Aspire, Achieve & Respect

How to revise science

Your Specification is either:

- AQA GCSE Combined Science: Trilogy (8464) or
- AQA GCSE Separate Sciences: (9-1) Biology (8461) Chemistry (8462) Physics (8463)



Topics

Paper 1

Biology

Cell Biology

Organisation

Infection & Response

Bioenergetics

Chemistry

Atomic Structure & the Periodic Table

Bonding Structure & properties

Quantitative Chemistry

Chemical Changes

Energy Changes

Physics

Energy

Electricity

Particle model of matter

Atomic Structure

Paper 2

Biology

Homeostasis & Response

Inheritance, variation & Evolution

Ecology

Chemistry

The Rate & extent of chemical Change

Organic Chemistry

Chemical Analysis

Chemistry of the atmosphere

The Earth's resources

Using resources (Triple Only)

Physics

Forces

Waves

Magnetism and electromagnetism

Space Physics (Triple only)

What is the point of revision?

It is to ***remember*** things.

The best way to **remember** is through **cues**.

A cue is something that you associate with something else.

The first rule of revision:

Don't worry.

Worrying will put you off and stop you from doing anything at all.

Second rule of revision

Do not take the easy option and go over things that you already know.

This might make you feel better *(and boost your confidence)* but actually is of no benefit.

Third rule of revision

Look at the textbook or revision guide– this will often summarise what you need to know. The specification can be found on www.aqa.org.uk/subjects/ science.

Final Rule:

Plan your revision. There's no point in trying to cram too much in.

You know when your exam is. What will you need to cover by that date?

Revision timetable apps can be found in the play store and app store.

What should I revise?

Get a copy of the specification from the AQA website. Go through it line by line marking the things you need to go over. This may include things like:

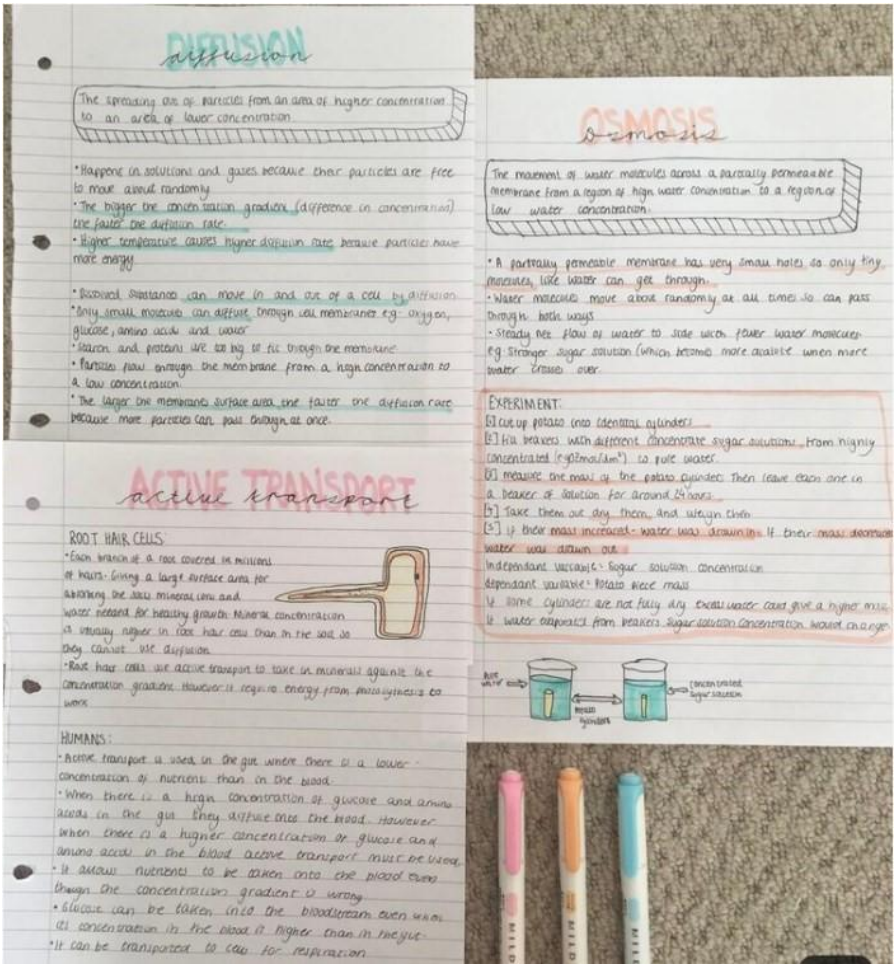
- Metals and their uses
- Crude oils and fuels
- Changes in the earth and its atmosphere

• Fundamental ideas in chemistry

Highlight the points you fail to remember when you go over the topic. There is no point in learning what you already know!

