# **SAT Writing and Language Practice Test 13**

# A Sweet Discovery

Like most chemists, a laboratory was where Constantin Fahlberg worked on his research. However, the discovery for which he is famous occurred not in the laboratory, but at supper.

Chemical compounds are derived from coal tar, which is what Fahlberg began working on as a research chemist in a laboratory at Johns Hopkins University in early 1878. Coal tar was a by-product of steel manufacturing, and compounds derived from them had been used as medicines and in dye formulations. Fahlberg, and others in the laboratory, were studying ways to add different chemicals to molecules found in coal tar to see if the new compounds formed had other useful properties.

One night in June, Fahlberg finished a long day of work; he had been so demanding in his research that he forgot to eat lunch, so he hurried to his supper without stopping to wash his hands. He might have considered hand washing unnecessary because he had not handled any toxic chemicals that day, or he might have just been so hungry he did not think about it.

The bread tasted so sweet that Fahlberg thought he might have picked up some cake by mistake. He rinsed out his mouth with water and then patted his mustache dry with a napkin. He was surprised to find that the napkin tasted sweet as well. He took another sip of water and realized that the water now tasted sweet. The bread, napkin, and glass of water had something in common. He then tasted his thumb, and it tasted sweeter than any candy he had ever had.

[1] Fahlberg rushed back into the lab and began to taste the contents of every beaker he had used that day. [2] Fortunately, he had not worked with anything poisonous or corrosive, or the story may have a different ending. [3] He had discovered saccharin, which he named for its intense sweetness. [4] He found a sweet-tasting mixture of chemicals and worked for weeks to isolate the sweet substance from the rest and to determine its chemical composition. [5] Although it is many times more sweet tasting than sugar, it cannot be used for energy by the body and therefore does not contribute to calories consumed or energy use. [6] Soon after Fahlberg started making saccharin commercially in 1886, it became popular with people who needed to lose weight and with diabetic patients who needed to avoid sugar. 10

1.

- A. NO CHANGE
- B. Like most chemists, Constantin Fahlberg worked on his research in a laboratory.
- C. Constantin Fahlberg worked on his research, like most chemists, in a laboratory.
- D. A laboratory, like most chemists, is where Constantin Fahlberg worked on his research.

- A. NO CHANGE
- B. Johns Hopkins University is where Fahlberg began working as a research chemist in a laboratory, making chemical compounds derived from coal tar in early 1878.

- C. Coal tar creates chemical compounds. This is what Fahlberg began working on as a research chemist in a laboratory at Johns Hopkins University in early 1878.
- D. In early 1878, Fahlberg began working as a research chemist in a laboratory at Johns Hopkins University, making chemical compounds derived from coal tar.

- A. NO CHANGE
- B. from it
- C. from these
- D. from him

4.

- A. NO CHANGE
- B. delayed
- C. engrossed
- D. excited
- 5. Which sentence should be inserted in this position to create an ideal transition to the next paragraph?
  - A. Later, hand washing would become a critical protocol in the laboratory.
  - B. Thankfully, he didn't, or he never would have discovered what came next.
  - C. Fahlberg had not eaten any cake, or indeed anything sweet, that day.
  - D. Either way, he picked up his bread in his unwashed hands and took a bite.

6.

- A. NO CHANGE
- B. Was there something that the bread, napkin, and glass of water had in common, he wondered?
- C. In fact, everything Fahlberg touched seemed to taste sweeter than usual, which intrigued his scientific mind.
- D. Fahlberg quickly realized that the one thing the bread, napkin, and glass of water had in common was that they had all touched his fingers.

- A. NO CHANGE
- B. would have had
- C. might have

- D. might have had
- **8.** How should sentence 3 be revised to most clearly and effectively convey the central idea of the paragraph?
  - A. NO CHANGE
  - B. The substance was saccharin, and it became known as an artificial sweetener.
  - C. Instead, the substance was a harmless sweetener called saccharin.
  - D. Interestingly, the substance was extremely sweet and would later be known as saccharin.

- A. NO CHANGE
- B. inventing
- C. creating
- D. producing
- **10.** Where should sentence 4 logically be placed within the paragraph?
  - A. Where it is now
  - B. Before sentence 1
  - C. Before sentence 3
  - D. Before sentence 6
- 11. Which of the following sentences would make the best conclusion to the passage?
  - A. Clearly, Constantin Fahlberg's legacy of research, along with his accidental discovery, continues to have lasting effects on society even today.
  - B. If Fahlberg had stopped to wash his hands that day, he might have continued his experiments on coal tar derivatives, never knowing that an important substance sat at the bottom of one of his laboratory beakers.
  - C. In addition to his discovery of saccharin, his work on coal tar proved that Constantin Fahlberg was a talented scientist whose work has applications in the present day, even though a number of new artificial sweeteners have been developed.
  - D. Fahlberg's discovery of saccharin is just one of the many examples of times when science
    was advanced through what some might call a happy accident.

