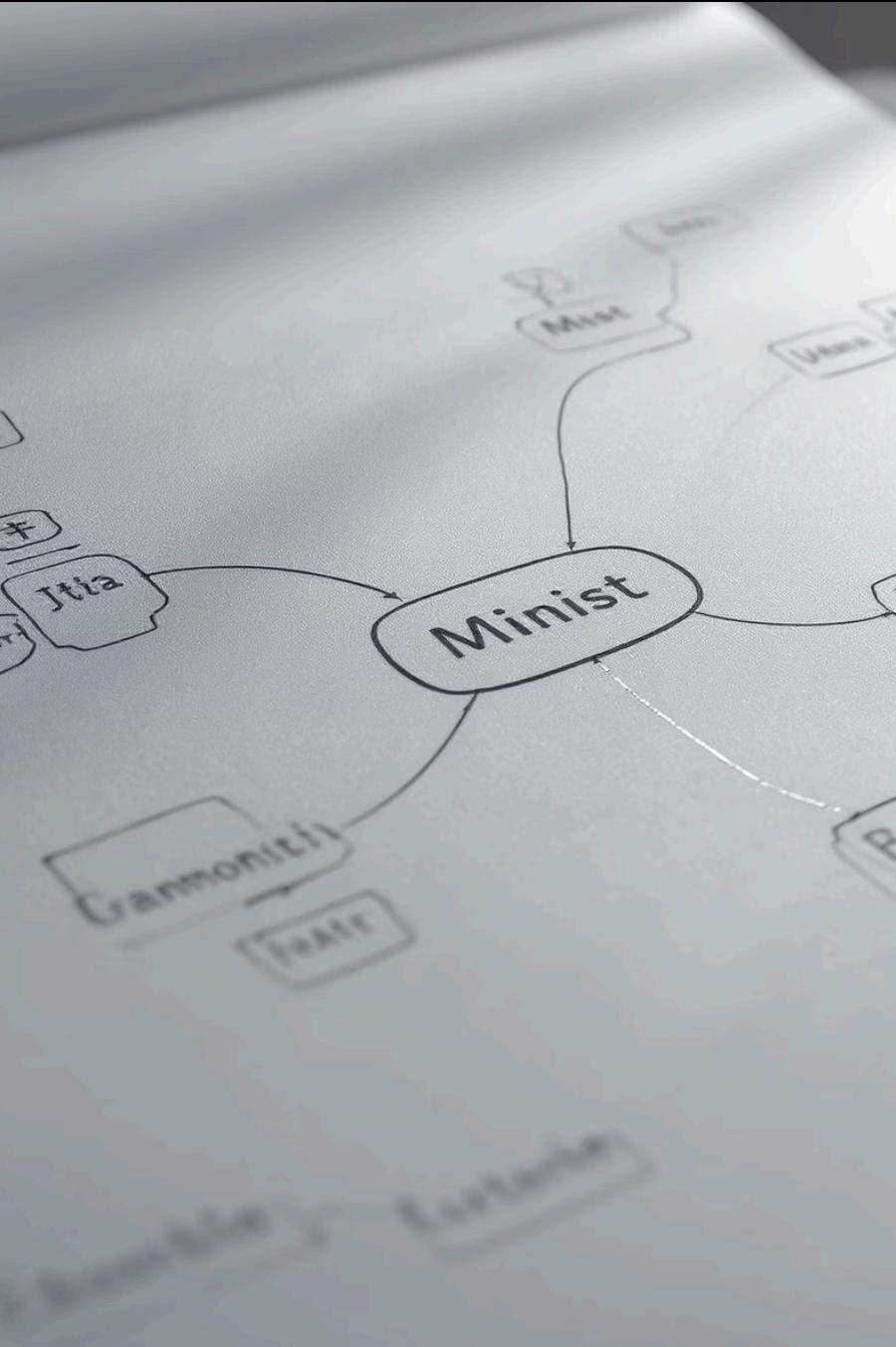


Learning Techniques

Imagine you have a toolbox for your brain. The better the tools and the better you know how to use them, the easier and more solid the things you "build"—your knowledge—will become. Mind maps and the SQ3R method are two of the best tools in this box.





