

Reading: Question 1

Questions 1-9 are based on the following passage.

This passage is adapted from Rabih Alameddine, *An Unnecessary Woman*. ©2013 by Rabih Alameddine.

Line I love Javier Marías’s work. I’ve translated two of his novels: *A Heart So White* and *Tomorrow in the Battle Think on Me*. I’ll consider a third after I read the French translation of the final volume of *Your Face Tomorrow*, although at more than thirteen hundred pages, I’ll probably
5 balk at that as well.

But I digress, as usual.

In one of his essays, Marías suggests that his work deals as much with what didn’t happen as with what happened. In other words, most of us believe we are who we are because of the decisions we’ve made,
10 because of events that shaped us, because of the choices of those around us. We rarely consider that we’re also formed by the decisions we didn’t make, by events that could have happened but didn’t, or by our lack of choices, for that matter.

More than fifty years ago, on a gloomy day when hope followed my
15 shrimp of an ex-husband out the door, or so I thought at the time, my friend Hannah led me by the hand to a bookstore owned by one of her relatives. The relative, a second cousin once removed, had opened the bookstore as a lark, a ground-floor store with an inadequate picture window in a distressed building off a main street and no foot traffic.

20 There were more stupid stuffed toys than there were books, and everything was covered with dust. The bookstore had as much chance of making it as I did.

Yet of all things, the flint that sparked a flame in my soul was the huge, darkly stained oak desk where the owner sat. To a practically
25 penniless twenty-year-old divorcée, sitting behind such a desk so grand, so luxurious—something to aspire to. I needed grandeur in my life.

Hannah told her relative he should hire me, and he informed her that he wanted to hire someone with more experience and, just as
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invisible, as if his face were hidden behind a perforated printout.

Hannah, my champion, wouldn't accept defeat. She explained that I loved books and read constantly, that I knew more about them than he ever would, and, just as important, that I could dust and clean and scrub and mop. He'd have the cleanest bookstore in the city, I piped up, the most sparkling, a diamond. I would rid it of its acrid and musty odor. He pretended to mull over the offer before deciding to hire me for the time being (still talking to Hannah and not me), until he could bring in someone else to be the face of the bookstore.

40 What I didn't know at the time was that the first face he offered the job to belonged to a pretty girl whose family was so classy that they immigrated to Brazil and one of their scions had recently become the governor of São Paulo. The girl left without ever showing her countenance in the bookstore. The second didn't show up either; she
45 married and no longer needed or wished to be employed.

Had either of these women made an appearance, my life would have been altogether different. I didn't realize how the fate of those two had influenced mine until a few years ago when the owner mentioned it in passing. He hadn't thought for a moment that I could do the job. He
50 credited my success to his diligent training.

I worked for the paperback dilettante for fifty years, and mine was the only face anyone associated with my bookstore.

Which choice best describes the passage?

- A. A character relates an anecdote and analyzes its applications to another character's life.
- B. A character relates to a friend an important chapter from a third character's life.
- C. An observation about an author's work leads into a personal narrative that supports that observation.
- D. The plot of a work of fiction is summarized, and that work's relationship to its author's life is considered.

Choice C is the best answer. In the third paragraph of the passage, the narrator observes that the work of author Javier Marías "deals as much with what didn't happen as with what happened." In the fourth through sixth paragraphs, the narrator describes the experience of going to see the owner of a local bookstore about a job. She explains, in the seventh paragraph, that the owner eventually gave her the job because two other women offered the position "didn't show up." The narrator connects the earlier observation and this story in the eighth paragraph when she concludes, "Had either of these women made an appearance, my life would have been altogether different." Therefore, the passage can best be described as an observation about an author's work leading into a personal narrative that supports that observation.

Choice A is incorrect because the anecdote related by the narrator isn't intended to aid in the analysis of another character's life. Choice B is incorrect because the story isn't relayed to a second character and doesn't describe the life of a third character. Choice D is incorrect. Although the narrator makes an observation about the work of Javier Marías, she doesn't summarize the plot of any of Marías's books or connect them to the events of his life.

Question Difficulty: Medium

Reading: Question 2

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What does the narrator imply about her own narrative style?

- A. She likes to rely heavily on a recurring phrase.
- B. She has a tendency to go off on tangents.
- C. She uses dialogue to reveal characters' thoughts.
- D. She admits to using extreme exaggerations.

Choice B is the best answer. In the second paragraph, the narrator characterizes her reflections in the first paragraph as a digression, or tangent. The inclusion of the phrase "as usual" indicates that the narrator is aware that these digressions are a common feature, or tendency, in her narrative style.

Choices A and D are incorrect because the narrator doesn't use a recurring phrase (choice A) or extreme exaggerations (choice D) in the passage, nor does she make reference to them. Choice C is incorrect because the narrator doesn't suggest that her use of dialogue is intended to reveal her characters' thoughts or that she considers dialogue to be a notable feature of her narrative style.

Question Difficulty: Medium

Reading: Question 3

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But I digress, as usual.

In one of his essays, Marías suggests that his work deals as much with what didn’t happen as with what happened. In other words, most of us believe we are who we are because of the decisions we’ve made,
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I worked for the paperback dilettante for fifty years, and mine was the only face anyone associated with my bookstore.

Which choice provides the best evidence for the answer to the previous question?

- A. [line 6](#) (“But I . . . usual”)
- B. [lines 8-11](#) (“In other . . . around us”)
- C. [lines 14-17](#) (“More than . . . relatives”)
- D. [error] (“The bookstore . . . did”)

Choice A is the best answer. The previous question asks what the narrator implies about her own narrative style. The answer, that she has a tendency to go off on tangents, is best supported by the second paragraph: “But I digress, as usual.”

Choices B, C, and D are incorrect because the cited lines don't provide evidence for the answer to the previous question that asks what the narrator implies about her narrative style. Instead, they include an observation on the work of Javier Marías (choice B), an introduction to a personal narrative (choice C), and a comparison between an untidy store and the narrator's emotional state (choice D).

Question Difficulty: Medium

Reading: Question 4

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In one of his essays, Marías suggests that his work deals as much with what didn’t happen as with what happened. In other words, most of us believe we are who we are because of the decisions we’ve made,
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Hannah told her relative he should hire me, and he informed her that he wanted to hire someone with more experience and, just as
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Had either of these women made an appearance, my life would have been altogether different. I didn't realize how the fate of those two had influenced mine until a few years ago when the owner mentioned it in passing. He hadn't thought for a moment that I could do the job. He
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I worked for the paperback dilettante for fifty years, and mine was the only face anyone associated with my bookstore.

What can reasonably be inferred about Hannah's motive in taking the narrator to apply for the job in the bookstore?

- A. She is trying to take the narrator's mind off the breakup of her marriage.
- B. She wants the job for herself.
- C. She suspects that the narrator will not keep the job for long.
- D. She thinks the narrator will improve the store's image.

Choice A is the best answer. In the fourth through sixth paragraphs, the narrator describes how on a gloomy day when she was feeling without hope following the departure of her ex-husband, her friend Hannah took her to a bookstore owned by one of Hannah's relatives, and Hannah, her "champion," lobbied for her to get the job. Based on the narrator's description of that day and the tone of her appreciation for Hannah's actions, it can reasonably be inferred that Hannah's motive in taking the narrator to apply for a job in the bookstore was to take the narrator's mind off the breakup of her marriage.

Choices B and C are incorrect because the narrator never implies that Hannah wants the job for herself (choice B), or that she suspects the narrator won't keep the job for long (choice C). Choice D is incorrect because although Hannah does highlight the narrator's cleaning skills in the sixth paragraph, the concern she expresses for the store's image is motivated by her desire to help her friend get the job.

Question Difficulty: Medium

Reading: Question 5

Questions 1-9 are based on the following passage.

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The description of the bookstore ([lines 17-22](#)) creates an impression of

- A. intellectualism.
- B. playfulness.
- C. age and disuse.
- D. disuse and mellowness.

Choice C is the best answer. In the fourth paragraph, the narrator describes the bookstore as being housed in a "distressed building off a main street" where there is "no foot traffic." Inside the store, everything is "covered with dust." Thus, the description of the bookstore suggests that it is old and has few customers, or in other words, the description creates an impression of age and disuse.

Choice A is incorrect because the description of the bookstore in the fourth paragraph doesn't convey a sense of intellectualism. Choice B is incorrect because although the narrator does remark on a collection of stuffed toys, they're described dismissively as "stupid," and are covered with dust like the books. Choice D is incorrect. The description of the bookstore does indicate disuse, but nothing in the description conveys a sense of mellowness.

Question Difficulty: Medium

Reading: Question 6

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In the passage, the narrator equates the bookstore's chances for success with her own

- A. prospects for the future.
- B. fondness for literature.
- C. romantic aspirations.
- D. physical appearance.

Choice A is the best answer. In the last sentence of the fourth paragraph, the narrator remarks that "the bookstore had as much chance of making it as I did." By suggesting that both she and the bookstore had a relatively small chance of success, the narrator equates her own prospects for the future with those of the bookstore.

Choices B, C, and D are incorrect because nowhere in the passage does the narrator indicate a clear connection between the bookstore's chances of success and her fondness for literature (choice B), her romantic aspirations (choice C), or her physical appearance (choice D).

Question Difficulty: Medium

Reading: Question 7

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I worked for the paperback dilettante for fifty years, and mine was the only face anyone associated with my bookstore.

Which choice provides the best evidence for the answer to the previous question?

- A. [lines 20-21](#) ("There were . . . dust")
- B. [lines 21-22](#) ("The bookstore . . . did")
- C. [lines 23-24](#) ("Yet . . . sat")
- D. [lines 24-27](#) ("To a . . . life")

Choice B is the best answer. The previous question asks which quality of her own the narrator equates with the bookstore's chances for success. The answer, that she equates her own prospects for the future with the bookstore's chances of success, is best supported by the last sentence of the fourth paragraph: "The bookstore had as much chance of making it as I did." These lines show that the narrator viewed both herself and the bookstore as unlikely to succeed.

Choices A, C, and D are incorrect because these lines don't equate the bookstore's chances of success with any aspect of the narrator. Instead, they emphasize the narrator's negative response to the bookstore's interior (choice A) and describe the owner's large wooden desk and the strong impression it makes on the narrator (choices C and D).

Question Difficulty: Medium

Reading: Question 8

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20 There were more stupid stuffed toys than there were books, and everything was covered with dust. The bookstore had as much chance of making it as I did.

Yet of all things, the flint that sparked a flame in my soul was the huge, darkly stained oak desk where the owner sat. To a practically
25 penniless twenty-year-old divorcée, sitting behind such a desk so grand, so luxurious—something to aspire to. I needed grandeur in my life.

Hannah told her relative he should hire me, and he informed her that he wanted to hire someone with more experience and, just as
30 important, with more class. He spoke as if I weren’t there, as if I were

invisible, as if his face were hidden behind a perforated printout.

Hannah, my champion, wouldn't accept defeat. She explained that I loved books and read constantly, that I knew more about them than he ever would, and, just as important, that I could dust and clean and
 35 scrub and mop. He'd have the cleanest bookstore in the city, I piped up, the most sparkling, a diamond. I would rid it of its acrid and musty odor. He pretended to mull over the offer before deciding to hire me for the time being (still talking to Hannah and not me), until he could bring in someone else to be the face of the bookstore.

40 What I didn't know at the time was that the first face he offered the job to belonged to a pretty girl whose family was so classy that they immigrated to Brazil and one of their scions had recently become the governor of São Paulo. The girl left without ever showing her countenance in the bookstore. The second didn't show up either; she
 45 married and no longer needed or wished to be employed.

Had either of these women made an appearance, my life would have been altogether different. I didn't realize how the fate of those two had influenced mine until a few years ago when the owner mentioned it in passing. He hadn't thought for a moment that I could do the job. He
 50 credited my success to his diligent training.

I worked for the paperback dilettante for fifty years, and mine was the only face anyone associated with my bookstore.

As used in [line 30](#), "class" most nearly means

- A. division.
- B. grade.
- C. refinement.
- D. structure.

Choice C is the best answer. In the first sentence of the sixth paragraph, the narrator explains that the bookstore owner "wanted to hire someone with more experience and, just as important, with more class." In other words, the owner is looking for someone who is refined—someone with a high level of social insight and good taste sometimes assumed to accompany wealth and social status. The narrator, who describes herself in the fifth paragraph as "a practically penniless twenty-year-old divorcée," clearly doesn't possess this kind of "class." Hence, in this context, "class" can be understood to mean refinement.

Choices A, B, and D are incorrect because in the context of the passage, "class" means refinement, not division (choice A), grade (choice B), or structure (choice D).

Question Difficulty: Medium

Reading: Question 9

Questions 1-9 are based on the following passage.

This passage is adapted from Rabih Alameddine, *An Unnecessary Woman*. ©2013 by Rabih Alameddine.

Line I love Javier Marías’s work. I’ve translated two of his novels: *A Heart So White* and *Tomorrow in the Battle Think on Me*. I’ll consider a third after I read the French translation of the final volume of *Your Face Tomorrow*, although at more than thirteen hundred pages, I’ll probably
5 balk at that as well.

But I digress, as usual.

In one of his essays, Marías suggests that his work deals as much with what didn’t happen as with what happened. In other words, most of us believe we are who we are because of the decisions we’ve made,
10 because of events that shaped us, because of the choices of those around us. We rarely consider that we’re also formed by the decisions we didn’t make, by events that could have happened but didn’t, or by our lack of choices, for that matter.

More than fifty years ago, on a gloomy day when hope followed my
15 shrimp of an ex-husband out the door, or so I thought at the time, my friend Hannah led me by the hand to a bookstore owned by one of her relatives. The relative, a second cousin once removed, had opened the bookstore as a lark, a ground-floor store with an inadequate picture window in a distressed building off a main street and no foot traffic.

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Hannah, my champion, wouldn't accept defeat. She explained that I loved books and read constantly, that I knew more about them than he ever would, and, just as important, that I could dust and clean and
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I worked for the paperback dilettante for fifty years, and mine was the only face anyone associated with my bookstore.

