by Willa Cather. In the novel, Cather depicts Alexandra Bergson as a person who takes comfort in understanding the world around her: _____

Which quotation from *O Pioneers!* most effectively illustrates the claim?

- A. "She looked fixedly up the bleak street as if she were gathering her strength to face something, as if she were trying with all her might to grasp a situation which, no matter how painful, must be met and dealt with somehow."
- B. "She had never known before how much the country meant to her. The chirping of the insects down in the long grass had been like the sweetest music. She had felt as if her heart were hiding down there, somewhere, with the quail and the plover and all the little wild things that crooned or buzzed in the sun. Under the long shaggy ridges, she felt the future stirring."
- C. "Alexandra drove off alone. The rattle of her wagon was lost in the howling of the wind, but her lantern, held firmly between her feet, made a moving point of light along the highway, going deeper and deeper into the dark country."
- D. "Alexandra drew her shawl closer about her and stood leaning against the frame of the mill, looking at the stars which glittered so keenly through the frosty autumn air. She always loved to watch them, to think of their vastness and distance, and of their ordered march. It fortified her to reflect upon the great operations of nature, and when she thought of the law that lay behind them, she felt a sense of personal security."

Question ID d8e0ab29

Assessment	Test	Domain	Skill	Difficulty
SAT	Reading and Writing	Information and Ideas	Command of Evidence	<div><div></div><div></div><div></div></div>

ID: d8e0ab29

Average Nitrate and Phosphate Concentrations in Seawater after Volcanic Eruption

Nutrient	Seawater in lava-affected area, 5–45 meters below surface	Seawater in lava-affected area, 75–125 meters below surface	Seawater outside of lava-affected area, 5–45 meters below surface	Seawater outside of lava-affected area, 75–125 meters below surface
Nitrate (micromoles per liter)	3.1	0.4	≤0.03	≤0.01
Phosphate (micromoles per liter)	0.17	0.09	0.14	0.06

After a volcanic eruption spilled lava into North Pacific Ocean waters, a dramatic increase of diatoms (a kind of phytoplankton) near the surface occurred. Scientists assumed the diatoms were thriving on nutrients such as phosphate from the lava, but analysis showed these nutrients weren't present near the surface in forms diatoms can consume. However, there was an abundance of usable nitrate, a nutrient usually found in much deeper water and almost never found in lava. Microbial oceanographer Sonya Dyhrman and colleagues believe that as the lava plunged nearly 300 meters below the surface it dislodged pockets of this nutrient, releasing it to float upward, given that _____

Which choice most effectively uses data from the table to complete the statement?

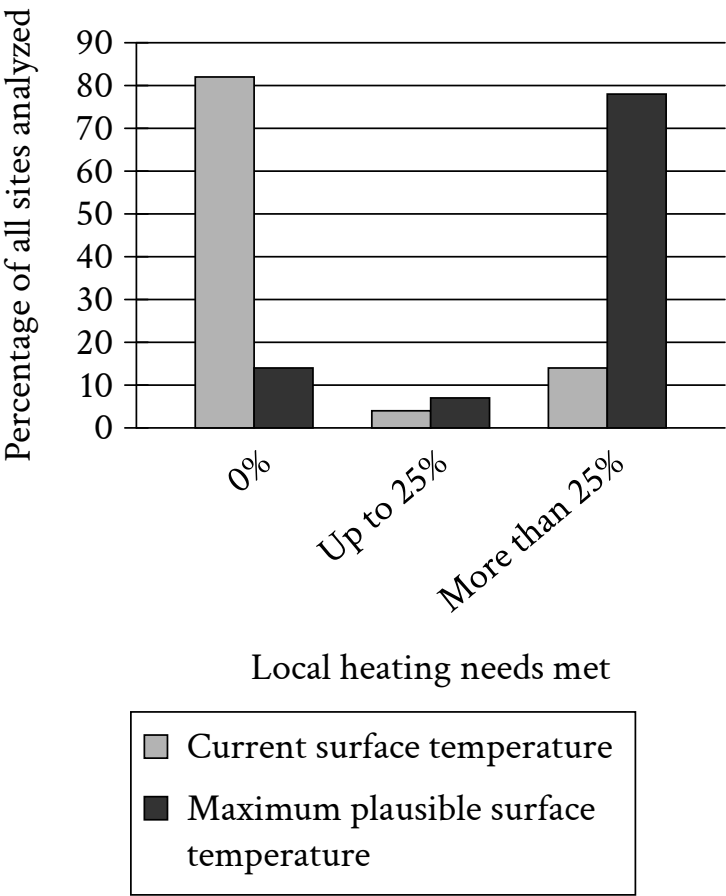
- A. at 5–45 meters below the surface, the average concentration of phosphate was about the same in the seawater in the lava-affected area as in the seawater outside of the lava-affected area.
- B. for both depth ranges measured, the average concentrations of nitrate were substantially higher in the seawater in the lava-affected area than in the seawater outside of the lava-affected area.
- C. for both depth ranges measured in the seawater in the lava-affected area, the average concentrations of nitrate were substantially higher than the average concentrations of phosphate.
- D. in the seawater outside of the lava-affected area, there was little change in the average concentration of nitrate from 75–125 meters below the surface to 5–45 meters below the surface.

Question ID a2441389

Assessment	Test	Domain	Skill	Difficulty
SAT	Reading and Writing	Information and Ideas	Command of Evidence	<div><div></div><div></div><div></div></div>

ID: a2441389

Home Heating Needs Met with Subsurface Thermal Pollution for Two Temperature Conditions, by Percentage of Sites



Urbanization, industrialization, and the warming climate create thermal pollution (excess heat) in the shallow subsurface soil. Susanne A. Benz and colleagues analyzed thousands of sites on three continents under one scenario in which surface temperature remains at the current level and under another in which the surface reaches the maximum plausible temperature. They then categorized each site according to the percentage of local home heating needs that could be met using this excess subsurface heat. The team concluded that if surface temperature approaches the maximum plausible level, the percentage of sites where thermal pollution could feasibly contribute to meeting home heating needs will increase.

Which choice best describes data in the graph that support Benz and colleagues’ conclusion?

- A. Under both temperature conditions, less than 10% of sites were in the up-to-25% group, but at the maximum plausible surface temperature, almost 80% of sites could have all their local heating needs met by thermal pollution.

- B. At current surface temperatures, more than 80% of the sites have no need for supplemental local home heating from subsurface thermal pollution, but at the maximum plausible surface temperature, more than 70% of sites exhibit significantly greater home heating needs.
- C. At current surface temperatures, more than 80% of sites can meet, at most, 25% of local home heating needs with subsurface thermal pollution, but at the maximum plausible surface temperature, more than 80% of sites can meet greater than 25% of local home heating needs.
- D. At current surface temperatures, more than 80% of the sites cannot use subsurface thermal pollution to meet any portion of local home heating needs, but at the maximum plausible surface temperature, that percentage drops below 20%.

Question ID af80d661

Assessment	Test	Domain	Skill	Difficulty
SAT	Reading and Writing	Information and Ideas	Command of Evidence	<div><div></div><div></div><div></div></div>

ID: af80d661

Although it’s clear that Mars once had liquid water on its surface, astronomers have debated whether the evidence of ancient water reflects a prolonged phase of warm, wet conditions—the so-called wet and warm scenario—or a brief period of melting in an otherwise consistently frozen environment. Researchers Benjamin T. Cardenas and Michael P. Lamb recently added to this debate by using data from NASA and the Mars Orbiter Laser Altimeter to map the topography of what is now a large basin in Mars’s northern hemisphere. Cardenas and Lamb concluded that the wet and warm scenario is likely correct.

Which finding about the basin, if true, would most directly support Cardenas and Lamb’s conclusion?

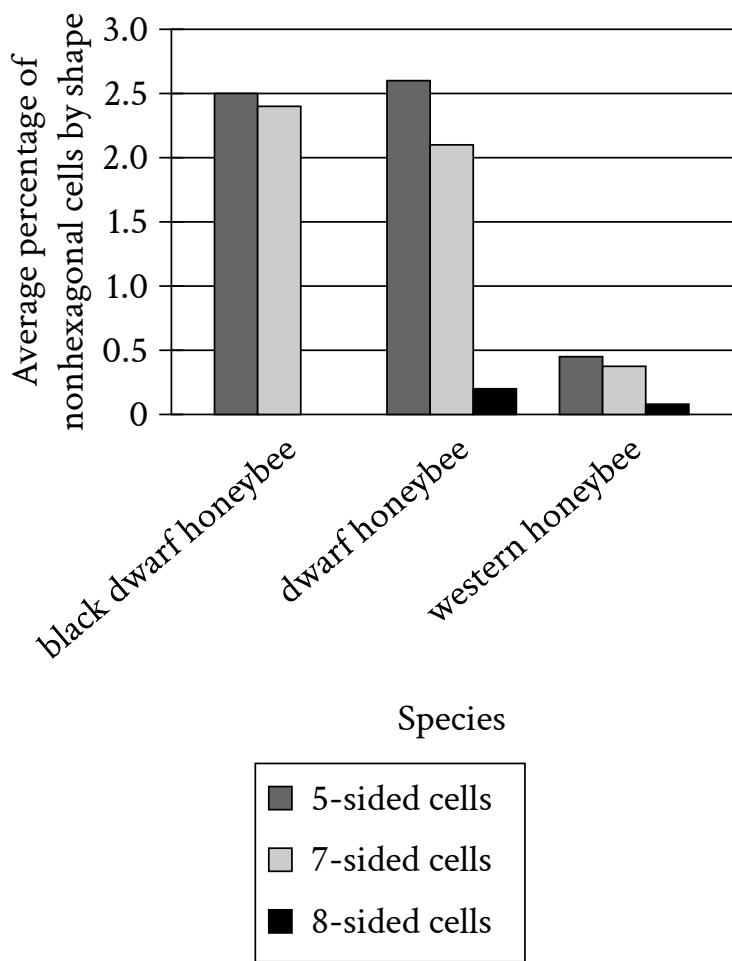
- A. Its dimensions and shape indicate that it is unlikely to have formed as the result of an asteroid or comet impact.
- B. It has features suggesting that it once held an ocean that underwent gradual sea-level changes over an extended time.
- C. Its physical characteristics are most consistent with it having formed as a result of a massive but short-lived influx of liquid water.
- D. It is surrounded by channels that could have been formed either by running water or by flowing lava.