🧠 Creating and Using Mind Maps

A mind map is much more than just a simple note. It's a visual map of your thoughts and helps your brain see information the way it prefers: in connections and structures.



What Is a Mind Map and Why Does It Work So Well?

Natural Brain Function

Your brain doesn't think in long, straight lists. It thinks in associations—one thought leads to the next, like branches on a tree. A mind map mimics this natural way of working.



Mind Map Structure

Central Theme

The main idea goes in the center, just like the main concept in your mind.

Main Branches

Thick branches extend from the center for the most important subtopics.

Detail Twigs

Thinner twigs extend from branches for details, examples, or further thoughts.

Keywords Only

You only use single, meaningful words. This forces you to filter for the most important points.

The Power of Visual Learning

The brain processes images 60,000 times faster than text! Colors help group topics and make the structure clearer.

This method especially appeals to **visual learners**, but through active structuring and the act of creating, it also supports **kinesthetic learners**.





How to Create the Perfect Mind Map

Creating a good mind map is simple if you follow a few rules. Here's your step-by-step guide to building an effective visual learning tool.

Mind Map Creation Steps

01

Create the Center

Take a sheet of paper (landscape format works best) and write the **main topic** in the middle.

Circle it or draw a small symbol.

Why it's important: Focuses your thoughts on the core and creates the anchor point.

02

Draw Main Branches

From the center, draw thick, curved branches for each **main topic or chapter**. Write the keyword *on* the branch.

Why it's important: Thick branches signal importance. Curved lines are more engaging than rigid, straight ones.

03

Add Twigs

Add thinner branches to the main ones for **details, facts, or examples**. Again: one word per twig.

Why it's important: Builds hierarchy. You instantly see what's a main point and what's a detail.

Final Mind Map Elements



Use Colors

Assign each main branch and its twigs their own color. This helps you visually separate topics and grasp the structure more quickly.



Add Images

Draw simple symbols or sketches next to keywords. A lightning bolt for "energy," a light bulb for "idea." Images activate different brain areas and create stronger memory connections than words alone.



Application in Everyday Learning

A mind map isn't an end in itself—it's an incredibly versatile tool that can transform how you approach learning and organizing information.

Mind Map Applications

Note-Taking

Instead of linear notes, create a mind map during a lecture or video. You'll have the structure instantly.

Structuring

Before writing an essay or presentation, make a mind map. It serves as your outline and ensures you don't miss key points.

Review

Hang your finished mind map on the wall. A quick glance can reactivate an entire topic area with all its connections. Much faster than rereading 20 pages of text.

Creative Brainstorming

Start with your topic in the middle and let your thoughts flow. Every idea becomes a new branch or twig.



📖 Implementing the SQ3R Method

This is one of the most effective techniques for not just reading texts, but truly understanding them and retaining the content long-term. The name sounds technical, but it's actually a very logical five-step process.

SQ3R Method Overview



Survey

Get an overview without detailed reading



Question

Turn headings into questions



Read

Read actively to find answers



Recite

Summarize in your own words



Review

Consolidate and organize knowledge

S – Survey

What You Do

You do **not** read the text in detail! You just skim it to get an overview. This only takes a few minutes.

- Read the **title**
- Look at the **subheadings**
- Check **pictures, graphics, diagrams** and read the captions
- Read the **first and last paragraph**
- Skim **bold words**



Goal

You build a mental map of the text. Your brain now knows what to expect, what it's about, and how it's structured. You activate prior knowledge.



