



Revision



Time for a change?

What works and what doesn't

Revision techniques - the good, the OK and the useless



- Professor John Dunlosky reviewed 1,000 scientific studies looking at 10 of the most popular revision strategies
- **Hands up for each one if you have ever used it**

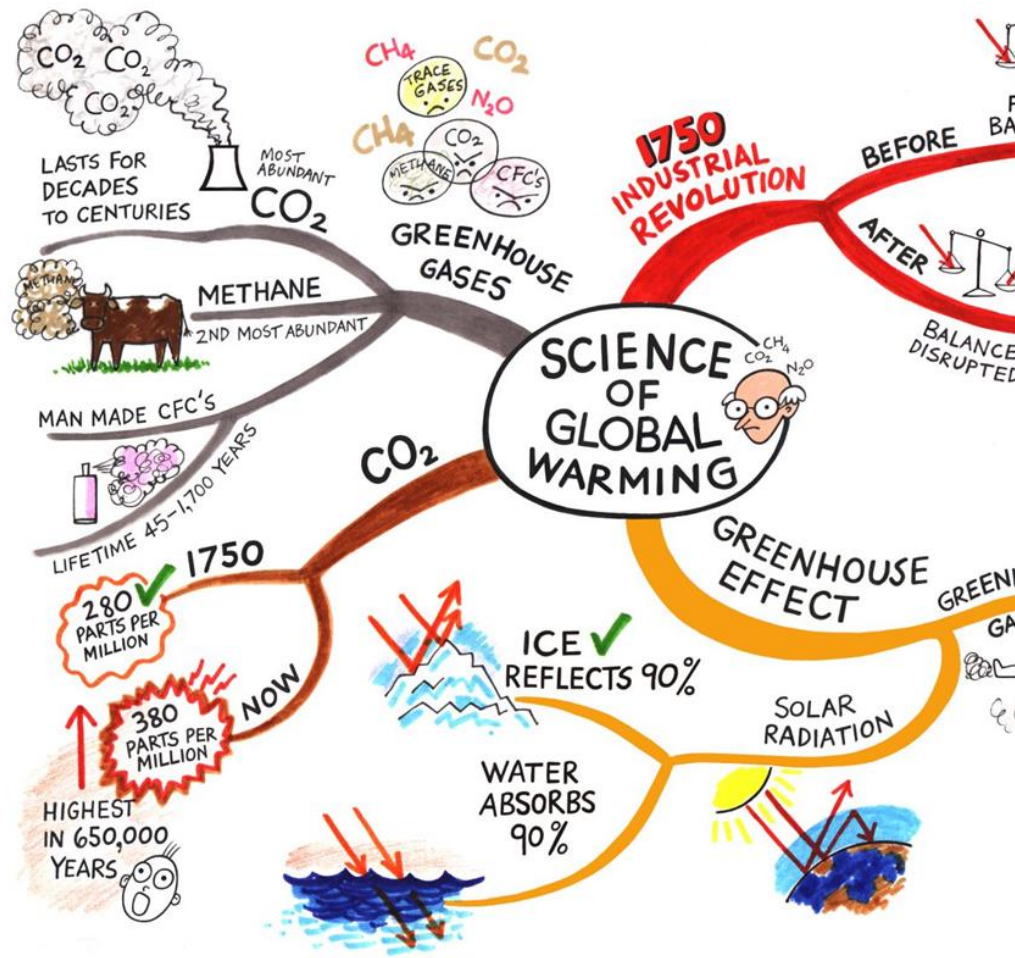
1. Elaborative interrogation

- You have a fact you need to learn / memorize / revise
- You ask yourself 'Why is this true'?
- You make up a (plausible) explanation for why the fact is true
- Helps your brain to make sense of the brain and relate it to existing ideas



2. Self-explanation

- Explaining how new information is related to known information..



2. Self-explanation

- ..or explaining steps taken when looking at worked examples

Worked example

A 20 N weight is raised through a height of 0.4 m. Calculate i) the work done
ii) the gain of gravitational potential energy of the object.

