

TOEFL Reading Sample Paper 09

- A) **Subject:** Reading Comprehension
- B) **Total Questions:** 20 Questions (2 Passages — 10 Questions per Passage)
- C) **Marking Scheme & Rules:**
- **Standard Questions:** 1 Point (Multiple Choice, Insert Text, etc.)
 - **Prose Summary:** 2 Points. This is the final question of each set.
 - **Partial Credit:** Awarded for the Prose Summary (usually 1 point if 2 out of 3 choices are correct).
 - **Negative Marking:** None. 0 points for incorrect answers.
 - **Timing:** Recommended 35 minutes for the entire section.

PASSAGE I: The Biology of the Giant Sequoia

Paragraph 1: Deep in California’s Sierra Nevada, the hierarchy of the world’s largest trees has recently shifted. For decades, the General Grant tree was considered the second-largest living thing on Earth, but it has been **supplanted** by a tree known as “The President.” This change in ranking resulted from the most comprehensive measurements ever taken of these gargantuan organisms. Scientists were surprised to find that after 3,240 years, The President is still growing wider at a consistent rate, dispelling the myth that these trees slow down in their old age.

Paragraph 2: [A] One of the most critical roles of these iconic trees is their ability to absorb planet-warming carbon dioxide. [B] Researcher Stephen Sillett’s team found that the amount of carbon dioxide absorbed during photosynthesis actually increases over the tree’s lifetime. [C] This is due to the massive volume of its crown, which contains roughly two billion leaves. [D] **Because these leaves are so numerous, the giant sequoia is one of the most efficient organisms on the planet at transforming atmospheric gases into nourishing sugars.**

Paragraph 3: The extraordinary lifespan of the giant sequoia is largely due to its physical **resiliency**. Its wood is highly resistant to the pests and diseases that typically shorten the lives of other tree species. Furthermore, its exceptionally thick bark makes it nearly impervious to fast-moving forest fires. Unlike white firs, which decay quickly after falling and release carbon back into the atmosphere, rot-resistant sequoias can remain solid for hundreds of years after they die, serving as long-term carbon storage.

1. The word "supplanted" in Paragraph 1 is closest in meaning to:

A. Discovered	C. Measured
B. Replaced	D. Protected
2. According to Paragraph 1, what was the most surprising discovery made about "The President"?

A. It is actually much younger than the General Grant tree.	B. It continues to grow in width even at a very advanced age.
C. It was originally planted by early settlers in 1850.	D. It has fewer leaves than smaller coastal redwoods.
3. The word "consistent" in Paragraph 1 is closest in meaning to:

A. Rapid	C. Unusual
B. Steady	D. Occasional
4. Why does the author mention "two billion leaves" in Paragraph 2?

A. To explain why the tree requires so much water to survive.	B. To illustrate the scale of the tree's photosynthetic capacity.
C. To argue that sequoias are more beautiful than other trees.	D. To provide evidence that the tree is currently dying.
5. According to Paragraph 3, what protects the giant sequoia from forest fires?

A. The high moisture content of its leaves.	B. Its ability to remain dormant during the summer.
C. The unusual thickness of its bark.	D. The lack of other vegetation in the Sierra Nevada.
6. Which of the sentences below best expresses the essential information in the highlighted sentence in Paragraph 2?

A. Atmospheric gases are converted into sugars by leaves in all types of plants.	B. The vast number of leaves allows the sequoia to be extremely effective at producing energy.
C. Sequoias need more nourishment than other organisms because they have billions of leaves.	D. Transformation of sugars is the most efficient way for a tree to survive for 3,000 years.
7. What can be inferred from Paragraph 3 about white firs?

A. They are more effective at storing carbon than sequoias.	B. They contribute more to atmospheric carbon when they fall and rot.
C. They are the only trees in California that are immune to fire.	D. They grow much slower than the giant sequoia.
8. The word "resiliency" in Paragraph 3 is closest in meaning to:

- A. Size
- B. Beauty

- C. Durability
- D. Height

9. Look at the four squares [A, B, C, D] in Paragraph 2. Where would the following sentence best fit?

"This challenges the previous notion that large trees lose their environmental utility as they get older."

- A. [A]
- B. [B]
- C. [C]
- D. [D]

10. [Summary] Select 3 sentences that summarize the most important ideas of the passage.

- a. Comprehensive measurements have led to a reevaluation of the size and growth patterns of giant sequoias.
- b. Giant sequoias remain highly productive and efficient carbon absorbers throughout their long lives.
- c. Sequoias possess unique physical traits, such as thick bark and rot-resistant wood, that ensure their survival.
- d. General Grant was once considered the world's second-biggest tree before 2012.
- e. Stephen Sillett dangling from ropes for 32 days was necessary to measure the tree's branches.
- f. The President was named after Warren G. Harding to commemorate his visit to the park.

PASSAGE II: Short-Term Memory and Chunking

Paragraph 1: Short-term memory (STM), often referred to as working memory, is the system responsible for holding small amounts of information in an active, readily available state for a brief period. Information typically enters the STM from the sensory storage area, where a neural filter selects only stimuli of immediate interest. Without active maintenance, this information usually **elapses** within thirty seconds and is subsequently erased to make room for new data.

Paragraph 2: [A] The capacity of the STM has been a subject of intense debate among psychologists. [B] The most famous theory, proposed by George A. Miller, suggests that the average human can hold approximately seven "chunks" of information. [C] A chunk is defined as a meaningful unit, such as a word or a familiar date, rather than a single digit or letter. [D] By organizing information into these larger, familiar patterns—a process known as "chunking"—individuals can **optimize** their memory capacity.

