



Grade 11
English Language Arts/Literacy
Research Simulation Task

2018 Released Items

2018 Released Items: Grade 11 Research Simulation Task

The Research Simulation Task requires students to analyze an informational topic through several articles or multimedia stimuli. Students read and respond to a series of questions and synthesize information from multiple sources in order to write an analytic essay.

The 2018 blueprint for PARCC's grade 11 Research Simulation Task includes Evidence-Based Selected Response/Technology-Enhanced Constructed Response items as well as one Prose Constructed Response prompt.

Included in this document:

- Answer key and standards alignment
- PDFs of each item with the associated text(s)

Additional related materials not included in this document:

- Sample scored student responses with annotations and practice papers
- PARCC Scoring Rubric for Prose Constructed Response Items
- Guide to English Language Arts/Literacy Released Items: Understanding Scoring
- PARCC English Language Arts/Literacy Assessment: General Scoring Rules for the 2015 Summative Assessment

PARCC Release Items Answer and Alignment Document

Text Type: RST										
Passage(s): Memory										
Item Code	Answer(s)	Standards/Evidence Statement Alignment								
II428626739	Item Type: EBSR Part A: D Part B: D	RI 11.1.1 RI 11.4.1								
II428627033	Item Type: EBSR Part A: A Part B: C	RI 11.1.1 RST 11.6.3								
II426128148	Item Type: TECR Select two central ideas and drag and drop them into the corresponding boxes. Then select a quotation that best supports each central idea and drag and drop each quotation into the correct box. <table border="1" data-bbox="492 856 1021 1341" style="margin: 10px auto;"> <thead> <tr> <th style="background-color: #ADD8E6;">Central Idea</th> <th style="background-color: #ADD8E6;">Central Idea</th> </tr> </thead> <tbody> <tr> <td style="background-color: #FFFF00;">Associational cues play a key role in the consolidation of memories.</td> <td style="background-color: #FFFF00;">People tend to remember things that have more value for them.</td> </tr> <tr> <th style="background-color: #ADD8E6;">Supporting Evidence</th> <th style="background-color: #ADD8E6;">Supporting Evidence</th> </tr> <tr> <td style="background-color: #90EE90;">"But now, important new understanding is arising from a research lab at Northwestern that links cueing to 're-consolidation' and reveals new possibilities for optimizing long-term memory formation." (paragraph 2)</td> <td style="background-color: #90EE90;">"The practical point is that we remember better the things we value and find to have positive reward value." (paragraph 6)</td> </tr> </tbody> </table>	Central Idea	Central Idea	Associational cues play a key role in the consolidation of memories.	People tend to remember things that have more value for them.	Supporting Evidence	Supporting Evidence	"But now, important new understanding is arising from a research lab at Northwestern that links cueing to 're-consolidation' and reveals new possibilities for optimizing long-term memory formation." (paragraph 2)	"The practical point is that we remember better the things we value and find to have positive reward value." (paragraph 6)	RI 11.1.1 RST 11.2.5
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<p>II428631866</p>	<p>Item Type: TECR</p> <p>In "New Discoveries on Optimizing Memory Formation," how do the three numbered lists contribute to structuring the information in the article? Complete the chart by dragging and dropping the list that best describes each phrase.</p> <p> <input type="button" value="List 1 (paragraph 3)"/> <input type="button" value="List 2 (paragraph 5)"/> <input type="button" value="List 3 (paragraph 9)"/> </p> <table border="1" data-bbox="418 443 781 1073"> <tr> <td data-bbox="418 520 553 590"> <p>List 2 (paragraph 5)</p> </td> <td data-bbox="597 443 781 625"> <p>describes the particular arrangement of the study described in the article</p> </td> </tr> <tr> <td data-bbox="418 722 553 791"> <p>List 1 (paragraph 3)</p> </td> <td data-bbox="597 625 781 848"> <p>provides background information necessary for understanding the article</p> </td> </tr> <tr> <td data-bbox="418 947 553 1016"> <p>List 3 (paragraph 9)</p> </td> <td data-bbox="597 848 781 1073"> <p>describes techniques that led to successful results in the study for some of the participants</p> </td> </tr> </table>	<p>List 2 (paragraph 5)</p>	<p>describes the particular arrangement of the study described in the article</p>	<p>List 1 (paragraph 3)</p>	<p>provides background information necessary for understanding the article</p>	<p>List 3 (paragraph 9)</p>	<p>describes techniques that led to successful results in the study for some of the participants</p>	<p>RI 11.1.1 RST 11.5.2</p>
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<p>II428632541</p>	<p>Item Type: EBSR</p> <p>Part A: D Part B: C, F</p>	<p>RI 11.1.1 RI 11.4.1</p>						

