

CONFRONTING THE FORGETTING CURVE: 8 great ways to enhance retention

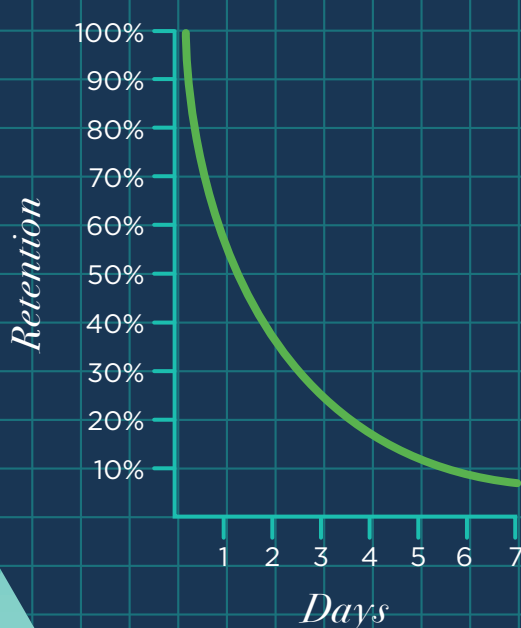
Whether we're studying arithmetic or calculus, we tend to forget most of what we learn and only hold onto a few key details. How can we retain more of what we've learned and fight our tendency to forget? How can teachers equip their students to retain more of the information they're given?

HOW FORGETTING WORKS

First conceived by 19th-century psychologist Hermann Ebbinghaus, the forgetting curve models the exponential rate at which we humans forget the information we've learned.

$$R = e^{-\frac{t}{S}}$$

The Forgetting Curve



R = How easily we can retrieve the information



t = Time



S = Stability of memory



e = Euler's number

This famously irrational and transcendental number forms the basis of natural logarithms. It has many applications, including compound interest.

WHAT AFFECTS OUR ABILITY TO RETAIN INFORMATION?

Students forget the most right after they've learned something, with the rate of forgetting declining as time goes on.



Relevance



Difficulty



Context



Stress



Sleep

HOW CAN WE EFFECTIVELY BEAT THE FORGETTING CURVE?

Here are 8 proven strategies to boost retention!



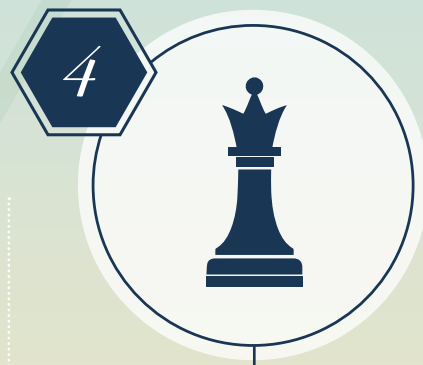
1 Use dynamic testing as a learning tool. Identify areas of poor understanding to target in future study.



2 Interrupt forgetting with regular retrieval. The more students are asked to recall information, the more they strengthen their memory.



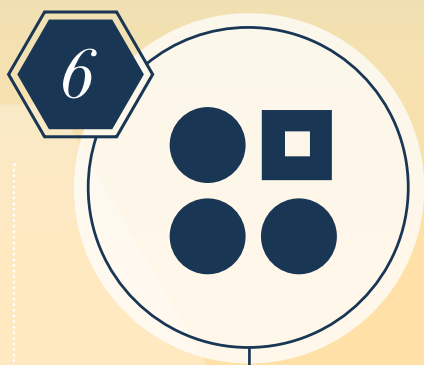
3 Anchor key concepts with visualizations. Visuals have been shown to decrease learning time and increase retrieval and retention.



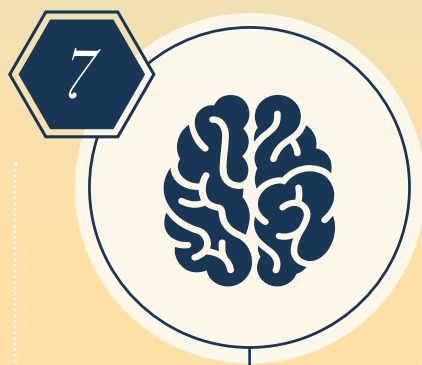
4 Encourage active processing and knowledge construction through interactivity like learning games or opportunities to work in groups.



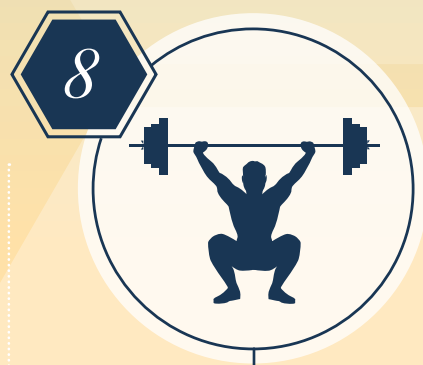
5 Provide feedback on the learner's meta processes in solving problems. Help them understand how they learn best.



6 Interleave content and formats. Interleaving has been shown to increase retention and help students to better develop their problem-solving abilities.



7 Reflect on what's been learned. Putting new information in a larger context helps students remember it better.



8 Space out practice and testing — avoid "mass learning" or cramming. This forces the student's brain to "build muscle," making retrieval easier in the future.



SOURCES:

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