

## Year 8 Science

### 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><b>What will I be learning about in this Learning Programme?</b> To understand what a wave is, how sound and light travel by waves and the different properties of light waves.</p> <p><b>Where have I seen this learning before?</b> Light and properties of light waves in KS2. Sound waves in KS2 and year 7.</p> <p><b>What could I use it for?</b> GCSE physics, A-level physics and BTEC applied science.</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> 11/05/26 - (WK 1)</p> <p>how to identify patterns in observations from wave experiments and compare the properties of waves and their features. that transverse waves can be reflected by observing waves; to describe sound as the transfer of energy through vibrations and explain why sound cannot travel through a vacuum.</p>	<p><b>Key Vocabulary</b></p> <p>Amplitude</p>	<p><b>Homework</b></p> <p>Complete Sparx Science task</p>
<p><b>In LP5.2, I will know:</b> 18/05/26 - (WK 2)</p> <p>how to complete an investigation on how sound travels using string phones; how to use frequency and wavelength to calculate wave speed; how to describe the relationship between frequency and pitch.</p>	<p><b>Key Vocabulary</b></p> <p>Longitudinal</p>	<p><b>Homework</b></p> <p>Complete Sparx Science task</p>
<p><b>LP5 RLW, I will:</b> 01/06/26 - (WK 1)</p> <p>review my learning, recalling and applying key knowledge, and focus on closing any gaps in my knowledge.</p>		<p><b>Homework</b></p> <p>Complete Sparx Science task</p>
<p><b>In LP5.3, I will know:</b> 08/05/26 - (WK 2)</p> <p>how light will interact with different materials; how to draw a ray diagram showing how an image is formed in a plane mirror; how to revise for a summative assessment.</p> <p>Extended Task.</p>	<p><b>Key Vocabulary</b></p> <p>Frequency</p>	<p><b>Homework</b></p> <p>Complete Sparx Science task</p>
<p><b>In LP5.4, I will know:</b> 15/06/26 - (WK 1)</p> <p>how to complete a summative assessment; how to review the summative assessment; how to complete a practical to demonstrate specular reflection.</p>	<p><b>Key Vocabulary</b></p> <p>Reflection</p>	<p><b>Homework</b></p> <p>Complete Sparx Science task</p>
<p><b>In LP5.5, I will know:</b> 22/06/26 - (WK 2)</p> <p>what happens when light is refracted; how to complete a practical to demonstrate the concept of refraction. the colours in white light;</p>	<p><b>Key Vocabulary</b></p> <p>Refraction</p>	<p><b>Homework</b></p> <p>Complete Sparx Science task</p>
<p><b>In LP5.6, I will know:</b> 29/06/26 - (WK 1)</p> <p>that an object's colour determines what wavelength is absorbed or reflected; why objects appear different colours using ideas of reflection and absorption. the structures and functions of the human eye;</p> <p>Extended Task.</p>	<p><b>Key Vocabulary</b></p> <p>Absorption</p>	<p><b>Homework</b></p> <p>Complete Sparx Science task</p>
<p><b>In LP5.7, I will know:</b> 06/07/26 - (WK 2)</p> <p>how a pin hole camera works and how to make one; some uses and dangers of the electromagnetic spectrum; how to review knowledge on light waves.</p>	<p><b>Key Vocabulary</b></p> <p>Spectrum</p>	<p><b>Homework</b></p> <p>Complete Sparx Science task</p>
<p><b>Resources to support learning:</b> EPC Knowledge organiser, BBC bitesize sound, BBC bitesize electromagnetic spectrum, Sparx, Synergy and KS3 revision resources.</p>		
<p><b>FFET Award Challenge for this Learning Programme:</b> Design a practical to investigate the effect of reflected colours of light on different coloured objects. For example, compare what a red object looks like under different colours of light. Explain why.</p>		

