

Autumn Term	Learning Programme	9.3 - The world of Physics	Science Department																																	
<p><b>This half term : Skills to be developed</b></p> <p><b>Literacy:</b> Comprehension reading skills assessed against the literacy framework. This will be based on the topic of 'colours of light'.</p> <p><b>Numeracy:</b> There will not be a numeracy assessment in this unit. Yet there will be opportunity to develop a range of mathematical skills within the unit. These will include: Use of formulae and units of measurements, rearranging formulae using a variety of techniques, constructing graph scales and interpreting graphical data.</p> <p><b>Digital Competence:</b> Opportunities will be provided to make use of a simulation to model experiments and scientific phenomena in the topics being studied.</p> <p><b>Subject Specific:</b> 'Investigating the resistance of a wire' experiment will focus on developing and assessing the scientific skill to review findings.</p> <p>The skill of making conclusions and decisions will also be developed and assessed in the light waves topic. This will be achieved by the students attempting to answer the question 'Why do we see the colour black?'.</p>		<p><b>Key Terms/Words :</b></p> <table border="1" data-bbox="1133 245 2143 692"> <tr> <td>Energy</td> <td>Electron</td> <td>Frequency</td> </tr> <tr> <td>Efficiency</td> <td>Newton</td> <td>Wavelength</td> </tr> <tr> <td>Gravitational potential energy</td> <td>Weight</td> <td>Absorb</td> </tr> <tr> <td>kinetic energy</td> <td>Velocity</td> <td>Reflection</td> </tr> <tr> <td>Transverse</td> <td>Acceleration</td> <td>Refraction</td> </tr> <tr> <td>Longitudinal</td> <td>Charge</td> <td>Echo</td> </tr> <tr> <td>Oscillation</td> <td>Friction</td> <td>Normal</td> </tr> <tr> <td>Wave speed</td> <td>Speed</td> <td>Perpendicular</td> </tr> <tr> <td>Current</td> <td>Displacement</td> <td>Parallel</td> </tr> <tr> <td>Voltage</td> <td>Voltmeter</td> <td>Resistance</td> </tr> <tr> <td>Ammeter</td> <td></td> <td></td> </tr> </table>		Energy	Electron	Frequency	Efficiency	Newton	Wavelength	Gravitational potential energy	Weight	Absorb	kinetic energy	Velocity	Reflection	Transverse	Acceleration	Refraction	Longitudinal	Charge	Echo	Oscillation	Friction	Normal	Wave speed	Speed	Perpendicular	Current	Displacement	Parallel	Voltage	Voltmeter	Resistance	Ammeter		
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<p><b>Topics to be studied</b></p>		<p><b>Independent Learning Task(s)</b></p>																																		
<p>Energy transfers and efficiency Light and sound waves Types of circuits and modelling current, voltage and resistance Describing forces and the motion of objects</p>		<p><b>Homework topics during this half term will include:</b></p> <p>Homework will involve students acting on the feedback provided in their scientific and literacy skills assessments.</p> <p>Calculation worksheets will be set for the students to practice the use of a range of formulae and units of measurement.</p>																																		
<p><b>Help and Support</b></p>																																				
<p><b>Support material for the topics covered can be found at:</b> BBC Bitesize, passmyexams.co.uk, Seneca learning, educake and mymaths.</p> <p><a href="https://www.bbc.com/education/subjects/zh2xsbk">https://www.bbc.com/education/subjects/zh2xsbk</a></p> <p>You may also wish to purchase a Key Stage 3 Revision guide from a company such as CGP for your child to use at home.</p>																																				

