

AQA GCSE Trilogy Science: How to Succeed!

1. Master the Basics

Strong Knowledge: Turn your All Saints' Absolutes into flashcards and learn them – you cannot answer the 'application' questions if you do not know the basics.

Use Past Papers: Practice with past papers to get used to the types of questions that appear and identify any areas of weakness. Past paper questions can be accessed on the VLE → Science → GCSE Revision 2024_25 → Practice Exam Papers

Or [cognitoresources.org](https://www.cognitoresources.org) → GCSE → Qs by topic → Science → AQA

Key Definitions: Learn key terms and their definitions in detail. You'll need to recall them quickly in exams, so write them out repeatedly to solidify your knowledge.

2. Use a Variety of Revision Resources

Video Resources: Online platforms such as YouTube (e.g., [Freesciencelessons](https://www.youtube.com/channel/UCv8v8v8v8v8v8v8v8v8v8v8)) can break down complex topics into digestible chunks with visual aids.

Flashcards: Make flashcards for key facts. These can be great for quick reviews and active recall.

Apps: Use apps like Quizlet for flashcards and spaced repetition or use apps that simulate practice questions and tests. Just make sure they are AQA specific!

3. Master Practical Skills

Know the Core Practical Experiments: AQA GCSE Science requires knowledge of specific practical experiments. Make sure you understand how to carry out these experiments, what results you should expect, and how to interpret the data. You can look over these on 'Malmesbury Science' on YouTube. There is a sheet with QR codes for these videos in this pack.

4. Use Effective Revision Techniques

- **Active Recall & Spaced Repetition:** Revisit difficult topics multiple times. Actively recall information rather than passively reading, and space your revisions over time to improve memory retention.
 - **Mind Mapping & Diagrams:** Create mind maps or diagrams to visualize complex concepts, such as the reactivity series or the process of fractional distillation. This can help you make connections between different topics.
 - **Practice Exam Writing:** Don't just answer questions in your head—write them out. This improves your exam technique, helps you structure answers, and allows you to refine your writing style.
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5. Stay Calm and Focused

- **Time Management:** Manage your revision time wisely by focusing on weak areas but also reviewing what you are already confident in. Spread your revision over a long period of time, rather than cramming.
 - **Stay Consistent:** Consistency is key. Develop a revision schedule that works for you and stick to it. Focus on regular short revision sessions rather than long, unproductive cramming sessions.
 - **Take Breaks:** Don't overwork yourself. Regular breaks help you stay sharp and prevent burnout. Use the Pomodoro Technique or similar time-management methods.
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6. Understand How Marks Are Awarded

- **Command Words:** Understand the command words in exam questions, such as "Compare", "Explain", "Describe", "Calculate", and "Evaluate". Tailor your responses to match the command word to avoid missing marks.
 - **Show Your Working:** For calculations, show all your working steps. Even if you make an error, partial credit can often be awarded for the correct method.
 - **Be Concise:** Don't over-explain. Provide clear, accurate, and concise answers. Avoid unnecessary detail unless the question specifically asks for it.
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7. Stay Positive and Persistent

- **Growth Mindset:** Believe in your ability to improve. If you struggle with a topic, work through the difficulty and seek help when needed. Don't be discouraged by setbacks.
 - **Ask for Help:** If you don't understand something, ask your Science Teacher.
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Remember:

Achieving your grade in AQA GCSE Science is about hard work, dedication, and smart revision strategies. Focus on mastering the concepts, applying your knowledge to exam-style questions, and staying calm during your studies and exams. Best of luck!

Year 11 February Science Mock Revision Lists

Use these checklists to help you focus your revision

Foundation students you do not need to do the parts that are written in **bold** and are labelled:

- **Higher Only**

You can cross these out.

