

Year 10 Combined Science Chemistry/Physics Learning Programme 5

<p>The LORIC skill focus for his 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>What will I be learning about in this Learning Programme? the measurement of amounts in chemistry, ensuring that the Law of Conservation of Mass is followed in every reaction, and explores how energy is transferred during chemical reactions.</p> <p>Where have I seen this learning before? You will have studied basic chemical calculations at KS3.</p> <p>What could I use it for? The application of Chemistry and chemical calculations is fundamental for anyone wanting to study most science degrees.</p>		<p>Literacy:</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
<p>In LP5.1, I will know:</p> <p>how to work out Ar from the periodic table and use this to calculate Mr and using this, calculate percentage mass; how to use ideas of mole to calculate mass and Mr.</p>	<p>11/05/26 - (WK 1)</p> <p>Key Vocabulary</p> <p>Mole</p>	<p>Homework</p> <p>Sparx Learning Homework Tasks</p>
<p>In LP5.2, I will know:</p> <p>how to balance chemical equations in terms of moles of reactants and products (HIGHER); how to explain how the amount of product formed will change if the amount of limiting reactant used is changed (HIGHER).</p>	<p>18/05/26 - (WK 2)</p> <p>Key Vocabulary</p> <p>Reactants</p>	<p>Homework</p> <p>Sparx Learning Homework Tasks</p>
<p>LP5 RLW, I will:</p> <p>review my learning, recalling and applying key knowledge, and focus on closing any gaps in my knowledge.</p>	<p>01/06/26 - (WK 1)</p> <p>Key Vocabulary</p> <p>Review</p>	<p>Homework</p> <p>Sparx Learning Homework Tasks</p>
<p>In LP5.3, I will know:</p> <p>how to use the concentration of a solution to calculate the mass of solute in a given volume; how to describe that if a reaction transfers energy to the surroundings it is exothermic and the temperature of the surroundings will increase, or if a reaction absorbs energy from the surroundings it is endothermic and the temperature of the surroundings will decrease.</p> <p>Extended Task.</p>	<p>08/05/26 - (WK 2)</p> <p>Key Vocabulary</p> <p>Exothermic</p>	<p>Homework</p> <p>Sparx Learning Homework Tasks</p>
<p>In LP5.4, I will know:</p> <p>Year 10 Mock exam week</p>	<p>15/06/26 - (WK 1)</p> <p>Key Vocabulary</p> <p>Assessment</p>	<p>Homework</p> <p>Sparx Learning Homework Tasks</p>
<p>In LP5.5, I will know:</p> <p>Year 10 Mock exam week</p>	<p>22/06/26 - (WK 2)</p> <p>Key Vocabulary</p> <p>Assessment</p>	<p>Homework</p> <p>Sparx Learning Homework Tasks</p>
<p>In LP5.6, I will know:</p> <p>how to use reaction profiles to show the relative energies of the reactants and products in reactions; how to (HIGHER ONLY) explain why reactions are exothermic or endothermic in terms of the amount of energy transferred when bond breaking compared to the amount of energy transferred when bond making.</p> <p>Extended Task.</p>	<p>29/06/26 - (WK 1)</p> <p>Key Vocabulary</p> <p>Reaction profile</p>	<p>Homework</p> <p>Sparx Learning Homework Tasks</p>
<p>In LP5.7, I will know:</p> <p>the structure of the atom and how this has developed over time; how to identify isotopes and how some of these can be radioactive and give off radiation.</p>	<p>06/07/26 - (WK 2)</p> <p>Key Vocabulary</p> <p>Isotopes</p>	<p>Homework</p> <p>Sparx Learning Homework Tasks</p>
<p>Resources to support learning: EPC Knowledge organiser, Synergy, Sparx science, GCSE Combined Science BBCBitesize Quantitative Chemistry.</p>		
<p>FFET Award Challenge for this Learning Programme: Watch a documentary on Chernobyl and write a brief summary. Share with class.</p>		