Question ID 5b968af0

Assessment	Test	Domain	Skill	Difficulty
SAT	Reading and Writing	Information and Ideas	Command of Evidence	<div><div></div><div></div><div></div></div>

ID: 5b968af0

Percentage of Nonhexagonal Cells in Hives of Three Honeybee Species



Honeybee hives consist mainly of hexagonal (six-sided) units called cells, in which queens lay eggs. Hexagonal cells for eggs that develop into nonreproductive workers are smaller than those for eggs that develop into reproductive drones, though the size difference varies by species. Difference in cell size results in a construction problem—it’s hard to neatly connect sections of small cells to sections of large cells—that worsens as the difference increases. To fill in gaps between the sections when building a hive, bees rely on cells that have more or fewer than six sides. A student studying beehive structure consults data on three species, concluding that _____

Which choice most effectively uses data from the graph to complete the student’s conclusion?

- A. cells for worker eggs are probably closer in size to cells for drone eggs in the hives of the western honeybee than in the hives of the dwarf honeybee and the black dwarf honeybee.

- B. both the western honeybee and the black dwarf honeybee probably reserve eight-sided cells for drone eggs, while the dwarf honeybee likely deposits drone eggs in seven-sided cells.
- C. the western honeybee probably relies on many more geometrical shapes when constructing cells than either the dwarf honeybee or the black dwarf honeybee does.
- D. the percentage of hexagonal cells is probably slightly lower in the hives of the western honeybee than in the hives of the dwarf honeybee and the black dwarf honeybee.

Question ID ef3ea612

Assessment	Test	Domain	Skill	Difficulty
SAT	Reading and Writing	Information and Ideas	Command of Evidence	<div><div></div><div></div><div></div></div>

ID: ef3ea612

In 1534 CE, King Henry VIII of England split with the Catholic Church and declared himself head of the Church of England, in part because Pope Clement VII refused to annul his marriage to Catherine of Aragon. Two years later, Henry VIII introduced a policy titled the Dissolution of the Monasteries that by 1540 had resulted in the closure of all Catholic monasteries in England and the confiscation of their estates. Some historians assert that the enactment of the policy was primarily motivated by perceived financial opportunities.

Which quotation from a scholarly article best supports the assertion of the historians mentioned in the text?

- A. "At the time of the Dissolution of the Monasteries, about 2 percent of the adult male population of England were monks; by 1690, the proportion of the adult male population who were monks was less than 1 percent."
- B. "A contemporary description of the Dissolution of the Monasteries, Michael Sherbrook's *Falle of the Religious Howses*, recounts witness testimony that monks were allowed to keep the contents of their cells and that the monastery timber was purchased by local yeomen."
- C. "In 1535, the year before enacting the Dissolution of the Monasteries, Henry commissioned a survey of the value of church holdings in England—the work, performed by sheriffs, bishops, and magistrates, began that January and was swiftly completed by the summer."
- D. "The October 1536 revolt known as the Pilgrimage of Grace had several economic motives: high food prices due to a poor harvest the prior year; the Dissolution of the Monasteries, which closed reliable sources of food and shelter for many; and rents and taxes throughout Northern England that were not merely high but predatory."

Question ID cf3e08b2

Assessment	Test	Domain	Skill	Difficulty
SAT	Reading and Writing	Information and Ideas	Command of Evidence	<div><div></div><div></div><div></div></div>

ID: cf3e08b2

The presence of other individuals of the same species has been observed to mitigate stress in highly social mammals. To investigate whether this phenomenon, known as social buffering, also occurs in reptiles, researchers led by Chelsea E. Martin monitored stress responses in wild southern Pacific rattlesnakes (*Crotalus helleri*) in three experimental treatments: when alone, with a rope, and with a companion *C. helleri*. The researchers compared the percent change between baseline and peak heart rate in response to a (harmless) disturbance, with higher values indicating higher stress levels.

Which finding, if true, would most directly support the idea that social buffering occurs among *C. helleri*?

- A. The average percent change in heart rate was lower among *C. helleri* with a companion than among solitary *C. helleri* and *C. helleri* with a rope.
- B. Average peak heart rates were highest among solitary *C. helleri*, but no differences were observed in average peak heart rates between *C. helleri* with a companion and *C. helleri* with a rope.
- C. *C. helleri* with a companion displayed a lower average baseline heart rate and lower average peak heart rate than did solitary *C. helleri* or *C. helleri* with a rope.
- D. Solitary *C. helleri* had higher average baseline heart rates than did *C. helleri* in the other treatments, but the average percent change in heart rate was smaller among solitary *C. helleri* than among *C. helleri* with a companion.

Question ID a9a21790

Assessment	Test	Domain	Skill	Difficulty
SAT	Reading and Writing	Information and Ideas	Command of Evidence	<div><div></div><div></div><div></div></div>

ID: a9a21790

A student in a political science course is writing a paper on Aristotle's *The Politics*, in which Aristotle offers his opinion on political instability and gives advice on how constitutions can be preserved. Aristotle observes that different forms of government can fall in different ways—for example, oligarchies might grant power to military leaders during wartime who refuse to relinquish that power during peacetime—but some methods of preserving order apply across all forms of government. The student claims that in particular Aristotle asserts that in a healthy state obedience to law must be as close to absolute as possible and that even minor infractions should not be ignored.

Which quotation from a philosopher’s analysis of *The Politics* would best support the student’s claim?

- A. “When constructing his argument regarding the characteristics of a well-functioning government, Aristotle asserts that ‘Transgression creeps in unperceived and at last ruins the state,’ illustrating this idea with a comparison to frequent small expenditures slowly and almost imperceptibly chipping away at a fortune until it is ultimately depleted.”
- B. “When Aristotle writes on the necessity of avoiding corruption in government, he proposes that ‘every state should be so administered and so regulated by law that its magistrates cannot possibly make money.’ In particular, he thinks oligarchies are particularly susceptible to corruption through bribery.”
- C. “When Aristotle considers the health of constitutions, he states that ‘Constitutions are preserved when their destroyers are at a distance, and sometimes also because they are near, for the fear of them makes the government keep in hand the constitution.’ He holds that rulers who wish to see constitutions preserved must continually remind the populace of the dangers that would result from a constitutional collapse.”
- D. “When contrasting different forms of government, Aristotle holds that ‘oligarchies may last, not from any inherent stability in such forms of government, but because the rulers are on good terms both with the unenfranchised and with the governing classes.’ That is, oligarchic leaders who wish to hold on to power will introduce members of disenfranchised classes into government in a participatory role.”

Question ID 90181343

Assessment	Test	Domain	Skill	Difficulty
SAT	Reading and Writing	Information and Ideas	Command of Evidence	<div><div></div><div></div><div></div></div>

ID: 90181343

In countries with right-hand traffic, drivers who want to make a left turn at a traffic intersection with stoplights have to wait for either a gap in oncoming traffic or a designated left-turn signal to turn green. At busy intersections, this often causes a backup of vehicles waiting to turn left or being prevented from proceeding by left-turning vehicles in front of them. Transportation researcher Vikash V. Gayah claims that in urban areas eliminating the option to turn left at busy intersections—both with and without dedicated left-turn signals—would improve traffic flow and, as a result, reduce overall travel times even if such a restriction would require drivers to sometimes travel a slightly longer distance.

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

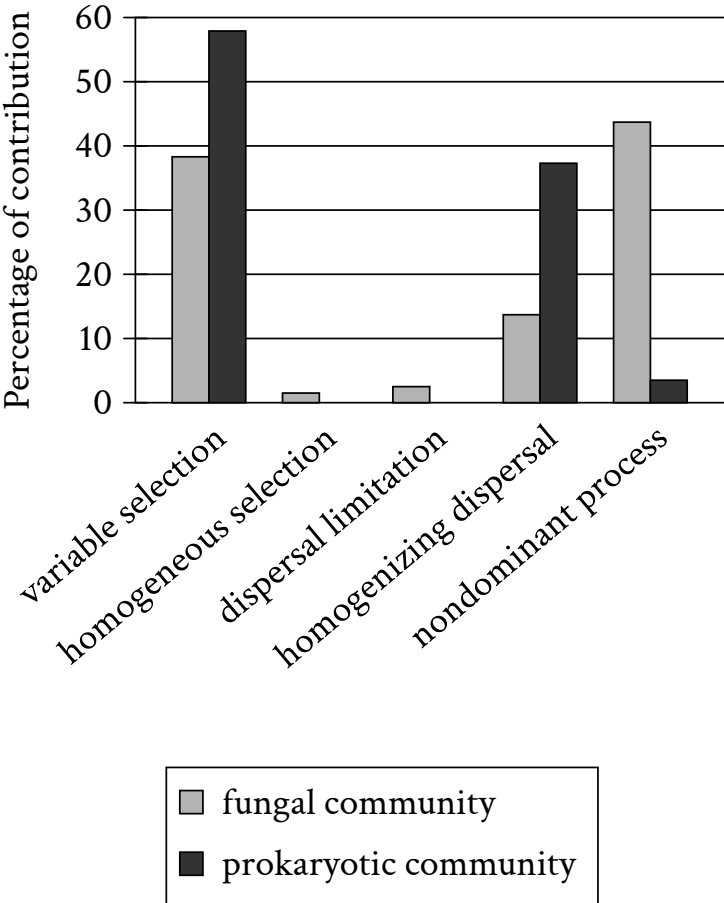
- A. In a town that installed left-turn signals at all busy intersections, seven out of ten survey respondents agreed with the statement “the streets in my community are easier to navigate by motor vehicle than before.”
- B. A traffic study of intersections in a large city shows that on average drivers wait longer to make a left turn at intersections without left-turn signals than at intersections with such signals.
- C. After a city eliminated left turns at busy intersections, a package-delivery company reports that its drivers have been able to reach more addresses in the city daily, on average, and therefore deliver more packages there annually.
- D. Statistics reveal that school buses in a city that eliminated left turns at most intersections took on average two minutes longer to complete their routes after the restriction took effect than they did before.

