

SCIENCE

Science is broken down into its three fundamental disciplines: Biology, Chemistry and Physics; each represents a diverse and fascinating exploration of the scientific method. These subjects approach our understanding of the physical world from differing perspectives.

Biology focuses on aspects of Physiology, Ecology, Anatomy, and Environmental science.

Chemistry focuses on aspects of the structure and behaviour of the substances that influence and shape the world around us.

Physics aims to explain fundamental laws of nature through the lens of both classical and quantum comprehension.

Pupils continuing with separate science subjects (either two or all three) are taught by subject specialists. These pupils will continue to follow the Pearson IGCSE 9-1 course for Biology, Chemistry or Physics depending upon their selection. This course will provide a broad and comprehensive educational experience which will set them up well for studying their chosen discipline to A Level if desired. A grade 7 or above would be recommended for those looking to take their science subject to A Level.

Pupils who wish to continue to study all three sciences but also wish to choose an additional option subject may select a Dual Science course at Higher level (worth two GCSEs) which covers Biology, Chemistry and Physics. A grade 7,7 or above in this course is a suitable foundation for studying a science at A level and this avenue does not therefore restrict a pupils' choices later.

If it is felt that a pupil may benefit from a science course which offers a reduced content (this is often indicated by relatively low attainment scores below a Grade 5 in multiple assessments across the three Sciences in Y9) then it would be highly recommended that they select the GCSE AQA Combined Science Trilogy course (known as Double Science) leading to two GCSE grades that reflect the combined performance over the three Sciences. This is a Foundation Level course. This

decision would be discussed with the pupil and his/her parents in advance of any decision.

The aims of these specifications are for the pupils to be able to:

- Acquire a systematic body of scientific knowledge and the skills needed to apply them in changing situations.
- Perform accurate experimental work and report it using the correct scientific method.
- Evaluate the benefits and drawbacks of scientific and technological development.
- Select, organise and present information clearly and logically, using the appropriate scientific terms.

There is no coursework component in any of the above selections.

Those taking IGCSE Biology, Chemistry or Physics will sit two written papers (for each respective Science), one of 2 hours in length (two thirds of the total mark) and one of 1 hour 15 minutes in length (one third of the total mark) resulting in a IGCSE grade with a maximum grading of 9.

Those taking the AQA Combined Science Trilogy course will sit a total of six papers each of 1 hour 15 minutes, two per Science resulting in two GCSE grades with a maximum grading of 5.

Mrs R E Hill
Head of Science