

## Year 8 Science

### Learning Programme 5

<p>The LORIC skill focus for this LP is: COMMUNICATION.</p> <p>The Moral Virtues focus for this LP are: COURAGE and HUMILITY.</p> <p>Courage - Acting with bravery and overcoming fears.</p> <p>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></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;</p> <p>how to describe sound as the transfer of energy through vibrations and explain why sound cannot travel through a vacuum.</p>	<p><b>13/05/24 - (WK 1)</b></p> <p><b>Key Vocabulary</b></p> <p>Amplitude</p>	<p><b>Homework</b></p> <p>Learn spellings</p>
<p><b>In LP5.2, I will know:</b></p> <p>how to use frequency and wavelength to calculate wave speed;</p> <p>how to describe the relationship between frequency and pitch;</p> <p>how light will interact with different materials.</p>	<p><b>20/05/24 - (WK 2)</b></p> <p><b>Key Vocabulary</b></p> <p>Frequency</p>	<p><b>Homework</b></p> <p>Learn definitions</p>
<p><b>In LP5.3, I will know:</b></p> <p>how to draw a ray diagram showing how an image is formed in a plane mirror;</p> <p>how to complete a practical to demonstrate the concept of specular reflection;</p> <p>what happens when light is refracted.</p> <p>Extended Task.</p>	<p><b>03/06/24 - (WK 1)</b></p> <p><b>Key Vocabulary</b></p> <p>Reflection</p>	<p><b>Homework</b></p> <p>Knowledge organiser flipper</p>
<p><b>In LP5.4, I will know:</b></p> <p>how to complete a practical to demonstrate the concept of refraction;</p> <p>how to investigate the colours in white light.</p>	<p><b>10/06/24 - (WK 2)</b></p> <p><b>Key Vocabulary</b></p> <p>Refraction</p>	<p><b>Homework</b></p> <p>10 core questions homework</p>
<p><b>In LP5.5, I will know:</b></p> <p>how to revise learning from LP1;</p> <p>how to revise learning from LP2;</p> <p>how to revise learning from LP3.</p>	<p><b>17/06/24 - (WK 1)</b></p> <p><b>Key Vocabulary</b></p> <p>Revision</p>	<p><b>Homework</b></p> <p>Extended literacy task</p>
<p><b>In LP5.6, I will know:</b></p> <p>how to revise learning from LP4;</p> <p>how to complete a summative assessment;</p> <p>how to review the summative assessment.</p> <p>Extended Task.</p>	<p><b>24/06/24 - (WK 2)</b></p> <p><b>Key Vocabulary</b></p> <p>Longitudinal</p>	<p><b>Homework</b></p> <p>10 core questions homework</p>
<p><b>In LP5.7, I will know:</b></p> <p>and predict the colour objects would be seen as;</p> <p>why objects appear different colours using ideas of reflection and absorption;</p> <p>the structures and functions of the human eye.</p>	<p><b>01/07/24 - (WK 1)</b></p> <p><b>Key Vocabulary</b></p> <p>Absorption</p>	<p><b>Homework</b></p> <p>Extended exam question</p>
<p><b>In LP5.8, I will know:</b></p> <p>how a pin hole camera works, and how to make one;</p> <p>some uses and dangers of the electromagnetic spectrum;</p> <p>how to investigate light using practical skills.</p>	<p><b>08/07/24 - (WK 2)</b></p> <p><b>Key Vocabulary</b></p> <p>Spectrum</p>	<p><b>Homework</b></p> <p>10 core questions homework</p>
<p><b>Resources to support learning:</b></p> <p>Booklet, Knowledge organiser, BBC bitesize, MS TEAMS and KS3 revision resources.</p>		
<p><b>FFET Award Challenge for this Learning Programme:</b></p> <p>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>		

PRT Task 1

PRT Task 2