

<b>Science</b>							
<b>Intent</b>		<p><i>Science education provides the knowledge and the keys to understanding the physical world. The goal of this curriculum is to teach students to develop skills such as critical thinking, collecting and analysing data, investigation and problem solving.</i></p> <p><i>It encourages pupils to challenge, ask questions and train their perseverance when concepts learnt get challenging.</i></p> <p><i>They get insights into how their body works, how the mind processes, while learning about the mechanism of the universe and the evolution of life. As the world is changing around them, science education also shows how students can impact their surroundings by invoking change.</i></p> <p><i>This curriculum provides regular opportunities for practical work outdoor and in laboratory environment, backed by robust theories.</i></p> <p><i>As they move through the curriculum - working individually and within teams - students will learn how to value the application of science in their everyday life.</i></p> <p><i>If outreach is at the core of year 7's curriculum, the application of mathematics is slowly introduced each year. The student's journey starts by learning about the fundamentals of sciences. It ends in performing more complex scientific experiments with deeper understanding of the scientific processes.</i></p> <p><i>By the end of Year 11, students should have the opportunity to gain national qualifications in science, either Entry Level or GCSEs.</i></p>					
	<b>Autumn 1 (first few lessons)</b>	<b>Autumn 1</b>	<b>Autumn 2</b>	<b>Spring 1</b>	<b>Spring 2</b>	<b>Summer 1</b>	<b>Summer 2</b>
<b>Year 7 Biology</b>	<b>7.1 Baseline test Safety in the lab</b>	<b>B7.2 Cells</b>	<b>B7.2 Cells</b>	<b>B7.3 Body Systems</b>	<b>B7.3 Body systems</b>	<b>B7.4 Reproduction</b>	<b>B7.5 Healthy living</b>
<b>Chemistry</b>		<b>C7.2 Particles and their behaviour</b>	<b>C7.2 Particles and their behaviour</b>	<b>C7.3 Elements, compounds, and mixtures</b>	<b>C7.4 Reactions</b>	<b>C7.4 Reactions</b>	<b>C7.5 Acids and alkalis</b>
<b>Physics</b>		<b>P7.2 Energy</b>	<b>P7.3 Forces</b>	<b>P7.3 Forces</b>	<b>P7.4 Sound</b>	<b>P7.5 Light</b>	<b>P7.6 Space</b>
<b>Year 8 Biology</b>	<b>B8.1 Health and Lifestyle</b>		<b>B8.2 Ecosystems</b>		<b>B8.3 Adaptation &amp; inheritance</b>	<b>B8.3 Adaptation &amp; inheritance</b>	
<b>Chemistry</b>	<b>C8.1 The periodic table</b>	<b>C8.2 Separation techniques</b>		<b>C8.3 The Earth</b>	<b>C8.4 Metals and acids</b>	<b>C8.4 Metals and acids</b>	

Physics	<i>P8.1 Unit conversions</i>  <i>Motion and pressure</i>	<i>P8.2 Motion and pressure</i>	<i>P8.3 Energy</i> <i>P8.3 Energy</i>		<i>P8.4 Electricity &amp; magnetism</i>	
Year 9 Biology	<i>B9.1 Cells</i>		<i>B9.2 Organ systems</i>		<i>B9.3 Bioenergetics</i>	<i>B9.4 Forensics science</i>
Chemistry	<i>C9.1 Atomic structure</i>		<i>C9.2 The periodic table</i>	<i>C9.3 Structure &amp; bonding</i>	<i>C9.3 Structure &amp; bonding</i>	<i>C9.4 Forensics science</i>
Physics	<i>P9.1 Waves</i>	<i>P9.3 Particle model of matter</i>	<i>P9.4 Atomic structure</i>	<i>P9.5 Optics</i>	<i>P9.6 Forces &amp; motion</i>	
Year 10 Biology	<i>1 Cells</i>  <i>2 Organisation</i>	<i>3 Diseases</i>	<i>5 Biological responses</i>	<i>6 Inheritance</i> <i>4 Bioenergetics</i>	<i>6 Evolution</i>  <i>6 Genetic technologies</i>	<i>Revision</i>
Chemistry	<i>Chemical calculations</i>	<i>Chemical changes</i>	<i>Electrolysis</i>  <i>Separation techniques</i>	<i>12 Energy changes</i>	<i>13 Rates and equilibria</i>	<i>8 Atomic Structure &amp; the periodic table</i>  <i>9 Bonding, structure and the properties of matter:</i>  <i>Paper 1 &amp; 2 revision</i>
Physics	<i>18 Energy</i>	<i>19 Electricity</i>	<i>22 Forces</i>	<i>22 Motion</i>	<i>23 Waves</i>	<i>Particle Model of Matter</i>  <i>Atomic Structure</i>  <i>Paper 1 &amp; 2 revision</i>
Year 11 Biology	<i>7 Ecology</i>	<i>7 Ecology</i>	<i>Paper 1 Revision</i>	<i>Paper 2 Revision</i>	<i>Paper 1 &amp; 2 Revision</i>	<i>Exam</i>

Chemistry	<b>14 Crude oil &amp; fuels</b>  <b>15 Chemical analysis</b>	<b>16 The Earth's atmosphere</b>  <b>17 The Earth's resources</b>	<b>Paper 1 Revision</b>	<b>Paper 2 Revision</b>	<b>Paper 1 &amp; 2 Revision</b>	Exam
Physics	<b>24 Magnetism</b>	<b>Space</b>	<b>Paper 1 Revision</b>	<b>Paper 2 Revision</b>	<b>Paper 1 &amp; 2 Revision</b>	Exam
Rocket Project	<b>Rocket equation</b> $V_R = V_e \ln\left(\frac{M_T}{M_O}\right)$ <b>3<sup>rd</sup> Law of Newton</b> $Md = md$	<b>Combustion</b> Hydrocarbons – fuel and oxidizers  <b>Aerodynamics</b>	<b>Prediction of path</b> Projectile equation (Trigonometry KS4)  <b>Plan of launch</b>	<b>3D printing &amp; construction</b>	<b>Launch procedures</b> Security & logistics	<b>Report on launch</b>
Forensics Science CSI	<b>Crime Scene processing:</b>	<b>Chemical techniques:</b>	<b>Physical techniques:</b>	<b>Biological techniques:</b>	<b>CSI Crime Scene:</b>	<b>Report on CSI crime scene:</b>