Which choice provides the best evidence for the conclusion that the bookstore owner initially ignored the narrator?

- A. [lines 28-30](#) ("Hannah . . . class")
- B. [lines 30-31](#) ("He spoke . . . printout")
- C. [lines 31-32](#) ("Hannah . . . defeat")
- D. [lines 32-35](#) ("She explained . . . mop")

Choice B is the best answer because the cited lines provide the best evidence for the conclusion that the bookstore owner initially ignored the narrator. The second sentence of the sixth paragraph states that "he spoke as if I weren't there, as if I were invisible, as if his face were hidden behind a perforated printout." This sentence clearly indicates that the bookstore owner didn't acknowledge the narrator's presence at first and chose to speak in a distant and impersonal manner, directing his words only to the narrator's friend. Thus, these lines provide the best evidence for the conclusion that the bookstore owner initially ignored the narrator.

Choices A, C, and D are incorrect because these lines describe the first exchange between Hannah and the bookstore owner (choice A) and Hannah's subsequent defense of the narrator's abilities (choices C and D), but they don't provide evidence for the conclusion that the bookstore owner initially ignored the narrator.

Question Difficulty: Medium

Reading: Question 10

Questions 10-18 are based on the following passage and supplementary material.

This passage is adapted from Kathleen D. Vohs, “It’s Not ‘Mess.’ It’s Creativity.” ©2013 by The New York Times Company.

Line Messy or tidy—which is better?

Historically, the evidence has favored the tidy camp. The anthropologist Mary Douglas noted almost 50 years ago a connection between clean, open spaces and moral righteousness. More recently, 5 psychologists have shown that the scent of citrus cleaning products is enough to raise people’s ethical standards and promote trust. Conversely, in another study, people were found to associate chaotic wilderness with death.

10 But if messiness is so bad, why do so many people tolerate, and even embrace, it?

Not long ago, two of my colleagues and I speculated that messiness, like tidiness, might serve a purpose. Since tidiness has been associated with upholding societal standards, we predicted that just being around tidiness would elicit a desire for convention. We also 15 predicted the opposite: that being around messiness would lead people away from convention, in favor of new directions.

We conducted some experiments to test these intuitions, and our hunches were borne out.

20 For our first study, we arranged rooms in our laboratory to look either tidy, with books and papers stacked and orderly, or messy, with papers and books strewn around haphazardly. Then we invited 188 adults to visit our laboratory individually, ostensibly for a consumer-choice study. Each subject was assigned to either a messy or a tidy room, where he or she was shown a menu from a deli that made fruit 25 smoothies. The smoothies were said to come with a “boost” (added ingredients) from which there were three options to choose—a health, wellness or vitamin boost.

30 We created two versions of the menu. Half of the subjects saw a menu that had the word “classic” highlighting the health boost option, whereas the other half saw the health boost highlighted by the word

“new.” Then our subjects made their choices.

As predicted, when the subjects were in the tidy room they chose the health boost more often—almost twice as often—when it had the “classic” label: that is, when it was associated with convention. Also as
35 predicted, when the subjects were in the messy room, they chose the health boost more often—more than twice as often—when it was said to be “new”: that is, when it was associated with novelty. Thus, people greatly preferred convention in the tidy room and novelty in the messy room.

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Forty-eight research subjects came individually to our laboratory, again assigned to messy or tidy rooms. This time, we told subjects to
45 imagine that a Ping-Pong ball factory needed to think of new uses for Ping-Pong balls, and to write down as many ideas as they could. We had independent judges rate the subjects’ answers for degree of creativity, which can be done reliably.

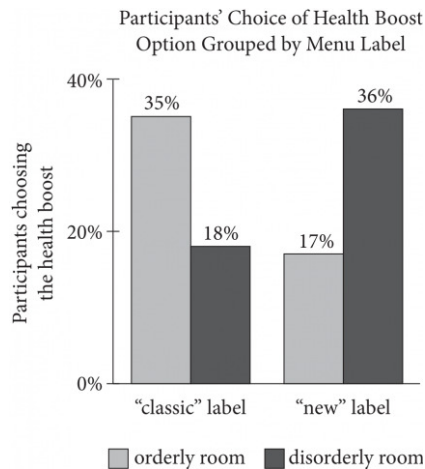
When we analyzed the responses, we found that the subjects in
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At the same time, the working world is abuzz about cultivating innovation and creativity, endeavors that our findings suggest might be
70 hampered by the minimalist movement. While cleaning up certainly has its benefits, clean spaces might be too conventional to let inspiration flow.



Adapted from Kathleen D. Vohs et al., "Physical Order Produces Healthy Choices, Generosity, and Conventionality, Whereas Disorder Produces Creativity." ©2013 by Kathleen D. Vohs et al.

As used throughout the passage, "convention" most nearly means

- A. formality.
- B. resolution.
- C. custom.
- D. regulation.

Choice C is the best answer. The word "convention" appears four times in the passage, and two of these uses are particularly illustrative. In the last sentence of the fourth paragraph, the author and her colleagues posit that being in a messy environment "would lead people away from convention, in favor of new directions." Here, convention stands in opposition to "new directions." Similarly, "convention" is contrasted with "novelty" in the last sentence of the eighth paragraph: "Thus, people greatly preferred convention in the tidy room and novelty in the messy room." The contrast of "convention" with both "new directions" and "novelty" suggests that it is being used to refer to a common practice or custom. Therefore, the word "convention," as used in the passage, is most similar in meaning to custom.

Choices A, B, and D are incorrect because in the context of the passage, "convention" means custom, not formality (choice A), resolution (choice B), or regulation (choice D).

Question Difficulty: Hard

Reading: Question 11

Questions 10-18 are based on the following passage and supplementary material.

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Line Messy or tidy—which is better?

Historically, the evidence has favored the tidy camp. The anthropologist Mary Douglas noted almost 50 years ago a connection between clean, open spaces and moral righteousness. More recently, 5 psychologists have shown that the scent of citrus cleaning products is enough to raise people's ethical standards and promote trust.

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35 predicted, when the subjects were in the messy room, they chose the health boost more often—more than twice as often—when it was said to be “new”: that is, when it was associated with novelty. Thus, people greatly preferred convention in the tidy room and novelty in the messy room.

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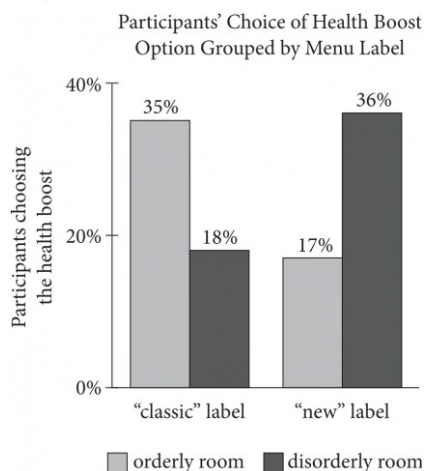
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Adapted from Kathleen D. Vohs et al., “Physical Order Produces Healthy Choices, Generosity, and Conventionality, Whereas Disorder Produces Creativity.” ©2013 by Kathleen D. Vohs et al.

As used in [line 6](#), “promote” most nearly means

- A. advocate.
- B. publicize.
- C. endorse.
- D. encourage.

Choice D is the best answer. The third sentence of the second paragraph states that “the scent of citrus cleaning products is enough to raise people’s ethical standards and promote trust.” In other words, the smell of cleaning products can build trust in people. Therefore, the word “promote,” as used in the passage, most nearly means encourage.

Choices A, B, and C are incorrect because in the context of the passage, “promote” means encourage, not advocate (choice A), publicize (choice B), or endorse (choice C).

Question Difficulty: Medium

Reading: Question 12

Questions 10-18 are based on the following passage and supplementary material.

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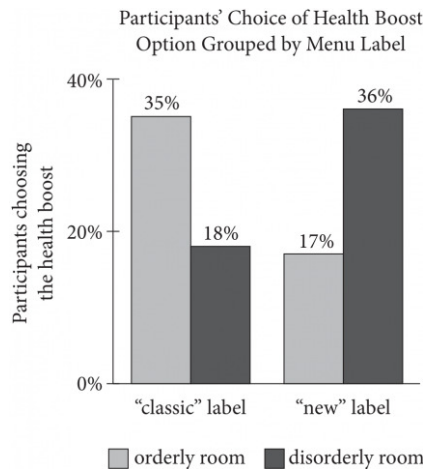
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Based on the passage, one assumption the author made when evaluating the results of the Ping-Pong balls experiment is that

- A. subjects felt more relaxed in the neat laboratory rooms.
- B. each new idea was the result of a similar amount of exertion.
- C. highly creative ideas would be less likely to succeed on a mass-market scale.
- D. the independent judges considered the messiness of the subjects' environment.

Choice B is the best answer. The tenth paragraph describes the Ping-Pong balls experiment, in which participants were "assigned to messy or tidy rooms" and asked to think of "new uses for Ping-Pong balls." The eleventh paragraph summarizes the results of this experiment, including the author's finding that "the subjects in both types of rooms came up with about the same number of ideas, which meant they put about the same effort into the task." Therefore, one assumption the author made when evaluating the results of this experiment is that each new idea was the result of a similar amount of exertion.

Choices A, C, and D are incorrect because the passage doesn't suggest that the author made any assumptions about the subjects' level of relaxation (choice A), the marketability of any of the ideas they produced (choice C), or that the independent judges considered the messiness of the subjects' environment (choice D).

Question Difficulty: Medium

Reading: Question 13

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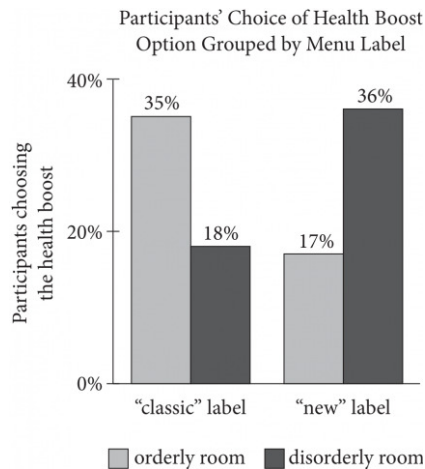
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Which choice best supports the idea that the state of order in an environment has a pronounced effect on the upper edge of the range of creativity?

- A. [lines 46-48](#) (“We . . . reliably”)
- B. [lines 49-50](#) (“When . . . ideas”)
- C. [lines 51-53](#) (“Nonetheless . . . expected”)
- D. [lines 55-58](#) (“we found . . . counterparts”)

Choice D is the best answer. The last sentence of the eleventh paragraph states that “we found a remarkable boost from being in the messy room—these subjects came up with almost five times the number of highly creative responses as did their tidy-room counterparts.” This sentence best supports the idea that the state of order in an environment (that is, a messy room) has a pronounced effect (“a remarkable boost”) on the upper edge of the range of creativity (“highly creative responses”).

Choices A, B, and C are incorrect because the cited lines don’t support the idea that the state of order in an environment has a pronounced effect on the upper edge of the range of creativity. Instead, they clarify how the creativity of responses was rated (choice A), claim that the number of ideas produced by respondents working in messy and tidy rooms was the same (choice B), and present the finding that respondents working in messy rooms are more creative than those in tidy rooms (choice C).

Question Difficulty: Hard

Reading: Question 14

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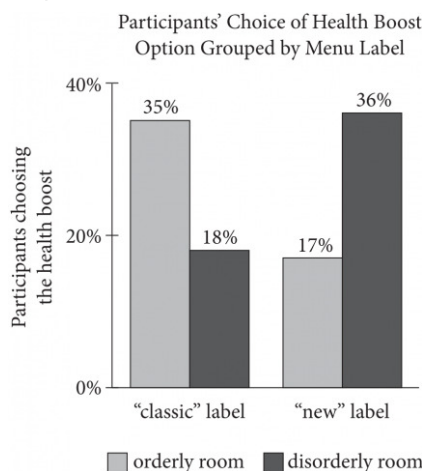
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Adapted from Kathleen D. Vohs et al., “Physical Order Produces Healthy Choices, Generosity, and Conventionality, Whereas Disorder Produces Creativity.” ©2013 by Kathleen D. Vohs et al.

In [lines 59-62](#), the reference to the Northwestern University study serves mainly to

- A. provide additional support for the findings of the author’s second study.
- B. broaden the range of perspectives presented in the discussion.
- C. offer an example of an experiment with findings applicable to daily life.
- D. respond to arguments against the findings of the author’s first study.

Choice A is the best answer. The twelfth paragraph states: “These results have been confirmed by independent researchers at Northwestern University, who found that subjects in a messy room drew more creative pictures and were quicker to solve a challenging brainteaser puzzle than subjects in a tidy room.” This information provides additional support for the findings of the author’s second study, which dealt with the level of creativity engendered by messy environments, as described in the tenth and eleventh paragraphs.

Choice B is incorrect because the information doesn’t broaden the range of perspectives presented in the discussion, but rather confirms the conclusions made by the author. Choice C is incorrect. Although the twelfth paragraph does offer an example of an experiment, any relevance to daily life is incidental, as it is intended to corroborate the author’s findings in the second experiment. Choice D is incorrect because the author’s reference to the research conducted at Northwestern University isn’t intended to respond to arguments against the findings of the author’s first study.

Question Difficulty: Medium

Reading: Question 15

Questions 10-18 are based on the following passage and supplementary material.

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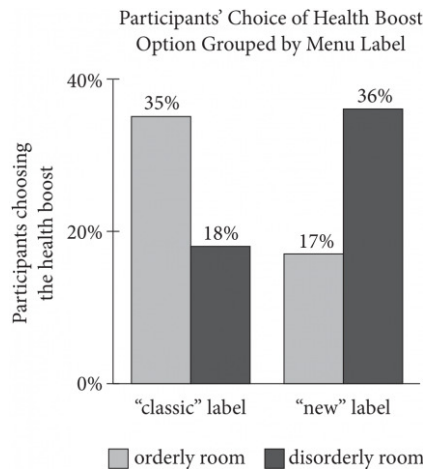
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Based on the passage, which claim would the author most likely make about companies that follow the minimalist design trend?