Question ID b8f137f7

Assessment	Test	Domain	Skill	Difficulty
SAT	Reading and Writing	Information and Ideas	Command of Evidence	<div><div></div><div></div><div></div></div>

ID: b8f137f7

Relative Contributions of Processes to Prokaryotic and Fungal Community Assembly in Qinghai-Tibetan Lakes



In a 2020 study, Jian Yang et al. examined prokaryotic and fungal microbial communities in Qinghai-Tibetan Plateau lake sediment to understand the relative contributions of various factors to community assembly, or formation. They quantified the contributions of environmental pressures (variable and homogeneous selection), dispersal limitation, homogenizing dispersal, and nondominant processes. Tolerance of environmental pressures is known to be higher in fungi than in prokaryotes, which the researchers hypothesize accounts for the finding that _____

Which choice most effectively uses data from the graph to complete the statement?

- A. homogenizing dispersal contributed substantially less to fungal community assembly than variable selection did.
- B. the total number of factors that contributed to community assembly was greater for prokaryotes than for fungi.
- C. variable selection contributed substantially less to fungal community assembly than to prokaryote community assembly.

D. the contribution of homogeneous selection to community assembly was negligible for both fungi and prokaryotes.

Question ID 7bf5ee05

Assessment	Test	Domain	Skill	Difficulty
SAT	Reading and Writing	Information and Ideas	Command of Evidence	<div><div></div><div></div><div></div></div>

ID: 7bf5ee05

King Lear is a circa 1606 play by William Shakespeare. In the play, the character of King Lear attempts to test his three daughters' devotion to him. He later expresses regret for his actions, as is evident when he _____

Which choice most effectively uses a quotation from *King Lear* to illustrate the claim?

- A. says of himself, "I am a man / more sinned against than sinning."
- B. says during a growing storm, "This tempest will not give me leave to ponder / On things would hurt me more."
- C. says to himself while striking his head, "Beat at this gate that let thy folly in / And thy dear judgement out!"
- D. says of himself, "I will do such things— / What they are yet, I know not; but they shall be / The terrors of the earth!"

Question ID b8dd8651

Assessment	Test	Domain	Skill	Difficulty
SAT	Reading and Writing	Information and Ideas	Command of Evidence	<div><div></div><div></div><div></div></div>

ID: b8dd8651

Several studies of sediment (e.g., dirt, pieces of rock, etc.) in streams have shown an inverse correlation between sediment grain size and downstream distance from the primary sediment source, suggesting that stream length has a sorting effect on sediment. In a study of sediment sampled at more than a dozen sites in Alpine streams, however, geologists Camille Litty and Fritz Schlunegger found that cross-site variations in grain size were not associated with differences in downstream distance, though they did not conclude that downstream distance is irrelevant to grain size. Rather, they concluded that sediment influx in these streams may have been sufficiently spatially diffuse to prevent the typical sorting effect from being observed.

Which finding about the streams in the study, if true, would most directly support Litty and Schlunegger’s conclusion?

- A. The streams regularly experience portions of their banks collapsing into the water at multiple points upstream of the sampling sites.
- B. The streams contain several types of sediment that are not typically found in streams where the sorting effect has been demonstrated.
- C. The streams mostly originate from the same source, but their lengths vary considerably due to the different courses they take.
- D. The streams are fed by multiple tributaries that carry significant volumes of sediment and that enter the streams downstream of the sampling sites.

Question ID 92dd36f6

Assessment	Test	Domain	Skill	Difficulty
SAT	Reading and Writing	Information and Ideas	Command of Evidence	<div><div></div><div></div><div></div></div>

ID: 92dd36f6

Fiber Characteristics of Mouflon, Navajo-Churro, and Spanish Merino Sheep

Type of sheep	Diameter of outer coat fibers (in microns)	Diameter of inner coat fibers (in microns)
Spanish Merino	19–24	17–21
Navajo-Churro	35 or higher	10–35
Mouflon	150	15

Domestic sheep’s wild ancestor, the mouflon, has a coarse outer coat and an inner coat of wool fiber that is finer in diameter and therefore much softer. In some domestic breeds, such as the Spanish Merino, the outer fiber is only marginally coarser than the inner, and the wool is soft overall. Thus, Merino wool is ideal for delicate garments worn against the skin. Meanwhile, the Navajo-Churro has been selected to retain the marked distinction between outer and inner fiber that the Merino has lost. Being coarser than Merino wool overall, Navajo-Churro wool yields a more durable yarn, which Diné (Navajo) weavers use in their celebrated rugs. Yet a comparison of the fiber characteristics of all three sheep reveals that _____

Which choice most effectively uses data from the table to complete the text?

- A. the selection process that enabled the Navajo-Churro to retain its somewhat coarse outer fiber also resulted in inner fiber that, at its softest, is softer than either the mouflon’s or the Merino’s inner fiber.
- B. the Navajo-Churro more closely resembles its ancestor, the mouflon, in the uniform softness of its inner fiber, while the Merino more closely resembles the mouflon in the variable diameter of its outer fiber.
- C. domestication resulted in a counterintuitive increase in the inner fiber’s minimum diameter, making the inner fiber of the Merino and the Navajo-Churro less suitable for delicate garments than the mouflon’s inner fiber is.
- D. the domestication of the mouflon and the subsequent selection process that produced the Merino and the Navajo-Churro resulted in greater softness of outer and inner fiber alike.

Question ID 0abd16fa

Assessment	Test	Domain	Skill	Difficulty
SAT	Reading and Writing	Information and Ideas	Command of Evidence	<div><div></div><div></div><div></div></div>

ID: 0abd16fa

Percentage Point Changes in US Federal Outlays Relative to GDP by Congressional Status

Period	Congressional status	Change in total outlays	Change in nondefense outlays	Change in defense outlays
1981–1988	divided	−0.4	−1.3	0.9
1975–1976	divided	2.7	3.0	−0.3
1977–1980	undivided	0.3	0.6	−0.3
1964–1968	undivided	1.9	1.4	0.5
1969–1974	divided	−1.8	2.1	−3.9

Economist Steve H. Hanke has shown that divided US Congresses—which occur when one party holds the majority in the House of Representatives and another holds the majority in the Senate—tend to accompany reductions in total federal outlays (spending) relative to gross domestic product (GDP), which Hanke interprets to reflect decreases in government size. Hanke calculated the percentage point change in total outlays (encompassing nondefense and defense outlays) for consecutive US Congresses. Hanke has pointed to his calculations as evidence that a divided Congress may be a “necessary but not sufficient condition” for a decrease in government size to occur.

Which choice best describes data from the table that support the underlined claim?

- A. The periods of undivided Congresses were associated with increases in nondefense outlays, whereas all the periods of divided Congresses except one were associated with reductions in defense outlays.
- B. All the periods of divided Congresses were associated with reductions in total outlays, although two periods were also associated with increases in nondefense outlays.
- C. The periods of undivided Congresses were associated with increases in total outlays, whereas all the periods of divided Congresses were associated with reductions in either nondefense outlays or defense outlays.
- D. All the periods of divided Congresses except one were associated with reductions in total outlays, whereas the periods of undivided Congresses were associated with increases in total outlays.

Question ID ae1e4d1d

Assessment	Test	Domain	Skill	Difficulty
SAT	Reading and Writing	Information and Ideas	Command of Evidence	<div><div></div><div></div><div></div></div>

ID: ae1e4d1d

Average Number and Duration of Torpor Bouts and Arousal Episodes for Alaska Marmots and Arctic Ground Squirrels, 2008–2011

Feature	Alaska marmots	Arctic ground squirrels
torpor bouts	12	10.5
duration per bout	13.81 days	16.77 days
arousal episodes	11	9.5
duration per episode	21.2 hours	14.2 hours

When hibernating, Alaska marmots and Arctic ground squirrels enter a state called torpor, which minimizes the energy their bodies need to function. Often a hibernating animal will temporarily come out of torpor (called an arousal episode) and its metabolic rate will rise, burning more of the precious energy the animal needs to survive the winter. Alaska marmots hibernate in groups and therefore burn less energy keeping warm during these episodes than they would if they were alone. A researcher hypothesized that because Arctic ground squirrels hibernate alone, they would likely exhibit longer bouts of torpor and shorter arousal episodes than Alaska marmots.

Which choice best describes data from the table that support the researcher’s hypothesis?

- A. The Alaska marmots’ arousal episodes lasted for days, while the Arctic ground squirrels’ arousal episodes lasted less than a day.
- B. The Alaska marmots and the Arctic ground squirrels both maintained torpor for several consecutive days per bout, on average.
- C. The Alaska marmots had shorter torpor bouts and longer arousal episodes than the Arctic ground squirrels did.
- D. The Alaska marmots had more torpor bouts than arousal episodes, but their arousal episodes were much shorter than their torpor bouts.

