



What should I do when I'm told to 'revise'?

Before choosing a revision technique, identify the subjects and then the specific topics that your teacher and reports have indicated you need to work hardest on.

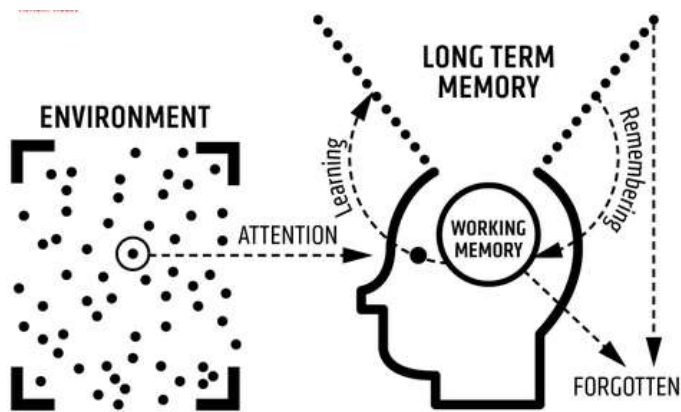
Don't plan to revise 'History' (it's way too big), choose a specific aspect that your teacher's feedback and results suggest you need to focus on eg. 'Tudors'. **Start with the content that you haven't looked at for ages.**

This is harder, but ultimately more rewarding.

PART 1: The Science of Learning, Memory and Attention

Revising can be hard – especially if you think about it the wrong way. Revising isn't just about getting stuff IN to your brain – it's about being able to get it OUT of your brain when you need it. A lot of scientific research has been done about how the brain (and memory) works, as well as the study methods that work best (see Dunlosky, 2013). Before we look at some revision strategies, it's a good idea to understand a little bit about how your brain (and memory) works.

The most effective way to learn is to have information move from the working memory to the long-term memory



(LTM). If there is no change in long term memory, then no learning has taken place. Long-term memory has unlimited storage capacity, and once remembered, information stored within LTM can be stored there indefinitely. By comparison, your working memory and attention is far more limited (lasts 30 seconds and can only store 9 items of information at once). Therefore, the revision you do must be aimed at transferring information from your working memory to your long-term memory. Knowledge does not stay in your long term memory unless you think about it regularly.

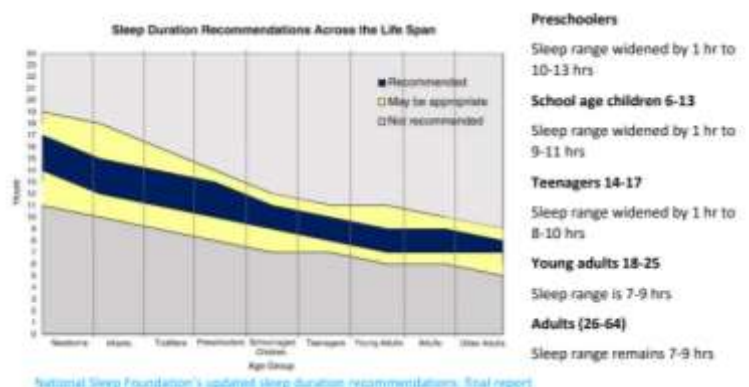
As your short-term memory and attention is limited, it is important to limit distractions when revising. In particular, limiting your access to technology like a mobile phone will help you to concentrate, as will having a calm area to work in. In addition, it is much easier to learn and recall information when we are physically and mentally well-rested. The next section will give you some more information about this.

Part 2: Wellbeing

Revision can be stressful for students. It is important to remember to take care of your health as a priority. Make sure you incorporate healthy habits in your revision schedules.

Sleep comfortably: during stressful periods, it can be difficult to sleep properly, but that is when your body requires rest the most. 8 hours a night minimum, phone away from your bed!

Importance of Sleep to Learning



Take regular short breaks – also have longer periods downtime built into your schedule, and do not over-work yourself.

Do frequent short exercises – stand up and walk around, do stretches, especially your neck and shoulders. Both your body and mind need to be kept active.

Drink water and get fresh air – it is important to stay hydrated, and to have your room cool enough to stay awake!

Eat well – not too many sugary snacks – little and often is best.

Focus on what you have already done – instead of worrying about the work left to do, reframe your thoughts to focus on your successes. A positive mindset will make it easier to stay motivated.

Part 3: Key Principles of Effective Revision

Successful revision involves doing something with the information, applying it (NOT Copying/Reading/Highlighting!) – this is essential so that your brain makes connections, remembers all the information and how to apply it. If you are 'busy' but not having to think hard about something, then you are not revising effectively.