- A. They are likely to be groundbreakers in innovation.
- B. They are less likely to value open spaces in the workplace.
- C. Their employees are less likely to exhibit originality.
- D. Their employees' performance on collaborative projects is likely to improve.

Choice C is the best answer. In the third sentence of the eleventh paragraph, the author contends that people working in messy rooms were "28 percent more creative" than people working in tidy rooms, according to her research. She applies this conclusion to a critique of the minimalist design trend in the first sentence of the last paragraph: "At the same time, the working world is abuzz about cultivating innovation and creativity, endeavors that our findings suggest might be hampered by the minimalist movement." Therefore, the author would most likely claim that employees at companies following the minimalist design trend would be less likely to exhibit originality.

Choice A is incorrect because its contention, that companies following the minimalist design trend are likely to be groundbreakers, directly contradicts the findings of the author's study. Choice B is incorrect because the question of whether or not employees value open spaces isn't directly related to the focus of the author's research, which was messiness. Choice D is incorrect because the studies described by the author measured the effects of messiness on creativity, not collaboration.

Question Difficulty: Medium

Reading: Question 16

Questions 10-18 are based on the following passage and supplementary material.

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Line Messy or tidy—which is better?

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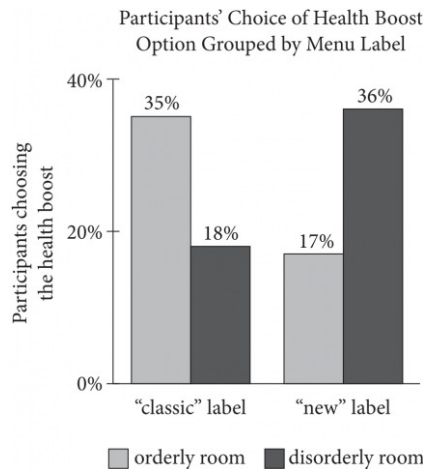
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Which choice provides the best evidence for the answer to the previous question?

- A. [lines 40-42](#) (“Given . . . creativity”)
- B. [lines 63-65](#) (“There . . . cubicles”)
- C. [lines 65-67](#) (“Today’s . . . footprints”)
- D. [lines 69-71](#) (“At the . . . movement”)

Choice D is the best answer. The previous question asks which claim the author would most likely make about companies that follow the minimalist design trend. The answer, that their employees are less likely to exhibit originality, is best supported by the first sentence of the last paragraph: “At the same time, the working world is abuzz about cultivating innovation and creativity, endeavors that our findings suggest might be hampered by the minimalist movement.”

Choices A, B, and C are incorrect because the cited lines don’t support the answer to the previous question. Instead, they describe the rationale behind the second experiment (choice A) and discuss the shift in office spaces from private cubicles (choice B) to smaller, shared workspaces (choice C).

Question Difficulty: Hard

Reading: Question 17

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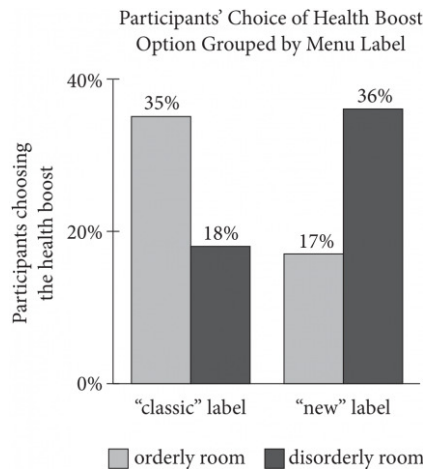
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According to the graph, what percentage of participants in the disorderly room chose the health boost when it was labeled "classic"?

- A. 17%
- B. 18%
- C. 35%
- D. 36%

Choice B is the best answer. The graph shows the percentages of participants in an orderly room and a disorderly room who chose from health boost options with the labels "classic" or "new." According to the graph, 18% of participants in the disorderly room chose the health boost when it was labeled "classic."

Choices A, C, and D are incorrect because they don't correctly identify the percentage of participants from the disorderly room who chose the health boost labeled "classic." Instead, choices A and C identify the percentage of participants from the orderly room who chose the health boost labeled "new" (17%) and "classic" (35%), while choice D identifies the percentage of participants from the disorderly room who chose the health boost labeled "new" (36%).

Question Difficulty: Easy

Reading: Question 18

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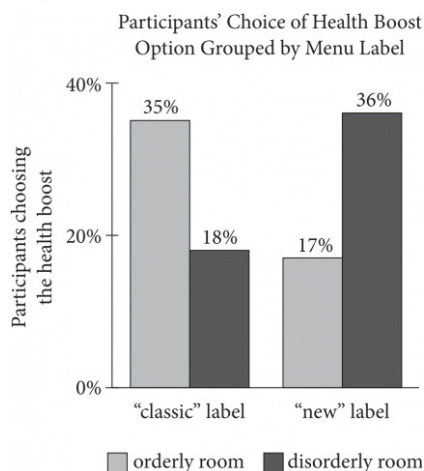
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Which statement about participants in the author's first study is best supported by the data in the graph?

- A. Participants in the disorderly room were equally likely to choose the "classic" health boost as to choose the "new" health boost.
- B. Participants in the orderly room were around twice as likely to choose the "new" health boost as were those in the disorderly room.
- C. Participants in the disorderly room were equally likely to choose the vitamin boost as to choose the wellness boost.
- D. Participants in the disorderly room were around twice as likely to choose the "new" health boost as were those in the orderly room.

Choice D is the best answer. According to the legend for the graph, the dark-gray bars represent the choice of participants in the disorderly room, while the light-gray bars represent the choice of participants in the orderly room. The dark-gray bar on the right indicates that 36% of participants from the disorderly room chose the health boost labeled "new," and the light-gray bar on the right indicates that 17% percent of participants in the orderly room that made the same choice. Hence, the data in the graph best support the statement that participants in the disorderly room were around twice as likely to choose the "new" health boost as were those in the orderly room.

Choices A, B, and C are incorrect because the graph doesn't support these statements. Rather than being equally likely to choose the "classic" health boost as the one labeled "new" (choice A), participants in the disorderly room were much more likely to choose the health boost labeled "new." Furthermore, participants in the orderly room weren't twice as likely to choose the "new" health boost as those in the disorderly room (choice B). Finally, the graph doesn't provide information about the vitamin and wellness boosts (choice C), only about the health boost.

Question Difficulty: Medium

Reading: Question 19

Questions 19-27 are based on the following passages.

Passage 1 is adapted from Nancy Stamp, "Restoring Tomato Flavor." ©2013 by The Scientist. Passage 2 is adapted from Ferris Jabr, "Creating Tastier and Healthier Fruits and Veggies with a Modern Alternative to GMOs." ©2014 by Scientific American.

Line **Passage 1**

Tomatoes are the #1-selling fruit or vegetable in the world today. Yet consumers complain about blandness of supermarket tomatoes and yearn for the old-timey summer-fresh, off-the-vine taste.

5 Tomato taste is a unique combination of five tastants—sweet, sour, salty, bitter, and savory (umami) compounds—as well as the aroma of volatiles, many from the breakdown of the carotenoid pigments, such as the bright red antioxidant lycopene. The modern tomato plant was bred to produce more fruit, diluting the relatively fixed amount of
10 nutrients and tastants the plant has to offer. But that is only part of the story.

Researchers at the University of California, Davis, recently discovered that a genetic mutation that occurred about 70 years ago, and was then selected by breeders for its effect of causing tomatoes to
15 ripen uniformly, came at the cost of less sugar and carotenoids in the fruit. Breeders also grew gas-able fruit, cultivars that respond well to ethylene to trigger ripening during postharvest, thus allowing tomatoes to be picked while still green. However, it is difficult to gauge when green tomatoes have matured to the point of forming the seed gel so
20 rich in acid and umami. If picked too soon, the fruit will not ripen well.

Even for the mature green tomatoes, postharvest ethylene gassing by itself cannot fully substitute for the flavor developed by true vine ripening. For example, green fruit receives most of its sugar from leaves but also has chloroplasts that, when bathed in sunshine, can
25 make more sugar directly within the fruit. Picked and stored fruit, of course, is stored in the dark, and thus neither receives nor produces sugar. And because tomatoes are a delicate fruit, they are also bred for a tougher (and distasteful) skin to withstand picking, packing, and transport. The final nail in the flavor coffin is refrigeration. Despite
30 knowing it ruins the taste by reducing the volatiles so crucial for good

flavor, wholesalers and retailers refrigerate tomatoes to prolong shelf life during distribution.

Passage 2

Horticultural scientist Harry Klee is determined to rescue the
35 industrial tomato from its current gustatory doldrums. Through a series
of large taste tests, he has evaluated nearly 200 varieties of heirloom
tomatoes—older cultivars preserved by small groups of farmers and
gardeners and sold at some grocery stores and farmers markets.
Heirlooms are known for their vibrant colors and fantastic flavor, but
40 their skin easily cracks and scars, they often go soft quickly, and they
come from plants that do not make enough fruit to meet the demands
of large commercial farmers.

In his research, Klee has learned that many heirlooms are tastier
than standard supermarket tomatoes not because they have more
45 sugar but because they are chock-full of a much more complex
component of flavor: pungent chemicals known as volatile organic
compounds that waft off plants and into our nostrils (think freshly cut
grass or the alluring smell of citrus). In a 2012 study Klee and his
colleagues discovered that people actually enjoy a tomato with
50 moderate levels of sugar if it contains enough of an aromatic
compound named geranial. Klee suspects that geranial and other
volatiles not only give a tomato its scent but also magnify the fruit's
innate sweetness. In follow-up studies, he created tomatoes that
lacked geranial and other fragrant molecules. People did not like them.
55 If a tomato had average to high sugar levels but no volatiles,
volunteers did not perceive it as sweet.

Lately, Klee has been trying to make hybrid plants that give growers
and consumers the best of both tomato worlds, old and new. In the
past three years he and his colleagues have mated the most delicious
60 heirlooms they could find with modern conventional tomatoes to create
crossbreeds that yield well, are firm and smooth-skinned, and taste
great. Klee routinely stocks up on cheap electric toothbrushes, which
he and his team use to gently but thoroughly rattle tomato flowers,
gathering the pollen that falls off in test tubes so they can play

65 matchmaker. All the while, the breeders have been using hole punches to collect bits of leaves and analyze the plants' DNA, looking for genetic patterns that correspond to high levels of volatiles, for instance, or flawless skin. "Genetic analysis has definitely informed crossing decisions," Klee says. "Our work has really accelerated in the last

70 couple of years with the emergence of the tomato genome sequence."

The main purpose of Passage 1 is to

- A. examine the techniques used for enhancing the taste of modern tomatoes.
- B. identify several influences on the physical appearance of modern tomatoes.
- C. discuss key phases of the process used to distribute modern tomatoes.
- D. describe some of the factors contributing to the blandness of modern tomatoes.

Choice D is the best answer. In the second paragraph of Passage 1, the compounds that make up tomato taste are described. The passage goes on to detail the ways agricultural and commercial practices have diluted these compounds. The third and fourth paragraphs describe how picking tomatoes while they are still green prevents them from ripening well, and, as a result, they lack the flavor of vine-ripened tomatoes. Passage 1 ends with a description of how modern tomatoes are bred to have tough skins that are "distasteful" and are often refrigerated during storage, which reduces "the volatiles so crucial for good flavor." Therefore, the main purpose of Passage 1 is to describe some of the factors contributing to the blandness of modern tomatoes.

Choice A is incorrect because Passage 1 makes it clear that agricultural and commercial practices have diminished, not enhanced, the taste of modern tomatoes. Choice B is incorrect because the main purpose of Passage 1 isn't to identify the influences on the physical appearance of modern tomatoes, but rather the factors that affect their taste. Choice C is incorrect. Passage 1 discusses modern tomato harvest and distribution methods but doesn't detail steps of the distribution process.

Question Difficulty: Medium

Reading: Question 20

Questions 19-27 are based on the following passages.

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In the context of Passage 1, [lines 5-11](#) serve to

- A. highlight how best to cultivate modern tomatoes.
- B. emphasize the hardiness and variety of modern tomato plants.
- C. establish a link between the taste and the breeding of modern tomatoes.
- D. raise concerns about the nutritional value of the modern tomato.

Choice C is the best answer. The cited lines encompass the second paragraph of Passage 1. This paragraph describes tomato flavor as "a unique combination of five tastants—sweet, sour, salty, bitter, and savory (umami) compounds." It then explains how modern breeding has led to plants that produce more tomatoes than these plants did previously. This higher level of production leads to blander tomatoes, as it causes a dilution of the "relatively fixed amount of nutrients and tastants the plant has to offer." Therefore, these lines from Passage 1 serve to establish a link between the taste and the breeding of modern tomatoes.

Choice A is incorrect. Although the cited lines discuss the cultivation of tomatoes, they don't explain how to do this, but rather seek to connect the taste of modern tomatoes to recent breeding practices. Choice B is incorrect because while the cited lines do mention the higher yield of modern tomato plants, they don't emphasize the hardiness or variety of these plants. Choice D is incorrect. Although the cited lines mention the dilution of nutrients in modern tomatoes, this concept isn't the main focus of these lines.

Question Difficulty: Medium

Reading: Question 21

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As used in [line 9](#), "fixed" most nearly means

- A. stable.
- B. immobile.
- C. repaired.
- D. obsessive.

Choice A is the best answer. The second sentence of the second paragraph of Passage 1 states, "The modern tomato plant was bred to produce more fruit, diluting the relatively fixed amount of nutrients and tastants the plant has to offer." In other words, the amount of nutrients the plant produces doesn't change, so these nutrients and tastants are less concentrated in tomato plants that produce more fruit. Thus, in the context of Passage 1 the word "fixed" most nearly means stable.

