

21/22: Year 7/8 Curriculum and Assessment Map

Year	7/8 Subject Science		
Intent	<p>The science curriculum is developed to enlighten students and provide them with a rich knowledge of the world around them.</p> <p>At key stage3, students will learn about the natural world and will begin to develop critical thinking about scientific principles and facts. They will learn to make links across the three disciplines of Physics, Chemistry and Biology, while developing and deepening their vocabulary in science. Students will explore how science works through practical activities, observations and through modelling scientific concepts. Students will embark on developing ideas and explanation for abstract concepts as well as developing reasonable explanation for unfamiliar context as they learn about the world they live in, in relation to life form, matter and energy.</p>		
	Implement	September - December	January - March
<p>Physics-Waves</p> <p>Wave effects: Sound waves, water wave sand energy Radiation and energy</p> <p>Waves properties: Modelling waves</p> <p>Physics-Forces</p> <p>Contact forces: Friction and drag Squashing and stretching Turning forces</p> <p>Pressure: Pressure in gas Pressure in liquid Stress on solids</p>		<p>Chemistry- Earth</p> <p>Climate: Global warming Carbon cycle Climate change</p> <p>Earth resources: Extracting metals Recycling</p> <p>Chemistry- Reaction</p> <p>Types of reaction: Atoms in chemical reactions Combustion Thermal decomposition Conservation of mass</p> <p>Chemical energy: Exothermic and endo thermic Energy level diagrams Bond energy</p>	<p>Biology -Ecosystem</p> <p>Respiration: Aerobic respiration Anaerobic respiration Biotechnology</p> <p>Photosynthesis: Leaves investigating photosynthesis Plant minerals</p> <p>Physics- Energy Work energy and machine</p> <p>Heating and cooling: Energy and temperature Energy transfer-particles Energy transfer-radiation and insulation</p>

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	<p>Chemistry-Matter Atoms, elements, and compound Chemical formulae Polymer</p> <p>Chemistry-The Periodic Table The elements of group 1 The elements of group 7 The elements of group 0</p> <p>Biology-Breathing Gas exchange Breathing Drugs Alcohol Smoking</p> <p>Biology-Digestion Nutrition Food test Unhealthy diet Digestive system Bacteria and enzymes in digestion</p> <p>Physics- Electromagnetics Magnets and magnetic fields Electromagnets Using electromagnets</p>	<p>Biology-Genes Evolution: Natural selection Charles Darwin Extinction Preserving biodiversity Inheritance DNA Genetics Genetic modification</p>
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Impact	<p>AP1 <i>End Autumn 2 Diagnostic Assessment</i></p>	<p>AP2 <i>End Spring 1 Diagnostic Assessment</i></p>	<p>AP3 <i>End Summer 1 Diagnostic Assessment</i></p>
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