









## Curriculum Overview for Physics

### Year 11

<p><b>Half Term 1: waves</b></p> <p><b>Substantive Knowledge:</b></p> <ul style="list-style-type: none"> <li>Define the two types of wave and describe them using key terms.</li> <li>Describe the difference between specular and diffuse reflection.</li> <li>Describe and explain refraction.</li> <li>Explain what happens to sound waves.</li> <li>Describe how to measure the speed of waves in a liquids</li> <li>Describe how to measure the speed of waves in a solid</li> <li>Identify and describe waves on the EM Spectrum</li> </ul> <p><b>Disciplinary Knowledge:</b></p> <ul style="list-style-type: none"> <li>Select appropriate methods for measuring the speed of a wave</li> <li>Discuss the uses and dangers of EM waves.</li> </ul>		<p>Skim and Scan of source information Decoding terms Etymology of key terms</p>
		<p>Transverse waves, longitudinal waves, compression, rarefaction, amplitude, wavelength, frequency, period, hertz, medium, apparatus, Reflection (Triple), transmission (Triple), absorption (Triple), refraction</p>
		<p>Recall questions to start every lesson Recall test Review sheet End of unit assessment</p>
		<p>Revision Card preparation for every lesson Recall test Review sheet Repetition of use of revision cards for end of unit assessment</p>
<p><b>Half Term 2: Waves</b></p> <p><b>Substantive Knowledge:</b></p> <ul style="list-style-type: none"> <li>Explain how waves on the Electromagnetic Spectrum can be used</li> <li>explain the dangers of Electromagnetic waves.</li> <li>Explain how images can be made using waves (T).</li> <li>Draw ray diagrams for both convex and concave lenses (T).</li> <li>Describe the images formed by lenses and explain how they are formed (T).</li> </ul> <p><b>Disciplinary Knowledge:</b></p> <ul style="list-style-type: none"> <li>Draw a ray diagrams for reflection, refraction and lenses (T)</li> </ul>		<p>Decoding of key terminology Skim reading Etymology of key terms</p>
		<p>sound waves, ultrasound waves (Triple/HT), seismic waves, P-waves (Triple/HT), S-waves (Triple/HT), Echo sounding (Triple/HT),</p>
		<p>Recall tests Review sheet End of unit test</p>
		<p>Review sheet Memorising revisions cards and preparing revision cards for every lesson</p>