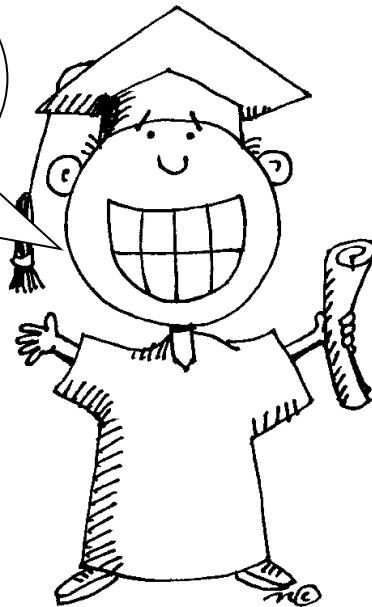


Revision Guidance

“If you think you can,
you can,
if you think you can't,
you can't!”
Henry Ford



Top Ten Revision Tips

1. Short bursts of revision (30-40 minutes) are most effective. Your concentration lapses after about an hour and you need to take a short break (5-10 minutes).
2. Find a quiet place to revise - your bedroom, school, the library - and refuse to be interrupted or distracted.
3. Make sure you don't just revise the subjects and topics you like. Work on your weaker ones as well.
4. Make your own revision notes because you will remember what you have written down more easily. Stick key notes to cupboards or doors so you see them everyday.
5. Rewrite the key points of your revision notes; read them out loud to yourself. We remember more than twice as much of what we say aloud than of what we merely read.
6. Use different techniques. Make your own learning maps, use post-it notes to write key words on, create flash cards. Record your notes on tape and listen to them back on your Walkman. Ask friends and family to test you. Use highlighter pens to mark important points. Chant or make up a rap song.
7. Practise on past exam papers or revision tests available on the web. Initially do one section at a time and progress to doing an entire paper against the clock.
8. You will need help at some stage, ask parents, older brothers and sisters, teachers or friends. If there is a teacher with whom you get on well at school ask for their e-mail address so you can clarify points you are unsure of whilst on study leave. Use websites specifically designed for revision.
9. **Don't get stressed out!** Eat properly and get lots of sleep!
10. **Believe in yourself and be positive.** If you think you can succeed you will; if you convince yourself that you will fail, that's what will probably happen.



Effective revision

To be effective, revision must be:

- **Active** - always work with a pen and paper, look for key points, test yourself. Never just sit down and read for a set period. Focus on tasks, not time. If you just read notes you'll only retain about 10% of the information.
- **Organised** - always ask yourself at the start of a study session "what do I want to have completed in this session?" Have a plan for what you want to cover this week and this month. Have an overview of the priority areas in each subject.

REVISION -

DO

1. Make a list of all the topics you need to revise:

Each subject that you are studying can be broken down into its constituent parts, with main sections, sub-topics and supporting details. A very useful start is to list out all the topics on the course according to this hierarchy and use this as a 'revision checklist' for the subject. Tick topics off as you've learnt them.

2. Create a realistic schedule.

3. Plan ahead by working backwards



4. Revise using your preferred learning style.

Have you tried..... mindmaps, diagrams, colour, mnemonics, recording yourself and listening back to it, rewriting your favourite song using your revision notes for a topic as the words, walking round (Great for kinaesthetic learners - try read out the positive effects of X standing on the left hand side of the room and negative effects on the right hand side).



Learning Styles

Know how you learn best and then you can revise in ways that suit your style.

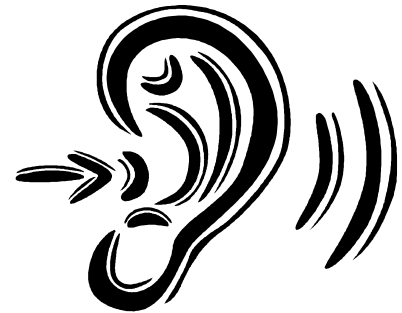


Visual learners prefer to:

- ❖ Draw pictures and diagrams
- ❖ Colour code their work
- ❖ Use different coloured paper, pens etc
- ❖ Use their own system of symbols etc
- ❖ Create images and scenes in their minds

Auditory learners prefer to:

