

How does our memory work?

Learning how to learn



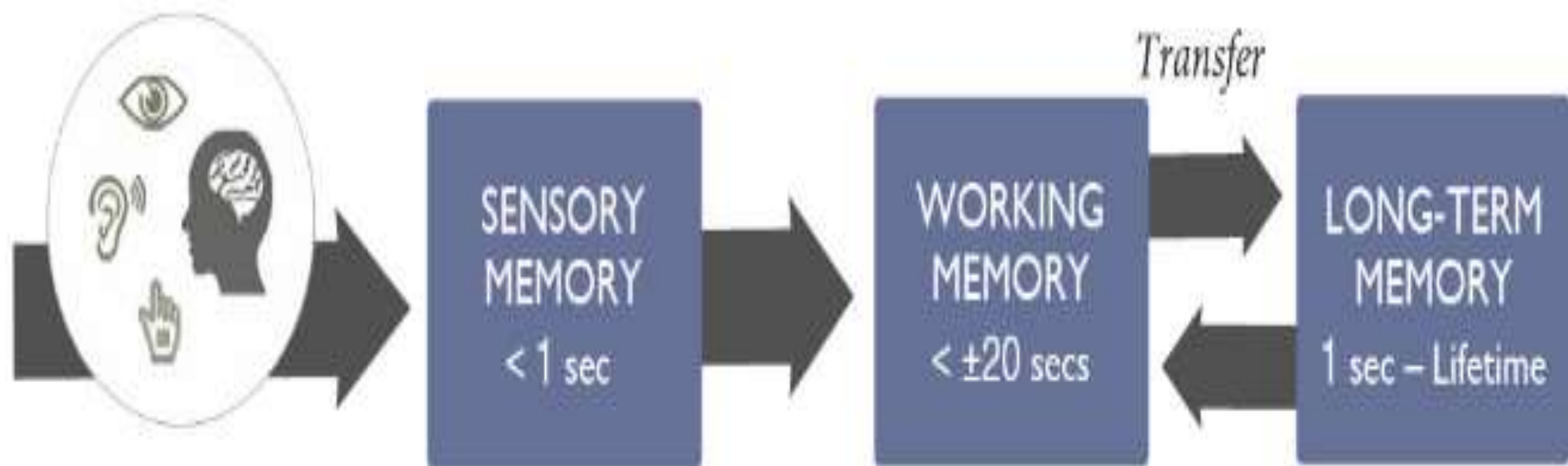
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How many could you remember?

59302878256893538

We're now going to try this again, with exactly the same rules...

the cat sat on the mat





So, how do we remember new information?



Encoding – the initial material which enters your mind

Consolidation – the glue which holds your memories together

Retrieval – how you keep going back over that material to form and strengthen those neural pathways