Solution

i) The force needed to lift the weight = 20 N

Work done = force \times distance moved in the direction of the
force = $20 \text{ N} \times 0.4 \text{ m}$
= 8.0 J

ii) Gain of gravitational potential energy = work done = 8.0 J

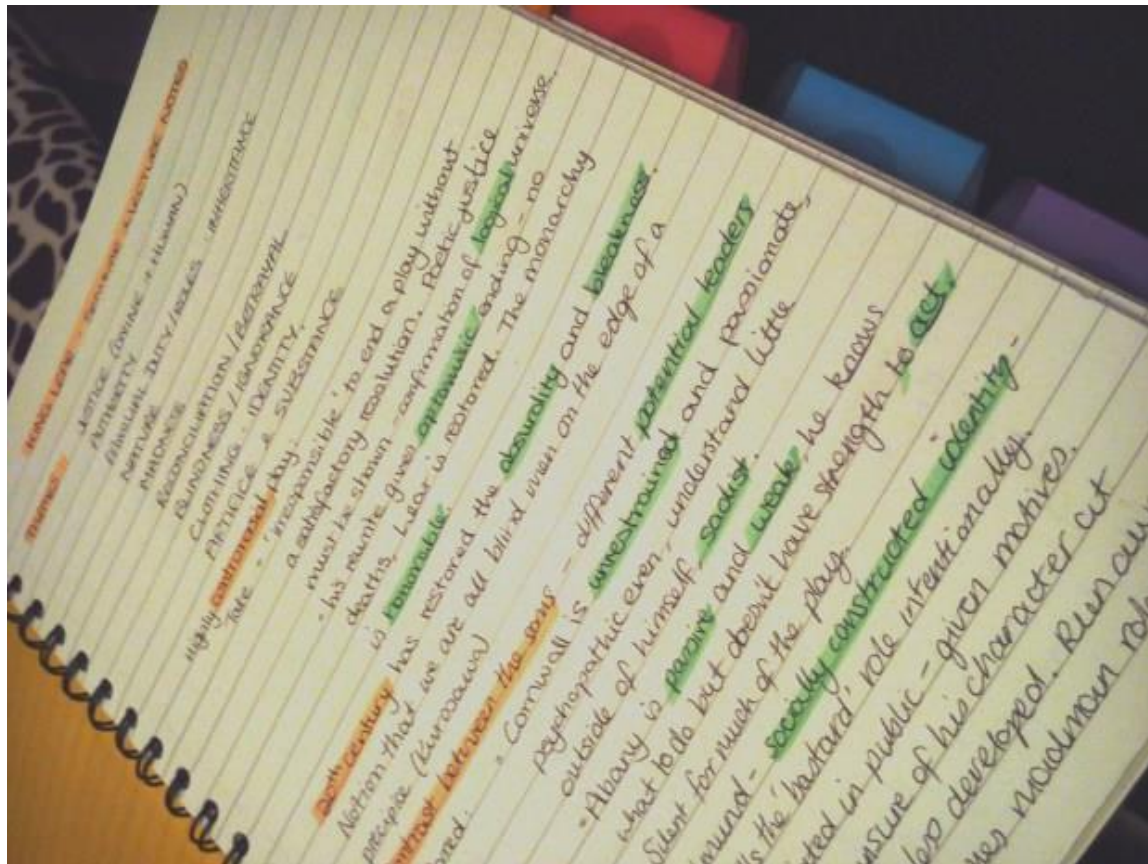
..because it
needs to match
the weight in
size