Choices B, C, and D are incorrect because in the context of the passage, "fixed" means stable, not immobile (choice B), repaired (choice C), or obsessive (choice D).

Question Difficulty: Medium

Reading: Question 22

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Passage 1 supports which claim about the modern tomato industry?

- A. It employs breeding practices that result in visually unappealing produce.
- B. It creates a long-lasting product at the cost of flavor.
- C. It supports researchers who try to improve the taste of its produce.
- D. It enhances the quality of its produce by mimicking natural processes.

Choice B is the best answer. The last sentence of Passage 1 describes the trade-off between flavor and perishability brought about by the refrigerated storage of modern tomatoes: "Despite knowing it ruins the taste by reducing the volatiles so crucial for good flavor, wholesalers and retailers refrigerate tomatoes to prolong shelf life during distribution." Therefore, Passage 1 supports the claim that the modern tomato industry creates a long-lasting product at the cost of flavor.

Choices A and C are incorrect. Passage 2 mentions the visually unappealing qualities of some tomato varieties (choice A), as well as research aimed at improving the taste of tomatoes (choice C), but neither of these topics is mentioned in Passage 1. Choice D is incorrect because although there are two instances in which the mimicry of natural processes is mentioned, one occurs in Passage 2 (artificial pollination), and the other (ripening with ethylene gas) occurs in Passage 1 but emphasizes a harmful effect on taste, rather than improvements in quality.

Question Difficulty: Medium

Reading: Question 23

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Which choice provides the best evidence for the answer to the previous question?

- A. [lines 12-16](#) ("Researchers . . . fruit")
- B. [lines 16-18](#) ("Breeders . . . green")
- C. [lines 26-28](#) ("Picked . . . sugar")
- D. [lines 31-33](#) ("Despite . . . distribution")

Choice D is the best answer. The previous question asks which claim about the modern tomato industry is supported by Passage 1. The answer, that it creates a long-lasting product at the cost of flavor, is best supported by the last sentence of Passage 1: "Despite knowing it ruins the taste by reducing the volatiles so crucial for good flavor, wholesalers and retailers refrigerate tomatoes to prolong shelf life during distribution."

Choices A, B, and C are incorrect because the cited lines don't support the answer to the previous question. Instead, they draw a link between breeding for uniform ripening and flavor loss (choice A), explain how breeding produces "gas-able fruit" that can be "picked while still green" (choice B), and describe the effect of picking and storing green fruit on its sugar levels (choice C).

Question Difficulty: Medium

Reading: Question 24

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As used in [lines 42-43](#), "meet" most nearly means

- A. assemble.
- B. confront.
- C. satisfy.
- D. introduce.

Choice C is the best answer. In the last sentence of the first paragraph of Passage 2, the author states, "Heirlooms . . . come from plants that do not make enough fruit to meet the demands of large commercial farmers." The passage implies that the demands of commercial farmers have been set by the higher output of nonheirloom tomato varieties. The fact that heirloom plants can't typically produce enough fruit to answer these farmers' demands explains why they aren't more widely used. Thus, in the context of Passage 2, the word "meet" most nearly means satisfy.

Choices A, B, and D are incorrect because in the context of Passage 2, "meet" means satisfy, not assemble (choice A), confront (choice B), or introduce (choice D).

Question Difficulty: Easy

Reading: Question 25

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65 matchmaker. All the while, the breeders have been using hole punches to collect bits of leaves and analyze the plants' DNA, looking for genetic patterns that correspond to high levels of volatiles, for instance, or flawless skin. "Genetic analysis has definitely informed crossing decisions," Klee says. "Our work has really accelerated in the last

70 couple of years with the emergence of the tomato genome sequence."

The description in Passage 2 of Klee's most recent research indicates that it is based on the assumption that

- A. both customers and producers will benefit from improvements in the quality of conventional tomatoes.
- B. moderate to high levels of sugar will make tomatoes more appetizing to humans than will any other feature.
- C. consumers have little interest in produce that contains high levels of volatiles.
- D. organically grown tomatoes are superior to genetically modified versions.

Choice A is the best answer. Klee's most recent research is introduced in the first sentence of the last paragraph of Passage 2: "Lately, Klee has been trying to make hybrid plants that give growers and consumers the best of both tomato worlds, old and new." This paragraph goes on to suggest that Klee's research is founded on the idea that his hybrid plants will offer advantages both to people who produce tomatoes (the plants will "yield well"), and to those who buy them (the fruit will "taste great"). In other words, the description indicates that Klee's most recent research is based on the assumption that both producers and customers will benefit from improvements in the quality of conventional tomatoes.

Choices B and C are incorrect because these assumptions don't underlie Klee's most recent research and, in fact, contradict his earlier research. In a study described in the second paragraph of Passage 2, Klee found that people didn't enjoy tomatoes with a lot of sugar and no volatiles, indicating that high levels of sugar alone don't make tomatoes appetizing (choice B). Furthermore, people had high interest, rather than little interest, in tomatoes that contained sizable amounts of a volatile called "geranial" (choice C). Choice D is incorrect because the topic of organic growing practices is never addressed in Passage 2. Furthermore, Klee's research is based on the assumption that industrial tomatoes and heirloom tomatoes both have desirable traits, not that one variety is superior to the other.

Question Difficulty: Medium

Reading: Question 26

Questions 19-27 are based on the following passages.

Passage 1 is adapted from Nancy Stamp, "Restoring Tomato Flavor." ©2013 by The Scientist. Passage 2 is adapted from Ferris Jabr, "Creating Tastier and Healthier Fruits and Veggies with a Modern Alternative to GMOs." ©2014 by Scientific American.

Line **Passage 1**

Tomatoes are the #1-selling fruit or vegetable in the world today. Yet consumers complain about blandness of supermarket tomatoes and yearn for the old-timey summer-fresh, off-the-vine taste.

5 Tomato taste is a unique combination of five tastants—sweet, sour, salty, bitter, and savory (umami) compounds—as well as the aroma of volatiles, many from the breakdown of the carotenoid pigments, such as the bright red antioxidant lycopene. The modern tomato plant was bred to produce more fruit, diluting the relatively fixed amount of
10 nutrients and tastants the plant has to offer. But that is only part of the story.

Researchers at the University of California, Davis, recently discovered that a genetic mutation that occurred about 70 years ago, and was then selected by breeders for its effect of causing tomatoes to
15 ripen uniformly, came at the cost of less sugar and carotenoids in the fruit. Breeders also grew gas-able fruit, cultivars that respond well to ethylene to trigger ripening during postharvest, thus allowing tomatoes to be picked while still green. However, it is difficult to gauge when green tomatoes have matured to the point of forming the seed gel so
20 rich in acid and umami. If picked too soon, the fruit will not ripen well.

Even for the mature green tomatoes, postharvest ethylene gassing by itself cannot fully substitute for the flavor developed by true vine ripening. For example, green fruit receives most of its sugar from leaves but also has chloroplasts that, when bathed in sunshine, can
25 make more sugar directly within the fruit. Picked and stored fruit, of course, is stored in the dark, and thus neither receives nor produces sugar. And because tomatoes are a delicate fruit, they are also bred for a tougher (and distasteful) skin to withstand picking, packing, and transport. The final nail in the flavor coffin is refrigeration. Despite
30 knowing it ruins the taste by reducing the volatiles so crucial for good

flavor, wholesalers and retailers refrigerate tomatoes to prolong shelf life during distribution.

Passage 2

Horticultural scientist Harry Klee is determined to rescue the
35 industrial tomato from its current gustatory doldrums. Through a series
of large taste tests, he has evaluated nearly 200 varieties of heirloom
tomatoes—older cultivars preserved by small groups of farmers and
gardeners and sold at some grocery stores and farmers markets.
Heirlooms are known for their vibrant colors and fantastic flavor, but
40 their skin easily cracks and scars, they often go soft quickly, and they
come from plants that do not make enough fruit to meet the demands
of large commercial farmers.

In his research, Klee has learned that many heirlooms are tastier
than standard supermarket tomatoes not because they have more
45 sugar but because they are chock-full of a much more complex
component of flavor: pungent chemicals known as volatile organic
compounds that waft off plants and into our nostrils (think freshly cut
grass or the alluring smell of citrus). In a 2012 study Klee and his
colleagues discovered that people actually enjoy a tomato with
50 moderate levels of sugar if it contains enough of an aromatic
compound named geranial. Klee suspects that geranial and other
volatiles not only give a tomato its scent but also magnify the fruit's
innate sweetness. In follow-up studies, he created tomatoes that
lacked geranial and other fragrant molecules. People did not like them.
55 If a tomato had average to high sugar levels but no volatiles,
volunteers did not perceive it as sweet.

Lately, Klee has been trying to make hybrid plants that give growers
and consumers the best of both tomato worlds, old and new. In the
past three years he and his colleagues have mated the most delicious
60 heirlooms they could find with modern conventional tomatoes to create
crossbreeds that yield well, are firm and smooth-skinned, and taste
great. Klee routinely stocks up on cheap electric toothbrushes, which
he and his team use to gently but thoroughly rattle tomato flowers,
gathering the pollen that falls off in test tubes so they can play

65 matchmaker. All the while, the breeders have been using hole punches to collect bits of leaves and analyze the plants' DNA, looking for genetic patterns that correspond to high levels of volatiles, for instance, or flawless skin. "Genetic analysis has definitely informed crossing decisions," Klee says. "Our work has really accelerated in the last

70 couple of years with the emergence of the tomato genome sequence."

In Passage 2, Klee's description of his crossbreeding efforts suggests that recent scientific advances have helped to increase the

- A. potential quality of the products available to the public.
- B. number of research studies that have applications beyond agriculture.
- C. funding of investigations to reexamine previous findings.
- D. frequency of debates concerning the value of genome analysis.

Choice A is the best answer. Klee describes his own crossbreeding efforts in the last two sentences of Passage 2: "Genetic analysis" characterized by "the emergence of the tomato genome sequence" has "definitely informed crossing decisions." Klee indicates that as a result of the use of this analysis, his team's work "has really accelerated." The goal of their most recent research, as outlined in the second sentence of the last paragraph, is to create tomato "crossbreeds that yield well, are firm and smooth-skinned, and taste great," making them more attractive to consumers. Thus, Klee's description of his crossbreeding efforts suggests that recent scientific advances have helped to increase the potential quality of the products available to the public.

Choices B, C, and D are incorrect because these assumptions aren't supported by Passage 2. Although one might expect recent scientific advances like genome sequencing to increase the number of research studies with applications beyond agriculture (choice B) or the funding of investigations to reexamine previous findings (choice C), neither of these developments is mentioned in Klee's description of his crossbreeding efforts. An increase in the frequency of debates concerning the value of genome analysis (choice D) also isn't suggested by Klee's description of his efforts.

Question Difficulty: Medium

Reading: Question 27

Questions 19-27 are based on the following passages.

Passage 1 is adapted from Nancy Stamp, "Restoring Tomato Flavor." ©2013 by The Scientist. Passage 2 is adapted from Ferris Jabr, "Creating Tastier and Healthier Fruits and Veggies with a Modern Alternative to GMOs." ©2014 by Scientific American.

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10 nutrients and tastants the plant has to offer. But that is only part of the story.

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15 ripen uniformly, came at the cost of less sugar and carotenoids in the fruit. Breeders also grew gas-able fruit, cultivars that respond well to ethylene to trigger ripening during postharvest, thus allowing tomatoes to be picked while still green. However, it is difficult to gauge when green tomatoes have matured to the point of forming the seed gel so
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Even for the mature green tomatoes, postharvest ethylene gassing by itself cannot fully substitute for the flavor developed by true vine ripening. For example, green fruit receives most of its sugar from leaves but also has chloroplasts that, when bathed in sunshine, can
25 make more sugar directly within the fruit. Picked and stored fruit, of course, is stored in the dark, and thus neither receives nor produces sugar. And because tomatoes are a delicate fruit, they are also bred for a tougher (and distasteful) skin to withstand picking, packing, and transport. The final nail in the flavor coffin is refrigeration. Despite
30 knowing it ruins the taste by reducing the volatiles so crucial for good

flavor, wholesalers and retailers refrigerate tomatoes to prolong shelf life during distribution.

Passage 2

Horticultural scientist Harry Klee is determined to rescue the
35 industrial tomato from its current gustatory doldrums. Through a series
of large taste tests, he has evaluated nearly 200 varieties of heirloom
tomatoes—older cultivars preserved by small groups of farmers and
gardeners and sold at some grocery stores and farmers markets.
Heirlooms are known for their vibrant colors and fantastic flavor, but
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come from plants that do not make enough fruit to meet the demands
of large commercial farmers.

In his research, Klee has learned that many heirlooms are tastier
than standard supermarket tomatoes not because they have more
45 sugar but because they are chock-full of a much more complex
component of flavor: pungent chemicals known as volatile organic
compounds that waft off plants and into our nostrils (think freshly cut
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70 couple of years with the emergence of the tomato genome sequence."

Which statement best describes the relationship between the two passages?

- A. Passage 2 describes scientific research that is designed to address an issue identified in Passage 1.
- B. Passage 2 explains a modern approach that exposes the shortcomings of a claim made in Passage 1.
- C. Passage 2 discusses a significant exception to the generalizations highlighted in Passage 1.
- D. Passage 2 criticizes a controversial scientific method used to justify the main argument in Passage 1.

Choice A is the best answer. The main purpose of Passage 1 is to examine the problem of "blandness" of "supermarket tomatoes," as put forth in the first paragraph. Passage 1 identifies the source of this problem in production practices that sacrifice flavor for higher yield and greater storage potential. Passage 2 focuses on research conducted by horticulturist Harry Klee, the goal of which is to produce tomatoes "that yield well, are firm and smooth-skinned, and taste great," as described in the second sentence of the last paragraph. Therefore, the best summary of the relationship between the two passages is that Passage 2 describes scientific research that is designed to address an issue identified in Passage 1.