The Paper 2 Topics are:

Biology	Chemistry	Physics
B5 – Homeostasis & Response	C6 – The rate & extent of chemical change	P5 - Forces
B6 – Inheritance, variation & evolution	C7 – Organic chemistry	P6 - Waves
B7 - Ecology	C8 – Chemical analysis	P7 – Magnetism and electromagnetism
	C9 – Chemistry of the atmosphere	
	C10 – Using resources	

You will find the following resources on the VLE at either of these locations:

Subjects > Science>.GCSE Revision 2024_25

OR

Subjects > 00) Year 11 Mock Exams Feb 2025 > Science

- AQA Specifications
- Exam Papers
- Equation Sheet
- Revision sheets
- Knowledge Mats
- Paper 2 Checklists
- Revision Summaries
- Required Practicals

For the next half-term your retrieval quizzes will all be based on Paper 2 content to help you with your revision. They will be based on the Absolutes,

	Teacher A	Teacher A		Teacher B	Teacher B
w/b	Absolute				
13th Jan	B5 boxes 1-5	B5 boxes 6-11		C6 boxes 1-4	C6 boxes 5-6
20th Jan	P6 first page	P6 second page		C7 boxes 1-5	C8 boxes 1-5
27th Jan	B6 boxes 1-6	B6 boxes 7-13		P7 first page	P7 second page (higher only)
3rd Feb	P5 Forces	P5 Motion		C9 boxes 1-6	C10 boxes 1-5
10th Feb	B7 boxes 1-5	B7 boxes 6-10			

Biology paper 2

5. Homeostasis & Response;
 - Homeostasis, Human Nervous System, Human Endocrine System, Control of Blood Glucose Concentration, **Negative Feedback (Higher Only)**, Hormones in Human Reproduction, Contraception, **Treating Infertility (Higher Only)**,
6. Inheritance, Variation and Evolution;
 - Sexual and Asexual Reproduction, Meiosis, DNA and the Genome, Genetic Inheritance, Inherited Disorders, Sex Determination, Variation, Evolution, Selective Breeding, Genetic Engineering, Evidence for Evolution – fossils and antibiotic resistance, Extinction, Classification
7. Ecology;
 - Communities, Abiotic & Biotic Factors, Adaptations, Food Chains, Predator-Prey Graphs, Water & Carbon Cycles, Biodiversity, Waste Management, Land Use, Deforestation, Global Warming, Maintaining Biodiversity

Required Practicals;

- Reaction Times, Ecological Sampling

Chemistry Paper 2

6. The Rate and Extent of Chemical Change;
 - Calculating rates of reaction, Factors which affect the rates of chemical reactions, Collision theory and activation energy, Catalysts, Reversible reactions, Energy changes and reversible reactions, Equilibrium, **The effect of changing conditions (concentration, temperature and pressure) on equilibrium (Higher Only)**
7. Organic Chemistry;
 - Crude oil, hydrocarbons and alkanes, Fractional distillation and petrochemicals, Properties of hydrocarbons, Cracking and alkanes,
8. Chemical Analysis;
 - Pure substances, Formulations, Chromatography, Gas tests (H_2 , O_2 , CO_2 , Cl_2)
9. Chemistry of the Atmosphere;
 - Proportions of different in the atmosphere, The Earth's early atmosphere, How oxygen increased, How carbon dioxide decreased, Greenhouse gases, Human activities and greenhouse gases, Global climate change, Carbon footprint, Atmospheric pollutants from fuels – properties and effects
10. Using Resources;
 - Earth's resources, Sustainable development, Potable water, Waste water treatment, **Phytomining and Bioleaching (Higher Only)**, Life Cycle Assessments (LCAs), Ways of reducing resource use

Required Practicals;

- Rates of Reaction, Chromatography, Analysis and Purification of Water

Physics Paper 2

5. Forces;
 - Scalar & vector quantities, Contact and non-contact forces, Gravity, Resultant forces, Work done and energy transfer, Forces and elasticity, Distance and displacement, Speed, Velocity, Distance-Time graph, Acceleration, Newton's First, second and Third Laws, Forces and Braking – Factors affecting Stopping distances, & Reaction times, **Momentum (Higher Only)**
6. Waves;
 - Transverse and longitudinal waves, Properties of waves, Electromagnetic waves – Types, Properties and Uses
7. Magnetism and Electromagnetism;
 - Permanent and induced magnetism, Magnetic fields, Electromagnetism, **Fleming's left-hand rule (Higher Only)**, **Electric motors (Higher Only)**

Required Practicals;

- Extension of a Spring, Effect of Force on Acceleration of a constant mass ($F=ma$), Measuring frequency, wavelength and speed of waves, Infrared radiation and different surfaces (Leslie Cube)