II428726896	<p>Item Type: TECR</p> <p>Step 1</p> <p>Subjects hear lists of 15 words presented at a rate of 1 word per 1.5 seconds.</p> <p>Step 2</p> <p>Subjects are asked to recall the list.</p> <p>Step 3</p> <p>Subjects are instructed to be cautious and accurate in their answers (instructed not to guess).</p> <p>Step 4</p> <p>Subjects are given a test in which the studied terms are mixed with a variety of words that did not actually appear on the lists.</p> <p>Step 5</p> <p>Subjects classify each word based on whether they specifically remember at which point on the list it appeared or only knew generally that the word had been studied.</p>	<p>RI 11.1.1 RST 11.3.6</p>
II428728419	<p>Item Type: EBSR Part A: C Part B: D</p>	<p>RI 11.1.1 RI 11.6.1 RST 11.6.3</p>
II428728730	<p>Item Type: EBSR Part A: C Part B: D</p>	<p>RI 11.1.1 RST 11.6.3</p>
II428729783	<p>Item Type: PCR Refer to Grade 11 Scoring Rubric</p>	<p>RI 11.1.1 RST 11.6.3</p>

II428626208	Item Type: EBSR (additional item) Part A: C Part B: A	RI 11.1.1 RI 11.4.1
II428727758	Item Type: EBSR (additional item) Part A: B Part B: A	RI 11.1.1 RI 11.4.1
II428728046	Item Type: EBSR (additional item) Part A: D Part B: B, F	RI 11.1.1 RST 11.2.5
II428729479	Item Type: PCR (additional item) Refer to Grade 11 Scoring Rubric	RI 11.1.1 RST 11.9.4

Today you will research scientific discoveries about how memory works. You will read the article “New Discoveries on Optimizing Memory Formation.” Then you will read the passage from “Tricks of Memory” and the article “Exceptional Memory Explained: How Some People Remember What They Had for Lunch 20 Years Ago.” As you review these sources, you will gather and synthesize information and answer questions about scientific concepts so you can write an analytical essay.

Read the article “New Discoveries on Optimizing Memory Formation.” Then answer the questions.

New Discoveries on Optimizing Memory Formation

by William R. Klemm

- 1** As each of us goes through life, we remember a little and forget a lot. The stockpile of what we remember contributes greatly to define us and our place in the world. Thus, it is important to remember and optimize the processes that make that possible.
- 2** People who compete in memory contests (“memory athletes”) have long known the value of associational cues (see my *Memory Power 101* book). Neuroscientists have known for a long time about memory consolidation (converting short-term memory to long-term form) and the value of associational cues. But now, important new understanding is arising from a research lab at Northwestern that links cueing to “re-consolidation” and reveals new possibilities for optimizing long-term memory formation.
- 3** The underlying research approach is based on such well-established memory principles as:
 1. When information is first acquired, it is tagged for its potential importance or value.
 2. Such tagging is influenced by multiple factors such as repetition, attention, emotion, or purpose.
 3. Valuable memories get preferentially rehearsed, either through conscious will or by covert (implicit) brain processes.