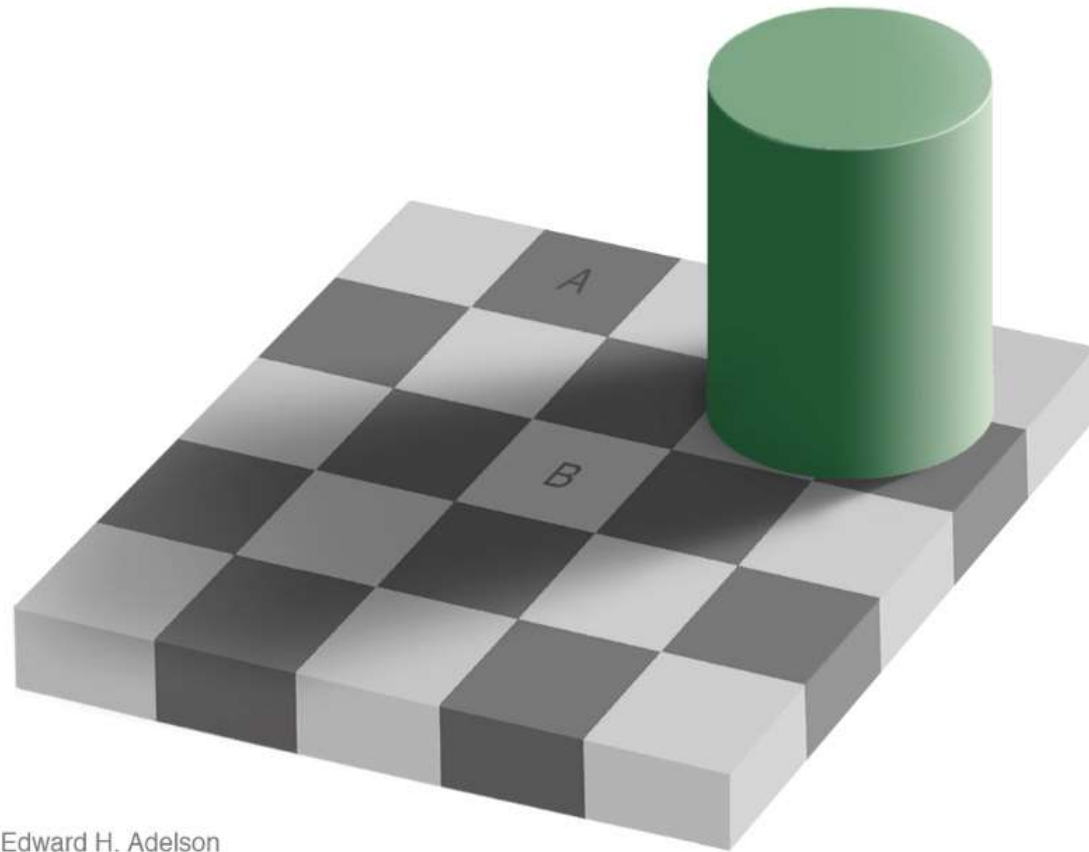
What we know about memory

1. Your memory is not just a repository box



What we know about memory

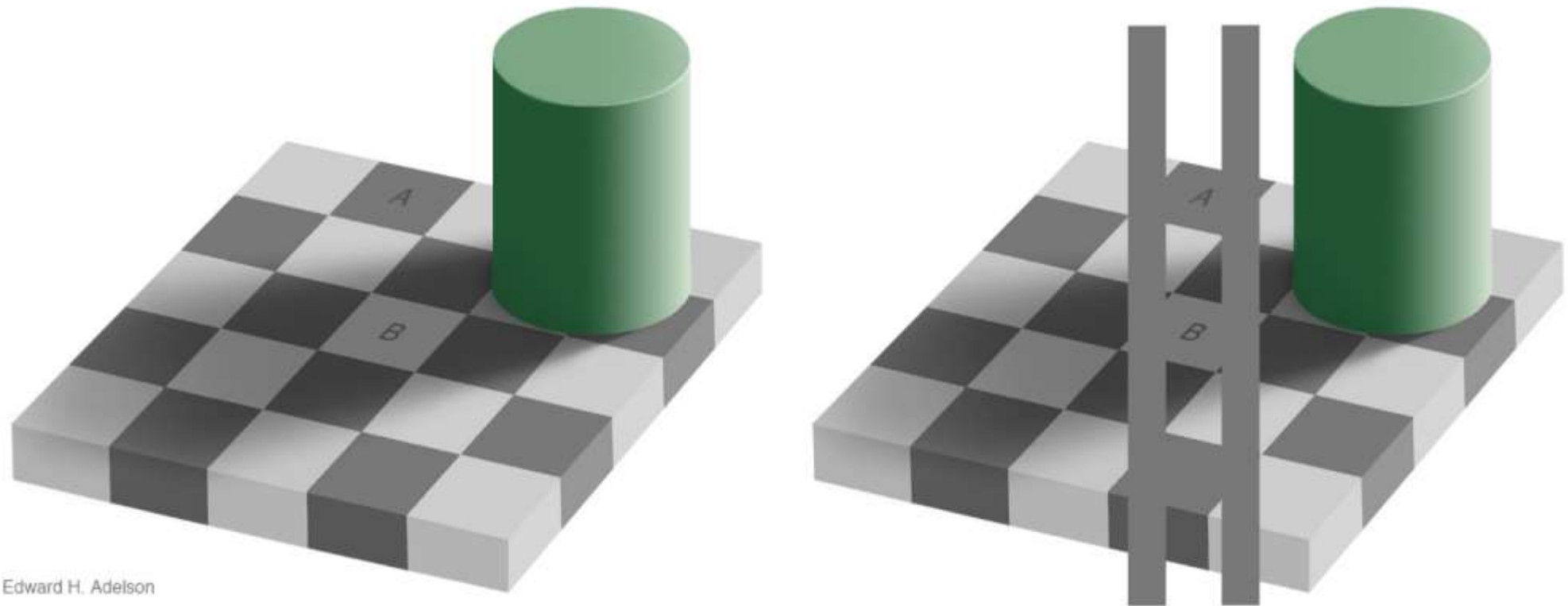
2. Your brain will take shortcuts (cognitive schema)



