

Recall and Revision Strategies

How memory works, what the evidence says, and practical strategies for every key stage

How memory works: retrieval practice

Retrieval practice means **drawing information out of memory** with little or no support, such as answering a question from memory rather than re-reading the answer. Every time information is retrieved it becomes stronger and easier to remember next time.

“Using memory shapes your memory.” Robert Bjork

1. Senses

Information comes in through what we see and hear. This is why the revision environment matters.

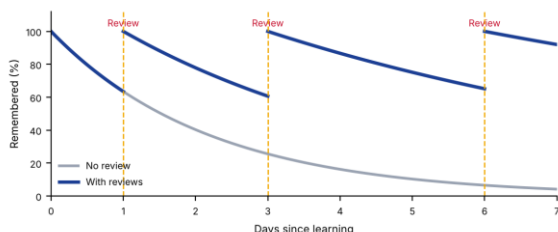
2. Working memory

Anything not rehearsed is lost within 18 to 30 seconds.

3. Long-term memory

Only rehearsed information gets here. Storing it is not enough: it must be retrievable in the exam hall.

The forgetting curve



Two-thirds of new material is forgotten within a week if it is not reviewed.

Almost 90% is gone after six weeks.

Each review flattens the curve: every review takes less time and the knowledge lasts longer.

The three most effective study methods

- **Spaced practice:** short, regular sessions spread over weeks rather than one long session the night before.
- **Retrieval practice:** frequent self-testing with flashcards, quizzes and past questions.
- **Interleaving:** mixing up topics and subjects within a session so the brain has to work harder to recall the right knowledge.

Students naturally default to the least effective techniques, such as re-reading notes and highlighting, which feel productive but change very little (Bjork, Dunlosky and Kornell, 2012).

Three things to remember

- **Test the hardest content first.** Go through the book or revision guide before jumping into exam questions.
- **Mistakes are part of learning.** Every mistake tells you what to revise next.
- **Forgetting is a good thing.** Reviewing after a gap, and trying to recall it, boosts memory far more than reviewing straight away. It is hard at first, so do not give up.

Strategies that work

Flashcards and the Leitner system

Question on the front, answer on the back. Sort into piles and revisit the "don't know" pile most often.

Look, cover, write, check

Revise a section, cover it, write down everything you remember, then check and highlight what was missed.

Blurting

Write everything you know about a topic on a blank page, then check the notes and add what was missing in a different colour.

Mind maps and chunking

Single words, colour to separate ideas, cross-links between topics. Group items into memorable chunks and invent mnemonics.

Past papers against the clock

Get familiar with the format and wording, then mark using the mark scheme. Planning answers is as valuable as writing them in full.

Teach it back

Explain a topic to a parent, sibling or friend. Record key quotes and formulae, use short explainer videos, read notes aloud.

Practical strategies for every key stage

Key Stage 3 (Years 7 to 9)

Build the habit

- ✓ Start every homework session with a five-minute quiz on last week's learning.
- ✓ Keep one set of flashcards per subject; add two or three cards after each lesson.
- ✓ Use look, cover, write, check for spellings, key words and vocabulary.
- ✓ Short bursts: 15 to 20 minutes, then a break.
- ✓ Teach a parent one thing you learned today.

Key Stage 4 (Years 10 and 11)

Make it exam-ready

- ✓ Draw up a timetable of 20 to 25-minute slots that switch subjects; make a topic tick list so progress is visible.
- ✓ Blurt a topic, then fix the gaps from your notes in a second colour.
- ✓ Leitner box: revisit the "don't know" pile daily, the "know" pile weekly.
- ✓ Past-paper questions against the clock, marked with the mark scheme.
- ✓ Check the command word before you answer; plan before you write.

Key Stage 5 (Years 12 and 13)

Own your learning

- ✓ Interleave: mix topics and papers in one session rather than one unit at a time.
- ✓ Turn notes into questions as you make them, then revise from the questions only.
- ✓ Weekly retrieval of earlier units so Year 12 content is not relearned from scratch.
- ✓ Plan essay answers from memory, then compare with the mark scheme and model answers.
- ✓ Study with a partner: test each other and explain the hardest ideas aloud.

Three questions to ask at home

Asked regularly, these open up a conversation about learning and help your child see it as something to be thought about, talked about and improved:

- What did you learn today?
- What did you find difficult?
- Do you know what you need to do to improve?