

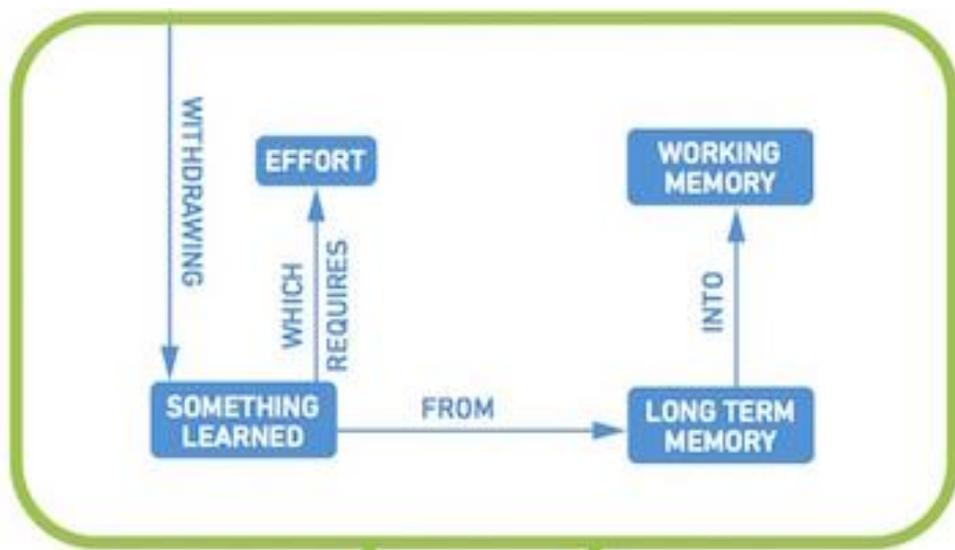
Effective Learning Strategies For Students



**DUNDONALD
HIGH SCHOOL**

Strategy 1 - Retrieval Practice

- Retrieval practice is any activity that means you have to retrieve information from your long-term memory.
- This is crucial because of the way in which our memories work. Our long-term memory is where we store information that we have learned previously. However, we have to be able to retrieve this from our long-term memory to our working memory, otherwise it will be forgotten. Retrieval is practising this retrieval. This makes the memory stronger and means you can recall the information more easily in the future. This is shown in the diagram below.
- This has been called the ‘testing effect’. Research has shown that pupils do better in their final exams if they learn the information once and then do lots of tests (retrieval practice) rather than if they try to go over the information lots of times and only have one test.
- This means that it is really important that when you are doing retrieval practice you do not use your notes and instead compete any of the activities from memory.
- After you have completed the retrieval practice it is important to make sure you check and correct your responses. This will make sure that you remember the right answers in the future.



Retrieval Practice - Quizzes

- Quizzes simply involve answering questions.
- You could use questions that you have completed in class or make your own.
- Include a range of questions – multiple choice, knowledge, understanding.
- Remember to answer the questions from memory first and then check if they are correct/complete using your notes afterwards.

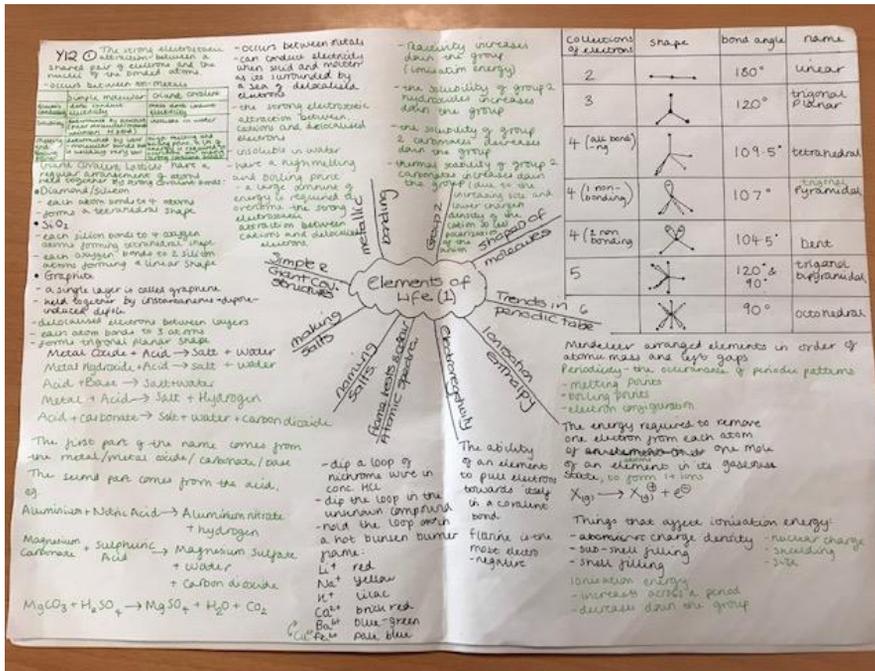
1. What is meant by 'exchange rates'?
2. What is meant by 'interest rates'?
3. Give two internal sources of finance
4. How is gross profit calculated?
5. What are long-term liabilities?
6. What is job production?
7. State two advantages of job production
8. State two disadvantages of job production
9. Why do businesses do a business plan?
10. What is buffer stock?