Choice B is incorrect because although Passage 2 explains a modern approach to the problem of bland tomatoes, it doesn't expose the shortcomings of any claims made in Passage 1. Choices C and D are incorrect because Passage 2 doesn't discuss an exception to a generalization highlighted in Passage 1 (choice C) or criticize any of the methods used to justify the main argument in Passage 1 (choice D).

Question Difficulty: Medium

Reading: Question 28

Questions 28-37 are based on the following passage.

This passage is adapted from US Secretary of State George C. Marshall, "The Marshall Plan." Delivered June 5, 1947, at Harvard University, two years after the end of the Second World War.

Line In considering the requirements for the rehabilitation of Europe, the physical loss of life and the visible destruction of cities, factories, mines, and railroads were correctly estimated, but it has become obvious during recent months that this visible destruction was probably
5 less serious than the dislocation of the entire fabric of the European economy.

The farmer has always produced the foodstuffs to exchange with the city dweller for the other necessities of life. This division of labor is the basis of modern civilization. At the present time it is threatened with
10 breakdown. The town and city industries are not producing adequate goods to exchange with the food-producing farmer. Raw materials and fuel are in short supply. Machinery is lacking or worn out. The farmer or the peasant cannot find the goods for sale which he desires to purchase. So the sale of his farm produce for money which he cannot
15 use seems to him an unprofitable transaction. He, therefore, has withdrawn many fields from crop cultivation and is using them for grazing. He feeds more grain to stock and finds for himself and his family an ample supply of food, however short he may be on clothing and the other ordinary gadgets of civilization. Meanwhile people in the
20 cities are short of food and fuel. So the governments are forced to use their foreign money and credits to procure these necessities abroad. This process exhausts funds which are urgently needed for reconstruction. Thus a very serious situation is rapidly developing which bodes no good for the world. The modern system of the division
25 of labor upon which the exchange of products is based is in danger of breaking down.

The truth of the matter is that Europe's requirements for the next three or four years of foreign food and other essential products—principally from America—are so much greater than her present ability
30 to pay that she must have substantial additional help, or face

economic, social, and political deterioration of a very grave character.

The remedy lies in breaking the vicious circle and restoring the confidence of the European people in the economic future of their own countries and of Europe as a whole. The manufacturer and the farmer
35 throughout wide areas must be able and willing to exchange their products for currencies the continuing value of which is not open to question.

It is logical that the United States should do whatever it is able to do to assist in the return of normal economic health in the world, without
40 which there can be no political stability and no assured peace. Our policy is directed not against any country or doctrine but against hunger, poverty, desperation, and chaos. Its purpose should be the revival of a working economy in the world so as to permit the emergence of political and social conditions in which free institutions
45 can exist. Such assistance, I am convinced, must not be on a piece-meal basis as various crises develop. Any assistance that this Government may render in the future should provide a cure rather than a mere palliative.

It would be neither fitting nor efficacious for this Government to
50 undertake to draw up unilaterally a program designed to place Europe on its feet economically. This is the business of the Europeans. The initiative, I think, must come from Europe. The role of this country should consist of friendly aid in the drafting of a European program and of later support of such a program so far as it may be practical for us to
55 do so. The program should be a joint one, agreed to by a number of, if not all, European nations.

In the passage, Marshall states that the death and obvious physical ruin caused in Europe by the war

- A. were more extensive than world leaders had expected.
- B. are difficult to quantify because they are unprecedented in scale.
- C. had been properly taken into account in planning for reconstruction.
- D. may be the most serious of all the factors affecting postwar life.

Choice C is the best answer. In the first sentence of the passage, Marshall states, "In considering the requirements for the rehabilitation of Europe, the physical loss of life and the visible destruction of cities, factories, mines, and railroads were correctly estimated." Therefore, according to Marshall, the death and obvious physical ruin caused in Europe by the war have been properly taken into account in planning for reconstruction.

Choices A and B are incorrect because Marshall doesn't argue that the death and physical ruin caused by the war were more

extensive than world leaders expected (choice A), or that they are difficult to quantify because they are unprecedented in scale (choice B). Choice D is incorrect because Marshall doesn't argue that the death and physical destruction caused by the war are the most serious of all the factors affecting postwar life. Instead, he implies that the dislocation of the European economy is a more serious factor.

Question Difficulty: Hard

Reading: Question 29

Questions 28-37 are based on the following passage.

This passage is adapted from US Secretary of State George C. Marshall, "The Marshall Plan." Delivered June 5, 1947, at Harvard University, two years after the end of the Second World War.

Line In considering the requirements for the rehabilitation of Europe, the physical loss of life and the visible destruction of cities, factories, mines, and railroads were correctly estimated, but it has become obvious during recent months that this visible destruction was probably
5 less serious than the dislocation of the entire fabric of the European economy.

The farmer has always produced the foodstuffs to exchange with the city dweller for the other necessities of life. This division of labor is the basis of modern civilization. At the present time it is threatened with
10 breakdown. The town and city industries are not producing adequate goods to exchange with the food-producing farmer. Raw materials and fuel are in short supply. Machinery is lacking or worn out. The farmer or the peasant cannot find the goods for sale which he desires to purchase. So the sale of his farm produce for money which he cannot
15 use seems to him an unprofitable transaction. He, therefore, has withdrawn many fields from crop cultivation and is using them for grazing. He feeds more grain to stock and finds for himself and his family an ample supply of food, however short he may be on clothing and the other ordinary gadgets of civilization. Meanwhile people in the
20 cities are short of food and fuel. So the governments are forced to use their foreign money and credits to procure these necessities abroad. This process exhausts funds which are urgently needed for reconstruction. Thus a very serious situation is rapidly developing which bodes no good for the world. The modern system of the division
25 of labor upon which the exchange of products is based is in danger of breaking down.

The truth of the matter is that Europe's requirements for the next three or four years of foreign food and other essential products—principally from America—are so much greater than her present ability
30 to pay that she must have substantial additional help, or face

economic, social, and political deterioration of a very grave character.

The remedy lies in breaking the vicious circle and restoring the confidence of the European people in the economic future of their own countries and of Europe as a whole. The manufacturer and the farmer
35 throughout wide areas must be able and willing to exchange their products for currencies the continuing value of which is not open to question.

It is logical that the United States should do whatever it is able to do to assist in the return of normal economic health in the world, without
40 which there can be no political stability and no assured peace. Our policy is directed not against any country or doctrine but against hunger, poverty, desperation, and chaos. Its purpose should be the revival of a working economy in the world so as to permit the emergence of political and social conditions in which free institutions
45 can exist. Such assistance, I am convinced, must not be on a piece-meal basis as various crises develop. Any assistance that this Government may render in the future should provide a cure rather than a mere palliative.

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55 do so. The program should be a joint one, agreed to by a number of, if not all, European nations.

A significant contrast that Marshall draws in discussing the fundamental nature of an economy is between

- A. rural and urban production.
- B. raw materials and finished goods.
- C. town residents and city residents.
- D. domestic and foreign resources.

Choice A is the best answer. In the first sentence of the second paragraph, Marshall draws a distinction between the farmer, who “has always produced the foodstuffs,” and the city dweller, who produces “the other necessities of life.” In the following sentence, Marshall emphasizes the importance of these roles: “This division of labor is the basis of modern civilization.” Therefore, a significant contrast that Marshall draws in discussing the fundamental nature of an economy is between rural (the farmer’s) and urban (the city dweller’s) production.

Choice B is incorrect because although Marshall does mention the lack of raw materials in postwar Europe, he doesn't draw a contrast between raw materials and finished goods in his discussion of the European economy. Choice C is incorrect because Marshall draws a distinction between the production of farmers and the production of city dwellers, not between town and city residents. Choice D is incorrect. Although Marshall does discuss the dependence of Europe on foreign aid in the absence of viable domestic production, he views this as a side effect of the unhealthy state of the postwar European economy, not part of the fundamental nature of economies in general.

Question Difficulty: Medium

Reading: Question 30

Questions 28-37 are based on the following passage.

This passage is adapted from US Secretary of State George C. Marshall, "The Marshall Plan." Delivered June 5, 1947, at Harvard University, two years after the end of the Second World War.

Line In considering the requirements for the rehabilitation of Europe, the physical loss of life and the visible destruction of cities, factories, mines, and railroads were correctly estimated, but it has become obvious during recent months that this visible destruction was probably
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20 cities are short of food and fuel. So the governments are forced to use their foreign money and credits to procure these necessities abroad. This process exhausts funds which are urgently needed for reconstruction. Thus a very serious situation is rapidly developing which bodes no good for the world. The modern system of the division
25 of labor upon which the exchange of products is based is in danger of breaking down.

The truth of the matter is that Europe's requirements for the next three or four years of foreign food and other essential products—principally from America—are so much greater than her present ability
30 to pay that she must have substantial additional help, or face

economic, social, and political deterioration of a very grave character.

The remedy lies in breaking the vicious circle and restoring the confidence of the European people in the economic future of their own countries and of Europe as a whole. The manufacturer and the farmer
 35 throughout wide areas must be able and willing to exchange their products for currencies the continuing value of which is not open to question.

It is logical that the United States should do whatever it is able to do to assist in the return of normal economic health in the world, without
 40 which there can be no political stability and no assured peace. Our policy is directed not against any country or doctrine but against hunger, poverty, desperation, and chaos. Its purpose should be the revival of a working economy in the world so as to permit the emergence of political and social conditions in which free institutions
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 55 do so. The program should be a joint one, agreed to by a number of, if not all, European nations.

Which choice provides the best evidence for the answer to the previous question?

- A. [lines 3-6](#) (“it has . . . economy”)
- B. [lines 7-9](#) (“The farmer . . . civilization”)
- C. [lines 27-31](#) (“Europe’s . . . character”)
- D. [lines 38-40](#) (“It is . . . peace”)

Choice B is the best answer. The previous question asks about a significant contrast that Marshall draws in discussing the fundamental nature of an economy. The answer, that this contrast is drawn between rural and urban production, is best supported by the first two sentences of the second paragraph: “The farmer has always produced the foodstuffs to exchange with the city dweller for the other necessities of life. This division of labor is the basis of modern civilization.”

Choices A, C, and D are incorrect because the cited lines don’t support the answer to the previous question. Instead, they frame

Marshall's argument about the critical nature of the economic dislocation in postwar Europe (choice A), reinforce his call for continued financial aid to the continent (choice C), and uphold the role of the United States in maintaining political stability and peace by supporting the world's economic health (choice D).

Question Difficulty: Medium

Reading: Question 31

Questions 28-37 are based on the following passage.

This passage is adapted from US Secretary of State George C. Marshall, "The Marshall Plan." Delivered June 5, 1947, at Harvard University, two years after the end of the Second World War.

Line In considering the requirements for the rehabilitation of Europe, the physical loss of life and the visible destruction of cities, factories, mines, and railroads were correctly estimated, but it has become obvious during recent months that this visible destruction was probably
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20 cities are short of food and fuel. So the governments are forced to use their foreign money and credits to procure these necessities abroad. This process exhausts funds which are urgently needed for reconstruction. Thus a very serious situation is rapidly developing which bodes no good for the world. The modern system of the division
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55 do so. The program should be a joint one, agreed to by a number of, if not all, European nations.

Based on the passage, there were insufficient resources for rebuilding Europe after the war in part because European governments were

- A. spending too much money on transportation improvements.
- B. focused unduly on strengthening their devalued currencies.
- C. compelled to purchase essential goods from other countries.
- D. grossly ineffective as a result of widespread corruption.

Choice C is the best answer. In the eleventh sentence of the second paragraph, Marshall contends that postwar European city dwellers were “short of food and fuel.” According to the following sentence, this forced European governments to use resources such as “foreign money and credits” to buy these basic goods from other nations. This process was draining money that was “urgently needed for reconstruction,” according to the thirteenth sentence of this paragraph. Thus, based on the passage, there were insufficient resources for rebuilding Europe after the war, in part because European governments were compelled to purchase

essential goods from other countries.

Choice A is incorrect. Although Marshall does argue that European governments are spending money needed for reconstruction on food and fuel, he doesn't mention overspending on transportation improvements. Choice B is incorrect because although Marshall implies that stabilizing currencies in Europe will improve economic conditions, he doesn't argue that European governments have been unduly focused on strengthening their devalued currencies. Choice D is incorrect. Marshall claims that reconstruction funds were insufficient because they were being spent on necessities, not because of government corruption.

Question Difficulty: Medium

Reading: Question 32

Questions 28-37 are based on the following passage.

This passage is adapted from US Secretary of State George C. Marshall, "The Marshall Plan." Delivered June 5, 1947, at Harvard University, two years after the end of the Second World War.

Line In considering the requirements for the rehabilitation of Europe, the physical loss of life and the visible destruction of cities, factories, mines, and railroads were correctly estimated, but it has become obvious during recent months that this visible destruction was probably
5 less serious than the dislocation of the entire fabric of the European economy.

The farmer has always produced the foodstuffs to exchange with the city dweller for the other necessities of life. This division of labor is the basis of modern civilization. At the present time it is threatened with
10 breakdown. The town and city industries are not producing adequate goods to exchange with the food-producing farmer. Raw materials and fuel are in short supply. Machinery is lacking or worn out. The farmer or the peasant cannot find the goods for sale which he desires to purchase. So the sale of his farm produce for money which he cannot
15 use seems to him an unprofitable transaction. He, therefore, has withdrawn many fields from crop cultivation and is using them for grazing. He feeds more grain to stock and finds for himself and his family an ample supply of food, however short he may be on clothing and the other ordinary gadgets of civilization. Meanwhile people in the
20 cities are short of food and fuel. So the governments are forced to use their foreign money and credits to procure these necessities abroad. This process exhausts funds which are urgently needed for reconstruction. Thus a very serious situation is rapidly developing which bodes no good for the world. The modern system of the division
25 of labor upon which the exchange of products is based is in danger of breaking down.