Q – Question

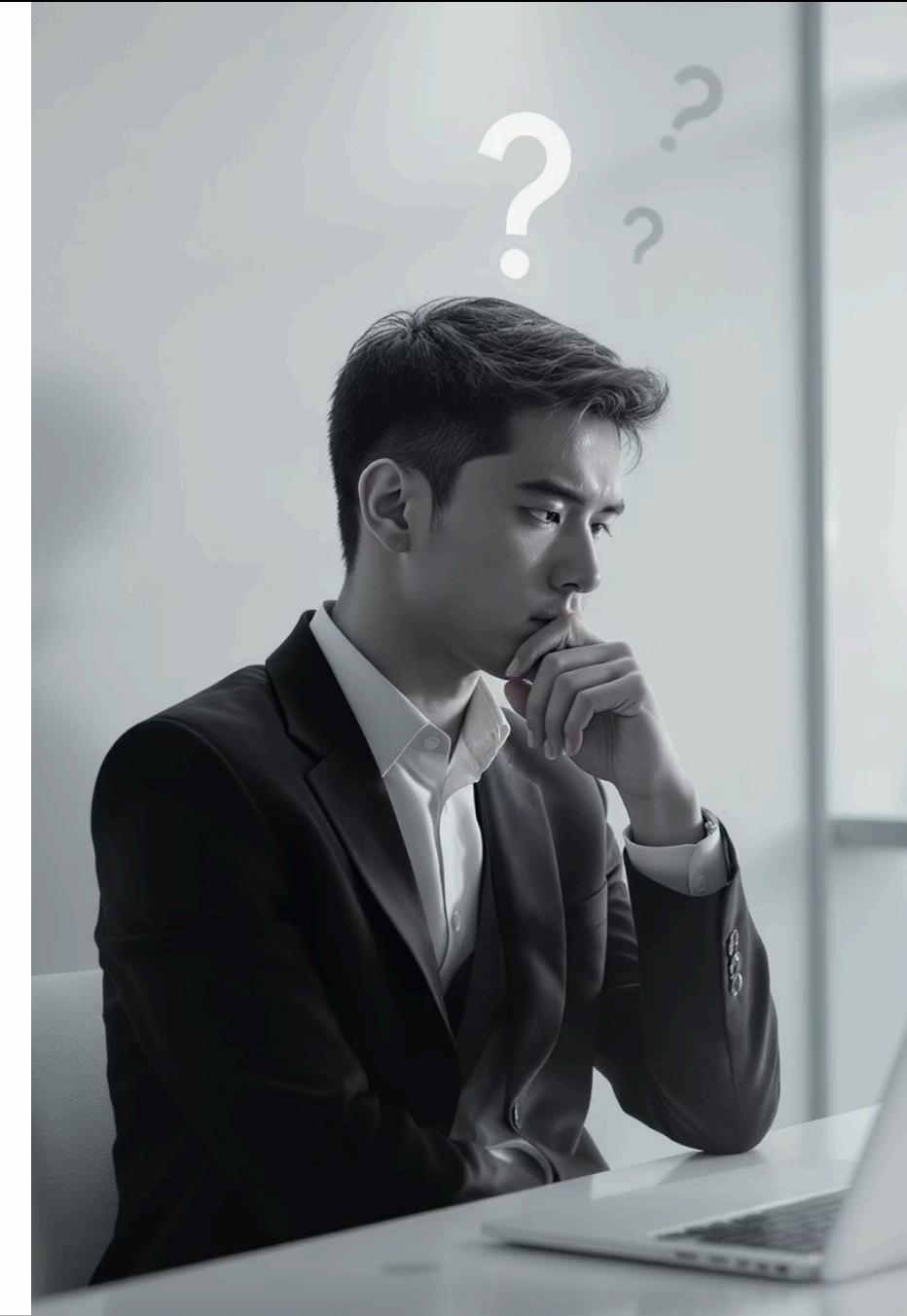
What You Do

Turn headings into questions.

