



Quality of Education
Curriculum Intent Statement
Subject: Science



CURRIUCLUM VISION

There is only one Earth. The study of the 3 subjects within science helps us to understand and appreciate it in all its forms, and gives us the knowledge we need to live sustainably and protect it.

In science, we aim to equip students with the knowledge and skills to make scientifically informed decisions.

Some students will go on to become scientists, but all students will need scientific understanding and the skills of thinking scientifically to make decisions about their everyday lives.

Throughout the study of all the science disciplines, students will develop the skills of:

- Description
- Explanation
- Application
- Analysis
- Evaluation
- Observation
- Data manipulation
- Enquiry
- Team work and collaboration

CURRICULUM RATIONALE

Through the study of biology, students will understand how organisms function, maintain health and interact as part of an ecosystem in our environment. Observations and data manipulation from experiments underpin the understanding of how organisms survive. Students will learn how features are inherited and how we can use biotechnology to human advantage, whilst also protecting our environment.

Through the study of chemistry, students will understand at the atomic level why different chemicals react or do not react together. Students will also appreciate how the structure of a material determines its properties and uses. Mathematical analysis of equations and investigations underpins this understanding at a quantitative level. Students will learn about the use of the Earth's raw materials to resource everyday life and how we can use this knowledge to live a sustainable life.

Through the study of physics, students will understand the phenomena that govern our universe including forces that generate movement, the electricity and other types of energy that power our lives, and the electromagnetic waves that enable our communication systems. Mathematical modelling using equipment and investigations help us to observe these phenomena on a smaller scale in the laboratory. The understanding of these ideas is essential for mankind to solve the energy crisis on Earth.

At GCSE students either complete the AQA Dual Science Award GCSE or AQA Triple Science in Biology, Chemistry and Physics, links to the exam specification and revision material can be seen on the exams page of the school website.