



Revision tip 1:

Flash cards/ Cue cards

Used to summarise your notes by ‘chunking’ key information together



There is some value in summarising your notes. Creating notes in your own words requires you to process the information and create connections in your brain. Summarising these further requires you to draw out the key points and choose between pieces of information. But the value does not continue as you reread your notes over and over.



Flashcards can also be used for testing

Flashcards can be used to test your knowledge, not just as a way to condense your notes further. I've seen people list bullet points on flashcards that they carry around with them to reread. Rereading notes is a passive learning activity so is not an economical use of your revision time.

Use flashcards as a quick way of testing what you know.

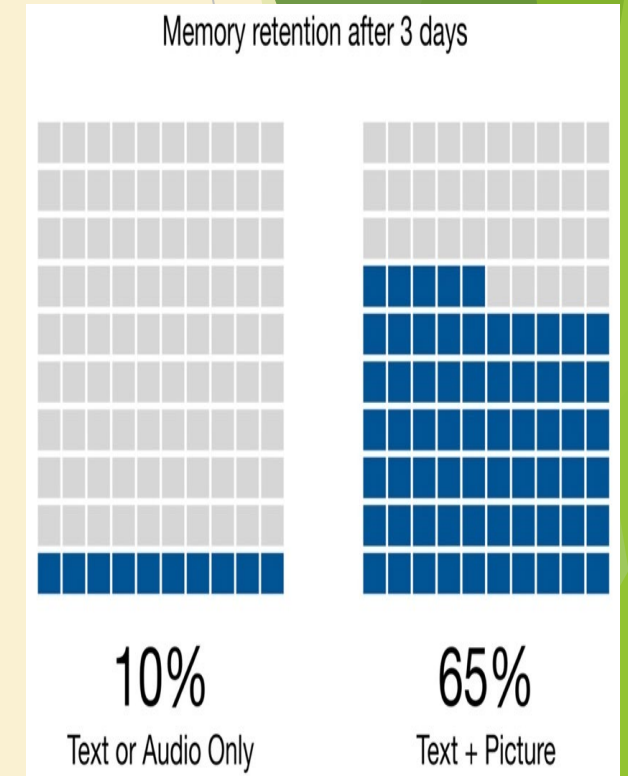
1. On the front of the card, write a key term or question
2. On the back of the card, answer that question or write the definition for the term
3. Try to guess the answer/definition on the front before checking the answer on the back.

A picture paints a thousand words...



The Pictorial Superiority Effect (PSE) explains that our brains find it easier to recognise and recall visual inputs - pictures are easier to remember than words. John Medina, memory expert (and developmental biologist), explains that text is pretty inefficient as words are actually viewed by our brains as lots of tiny little images that it has to process to find meaning. This takes time so pictures beat text - especially in the revision world.

Medina discovered in his research that, after three days, someone is likely to remember around 10% of information they read. If an image is added to text this figure increases and 65% of information is remembered