From "The Causes of the Industrial Revolution" → "**What were the causes of the Industrial Revolution?**"

From "The Role of the Steam Engine" → "**What role did the steam engine play?**"

Goal: You're no longer a passive reader but an active detective. Your brain is in search mode, looking for answers. This greatly improves focus and comprehension.





R1 – Read

What You Do

Now read the text section by section—but with a mission: **find the answers to your questions!**

- Read actively and carefully
- Highlight key words and main sentences
- Take notes in the margin



Goal: Since your brain is searching for answers, you read with much more focus. You automatically filter important from unimportant and absorb the core information more effectively.



R2 – Recite

What You Do

After finishing a section, pause. Look away from the text and try to recall the answer to your question **in your own words**.



Summarize aloud



Explain it as if teaching a friend



If you can't, quickly glance back

Review the text briefly and try again

Goal: This step moves information from short-term into long-term memory. You only truly understand something if you can put it in your own words.



R3 – Review

What You Do

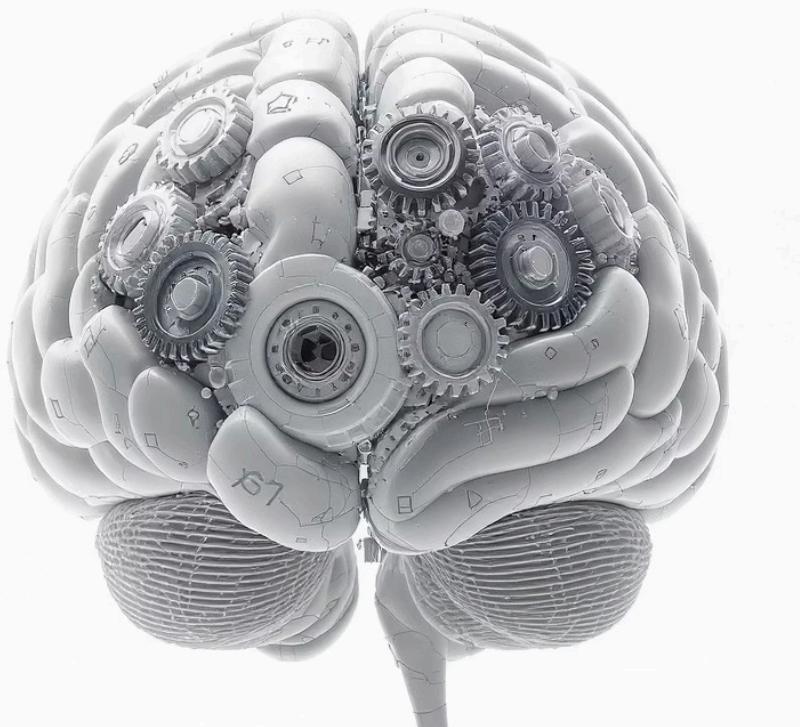
After finishing the text, take a moment to review everything.

- Go through your notes again
- Revisit your questions and answers
- Arrange the main ideas logically in your mind

A mind map works perfectly here!



Goal: You consolidate learning and build a stable knowledge network. Structured review prevents forgetting and ensures you can recall the information even weeks later.



