



Year 11 Support Evening 2023: Science

Mr Hiscock/Mr Henderson

Aims of Session



1. To explain how students can help prepare for their summer examinations in either Combined Science or the Third Science options.
2. To provide parents with information on the format of these exams and practical advice on how to support your son/daughter over the next couple of months.

What are students studying in science?



All students have science as one of their **core subjects** up to year 11, hence it will make up **at least two** of their GCSE's and therefore is nearly always part of the 5 A*- C measure required by many employers and universities.

AQA Combined Science is the new name for the old Core/Additional Science and is a **dual award GCSE** - hence grades go from **1-1 (lowest) to 9-9 (highest)**, but grades can also be split 5-4 or 2-1. Students who fail to meet the minimum requirement will receive a U grade. **The Final Grade is based on the Total mark from all six papers.**

Unlike previous courses the grade achieved is based **solely on exam performance**, there is **no coursework** component.

For those that selected the **third science option** they will receive separate GCSE qualifications for **AQA Biology, Chemistry and Physics.**

As these are **separate qualifications** the grades are completely dependant on the performance of students in each individual subject area and will therefore receive **one grade** for each subject
e.g. Biology 5 Chemistry 3 Physics 7.

How are students assessed?



All students will do six science papers (2 biology, 2 chemistry and 2 physics)

Papers are tiered Foundation or Higher tier with Foundation aimed at 1-5 and Higher 5-9.

AQA Combined Science

Length: 1 hour and 15 minutes each.

Pupils must sit **all higher tier or all foundation** – (students cannot sit higher in one subject e.g. Biology but foundation in other two.)

For those that sit the **higher tier we must expect** them to achieve at **least 4-4** as if they fail to achieve this standard they will be classified as a **U grade**.

AQA Biology, Chemistry and Physics

Length: 1 hour 45mins each.

As these are separate awards students can sit Foundation tier papers for one subject and higher in other subject area.

Student who fail to achieve a Level 4 on the higher tier will be classified as a U grade.

Biology Paper 1 : 16th May am (Tuesday)



AQA Combined Science

What's assessed

Biology topics 1–4: Cell Biology; Organisation; Infection and response; and Bioenergetics.

How it's assessed

- Written exam: 1 hour 15 minutes
- Foundation and Higher Tier
- 70 marks
- 16.7% of GCSE

Questions

Multiple choice, structured, closed short answer, and open response.

AQA Biology

What's assessed

Topics 1–4: Cell biology; Organisation; Infection and response; and Bioenergetics.

How it's assessed

- Written exam: 1 hour 45 minutes
- Foundation and Higher Tier
- 100 marks
- 50% of GCSE

Questions

•Multiple choice, structured, closed short answer and open response.

Chemistry Paper 1 : 22nd May am (Monday)



AQA Combined Science

What's assessed

Chemistry topics 8–12: Atomic structure and the periodic table; Bonding, structure, and the properties of matter; Quantitative chemistry; Chemical changes; and Energy changes.

How it's assessed

- Written exam: 1 hour 15 minutes
- Foundation and Higher Tier
- 70 marks
- 16.7% of GCSE

Questions

Multiple choice, structured, closed short answer, and open response.

AQA Chemistry

What's assessed

Topics 1–5: Atomic structure and the periodic table; Bonding, structure, and the properties of matter; Quantitative chemistry; Chemical changes; and Energy changes.

How it's assessed

- Written exam: 1 hour 45 minutes
- Foundation and Higher Tier
- 100 marks
- 50% of GCSE

Questions

•Multiple choice, structured, closed short answer and open response.

Physics Paper 1 : 25th May am (Thursday)



AQA Combined Science

What's assessed

Physics topics 18–21: Energy; Electricity; Particle model of matter and Atomic structure.

How it's assessed

- Written exam: 1 hour 15 minutes
- Foundation and Higher Tier
- 70 marks
- 16.7% of GCSE

Questions

Multiple choice, structured, closed short answer, and open response.

AQA Physics

What's assessed

Topics 1–4: Energy; Electricity; Particle model of matter and Atomic structure.

How it's assessed

- Written exam: 1 hour 45 minutes
- Foundation and Higher Tier
- 100 marks
- 50% of GCSE

Questions

•Multiple choice, structured, closed short answer and open response.

Biology Paper 2 : 9th June **pm** (Friday)



What's assessed

Biology topics 5–7: Homeostasis and response; Inheritance, variation and evolution; and Ecology.

What's assessed

Topics 5–7: Homeostasis and response; Inheritance, variation and evolution; and Ecology.

How it's assessed

- Written exam: 1 hour 15 minutes
- Foundation and Higher Tier
- 70 marks
- 16.7% of GCSE

How it's assessed

- Written exam: 1 hour 45 minutes
- Foundation and Higher Tier
- 100 marks
- 50% of GCSE

Questions

Multiple choice, structured, closed short answer, and open response.

Questions

- Multiple choice, structured, closed short answer and open response.