The unit of
work is the
Joule

..because
energy is
conserved

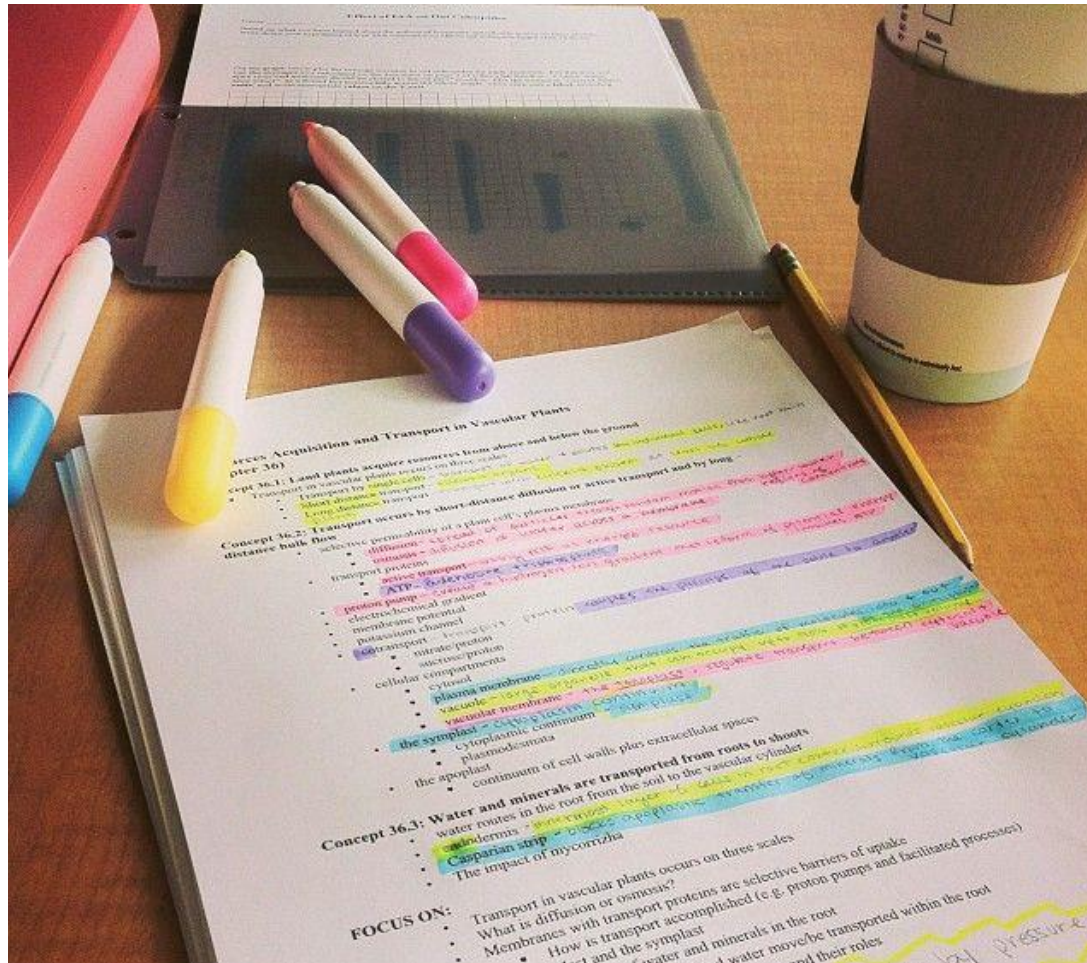
3. Summarizing (note taking)

- Copying out or condensing to summarize
- Textbook or revision guide as a source