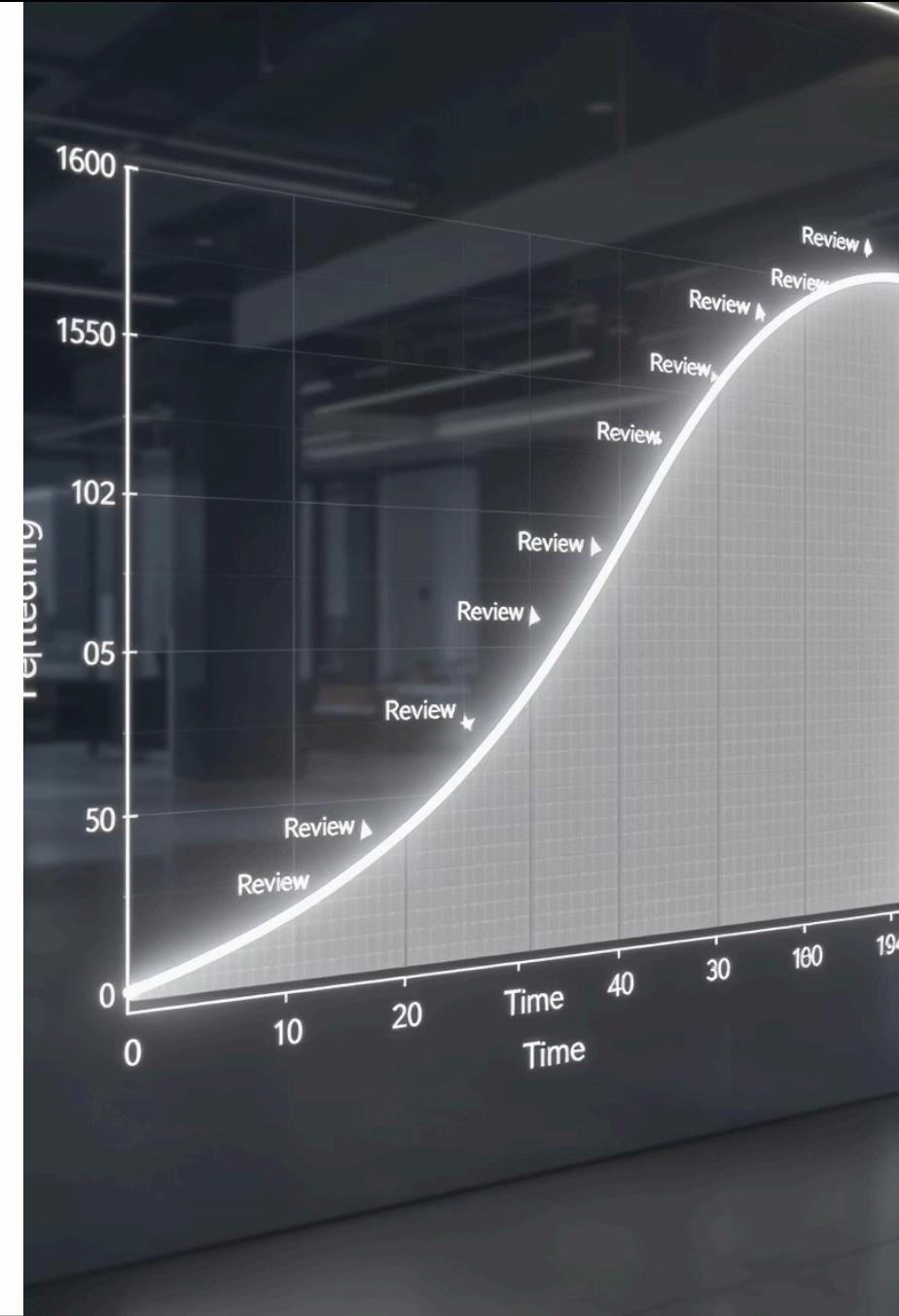
Efficient Learning Management

Efficient learning management means learning smarter, not harder. It's about using your brain the way it naturally works best. Instead of forcing knowledge in, you work with the natural rhythms of your memory.



Using Spaced Repetition for Sustainable Knowledge Retention

Spaced repetition is a learning method based on a simple but brilliant insight about memory: the **forgetting curve**.





The Forgetting Curve: The Natural Enemy of Learning

Over 100 years ago, German psychologist Hermann Ebbinghaus discovered that our brain forgets newly learned material very quickly if it isn't actively reviewed.