Chemistry Paper 2 : 13th June am (Tuesday)



AQA Combined Science	AQA Chemistry
What's assessed Chemistry topics 13–17: The rate and extent of chemical change; Organic chemistry; Chemical analysis; Chemistry of the atmosphere; and Using resources.	What's assessed Topics 6–10: The rate and extent of chemical change; Organic chemistry; Chemical analysis; Chemistry of the atmosphere; and Using resources.
How it's assessed <ul style="list-style-type: none">•Written exam: 1 hour 15 minutes•Foundation and Higher Tier•70 marks•16.7% of GCSE	How it's assessed <ul style="list-style-type: none">•Written exam: 1 hour 45 minutes•Foundation and Higher Tier•100 marks•50% of GCSE
Questions Multiple choice, structured, closed short answer, and open response.	Questions <ul style="list-style-type: none">•Multiple choice, structured, closed short answer and open response.

Physics Paper 2 : 16th June am (Friday)



AQA Combined Science	AQA Physics
What's assessed Physics topics 22-24: Forces; Waves; and Magnetism and electromagnetism.	What's assessed Topics 5–8: Forces; Waves; Magnetism and electromagnetism; and Space physics. *
How it's assessed <ul style="list-style-type: none">•Written exam: 1 hour 15 minutes•Foundation and Higher Tier•70 marks•16.7% of GCSE	How it's assessed <ul style="list-style-type: none">•Written exam: 1 hour 45 minutes•Foundation and Higher Tier•100 marks•50% of GCSE
Questions Multiple choice, structured, closed short answer, and open response.	Questions Multiple choice, structured, closed short answer and open response.

Preparing for exams



1. Key message is plan ahead – try to set a revision timetable and be specific with what you are going to revise e.g. Biology – Homeostasis
2. Test yourself using flash cards or exam questions.
3. Space repetition – don't just revise topics once make sure you revisit topics on a regular basis (drip –drip is more effective than one big session).
4. Do something active – don't just read/highlight notes. Try to convert ideas from one form into another e.g. mind map; reduce; teach your parents; prepare video clip; story board etc. **DON'T JUST READ YOUR NOTES.**
5. Use past papers and mark schemes.

GCSE Science Apps

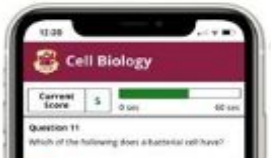
Revise for **AQA Science** with CGP's amazing **brand new Apps**. Perfect for **learning any time, anywhere!**



- Test yourself on a **specific topic** or the **whole subject**.
- Review your answers and see **full explanations** to make sure you really know your stuff.
- Download a **whole topic** for **FREE**. Full apps start from **just £1.99** — bargain!

You'll find full information on the system requirements and T&Cs [here](#).

100s of multiple choice questions
— plus **helpful explanations!**



Practise on the go — each test
lasts just **60 seconds**



Try to **beat your high scores** and
unlock **exciting achievements!**



Available for **Biology, Chemistry,**
Physics and **Combined Science**



The Learning Environment



Create the correct environment for learning :-

1. Peaceful environment (avoid distractions TV/leave the **Mobile phones in another room**).
2. Hydrate and fuel the brain.
3. Small amounts of information at a time (drip-drip) 20-30mins is top end of concentration for most students.
4. Review work regularly.
5. Allow time to de-stress and exercise.
6. Keep Motivated – set yourself a clear sensible targets .

Get Active



Doing something with the information you are trying to learn is much more effective than just reading or highlighting texts. Work books can be useful here as are the following techniques;

1. Reduce it - reduce a page of information into ten key words/phrases.
2. Change it - from one form into another e.g. text into pictures.
3. Connect it - to other ideas e.g. mind- maps.
4. Arrange it – into a flow diagram or sequence.
5. Simplify it – create flash cards of the key ideas (Questions/Answers).
6. Compare and contrast it e.g. Venn diagrams, Double bubble.

Review, review and review it again will aid retention – 90% of what we learn today will be forgotten tomorrow if not reviewed.

Visual Reminders



Flash cards are an excellent – try to use both images and words as combination often helps to use both hemispheres of our brain.

Packs of Postcards can be purchased from most newsagents.

Get them to teach you – involves higher order thinking and aids understanding.

- ask them open questions
- why, why, why?
- be positive
- make it part of a routine

Post its – can be used to highlight key ideas

- place around the house/bedroom to create visual reminders.

Resources



Exercise books

Students need to dig out their exercise books from year 9, 10 and 11.

Revision Guides

These are available for both Combined Science and Separate Biology, Chemistry and Physics.

Workbooks

These are also available for both Combined Science and Separate Biology, Chemistry and Physics.

Both of these can be ordered from school at reduced prices from CGP.

Please pick up order form and return to finance office by Friday 15th.

Useful Websites



Exam Board

<http://www.aqa.org.uk/subjects/science/gcse> Syllabus and specimen papers with mark schemes.

Self Help Videos

<https://classroom.thenational.academy/subjects-by-key-stage/key-stage-4>

<http://freesciencelessons.co.uk/revise/> Some revision techniques and science topics.

<https://www.youtube.com/user/ChrisThorntonUK> Range of common topics reviewed and explained.

Useful Revision websites

<https://www.bbc.co.uk/education/levels/z98jmp3> Range of revision notes and self mark tests.

<https://revisionvideos.com/> Website that requires an account but appears to be free of charge.

