

## Year 12 Applied Science SRS Learning Programme 2

<p>The LORIC skill focus for his LP is: ORGANISATION The Moral Virtues focus for this LP are: COMPASSION and HONESTY Compassion - the quality of feeling pity and concern for the sufferings or misfortunes of others. Honesty - the quality of being truthful.</p> <p><b>What will I be learning about in this Learning Programme?</b> You are learning about different properties of chemicals and why these different properties are present, as well as the characteristics of waves.</p> <p><b>Where have I seen this learning before?</b> You will have learnt about the Periodic Table in GCSE Chemistry and about waves in GCSE Physics.</p> <p><b>What could I use it for?</b> You will use this knowledge again if you study a BSc (Hons) in Chemistry or do an apprenticeship as a communications engineer.</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 LP2.1, I will know:</b></p> <p>how to describe and explain different types of intermolecular forces; how to write and balance symbol equations.</p>	<p><b>21/10/24 - (WK 2)</b></p> <p><b>Key Vocabulary</b></p> <p>intermolecular</p>	<p><b>Homework</b></p> <p>Exam practice on writing balanced equations.</p>
<p><b>In LP2.2, I will know:</b></p> <p>how to use balanced symbol equations to work out moles, molar masses and molarities; how to calculate empirical formula.</p>	<p><b>04/11/24 - (WK 1)</b></p> <p><b>Key Vocabulary</b></p> <p>moles</p>	<p><b>Homework</b></p> <p>Calculations on empirical formula.</p>
<p><b>LP2 RLW, I will:</b></p> <p>review my learning, recalling and applying key knowledge, and focus on closing any gaps in my knowledge.</p>	<p><b>11/11/24 - (WK 2)</b></p> <p><b>Key Vocabulary</b></p> <p>yield</p>	<p><b>Homework</b></p> <p>Calculations on reaction quantities and yield.</p>
<p><b>In LP2.3, I will know:</b></p> <p>how to calculate reaction quantities and yield; the organisation of the Periodic Table.</p> <p>Extended Task.</p>	<p><b>18/11/24 - (WK 1)</b></p> <p><b>Key Vocabulary</b></p> <p>electronegativity</p>	<p><b>Homework</b></p> <p>Exam questions on atoms.</p>
<p><b>In LP2.4, I will know:</b></p> <p>atoms by atomic and ionic radius; trends in electronegativity, ionisation energy, electron affinity, melting and boiling points.</p>	<p><b>25/11/24 - (WK 2)</b></p> <p><b>Key Vocabulary</b></p> <p>oxidation</p>	<p><b>Homework</b></p> <p>Revision for assessment.</p>
<p><b>In LP2.5, I will know:</b></p> <p>the products of reactions of metals with oxygen, water, hydrochloric and sulphuric acid; my strengths and areas for development for my learning so far.</p>	<p><b>02/12/24 - (WK 1)</b></p> <p><b>Key Vocabulary</b></p> <p>reactivity</p>	<p><b>Homework</b></p> <p>Exam practice on reactivity and trends.</p>
<p><b>In LP2.6, I will know:</b></p> <p>metals in order of reactivity and explain the trends; how to write half equations for oxidation and reduction reactions and LINK to the oxidative states of transition metal ions.</p> <p>Extended Task.</p>	<p><b>09/12/24 - (WK 2)</b></p> <p><b>Key Vocabulary</b></p> <p>displacement</p>	<p><b>Homework</b></p> <p>Exam questions on displacement.</p>
<p><b>In LP2.7, I will know:</b></p> <p>displacement reactions in metals and halogens; oscillations, periods, amplitude, wavelength and frequency using graphical representations of wave formation.</p>	<p><b>16/12/24 - (WK 1)</b></p> <p><b>Key Vocabulary</b></p> <p>diffraction</p>	<p><b>Homework</b></p> <p>Exam questions on waves.</p>
<p><b>Resources to support learning:</b> Knowledge organiser. <a href="https://www.youtube.com/watch?v=vkdmZb4cqmw">https://www.youtube.com/watch?v=vkdmZb4cqmw</a>. Knowledge organiser, Microsoft TEAMS</p>		
<p><b>FEET Award Challenge for this Learning Programme:</b> Support with school STEM Club.</p>		

PRT Task 1

PRT Task 2