40%

After 20 minutes

You may already forget this much

60%

After one day

It can be over this percentage

90%

After one week

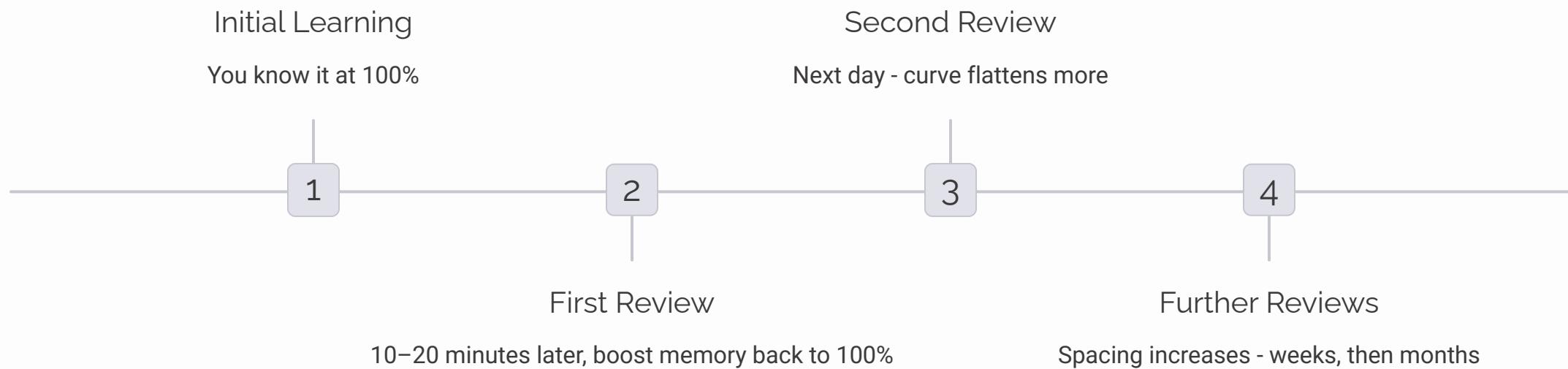
Almost everything might be gone

It's frustrating but completely normal. Your brain constantly clears out "unimportant" information.



How Spaced Repetition Beats the Forgetting Curve

Spaced repetition counters forgetting by having you review information exactly when your brain is about to forget it.



Each review at the right moment strengthens the memory trace.