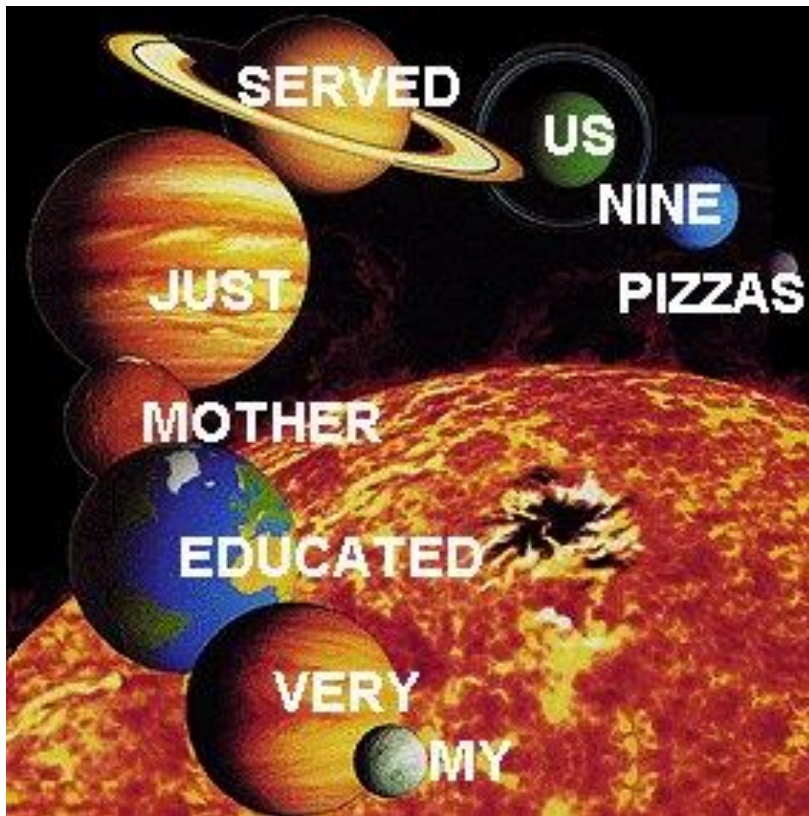
4. Highlighting/underlining

- Marking important points in a book or notes



5. Keyword mnemonic

- Sentences for lists:



- Imagery for lists:

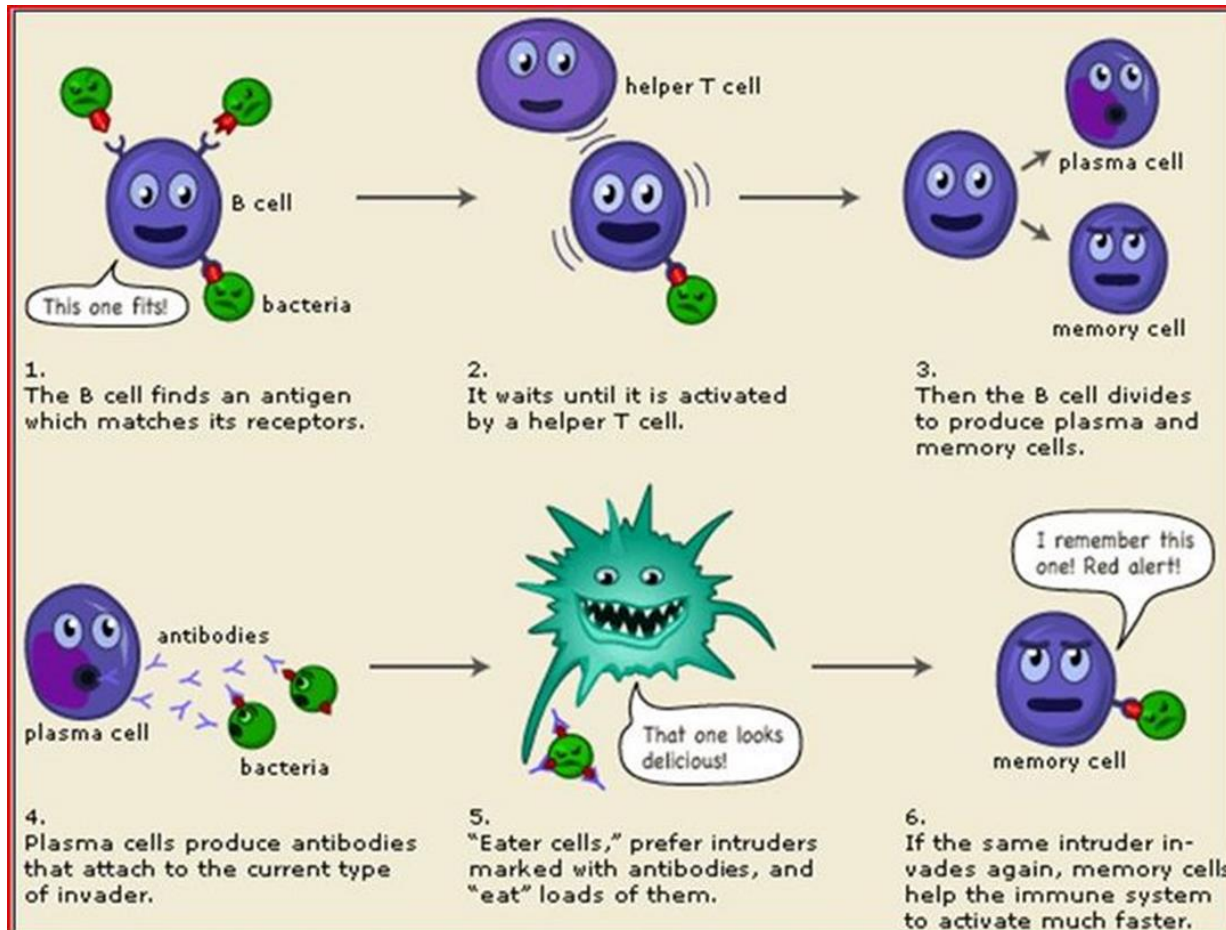


la dent (tooth)
la clef (key)
revenir (to return)
mourir (to die)



