



Curriculum Overview for Chemistry

Year 11 Set 2

<p>Half Term 3: Organic chemistry.</p> <p>Substantive Knowledge:</p> <ul style="list-style-type: none"> <input type="checkbox"/> Identify the general formula for an alkane <input type="checkbox"/> Describe fractional distillation. <input type="checkbox"/> Describe the properties of hydrocarbons. <input type="checkbox"/> Explain the properties of hydrocarbons. <input type="checkbox"/> Describe cracking. <input type="checkbox"/> Explain why we do cracking. <input type="checkbox"/> Compare the reactivity of alkanes and alkenes. <p>Disciplinary Knowledge:</p> <ul style="list-style-type: none"> <input type="checkbox"/> Identify alkenes. <input type="checkbox"/> Identify the general formula for an alkene and alkane. <p>Using resources</p> <p>Substantive Knowledge:</p> <ul style="list-style-type: none"> ▪ HT- Explain bioleaching and Phytomining. ▪ HT- Evaluate alternative biological methods of extracting metals. <p>Disciplinary Knowledge</p> <ul style="list-style-type: none"> ▪ 		Skim and Scan of source information Decoding terms Etymology of key terms
		Alkanes, Alkenes, Catalytic cracking, Combustion, Complete combustion, Crude oil, Cracking, Fractional distillation, Homologous series, Hydrocarbons, Steam cracking Bioleaching, ore, phytomining
		Baseline Recall questions to start every lesson End of unit assessment
		Revision Card preparation for every lesson Repetition of use of revision cards for end of unit assessment Exam questions - application
		Skim and Scan of source information Decoding terms Etymology of key terms
		Desalination Displacement Finite resources Ground water Life cycle assessment (LCA) Potable water Raw materials Renewable resources Sterilisation Sustainable development
<p>Half Term 4: Using resources</p> <p>Substantive Knowledge:</p> <ul style="list-style-type: none"> ▪ Define potable water ▪ Define LCA ▪ Describe how to test for pure water. ▪ Describe how to make potable water ▪ Describe ease of obtaining potable water from waste, ground and salt water. ▪ Evaluate ways of reducing the use of limited resources. <p>Disciplinary Knowledge:</p> <ul style="list-style-type: none"> ▪ Evaluate ways of reducing the use of limited resources. ▪ Compare LCA for plastic and paper bags. 		Baseline Recall questions to start every lesson End of unit assessment
		Revision Card preparation for every lesson Repetition of use of revision cards for end of unit assessment Exam questions - application