



## TSS Primary Science MTP 2022-2023 Year 6 Block 4 – Physics

Key Targets and Learning Objectives		Key Activities	Equipment
<ul style="list-style-type: none"> <li>Describe the effect of gravity and know that when gravity changes, the weight of an object changes, but the mass does not</li> <li>Use force diagrams to show the name, size and direction of forces acting on an object</li> <li>Describe the effect of different forces on an object at rest and in motion</li> <li>Recognise that the mass and shape of an object can affect if it floats or sinks</li> <li>Describe how a ray of light changes direction when it travels through different mediums and know that this is called refraction</li> <li>Use diagrams and conventional symbols to represent, make and compare circuits that include cells, switches, lamps and buzzers</li> <li>Make simple circuits and compare the brightness of lamps in series and parallel circuits</li> <li>Present and interpret results using tables, bar charts, dot plots and line graphs (WS)</li> </ul>		<p>Lesson 1 – Diagnostic test. Learn key words and talk about Ethara project</p> <p>Lesson 2 – Look at the difference between reflection and refraction.</p> <p>Lesson 3 – Set up simple circuits and show them through diagrams</p> <p>Lesson 4 – Use diagrams to show forces and the direction of forces.</p> <p>Lesson 5 – Analyse the shape of objects designed to go fast. Why are they shaped like they are. Focus on F1 cars DRS systems and downforce.</p> <p>Lesson 6 – Paper helicopters investigation. Record results.</p> <p>Lesson 7 – Assessment. Present and interpret results using tables, bar charts, dot plots and line graphs</p> <p><b>STEM activity</b> – NO STEAM activity due to Ethara</p>	<ul style="list-style-type: none"> <li>Tall glasses</li> <li>Electrical circuits</li> <li>Card</li> <li>Paper clips</li> <li>Energy stick</li> </ul>
Key vocabulary	Going Green Link	Integration of technology	
Force, gravity, friction, upthrust, aerodynamics, streamlined, acceleration, air resistance, drag, reflection, refraction, electrical component	<ul style="list-style-type: none"> <li>- Can F1 survive in the future? Look at new types of fuel and the pros and cons</li> </ul>	<ul style="list-style-type: none"> <li>- iPads to use for setting up circuits</li> </ul>	