Study Smarter: The 6 most effective study strategies

Spaced practice	Start planning early for exams and set aside a little bit of time everyday. Five hours spread out over two weeks is better than the same five hours all at once. This is one of the most effective revision strategies. The ideal is 20-30 minutes per session.
Interleaving	Interleaving is a process where students mix & combine multiple subjects & topics while they study in order to improve their learning. Rather than studying one topic for a long time before moving to another. This leads to better long-term memory.
Elaboration	This involves explaining and describing ideas in lots of detail, asking further questions about what you are learning and making links to help you connect new information with what you already know.
Concrete examples	Concrete examples involves finding & using specific, real-life examples to help develop & deepen understanding of abstract ideas. Abstract ideas can be difficult to understand & explain. Our memories find it easier to remember concrete examples better than abstract information.
Dual coding	Dual coding is the process of combining verbal materials with visual materials. There are many ways to visually represent materials, such as with infographics, timelines, cartoon/comic strips, diagrams and graphic organisers.
Retrieval practice	Through the act of pulling information out from your long term memory (retrieval), our memory for that information is strengthened and forgetting is less likely to occur. We are more likely to remember it when we need to.

The Cornell Note-taking Method

Topic:

Recall cues	**Notes:**
Questions and tasks based on the notes opposite	Tips • Bullet points • Symbols and abbreviations • Write in your own words (don't mindlessly copy) • Make sure it makes sense to you What to write • Keywords and ideas • Important dates / people / places • Diagrams / charts • Formulas • Examples / case studies • Critical analysis e.g. strengths / weaknesses

Summary

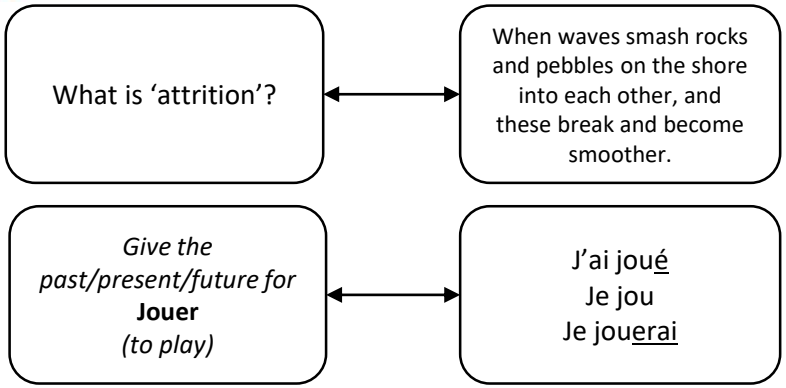
Summarise the main points in the notes above. Think about:

- Why is this info important
- What conclusions can I draw

Flashcards – testing not summarising

Making good flashcards

- One side of the flashcard should be a single question and its answer on the reverse
- Select the most important information to go on each flashcard. You could use topic checklists or bolded terms in your study guide to help you choose.
- Break complex concepts down so that they cover multiple cards.
- Use drawings to illustrate answers.