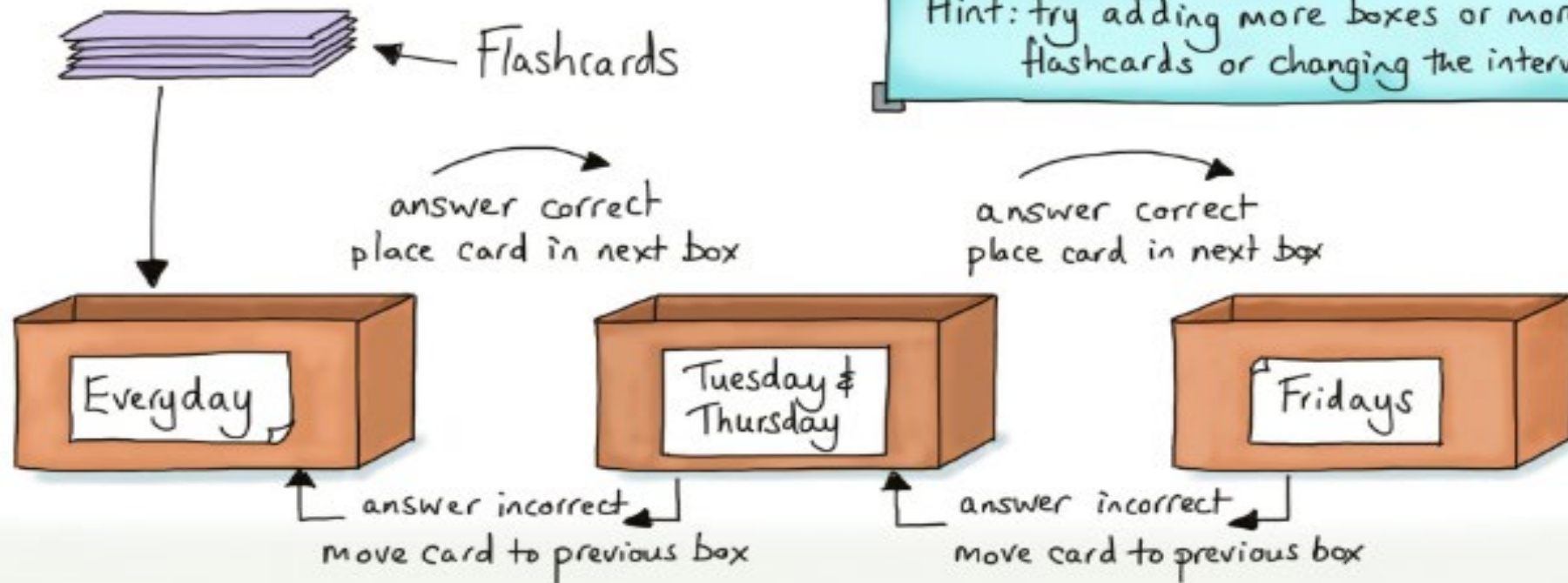


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LEITNER Flash card method

@ImpactWales

Hint: try adding more boxes or more flashcards or changing the intervals



An effective use of flashcards to prompt & recall learning using spaced practice proposed by Leitner in the 1970s. It focuses on the proficiency of recall of the learner. Information which is easily recalled has a longer time lapse before the next recall opportunity.

Subject specific use of flash cards/ cards

Measurement

Weight

$$F_g = m \times g$$

The gravitational force (F_g) which acts on an object on/near the surface of a planet/moon.

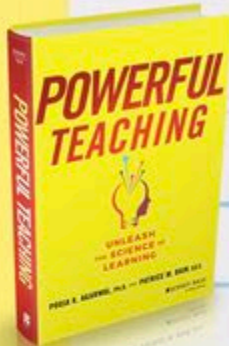
☆ Example

How tall is Mount Everest?

FRONT

8,848 metres above
sea level

BACK



Powerful Flashcards

- 1) Retrieve (don't cheat!)
- 2) Re-order (shuffle and interleave)
- 3) Repeat (at least 3 times)

*Just like lather, rinse, repeat!

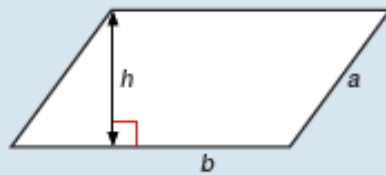
Make the following cue cards and test yourselves (these are needed for both higher and foundation)

