

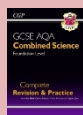
The English Martyrs Catholic School and Sixth Form College



Chemistry Year 11	<u>Module 1</u>	<u>Module 2</u>	<u>Module 3</u>
<u>Topic Theme and Intent</u>	Students review learning about atoms, ionic bonding and electrolysis which was disrupted by COVID. They also learn about the chemistry of the Earth and Atmosphere . This topic allows the students to understand the environmental challenges facing us today.	Students review learning about covalent bonding and crude oil which was disrupted by COVID. They also learn about the chemistry of the reversible reactions and equilibria . This topic allows the students to understand the choices made in careers in the chemical industry.	In this module students consolidate their learning and revise key concepts in the build up to their exams. Students look at specific areas identified in the mocks as weaknesses and complete broader revision of specific topics identified on an individual basis.
<u>Knowledge</u>	<ul style="list-style-type: none"> • Atomic structure and the formation of ionic compounds • Electrolysis • The atmosphere and climate change • Potable water 	<ul style="list-style-type: none"> • Covalent bonding • The separation and use of the products of crude oil. • Other organic molecules (Separates only) • Reversible reactions, Equilibria and Le Chatelier's principle 	<ul style="list-style-type: none"> • Atoms, bonding and structure. • Chemical reactions • Rates of reaction and equilibria • Analysis and the Earth's resources • Required practicals
<u>Skills</u>	Students complete practical work to determine the products of electrolysis. Students also carry out practical work to safely isolate pure water.	Students investigate the effect of changing conditions on the position of equilibrium. Students link these observations to Le Chatelier's principle.	Students practice their exam technique to better prepare them for their exams. They focus on command words and an understanding of mark schemes.
<u>Literacy Links</u>	<p>Reading – Students will read about the environmental issue of air pollution.</p> <p>Writing – Students start to communicate scientific ideas and concepts through writing.</p> <p>Oracy – Students start to use scientific vocabulary in discussion and question and answering.</p>	<p>Reading – Students will read about the uses of oil.</p> <p>Writing – Students practise communicating scientific ideas and concepts through writing.</p> <p>Oracy – Students practise the use of scientific vocabulary in discussion and question and answering.</p>	<p>Reading – Students will read about the key ideas they have covered.</p> <p>Writing – Students practise communicating scientific ideas and concepts through writing.</p> <p>Oracy – Students practise the use of scientific vocabulary in discussion and question and answering.</p>
<u>Essential Vocabulary</u>	Electron, electrode, electrolysis, electrolyte, potable, climate change, carbon footprint.	Crude oil, fractional distillation, alcohols, carboxylic acids, reversible reaction, equilibrium	Atoms, Bonding, Structure, Properties, Reactions, Rate, Equilibria, Atmosphere

Disciplinary Reading

CGP Books – GCSE Science COM and SEP, & Oxford Revise COM and SEP.



Reading for Pleasure

B. Goldacre - Bad Science



R. Munroe - What if?



M. Berners-Lee - There is No Planet B