4. Rehearsal episodes reactivate the memory and enhance long-term remembering because each re-consolidation episode builds on prior ones and strengthens the neural circuits that store the memory.
 5. Effectiveness of recall during rehearsal is promoted by use of relevant cues, that is, information that was associated with the original learning material.
 6. Such cues are effective, even when delivered during sleep.
- 4** The study involved 60 people in their early 20s, screened for good memory ability. All subjects participated in a four-hour learning period beginning in late morning. The learning consisted of 72 images placed in specific locations on a tile-like screen and presented one at a time. As each image appeared a corresponding sound was associated, intended to serve as a learning cue. For example, a dog picture would be associated with barking, cat with meow sound, etc. To create a value bias, each image had a superimposed number representing how important it was to remember this item and its location upon later testing. Subjects were given financial reward for how well they remembered, and thus remembering high-value images was a priority. Half of the images had high value assignments, while the rest had low values.
- 5** Subjects were assigned to four groups:
1. Groups 1 and 2 were tested to see how well they could remember where each object had appeared during the learning phase. They then took a 90 min nap while their EEGs were recorded. Half of these subjects heard white noise while the other half was presented the original sound cues of low-value images during non-REM sleep at a level that did not cause awakening. At the end of the nap, recall was again tested.
 2. The procedure in two other groups was similar except that these subjects did not nap. One of these groups watched a movie during the 90 minutes after the learning session, while the other group listened to the low-value sound cues while performing a working memory task.
- 6** Not surprisingly, the studies revealed that high-value images were remembered better, irrespective of whether or not a nap was taken. The practical point is that we remember better the things we value and find to have positive reward value. This reminds me of the sage saying that T.

Boone Pickens repeated from his basketball coach, who told players after each game: “Don’t dwell on your mistakes. Think about what you did right and do more of that!”

- 7** In the study, half of the low-value associations were rescued by cueing during wakefulness and all of them were rescued by cueing during sleep, even though only half of the images were cued. Notably, the best effects occurred during the deepest stage of sleep. No explanation was given to explain the sleep benefit, but I suspect it is because the sleeping brain is not distracting itself with irrelevant thoughts. This is consistent with the finding that low-value memories were not rescued well during REM sleep, when the brain is busily engaged in dreaming. The REM-sleep finding is at variance with other studies that reported a memory consolidating benefit of REM sleep. Apparently, the test conditions make a difference and more research is needed here.
- 8** Low-value associations were preferentially forgotten in the group that was not allowed to nap. This likely signifies that a brain busily engaged with other thoughts is less able to selectively consolidate memories, and only high-value items are likely to survive. This accords with the long-held theory that distractions and multi-tasking interfere with memory consolidation.
- 9** In summary, memory optimization would seem to require one to:
1. Create associations that can serve as memory cues.
 2. Place a high value on the cues and their targets.
 3. Repeatedly present the cues and replay the initial information. When awake, present the cues in self-test mode. When asleep, even better results would be obtained if cues were presented at a level that does not cause awakening during the early night sleep when sleep is deepest and there is little dreaming.

“New Discoveries on Optimizing Memory Formation” by William R. Klemm from PSYCHOLOGY TODAY. © 2013. Used by permission of the author.

1. Part A

As used throughout “New Discoveries on Optimizing Memory Formation,” what does the word **cueing** mean?

- A. clarifying
- B. demonstrating
- C. assuming
- D. prompting

Part B

Which quotation from the article supports the answer to Part A?

- A. “The stockpile of what we remember . . .” (paragraph 1)
- B. “Such tagging is influenced by multiple factors such as repetition, attention, emotion, or purpose.” (paragraph 3)
- C. “All subjects participated in a four-hour learning period beginning in late morning.” (paragraph 4)
- D. “For example, a dog picture would be associated with barking, cat with meow sound, etc.” (paragraph 4)

2. Part A

In “New Discoveries on Optimizing Memory Formation,” what is the author’s purpose in discussing the specifics of the study in paragraph 4?

- A. to emphasize aspects of the study intended to help participants remember certain images
- B. to list the features of the study that caused it to be unnecessarily difficult
- C. to provide incentive for readers to improve their memory optimization
- D. to explain why some participants were more successful than others

Part B

Which sentence from paragraph 4 provides evidence for the answer to Part A?

- A. “The study involved 60 people in their early 20s, screened for good memory ability.”
- B. “The learning consisted of 72 images placed in specific locations on a tile-like screen and presented one at a time.”
- C. “To create a value bias, each image had a superimposed number representing how important it was to remember this item and its location upon later testing.”
- D. “Half of the images had high value assignments, while the rest had low values.”

3. Select **two** central ideas and drag and drop them into the corresponding boxes. Then select a quotation that **best** supports **each** central idea and drag and drop each quotation into the correct box.