Edward H. Adelson

What we know about memory

2. Your brain will take shortcuts (cognitive schema)



Edward H. Adelson

What we know about memory

3) Operates best in certain circumstances

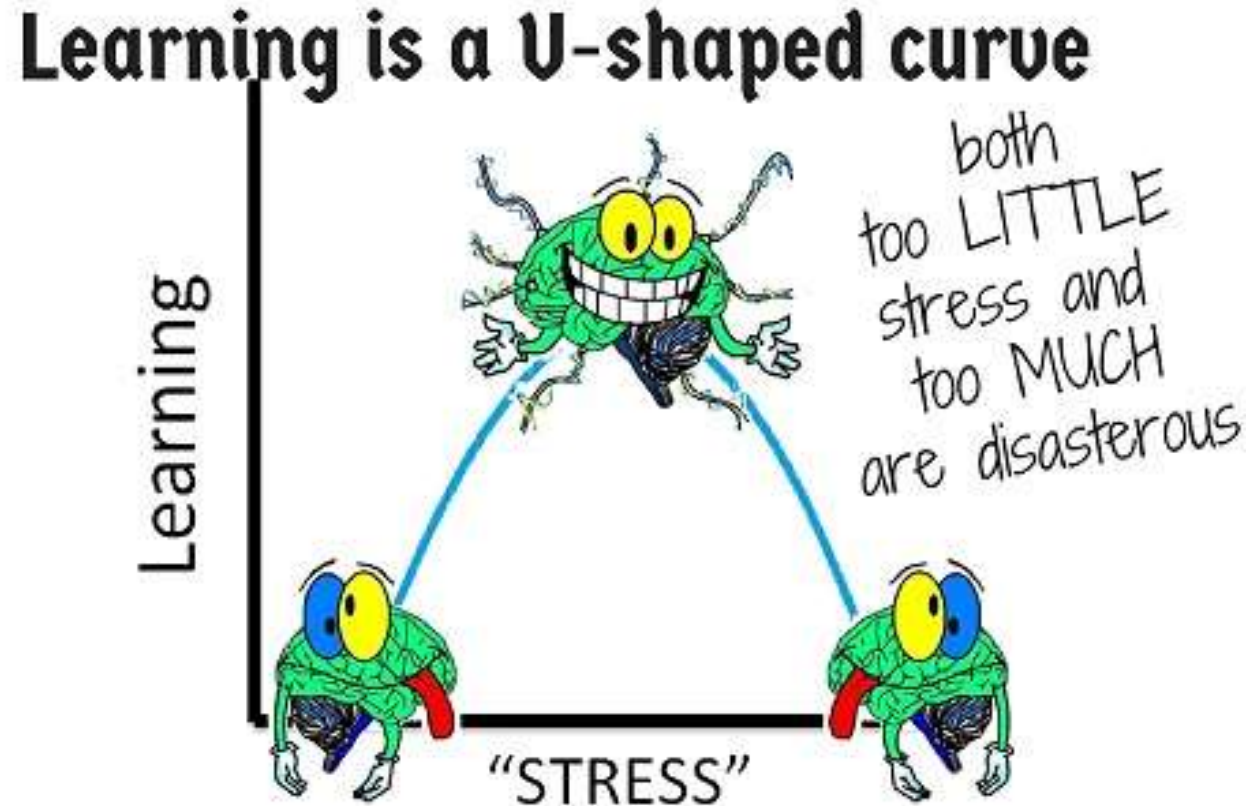
*'If you want to feel secure
Do what you already know how to do.
But if you want to grow...
Go to the cutting edge of your competence,
Which means a temporary loss of security.
So, whenever you don't quite know
What you are doing
Know
That you are growing...'*

(Viscott, 2003)

