## The English Martyrs Catholic School and Sixth Form College



Chemistry Year 8	Module 1	Module 2	Module 3
<u>Topic Theme and</u> <u>Intent</u>	Students learn about <b>The Periodic Table</b> – the method scientists use to classify and group <b>elements</b> according to <b>patterns</b> . Students will also look at <b>separation</b> <b>techniques</b> as ways of separating <b>mixtures</b> . These topics are studied so that students can see the patterns of <b>behaviour</b> found in the <b>materials</b> that make up their world, and how to separate materials that are mixed.	Students learn about <b>Materials</b> used in everyday life. Students will consider <b>metals</b> and their parts in <b>chemical</b> <b>reactions</b> . They will also consider materials like <b>ceramics</b> and <b>composites</b> , and their <b>usefulness</b> . This topic is studied so that students can describe how materials are used in everyday life and their use depends on their physical and chemical properties	Students learn about <b>The Earth</b> . Students look at the <b>structure</b> of the Earth and the <b>atmosphere</b> . They consider the different types of <b>rock</b> found on Earth, and how they are formed and recycled. Students also consider the <b>impact of humans</b> on the Earth and atmosphere. Students study this so they can understand the world around them and their impact on it.
<u>Knowledge</u> Skills	<ul> <li>Metals and non-metals</li> <li>The Periodic Table</li> <li>Groups on the periodic table.</li> <li>Solutions</li> <li>Separation Techniques</li> <li>Students will make observations from</li> </ul>	<ul> <li>Reactions of metals with acids, water and oxygen.</li> <li>Ceramics.</li> <li>Polymers.</li> <li>Composites.</li> <li>Carry out experiments, record</li> </ul>	<ul> <li>The Earth and atmosphere</li> <li>Rock types, formation, and the Rock Cycle.</li> <li>The Carbon Cycle.</li> <li>Climate Change and Recycling.</li> <li>Carry out observations of rocks to identify</li> </ul>
	chemical reactions, analyse this data and form conclusions.	observations and analyse the data to identify orders of reactivity and patterns of reactivity.	rock types and make links to rock formations.
<u>Literacy Links</u>	<ul> <li>Reading – Students will read about elements on the periodic table.</li> <li>Writing – Students start to communicate scientific ideas and concepts through writing.</li> <li>Oracy – Students start to use scientific vocabulary in discussion and question and answering.</li> </ul>	<ul> <li>Reading – Students will read about everyday materials.</li> <li>Writing – Students practise communicating scientific ideas and concepts through writing.</li> <li>Oracy – Students practise the use scientific vocabulary in discussion and question and answering.</li> </ul>	Reading – Students will read about the Structure of the Earth. Writing – Students will communicate scientific ideas and concepts through writing. Oracy – Students use scientific vocabulary in discussion and question and answering.
Essential Vocabulary	Group, period, halogen, noble gas, alkali metal, filtration , distillation, chromatography.	Oxides, salts, crystals, ceramics, polymers, composites.	Crust, mantle, core, sedimentary, igneous, metamorphic, weathering, cycle, climate, recycling.