# René Descartes: The Father of Modern Philosophy

\Throughout history, philosophy has shaped culture in pivotal ways. From the ancients to the postmoderns, great philosophers have spoken powerfully within 1 their respective contexts. For modern

Western culture, one philosopher's formative impact surpassed his contemporaries: France's René Descartes. Called "the father of modern philosophy," Descartes crucially influenced Western perspectives on knowledge and rationality.

This 17th-century philosopher ushered Western thought through an era of great public doubt and upheaval and into the age of self-reliant rationalism. Political and religious tradition and authority—the <u>obvious</u> premodern sources of truth and knowledge—were being questioned and rejected as new ideas identified potential inconsistencies. <u>Because foundations of truth seemed to be crumbling, Descartes's writings proposed an alternative foundation: individual reason.</u>

An expert in many fields, including algebra, anatomy, meteorology, and metaphysics, Descartes's work would on many levels serve to establish foundations for modern culture and science. This emphasis on reason, as opposed to traditional or authoritative bases for certainty, would become the modern mechanism for determining truth and knowledge.

[1] Modern culture would come to cherish this as an intellectual ideal. In his famous project, Descartes sought certainty by mentally stripping away every layer of knowledge that was remotely possible to doubt. [2] Descartes arrived at his memorable conclusions, "I think, therefore I am," he could only be certain of the fact that he was thinking. [3] Building from there, he could work toward rational certainty in other areas of knowledge. 2

Emphasizing the importance of building knowledge on certain evidence, Descartes modeled a reversal of the reigning scientific processes (which typically worked backward from observation to explanation). Descartes founded the modern scientific method, in which research and study could be reliably conducted based on certain evidence. The scientific method, and the emphasis on human reason, would become standard elements of modern thought. Though reimagined by ensuing culture and philosophy, these changes propelled by Descartes's initial contributions to that conversation.

10 Some people may argue that it is impossible to separate what Descartes accomplished from the things his contemporaries did. Certainly, most scientists and philosophers influence and build from each other's work. But Descartes was the crucial voice in early modern dialogue. His expertise drew trusted readership, and his well-read ideas pointed culture down the road to modern understanding—a road paved with reason, modernism's great intellectual virtue. Shifts 11 begun by Descartes's work would influence the very structure of ideas and systems in the modern world, from research methods to public processes like government and health systems.

1.

- A. NO CHANGE
- B. their
- C. its
- D. it's

- A. NO CHANGE
- B. makeshift
- · C. innovative

D. reigning

3.

- A. NO CHANGE
- B. In a time when foundations of truth seemed to be crumbling, Descartes's writings proposed an alternative foundation: individual reason.
- C. Despite the fact that foundations of truth seemed to be crumbling, Descartes's writings proposed an alternative foundation: individual reason.
- D. Although foundations of truth seemed to be crumbling, Descartes's writings proposed an alternative foundation: individual reason.

4.

- A. NO CHANGE
- B. Expertise in many fields, including algebra, anatomy, meteorology, and metaphysics,
   Descartes created work that
- C. An expert in many fields, including algebra, anatomy, meteorology, and metaphysics, Descartes would create work that
- D. With his expertise in many fields, including algebra, anatomy, meteorology, and metaphysics, Descartes's work

**5.** Which sentence, if added here, would offer the strongest support for the central claim of the paragraph?

- A. But his most impressive contribution was his advocacy for the individual's rationality.
- B. Unlike Descartes, other philosophers argued that reason alone could not provide the basis for knowledge.
- C. The idea known as Cartesian dualism posited that in the world there exists only mind and matter.
- D. His work on philosophy has proven to have more importance than his ideas about anatomy, many of which have since been disproven.

- A. NO CHANGE
- B. conclusion "I think, therefore I am," he could only be certain of the fact that he was thinking.
- C. conclusion, "I think, therefore I am;" he could only be certain of the fact that he was thinking.
- D. conclusion, "I think, therefore I am"; he could only be certain of the fact that he was thinking.

- 7. Which sentence should be added in front of sentence 1 to clarify the topic of the paragraph?
  - A. Descartes's contributions to philosophy were seen as threatening to religion.
  - B. Descartes focused his work on the pursuit of fact-based certainty.
  - C. The foundation for the ideas of many other philosophers is Descartes's work.
  - D. Descartes's ideas were rooted in his Jesuit training.
- 8. Which sentence should be added in front of sentence 3 to support the information in the paragraph?
  - A. This revelation came as a shock to many people.
  - B. However, he believed that certainty offered evidence to confirm his existence.
  - C. Still, it was a place to start.
  - D. This was a radical new way to think about thinking.

- A. NO CHANGE
- B. these changes being propelled by
- C. these changes having been propelled by
- D. these changes were propelled by

10.

