STAFF ROOM POSTER

Encoding: Where Memory Begins

Nothing can be retrieved that was never encoded. Four conditions that decide whether this lesson's content gets in at all.

Attention is the gate

Working memory encodes what attention selects. Remove competition at the moment of first teaching.

In class: Key explanation: pens down, screens blank, eyes here. Thirty focused seconds beat five distracted minutes.

Meaning beats repetition

Deep, meaning-based processing outlasts shallow exposure. Asking what something MEANS encodes; copying it does not.

In class: Instead of copy the definition: explain why a spider is not an insect, using the definition.

Connection is encoding

New material sticks to old knowledge. Surface the anchor before the new idea lands.

In class: Before teaching tributaries: two minutes recalling what we know about rivers. Now the new word has somewhere to live.

Generation locks it in

Producing something with new content (an example, a question, a sketch) encodes more than receiving it again.

In class: Give me your own example of friction helping us, not mine.

ROUTINE CARDS: CUT AND KEEP

Lesson Open and Close Routines

Encoding routines for the two highest-value windows: the first five minutes and the last five.

Open: anchor first

Retrieve the prior knowledge today's content connects to, before any new material.

Say: "Two minutes, books closed: everything you remember about yesterday's diagram."

Open: question the gap

Pose the question today's lesson answers. Curiosity directs attention; attention directs encoding.

Say: "By the end of today you will know why ice floats. Write your current guess."

Close: explain it forward

Learners restate the core idea for a named audience: meaning-making on a deadline.

Say: "Explain today's big idea to a Year 4 learner in two sentences. Best one read aloud."

Close: connect it out

One link to old learning, one to life. The connections are extra retrieval routes.

Say: "Finish both: This is like ___ that we learned because ___. Outside school, this shows up when ___."

QUICK REFERENCE POSTER

Elaboration Prompts That Deepen Encoding

Elaborative questions force meaning-based processing. Use during and after first teaching, orally or on whiteboards.

Why does that make sense?

The master prompt: connects the fact to its mechanism.

In class: Why WOULD warm air rise? Talk me through the particles.

How is it like, how is it different?

Comparison forces selection of defining features.

In class: How is a parliament like our school council? Where does the comparison break?

What if it were not true?

Counterfactuals expose what the idea actually does.

In class: Suppose friction vanished tonight. Describe your walk to school.

Where would this fail?

Boundary-testing builds the durable version of a concept, not the fair-weather one.

In class: Our rule says i before e. Find me two traitors to the rule.

TEACHER CHECKLIST

Encoding-Aware Lesson Check

Run on lessons introducing genuinely new content. Most forgetting is an encoding failure dressed up as a memory problem.

Before the new content

- [ ] The connecting prior knowledge is retrieved, not assumed.
- [ ] Distractions are cleared for the key explanation window.
- [ ] A guiding question gives attention a target.

During

- [ ] New material arrives in chunks small enough to process for meaning.
- [ ] At least two elaborative prompts force why/how thinking.
- [ ] Learners generate something with the content before the lesson ends.

After (the same week)

- [ ] First retrieval happens within 48 hours, from memory.
- [ ] The same content returns in a different format (question, sketch, example).
- [ ] What failed retrieval gets re-encoded with a new connection, not just repeated.

CPD BRIEFING: STAFF ROOM COPY

Memory Encoding: A 5-Minute Evidence Briefing

The first half of the memory story, and why teaching often skips it.

Depth of processing is the old truth that holds

Fifty years on, the levels-of-processing finding stands: meaning-based engagement with material produces more durable memory than shallow exposure, however many times the exposure repeats.

Encoding and retrieval are one cycle

Retrieval practice strengthens what encoding started, and generation blurs the line: producing examples and explanations is encoding AND retrieval at once. The classroom version: anchor, elaborate, generate, then quiz.

Attention is the non-negotiable

Working memory encodes only what attention selects. The thirty seconds of genuine focus you engineer for a key explanation outperform any amount of half-attended repetition.

The honest caveat

Levels of processing began as a framework, not a measurable scale, and lab effects shrink in noisy classrooms. Treat these as design principles with strong convergent support, and let your retrieval data tell you which encodings actually took.

Evidence base

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