Retrieval practice - Flash cards

- Flash cards have questions on the front and the answer on the back.
- This means you will need to break topics down into lots of small questions.
- Look at the question side and try to answer it. You can do this with another person, say the answer out loud to yourself or write the answer down. You then turn the card over to check if your answer was correct. Make sure you go over the incorrect ones again!
- You can review the flash cards from both sides
- You can use instructions and well as questions, e.g. explain this, evaluate this, etc.



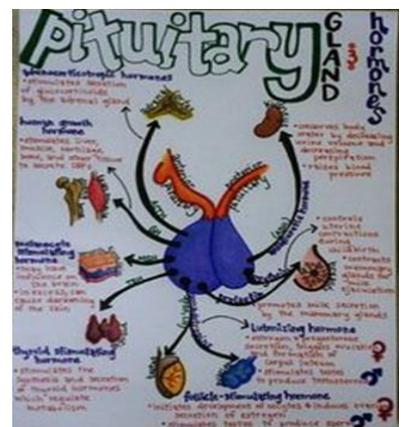
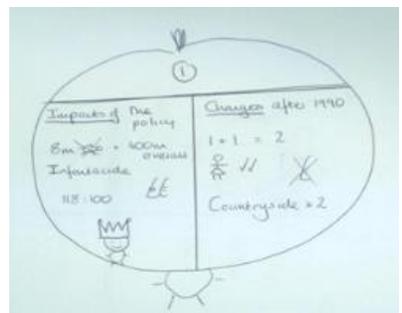
Retrieval practice - Mind maps



- Use the main parts of the topic as the first branches. You can get these from your notes to make sure that you include everything.
- You should then complete the rest of the mind map from memory.
- When you have done this you can use your notes to check, correct and add to the mind map.

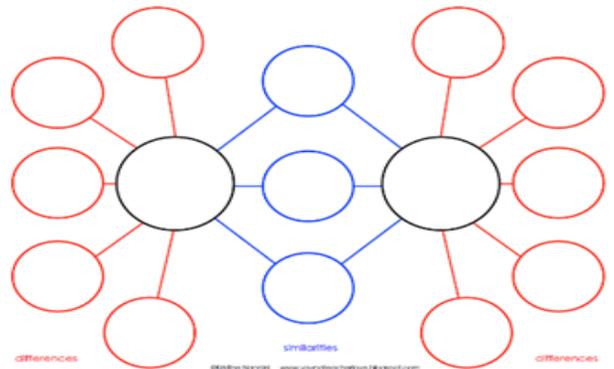
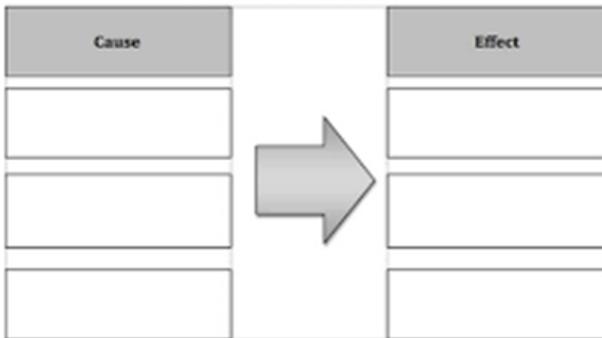
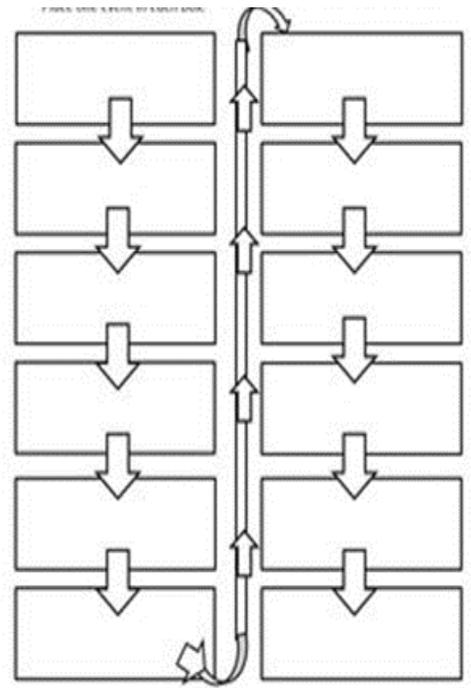
Retrieval practice - Diagrams