6. Imagery for text

- Attempting to form mental images of text materials while reading or listening



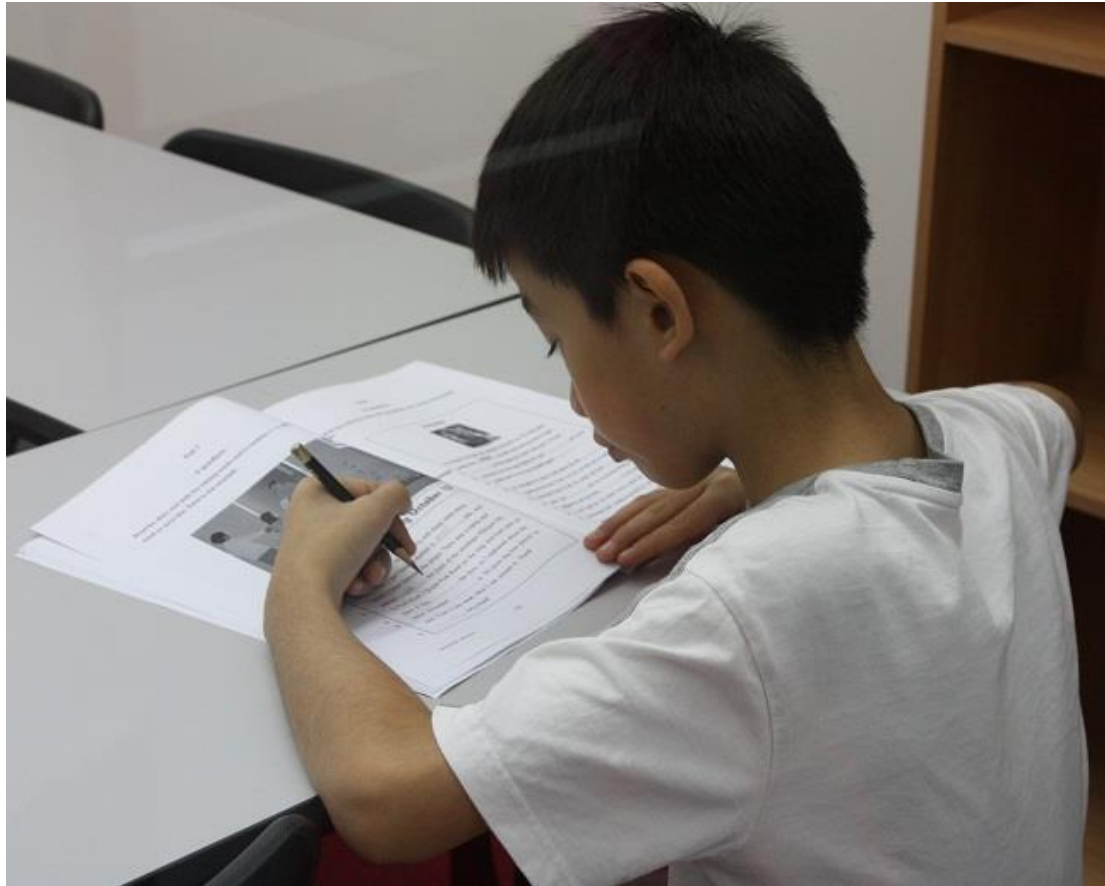
7. Rereading

- Restudying text again after an initial reading



8. Practice testing

- Self-testing or taking practice tests / past papers



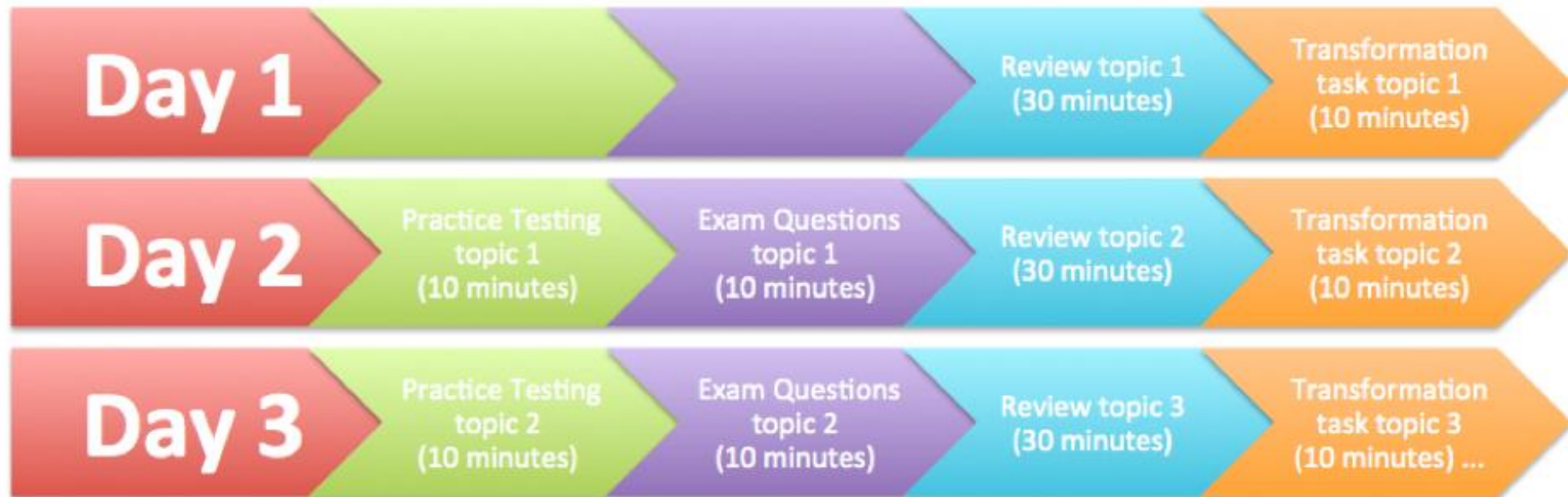
9. Distributed practice

- Following a revision timetable that spreads out activities over time



10. Interleaved practice

- Following a revision timetable that mixes up different subjects / topic / types of work within the same session