Central Idea	Central Idea
Supporting Evidence	Supporting Evidence

(continues on next page)

Associational cues play a key role in the consolidation of memories.	Rehearsal episodes reactivate long-term memory.
People tend to remember things that have more value for them.	Long-term memory retention is more difficult than short-term memory retention.
People who compete in memory contests typically rely on associational cues.	It is important for people not to dwell on their mistakes.
"The stockpile of what we remember contributes greatly to define us and our place in the world." (paragraph 1)	"But now, important new understanding is arising from a research lab at Northwestern that links cueing to 're-consolidation' and reveals new possibilities for optimizing long-term memory formation." (paragraph 2)
"People who compete in memory contests ('memory athletes') have long known the value of associational cues. . . ." (paragraph 2)	"The practical point is that we remember better the things we value and find to have positive reward value." (paragraph 6)
"Low-value associations were preferentially forgotten in the group that was not allowed to nap." (paragraph 8)	

4. In "New Discoveries on Optimizing Memory Formation," how do the three numbered lists contribute to structuring the information in the article? Complete the chart by dragging and dropping the list that **best** describes each phrase.

List 1 (paragraph 3)

List 2 (paragraph 5)

List 3 (paragraph 9)

<input type="text"/>	describes the particular arrangement of the study described in the article
<input type="text"/>	provides background information necessary for understanding the article
<input type="text"/>	describes techniques that led to successful results in the study for some of the participants

Read the passage from “Tricks of Memory.” Then answer the questions.

from “Tricks of Memory”

by Henry L. Roediger, III, and Kathleen B. McDermott

- 1** There are two fundamental errors of remembering: forgetting events that occurred previously and remembering those that did not occur (or remembering them differently from the way in which they occurred). The first error, forgetting, hardly needs documentation; the experience is embarrassingly familiar to everyone. The other major class of memory errors, errors of commission, strikes most people as a curious one: How could a memory that seems vivid and clear be anything but accurate?
- 2** This article focuses on these tricks of memory. Sources of error can arise at several stages in the encoding-storage-retrieval sequence. People can perceive (and therefore encode) events differently from the way they occur; stored memories can be influenced by intervening events; and conditions during the retrieval stage can lead to reports that bear little relation to the original occurrences.
- 3** We believe that distortions of memory provide a fertile ground for studying interesting and important psychological phenomena. The experimental techniques used to induce illusory memories have typically involved the presentation of complex material (e.g., prose or videotapes), the introduction of misleading information between the time when the material is first presented (the study phase) and the time when memory is tested (the test phase), and the use of long delays between study and test (see Roediger, 1996). The work described here provides a new procedure for inducing illusory memories. This procedure differs from typical ones used in false memory research in that it uses a standard list-learning paradigm, no misleading information, immediate testing, and warnings to subjects to be cautious and accurate. Despite these features, the illusory memories obtained are among the strongest ever reported in the literature on human memory.

AN ASSOCIATIVE MEMORY ILLUSION

- 4** In our first studies (Roediger & McDermott, 1995), we created illusory memories by adapting a procedure used by Deese (1959) for other

purposes. In our typical experiment, subjects hear lists of 15 words presented at the rate of 1 word every 1.5 s. Each list consists of a set of words associated to a single word that is not itself presented. For example, subjects may hear *bed, rest, awake, tired, dream, wake, snooze, blanket, doze, slumber, snore, nap, peace, yawn, and drowsy*; immediately afterward, they are asked to recall the list. The subjects are instructed not to guess—to be certain that they recall only items that were actually on the list. In this example, the list words are all associates of *sleep*, which does not appear on the list. The results from one experiment (averaged over 24 such associative lists) are shown in Figure 1. The graph shows strong primacy and recency effects, or high probabilities of recall of words from the beginning and the end of the lists. However, the most striking finding is represented by the dashed line, which indicates the level of recall for the critical nonpresented words (e.g., *sleep*) from which the lists were derived. The probability of recall of these missing words was somewhat greater than the probability of recall of words that actually had been presented in the middle of the lists!