The truth of the matter is that Europe's requirements for the next three or four years of foreign food and other essential products—principally from America—are so much greater than her present ability
30 to pay that she must have substantial additional help, or face

economic, social, and political deterioration of a very grave character.

The remedy lies in breaking the vicious circle and restoring the confidence of the European people in the economic future of their own countries and of Europe as a whole. The manufacturer and the farmer
 35 throughout wide areas must be able and willing to exchange their products for currencies the continuing value of which is not open to question.

It is logical that the United States should do whatever it is able to do to assist in the return of normal economic health in the world, without
 40 which there can be no political stability and no assured peace. Our policy is directed not against any country or doctrine but against hunger, poverty, desperation, and chaos. Its purpose should be the revival of a working economy in the world so as to permit the emergence of political and social conditions in which free institutions
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It would be neither fitting nor efficacious for this Government to
 50 undertake to draw up unilaterally a program designed to place Europe on its feet economically. This is the business of the Europeans. The initiative, I think, must come from Europe. The role of this country should consist of friendly aid in the drafting of a European program and of later support of such a program so far as it may be practical for us to
 55 do so. The program should be a joint one, agreed to by a number of, if not all, European nations.

Which choice provides the best evidence for the answer to the previous question?

- A. [lines 10-12](#) (“The town . . . supply”)
- B. [lines 19-23](#) (“Meanwhile . . . reconstruction”)
- C. [lines 34-37](#) (“The manufacturer . . . question”)
- D. [line 52](#) (“The initiative . . . Europe”)

Choice B is the best answer. The previous question asks about the reason that Europe had insufficient resources for rebuilding after the war. The answer, that European governments were compelled to purchase essential goods from other countries, is best supported by the eleventh through thirteenth sentences of the second paragraph: “Meanwhile people in the cities are short of food and fuel. So the governments are forced to use their foreign money and credits to procure these necessities abroad. This process exhausts funds which are urgently needed for reconstruction.”

Choices A, C, and D are incorrect because the cited lines don't support the answer to the previous question. Instead, they detail the breakdown in trade between rural and urban areas (choice A), emphasize the importance of maintaining stable currencies (choice C), and insist that any potential plans for economic recovery be devised by the Europeans themselves (choice D).

Question Difficulty: Medium

Reading: Question 33

Questions 28-37 are based on the following passage.

This passage is adapted from US Secretary of State George C. Marshall, "The Marshall Plan." Delivered June 5, 1947, at Harvard University, two years after the end of the Second World War.

Line In considering the requirements for the rehabilitation of Europe, the physical loss of life and the visible destruction of cities, factories, mines, and railroads were correctly estimated, but it has become obvious during recent months that this visible destruction was probably
5 less serious than the dislocation of the entire fabric of the European economy.

The farmer has always produced the foodstuffs to exchange with the city dweller for the other necessities of life. This division of labor is the basis of modern civilization. At the present time it is threatened with
10 breakdown. The town and city industries are not producing adequate goods to exchange with the food-producing farmer. Raw materials and fuel are in short supply. Machinery is lacking or worn out. The farmer or the peasant cannot find the goods for sale which he desires to purchase. So the sale of his farm produce for money which he cannot
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 55 do so. The program should be a joint one, agreed to by a number of, if not all, European nations.

What main effect do the phrases “very serious,” “bodes no good,” and “danger of breaking down,” used in [lines 23-26](#), have on the tone of Marshall’s description of the situation?

- A. The phrases create a pessimistic tone that calls attention to the situation’s hopelessness.
- B. The phrases create an indecisive tone that reinforces the situation’s uncertain outcome.
- C. The phrases create an earnest tone that emphasizes the critical nature of the situation.
- D. The phrases create an exhausted tone that reflects international weariness with the situation.

Choice C is the best answer. In the second paragraph, Marshall outlines the economic distress faced by postwar European governments: since farmers are using land for grazing rather than growing crops, city dwellers must divert funds intended for reconstruction to buy basic necessities (such as food) from foreign markets. In the last sentences of this paragraph, Marshall characterizes this situation as “very serious,” as it “bodes no good,” or heralds a grim future in which domestic trade relationships are “in danger of breaking down.” However, in the following paragraphs, Marshall goes on to urge the United States to provide continued

aid to Europe to help avert this catastrophe. In light of this call to action, Marshall's use of the quoted phrases creates an earnest tone that emphasizes the critical nature of the situation.

Choice A is incorrect. Although these phrases do hint at the possibility of a disastrous outcome for Europe, Marshall hopes to rally support to avert this catastrophe, as the third through fifth paragraphs make clear. Thus, it is inaccurate to characterize Marshall's tone as pessimistic, or his view of the situation as hopeless. Choices B and D are incorrect because Marshall's phrasing suggests concerned engagement rather than indecisiveness (choice B) or exhaustion (choice D).

Question Difficulty: Medium

Reading: Question 34

Questions 28-37 are based on the following passage.

This passage is adapted from US Secretary of State George C. Marshall, "The Marshall Plan." Delivered June 5, 1947, at Harvard University, two years after the end of the Second World War.

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55 do so. The program should be a joint one, agreed to by a number of, if not all, European nations.

In the passage, Marshall indicates that achieving sound economic conditions in Europe requires

- A. a ban on importing foreign products.
- B. a reestablishment of citizens' confidence.
- C. a change in governmental leaders.
- D. an adoption of a new type of currency.

Choice B is the best answer. In the fourth paragraph, Marshall puts forward the outlines of a plan for salvaging the postwar European economy: "The remedy lies in . . . restoring the confidence of the European people in the economic future of their own countries." In other words, achieving sound economic conditions in Europe requires a reestablishment of citizens' confidence.

Choice A is incorrect because although Marshall does describe the negative consequences of diverting money intended for reconstruction to the purchasing of necessities abroad, he doesn't call for a ban on importing foreign products. Choices C and D are

incorrect because Marshall doesn't indicate that a change in governmental leaders (choice C) or the adoption of a new type of currency (choice D) would ameliorate economic distress in Europe.

Question Difficulty: Medium

Reading: Question 35

Questions 28-37 are based on the following passage.

This passage is adapted from US Secretary of State George C. Marshall, "The Marshall Plan." Delivered June 5, 1947, at Harvard University, two years after the end of the Second World War.

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 55 do so. The program should be a joint one, agreed to by a number of, if not all, European nations.

As used in [line 39](#), “return” most nearly means

- A. reversal.
- B. reinstatement.
- C. repayment.
- D. response.

Choice B is the best answer. In the first sentence of the fifth paragraph, Marshall declares that “the United States should do whatever it is able to do to assist in the return of normal economic health in the world.” In other words, a reestablishment of the world’s economic viability should be a priority of the government of the United States. Thus, in the context of the passage, the word “return” most nearly means reinstatement.

Choices A, C, and D are incorrect because in the context of the passage, “return” means reinstatement, not reversal (choice A),

repayment (choice C), or response (choice D).

Question Difficulty: Medium

Reading: Question 36

Questions 28-37 are based on the following passage.

This passage is adapted from US Secretary of State George C. Marshall, "The Marshall Plan." Delivered June 5, 1947, at Harvard University, two years after the end of the Second World War.

Line In considering the requirements for the rehabilitation of Europe, the physical loss of life and the visible destruction of cities, factories, mines, and railroads were correctly estimated, but it has become obvious during recent months that this visible destruction was probably
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15 use seems to him an unprofitable transaction. He, therefore, has withdrawn many fields from crop cultivation and is using them for grazing. He feeds more grain to stock and finds for himself and his family an ample supply of food, however short he may be on clothing and the other ordinary gadgets of civilization. Meanwhile people in the
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 55 do so. The program should be a joint one, agreed to by a number of, if not all, European nations.

In context, Marshall's use of the words "cure" and "palliative" ([lines 47-48](#)) suggests that the assistance provided by the United States must

- A. address each new problem as it arises.
- B. heal all who have suffered injuries.
- C. be thorough and comprehensive.
- D. focus on individuals rather than nations.

Choice C is the best answer. In the last sentence of the fifth paragraph, Marshall concludes that any assistance provided by the government of the United States to Europe should be "a cure rather than a mere palliative." Potential remedies for the unhealthy European economy are equated metaphorically with medical treatments: one variety may lessen pain without addressing the underlying symptoms (a palliative), while another type seeks to restore full health (a cure). Therefore, Marshall's insistence on a cure rather than a palliative suggests that the assistance provided by the United States must be thorough and comprehensive.

Choice A is incorrect because Marshall's choice of words doesn't suggest that the assistance provided by the United States be adaptive, addressing each new problem as it arises, but rather that it be comprehensive. Choices B and D are incorrect because although Marshall's choice of words does invoke a medical context, the words are clearly intended to be understood metaphorically. Therefore, his use of these terms doesn't suggest that the assistance provided by the United States must heal all who have suffered injuries (choice B) or that it focus on individuals rather than nations (choice D).

Question Difficulty: Medium

Reading: Question 37

Questions 28-37 are based on the following passage.

This passage is adapted from US Secretary of State George C. Marshall, "The Marshall Plan." Delivered June 5, 1947, at Harvard University, two years after the end of the Second World War.

Line In considering the requirements for the rehabilitation of Europe, the physical loss of life and the visible destruction of cities, factories, mines, and railroads were correctly estimated, but it has become obvious during recent months that this visible destruction was probably
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55 do so. The program should be a joint one, agreed to by a number of, if not all, European nations.

It can most reasonably be inferred from the passage that Marshall believes the United States should

- A. provide food, machinery, and fuel to European farmers.
- B. be frugal in its plans to revive the European economy.
- C. help resolve additional European crises as they develop.
- D. defer to the Europeans in deciding on appropriate solutions.

Choice D is the best answer. In the last paragraph of the passage, Marshall indicates that Europeans should have the authority to determine the shape of economic recovery efforts. The United States shouldn't "draw up unilaterally a program designed to place Europe on its feet economically. This is the business of the Europeans." Hence, it can be inferred from the passage that Marshall believes the United States should defer to the Europeans in deciding on appropriate solutions.

Choice A is incorrect. Marshall does suggest that European farmers lack access to manufactured goods, but he implies that

returning Europe to a healthy economic state involves helping it regain the ability to manufacture its own goods rather than supplying it with goods produced abroad. Choice B is incorrect because Marshall doesn't imply that the efforts of the United States should be frugal, but rather that they must be thorough and comprehensive. Choice C is incorrect because it can't be reasonably inferred from the passage that Marshall believes the United States should help resolve additional European crises as they develop.

Question Difficulty: Hard

Reading: Question 38

Questions 38-47 are based on the following passage and supplementary material.

This passage is adapted from Elizabeth Pennisi, "Seagrasses Partner with Clams to Stay Healthy." ©2012 by American Association for the Advancement of Science.

Line Not much to look at and sometimes quite mucky, seagrass beds have been called the ugly ducklings of marine conservation. They lack the charisma of coral reefs, yet like reefs, these beds form a highly productive and diverse ecosystem, acting as the nursery for many

5 kinds of fish as well as a home to sea turtles, manatees, and a host of other sea creatures. Seagrasses help cycle nutrients, and experts estimate they provide \$1.9 trillion in ecosystem services per year worldwide. At the heart of seagrasses' success may be a small clam.

Seagrasses are saltwater flowering plants that grow along coasts

10 and make up 0.2% of the ocean's ecosystems. They produce an amount of biomass that beats that of the Amazonian rain forest and is on par with that of corn and sugarcane crops. Their roots and stems trap organic matter and sediment, causing buildups of rich mud that can be waist deep.

15 This muck is a potential threat to the grass: Decaying organic matter produces a lot of sulfide, creating what could be an unhealthy environment for plant roots. Researchers had assumed that the oxygen released from seagrass roots combined with enough of the surrounding sulfide to neutralize this toxic element. Not so. "We found

20 that in most seagrass beds, it's much more complex," marine ecologist Tjisse van der Heide says. "They have a trick to speed up oxidation" that relies on a symbiotic relationship with bacteria that consume sulfides.

Van der Heide first began to suspect that seagrass depended on

25 bacteria while doing fieldwork in Mauritania. He and his colleagues found thousands of 1-centimeter lucinid clams living among the seagrass roots. Gills make up much of the clam's innards: That's where sulfide-oxidizing bacteria live. They sustain the clam by providing nutrients in much the way that zooxanthellae sustain coral.

30 Following up on their clam observation, the researchers took 110

samples of seagrass beds with a 15-centimeter-wide tube that cut cores 20 centimeters deep into the sediment. They filtered out and weighed all the organisms in the sediment and dried and weighed the seagrass in each core. “The more bivalves we found in the core, the more seagrass we found in the core,” suggesting a beneficial partnership, Van der Heide says.

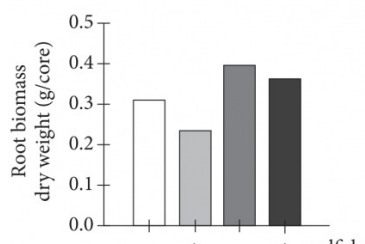
Wondering if this cohabitation was unique to Mauritania, the researchers combed the literature for studies describing the communities inside other seagrass beds, finding 84 covering tropic, subtropic, and temperate sites on six continents. Lucinid clams were found associated with 11 of 12 seagrass genera, the one exception being a seagrass that grew on bare rock.

Next, Van der Heide explored the potential of this relationship in the lab. He grew seagrass alone, clams alone, and the two organisms together under different conditions, including one in which he and his colleagues injected sulfide into the sediment semiweekly. On its own, the seagrass was able to process some of the sulfide, but sulfide gradually increased in concentration and interfered with seagrass growth. The clams alone got rid of the introduced sulfide but didn't get any bigger. But both the clams and the seagrass thrived when together, getting rid of the sulfide and growing as well, Van der Heide's team reports. The roots seemed to provide the clams with more ready access to oxygen, which “was necessary for the bivalves to consume that sulfide in an efficient manner,” Van der Heide explains.