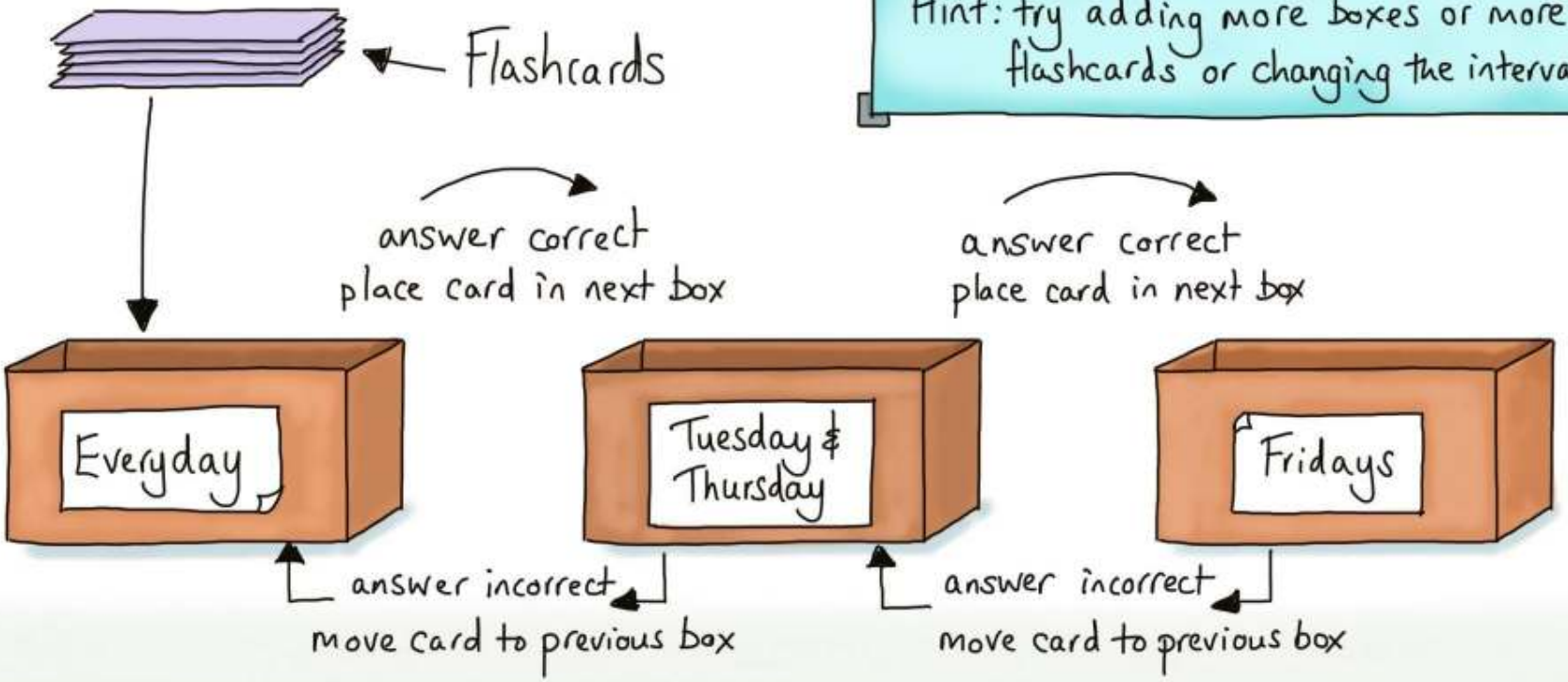
Using flashcards

- Say your answer out loud and not just in your head. It's very important you are fully committed to your answer. Even better would be to write your answer out as this is what you would have to do in an exam.
- Use them both ways – look at the answers and say what the question is.