Question ID 529ab62c

Assessment	Test	Domain	Skill	Difficulty
SAT	Reading and Writing	Information and Ideas	Command of Evidence	<div><div></div><div></div><div></div></div>

ID: 529ab62c

Many archaeologists will tell you that categorizing excavated fragments of pottery by style, period, and what objects they belong to relies not only on standard criteria, but also on instinct developed over years of practice. In a recent study, however, researchers trained a deep-learning computer model on thousands of images of pottery fragments and found that it could categorize them as accurately as a team of expert archaeologists. Some archaeologists have expressed concern that they might be replaced by such computer models, but the researchers claim that outcome is highly unlikely.

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

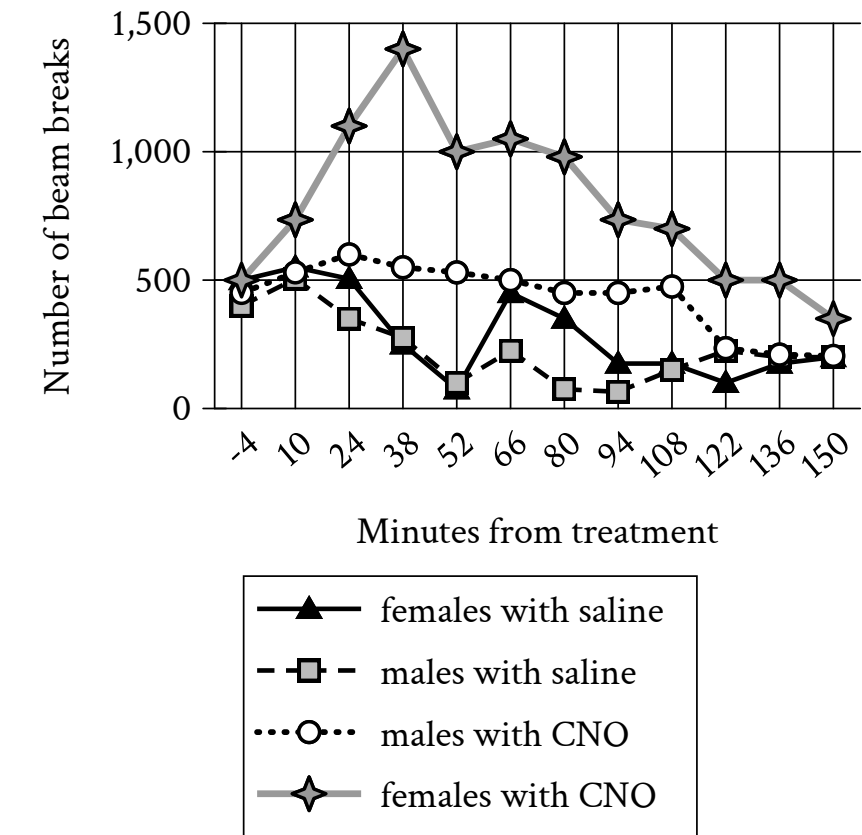
- A. In the researchers’ study, the model was able to categorize the pottery fragments much more quickly than the archaeologists could.
- B. In the researchers’ study, neither the model nor the archeologists were able to accurately categorize all the pottery fragments that were presented.
- C. A survey of archaeologists showed that categorizing pottery fragments limits the amount of time they can dedicate to other important tasks that only human experts can do.
- D. A survey of archaeologists showed that few of them received dedicated training in how to properly categorize pottery fragments.

Question ID 71e0dd93

Assessment	Test	Domain	Skill	Difficulty
SAT	Reading and Writing	Information and Ideas	Command of Evidence	<div><div></div><div></div><div></div></div>

ID: 71e0dd93

Number of Infrared Beam Breaks by Mice
Treated with CNO or Saline, by Sex



To investigate the influence of certain estrogen-responsive neurons on energy expenditure, biologist Stephanie Correa et al. treated female and male mice with either saline solution or clozapine-N4-oxide (CNO), which activates the neurons. Monitoring the activity levels of the mice by measuring how frequently the animals broke infrared beams crossing their enclosures, Correa et al. found that the mice in their study showed sex-specific differences in response to neuron activation: _____

Which choice most effectively uses data from the graph to complete the assertion?

- A. the four groups of mice differed greatly in their activity levels before treatment but showed identical activity levels at the end of the monitoring period.
- B. saline-treated females showed substantially more activity at certain points in the monitoring period than saline-treated males did.
- C. CNO-treated females showed more activity relative to saline-treated females than CNO-treated males showed relative to saline-treated males.

D. CNO-treated females showed a substantial increase and then decline in activity over the monitoring period, whereas CNO-treated males showed a substantial decline in activity followed by a steep increase.

Question ID 2a57b2a8

Assessment	Test	Domain	Skill	Difficulty
SAT	Reading and Writing	Information and Ideas	Command of Evidence	<div><div></div><div></div><div></div></div>

ID: 2a57b2a8

An archaeological team led by Piotr Bieliński and Sultan al-Bakri found remnants of a 4,000-year-old Bronze Age board game at a site in Oman. Little is left of the game except a stone board, which is carved with a grid and has places to hold game pieces. Some scholars claim that the game was largely played by traders.

Which finding, if true, would most directly support the scholars’ claim?

- A. Other examples of the game dating to the same period have been found in the remains of several homes in the region, including in one home that may have belonged to a trader.
- B. Similar games have been found in other sites dating to the same period that were connected to the site in Oman via trade routes.
- C. The other known examples of the game dating to the same period have been found along routes that seem to have been used primarily by traders at the time.
- D. Remnants of other goods have been found at the site in Oman that probably also reached the location through trade.

Question ID f1341fe1

Assessment	Test	Domain	Skill	Difficulty
SAT	Reading and Writing	Information and Ideas	Command of Evidence	<div><div></div><div></div><div></div></div>

ID: f1341fe1

Many governments that regularly transfer money to individuals—to provide supplemental incomes for senior citizens, for example—have long done so electronically, but other countries typically have distributed physical money and have only recently developed electronic transfer infrastructure. Researchers studied the introduction of an electronic transfer system in one such location and found that recipients of electronic transfers consumed a different array of foods than recipients of physical transfers of the same amount did. One potential explanation for this result is that individuals conceive of and allocate funds in physical money differently than they conceive of and allocate funds in electronic form.

Which finding from the study, if true, would most directly weaken the potential explanation?

- A. Recipients of electronic transfers typically spent their funds at a slower rate than recipients of physical transfers did.
- B. Nearly every recipient of an electronic transfer withdrew the entire amount in physical money shortly after receiving the transfer.
- C. Recipients of physical transfers tended to purchase food about as frequently as recipients of electronic transfers did.
- D. Some recipients of physical transfers received small amounts of money relatively frequently, while others received large amounts relatively infrequently.

Question ID dd56f034

Assessment	Test	Domain	Skill	Difficulty
SAT	Reading and Writing	Information and Ideas	Command of Evidence	<div><div></div><div></div><div></div></div>

ID: dd56f034

Electra is a circa 420–410 BCE play by Sophocles, translated in 1870 by R.C. Jebb. Electra, who is in mourning for her dead father and her long-absent brother, is aware of the intensity of her grief but believes it to be justified: _____

Which quotation from *Electra* most effectively illustrates the claim?

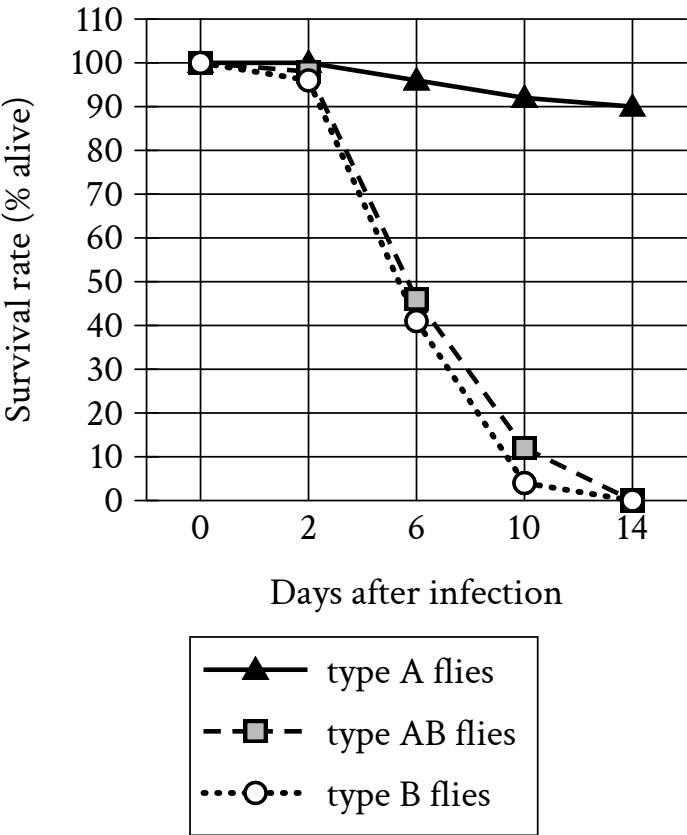
- A. “O thou pure sunlight, and thou air, earth’s canopy, how often have ye heard the strains of my lament, the wild blows dealt against this bleeding breast, when dark night fails!”
- B. “Send to me my brother; for I have no more the strength to bear up alone against the load of grief that weighs me down.”
- C. “I know my own passion, it escapes me not; but, seeing that the causes are so dire, will never curb these frenzied complaints, while life is in me.”
- D. “But never will I cease from dirge and sore lament, while I look on the trembling rays of the bright stars, or on this light of day.”

