Memory at Work

Trace how information becomes a usable memory.

P.4.2 "Describe the processes of memory, including encoding, storage, and retrieval."

NAME _____ DATE _____

1 READ AND MARK

Read it twice

YOUR JOB Underline Maya's actions that help her encode the directions, draw a box around evidence that the directions remain stored over time, and circle moments when she retrieves them.

A Busy Day at the Polls

1. At a school mock election, Maya volunteers to guide voters. A memory begins when a person takes in information and changes it into a form the brain can use, a process called encoding. Attention and meaning affect what gets encoded. Storage is the keeping of information over time, whether for seconds or much longer. Retrieval is bringing stored information to mind when it is needed. These processes work together, but they are not the same event. A person may hear directions but miss part of them, keep them for later, or struggle to bring them to mind at a busy moment.

2. During training, the election coordinator gives Maya three directions: find each voter's name on the roster, hand over one ballot, and point to the ballot box. Rather than repeat the words without thinking, Maya imagines a voter moving from the roster to the ballot box. She then tells a partner the steps in her own words. That evening, she practices the sequence once without looking at her notes. The next morning, she can still describe the steps while walking to school. Her practice gives her another chance to keep the sequence available after training has ended.

3. At the first crowded voting session, a classmate asks Maya about a lost pencil just as a voter arrives. Maya pauses and cannot immediately recall what to do after checking the roster. Seeing the stack of ballots helps her bring the next direction to mind. She hands over one ballot and points to the box. Later, Maya remembers the order of the steps but mistakenly recalls that the coordinator said to hand out two ballots. She checks the posted directions and corrects herself. Remembering is not a perfect replay: a useful cue can help, while a remembered detail can be wrong.

2 ANSWER WITH EVIDENCE

Use the passage

1. How does Maya turn the coordinator's directions into something meaningful to her? Explain how this is encoding.

2. What evidence shows that Maya stored the directions beyond the training session?

3. When Maya pauses at the crowded voting session, what helps her retrieve the next step? Why does her pause not prove she forgot the directions completely?

4. What detail does Maya remember incorrectly later? What does this show about retrieval?

3 YOUR TURN

Your own words

Write 4 to 5 sentences about learning a task outside a mock election. Show and name encoding, storage, and retrieval, and include a clue that helps you retrieve a step.

Memory at Work

PART 1 · READ AND MARK

Underline Maya's actions that help her encode the directions, draw a box around evidence that the directions remain stored over time, and circle moments when she retrieves them. Accept any marking that follows this job and points at the right text.

PART 2 · ANSWERS

#	QUESTION	ANSWER
1	How does Maya turn the coordinator's directions into something meaningful to her? Explain how this is encoding.	**She imagines a voter moving through the steps and explains them in her own words. She is taking in the directions and giving them meaning, which helps encode them.**
2	What evidence shows that Maya stored the directions beyond the training session?	**She can still describe the steps the next morning, showing that the information remained in memory after training.**
3	When Maya pauses at the crowded voting session, what helps her retrieve the next step? Why does her pause not prove she forgot the directions completely?	**The stack of ballots cues her to bring the next step to mind. Her pause shows difficulty retrieving it at first, but she then remembers what to do.**
4	What detail does Maya remember incorrectly later? What does this show about retrieval?	**She recalls being told to hand out two ballots instead of one. Retrieved memories can contain errors rather than replaying events exactly.**

PART 3 · YOUR TURN (SAMPLE ANSWER)

When I learned to cook rice, I pictured the pot bubbling as I repeated the steps aloud, which helped me encode them. After practicing that evening, I still knew the steps the next day, showing storage over time. When I cooked again, I briefly forgot when to lower the heat. Seeing the pot begin to bubble helped me retrieve that step.

Accept different wording if students distinguish taking in information, keeping it over time, and bringing it to mind. For the open task, look for a plausible clue connected to a specific retrieved step.