- ❖ Say their work aloud
- ❖ Give presentations to an imaginary audience
- ❖ Record notes on a tape recorder
- ❖ Use silly noises to remember things
- ❖ Hear the information in their mind
- ❖ Play instrumental music



Kinaesthetic learners prefer to:

- ❖ Do actions when learning key facts
- ❖ Walk about when learning
- ❖ Find it harder to sit at a desk
- ❖ Add emotions and textures to exaggerate information
- ❖ Try to experience what they are learning

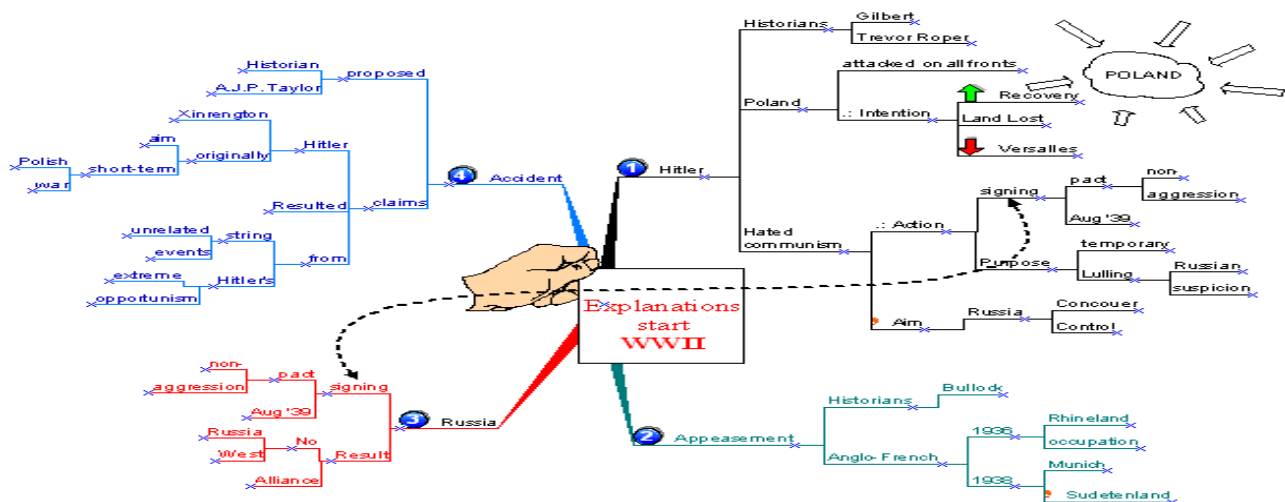
How should I revise?

Try one of these.....

A: MIND MAPS: Make mind-maps or association maps rather than taking linear notes. Mapping your notes by radiating key words out in a pattern of links from a central point will make best use of your memory. If you use colour and images on the maps, you'll be harnessing the power of both sides of your brain - creative and logical.

How to mind map:

1. Start with the theme in the middle of the page.
2. Then develop your main idea.
3. Each branch must relate to the branch before it.
4. Use only key words and images.
5. Key words must be be written along the branches.
6. Printing your key words makes them more memorable.
7. Use highlighters and coloured markers to colour code branches.



Making Your Notes Useful

In addition, good summary notes make retrieval of information quicker and easier.

- **Sort out your filing system**

If you haven't already done so, get your subject folders and notes organised immediately. Invest in some ring binders, dividers, plastic pockets, etc.

- **Less is always more**

When writing notes, remember they should contain a summary, not an extensive repetition of what is in the textbook. Don't crowd the page

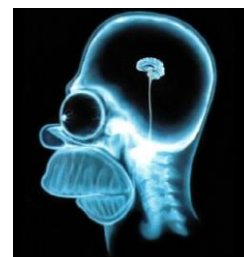
- **Make your notes visual**

Ensure your notes have a memorable appearance so that you can recall them easily. Use illustrations, diagrams, graphs, colours, and boxes ('a picture is worth a thousand words').



Improving Memory

We often blame our memory for poor academic performance ("I'm no good at remembering names / dates / rules / verbs / characteristics") when really we should be addressing our faulty input and storage system.



- **Repetition:** Studies indicate that 66% of material is forgotten within seven days if it is not reviewed or recited again by the student, and 88% is gone after six weeks. Don't make life harder for yourself - build in a brief daily and weekly review of material covered. It will save you having to re-learn material from scratch!