- Diagrams can be a useful way of remembering and summarising a large amount of information.
- Draw a diagram to summarise a topic (from memory first and then use notes to check and correct).
- Tip - Keep pictures simple - use single words/symbols/letters not sentences or paragraphs.



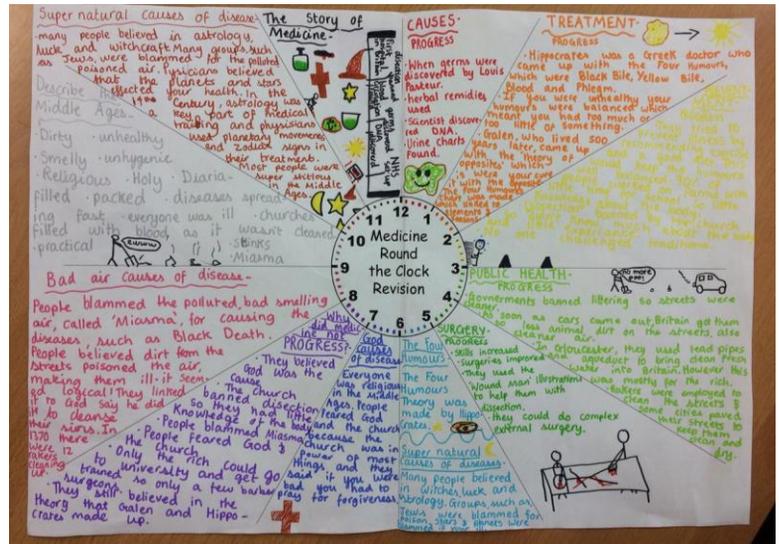
Retrieval practice - Graphic organisers

- Graphic organisers are any diagram/image.
- For example, double bubble maps can be used to explore similarities and differences between the two topics. The differences are placed in the outer rings and the similarities in the linked spaces.
- Sequence arrows can be used to show order of a process.
- Causes and effect organisers require pupils to think about the causes and consequences.
- You can complete a graphic organiser from memory and then use your notes to check it is correct and fully complete.



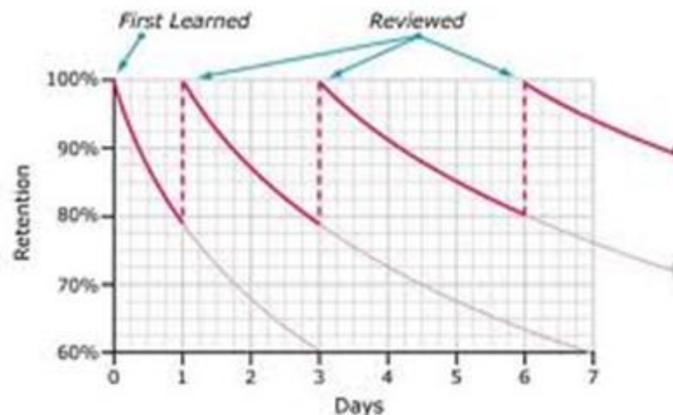
Retrieval practice - Retrieval clocks

- Split a piece of paper into 12 sections.
- Each section is one aspect of the topic.
- You have 5 minutes to complete each section.
- Do this from memory and then use your notes to check and correct.



Strategy 2 - Spacing

- Spacing is revisiting a topic sometime after first learning it.
- You need to go over topics multiple times, with a gap in between. This is because each time we go over a topic (after a gap) we forget less of it and remember more. This is shown in the diagram below.
- Throughout the course, you should revisit/review topics that you covered last week, last month and all the way back to the start of the course
- Research has shown this to be effective as it allows for some forgetting time. Retrieving this information is therefore more difficult and so long-term retention is improved.
- This is opposed to traditionally massed practice, where a skill/knowledge is practiced/recovered again and again and then a new skill or topic is covered.
- This has traditionally been seen as effective because massed practice leads to the quickest gain in performance. However, this type of practice also leads to more rapid forgetting.



