

## Year 10 Chemistry

### Learning Programme 5

<p>The LORIC skill focus for this LP is: COMMUNICATION. The Moral Virtues focus for this LP are: COURAGE and HUMILITY.</p> <p>Courage - Acting with bravery and overcoming fears. Humility - Having a modest view of oneself.</p> <p><b>What will I be learning about in this Learning Programme?</b> How energy is transferred in a chemical reaction, how different factors affect the rate of a reaction.</p> <p><b>Where have I seen this learning before?</b> You will have studied chemical reactions at KS3.</p> <p><b>What could I use it for?</b> Rates and equilibria at KS5.</p>		<p><b>Literacy:</b></p> <ul style="list-style-type: none"> <li>Capital letters must be used at the start of sentences and for the first letter of proper nouns</li> <li>Full stops must be used at the end of a sentence</li> <li>Question marks must be used at the end of a question</li> <li>Apostrophes should only be used for possession or omission</li> <li>Days of the week and months must be spelled correctly</li> <li>Key words must be spelled correctly</li> </ul>
<p><b>In LP5.1, I will know:</b> how to explain the difference between endothermic and exothermic reactions and draw appropriate reaction profiles; how to complete the calorimetry required practical.</p>	<p><b>11/05/26 - (WK 1)</b></p> <p><b>Key Vocabulary</b></p> <p>Exothermic</p>	<p><b>Homework</b></p> <p>Sparx Learning Homework Tasks</p>
<p><b>In LP5.2, I will know:</b> how to calculate bond energies; how to describe and explain the application of Cells, batteries, and hydrogen fuel cells (Triple Only).</p>	<p><b>18/05/26 - (WK 2)</b></p> <p><b>Key Vocabulary</b></p> <p>Reaction</p>	<p><b>Homework</b></p> <p>Sparx Learning Homework Tasks</p>
<p><b>LP5 RLW, I will:</b> review my learning, recalling and applying key knowledge, and focus on closing any gaps in my knowledge.</p>	<p><b>01/06/26 - (WK 1)</b></p>	<p><b>Homework</b></p> <p>Sparx Learning Homework Tasks</p>
<p><b>In LP5.3, I will know:</b> how to calculate the rate of a reaction; how to calculate the rate of a reaction using tangents (H tier only).</p> <p>Extended Task.</p>	<p><b>08/05/26 - (WK 2)</b></p> <p><b>Key Vocabulary</b></p> <p>Tangent</p>	<p><b>Homework</b></p> <p>Sparx Learning Homework Tasks</p>
<p><b>In LP5.4, I will know:</b> how rates of a reaction are affected by; surface area, temperature, concentration; how to explain this by linking to collision theory; how to undertake the two concentration required practical's (volume of gas and turbidity).</p>	<p><b>15/06/26 - (WK 1)</b></p> <p><b>Key Vocabulary</b></p> <p>Product</p>	<p><b>Homework</b></p> <p>Sparx Learning Homework Tasks</p>
<p><b>In LP5.5, I will know:</b> how rates of a reaction are affected by pressure and catalysts; how to explain this by linking to collision theory.</p>	<p><b>22/06/26 - (WK 2)</b></p> <p><b>Key Vocabulary</b></p> <p>Catalyst</p>	<p><b>Homework</b></p> <p>Sparx Learning Homework Tasks</p>
<p><b>In LP5.6, I will know:</b> how we can make changes to equilibrium position by; adding/removing reactants; how we can make changes to equilibrium position by; adding/removing products.</p> <p>Extended Task.</p>	<p><b>29/06/26 - (WK 1)</b></p> <p><b>Key Vocabulary</b></p> <p>Equilibrium</p>	<p><b>Homework</b></p> <p>Sparx Learning Homework Tasks</p>
<p><b>In LP5.7, I will know:</b> how we can make changes to equilibrium position by; adding/removing reactants or products, changing the temperature and changing the pressure.</p>	<p><b>06/07/26 - (WK 2)</b></p> <p><b>Key Vocabulary</b></p> <p>Pressure</p>	<p><b>Homework</b></p> <p>Sparx Learning Homework Tasks</p>
<p><b>Resources to support learning:</b> EPC Knowledge organiser, Sparx science, Synergy and GCSE Bitesize Chemistry rates of reaction.</p>		
<p><b>FFET Award Challenge for this Learning Programme:</b> LP5 - conduct a kitchen experiment to determine how different factors can affect everyday reactions. Write down your method and findings in a scientific way and present to the class.</p>		