Make a plan: Look at the specification and any self-assessments you have done regarding your knowledge of a particular subject. Identify key areas of weakness and make a list of topics to revise. Research the assessment, are there past papers, mark schemes and examiners reports you can look at? What sort of questions occur frequently?

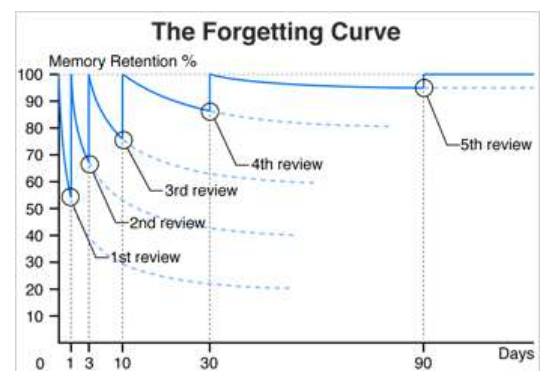
Get into a routine: Set aside regular time periods to revise, ideally at the same time each week. Have all your study materials prepare before you start and don't allow yourself to get distracted. Keep a record of the progress you are making!

Deliberate Practice: Revision needs to be both purposeful and systematic. This means that organising a method of breaking down whatever task it is you want to improve on into its core elements is imperative. Rather than practising 'the whole thing' you practise getting better at the individual steps in order to achieve your goal of improvement in 'the whole thing'. Active revision is needed in order to learn. Re-reading notes will not help if you do not engage with the material, your brain needs to process the information and work with it in some way in order for it to enter into your Long-Term Memory.

Retrieval Practice: This is the practice of consistently accessing information from memory. A large portion of learning occurs when you focus on remembering the information they were taught. Instead of reading the same information consistently, it is more effective to actively recall the information over time. There is even evidence to suggest that retrieval practice multiplies the number of 'routes' to stored ideas in your memory, making them easier to access because you've tried, even if you can't quite remember them now!

Spacing and Interleaving: Leaving time between moments of revision is a key aspect of transferring information from the working memory to LTM. As demonstrated in The Forgetting Curve, repeated attempts to review the information leads to higher rates of memory retention. Finally, following this principle also dissuades the use of last-minute cramming as a reasonable revision practice.

Be aware too of the "fluency illusion". This is the feeling that you know something well which you have just re-read. You need to be sure that the information goes into your long-term memory; by spacing out your learning and regularly testing yourself you can be sure that you actually know what you have been revising.



PART 4: Individual Revision Techniques

Flashcards: These are clearly useful for remembering facts, vocabulary and key terms/definitions (write 'questions' on one side, then 'answers' on the other side of a piece of paper, then test yourself. You must then do something with that knowledge i.e. apply it in an explanation or practice exam question. Make sure you spend more time using the flashcards than making them.

Making good quality FLASHCARDS

These can be used for more than just language vocab or key terms/definitions, they can deepen understanding too!

BONUS CARDS:

- Why is that the answer?
- How might the answer be different if.....
- Is that always the correct answer?
- How does that link to the previous flashcard?
- Do you have an example?
- Can you prove it?

Question on one side, answer on the other

- Make them about the most important info, not whatever comes to mind;
- Make them about the info that your teacher/self-testing has identified as missing/weak;
- Make the questions progressively harder.....
 - Name 3 elements from the Halogens in the Periodic Table
 - Describe the characteristics of a Halogen
 - Explain how Halogens react with Hydrogen and why
- Don't chuck flashcards away just because you got it right twice, 'overlearning' works!
- Pause before turning over - the act of trying to remember, even if unsuccessful, aids learning.

Practice Answers: Predict what the exam questions might be (look in your text book and exercise book for what you've been previously asked), then write answers for those potential questions. Swap with a partner to give suggestions for improvements.

Mindmaps: you need to engage actively with your revision - drawing mind-maps can be helpful if you make meaningful connections between different ideas – start with a blank sheet of paper (don't just copy from an open book, as that involves no hard thinking) - label your 'links' and explain why those 2 ideas are linked. Labelled diagrams with explanations are useful too. Being able to CONNECT the different branches in the diagram will re-enforce the information and make it easier to recall. This is far more effective than spider diagrams, which see knowledge as isolated.

Good quality Mindmaps

- Structure your page according to the 'big questions' or sections of the specification – NOT just random bits of information;
- Start from blank, with no books/notes open – make your brain work hard to RETRIEVE information!
- Draw and justify links between bits of information, as this will likely prompt further retrieval
- Now open your notes/books and add in any missing information
- Later, try starting from a blank page again! What should happen to how much you remember?

