

The logo for Erasmus Darwin Academy, featuring a stylized sunburst or fan shape with several lines radiating from a central point.

ERASMUS DARWIN ACADEMY

Excellence for All

Revision Hints and Tips

Year 11 - 2020

Revision Techniques- what shouldn't you do

What does research say?

Re-reading and highlighting are among the commonest and apparently most obvious ways to memorise or revise material. They also give a satisfying – **but deceptive** – feeling of fluency and familiarity with the material (Brown et al, 2014).

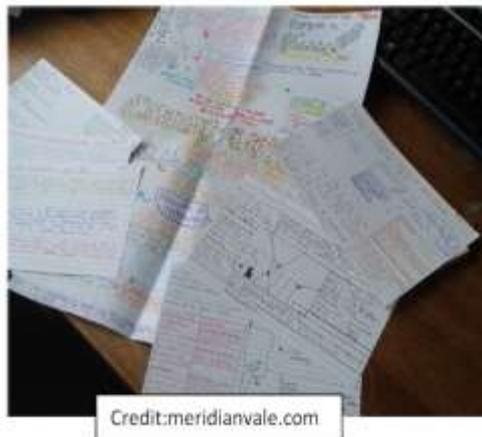
As we can see from the research above, one of the most common (and easy) methods of revision is actually one of the **least effective**. Re-reading and highlighting notes can lead to very little of the read or highlighted information going in to long term memory. There is nothing wrong with reading and highlighting, but on their own they are **very, very ineffective**.

Effective Revision – what you should do



These 6 strategies have supporting evidence from Cognitive Psychology. This information is also available on our website. In terms of actual revision **techniques**, we recognise that this is down to each individual however; research indicates that there are more productive ways to revise which are explained below.

Technique 1- Revision Flashcards



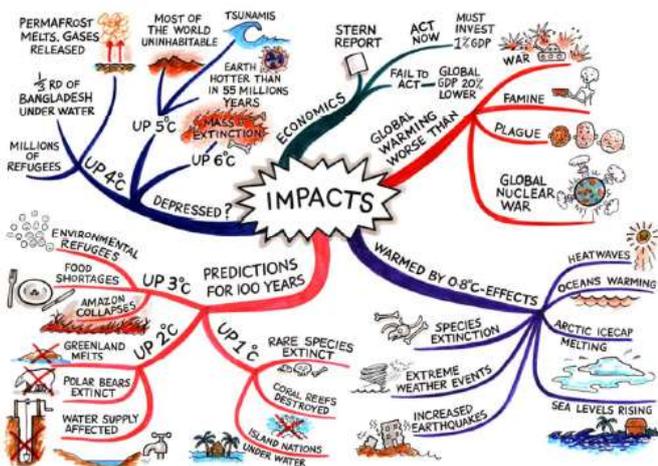
Flashcards have a keyword or the name of a concept/topic on one side and a definition or a series of notes on the other. Probably the easiest way to make flash cards is to use your class notes to produce flash cards for each topic you need to study. On one side will go the topic title and on the reverse you need to summarise the key points. Use pictures and words (Dual Coding) and Concrete Examples (where appropriate).

If you use this technique it is important to remember that the creation of the flash cards **does not** represent the end point of revision for this topic. The next crucial step is to test how well you can recall the information on the flash card (Retrieval). If you are going to create flash cards then make sure they are done early so there is time to revisit the topic (Spacing) at a later date.

Technique 2 - Mind Maps

Put simply, a topic is summarised on one large sheet. Each sheet will have more information than a flash-card.

Steps to follow: Write the **MAIN TOPIC** in the middle of the paper and draw a ring around it. For each **KEY POINT** draw a branch out from the main topic. Write a **KEY WORD** or **PHRASE** on each branch. Build out further branches and add **DETAILS**. Use pictures and words (Dual Coding) rather than loads of writing copied from your notes.