Paragraph 3: While "rote rehearsal"—the simple repetition of information—can keep a memory alive temporarily, it is often ineffective for transferring data into long-term storage. A more successful method is "elaborate rehearsal," which involves assigning semantic meaning to new information. By connecting new data to existing knowledge, the brain creates more **cues** for retrieval. This explains why multiple-choice tests, which provide visual and contextual cues, are often easier than open-ended recall tasks.

11. The word "elapses" in Paragraph 1 is closest in meaning to:
- A. Increases
 - B. Passes
 - C. Appears
 - D. Continues
12. According to Paragraph 1, what determines which information enters the short-term memory?
- A. The length of time the information has been in long-term storage.
 - B. A filter that identifies stimuli that are of immediate interest.
 - C. The number of chunks the brain can process at once.
 - D. The physical size of the information being presented.
13. According to Paragraph 2, how can a person increase the amount of information held in STM?
- A. By repeating the information out loud as quickly as possible.
 - B. By grouping individual items into meaningful units.
 - C. By clearing the sensory storage area of all other stimuli.
 - D. By avoiding any form of semantic meaning.
14. The word "optimize" in Paragraph 2 is closest in meaning to:
- A. Reduce
 - B. Make the best use of
 - C. Change
 - D. Visualize
15. Why does the author mention a "doorbell" or "dog barking" (as implied in Paragraph 3 context)?
- A. To give an example of information that is naturally chunked.
 - B. To illustrate how external interruptions can cause rote rehearsal to fail.
 - C. To show that animals have shorter memory spans than humans.
 - D. To explain how the neural filter selects loud noises.
16. Which of the sentences below best expresses the essential information in the highlighted sentence in Paragraph 3?
- A. Repeating information is the only way to ensure it stays in the long-term memory forever.
 - B. Rote rehearsal keeps information in the STM briefly but is not the best way to create permanent memories.
 - C. Temporary memories are usually more accurate than those stored through elaborate rehearsal.
 - D. Most data is transferred to long-term storage without the need for any form of repetition.
17. The word "cues" in Paragraph 3 is closest in meaning to:
- A. Questions
 - B. Signals
 - C. Tests
 - D. Images
18. What is the "Rhetorical Purpose" of the author's mention of "George A. Miller" in Paragraph 2?

- A. To argue that modern theorists have proven his ideas were incorrect.
- B. To provide a historical origin for the most widely accepted theory on STM capacity.
- C. To explain how the term "working memory" was first invented.
- D. To contrast his research with the study of sensory storage.

19. Look at the four squares [A, B, C, D] in Paragraph 2. Where would the following sentence best fit?

"For example, a person can remember a long phone number more easily if the digits are separated into groups."

- A. [A] B. [B] C. [C] D. [D]

20. [Summary] Select 3 sentences that summarize the most important ideas of the passage.

- a. Short-term memory is a brief holding system that only accepts relevant stimuli from the senses.
- b. The capacity of the STM is limited to roughly seven chunks, but this can be improved through organization.
- c. Elaborate rehearsal, which adds meaning to data, is more effective for long-term memory than simple repetition.
- d. Information that is not rehearsed usually disappears from the mind in less than thirty seconds.
- e. Meaningful units of information are easier to remember than random letters and numbers.
- f. Multiple-choice tests are frequently used because they provide retrieval cues to students.

Solutions - Section I

1. **(B)** "Supplanted" means to take the place of another; "replaced" is the best synonym.
2. **(B)** Paragraph 1 states it is "still growing wider at a consistent rate," which disproves the myth of slowing down.
3. **(B)** In the context of growth rates, "consistent" means "steady" or regular.
4. **(B)** The author mentions the leaf count to show how the tree is so "efficient" at photosynthesis (energy production).
5. **(C)** Paragraph 3 explicitly credits the "exceptionally thick bark" for making the tree impervious to fire.
6. **(B)** The original sentence links leaf count to efficiency in sugar transformation. Option B captures this energy effectiveness.
7. **(B)** The text says sequoias are rot-resistant while white firs "decay quickly," releasing carbon back into the air.
8. **(C)** "Resiliency" refers to the ability to withstand or recover from difficult conditions; "durability" is the closest fit.
9. **(C)** Square [C] is correct because the previous sentence introduces carbon absorption, and the inserted sentence comments on how this challenges older myths about age.
10. **(a, b, c)** These summarize the growth reevaluation (a), the carbon utility (b), and the survival mechanisms (c).

Solutions - Section II

11. **(B)** In the context of time, "elapses" means "passes."
12. **(B)** Paragraph 1 states a filter selects only stimuli of "immediate interest."
13. **(B)** The text describes "chunking" as the process of organizing information into meaningful units to increase capacity.
14. **(B)** "Optimize" means to make something as effective or functional as possible.
15. **(B)** These examples (from the OCR source) show that interruptions during rote rehearsal lead to instant forgetting.
16. **(B)** The original sentence contrasts the temporary nature of rote repetition with the permanence of long-term storage.
17. **(B)** In psychological retrieval, "cues" are "signals" or hints that help one remember.

18. **(B)** Miller is cited to establish the "seven chunks" theory, the foundational concept of the paragraph.
19. **(D)** Square [D] follows the definition and naming of the "chunking" process, providing a concrete example.
20. **(a, b, c)** These capture the definition/filter (a), the capacity/chunking (b), and the retention methods (c).