





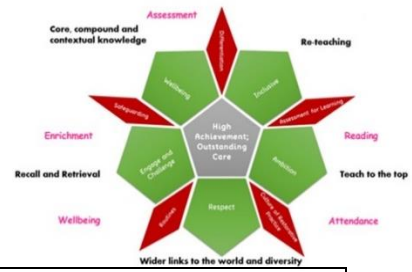




## Curriculum Overview for Physics

### Year 11

<p><b>Half Term 5: waves and revision for paper 1</b></p> <p>Substantive knowledge:</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> <li>• Energy stores and transfers</li> <li>• Efficiency</li> <li>• Circuits</li> <li>• Current, voltage and resistance</li> <li>• National grid and transformers</li> <li>• States of matter and changing state</li> <li>• Specific latent heat and heat capacity</li> <li>• Density</li> <li>• The atom and isotopes</li> <li>• Radioactivity</li> <li>• Ionising radiation</li> <li>• Dangers of radiation</li> <li>• (triple only) Fission and fusion</li> </ul> <p>Disciplinary knowledge</p> <ul style="list-style-type: none"> <li>• Calculation</li> <li>• Practical methods</li> <li>• Extended writing</li> <li>• Select appropriate methods for measuring the speed of a wave</li> <li>• Discuss the uses and dangers of EM waves.</li> <li>•</li> </ul>		<p>Decoding of key terminology Skim reading 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>End of unit test</p>
		<p>Revision cards on taught content and correctly tiered exam questions.</p>
<p><b>Half Term 6: revision for paper 2</b></p> <p>Substantive knowledge:</p> <ul style="list-style-type: none"> <li>• Vectors and scalars</li> <li>• Distance time graphs and velocity time graphs</li> <li>• Newtons laws</li> <li>• (H) momentum</li> <li>• Wave features</li> <li>• Wave soeed core practicals</li> <li>• Refraction</li> <li>• (T) lenses and colour</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>



<ul style="list-style-type: none"> <li>• Magnetism</li> <li>• Electromagnetism</li> <li>• Motors and generators.</li> </ul>		End of unit test
Disciplinary knowledge <ul style="list-style-type: none"> <li>• Calculation</li> <li>• Practical methods</li> <li>• Extended writing</li> </ul>		Revision cards on taught content and correctly tiered exam questions.