

Retrieval Practice Activity Cards

Six evidence-based techniques that outperform re-reading and highlighting

Re-reading and highlighting feel productive but barely improve retention. These six techniques force the brain to actively retrieve information, which strengthens memory by 50–100% compared to passive review.

TECHNIQUE	HOW IT WORKS	BEST FOR	EXAMPLE
Flashcards	Write question on front, answer on back. Review using spaced repetition (Leitner system).	Vocabulary, facts, definitions, formulas	Front: 'What is photosynthesis?' Back: write answer from memory, then flip to check.
Brain Dump	Close the book. Write everything you remember about a topic on blank paper. Then check what you missed.	Broad topic review, identifying gaps	After reading a chapter on the Civil War, write everything you remember in 5 minutes. Compare to the text.
Practice Testing	Take a practice quiz or test under real conditions. Grade yourself honestly.	Exam preparation, any subject with testable content	Use end-of-chapter questions, make your own quiz, or use free online quizzes for the topic.
Teach-Back Method	Explain the concept to someone else (or an empty chair) without notes. If you can't explain it simply, you don't know it.	Complex concepts, processes, arguments	Explain how the water cycle works to a younger sibling using only a whiteboard.
Spaced Retrieval	Review material at increasing intervals: 1 day, 3 days, 7 days, 14 days, 30 days.	Long-term retention of any material	After learning new math formulas Monday, review Wednesday, then the following Monday, then two weeks later.
Elaborative Interrogation	For every fact, ask 'Why is this true?' and 'How does this connect to what I already know?'	Science, history, any fact-heavy subject	Fact: 'Metals expand when heated.' Ask: 'Why? What happens at the atomic level? Where have I seen this?'

THE DESIRABLE DIFFICULTY PRINCIPLE

The discomfort of struggling to remember IS the learning. If retrieval feels easy, the practice isn't working. Difficulty is the signal that memory is being strengthened.

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