Question ID 3508affd

Assessment	Test	Domain	Skill	Difficulty
SAT	Reading and Writing	Information and Ideas	Command of Evidence	<div><div></div><div></div><div></div></div>

ID: 3508affd

Average Survival of Fruit Flies following Infection



In a study of the evolution of *DptA* and *DptB*—*Diptericin* genes encoding antimicrobial peptides that combat pathogens and foster beneficial microbes in fruit flies (*Drosophila*)—researchers assessed *Drosophila melanogaster* resistance to pathogenic infections by *Providencia rettgeri* and *Acetobacter sicerae*, bacteria common in the flies’ environments. Subjects included flies identified by mutations silencing *DptA*, *DptB*, or both *DptA* and *DptB* (termed types A, B, and AB, respectively). In conjunction with the observation that resistance to *P. rettgeri* correlates with *DptA* activity but is not significantly affected by *DptB* activity, data in the graph of survival rates post-*A. sicerae* infection suggest that _____

Which completion of the text is best supported by data in the graph?

- A. *DptA* confers defense against *A. sicerae* regardless of the presence of *DptB*.
- B. *DptB* protects against only one bacteria species, whereas *DptA* protects against multiple species.
- C. *DptB* may have developed as a specific defense against *A. sicerae*.
- D. defense against *A. sicerae* is strongest when both *DptA* and *DptB* are present.

Question ID f7fa7396

Assessment	Test	Domain	Skill	Difficulty
SAT	Reading and Writing	Information and Ideas	Command of Evidence	<div><div></div><div></div><div></div></div>

ID: f7fa7396

Declining fishing technology costs and overexploitation of near-shore fishing grounds have made isolated oceanic reefs, which often lack regulatory protections, increasingly attractive to commercial and sport fishers. A team led by Octavio Aburto-Oropeza surveyed the biomass density and species composition of two isolated reefs: Alacranes, a protected (fishing prohibited) reef 135 kilometers from the Yucatan Peninsula, and Bajos del Norte, an unprotected reef 25 kilometers farther out to sea. Species at the highest level of the trophic pyramid constituted 34% of the biomass at Alacranes and 10% of the biomass at Bajos del Norte. Aburto-Oropeza and colleagues attribute this difference to the two reefs’ difference in regulatory status.

Which finding, if true, would most directly support Aburto-Oropeza and colleagues’ explanation?

- A. Total biomass at Alacranes is much greater than total biomass at Bajos del Norte, though the reefs’ biomass densities are similar.
- B. Some of the species that compose the highest trophic level at Bajos del Norte are not found at Alacranes.
- C. It is somewhat more expensive for commercial and sport fishers to reach Bajos del Norte than it is to reach Alacranes.
- D. Commercial and sport fishers tend to disproportionately remove species at the highest trophic level.

Question ID 2d64114f

Assessment	Test	Domain	Skill	Difficulty
SAT	Reading and Writing	Information and Ideas	Command of Evidence	<div><div></div><div></div><div></div></div>

ID: 2d64114f

Archaeologists have held that the Casarabe culture, which emerged in the southwestern Amazon basin in the first millennium CE, was characterized by a sparse, widely distributed population and little intervention in the surrounding wilderness. Recently, however, archaeologist Heiko Prümers and colleagues conducted a study of the region using remote-sensing technology that enabled them to create three-dimensional images of the jungle-covered landscape from above, and the researchers concluded that the Casarabe people developed a form of urbanism in the Amazon basin.

- Which finding about the remote-sensing images, if true, would most directly support Prümers and colleagues’ conclusion?
- A. They show shapes consistent with widely separated settlements of roughly equal small size surrounded by uncultivated jungle.
 - B. They show shapes consistent with long-distance footpaths running from Casarabe territories to large cities outside the region inhabited by the Casarabe people.
 - C. They show shapes consistent with scattered small farms created by clearing jungle areas near sources of fresh water.
 - D. They show shapes consistent with monumental platforms and dense central settlements linked to smaller settlements by a system of canals and roadways.

Question ID 014151d0

Assessment	Test	Domain	Skill	Difficulty
SAT	Reading and Writing	Information and Ideas	Command of Evidence	<div><div></div><div></div><div></div></div>

ID: 014151d0

Delta 15-N Values in Seagrass Samples from Four Sites on the Yucatan, 2016–2017

Site	February 2016	October 2016	February 2017	October 2017
Akumal Bay	no data available	3.3	2.0	6.3
Mahahual	0.7	no data available	2.5	3.4
Tulum	6.1	5.9	2.3	5.5
Xahuayxol	0.9	0.3	−0.9	1.4

Because water from natural, uncontaminated sources is less enriched with the stable nitrogen isotope ¹⁵N than wastewater from human activities is, the presence of such wastewater in nature can be detected by examining delta 15-N values (a measure of the ratio of ¹⁵N to ¹⁴N) in plants. Karla A. Camacho-Cruz and colleagues assessed delta 15-N values in the seagrass *Thalassia testudinum* from sites on Mexico’s Yucatan peninsula with intermediate tourism development, including Akumal Bay and Tulum, and low tourism development, including Mahahual and Xahuayxol, throughout 2016 and 2017. The data suggest that the intermediate-tourism sites experienced influxes of human wastewater. However, the researchers concluded that this happened intermittently.

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

- A. Although delta 15-N values were generally higher in Akumal Bay and Tulum than in Mahahual and Xahuayxol, the values were lower in Akumal Bay than in Mahahual and Xahuayxol in February 2017.
- B. Delta 15-N values reached their lowest level in February 2017 in both Akumal Bay and Tulum, but no data were available for Akumal Bay in February 2016, when the values reached their highest level in Tulum.
- C. Although all sites showed considerable variation in delta 15-N values, the values remained relatively constant in Akumal Bay from October 2016 to February 2017 and in Tulum from February 2016 to October 2016.
- D. In Akumal Bay and Tulum, delta 15-N values fluctuated considerably across the three measurements made from October 2016 to October 2017.

Question ID 486d2085

Assessment	Test	Domain	Skill	Difficulty
SAT	Reading and Writing	Information and Ideas	Command of Evidence	<div><div></div><div></div><div></div></div>

ID: 486d2085

Founded in 1965 and originally established as a cultural extension of the United Farm Workers—a union representing many Mexican American agricultural workers at the time—the theater troupe El Teatro Campesino has achieved recognition as a source of inspiration for subsequent Chicano theater companies and as a contributor to the dramatic arts. In an article about the company, a theater historian posits that a significant stylistic influence on El Teatro’s early performances was the audience-mediated slapstick comedy of *carpa* theater, vaudeville-style shows popular in Mexico and the US Southwest in the 1920s and ’30s.

Which quotation from the article would best illustrate the theater historian’s claim?

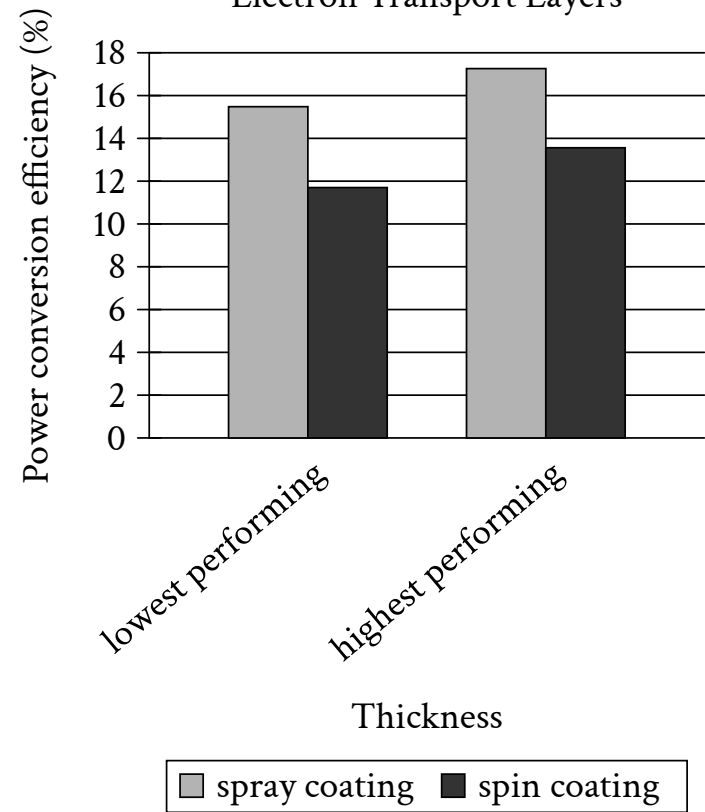
- A. “The company presented *actos*, short comedy sketches, that often relied on exaggerated physical humor to groups of agricultural workers, whose reactions—enthusiastic cheers of appreciation and, occasionally, loud boos of disapproval—promoted improvisation.”
- B. “The company was focused on the reality of the present situation and discovered that humor was often found in that reality; consequently, comedy became a tool to convey social critique while entertaining and inspiring audiences.”
- C. “The company relied heavily on satire, humor, and references to contemporary popular culture as well as a make-do aesthetic—often referred to as *rasquache*—that reflected not only the troupe’s limited financial resources but also its sociopolitical message.”
- D. “The members of the company, which in addition to founder Luis Valdez consisted entirely of nonprofessional actors, traveled into farm fields, where they, with minimal props and costumes, performed comedy in the form of brief humorous vignettes.”

Question ID c7416710

Assessment	Test	Domain	Skill	Difficulty
SAT	Reading and Writing	Information and Ideas	Command of Evidence	<div><div></div><div></div><div></div></div>

ID: c7416710

Power Conversion Efficiency of
Lowest and Highest Performing
Spin-coated and Spray-coated
Electron Transport Layers



Perovskite solar cells convert light into electricity more efficiently than earlier kinds of solar cells, and manufacturing advances have recently made them commercially attractive. One limitation of the cells, however, has to do with their electron transport layer (ETL), through which absorbed electrons must pass. Often the ETL is applied through a process called spin coating, but such ETLs are fairly inefficient at converting input power to output power. André Taylor and colleagues tested a novel spray coating method for applying the ETL. The team produced ETLs of various thicknesses and concluded that spray coating holds promise for improving the power conversion efficiency of ETLs in perovskite solar cells.