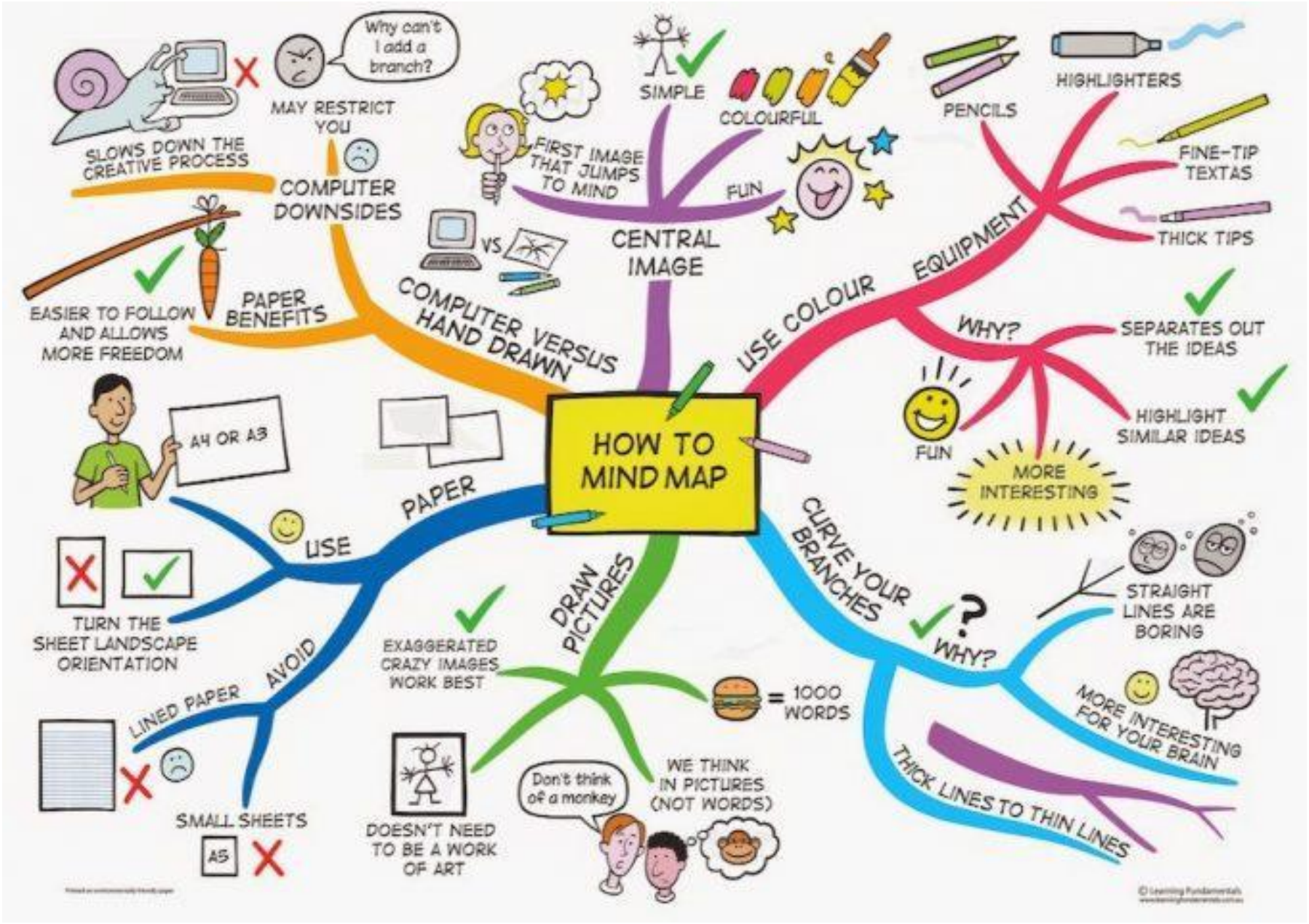
LEITNER Flash card method

@ImpactWales

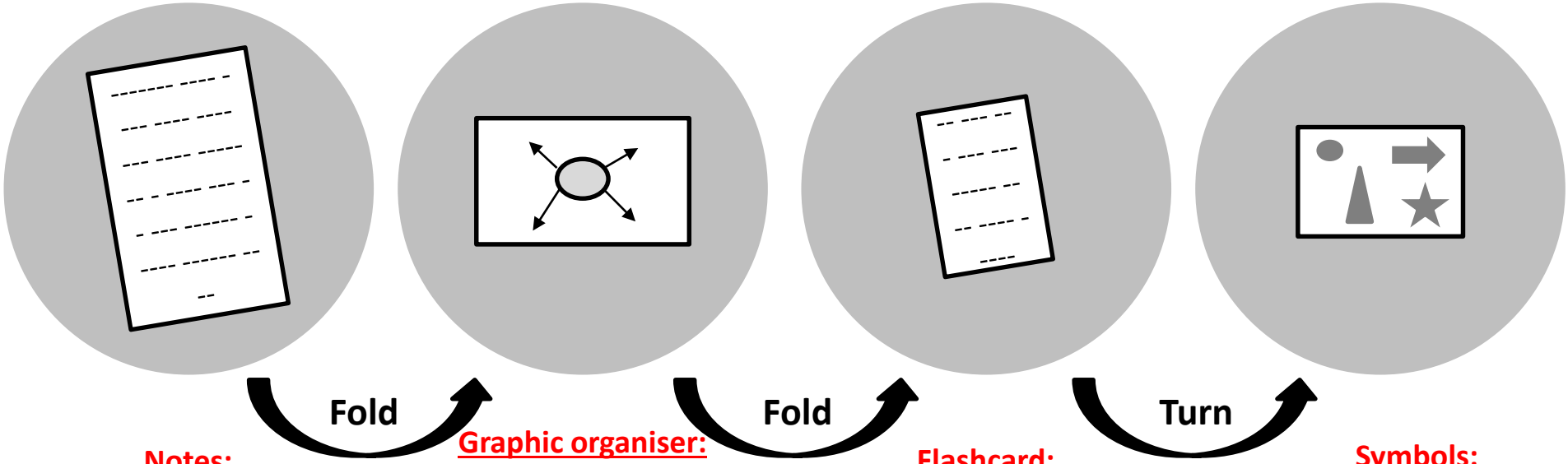
Hint: try adding more boxes or more flashcards or changing the intervals