Areas

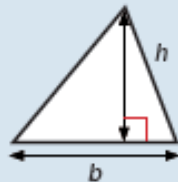
$$\text{Rectangle} = l \times w$$



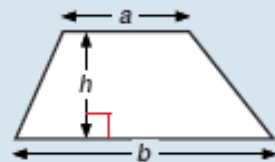
$$\text{Parallelogram} = b \times h$$



$$\text{Triangle} = \frac{1}{2} b \times h$$

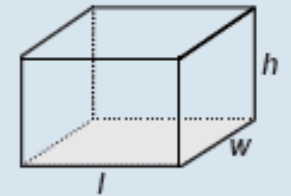


$$\text{Trapezium} = \frac{1}{2} (a + b)h$$

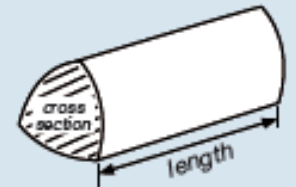


Volumes

$$\text{Cuboid} = l \times w \times h$$



$$\text{Prism} = \text{area of cross section} \times \text{length}$$



$$\text{Cylinder} = \pi r^2 h$$



Compound measures

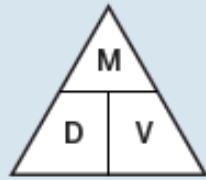
Speed

$$\text{speed} = \frac{\text{distance}}{\text{time}}$$



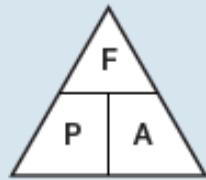
Density

$$\text{density} = \frac{\text{mass}}{\text{volume}}$$



Pressure

$$\text{pressure} = \frac{\text{force}}{\text{area}}$$

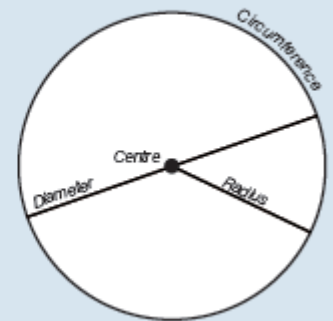


Circles

Circumference =
 $\pi \times \text{diameter}$, $C = \pi d$

Circumference =
 $2 \times \pi \times \text{radius}$, $C = 2\pi r$

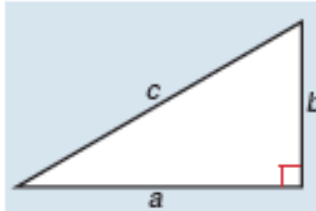
Area of a circle =
 $\pi \times \text{radius squared}$ $A = \pi r^2$



Pythagoras

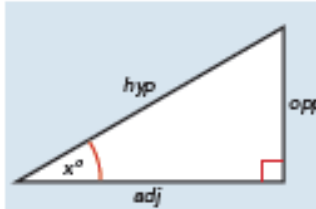
Pythagoras' Theorem

For a right-angled triangle,
 $a^2 + b^2 = c^2$

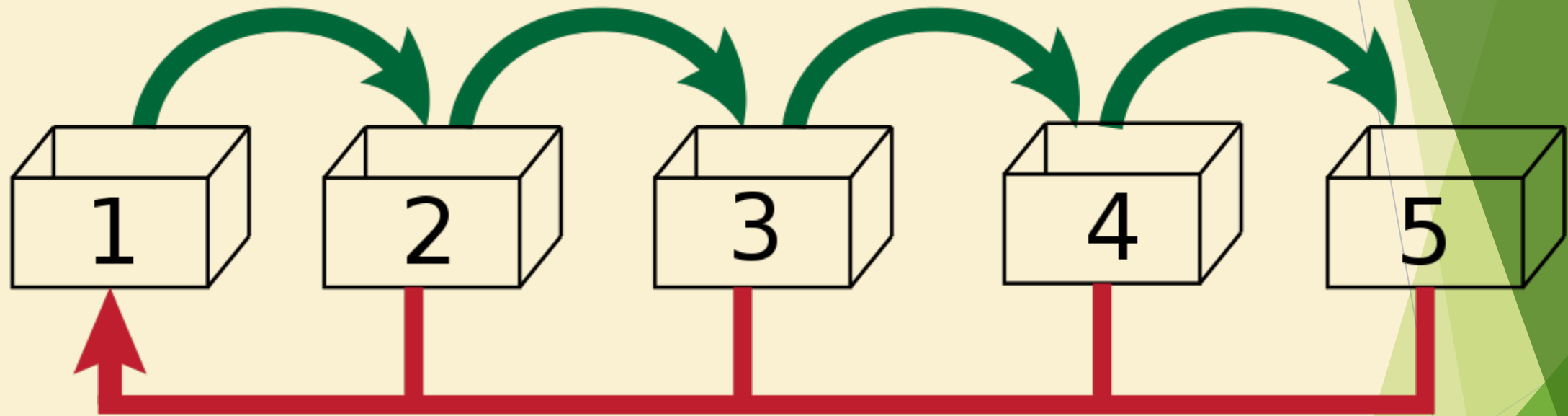


Trigonometric ratios (*new to F*)

$\sin x^\circ = \frac{\text{opp}}{\text{hyp}}$, $\cos x^\circ = \frac{\text{adj}}{\text{hyp}}$, $\tan x^\circ = \frac{\text{opp}}{\text{adj}}$



Use the Leitner Flashcard method to ensure you can remember all of the maths cards that you have made



Incorrectly answered cards

Now make flash cards specific to your areas of weakness.

- ▶ Flashcards are regularly available outside of the resources office to come and collect