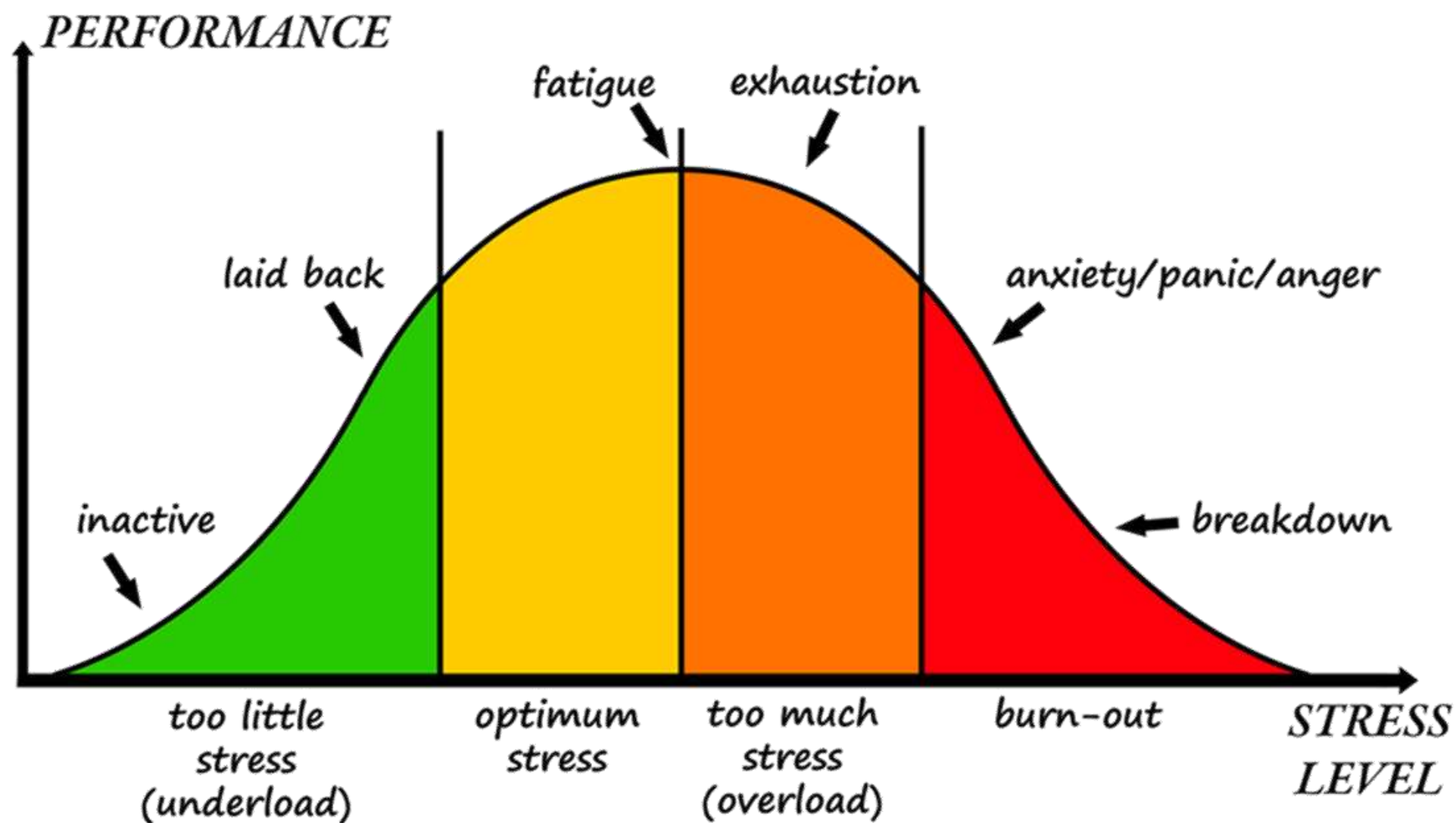


What we know about memory

3) Operates best in certain circumstances



STRESS CURVE



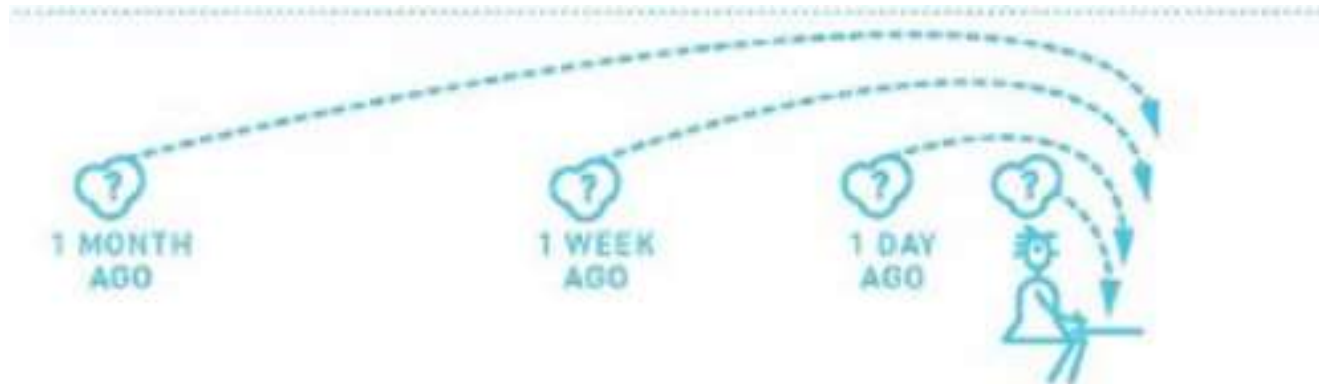
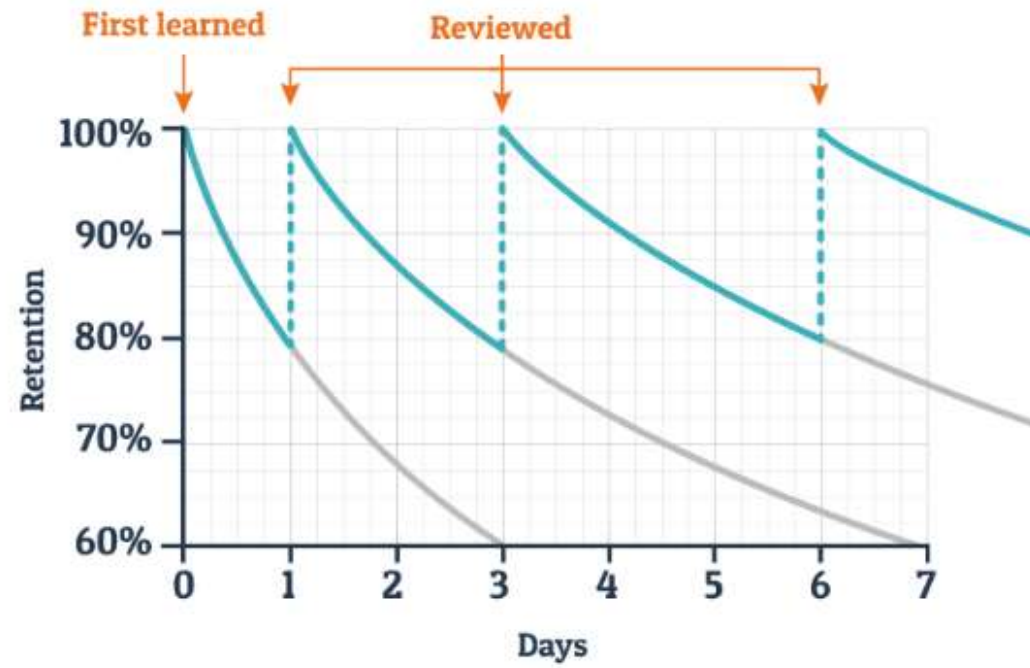
What we know about memory

1. Your memory is not just a repository box
2. Your brain will take shortcuts (cognitive schema)
3. Operates best in certain circumstances



Where do we go from here?

Typical Forgetting Curve for Newly Learned Information



RETRIEVAL!

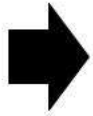
Your brain's
strong ally



Learn smarter with less effort the way your brain craves!