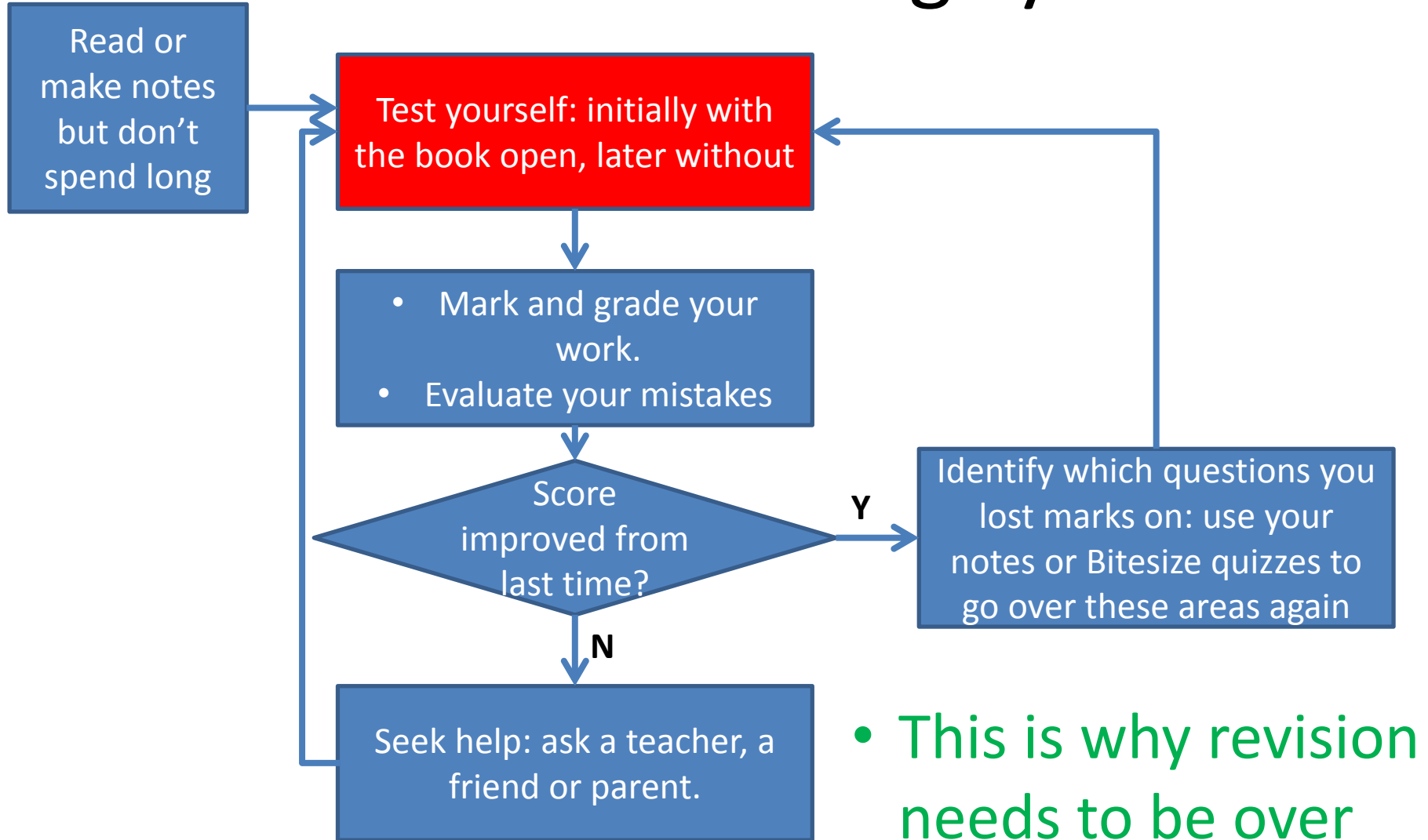


Which actually **work**?

Effectiveness	Strategies
High	Practice testing Distributed practice
Moderate	Elaborative interrogation Self-explanation Interleaved practice
Low	Summarization Highlighting Keyword mnemonics Imagery for text Rereading



