Why Memories Slip

Trace what makes a memory hard to retrieve.

P.4.4 "Identify the factors that affect retrieval (storage decay, proactive and retroactive interference) including memory disorders."

NAME _____ DATE _____

1 READ AND MARK

Read it twice

YOUR JOB Underline the explanations of storage decay and both kinds of interference, circle the names of the memory disorders, and number the interference examples 1 when old learning blocks new learning and 2 when new learning blocks old learning.

The Radio Station's Memory Mix-Ups

1. At a neighborhood radio station, volunteers must remember booth rules, guest names, and yesterday's announcements. Forgetting does not always mean a memory has vanished. Retrieval means bringing stored information back when it is needed, and several obstacles can make that difficult. Storage decay is a gradual weakening of a memory over time, especially when information is not revisited. A volunteer who learned an unused equipment code last spring may struggle to recall it now, even without learning a replacement code. Rehearsing the code over several days would give the volunteer more chances to keep it available.

2. Other memories can compete during retrieval. In proactive interference, older learning gets in the way of recalling newer learning. After months of calling a radio segment "Morning Mix," a host may accidentally use that old name when introducing its new title, "Daybreak Desk." Retroactive interference works in the opposite direction: newer learning makes older information harder to recall. After practicing the new title for weeks, the host may blank on the former title when a guest asks about it. Both mistakes involve competing information, not simply the passage of time. To tell them apart, ask which memory came first and which one is harder to retrieve.

3. Some memory problems reflect a disorder rather than ordinary competition or disuse. Anterograde amnesia, which can follow brain injury, severely limits a person's ability to form lasting new memories, though memories from before the injury may remain. A volunteer with this condition might greet the same new guest several times without remembering earlier introductions. Alzheimer's disease is a progressive brain disorder that can disrupt memory and other thinking abilities. Someone with Alzheimer's may forget familiar routines as the condition advances. A single forgotten name cannot diagnose either disorder; clinicians look for patterns, history, and other evidence before identifying a cause.

2 ANSWER WITH EVIDENCE

Use the passage

1. A student cannot recall a seldom-used locker combination learned last year. No other combination has replaced it. Which factor best fits, and why?

2. A bus rider learns a new route number but keeps saying the old number. Which kind of interference is this? Explain which learning is getting in the way.

3. After using a new password for weeks, a student has trouble recalling the password it replaced. Which kind of interference is this? Explain your choice.

4. After a brain injury, a person repeatedly meets a new neighbor but cannot form a lasting memory of meeting them. Which disorder in the passage matches this pattern, and how is it different from interference?

3 YOUR TURN

Your own words

Invent one pair of old and new information. Write two short situations using that pair: one showing proactive interference and one showing retroactive interference. Name which information is hard to recall in each situation.

Why Memories Slip

PART 1 · READ AND MARK

Underline the explanations of storage decay and both kinds of interference, circle the names of the memory disorders, and number the interference examples 1 when old learning blocks new learning and 2 when new learning blocks old learning. Accept any marking that follows this job and points at the right text.

PART 2 · ANSWERS

#	QUESTION	ANSWER
1	A student cannot recall a seldom-used locker combination learned last year. No other combination has replaced it. Which factor best fits, and why?	**Storage decay best fits because the combination has not been used for a long time, and no competing combination is described.**
2	A bus rider learns a new route number but keeps saying the old number. Which kind of interference is this? Explain which learning is getting in the way.	**Proactive interference. The old route number is getting in the way of recalling the new one.**
3	After using a new password for weeks, a student has trouble recalling the password it replaced. Which kind of interference is this? Explain your choice.	**Retroactive interference. Learning the new password is making the older one harder to recall.**
4	After a brain injury, a person repeatedly meets a new neighbor but cannot form a lasting memory of meeting them. Which disorder in the passage matches this pattern, and how is it different from interference?	**Anterograde amnesia matches the difficulty forming lasting new memories. Interference involves learned information competing during retrieval.**

PART 3 · YOUR TURN (SAMPLE ANSWER)

Last month I learned that my club meets in Room 206, but this month it moved to Room 309. Proactive interference: The old room number, 206, makes the new number, 309, hard to recall. Retroactive interference: After learning 309 well, I cannot remember the old number, 206, when I fill out the club's history form.

Accept different invented facts if the proactive example has old learning disrupt recall of new information and the retroactive example has new learning disrupt recall of old information. For question 4, do not treat one forgotten meeting alone as a diagnosis.