- Which choice best describes data from the graph that support Taylor and colleagues’ conclusion?
- A. Both the ETL applied through spin coating and the ETL applied through spray coating showed a power conversion efficiency greater than 10% at their lowest performing thickness.
 - B. The lowest performing ETL applied through spray coating had a higher power conversion efficiency than the highest performing ETL applied through spin coating.

- C. The highest performing ETL applied through spray coating showed a power conversion efficiency of approximately 13%, while the highest performing ETL applied through spin coating showed a power conversion efficiency of approximately 11%.
- D. There was a substantial difference in power conversion efficiency between the lowest and highest performing ETLs applied through spray coating.

Question ID d4155c79

Assessment	Test	Domain	Skill	Difficulty
SAT	Reading and Writing	Information and Ideas	Command of Evidence	<div><div></div><div></div><div></div></div>

ID: d4155c79

As media consumption has become increasingly multiplatform and socially mediated, active news acquisition has diminished in favor of an attitude known as “news finds me” (NFM), in which people passively rely on their social networks and ambient media environments for information about current events. Homero Gil de Zúñiga and Trevor Diehl examined data on a representative group of adults in the United States to determine participants’ strength of NFM attitude, political knowledge, and political interest. Although no major election took place sufficiently near the study for Gil de Zúñiga and Diehl to identify causality between NFM and voting behavior, they did posit that NFM may reduce voting probability through an indirect effect.

Which finding, if true, would most directly support the idea advanced by Gil de Zúñiga and Diehl?

- A. NFM attitude tends to increase in strength as major elections approach, and people are significantly more likely to vote in major elections than in minor elections.
- B. NFM attitude has a strong negative effect on political knowledge and interest, and there is known to be a strong positive correlation between political knowledge and interest and the likelihood of voting.
- C. Political interest is known to have a strong positive effect on likelihood of voting but shows only a weak positive effect on political knowledge, and NFM attitude shows little correlation with either political knowledge or political interest.
- D. The likelihood of voting increases as political knowledge increases, and the relationship between NFM attitude and political knowledge tends to strengthen as the size of people’s social networks increases.

Question ID 8acb62c2

Assessment	Test	Domain	Skill	Difficulty
SAT	Reading and Writing	Information and Ideas	Command of Evidence	<div><div></div><div></div><div></div></div>

ID: 8acb62c2

Distribution of Ecosystem Services Affected by Invasive Species by Service Type

Region (Overall)	Provisioning (75%)	Regulating (21%)	Cultural (4%)
West	73%	27%	0%
North	88%	12%	0%
South	79%	14%	7%
East	83%	6%	11%
Central	33%	67%	0%

To assess the impact of invasive species on ecosystems in Africa, Benis N. Egoh and colleagues reviewed government reports from those nations about how invasive species are undermining ecosystem services (aspects of the ecosystem on which residents depend). The services were sorted into three categories: provisioning (material resources from the ecosystem), regulating (natural processes such as cleaning the air or water), and cultural (nonmaterial benefits of ecosystems). Egoh and her team assert that countries in each region reported effects on provisioning services and that provisioning services represent the majority of the reported services.

Which choice best describes data from the table that support Egoh and colleagues’ assertion?

- A. Provisioning services represent 73% of the services reported for the West region and 33% of those for the Central region, but they represent 75% of the services reported overall.
- B. None of the percentages shown for provisioning services are lower than 33%, and the overall percentage shown for provisioning services is 75%.
- C. Provisioning services are shown for each region, while no cultural services are shown for some regions.
- D. The greatest percentage shown for provisioning services is 88% for the North region, and the least shown for provisioning services is 33% for the Central region.

Question ID 621d5a3d

Assessment	Test	Domain	Skill	Difficulty
SAT	Reading and Writing	Information and Ideas	Command of Evidence	<div><div></div><div></div><div></div></div>

ID: 621d5a3d

Having demonstrated that the power conversion efficiency of new perovskite photovoltaic cells is nearly indistinguishable from that of cells recycled multiple times, Xun Xiao and colleagues evaluated the levelized cost of electricity (LCOE)—a measure of cost per produced electricity unit that incorporates materials acquisition costs as well as operating costs—for power plants utilizing each type of cell. With a modeled 15-year cell lifetime, the LCOE of plants using new cells was 4.99 cents per kilowatt-hour, whereas that of plants using cells recycled three times was 4.05 cents per kilowatt-hour. Moreover, the LCOE differential grew from 18.8% to 31.3% when the modeled cell lifetime was reduced by two-thirds.

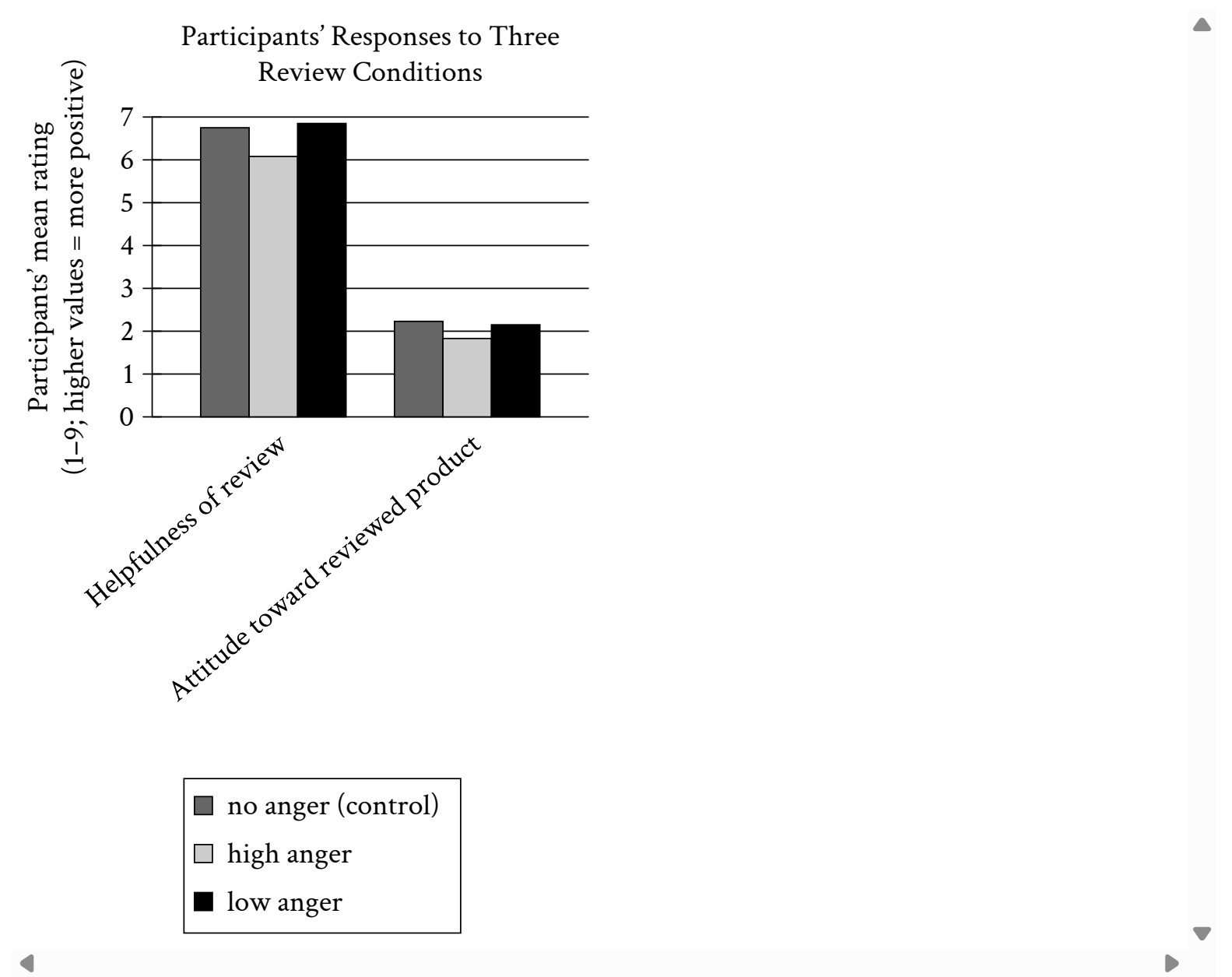
Based on the text, which choice, if true, most coherently and directly accounts for the observation presented in the underlined sentence?

- A. Cells can be recycled multiple times without a significant decrease in power conversion efficiency, and thus recycling cells more frequently does not change the LCOE for plants using recycled cells.
- B. Although potentially less expensive than producing new cells, recycling cells does incur costs, and thus reducing cell lifetimes entails greater cumulative costs.
- C. Securing new cell materials is more expensive than recycling cell materials, and thus more frequent cell replacement entails greater disparity in cumulative costs.
- D. As the modeled cell lifetime decreases, plant operating costs increase, and thus the LCOE for plants using new cells diverges from that of plants using recycled cells.

Question ID 8cc6b27a

Assessment	Test	Domain	Skill	Difficulty
SAT	Reading and Writing	Information and Ideas	Command of Evidence	<div><div></div><div></div><div></div></div>

ID: 8cc6b27a



To understand how expressions of anger in reviews of products affect readers of those reviews, business scholar Dezhi Yin and colleagues measured study participants' responses to three versions of the same negative review—a control review expressing no anger, a review expressing a high degree of anger, and a review expressing a low degree of anger. Reviewing the data, a student concludes that the mere presence of anger in a review may not negatively affect readers' perceptions of the review, but a high degree of anger in a review does worsen readers' perceptions of the review.

