

Subject	Science
Curriculum Intent	I will have the knowledge, skills, and desire to understand and question the world around me.
Key Stage 3	<p>Students are taught in mixed ability teaching groups. Students follow our threshold curriculum and cover three cycles of teaching throughout the year. These three cycles are Biology, Chemistry, and Physics. These cycles cover a range of Science topics.</p> <p>In Year 7, students cover: topics on particles, acid and alkalis, and chemical reactions in Chemistry. Forces, space, and waves topics are covered in Physics. In Biology students cover topics on cells, human biology, and plants.</p> <p>In Year 8, students cover: Topics on electricity, magnetism, and energy in Physics. The periodic table, reactions of metals, and earth chemistry are covered in the Chemistry cycle. In Biology students study topics on plants, ecology, variation and inheritance.</p> <p>In Year 9, students cover: cells, microscopes, plants, and respiration in the Biology cycle. Elements, compounds, chemical equations, and atomic structure are covered in Chemistry. In Physics students study topics on energy resources, heat transfer, and changing state.</p> <p>Students are assessed formally at the end of each cycle, where they sit a Key Assessment Task (KAT) on the content of the previous cycle. Students are also assessed twice during each cycle when they complete Key learning tasks (KLTs) based on the practicals and the knowledge covered to date.</p>
Key Stage 4	<p>Students in KS4 follow the AQA GCSE Science specifications. Students who choose Triple Science in their option block will follow the separate Biology (8461), Chemistry (8462), and Physics (8463) GCSE courses, and will be awarded three separate GCSEs at the end of Year 11. All other students follow the AQA Combined Science: Trilogy course (8464), working towards two GCSE grades.</p> <p>Regardless of their option choices, students are taught Biology, Chemistry, and Physics weekly in separate double lessons and are taught by specialist teachers. They are generally taught in mixed groups, although there is some setting for ability to suit the needs of students taking Foundation or Higher tier examinations.</p> <p>As part of all courses, students must complete a range of 'Required Practical' activities in each subject. These are completed as part of the specific topics throughout the course and are examined at the end of the course.</p> <p>Students are assessed in six external examinations at the end of the two year course in Year 11, and their final grades are entirely determined by their exam performance.</p>