



SCRAP THAT HIGHLIGHTER!

THE GUIDE TO SUCCESSFUL STUDYING

A 2013 study¹ found that **highlighting**  and **re-reading**  were two of the most common methods of learning and revision used by students. It also found that **these techniques have relatively little impact**. Instead, try these scientifically proven methods to avoid that last minute panic-cramming session!

SPACED LEARNING

INTERLEAVING

RETRIEVAL PRACTICE

How to do it:

1. Write a list of all the topics as you learn them.
2. Every 2-3 weeks, use the list to go back and do problems/questions from an old topic.
3. As you cover more and more topics, start cycling between the older ones, ensuring you leave a gap of about 2-3 weeks each time.
4. Put ticks next to the ones you revisit to check you're covering all the topics evenly.
5. When going back, ensure you're attempting problems or doing some *Retrieval Practice*.

Why it works:

We forget about 50% of new learning within an hour of it finishing, and around 70% within 24 hours².

We also relearn things faster, and for longer, each time we revisit the information¹.

Spacing your learning therefore allows you to remember better, by giving you time to forget.

Useful Resources:

Download an academic calendar and plan each month. You can find an e-version here: [Inspired Learning Calendar](#)

How to do it:

1. Within a subject:
 - When covering a topic it's normal to fully cover one topic, before moving onto the next.
 - Interleaving mixes problems and topics together.
 - For example, rather than doing an exercise on adding fractions, then one on subtracting, then one on dividing and so on, you pick one or two from each exercise in a random order and do them all together.
2. Between subjects:
 - In a single revision session, it's normal to focus on one subject at a time.
 - Instead, spend half the time and repeat the subjects.
 - For example instead of doing an hour each of subject A, then B, then C; do half an hour each of A, then B, then C, and then start again.

Why it works:

Not only does the method need to be executed correctly, but a **correct method needs to be selected** too. Doing this improves the brain's ability to **link the problem with the method needed**¹, making it easier in the future both for exams and in everyday life.

Useful Resources:

Use a calendar to plan your time, you can find an e-version here: [Inspired Learning Calendar](#).

How to do it:

There's lots of ways to do retrieval practice, here are a few of the best and easiest:

1. Quizzes:
 - You can find them online, in textbooks, or make your own!
 - Make a note of what you got wrong so you know where to focus your revision for future.
2. Flash cards:
 - Put the topic on one side, and key facts on the other.
 - Look at the topic and then try to recall and write down the key facts on the other side.
 - Check to see how many you've got correct. Put a cross next to the ones you've missed so you know where to focus next time.

For any method you use, keep going until you've got it all right at least once, then use *Spaced Learning* to revisit regularly.

Why it works:

This technique forces use of your memory, unlike highlighting/re-reading. **Every time you use your memory, you strengthen it**¹, similar to a muscle in your body.

Useful Resources:

Websites like [Kahoot](#), [Quizizz](#), or even [Google Forms](#) allow you to make your own quizzes, and [Cram](#) can be used for flashcards.

1. Dunlosky, J. (2013) Strengthening the pupil toolbox: Study strategies to boost learning. *American Educator*, 37(3): 12-21.
2. Ebbinghaus, H. (2013) Memory: A contribution to experimental psychology. *Annals of neurosciences*, 20(4):155.

