

Year 10 Chemistry

Learning Programme 4

<p>The LORIC skill focus for his LP is: INITIATIVE.</p> <p>The Moral Virtues focus for this LP are: INTEGRITY and GRATITUDE.</p> <p>Integrity - Having strong moral principles. I will show integrity by taking responsibility for my actions.</p> <p>Gratitude - Feeling and expressing thanks. I will show gratitude by saying please and thank you.</p>		<p>Literacy Non-Negotiables:</p> <ul style="list-style-type: none"> • Capital letters must be used at the start of sentences and for the first letter of proper nouns • Full stops must be used at the end of a sentence • Question marks must be used at the end of a question • Apostrophes should only be used for possession or omission • Days of the week and months must be spelled correctly • Key words must be spelled correctly • Vocabulary to be taught using the Frayer model
<p>What will I be learning about in this Learning Programme?</p> <p>We are learning how metals react and can be extracted. We are also learning how acids react with different bases and the products they form.</p>		
<p>Where have I seen this learning before?</p> <p>KS3 - Acids and Alkalis. Also builds on the ionic bonding topic from LP2</p> <p>What could I use it for?</p> <p>Redox reactions and energy changes at KS5</p>		
<p>In LP4.1, I will know:</p> <p>how to explain how metals and acids react with each other and the names of the different products formed; how to formulate ionic equations.</p>	<p>09/03/26 - (WK 2)</p> <p>Frayer Model Words</p> <p>Neutralisation</p>	<p>Homework</p> <p>Sparx Homework Task</p>
<p>In LP4.2, I will know:</p> <p>how to construct half equations that show oxidation and reduction in different species; how acids and bases react with each other and the variety of products formed; how to write the reaction between acids and bases using ionic formula.</p>	<p>16/03/26 - (WK 1)</p> <p>Frayer Model Words</p> <p>Base</p>	<p>Homework</p> <p>Sparx Homework Task</p>
<p>In LP4.3, I will know:</p> <p>how to conduct the practical - Preparation of a pure, dry sample of a soluble salt from an insoluble oxide or carbonate, using a Bunsen burner to heat dilute acid and a water bath or electric heater to evaporate the solution.</p> <p>Extended Task.</p>	<p>23/03/26 - (WK 2)</p> <p>Frayer Model Words</p> <p>Soluble</p>	<p>Homework</p> <p>Sparx Homework Task</p>
<p>In LP4.4, I will know:</p> <p>how to explain the difference between strong and weak acids; how to use the pH scale to describe the difference between strong and weak acids; how to explain the difference between strong and weak acids based on [H⁺] concentration</p>	<p>13/04/26 - (WK 1)</p> <p>Frayer Model Words</p> <p>Concentration</p>	<p>Homework</p> <p>Sparx Homework Task</p>
<p>In LP4.5, I will know:</p> <p>how to explain the process of electrolysis; how electrolysis occurs in molten compounds and in solutions.</p>	<p>20/04/26 - (WK 2)</p> <p>Frayer Model Words</p> <p>Electrolysis</p>	<p>Homework</p> <p>Sparx Homework Task</p>
<p>In LP4.6, I will know:</p> <p>how electrolysis of aluminium oxide occurs; how to conduct the required practical - Investigate what happens when aqueous solutions are electrolysed using inert electrodes. This should be an investigation involving developing a hypothesis.</p> <p>Extended Task.</p>	<p>27/04/26 - (WK 1)</p> <p>Frayer Model Words</p> <p>Electrodes</p>	<p>Homework</p> <p>Sparx Homework Task</p>
<p>In LP4.7, I will know:</p> <p>how to explain the difference between endothermic and exothermic reactions; how to conduct the calorimetry required practical.</p>	<p>04/05/26 - (WK 2)</p> <p>Frayer Model Words</p> <p>Exothermic</p>	<p>Homework</p> <p>Sparx Homework Task</p>
<p>Resources to support learning:</p> <p>Resource booklet, Knowledge organiser, BBC GCSE Bitesize, Free GCSE Science videos on YOUTUBE. COGNITO Science</p>		
<p>FFET Award Challenge for this Learning Programme:</p> <p>LP4 Year 10 Science: Create a revision resource on a topic of your choice</p>		

PRT Task 1

PRT Task 2