Create schemata: A schema is a mental template, and functions as a web of interconnected knowledge about a particular topic. When creating schemata, it is possible to link simple concepts, but also concepts that lead to hierarchical thinking. Therefore, they are more sophisticated than the "chunking" which happens in working memory. Connecting information in this way makes it easier to recall more complex, interconnected, ideas.

Condensed Notes: Put 'cues' (questions / main points / prompts / clues) in the margin on the left-hand side, then 'flesh out' the right-hand side with what you can remember about that cue. Then open your book and add to it. Then try again – you should be adding more and more information each time. [The Cornell Note Taking System](#)

Self-Quizzing: Look, cover, say, check, improve. As you approach the end of a revision session, write yourself a 10 question quiz (make it tough, not just facts but testing your understanding). At the start of the next revision session, give it a go. Focus your revision on only the bits you got wrong.



Part 5: Discussion Revision

Select & Justify: with your partner, challenge them to 'select' the most significant facts, ideas, concepts or terms in a topic, then get them to 'justify' why they have chosen these as the most significant. Try and convince them that they are wrong, by referring to alternative ideas that you think are more important – ensure you tell them why! Listen carefully to what they say and give them feedback at the end as to how convincing they are and whether in reality their answer might be right.

Just a Minute: Choose a topic or key term. Your partner has to talk for one minute about that topic/term. No pauses, hesitations, slips or repetitions are allowed. 3 'strikes' and they are out, leaving you to finish off the minute's worth of talking. If they go too far off topic, that counts as a 'strike' too. It must be relevant to the topic/term.

Be the Teacher: Choose a topic/idea that you find tough. Your partner has to teach it to you from scratch – ask them to explain themselves, question them when they rush over something to quickly and pick them up on anything you remain unclear on. You could also get a partner/sibling/parent to get you to explain the links between elements of your mind map.

Part 6: Tips for Parents/Carers

Be positive and let them know you are proud of them.

Praise them for their effort.

Reframe what they don't yet know as a positive: now they know where to focus.

Don't let them be overly critical of themselves just because everything isn't right, right now.

Encourage them to make a detailed revision plan with breaks and relaxation built in.

Ensure they have a quiet place where they are undisturbed.

Have regular meals together, opportunities for a conversation.

Get them to explain things they are learning, ask only sympathetic questions and clarifications.

Ensure they do some physical activity each day – even if just walking the dog / walking home from school

Don't let them judge themselves to their peers or siblings.

Be sympathetic to the fact that they have a lot of work to do and it is a stressful time for them.

Plan some nice surprises, things to look forward to: favourite food, take away, family films.

Part 7: What to Avoid

Avoid anything 'passive' – you need to make your brain think hard!

Do NOT listen to Music while you study - you could perform 60% better without ([Research Evidence](#))

Do NOT distract others – others will want to develop good study habits, even if you don't!

Do NOT simply read through or copy from exercise/text/revision books – it doesn't work!

Do NOT stick on the same subject or topic for endless hours.

Do NOT waste your time fidgeting/scribbling/drawing/talking – get into exam habits!

Do NOT just highlight 'key information' – do something active with it instead!

Do NOT revise the topics/subjects that you know already or are already excellent at!

Do NOT have your mobile in the same room as you – it can make you 20% less effective ([Research Evidence](#))

Part 8: Who to contact for help?

For any subject-specific queries, check in a book, look online, ask a friend and then if not, ask your teacher.

For any questions about the exams themselves, ask your form tutor.

The school councillor and school nurse are still available - email studentsupport@reading-school.co.uk to book an appointment.

You can use some amazing advice from the local NHS: [Exam stress | Children Young People and Families Online Resource \(berkshirehealthcare.nhs.uk\)](#)

For any concerns about your or your friend's wellbeing, ask your form tutor or Head of House in the first instance

If it is more serious or urgent, email one of Dr Evans, Mr Lloyd, Mr McGall, Mr Singh or Miss Stratford confidentially.

[No5 - Free Counselling Services - Reading](#) -Reading's young person's counselling centre, dedicated to providing free, confidential counselling and emotional support to anyone between the ages of 11-25. Contact by text 07984 357551 or Tel: 0118 9015668.

[Home - ARC \(arcweb.org.uk\)](#) - Wokingham's young person's counselling service contact them on Tel: 0118 9776710.

[Reading Relate* | Relate](#) -can offer children and young people's counselling, as well as family counselling for any young person who's having problems. Whether it's depression, mental health concerns, or issues with parents or people at school. Contact Tel: 0118 987 6161