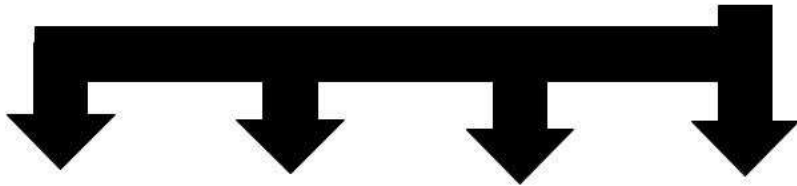
Study (new
ideas or review)



Stop studying



Retrieve from
memory



Self-assess
with
questions



Retell what
you
remember



Create a mind
map



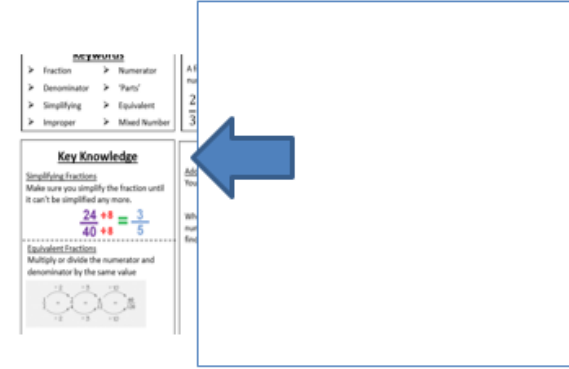
Draw new
ideas out



Resume studying

Icons: Dairy Free Design, Chinnaking, Travis Avery,
Francesca Arena, Gregor Cresnar, Mert Güler,
Vladimir Belochkin, b farias via TheNounProject.com.

Copy-Cover-Write-Check



Turn over your summary notes and write them
out from scratch in 3 minutes

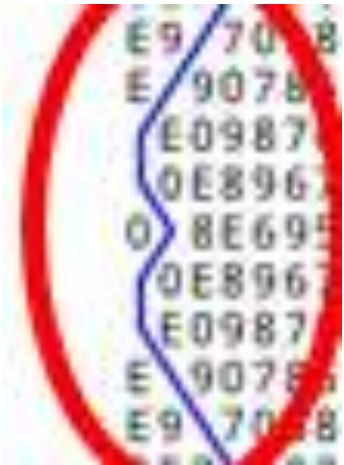
Then, check what you've forgotten – write this
up in another colour pen.

It is important you re-do this a day or two after.
*Only when you can remember all of the key
points can you be confident you have learnt it!*

Anticipate misconceptions...

Learn from mistakes...

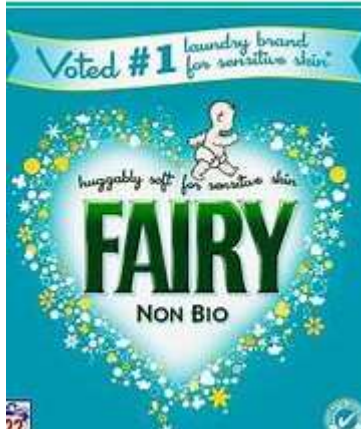
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Mnemonics

Links to images

➤ *BIO*



“Our hypothesis is that generating a very brief narrative about the concepts in something new you’re trying to learn can help clarify those concepts, and will create an anchor in memory that you can then go back to,” Johnson said. “In the future, when you’re trying to recall these concepts again, you have this story in mind that you can follow along. As you follow that story along, those concepts come to life for you, and, therefore, should provide better learning in the long term.”

Dan Johnson



Things have to stand out
to help the brain
remember it...

Cambridge S Minor
Norwich S Minor
London S Minor
Bourne S Minor

What do other ringers say?