- A. NO CHANGE
- B. Some may argue that it is impossible to separate Descartes's accomplishments from those
  of his contemporaries.
- C. Some people may argue that it is impossible to separate Descartes from his contemporaries.
- D. Some may argue that what Descartes accomplished is no different from what his contemporaries did.

11.

- A. NO CHANGE
- B. foreseen
- C. initiated
- D. evolved

The Novel: Introspection to Escapism

Art is never 1 stagnant, nor is it meant to be. A poem written today looks and sounds vastly different from a poem by Shakespeare, and a modern symphony no longer resembles one by Beethoven. So it is with the novel, that still relatively young members of the literary family (many consider Don Quixote, published in 1605, to be the first). The novel is evolving to reflect the 2 changing worlds; for better or for worse.

A few quotations from acclaimed novelists of the past illustrate how broadly the form was once regarded. G. K. Chesterton said, "A good novel tells us the truth about its hero, but a bad novel tells us the truth about its author." English writer Ford Madox Ford believed the novelist played an important role as a recorder of history. Ford said of his friend Joseph Conrad. "We agreed that the novel is absolutely the only vehicle for the thought of our day."

It's not that over centuries writers of novels shed these ambitions; novels today still address complexities and intricate social dynamics. However, in recent decades, especially the 2000s, popular novels and their film adaptations have driven the novel market in a broader direction. Novels are considered just another entertainment medium, which are now available on digital devices, one that ought to enthrall its passive reader and relieve him or her of the stress and tedium of life. The difficulties, challenges, and triumphs of real life are less of the subject of popular novels; instead, escapist tales of fantastical lands and escapades are more popular.

It is rare today for a novelist to attempt to ask "What does it mean?" Instead, 10 we strive to provide the reader with an answer to the question "What happens next?"

"Publishers, readers, booksellers, even critics," critic James Woods wrote, "acclaim the novel that one can deliciously sink into, forget oneself in, the novel that returns us to the innocence of childhood or the dream of the cartoon, the novel of a thousand confections and no unwanted significance. What becomes harder to find, and lonelier to defend, is the idea of 11 the novel as—in Ford Madox Ford's words—a 'medium of profoundly serious investigation into the human case."

1.

- A. NO CHANGE
- B. sluggish
- C. static
- D. similar

- A. NO CHANGE
- B. changing world—for better
- C. changing world: for better
- D. changing world for better
- **3.** Which choice most effectively establishes the main topic of the paragraph?
  - A. The novel, while well regarded, would never match the poem as the ideal form for conveying the struggles of humanity.

- B. The novel was once sacred ground, meant to capture and reveal universal truths, to depict society and all its ills, to explore and expound upon the human condition.
- C. Both poetry and novels enjoyed a resurgence of popularity in the early 1900s due to the notoriety of many of the prominent authors of the day.
- D. By the early 1900s, novels had evolved into something entirely different from the form Cervantes pioneered with Don Quixote.

- A. NO CHANGE
- B. loftily
- C. haughtily
- D. pretentiously
- **5.** Which choice would improve the sentence?
  - A. Ford said of his friend, the novelist Joseph Conrad,
  - B. Ford said of his great friend, Joseph Conrad,
  - C. Ford said of Joseph Conrad,
  - D. Ford said of his friend, Joseph Conrad, a Pole who moved to Britain,

#### 6.

- A. NO CHANGE
- B. However: in recent decades,
- C. However in recent decades,
- D. In recent decades however;

## 7.

- A. NO CHANGE
- B. Novels, which are now available on digital devices, are considered just another entertainment medium,
- C. Novels are considered just another entertainment medium, now available on digital devices,
- D. Novels, just another entertainment medium which are now available on digital devices

## 8.

• A. NO CHANGE

- B. less often the subject of popular novels instead, escapist tales of fantastical lands and escapades are more popular.
- C. less often the subject of popular novels, instead, escapist tales of fantastical lands and escapades are more popular.
- D. less often the subject of popular novels: instead, escapist tales of fantastical lands and escapades are more popular.
- 9. Which detail would provide the best support for the ideas presented in the paragraph?
  - A. Novels exploring deep social issues remain the most heavily decorated books come literary award season.
  - B. Director James Cameron remarked recently about the inherent difficulty of adapting novels with fantasy themes.
  - C. Writing in the New Yorker magazine in 2014, critic James Woods stated that readers now want novels that, like popcorn, are "easy to consume."
  - D. The slice of life novel remains tremendously popular among books targeting younger readers.

- A. NO CHANGE
- B. they strive
- C. it strives
- D. he or she strives

- A. NO CHANGE
- B. the novel as, in Ford Madox Ford's words—a 'medium of profoundly serious investigation into the human case."
- C. the novel as, in Ford Madox Ford's words: a 'medium of profoundly serious investigation into the human case."
- D. the novel as, in Ford Madox Ford's words; a 'medium of profoundly serious investigation into the human case."