

# GCSE Science- Combined Award

*"We will always have STEM with us. Some things will drop out of the public eye and will go away, but there will always be science, engineering, and technology. There will always, always be mathematics."*

**Katherine Johnson- NASA scientist**

## Course Overview

Scholars who study GCSE Combined Science, will be provided with the knowledge that enables them to understand the world and make sense of the Science that they come across in everyday life. Through studying this course, scholars will develop a body of foundational knowledge that will encourage them to be curious and excited by natural phenomena, whilst also enabling them to link their learning to other observations. By studying GCSE Science, scholars will come to appreciate what Science can tell them about themselves, the environment, and the Universe.

GCSEs in Combined Science will allow progression to several A-Level and college courses. The course provides a solid foundation of knowledge and understanding in the subject, whilst also developing practical skills.

## What are the topics I will study?

- Chemistry - Atoms and the Periodic table, Bonding, Quantitative Chemistry, Chemical Changes, Energy changes, Rates of reaction, Organic Chemistry, Chemical analysis, Atmosphere and Using Resources.
- Biology - Cells, Organisation, Infection and Disease, Bioenergetics, Homeostasis, Evolution, Inheritance and Selection and Ecology.
- Physics - Energy, Electricity, Particle Theory, Atomic Structure and Radioactivity, Forces, Waves, Magnetism and Electromagnetism.

## What skills and knowledge will I develop?

Throughout this course, scholars will develop their scientific thinking and their experimental skills. Scholars will plan experiments to make observations and to test their hypothesis. They will make and record observations using a range of apparatus and will evaluate methods and suggest appropriate improvements.

## Further reading

[AQA | Science | GCSE | Combined Science: Trilogy](#)

## Qualification Details

- **Qualification:** GCSE
- **Exam Board:** AQA
- **Specification:** 8464 (Trilogy)
- Included in the EBACC award

## Assessment Pathway

AQA Trilogy GCSE (9–1) in Combined Science consists of six externally examined papers at the end of the course. These are available at foundation tier (grades 1 to 5) and higher tier (grades 4 to 9).

Each paper consists of a total of 70 marks. The six papers include: two Biology papers, two Chemistry papers and two Physics papers.

Each paper is 1 hour and 15 minutes in duration and consists of different question styles, including multiple-choice questions, short answer questions, calculations and extended open-response questions. They examine fact recall, application of understanding, evaluation, practical apparatus, and techniques and working scientifically skills.

Practical skills are assessed through the written assessment in the final exams. The content of the course includes 21 required practicals in class and will also be examined in the final exams.

## Possible Careers

Scholars could follow a wide range of career opportunities beyond studying Science. These could include becoming a: Zoologist, Doctor, Forensic Scientist, Paramedic, Teacher, Veterinary Surgeon, Sport Scientist and an Engineer.

## Employability Skills

**Listening:** The receiving, retaining and processing of information or ideas.

**Problem Solving:** The ability to find a solution to a situation or challenge.

**Key Contact:** Ms R Fearn/Miss H Walker F007