

# **Science**

### Your daughter will already be following her KS4 Science course

### **Course Aims**

On this Science course students study aspects of Biology, Chemistry and Physics. It aims to develop scientific literacy and to enable students to engage in the world of science as both consumers and citizens. It prepares students for future roles within society as householder, parent and juror and to answer questions about how our bodies work, the technology in our pockets, threats to our environment and our place in the universe.

## What you will study

All students will study units of Biology, Chemistry and Physics which lead to 2 GCSE's in Combined Science in Year 11 or which form part of the three separate science GCSEs. Those students who choose to study Triple Science will have the same number of units but extra content in some units to gain 3 GCSEs.

### The units are:

**Physics** – Forces, energy, waves, electricity, magnetism and electromagnetism, particle model of matter, atomic structure and space physics (triple only).

**Biology** – Cell biology, organisation, infection and response, bioenergetics, homeostasis and response, inheritance, variation and evolution, ecology.

**Chemistry** – Atomic structure and the periodic table, bonding, structure and the properties of matter, quantitative chemistry, chemical changes, energy changes, the rate of extent of chemical change, organic chemistry, chemical analysis, chemistry of the atmosphere, using resources.

#### Students will learn:

- Scientific facts and ideas, which will help them to understand the world around them.
- How to carry out a range of scientific investigations and to analyse the results.
- How to organise and present information clearly and use ICT.
- How to evaluate the validity of scientific evidence presented to them.
- How to deal with issues involving science which they may meet for example, mobile phone safety, decisions about childhood vaccinations and sustainable use of resources.

### The Facts

Subject	Level	Exam Board	Time Allocation	Assessment	Access to grades
Combined Science	GCSE	AQA (Trilogy)	5 lessons per week - Y9 6 lessons per week - Y10 & Y11	Six exams – two in biology, two in chemistry and two in physics. No separate coursework assessment. All papers are 1hr 15mins	Foundation Grades 5-1 Higher Grades 9-4
Biology Chemistry Physics	GCSE	AQA	5 lessons per week - Y9 6 lessons per week - Y10 & Y11	Two papers each for biology, chemistry and physics. No separate coursework assessment. All papers are 1hr 45 mins.	Foundation Grades 5-1 Higher Grades 9-4

For further information talk to Mr D Adams