



Year 8 is part of Key Stage 3, in Science. The course provides essential foundations in science which will allow pupils to be successful in their GCSE studies. Pupils are taught a series of Biology, Chemistry and Physics topics. To maximise the opportunity for pupils to use limited practical equipment, the modules are not taught all at the same time. All pupils will study every module but they may not be in the order presented below.

TERM	UNIT	WHAT WILL YOU BE LEARNING?	ARE YOU PREPARED FOR LEARNING?
1	B8.1 – Health and Lifestyle  C8.1 – The Periodic Table	<ul style="list-style-type: none"><li>• Nutrients and food tests</li><li>• Digestion and the digestive system</li><li>• Enzymes in digestions</li><li>• Drugs, alcohol and smoking.</li></ul> <ul style="list-style-type: none"><li>• Metals and non-metals</li><li>• Groups and periods</li><li>• The elements of groups 1, 7 and 0</li></ul>	Your exercise book will be clearly presented and all work will be complete.  Practical work will be written up and evidence of practical work will be kept in your exercise book.  You will come to lesson with stationery, books and relevant homework.
2	P8.1 – Electricity and magnetism  B8.2 - Ecosystems	<ul style="list-style-type: none"><li>• Static electricity</li><li>• Electric current</li><li>• Potential difference</li><li>• Series circuits</li><li>• Parallel circuits</li><li>• Magnets and electromagnets</li></ul> <ul style="list-style-type: none"><li>• Photosynthesis</li><li>• Leaves, the organ of photosynthesis</li><li>• Plant minerals</li><li>• Aerobic and anaerobic respiration</li><li>• Ecosystems, food chains and food webs</li></ul>	
3	C8.2 – Separation techniques	<ul style="list-style-type: none"><li>• Mixtures</li><li>• Solutions and solubility</li></ul>	

		<ul style="list-style-type: none"> <li>• Filtration</li> <li>• Evaporation and distillation</li> <li>• Chromatography</li> </ul>	
4	<p>P8.2 – Energy</p> <p>B8.3 – Adaptation and Inheritance</p>	<ul style="list-style-type: none"> <li>• Food and fuels</li> <li>• Energy and temperature</li> <li>• Energy transfer by conduction, convection and radiation</li> <li>• Energy resources</li> <li>• Work, energy and machines</li> <li>• Plant and animal adaptations</li> <li>• Predator prey relationships</li> <li>• Continuous and discontinuous variation</li> <li>• Inheritance</li> <li>• Natural selection</li> <li>• Extinction</li> </ul>	
5	<p>C8.3 – Metals and Acids</p> <p>P8.3 – Motion and Pressure</p>	<ul style="list-style-type: none"> <li>• Acids and metals</li> <li>• Metals and Oxygen</li> <li>• Metals and water</li> <li>• Metal displacement reactions</li> <li>• Metal extraction</li> <li>• Ceramics, polymers and composites</li> <li>• Calculating speed</li> <li>• Relative motion</li> <li>• Pressure in gases, liquids and solids</li> <li>• Turning moments</li> <li>• Centre of gravity</li> </ul>	
6	C8.4 – The Earth	<ul style="list-style-type: none"> <li>• The earth and its atmosphere</li> </ul>	

		<ul style="list-style-type: none"><li>• Sedimentary, Igneous and metamorphic rocks</li><li>• The rock cycle</li><li>• The carbon cycle</li><li>• Climate change</li><li>• Recycling</li></ul>	
<p>At the end of each module students are set revision exercises to complete before taking a test. At the end of each section there will be a synoptic test covering all material studied. At the end of the year there will be examination on all material studied so far.</p>			