

YEAR 11 OVERVIEW 2020/21 - CHEMISTRY

	Term 1	Term 2	Term 3	Term 4	Term 5	Term 6
Year 11	Quantitative Chemistry	Organic Chemistry	Earth & The Environment	Earth & The Environment	Exam Preparation	
	<p>SEPARATE SCIENCE: Percentage yield and atom economy can also be calculated for chemical reactions.</p> <p>mol/dm³ can also be used as a unit of measurement for concentration of a solution.</p>	<p>The hydrocarbons in crude oil can be separated using fractional distillation.</p> <p>Some of the properties of hydrocarbons depend on the size of their molecules. These properties influence how hydrocarbons are used as fuels.</p>	<p>For 200 million years, the composition of the Earth's atmosphere has remained much the same as it is today. However, volcanic activity, the formation of oceans and the presence of life all played a part in changing the atmosphere before this time period.</p> <p>Greenhouse gases are present in the atmosphere and the amount of these has increased, largely due to human activity.</p> <p>Many scientists believe that increased human activity is contributing to an increase in the surface temperature of the earth.</p> <p>An increase in the average global temperature is a major cause of climate change.</p>	<p>The rising human population depend on the earth's natural resources for food, shelter, warmth and transport.</p> <p>Water is a natural resource; it can be made safe to drink or purified using a range of techniques such as distillation, filtration, sterilisation, desalination and reverse osmosis.</p> <p>The environmental impact of resource use in product manufacturing is evaluated through Life Cycle Assessments.</p> <p>Reducing the use of resources, reusing products and recycling materials can have a positive impact on the environment.</p>	<p>Extensive and explicit recall of knowledge to facilitate effective rehearsal of exam technique.</p> <p>Links between different sections of knowledge are embedded further.</p>	
	Chemical Methods	<p>Hydrocarbons can be broken down to produce smaller, more useful molecules in the process of cracking. The products of cracking are alkanes and alkenes.</p> <p>SEPARATE SCIENCE: Alkenes are hydrocarbons with the functional group C=C. Alcohols contain the functional group -OH. Carboxylic acids have the functional group -COOH.</p> <p>'Addition polymerisation' and 'condensation polymerisation' are two types of reaction in which polymers can be made.</p>				
	<p>A pure substance is a single element or compound, not mixed with anything else. A formulation, however, is a mixture – and one that has been designed as a useful product.</p> <p>Chromatography is a method used to separate some mixtures.</p> <p>Other chemical methods of analysis involve the identification of substances such as common gases.</p> <p>SEPARATE SCIENCE: Flame tests can be used to identify metal ions. Sodium hydroxide can also be used to identify some metal ions.</p> <p>Instrumental methods can also be used to detect and identify elements and compounds, for example: flame emission spectroscopy.</p>					