Strategy 3 – Interleaving

- Interleaving is mixing up of lots of different subjects or topics when you do independent study. Research has shown that you will remember more if you do this rather than studying one topic for a block of time and then another.
- Make sure you do retrieval practice on lots of different topics.
- This is shown in the diagram.



Can't I just read my notes? - Ineffective Learning Strategies

Research has shown the following study strategies to be ineffective:

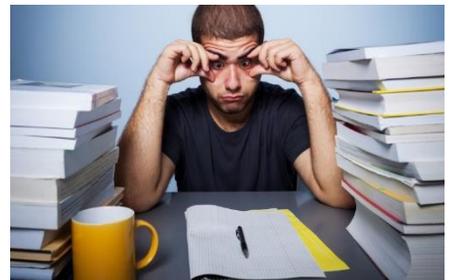
1. **Writing a summary of your notes.**
 2. **Highlighting your notes.**
 3. **Re-reading.**
- This is because they make you feel like you know the material and may help you to remember the information in the short-term (e.g. just after re-reading your notes) but this will not last so you are more likely to forget the information in the coming days.
 - These techniques should be used to highlight important information and make your revision notes but not as ways to help you remember that material.



Can't I just revise?

- Revision or 'cramming' is when students try to memorise knowledge before an exam.
- However, GCSEs are terminal exams (all of content is tested at the end of the 2 years) and this means there is too much to 'cram'!
- There is a limit to how much you can 'revise' and so lots of the knowledge will be forgotten.
- Independent study means going over topics of a regular basis as the course progresses.
- It will help to ensure that you remember the information as you go and keep it in your long-term memory to use in the exam.

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REVISION



I must begin
revision.
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Useful Websites

BBC Bitesize

<https://www.bbc.co.uk/bitesize/levels/z98jmp3>

BBC Bitesize is an online learning resource provided by the British Broadcasting Corporation (BBC) that offers a range of revision materials and interactive activities to help GCSE students prepare for their exams. BBC Bitesize is considered to be one of the best science revision websites for UK student.

QUIZLET

<https://quizlet.com/>

Quizlet is a versatile online tool that facilitates learning through the use of flashcards, games, and quizzes. It caters to a broad spectrum of subjects, making it an excellent resource for GCSE students across various disciplines. The platform allows users to create their own study sets or browse through millions of sets created by other users, covering everything from vocabulary to complex scientific concepts.

Corbett Maths

<https://corbettmaths.com/>

Corbettmaths is a revision and study resource that provides a range of materials and tools to help GCSE students prepare for their exams, with a focus on Maths.

YouTube

<https://www.youtube.com/>

Youtube is a video-sharing platform that offers a wide range of educational content, including revision videos and tutorials. You would need to ensure you use a credible source for the videos and use specific search terminology so that you find exactly what you are looking for. Your teachers will be able to better direct you with who to follow/search for.

- **Mr Bruff** – As an English teacher who knows the curriculum inside out, you can count on Mr Bruff to provide up-to-date and relevant information on both GCSE and A Level English Language & Literature. Video tutorials include those covering specific topics and exams questions, character analyses, exam tips, examples of student work, question and answer videos and even revision songs and raps. He also covers complete exam papers.
- **Hegarty Maths** – Huge amount of brilliant video tutorials covering specific topics and exam questions for both A Level and GCSE Maths (Foundation & Higher Tier). Add in videos on practice papers, top tips and playlists and you have the best maths revision channel available.
- **Free Science Lessons** – Covers all three sciences for GCSE and A Level. Includes practice papers, topic specific tutorials and exam tips. Their core belief is that outstanding education should be available for all.
- **Unjaded Jade** – A “study Tuber” who aims to help inspire and motivate you to do your best in exams. As well as providing tips on exam and revision techniques, tutorials on past papers and mark schemes, Jade offers very honest videos tackling issues such as exam stress, perfectionism and academic pressure. She also takes you along on her travels during her gap year and her tribulations

Save My Exams

<https://www.savemyexams.com/>

Save My Exams is a dedicated platform aimed at making revision more manageable and less daunting for GCSE and A-Level students. It provides access to a wealth of resources including detailed revision notes, mark schemes, and past papers for a range of subjects.