









Curriculum Overview for Chemistry

Year 11

<p>Half Term 3: Chemical analysis</p> <p>Substantive Knowledge: Describe how we test for pure substances. Describe the use of formulation. Identify examples of formulations. Describe the chromatography required practical. Explain how paper chromatography separates mixtures. Describe the test for hydrogen. Describe the test for oxygen Describe the test for chlorine. Describe the test for carbon dioxide</p> <p>Disciplinary Knowledge: Calculate Rf values.,Intepret chromatograms, describe how to complete a chomatogram.</p>		Skim and Scan of source information Decoding terms Etymology of key terms
		Pure, Boiling point, Mixture, Formulation, Chromatography, Mobile phase, Stationary phase, Limewater, Litmus paper
		Recall questions to start every lesson Recall test Review sheet
		Revision Card preparation for every lesson Recall test Review sheet Repetition of use of revision cards for end of unit assessment
<p>Half Term 4: Chemistry of the atmosphere</p> <p>Substantive Knowledge: Describe scientist's theory on how the Earth's atmosphere developed. Identify the photosynthesis equation and link to the development of the atmosphere. Explain how the levels of carbon dioxide change over time. Describe greenhouse effect in terms of short and long wave radiation. Explain how human activities increase levels of carbon dioxide and methane and the impact of it. Describe how to decrease emissions of carbon dioxide and methane. Describe how carbon monoxide, carbon particles (soot), sulfur dioxide and oxides of nitrogen are produced by burning fuels. Explain the effects of carbon monoxide, carbon particles (soot) and sulfur dioxide.</p> <p>Disciplinary Knowledge: Use ratios, fractions and percentages to describe the Earth's atmosphere. Using resources unit 10</p> <p>Substantive Knowledge: Finite and renewable resources, Reusing and recycling, Lifetime carbon assessment, Potable water theory, Waste water treatment,</p> <p>Disciplinary Knowledge:</p>		Skim and Scan of source information Decoding terms Etymology of key terms
		Acid rain, carbon footprint, environmental implication, Fossil fuels, Global climate change, Global dimming, Greenhouse effect, Greenhouse gases, Particulates, Photosynthesis, Pollutants
		Recall questions to start every lesson Recall test Review sheet Paper 2 mock – unit 6,7 8, 9 and 10
		Revision Card preparation for every lesson Recall test Review sheet Repetition of use of revision cards for end of unit assessment

<p>Analysis of data, describing how to test for potable water, Understanding and responding to command terms, Applying concepts into different contexts</p>		
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