- 5 After subjects had studied and recalled numerous lists, they were given a recognition test in which studied items were mixed with two types of nonstudied words (often called lures or distractors): the critical items (e.g., *sleep*) and unrelated distractors (e.g., *spider*). Subjects classified each word as *old* (studied) or *new* (nonstudied). If they classified a test word as old, they made a further judgment: whether they remembered or just knew the item had been studied (Tulving, 1985). That is, if they could recollect something specific about the moment of occurrence of the word during list presentation, they were to assign a *remember* judgment to the test word. If they knew the word had been in the list but could not recollect its exact moment of occurrence, they were to assign a *know* judgment.
- 6 Results for the three types of items (studied, unrelated nonstudied, and critical nonstudied) are shown in Figure 2. Examining the two left-most bars reveals no surprises: About 80% of the studied words were recognized, and most of these words were deemed to be remembered (the shaded part of the bar) rather than known (the white part). For unrelated lures, the false alarm rate (i.e., the frequency of recognizing them even though they were not presented) was low, and most of these falsely recognized words were

deemed to be known, not remembered. This latter result makes intuitive sense in that there was no original event to be remembered. The right-most bar shows recognition of critical items like *sleep*; the false alarm rate for these words approximated the hit rate (i.e., rate of correct recognition) for studied items (i.e., about .80). In addition, subjects claimed to remember (i.e., to vividly recollect) the presentation of these words as frequently as they did items that had been studied! This procedure demonstrates robust false remembering because subjects are saying not simply that a critical word seems familiar, but that they actually remember some specific aspect about the moment of its occurrence.

Roediger III, H. L., McDermott, K. B. (2000) "Tricks of Memory." CURRENT DIRECTIONS IN PSYCHOLOGICAL SCIENCE Vol. 9(4) p. 123–127, Copyright 2000 by Association for Psychological Science. Reprinted by permission of SAGE Publications, Inc.

5. Part A

Paragraph 1 of the passage from “Tricks of Memory” refers to **errors of commission**. In the context of the passage, what is the meaning of the term **errors of commission**?

- A. errors in which someone has committed to memory something that is true but not important
- B. errors in which someone has committed to memory something that has only recently occurred
- C. errors in which someone has committed to memory something that is factually accurate
- D. errors in which someone has committed to memory something that has not, in fact, been seen or experienced

Part B

Which **two** quotations from the passage provide context for understanding the meaning of the term **errors of commission**?

- A. “. . . the encoding-storage-retrieval sequence.” (paragraph 2)
- B. “. . . stored memories can be influenced by intervening events. . . .” (paragraph 2)
- C. “. . . illusory memories . . .” (paragraph 3)
- D. “. . . the time when memory is tested . . .” (paragraph 3)
- E. “. . . strong primacy and recency effects . . .” (paragraph 4)
- F. “. . . no original event to be remembered.” (paragraph 6)

6. Provide a replication of the experiment described in the passage from “Tricks of Memory” by dragging and dropping the choices into the appropriate boxes, placing them in the correct order. Not all options will be used.

Subjects are given a test in which the studied terms are mixed with a variety of words that did not actually appear on the lists.

Subjects are informed that a certain number of words appearing in their tests did not actually appear on the lists the subjects initially studied.

Subjects classify each word based on whether they specifically remember at which point on the list it appeared or only knew generally that the word had been studied.

Subjects are instructed to be cautious and accurate in their answers (instructed not to guess).

Subjects hear lists of 15 words presented at a rate of 1 word per 1.5 seconds.

Subjects hear a second list of words closely related to the words on the first list presented.

Subjects are asked to recall the list.

Step 1

Step 4

Step 2

Step 5

Step 3

Read the 2011 article “Exceptional Memory Explained: How Some People Remember What They Had for Lunch 20 Years Ago.” Then answer the questions.

Exceptional Memory Explained: How Some People Remember What They Had for Lunch 20 Years Ago

by Gary Stix

- 1** Researchers from the University of California, Irvine, reported in 2006 on a woman named Jill Price who could remember in great detail what she did on a particular day decades earlier. James McGaugh, Larry Cahill and Elizabeth Parker put the woman through a battery of tests and ascertained that she was not using any of the memory tricks that have been known to mnemonists for millennia.
- 2** Word got out, the media descended and the lab now receives calls every day from people who say they have the same ability as Price. Of the hundreds of people interviewed, 22 appear to exhibit what the researchers call highly superior autobiographical memory (HSAM), the detailed recollection of events that occurred in the distant past.
- 3** A question that has persisted about this line of research is whether the brains of these people are distinct from the organs of others who can't remember yesterday's lunch, let alone trivial events from 20 years back. Preliminary research presented at SFN (Society for Neuroscience) 2011 by the Irvine investigators suggests that there may be real differences in the brain structures of these people. MRI studies of 11 study participants demonstrate that multiple areas in the temporal and the parietal lobes tied to autobiographical memory are significantly larger than the same regions in a control group. At the same time, another area, the lentiform nucleus, linked to obsessive-compulsive disorder, is also bigger. Some of the study participants, in fact, have a tendency to hoard things or avoid germs, though none have been diagnosed with OCD.
- 4** “There seems to be this extreme organizational capacity, kind of like the tricks that mnemonists use,” says Howard Eichenbaum, a Boston University professor who is editor of the journal *Hippocampus*. “But the brain is doing it subversively under the radar so to speak. This process must interact with