Be sure to practice examples of the calculations that come up.

Note making



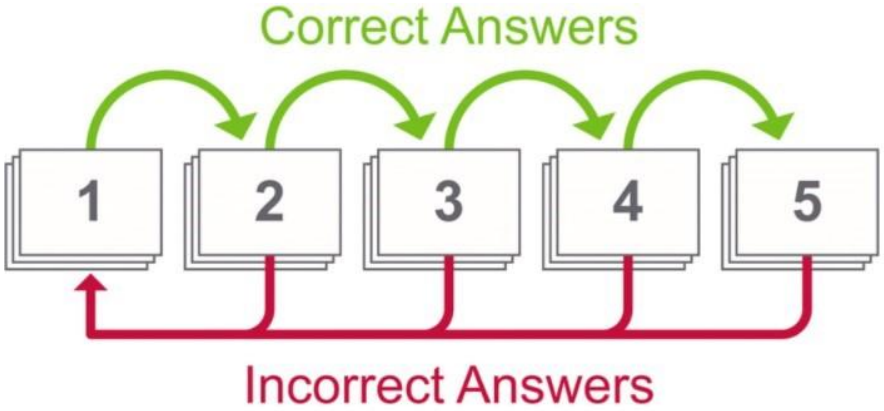
Making notes is absolutely crucial when revising for an exam. You should not, however, copy from your textbook word for word as this only helps you memorise what you have read and not learn it. Writing notes in your own words helps you recognise what you know and what you don't. Follow the syllabus as you revise and make notes, only moving on to the next section when you have fully understood the section you are currently studying. If anything within the syllabus is unfamiliar you can always refer back to your textbooks. Feel free to draw diagrams, note equations and scribble formulae etc. that make it easier for you to understand your notes. At the end of each section of your syllabus, run through a few practice questions and check your answers. Wrong answers are a good indication that you need to revise an area again. Don't fret if you don't get it all right on the first go, every time you go over the bits you have difficulty with, you'll remember a little bit more.

Flash cards

Flashcards that denote formulas, equations, facts etcetera can prove to be extremely handy when it comes to your revision. These can be displayed to reiterate things you have revised, or you could get friends or relatives to read from them, show you them, in return for you explaining them.

Flash cards are also essential for remembering the equations and definitions that you will need to know. If you do not know these basics you will lose marks on your exam paper.

When using flashcards, use the **Leitner system** to make the knowledge stick.
You can find details here:



https://www.youtube.com/watch?v=C20EvKtdJwQ

Sitting past papers

Most importantly it is recommended that you sit old papers as part of your revision. Aim to do all of them by the exams come around. There are only so many possible questions for them to ask! If a question comes up in several past exam papers, chances are it could be in yours. Past papers are a fabulous way of training your brain to think the same way as the examiner. Furthermore, they give you a good idea what to expect in your actual exam.
Always time yourself when sitting an old paper as in actual exam conditions you will be timed. Also, you should make sure you always write down your answers and don't complete the exam mentally. This will help you when checking your answers to see where you have gone wrong with any incorrect ones. It will also indicate areas that you need to do more revision. In your actual exam showing your workings are extremely important and you may lose marks if you do not do so.

Reward yourself

Positive reinforcement equates to confidence and you WILL need to go into your exam with as much confidence as possible. Writing things like "pass' or a grading such as "87%' on past exam papers you complete will give you a sense of great achievement. Keep track of your scores and watch your marks get higher and higher.

Resources

There are many places you can get support for your revision. Sometimes there are too many and it can become overwhelming. Here are some good places to start:

YouTube

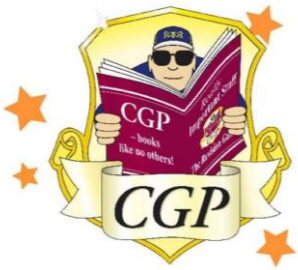
1. Malmsbury Science - required practicals
2. Cognito Science – general revision
3. Primrose Kitten – general revision

Focus eLearning

Simulated required practicals

Link: Focus E-Learning

Username:
student@theportsmouth41381
Password:
z2r0ryagw



CGP revision guides are available to purchase at low cost from The Portsmouth Academy.

The Portsmouth Academy

There are many resources provided by TPA, including:

- Past papers
- 6-mark question support
- Knowledge organisers