

## Answer Key: Will Your Brain Forget This? 7th Grade Memory Mastery Quiz

Analyze how information transitions from sensory input to permanent storage through real-world scenarios involving mnemonics, the spacing effect, and cognitive biases.

**1. To remember the Great Lakes (Huron, Ontario, Michigan, Erie, Superior), Sarah uses the word 'HOMES.' Which cognitive strategy is she employing to improve retrieval?**

**Answer:** B) An acromanic mnemonic

An acronym uses the first letter of each item in a list to create a catchy, memorable word, which acts as a retrieval cue for the brain.

**2. The 'Spacing Effect' suggests that 'cramming' for several hours the night before a test is more effective for long-term retention than shorter study sessions over several days.**

**Answer:** B) False

The Spacing Effect proves that intervals of time between study sessions allow for better consolidation of information into long-term memory.

**3. When you try to remember a phone number by grouping the digits into three sets (e.g., 555-019-2234), you are using a cognitive process known as \_\_\_\_\_.**

**Answer:** C) Chunking

Chunking is the process of organizing small bits of information into larger, familiar units, which increases the capacity of working memory.

**4. While riding a bicycle, you aren't consciously thinking about how to balance; this is an example of which type of long-term memory?**

**Answer:** C) Procedural Memory

Procedural memory is a type of implicit memory that stores information on how to perform motor skills and tasks without conscious thought.

**5. A student believes that all teenagers are messy after meeting one messy peer. This is an example of \_\_\_\_\_ reasoning, where a general conclusion is drawn from a specific instance.**

Name: \_\_\_\_\_

Date: \_\_\_\_\_

**Answer:** B) Inductive

Inductive reasoning moves from specific observations (one messy peer) to broad generalizations (all teenagers), which can sometimes lead to stereotypes.

**6. In the 'Modal Model' of memory, what is the correct order of the stages an external stimulus must pass through to become a permanent memory?**

**Answer:** B) Sensory -> Short-term -> Long-term

Information first hits our sensory registers, then moves to short-term (working) memory for processing, and finally may be stored in long-term memory.

**7. The 'Misinformation Effect' demonstrates that a person's recall of an event can be altered if they are exposed to misleading information after the event occurred.**

**Answer:** A) True

Memory is reconstructive; new information can interfere with original memories, causing people to remember things differently than they actually happened.

**8. When choosing between two brands of cereal, Marcus picks the one he recognizes from a catchy commercial without researching the nutrition facts. He is using a(n) \_\_\_\_\_, a mental shortcut.**

**Answer:** C) Heuristic

Heuristics are 'rules of thumb' or mental shortcuts that allow us to make quick decisions without an exhaustive search for information.

**9. Which of the following is an example of 'Elaborative Rehearsal' rather than just 'Maintenance Rehearsal'?**

**Answer:** C) Connecting the concept of 'Mitosis' to how a cut on your skin heals.

Elaborative rehearsal involves making meaningful connections between new info and existing knowledge, leading to deeper encoding and better recall.

**10. Working memory has an unlimited capacity and can hold complex information for several hours without active rehearsal.**

**Answer:** B) False

**Name:** \_\_\_\_\_

**Date:** \_\_\_\_\_

Working memory (short-term) is strictly limited, typically holding only about 5 to 9 items for roughly 15-30 seconds unless it is rehearsed.