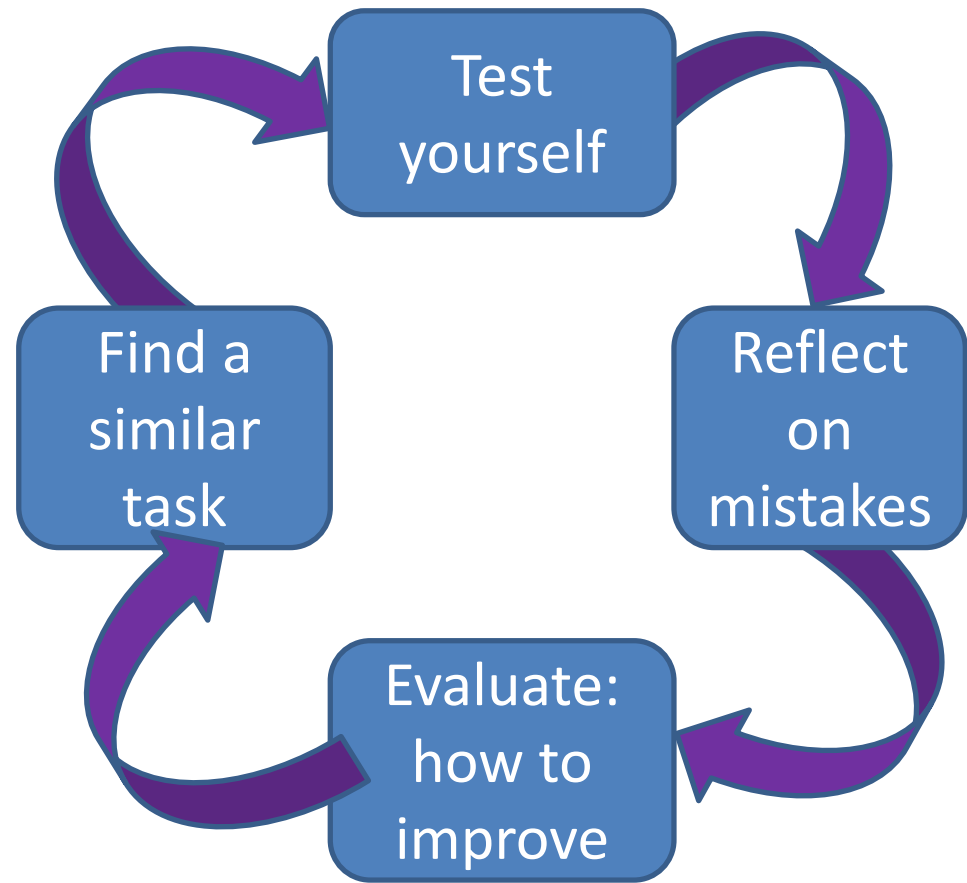
Distributed testing cycle



- This is why revision needs to be over several weeks..

Evaluating mistakes

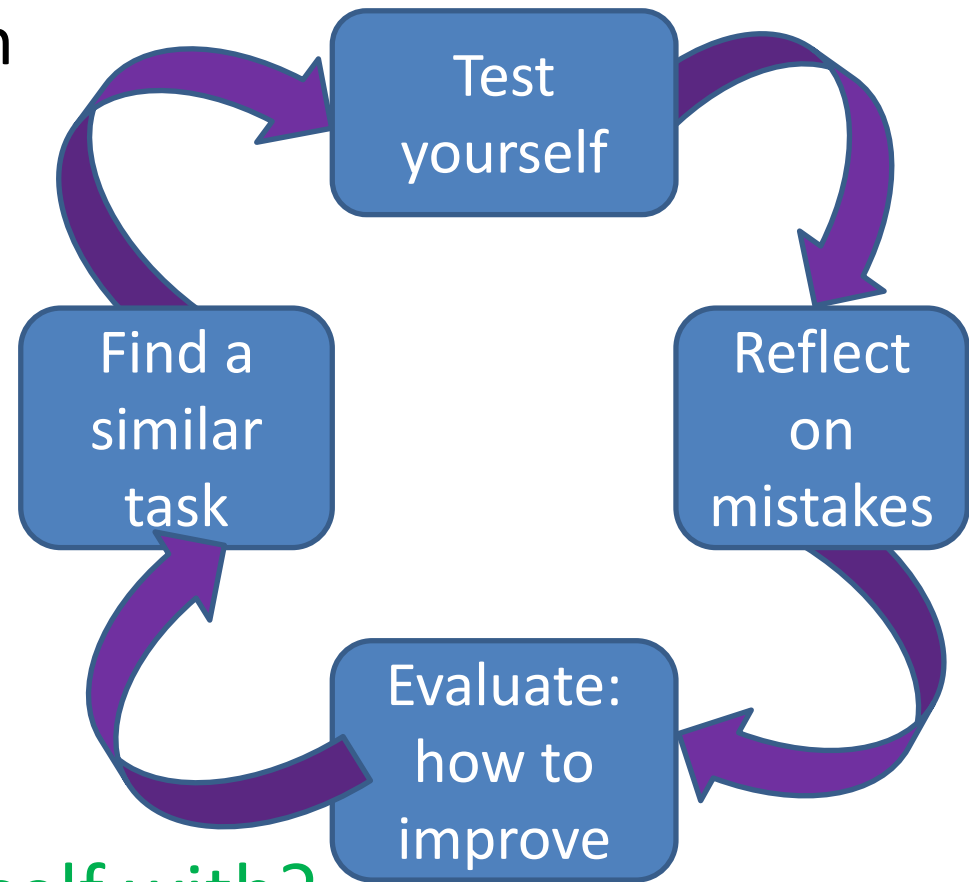
- **Metacognition:** ‘Thinking about thinking’ aka ‘Learning to learn’;
- **Reflect:**
 - Why did I choose that answer?
 - What was faulty about my answer?
 - What information was I missing?



Evaluating mistakes

- **Evaluate:**

- What should I have been thinking about for this Q?
- What would I do differently next time?
- What do I need to go over again before trying a similar Q?



- What can you test yourself with?
- Can you mix it up?

How can you test yourself

- Past papers
- Make flash cards and test yourself with them
- Make Design exam Qs and trade with a friend
- Practice questions in books
- Get someone to test you verbally on your notes
- Do an online quiz if available



Why am I telling you this now?

- You need to start revising early: **distributed testing**
- Remaining class tests: opportunity to rehearse new revision techniques