This will be even more effective if your teacher provides the framework for the mind map. If you use this technique it is important to remember that the creation of the mind map **does not** represent the end point of revision for this topic. The next crucial step is to test how well you can recall the information on the mind map (Retrieval). If you are going to create mind maps then make sure they are done early so there is time to revisit the topic (Spacing) at a later date.

So, is Retrieval (recall) key to effective revision?

Research demonstrates that...

“Students who can test themselves or try to Retrieve material from their memory are going to learn that material better in the long run. Start by reading the text book then make flash cards of the critical concepts **and test yourself**. A century of research has shown that repeated testing works.” – Professor Dunlosky, Journal of the Association for Psychological Science

Successful Retrieval makes this information more retrievable later (i.e. in the exam). Which brings us to the most simple technique which has links with technique 1 and 2:

Technique 3- Self-quizzing/Testing via your knowledge organisers

This can be as simple as having a blank sheet of paper in front of you and writing down (from memory) everything you know about a topic (Retrieval) and trying to Elaborate on some of the key ideas. This retrieval could be based on a mind map or flashcards. Once complete, the student then self-checks from the book/flash-card/mind map and corrects any spelling mistakes, omissions or inaccuracies. You can also use your friends/family to test you from your flashcards/mind maps/revision guide. Parents can really help their child by testing them regularly on different topics.

Retrieval is hard, how can mnemonics help?

When revising topics, try to create and use mnemonics to help you with retrieval. For instance, **VC BASPOG** is quite easy to remember and will help you answer questions on natural selection (as it stands for **V**ariation, **C**ompetition, **B**est **A**dapted **S**urvive and **P**ass **O**n **G**enes). Another examples of a mnemonic is **French People Can't Forget Paris** – **F**asting, **P**rayer, **C**harity, **F**aith, and **P**ilgrimage for the 5 pillars of Islam. Another example is **Always Eat An Apple Says Aunt Nora** – **A**sia, **E**urope, **A**ustralasia, **A**frica, **S**outh America, **A**ntarctica and **N**orth America for the 7 continents

Technique 4 – Revision Speed Dating

This is effective if you have a revision partner or if you have a revision group. Firstly pick a topic. In pairs, sit opposite each other with a blank sheet of paper each. You have 5 minutes to write as much as you can about the given topic. After 5 minutes compare what each of you have written and the best response receives a point. Then swap (if you are in a group) and pick a different topic and repeat again. See who has the most points at the end. This is an effective technique because it forces you to Retrieve the information from memory and by comparing responses you get to see if you have made any errors or have omitted any key information

Technique 5 - Past Paper Questions

This is a very effective method of revision because you have to Retrieve the information from memory. Your teacher may provide some papers and there are lots available online. However, you need to be thinking of the following points:

Make sure the past papers are from the same exam board that you are studying. Just doing the papers may not be enough. Can you get hold of mark schemes (online) or better still get a teacher to mark some of them? It is important to know if your answers are going to get you the marks that you need. It may be worth holding off past papers until you are well into the cycle of learning the material. Getting a question right might trick you into thinking you know all there is to know about a topic.

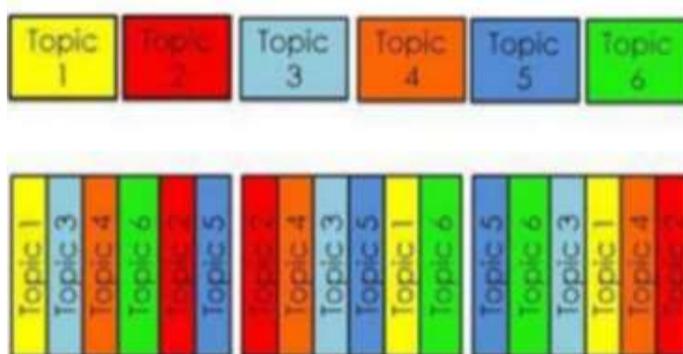
Organising and Structuring Revision

What does research say?

Blocking your revision- focusing on one topic for a long time then moving on to a new topic – is inefficient.