the hippocampus, which is taking these autobiographical memories and helping to sort things out the way that mnemonists sort out a long list of words.”

- 5** Superior autobiographical memory is not a “genius” trait and those in the study do not exhibit better cognition in other realms nor do they count Nobelists among their ranks—one is an actress (Marilyn Henner), another is a radio reporter, to name just two. They are not even natural card counters. They perform no better than a control group on tests of short-term memory skills—rote memorization of a string of numbers, for instance.
- 6** The advantages of a capacious autobiographical memory are not as obvious as they might seem. Most of the HSAM group relishes its special ability, but many wrestle with how they can use it in their daily lives. “The number one question from people who call us is what can I do with my memory,” says Aurora Leport, a graduate student from Cahill’s lab who is presenting the research at SFN on Tuesday. The callers want to know how they can use the skill “in a positive way” or simply how they can use it to make money. “I don’t really know how to answer that,” Leport says. “It’s shocking to me that they can’t use it better. It isn’t really a superpower. It’s not a key that allows them to do amazing things.”
- 7** Extraordinary memory can become an overwhelming burden, the ultimate in information overload, as witnessed by the case of Solomon Shereshevsky, profiled by the renowned psychologist Alexander Luria (1902–1977) in *The Mind of a Mnemonist*. A photographic memory like Shereshevsky’s captures and retains the most minute details of a text or image. Like memorizing the phone book. HSAM, by contrast, allows the recollection of your life as a fifteen-year-old as if it were only yesterday, but not at high resolution: You may remember that you ate cereal for breakfast on Feb. 15, 1989, but not every ingredient on the box.
- 8** Although they are emotionally well adjusted, some of the superior memory group has to continually come to terms with the vividness with which they recall negative memories from 10, 20, 30 years before. “When I ask them about a bad memory, they say it comes back to them with the same amount of detail,” Leport says, “but it also comes back to them with the amount of emotion at the time of the event so they have to deal with that.”

9 The discovery of HSAM could provide a new direction for researchers. The famous patient Henry Molaison, better known as HM, was unable to form new long-term memories because of surgical damage to the medial temporal lobe, which includes the hippocampus. But study of his case greatly deepened the understanding of how memory works. Superior autobiographical memory could, in theory, give neuroscientists insights from the opposite pole. “We have a new tool in which we can look at memory when it’s functioning at a higher level,” LePort says. These studies might also furnish a new appreciation of the critical balancing act between remembering and forgetting to keep from getting overpowered by thought and emotion.

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7. Part A

In “Exceptional Memory Explained,” what is the author’s purpose in citing the research presented in paragraph 3?

- A. It introduces contrary information to undermine a hypothesis about HSAM.
- B. It suggests multiple interpretations of the causes of HSAM.
- C. It provides concrete evidence relevant to answering a common question about HSAM.
- D. It establishes a causal relationship between HSAM and another condition.

Part B

Which quotation presents material that is **most** similar in purpose to the research presented in paragraph 3?

- A. “Researchers from the University of California, Irvine, reported in 2006 on a woman named Jill Price who could remember in great detail what she did on a particular day decades earlier.” (paragraph 1)
- B. “They are not even natural card counters. They perform no better than a control group on tests of short-term memory skills—rote memorization of a string of numbers, for instance.” (paragraph 5)
- C. “Extraordinary memory can become an overwhelming burden, the ultimate in information overload, as witnessed by the case of Solomon Shereshevsky, profiled by the renowned psychologist Alexander Luria (1902–1977) in *The Mind of a Mnemonist*.” (paragraph 7)
- D. “The famous patient Henry Molaison, better known as HM, was unable to form new long-term memories because of surgical damage to the medial temporal lobe, which includes the hippocampus.” (paragraph 9)

8. Part A

Why does the author of “Exceptional Memory Explained” provide the explanation included in paragraph 5?

