



Year 11 Physics Curriculum Summary



YEAR GROUP: 11 LETCH

SUBJECT: Physics

When?	Knowledge	Understanding	Assessment
<p>Wave properties</p>	<p>Be able to:</p> <ul style="list-style-type: none"> • transverse and longitudinal waves • Describe and explain amplitude, frequency and wavelength of a wave • Draw and explain the differences between reflection and refraction 	<p>Students will carry out a range of practical experiments during these topics.</p> <p>wave properties key words: amplitude compression echo electromagnetic waves frequency longitudinal waves mechanical wave oscillate rarefaction reflection refraction speed transmission/transmitted transverse wave vibrate wavelength</p>	<p>wave properties assessment</p>
<p>Electromagnetic waves</p>	<p>Be able to:</p> <ul style="list-style-type: none"> • Give examples that illustrate the transfer of energy by electromagnetic waves • Understand and explain what the different types of electromagnetic waves are used for • Describe what X-rays are used for in medicine and why they are dangerous 	<p>Students will carry out a range of practical experiments during these topics.</p> <p>Electromagnetic waves key words: carrier waves charge-coupled device (CCD) contrast medium electromagnetic spectrum microwaves optical fibre</p>	<p>Electromagnetic waves assessment</p>



		<p>radiation dose radio waves ultraviolet radiation (UV) wave speed white light X-rays</p>	
<p>Electromagnetism</p>	<p>Be able to:</p> <ul style="list-style-type: none">• Describe what induced magnetism is• Describe how to plot the magnetic field pattern of a magnet using a compass• Describe how the strength and direction of a magnetic field varies with position and with the current	<p>Students will carry out a range of practical experiments during these topics.</p> <p>Electromagnetism key words:</p> <p>electromagnet Fleming's left-hand rule induced magnetism magnetic field magnetic field line magnetic flux density motor effect solenoid split-ring commutator</p>	<p>Electromagnetism assessment</p>