“The elegant experimental design provides compelling evidence for the benefits of the interaction between seagrasses and the associated bivalve,” says Carlos Duarte, a marine ecologist at the University of Western Australia in Perth.

Figure 1

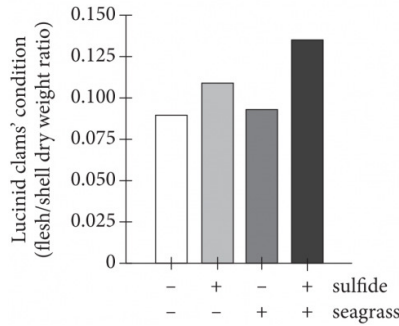
Effect of Sulfide and Lucinid Clams on Seagrass Root Biomass



- + - + sulfide
- - + + lucinid clams

Figure 2

Effect of Sulfide and Seagrass
on Lucinid Clams' Condition



Adapted from Tjisse van der Heide et al., "A Three-Stage Symbiosis Forms the Foundation of Seagrass Ecosystems." ©2012 by American Association for the Advancement of Science.

The main purpose of the passage is to

- A. describe a study showing how one species helps to limit the spread of another species.
- B. present research that reveals a mutually beneficial relationship between different species.
- C. explain how changing environmental conditions pose a threat to multiple species in an ecosystem.
- D. analyze the process by which one species can take over the ecological niche of another species.

Choice B is the best answer. The passage describes research conducted to understand the relationship between two organisms: seagrass and lucinid clams. The third paragraph explains that seagrass traps decaying organic matter around its roots, which is unhealthy for the seagrass because this decaying organic matter produces a lot of sulfide. The fourth paragraph states that when researchers found "thousands of . . . lucinid clams living among the seagrass roots" in Mauritania, they began to theorize that the two organisms benefited each other and created conditions where surrounding grass wasn't affected by the decaying organic matter's production of sulfide. Laboratory tests described in the seventh paragraph confirmed that the clams aided in "getting rid of the sulfide" and the seagrass "seemed to provide the clams with more ready access to oxygen, which 'was necessary for the bivalves to consume that sulfide in an efficient manner.'" Therefore, the main purpose of the passage is to present research that reveals a mutually beneficial relationship between different species.

Choice A is incorrect because the passage doesn't describe a study showing how one species helps to limit the spread of another species. Instead, the passage describes research demonstrating how two species benefit each other. Choice C is incorrect because the passage makes no reference to the threat posed by changing environmental conditions. Choice D is incorrect because the passage doesn't describe the process by which one species takes over the ecological niche of another species, but rather describes a relationship between two organisms that inhabit overlapping ecological niches.

Question Difficulty: Medium

Reading: Question 39

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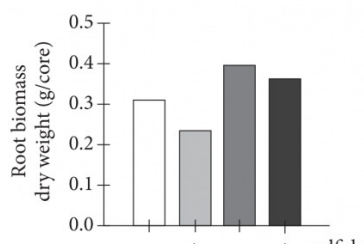
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Figure 1

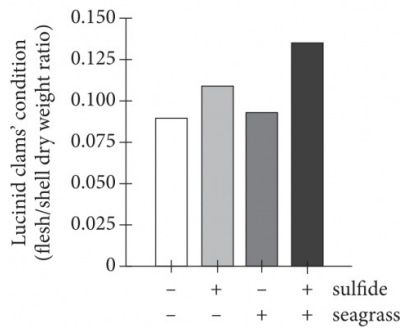
Effect of Sulfide and Lucinid Clams on Seagrass Root Biomass



- + - + sulfide
- - + + lucinid clams

Figure 2

Effect of Sulfide and Seagrass
on Lucinid Clams' Condition



Adapted from Tjisse van der Heide et al., "A Three-Stage Symbiosis Forms the Foundation of Seagrass Ecosystems." ©2012 by American Association for the Advancement of Science.

As used in [line 12](#), "beats" most nearly means

- A. exceeds.
- B. subdues.
- C. strikes.
- D. counteracts.

Choice A is the best answer. In the second sentence of the second paragraph, the author states, "[Seagrass beds] produce an amount of biomass that beats that of the Amazonian rain forest and is on par with that of corn and sugarcane crops." In other words, there is more plant and animal life in seagrass beds than there is in the Amazonian rain forest. Therefore, in the context of the passage, the word "beats" most nearly means exceeds.

Choices B, C, and D are incorrect because in the context of the passage, "beats" means exceeds, not subdues (choice B), strikes (choice C), or counteracts (choice D).

Question Difficulty: Easy

Reading: Question 40

Questions 38-47 are based on the following passage and supplementary material.

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Line Not much to look at and sometimes quite mucky, seagrass beds have been called the ugly ducklings of marine conservation. They lack the charisma of coral reefs, yet like reefs, these beds form a highly productive and diverse ecosystem, acting as the nursery for many
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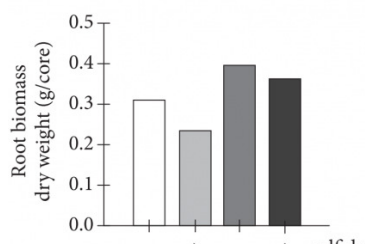
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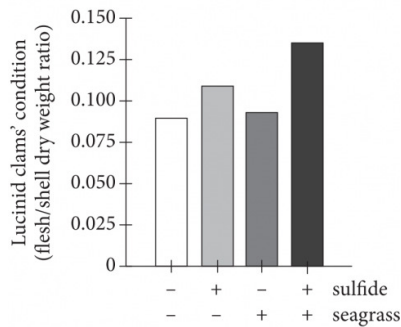
Effect of Sulfide and Lucinid Clams on Seagrass Root Biomass



- + - + sulfide
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Figure 2

Effect of Sulfide and Seagrass
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It can reasonably be inferred from the passage that sulfide accumulates around seagrass roots due to

- A. an overabundance of lucinid clams.
- B. the presence of sulfide-oxidizing bacteria.
- C. an excess of key root nutrients.
- D. the physical characteristics of the seagrass.

Choice D is the best answer. The last sentence of the second paragraph outlines how the physical properties of seagrass encourage the accumulation of debris: "Their roots and stems trap organic matter and sediment, causing buildups of rich mud that can be waist deep." In the third paragraph, the author goes on to explain that "this muck . . . produces a lot of sulfide." Therefore, it can reasonably be inferred from the passage that sulfide accumulates around seagrass roots due to the physical characteristics of the seagrass.

Choices A and B are incorrect because lucinid clams (choice A) and the sulfide-oxidizing bacteria that live in clam gills (choice B) don't cause the amount of sulfide around seagrass roots to accumulate. Instead, they help to diminish the amount of sulfide. Choice C is incorrect because although seagrasses "cycle nutrients," according to the passage, no mention is made of key root nutrients playing a role in the accumulation of sulfide around the plants' roots.

Question Difficulty: Hard

Reading: Question 41

Questions 38-47 are based on the following passage and supplementary material.

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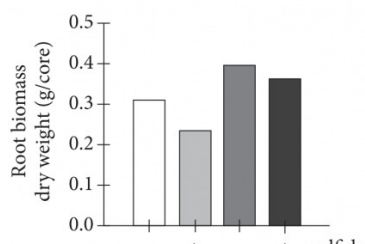
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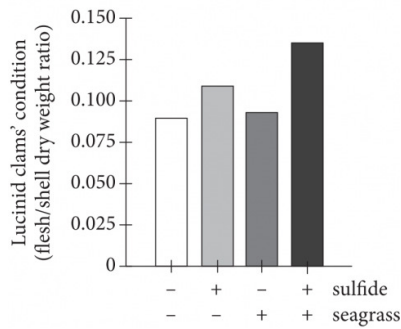
60 Figure 1
Effect of Sulfide and Lucinid Clams on Seagrass Root Biomass



- + - + sulfide
- - + + lucinid clams

Figure 2

Effect of Sulfide and Seagrass
on Lucinid Clams' Condition



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Which choice provides the best evidence for the answer to the previous question?

- A. [lines 11-13](#) ("They . . . crops")
- B. [lines 13-15](#) ("Their . . . deep")
- C. [lines 22-24](#) ("They . . . sulfides")
- D. [lines 26-28](#) ("He and . . . roots")

Choice B is the best answer. The previous question asks what can reasonably be inferred from the passage about the cause of sulfide accumulation around seagrass roots. The answer, that this accumulation is caused by the physical characteristics of seagrass, is best supported by the last sentence of the second paragraph: "Their roots and stems trap organic matter and sediment, causing buildups of rich mud that can be waist deep." In the third paragraph, the author explains that "this muck . . . produces a lot of sulfide," providing a link between the buildup of mud and the accumulation of sulfide.

Choices A, C, and D are incorrect because the cited lines don't support the answer to the previous question. Instead, they compare the biomass of seagrass with that of other well-known plant species (choice A), explain the role of bacteria in the reduction of sulfides (choice C), and introduce the discovery of lucinid clams among seagrass roots in Mauritania (choice D).

Question Difficulty: Hard

Reading: Question 42

Questions 38-47 are based on the following passage and supplementary material.

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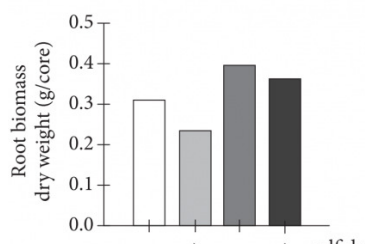
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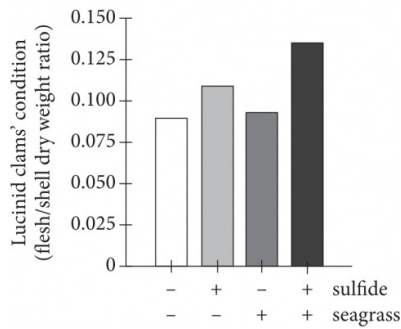
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- - + + lucinid clams

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Adapted from Tjisse van der Heide et al., "A Three-Stage Symbiosis Forms the Foundation of Seagrass Ecosystems." ©2012 by American Association for the Advancement of Science.

As used in [line 29](#) and [line 30](#), "sustain" most nearly means

- A. withstand.
- B. affirm.
- C. prolong.
- D. nourish.

Choice D is the best answer. In the fourth paragraph, the author discusses sulfide-oxidizing bacteria, which live in the gills of lucinid clams and help to feed them. In the last sentence of this paragraph, the author states, "They sustain the clam by providing nutrients in much the way that zooxanthellae sustain coral." Thus, in the context of the passage, the word "sustain" most nearly means nourish.

Choices A, B, and C are incorrect because in the context of the passage, "sustain" means nourish, not withstand (choice A), affirm (choice B), or prolong (choice C).

Question Difficulty: Medium

Reading: Question 43

Questions 38-47 are based on the following passage and supplementary material.

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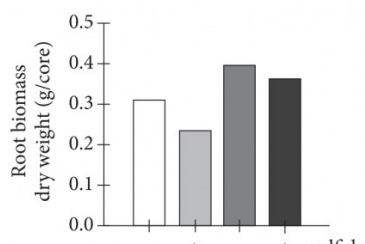
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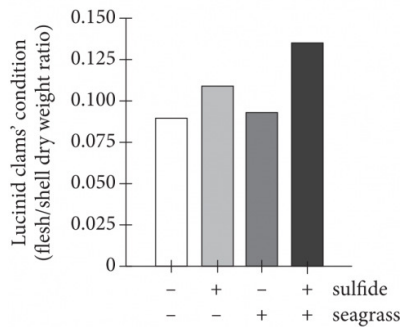
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Which choice provides the best evidence that Van der Heide was trying to determine whether seagrass and lucinid clams together respond differently to additional sulfide in the sediment than does either seagrass alone or lucinid clams alone?

- A. [lines 33-35](#) ("They . . . each core")
- B. [lines 35-37](#) ("The more bivalves . . . says")
- C. [lines 41-43](#) ("Lucinid . . . rock")
- D. [lines 45-47](#) ("He grew . . . semiweekly")

Choice D is the best answer. The author describes Van der Heide's laboratory experiments in the seventh paragraph. The methodical nature of these experiments demonstrates that they were designed to answer questions regarding the mutual relationship between seagrass and lucinid clams: "He grew seagrass alone, clams alone, and the two organisms together under different conditions, including one in which he and his colleagues injected sulfide into the sediment semiweekly." These lines provide the best evidence that Van der Heide was trying to determine whether seagrass and lucinid clams together respond differently to additional sulfide in the sediment than does either seagrass or lucinid clams in isolation.

Choices A, B, and C are incorrect because the cited lines don't provide the best evidence that Van der Heide was trying to determine whether seagrass and lucinid clams together respond differently to additional sulfide in the sediment than does either seagrass alone or lucinid clams alone. Instead, they explain how ratios of seagrass and clams were measured in field samples (choice A), show how ratios of these organisms suggested a beneficial partnership (choice B), and provide a summary of the results of related studies (choice C).

Question Difficulty: Medium

Reading: Question 44

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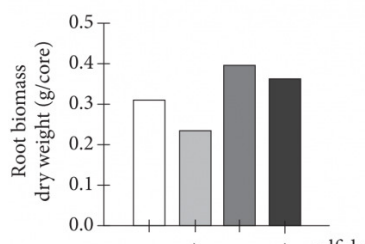
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Figure 1

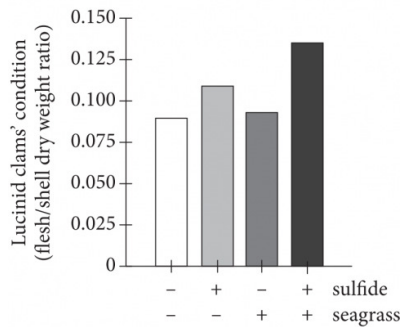
Effect of Sulfide and Lucinid Clams on Seagrass Root Biomass



- + - + sulfide
- - + + lucinid clams

Figure 2

Effect of Sulfide and Seagrass
on Lucinid Clams' Condition



Adapted from Tjisse van der Heide et al., "A Three-Stage Symbiosis Forms the Foundation of Seagrass Ecosystems." ©2012 by American Association for the Advancement of Science.