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

- A. On average, participants' ratings of the helpfulness of the review were substantially higher than were participants' ratings of the reviewed product regardless of which type of review participants had seen.
- B. Compared with participants who saw the control review, participants who saw the low-anger review rated the review as slightly more helpful, whereas participants who saw the high-anger review rated the review as less helpful.
- C. Participants who saw the low-anger review rated the review as slightly more helpful than participants who saw the control review did, but participants' attitude toward the reviewed product was slightly worse when participants saw the low-anger review than when they saw the no-anger review.
- D. Compared with participants who saw the low-anger review, participants who saw the high-anger review rated the review as less helpful and had a less positive attitude toward the reviewed product.

Question ID 1d606968

Assessment	Test	Domain	Skill	Difficulty
SAT	Reading and Writing	Information and Ideas	Command of Evidence	<div><div></div><div></div><div></div></div>

ID: 1d606968

In a research paper, a student criticizes some historians of modern African politics, claiming that they have evaluated Patrice Lumumba, the first prime minister of what is now the Democratic Republic of the Congo, primarily as a symbol rather than in terms of his actions.

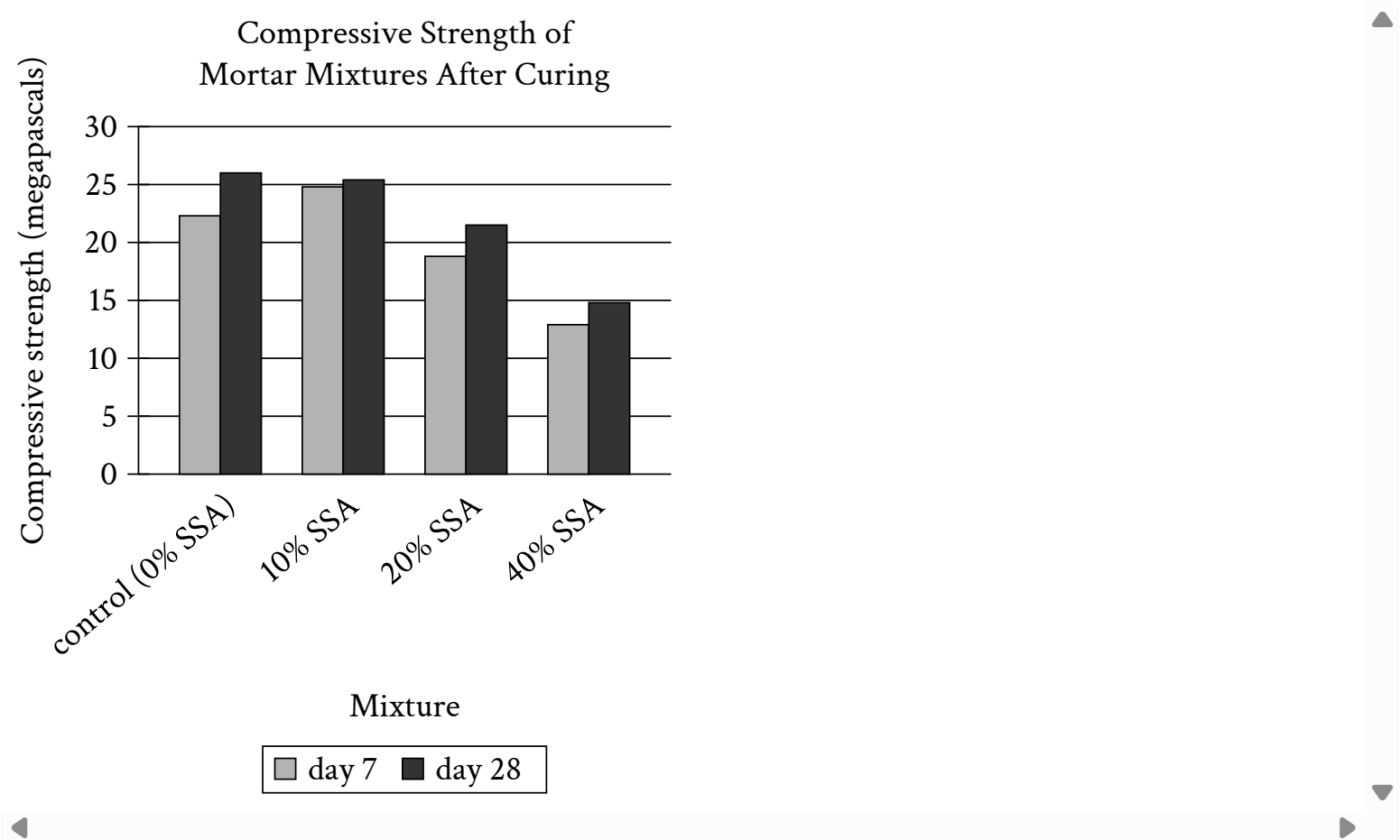
Which quotation from a work by a historian would best illustrate the student’s claim?

- A. “Lumumba is a difficult figure to evaluate due to the starkly conflicting opinions he inspired during his life and continues to inspire today.”
- B. “The available information makes it clear that Lumumba’s political beliefs and values were largely consistent throughout his career.”
- C. “Lumumba’s practical accomplishments can be passed over quickly; it is mainly as the personification of Congolese independence that he warrants scholarly attention.”
- D. “Many questions remain about Lumumba’s ultimate vision for an independent Congo; without new evidence coming to light, these questions are likely to remain unanswered.”

Question ID a7a7939e

Assessment	Test	Domain	Skill	Difficulty
SAT	Reading and Writing	Information and Ideas	Command of Evidence	<div><div></div><div></div><div></div></div>

ID: a7a7939e



Mollusk shells are mainly composed of calcium carbonate, a chemical compound used in mortar and other construction materials. A research team led by Ariane da Silva Cardoso investigated pulverizing discarded Sururu mussel shells to create a substitute for fine aggregates (such as sand) in mortar mixtures. The team prepared mixtures with Sururu shell aggregate (SSA) replacing varying percentages of sand and then tested the mortars' compressive strength on days 7 and 28 of curing. Based on their findings, the team recommended SSA substitution in relatively small proportions to avoid compromising strength.

Which choice most effectively uses data from the graph to support the researchers' recommendation?

- A. The 10% SSA mixture's compressive strength was greater than or approximately equal to that of the control mixture on day 7 and on day 28, but on both days the 20% and 40% SSA mixtures had less compressive strength than the control mixture did.
- B. The compressive strength of the 10% SSA mixture remained nearly the same from day 7 to day 28, while that of the 20% and 40% SSA mixtures changed substantially.
- C. The 10% SSA mixture's compressive strength was greater than that of the control mixture on day 7, but by day 28 the 10% SSA mixture's compressive strength had decreased while that of the control mixture had increased.

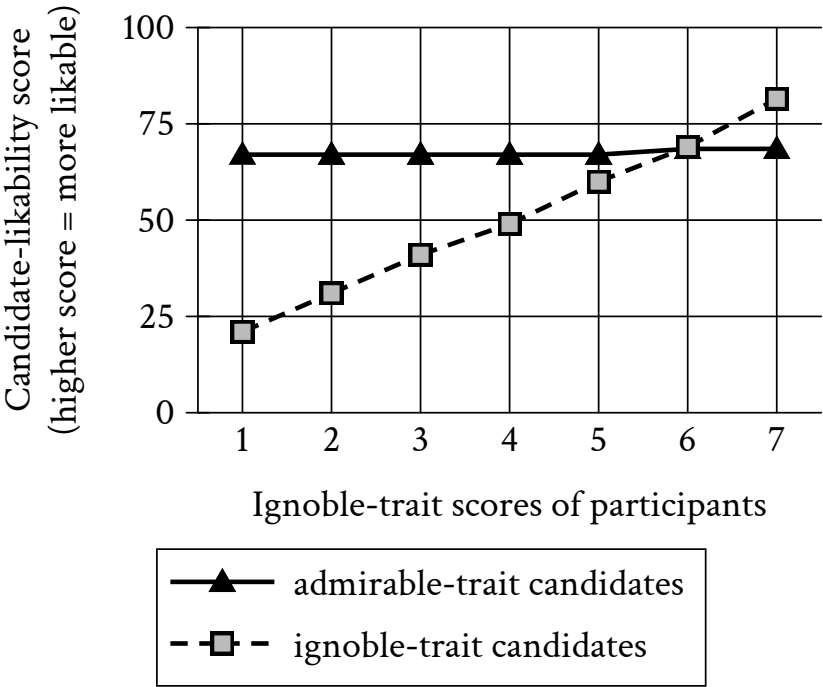
D. The compressive strength of the 10% SSA mixture never surpassed the compressive strength measured for the control mixture on day 28.

Question ID 0e008c2d

Assessment	Test	Domain	Skill	Difficulty
SAT	Reading and Writing	Information and Ideas	Command of Evidence	<div><div></div><div></div><div></div></div>

ID: 0e008c2d

Participants' Likability Ratings for
Candidates by Candidates' Traits
and Participants' Ignoble-Trait Scores



Alessandro Nai et al. presented study participants with vignettes about fictive political candidates, portraying them as embodying a personality trait widely considered admirable (e.g., agreeableness) or one considered ignoble (e.g., cynicism). A survey recorded participants' ratings of the candidates' likability and showed that across participants, ignoble-trait candidates were less likable than admirable-trait candidates. However, when the researchers factored in the participants' own personality-trait scores, on a scale of 1 (least ignoble) to 7 (most ignoble), they concluded that this relative ranking of candidates persisted except among the participants with high ignobility scores.