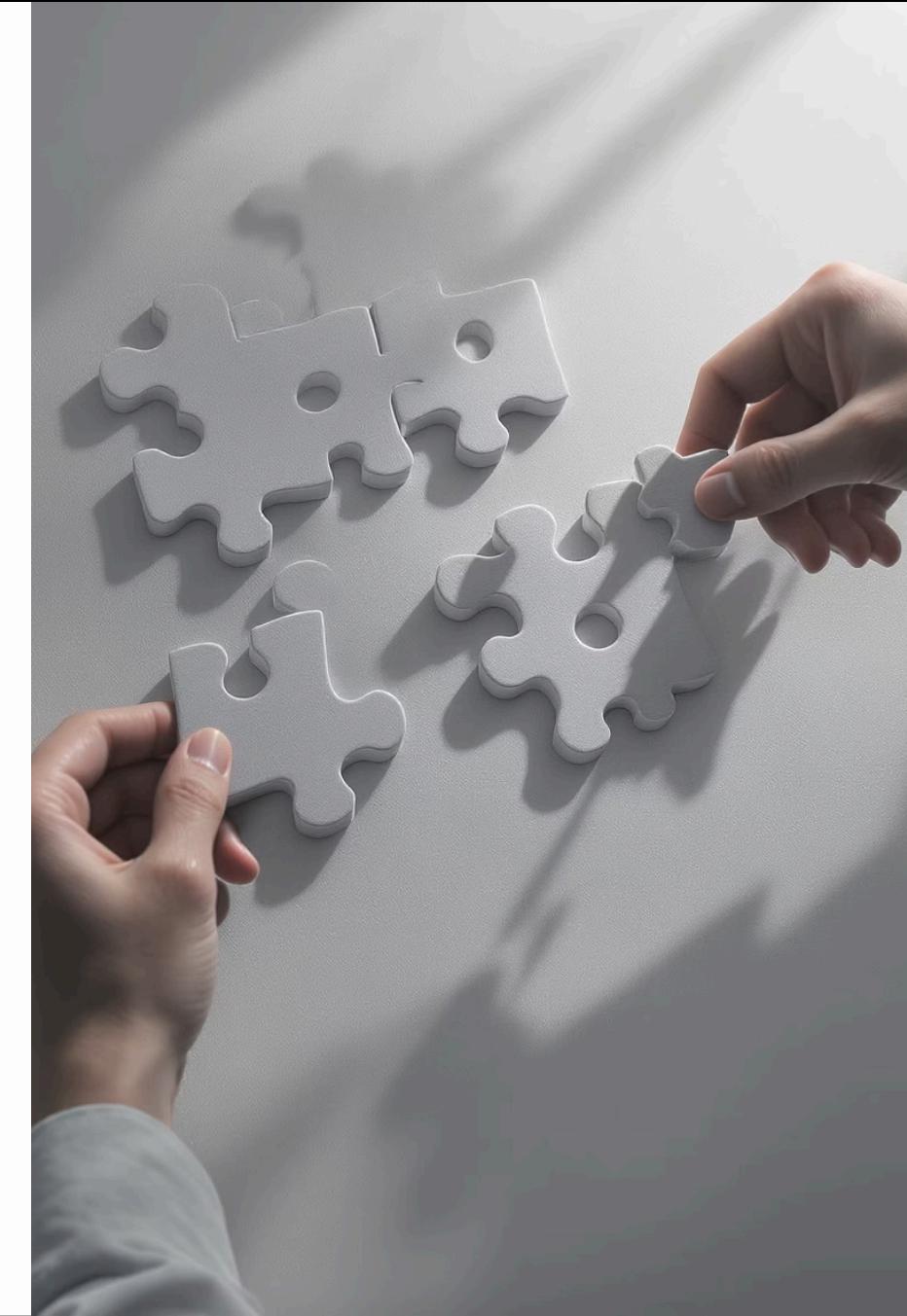
Practical Implementation in Everyday Life

You don't have to calculate review intervals yourself. There are great tools to do it for you:

Tool	Description	How it works
Digital flashcard apps	The most popular and effective spaced repetition tools (Anki, Quizlet, SuperMemo)	Enter your material, app quizzes you, algorithm schedules perfect review times
Physical flashcards	Uses multiple boxes (Leitner system) to track progress	Box 1: New cards (daily), Box 2: Known cards (every 2-3 days), etc.

Breaking Down Complex Information with the Chunking Method

Chunking means breaking a large, overwhelming set of information into smaller, meaningful "chunks." This is a direct hack for your short-term (working) memory.





The Magic of Small Chunks

We know short-term memory can only hold about 7 ± 2 items. Try memorizing this sequence:

7 1 0 1 9 4 5 1 8 1 5

Hard, right? 11 separate digits overwhelm the brain.

Now try it like this:

710 – 1945 – 1815

Much easier! Same digits, but only **three chunks**.

- ❑ Chunking is the process of grouping separate elements into larger, meaningful units.



Chunking Applications in Everyday Learning

You can apply chunking to almost any topic to make complex information more manageable and memorable.



Phone Numbers & Passwords

Instead of 017612345678, remember 0176
– 123 456 78



Vocabulary

Learn phrases instead of isolated words.
Instead of just "supply," learn "supply and
demand"



Reading Long Texts

Break into sections, give each a small
heading. Work chunk by chunk



Complex Processes

Break down steps (e.g., photosynthesis): Absorption → Light
conversion → Production



Learning an Instrument

Learn measures/phrases instead of the whole song at once

The key: Don't just break it down—find *connections and meaning* within each chunk. The more meaningful a chunk is, the easier your brain stores it as one unit.