Which statement about the oxygen released by seagrass roots is best supported by information in the passage?

- A. It impedes the growth of sulfide-oxidizing bacteria in the gills of lucinid clams.
- B. It serves the same role for lucinid clams that zooxanthellae serve for coral.
- C. It is not sufficient to eliminate sulfide accumulation in the absence of lucinid clams.
- D. It becomes more concentrated as sediment builds up around seagrass roots.

Choice C is the best answer. In the third paragraph, the author explains how the researchers assumed that "oxygen released from seagrass roots" combines with sulfides to "neutralize this toxic element." However, according to the research described in the seventh paragraph, seagrass can oxidize some sulfide, but not enough to prevent sulfide levels from slowly rising, while bacteria in lucinid clam gills can oxidize much greater amounts of sulfide. Therefore, the statement about the oxygen released by seagrass roots that is best supported by the information in the passage is that this oxygen isn't sufficient to eliminate sulfide accumulation in the absence of lucinid clams.

Choice A is incorrect because the passage doesn't suggest that oxygen impedes the growth of sulfide-oxidizing bacteria. Choice B is incorrect because the passage describes sulfide-oxidizing bacteria, not oxygen, as fulfilling the same role for clams that zooxanthellae serve for coral. Choice D is incorrect because the passage identifies sulfide, not oxygen, as a substance that becomes more concentrated as sediment builds up around plant roots.

Question Difficulty: Hard

Reading: Question 45

Questions 38-47 are based on the following passage and supplementary material.

This passage is adapted from Elizabeth Pennisi, "Seagrasses Partner with Clams to Stay Healthy." ©2012 by American Association for the Advancement of Science.

Line Not much to look at and sometimes quite mucky, seagrass beds have been called the ugly ducklings of marine conservation. They lack the charisma of coral reefs, yet like reefs, these beds form a highly productive and diverse ecosystem, acting as the nursery for many
5 kinds of fish as well as a home to sea turtles, manatees, and a host of other sea creatures. Seagrasses help cycle nutrients, and experts estimate they provide \$1.9 trillion in ecosystem services per year worldwide. At the heart of seagrasses' success may be a small clam.

Seagrasses are saltwater flowering plants that grow along coasts
10 and make up 0.2% of the ocean's ecosystems. They produce an amount of biomass that beats that of the Amazonian rain forest and is on par with that of corn and sugarcane crops. Their roots and stems trap organic matter and sediment, causing buildups of rich mud that can be waist deep.

15 This muck is a potential threat to the grass: Decaying organic matter produces a lot of sulfide, creating what could be an unhealthy environment for plant roots. Researchers had assumed that the oxygen released from seagrass roots combined with enough of the surrounding sulfide to neutralize this toxic element. Not so. "We found
20 that in most seagrass beds, it's much more complex," marine ecologist Tjisse van der Heide says. "They have a trick to speed up oxidation" that relies on a symbiotic relationship with bacteria that consume sulfides.

Van der Heide first began to suspect that seagrass depended on
25 bacteria while doing fieldwork in Mauritania. He and his colleagues found thousands of 1-centimeter lucinid clams living among the seagrass roots. Gills make up much of the clam's innards: That's where sulfide-oxidizing bacteria live. They sustain the clam by providing nutrients in much the way that zooxanthellae sustain coral.

30 Following up on their clam observation, the researchers took 110

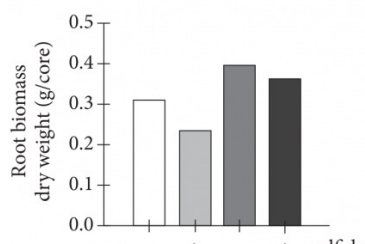
samples of seagrass beds with a 15-centimeter-wide tube that cut cores 20 centimeters deep into the sediment. They filtered out and weighed all the organisms in the sediment and dried and weighed the seagrass in each core. “The more bivalves we found in the core, the more seagrass we found in the core,” suggesting a beneficial partnership, Van der Heide says.

Wondering if this cohabitation was unique to Mauritania, the researchers combed the literature for studies describing the communities inside other seagrass beds, finding 84 covering tropic, subtropic, and temperate sites on six continents. Lucinid clams were found associated with 11 of 12 seagrass genera, the one exception being a seagrass that grew on bare rock.

Next, Van der Heide explored the potential of this relationship in the lab. He grew seagrass alone, clams alone, and the two organisms together under different conditions, including one in which he and his colleagues injected sulfide into the sediment semiweekly. On its own, the seagrass was able to process some of the sulfide, but sulfide gradually increased in concentration and interfered with seagrass growth. The clams alone got rid of the introduced sulfide but didn’t get any bigger. But both the clams and the seagrass thrived when together, getting rid of the sulfide and growing as well, Van der Heide’s team reports. The roots seemed to provide the clams with more ready access to oxygen, which “was necessary for the bivalves to consume that sulfide in an efficient manner,” Van der Heide explains.

“The elegant experimental design provides compelling evidence for the benefits of the interaction between seagrasses and the associated bivalve,” says Carlos Duarte, a marine ecologist at the University of Western Australia in Perth.

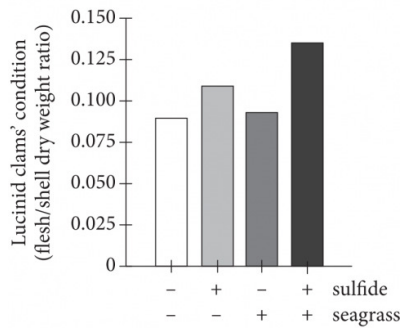
Figure 1
Effect of Sulfide and Lucinid Clams on Seagrass Root Biomass



- + - + sulfide
- - + + lucinid clams

Figure 2

Effect of Sulfide and Seagrass
on Lucinid Clams' Condition



Adapted from Tjisse van der Heide et al., "A Three-Stage Symbiosis Forms the Foundation of Seagrass Ecosystems." ©2012 by American Association for the Advancement of Science.

Which choice provides the best evidence for the answer to the previous question?

- A. [lines 28-29](#) ("Gills . . . live")
- B. [lines 29-30](#) ("They . . . coral")
- C. [lines 47-50](#) ("On its . . . growth")
- D. [lines 50-51](#) ("The clams . . . bigger")

Choice C is the best answer. The previous question asks which statement about the oxygen released by seagrass roots is best supported by information in the passage. The answer, that this oxygen isn't sufficient to eliminate sulfide accumulation in the absence of lucinid clams, is best supported by the third sentence of the seventh paragraph: "On its own, the seagrass was able to process some of the sulfide, but sulfide gradually increased in concentration and interfered with seagrass growth."

Choices A, B, and D are incorrect because the cited lines don't support the answer to the previous question. Instead, they emphasize the prevalence of gills in lucinid clam anatomy and the presence of sulfide-oxidizing bacteria in those gills (choice A), illustrate the relationship between sulfide-oxidizing bacteria and lucinid clams (choice B), and describe the effects of increased sulfide on clams in the absence of seagrass (choice D).

Question Difficulty: Hard

Reading: Question 46

Questions 38-47 are based on the following passage and supplementary material.

This passage is adapted from Elizabeth Pennisi, "Seagrasses Partner with Clams to Stay Healthy." ©2012 by American Association for the Advancement of Science.

Line Not much to look at and sometimes quite mucky, seagrass beds have been called the ugly ducklings of marine conservation. They lack the charisma of coral reefs, yet like reefs, these beds form a highly productive and diverse ecosystem, acting as the nursery for many
5 kinds of fish as well as a home to sea turtles, manatees, and a host of other sea creatures. Seagrasses help cycle nutrients, and experts estimate they provide \$1.9 trillion in ecosystem services per year worldwide. At the heart of seagrasses' success may be a small clam.

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samples of seagrass beds with a 15-centimeter-wide tube that cut cores 20 centimeters deep into the sediment. They filtered out and weighed all the organisms in the sediment and dried and weighed the seagrass in each core. “The more bivalves we found in the core, the more seagrass we found in the core,” suggesting a beneficial partnership, Van der Heide says.

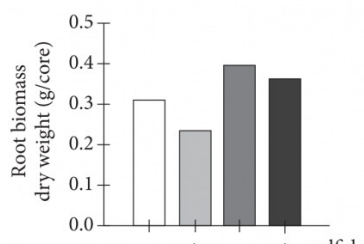
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Figure 1

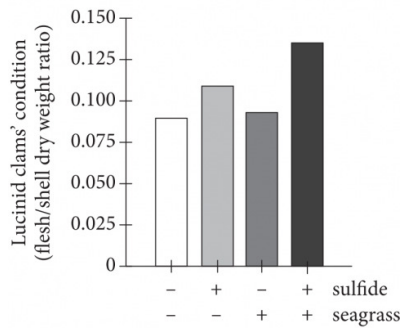
Effect of Sulfide and Lucinid Clams on Seagrass Root Biomass



- + - + sulfide
- - + + lucinid clams

Figure 2

Effect of Sulfide and Seagrass
on Lucinid Clams' Condition



Adapted from Tjisse van der Heide et al., "A Three-Stage Symbiosis Forms the Foundation of Seagrass Ecosystems." ©2012 by American Association for the Advancement of Science.

Which conclusion is best supported by the experimental results shown in figure 1?

- A. Sulfide had a positive effect on the root biomass of seagrass when lucinid clams were absent.
- B. Seagrass had a greater root biomass in the absence of lucinid clams and injected sulfide than when exposed to both lucinid clams and injected sulfide.
- C. The presence of lucinid clams had a positive effect on the root biomass of seagrass regardless of whether sulfide was present.
- D. Lucinid clams had a positive effect on the root biomass of seagrass in direct proportion to the concentration of sulfide in the sediment.

Choice C is the best answer. Figure 1 is a bar graph that shows the effect of sulfide and lucinid clams' presence on seagrass root biomass. The vertical axis shows the dry weight of the root biomass in increments of 0.1 grams per core. The horizontal axis indicates, for each of four conditions, whether lucinid clams were present in that condition, as well as whether sulfide was added to the sediment in that condition. The two bars that represent the conditions in which clams were present (both with and without sulfide) are taller than the two bars that represent the conditions in which clams were absent (both with and without sulfide), indicating that the seagrass had greater root biomass when the clams were present, regardless of whether sulfide was added to the sediment. Therefore, figure 1 best supports the conclusion that the presence of lucinid clams had a positive effect on the root biomass of seagrass regardless of whether sulfide was present.

Choice A is incorrect because figure 1 doesn't support the conclusion that sulfide had a positive effect on root biomass even when clams were absent (choice A). Choice B is incorrect because seagrass had a lower (rather than higher) root biomass in the absence of both lucinid clams and injected sulfide than in the presence of both. Choice D is incorrect because figure 1 doesn't provide any information about the concentration of the sulfide in the sediment, only whether it was present or absent in the sediment.

Question Difficulty: Medium

Reading: Question 47

Questions 38-47 are based on the following passage and supplementary material.

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Line Not much to look at and sometimes quite mucky, seagrass beds have been called the ugly ducklings of marine conservation. They lack the charisma of coral reefs, yet like reefs, these beds form a highly productive and diverse ecosystem, acting as the nursery for many
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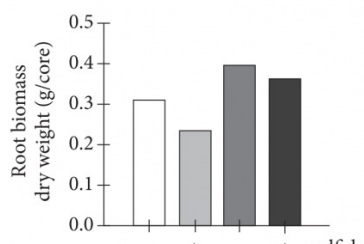
35 samples of seagrass beds with a 15-centimeter-wide tube that cut cores 20 centimeters deep into the sediment. They filtered out and weighed all the organisms in the sediment and dried and weighed the seagrass in each core. “The more bivalves we found in the core, the more seagrass we found in the core,” suggesting a beneficial partnership, Van der Heide says.

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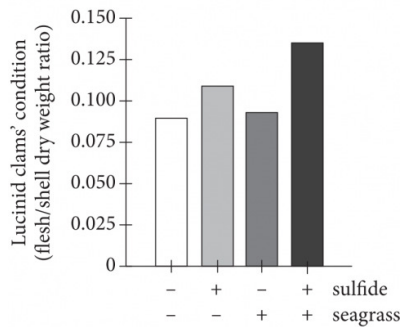
60 Figure 1
Effect of Sulfide and Lucinid Clams on Seagrass Root Biomass



- + - + sulfide
- - + + lucinid clams

Figure 2

Effect of Sulfide and Seagrass
on Lucinid Clams' Condition



Adapted from Tjisse van der Heide et al., "A Three-Stage Symbiosis Forms the Foundation of Seagrass Ecosystems." ©2012 by American Association for the Advancement of Science.

Regarding the claim that clams and seagrass "thrive when together" ([lines 51-52](#)) in the experiment, which statement is best supported by the information in the two figures?

- A. The clams thrived more when seagrass was present than in any condition without seagrass.
- B. Increasing the quantity of sulfide when clams were present helped seagrass thrive.
- C. Decreasing the quantity of sulfide when seagrass was present helped clams thrive.
- D. The introduction of sulfide when both clams and seagrass were present benefited clams but not seagrass.

Choice D is the best answer. Figure 2 indicates that the clams had the greatest flesh to shell weight ratio, an indicator of clam health, in the condition where sulfide was added and seagrass was present. However, figure 1 shows that seagrass had relatively less biomass in both of the conditions where sulfide was present. Therefore, the information in the two figures supports the claim that the introduction of sulfide when both clams and seagrass were present benefited clams but not seagrass.

Choice A is incorrect because according to figure 2, clams benefited more in the condition where sulfide was present but not seagrass than they did in the condition where seagrass was present but not sulfide. Choice B is incorrect because according to figure 1, when clams were present, seagrass had less root biomass when sulfide was present than when it was absent. Choice C is incorrect because according to figure 2, when seagrass was present, the absence of sulfide had a negative effect on the health of the clams.

Question Difficulty: Hard