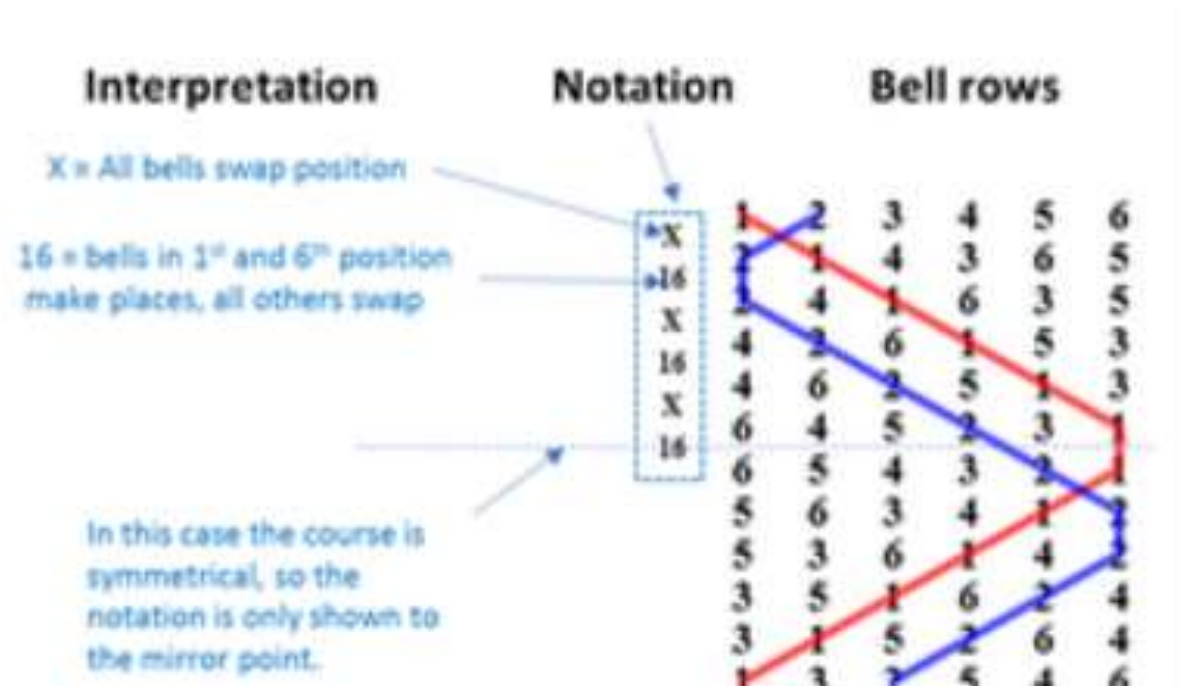
- Know things well in advance – ringing chamber can feel pressurised
- If I'm learning a tricky composition I will start a couple of weeks beforehand, even if I could get away with just needing a couple of days or maybe even a couple of hours. I'm always more comfortable if I've learnt something well in advance and then drum it in repetitively once a day every day when I'm walking to work - just 10-15mins mental revision
- Colour code and make patterns
- But go steady: if you try to learn too much, and too many techniques, you may struggle. Build up your arsenal of tools as you become more proficient in ringing.
- Learning becomes much easier as you learn more methods

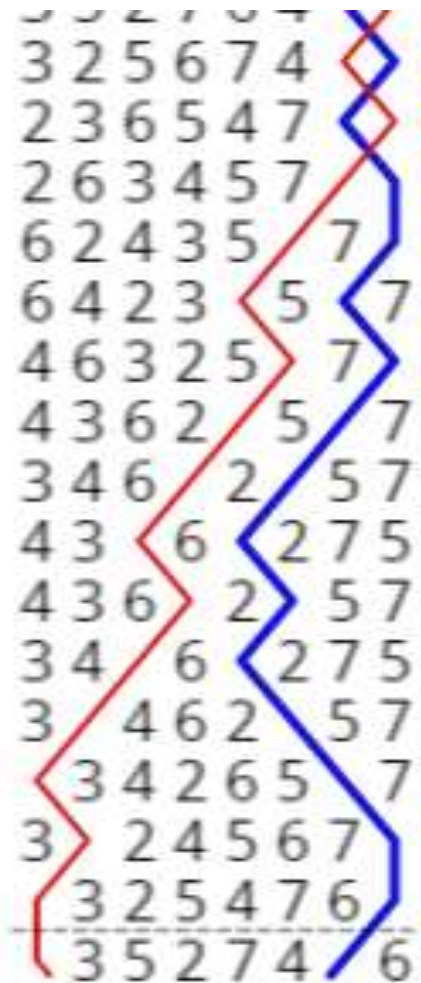


I always do quite a lot of writing out and thinking through. I like to write out the grid and see how it fits together, where passing the treble fits, what happens at the lead end and the half lead, which bits are the same as other methods



Write out the method from the place notation. This can give insights that you don't get from the line alone.





When learning London Surprise Major, I visualise the skyline of London. I associate names to each of the parts of the method as I “walk” around London in my mind, helping me to associate the shapes of the skyline with parts of the method.

So, for example, in this section (the end of 5ths place bell) I imagine Tower Bridge as the dodge-lie-dodge at the back. I then walks down to the Needle on the Embankment (the fishtail in 5-6) before heading up to the Shell building. Then he heads down to the Strand to begin 7ths place bell

It takes years and years and years of concerted practice to train your brain to do these things to the point of excellence that you see in the very top ringers— it is like Jonny Wilkinson practising his goal kicking and David Beckham his free-kicks. Unless you live with a top quality method ringer, you will never see the effort going in – just the results!