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

- A. There was a strong positive correlation between participants' ignobility scores and admirable-trait candidates' likability ratings, but there was no correlation between ignobility scores and ignoble-trait candidates' likability ratings.
- B. Participants with an ignobility score of 5 or less rated admirable-trait candidates as more likable than ignoble-trait candidates, whereas participants with an ignobility score of 6 or more rated ignoble-trait candidates as equally likable as or even more likable than admirable-trait candidates.
- C. Overall, participants rated admirable-trait candidates as quite likable, and that rating was not significantly affected by the participants' ignobility scores.

D. Unlike participants with an ignobility score of 6, participants with an ignobility score either greater or less than 6 gave admirable-trait candidates and ignoble-trait candidates different likability ratings.

Question ID 1a9167e4

Assessment	Test	Domain	Skill	Difficulty
SAT	Reading and Writing	Information and Ideas	Command of Evidence	<div><div></div><div></div><div></div></div>

ID: 1a9167e4

Employment by Sector in France and the United States, 1800–2012 (% of total employment)

Year	Agriculture in France	Manufacturing in France	Services in France	Agriculture in US	Manufacturing in US	Services in US
1800	64	22	14	68	18	13
1900	43	29	28	41	28	31
1950	32	33	35	14	33	53
2012	3	21	76	2	18	80

Rows in table may not add up to 100 due to rounding.

Over the past two hundred years, the percentage of the population employed in the agricultural sector has declined in both France and the United States, while employment in the service sector (which includes jobs in retail, consulting, real estate, etc.) has risen. However, this transition happened at very different rates in the two countries. This can be seen most clearly by comparing the employment by sector in both countries in _____

Which choice most effectively uses data from the table to complete the statement?

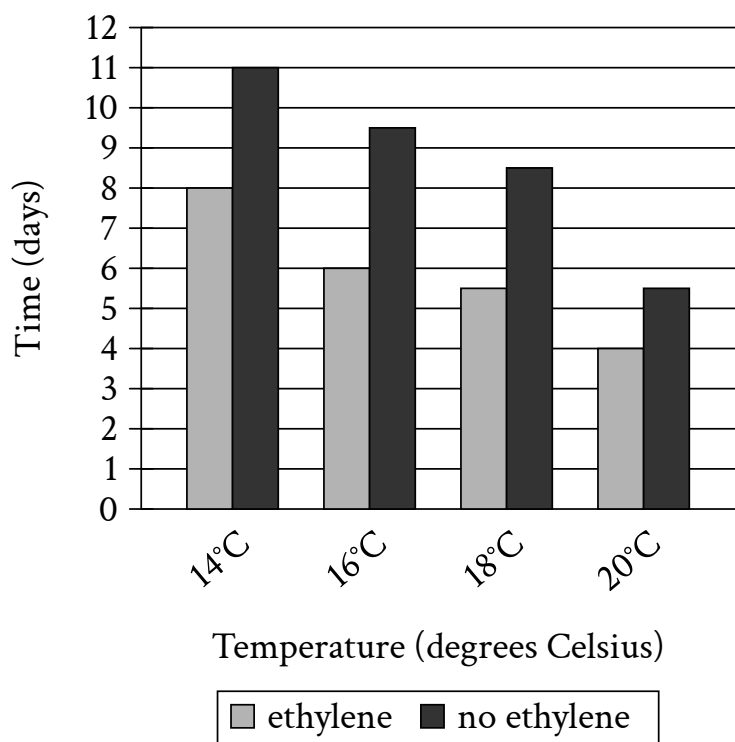
- A. 1900 with the employment by sector in 1950.
- B. 1800 with the employment by sector in 2012.
- C. 1900 with the employment by sector in 2012.
- D. 1800 with the employment by sector in 1900.

Question ID c2e17200

Assessment	Test	Domain	Skill	Difficulty
SAT	Reading and Writing	Information and Ideas	Command of Evidence	<div><div></div><div></div><div></div></div>

ID: c2e17200

Banana Ripening Time at Different Temperatures with and without Ethylene Treatment



A student is conducting an experiment to test the effect of temperature and ethylene treatment on the ripening speed of bananas. The student treated some bananas with ethylene while leaving others untreated, then allowed both types of bananas to ripen at one of four different temperatures. Comparing the data for bananas with and without ethylene, the student concluded that _____

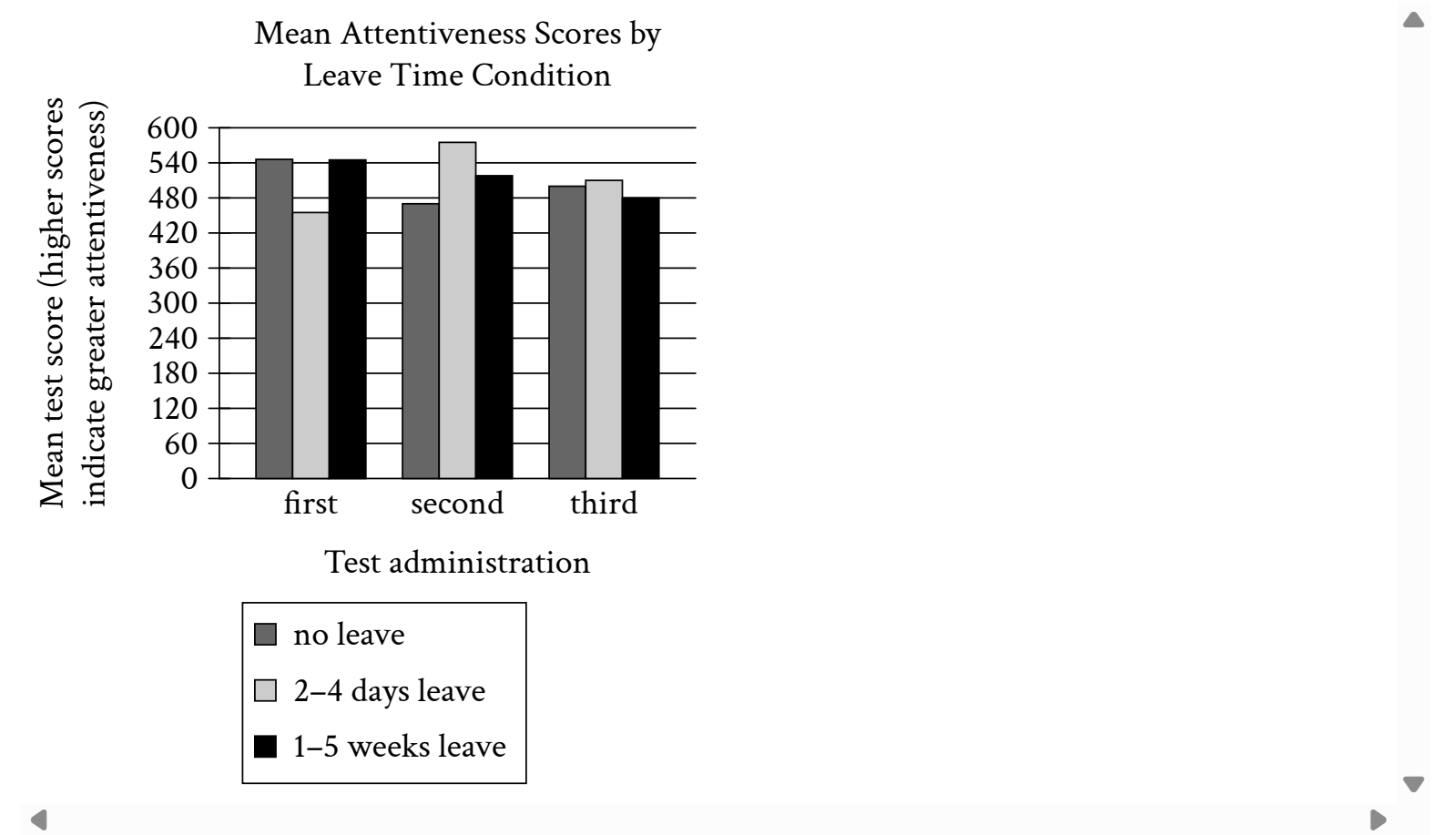
Which choice most effectively uses data from the graph to complete the student’s conclusion?

- A. 20°C is the ideal temperature at which to store bananas to slow ripening time.
- B. for those bananas that were not treated with ethylene, differences in temperature were not associated with absolute differences in ripening time.
- C. bananas treated with ethylene ripen faster at 14°C and 16°C than at 18°C and 20°C.
- D. ethylene was associated with a greater absolute change in ripening time at 14°C, 16°C, and 18°C than at 20°C.

Question ID 788d91ea

Assessment	Test	Domain	Skill	Difficulty
SAT	Reading and Writing	Information and Ideas	Command of Evidence	<div><div></div><div></div><div></div></div>

ID: 788d91ea



To investigate potential cognitive benefits of taking leave from work, psychologist Jan Packer and colleagues conducted a six-month study of Australian university staff members who took no leave from work during the study, took 2–4 days of leave, or took 1–5 weeks of leave. Tests of attentiveness were administered to participants three times during the study: at random for the no-leave staff, and for the rest, one week before their leave, one week following their return to work, and one week after the second test administration. After analyzing the results, the researchers concluded that longer leave times might not confer a greater cognitive benefit than shorter leave times do.

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

- A. In the second test administration, participants who took 2–4 days of leave had higher average attentiveness scores than did those who took no leave, but in the third test administration, those who took no leave had higher average scores than those who took 1–5 weeks of leave.
- B. In the first test administration, participants who took 2–4 days of leave had lower average attentiveness scores than did those who took 1–5 weeks of leave and those who took no leave.
- C. In both the second and third test administrations, participants who took 2–4 days of leave had higher average attentiveness scores than did participants who took 1–5 weeks of leave.

D. In the second and third test administrations, participants who took 2–4 days of leave had higher average attentiveness scores than did those who took no leave.