Looking over a topic every now and then will help to keep it in the memory, taking away the need to cram before exams.

Make a summary of the work and look over it ten minutes later, the next day, the next week and then the next month for a few minutes each time.

20 minutes is needed for the mind to get into the rhythm of and flow of the material. Any more than 40 minutes spent memorising means that memory declines to a point where it is no longer valuable.

The answer in revision lessons therefore is to do 30 minutes with a 5-minute stretch break and then review the topic.

After a one hour memorising session:

10 minutes later revise the topic for 10 minutes

1 day later revise the topic for 5 minutes

1 week later revise the topic for 2-5 minutes

1 month later revise the topic for 2-5 minutes

Before exams revise the topic as required.

Each time knowledge is reinforced; it enters deeper into the long-term memory and becomes more stable.

Some key terms used in examination questions

Analyse Explore the main ideas of the subject, show they are important and how they are related.	Distinguish Explain the difference.
Calculate Find out using mathematics.	Enumerate Make a list of the points under discussion.
Compare Show the similarities (but you can also point out the differences).	Explain Describe, giving reasons and causes.
Conclude Decide after reasoning something out.	Evaluate Give an opinion by exploring the good and bad points. It's a bit like asking you to assess something. Attempt to support your argument with expert opinion.
Define Give the meaning. This should be short.	Identify Recognise, prove something as being certain.
Describe Give a detailed account.	Illustrate Show by explaining and giving examples.
Justify Give a good reason for offering an opinion.	State Write briefly the main points.
List An item-by-item record of relevant images. This would normally be in note form without any need to be descriptive.	Summarise Give the main points of an idea or argument. Leave out unnecessary details that could cloud the issue.

Helpful Science Websites

Educake - Set yourself quizzes to improve your factual knowledge

HGCSC Home Learning - Your teachers will be uploading lessons and resources

Oak Learning Academy - Watch and complete lessons on any topic

Biology

GcseVise www.gcsewise.com

Detailed summary of the knowledge requirements for Science at Key Stage 4 of the National Curriculum. Good for revision purposes but you have to pay to become a member to access further material.

Gondar Design Biology www.purchon.com/biology/index.html

Concentrated revision notes and diagrams covering Key Stage 4 Biology. Ideal for students studying the single subject at GCSE. Excellent for final examination revision.

Chemistry

Gcsewise www.gcsewise.com

Detailed summary of the knowledge requirements for Science at Key Stage 4 of the National Curriculum. Good for revision purposes but you have to pay to become a member to access further material.

Physics

www.gcsewise.com

Detailed summary of the knowledge requirements for Science at Key Stage 4. Good for revision purposes but you have to pay to become a member to access further material.

www.fp.physics.f9.co.uk/gcse.htm

This is aimed at GCSE students. It has a regularly updated feature with an article and accompanying test. There are also sample questions and answers.

Topics and Assessments

AQA - Combined Science GCSE Trilogy (8464)

The specification can be found here:

<http://filestore.aqa.org.uk/resources/science/specifications/AQA-8464-SP-2016.PDF>

There are **six papers** in total and this will gain you 2 GCSEs for the combined Science: 2 for biology, 2 for chemistry and 2 for physics these will all be taken at the **end of Year 11** in the Summer exams.

Each paper is 1hr 15mins – 70 marks (16.7% of the GCSE)

Biology Topics

Paper 1 – topics 1-4

- Cell biology
- Organisation
- Infection and response
- Bioenergetics

Paper 2 – topics 5-7

- Homeostasis and response
- Inheritance
- Variation & evolution
- Ecology

Chemistry Topics

Paper 1 – topics 1-5

- Atomic structure and the periodic table
- Bonding, structure & properties of matter
- Quantitative chemistry
- Chemical changes
- Energy changes

Paper 2- topics 6-10

- The rate and extent of chemical change
- Organic chemistry
- Chemical analysis
- Chemistry of the atmosphere
- Using resources

Physics Topics

Paper 1 – topics 1-4

- Energy
- Electricity
- Particle model of matter
- Atomic structure.

Paper 2 – topics 5-7

- Forces
- Waves
- Magnetism
- Electromagnetism