

Subject	Physics		
Interpretation of National Curriculum into Year group Endpoints			
Year	Term 1	Term 2	Term 3
10	<p>Students will describe and explain the concepts of:</p> <p><b>P5 Forces</b></p> <ul style="list-style-type: none"> <li>• forces and fields: electrostatic, magnetic, gravity</li> <li>• forces as vectors</li> <li>• weight and gravitational field strength</li> <li>• Moments, toppling and centre of mass</li> <li>• calculating work done as force x distance; elastic and inelastic stretching</li> <li>• Hooke's law and elastic potential energy</li> <li>• speed of sound, estimating speeds and accelerations in everyday contexts</li> <li>• interpreting quantitatively graphs of distance, time, and speed</li> <li>• acceleration caused by forces; Newton's First Law</li> </ul>	<p>Students will describe and explain the concepts of:</p> <p><b>P5 Forces</b></p> <ul style="list-style-type: none"> <li>• Momentum and changes in momentum</li> <li>• pressure in fluids acts in all directions: variation in Earth's atmosphere with height, with depth for liquids, up-thrust force (qualitative).</li> <li>• decelerations and braking distances involved on roads, safety.</li> <li>• Impulse</li> </ul> <p><b>P6 Waves</b></p> <ul style="list-style-type: none"> <li>• amplitude, wavelength, frequency, relating velocity to frequency and wavelength</li> <li>• transverse and longitudinal waves</li> <li>• electromagnetic waves, velocity in vacuum; waves transferring energy; wavelengths and frequencies from radio to gamma-rays</li> <li>• velocities differing between media: absorption, reflection, refraction effects</li> <li>• production and detection, by electrical circuits, or by changes in atoms and nuclei</li> <li>• uses in the radio, microwave, infra-red, visible, ultra-violet, X-ray and gamma ray regions, hazardous effects on bodily tissues.</li> </ul>	<p>Students will describe and explain the concepts of:</p> <p><b>Revision for, taking and review and intervention after Y10 PPEs</b></p>