Interleaving your topics is far more effective!

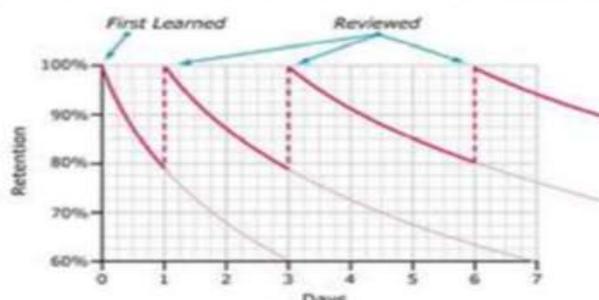
Blocking vs interleaving



What does research say?

Ebbinghaus's famous forgetting curve shows that the brain naturally "forgets" information. If we revisit previously covered topics after some time has elapsed, we have a greater chance of remembering more of the information.

Typical Forgetting Curve for Newly Learned Information



The research suggests that when you plan your revision timetable, mix your topics and your subjects up (Interleaving). It may *seem* sensible to concentrate on a single topic in History for 3 straight nights, but actually you will remember more if you interleave with different subjects and topics. Remember to revisit (Spacing) what you are revising regularly.

Suggested revision session timings:

20 minutes on a topic, 5 minutes break, 20 minutes on a *different* topic, 5 minutes break, 20 minutes on a *different* topic, 5 minutes break, 20 minutes on a *different* topic.

This means you can revise **4** different topics in just over an hour and a half. If you want to revise for a longer period stick with the 20 minute times and do more of them (with 5 minute breaks in between).

If you are planning to revise a topic for the first time you may want to produce a mind map or make flash cards.

If you are revisiting a topic then perhaps focus on Retrieving the mind map or the flash card from memory (then checking how successfully you retrieved) or perhaps doing some past paper questions.

Good Revisers V Poor Revisers

Good Revisers	Poor Revisers
Eat Breakfast	Skip Breakfast
Get lots of sleep	Have little sleep
Have regular bed times	Have inconsistent bed times
Get fresh air each day	Stay indoors all day
Exercise regularly	Complete very little exercise
Do lots of past papers	Highlight information
Spread out their revision	Cram their revision
Have a calm and orderly revision environment	Revise in front of the TV
Stay hydrated	Forget to stay hydrated
Put their phone away when revising	Constantly check their phone when revising

Summary

EDA Big 10 key points for examination success

- **IDENTIFY KEY CONTENT** – What are the key focus points that you got wrong in your last assessment– prioritise these areas and make sure you revise them. **EXAMINATION TRENDS** – For your option subjects – what topics have been asked on the paper for the last 2 years – know these topics.
- **DELIBERATE PRACTICE PAST PAPERS, PAST PAPERS AND MORE PAST PAPERS** – complete as many past papers as you can between now and the final examinations.
- **ENSURE YOU HAVE CLARITY ON WHAT CAN BE TESTED** – ensure that all teachers give you a copy of the specification so you are clear about every topic that could be tested.
- **DELIBERATE PRACTICE/INTERLEAVE and SPACE OUT REVISION CONTENT** – test yourself regularly on different topics from different points in the course e.g., get your parents to test you regularly on different topic areas.
- **NEVER** highlight notes as a form of revision, it's a waste of your time and **NEVER** revise information/content you understand.
- **INDIVIDUAL PERSONALISED LEARNING CHECKLISTS** – Ensure all teachers give you a PLC that identifies your strengths and key focus areas.
- **REMEMBER YOUR TARGET GRADE** – Aim for your target – you want to be better than the rest of the competition.
- **BE SMART WITH PREPARATION** – Use your revision timetable and ask the teachers for additional information should you not understand.
- **BELIEVE** – all of the above without self-belief is pointless, you **MUST** believe you can **SUCCEED**.

Good luck and remember **'I am not telling you it's going to be easy, I am telling you it's going to be worth it'**