- A. to offer a personal opinion about the subject being discussed
- B. to cast doubt on some of the experiments described in the article
- C. to resolve a common misconception about people with HSAM
- D. to suggest several possible benefits of HSAM

Part B

What other paragraph in the article serves the **most** similar function as the answer to Part A?

- A. paragraph 1
- B. paragraph 3
- C. paragraph 4
- D. paragraph 6

9. You have read “New Discoveries on Optimizing Memory Formation,” the passage from “Tricks of Memory,” and “Exceptional Memory Explained.” Think about how these sources all support the idea that multiple factors, both internal and external, can interfere with the accuracy of an individual’s memory.

Write an analytical essay in which you discuss the ways in which each source supports this idea. Your analysis should address how internal and external factors interfere with the accuracy of an individual’s memory. Use evidence from all **three** sources in developing your response.

10. Part A

As used in paragraph 4 of “New Discoveries on Optimizing Memory Formation,” what does the term **value bias** mean?

- A. a factor that causes a person to have a more accurate memory
- B. a quality of a particular object that causes a reaction
- C. an understanding that a particular thing is more important than other things
- D. a prejudice in favor of certain outcomes

Part B

Based on the study described in the article, what would be a specific example of a **value bias**?

- A. A person remembers an image of a tiger more clearly than he remembers other images because the image of the tiger had the number 1 stamped on it to indicate its importance.
- B. A person remembers a series of images more precisely because he was allowed to take a nap before being asked to recall the images.
- C. A person remembers only those items on a list that stood out as familiar to his everyday experiences.
- D. A person remembers images from a presentation that promoted a cause he supports but forgets images that did not support the same cause.

11. Part A

What does the word **capacious** mean as it is used in paragraph 6 of “Exceptional Memory Explained”?

- A. paralyzing
- B. extensive
- C. admirable
- D. unmatched

Part B

Which phrase provides support for the answer to Part A?

- A. “. . . in great detail . . .” (paragraph 1)
- B. “. . . distinct from the organs of others . . .” (paragraph 3)
- C. “. . . a superpower.” (paragraph 6)
- D. “. . . not at high resolution . . .” (paragraph 7)

12. Part A

Which statement captures the central ideas of “Exceptional Memory Explained”?

- A. People who exhibit HSAM typically suffer from obsessive-compulsive disorders and benefit from the use of mnemonic tricks.
- B. HSAM is an unexplained phenomenon in need of further study and results in people having an extraordinary intellect.
- C. HSAM is a result of deliberate training of the brain and occurs often in people who tend to be emotionally well adjusted.
- D. People who exhibit HSAM may have real brain differences from other people and may experience disadvantages in their daily lives.

Part B

Select **two** quotations that support the answer to Part A.

- A. “James McGaugh, Larry Cahill and Elizabeth Parker put the woman through a battery of tests and ascertained that she was not using any of the memory tricks that have been known to mnemonists for millennia.” (paragraph 1)
- B. “MRI studies of 11 study participants demonstrate that multiple areas in the temporal and the parietal lobes tied to autobiographical memory are significantly larger than the same regions in a control group.” (paragraph 3)
- C. “There seems to be this extreme organizational capacity, kind of like the tricks that mnemonists use. . . .” (paragraph 4)
- D. “They perform no better than a control group on tests of short-term memory skills—rote memorization of a string of numbers, for instance.” (paragraph 5)
- E. “Most of the HSAM group relishes its special ability. . . .” (paragraph 6)
- F. “Although they are emotionally well adjusted, some of the superior memory group has to continually come to terms with the vividness with which they recall negative memories from 10, 20, 30 years before.” (paragraph 8)

- 13.** You have read “New Discoveries on Optimizing Memory Formation,” the passage from “Tricks of Memory,” and “Exceptional Memory Explained.” Think about how all the sources explore the idea that memory is selective.

Write an essay in which you analyze the information to support the idea that memory is not entirely under the control of an individual’s will. Support your analysis with evidence from all **three** sources.

