

<p><b>Curriculum Aims</b></p> <ul style="list-style-type: none"> <li>To encourage independent learners, listeners and thinkers</li> <li>To provide enjoyable courses, that will stimulate interest and enthusiasm in the subjects</li> <li>To provide the foundations for understanding the world around us, while developing a sense of natural curiosity and wonder.</li> <li>Be confident about trying new things in a safe environment.</li> <li>Be inspired by science and want to learn more</li> <li>To understand that science uses models to make sense of observed natural phenomena</li> <li>To develop investigative skills of hypothesis, observation, analysis and evaluation</li> </ul>	<p><b>What will you see in science lessons?</b></p> <ul style="list-style-type: none"> <li>Students will build on skills that they have learnt in Years 8 and 9</li> <li>Students will be encouraged to be inspired, motivated and challenged by the key ideas in science such as the concept of cause and effect, the phenomena of action at a distance and the drivers of change</li> <li>Students and teachers will use models to develop understanding of the key ideas</li> <li>Students will perform regular practical activities to develop their experimental skills to include using a prediction to plan an experiment, manipulate apparatus, make and record observations, present data appropriately with guidance and evaluate</li> </ul>	<p><b>What will you see in students' science books?</b></p> <ul style="list-style-type: none"> <li>Topic checklists</li> <li>Notes on key concepts</li> <li>Practise calculations</li> <li>Experiment write ups to include some of the following, hypothesis, methods and diagrams, results tables, presentation of data, conclusions and evaluations</li> <li>Worksheets</li> <li>Practise past paper questions</li> <li>Revision notes, mind maps or worksheets.</li> <li>Subject tests and self-evaluation forms.</li> </ul>
<p><b>Curriculum Content and sequencing</b></p> <p><b>Biology</b> Cells and microscopy Enzymes Movement through membranes Cell division and growth The nervous system</p> <p><b>Chemistry</b> States of Matter Separation techniques Atomic Structure Periodic Table Types of Binding</p> <p><b>Physics</b> Waves and the Electromagnetic Spectrum Space</p>	<p><b>What formative assessment will you see in science?</b></p> <ul style="list-style-type: none"> <li>Each subject, Biology, Chemistry and Physics is split into 40 lessons and at the end of the unit of work, students will sit a test worth 35 marks which contains exam style questions which are marked by the teacher. Students then complete a self-evaluation and set themselves targets for the next unit.</li> <li>At the end of Year 9, students will develop their practical skills and perform three core practicals that will appear in their GCSEs, the students are set homework with exam style questions.</li> <li>Students have a mock exam at the end of Y9.</li> </ul>	<p><b>What is the faculty currently reading and discussing and why?</b></p> <p>In the biology department: we are reading The Biologist - The Royal Society of Biology membership magazine. Published six times a year, this is an excellent source of classroom material.</p> <p>In the Physics department, we are reading Classroom Physics (a publication produced by the Institute of Physics) to keep us informed on the latest research on teaching concepts and provide us with new ideas for demonstrations.</p>