GCSE Separate Sciences

"Science is a way of thinking much more than it is a body of knowledge."

Carl Sagan
(1934-1996) – American astronomer

Course Overview
Scholars who study the contents of GCSE Separate Sciences 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 the Separate 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 Variation and Ecology.
- Physics - Energy, Electricity, Particle Theory, Atomic Structure and Radioactivity, Forces, Waves, Magnetism and Electromagnetism and Space Physics.

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 | Physics
AQA | Science | GCSE | Chemistry
AQA | Science | GCSE | Biology

Qualification Details

- **Qualification:** GCSE
- **Exam Board:** AQA
- ***Specification**: 8461, 8462, 8463*
- Included in the EBACC award

Assessment Pathway
Scholars who study Separate Science will achieve a separate GCSE in each of the three Sciences, one in Biology, one in Chemistry and a third in Physics. Their overall grade for each Science GCSE is calculated through examinations that will be sat at the end of the course.

The Separate AQA GCSE (9–1) in Biology, Chemistry and Physics consists of two externally-examined papers for each GCSE.

Each paper is one hour forty-five minutes long and consists of different question styles including: multiple-choice questions, short answer questions, calculations and extended open-response questions. These are available at foundation tier and higher tier. Each externally examined paper consists of a total of 100 marks.

Practical skills are assessed through the written assessment in the final Year 11 examinations. The content of the course includes 28 core practicals that will be studied in class and will 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.

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