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.


HOW TO MIND MAP
CENTRAL IMAGE
SIMPLE
COLOURFUL
FIRST IMAGE THAT JUMPS TO MIND
FUN
VS
COMPUTER VERSUS HAND DRAWN
COMPUTER DOWNSIDES
Why can't I add a branch?
MAY RESTRICT YOU
SLOWS DOWN THE CREATIVE PROCESS
PAPER BENEFITS
EASIER TO FOLLOW AND ALLOWS MORE FREEDOM
USE COLOUR
EQUIPMENT
PENCILS
HIGHLIGHTERS
FINE-TIP TEXTAS
THICK TIPS
WHY?
SEPARATES OUT THE IDEAS
HIGHLIGHT SIMILAR IDEAS
FUN
MORE INTERESTING
PAPER
USE
A4 OR A3
TURN THE SHEET LANDSCAPE ORIENTATION
AVOID
LINED PAPER
SMALL SHEETS
A5
DRAW PICTURES
EXAGGERATED CRAZY IMAGES WORK BEST
= 1000 WORDS
DOESN'T NEED TO BE A WORK OF ART
Don't think of a monkey
WE THINK IN PICTURES (NOT WORDS)
CURVE YOUR BRANCHES
WHY?
STRAIGHT LINES ARE BORING
MORE INTERESTING FOR YOUR BRAIN
THICK LINES TO THIN LINES

Folding Frenzy:



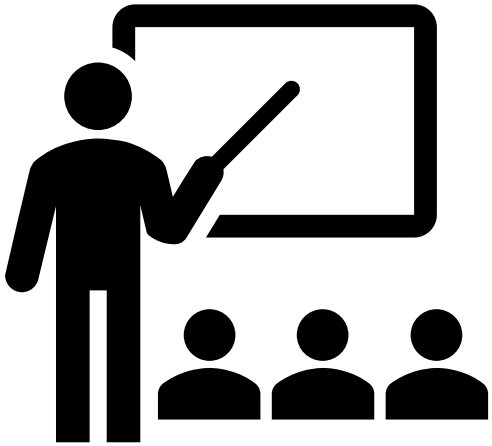
Notes:
Write on one side of an a4 page – keywords, definitions, summarising information, using symbols and diagrams.

Graphic organiser:
Create a graphic organiser on an A5 side of the paper. Represent the most important aspects, show links.

Flashcard:
Write on one A6 side of the sheet – 5-6 summary sentences, highlighting the keywords.

Symbols:
On the last A6 side – draw symbols to help you remember.

‘You be the teacher’:



- **Plan to teach** a topic or core piece of research to your peers or a family member – **or actually teach** them.
- The planning processes requires **cognitive elaboration and deeper processing** as you need to learn the content well enough yourself to teach it to another person.
- Even expecting to teach someone has a **positive impact on learning**, this impact is enhanced when you actually teach someone else.
- You could teach a peer within your subject, a peer or family member who does not take that subject.
- **Protégé effect –** students enlisted to tutor others work harder to understand the material, recall it more accurately and apply it more effectively.

Applying your knowledge

In addition to techniques to help you remember/recall the information, you need lots of practice applying it.

https://www.aqa.org.uk/subjects/science/gcse

https://www.physicsandmathstutor.com/

https://www.savemyexams.co.uk/gcse/#aqa