

**Specification: AQA Physics**

	<b>Autumn 1</b>	<b>Autumn 2</b>	<b>Spring 1</b>	<b>Spring 2</b>	<b>Summer 1</b>	<b>Summer 2</b>
<b>Year 11</b>	<p><b>ELECTRICITY 2</b>  <b>What will be learnt?</b>                      1 Mains electricity. 2 Power. 3 The National Grid. 4 Energy transfers. 5 Electrical energy. 6-7 Electric charges. 8 Electric fields.  <b>Why will it be learnt?</b>  <b>Main outcome:</b>                      To learn how the national grid supplies our home with energy and how to find the energy a device transfers. To explore how charges interact.  <b>Skills developed:</b></p> <ul style="list-style-type: none"> <li>Sequenced explanations</li> </ul> <p>Mathematical skills:</p> <ul style="list-style-type: none"> <li>Standard form</li> <li>Use of equations</li> </ul> <p><b>How will learning be assessed?</b>                      "Plug adaptors" extended writing task.                      Half-termly exam.</p> <p><b>FORCES &amp; MOTION 2</b>  <b>What will be learnt?</b>                      1 Motion quantities recap. 2 Motion graphs recap. 3</p>	<p>6-7 Stopping distances. 8-9 Conservation of momentum. 10 Changes in momentum.  <b>Why will it be learnt?</b>  <b>Main outcome:</b>                      To apply Newton's Laws of Motion to various phenomena, explain factors affecting stopping distances and solve problems relating to momentum changes.  <b>Skills developed:</b>                      Practical skills:</p> <ul style="list-style-type: none"> <li>Planning experiments.</li> <li>Processing data.</li> </ul> <p>Mathematical skills:</p> <ul style="list-style-type: none"> <li>Using conservation laws.</li> <li>Direct proportionality</li> </ul> <p><b>How will learning be assessed?</b>                      "Stopping distances" extended writing task.                      Half-termly exam.</p> <p><b>MAGNETISM &amp; ELECTROMAGNETISM</b>  <b>What will be learnt?</b></p>	<p>5 Speakers &amp; microphones. 6 Transformers.  <b>Why will it be learnt?</b>  <b>Main outcome:</b>                      To become familiar with the motor and generator effects and apply these to explain how various devices work.  <b>Skills developed:</b></p> <ul style="list-style-type: none"> <li>Sequenced explanations.</li> </ul> <p><b>How will learning be assessed?</b>                      "Motor" extended writing task.                      Half-termly exam.</p> <p><b>WAVES 2</b>  <b>What will be learnt?</b>                      1 Sound. 2 Ultrasound. 3 Seismic waves. 4 Reflection, absorption &amp; transmission. 5 Convex lenses. 6 Concave lenses. 7 Black body radiation.  <b>Why will it be learnt?</b>  <b>Main outcome:</b>                      To learn how ultrasound and seismic waves work. To be able to describe the</p>	<p>3 Resolving forces. 4 Moments, levers &amp; gears. 6 Pressure. 7 Pressure in fluids. 8 Atmospheric pressure.  <b>Why will it be learnt?</b>  <b>Main outcome:</b>                      To be able to split up and combine forces to explore their effects. To be able to apply ideas of moments and pressure.  <b>Skills developed:</b>                      Mathematical skills:</p> <ul style="list-style-type: none"> <li>Finding components of vectors.</li> <li>Resolving vectors.</li> <li>Producing and rearranging equations.</li> </ul> <p><b>How will learning be assessed?</b>                      "Springs and moments" extended writing task.                      Half-termly exam.</p> <p><b>SPACE</b>  <b>What will be learnt?</b>                      1 Orbits &amp; the solar system. 2 Stellar lifecycles. 3 The big bang.  <b>Why will it be learnt?</b>  <b>Main outcome:</b></p>	<b>REVISION</b>	<b>REVISION</b>

Long term planning grid

	<p>Newton's 1<sup>st</sup> and 3<sup>rd</sup> laws. 4-5 Newton's 2<sup>nd</sup> law. Continued in Autumn 2.</p>	<p>1 Magnetism. 2 Electromagnets. 3 Motors. 4 Generators. Continued in Spring 1.</p>	<p>images through lenses and deduce their uses. <b>Skills developed:</b></p> <ul style="list-style-type: none"> <li>• Geometric diagrams.</li> <li>• Use of data.</li> </ul> <p><b>How will learning be assessed?</b> "Seismic" extended writing task. Half-termly exam.</p> <p><b>FORCES 2</b> <b>What will be learnt?</b> 1 Recap of Forces 1 topic. 2 Components. Continued in Spring 2.</p>	<p>To get an overview of the structure and evolution of the universe. <b>Skills developed:</b></p> <ul style="list-style-type: none"> <li>• Sequenced explanations.</li> <li>• Use of data.</li> </ul> <p><b>How will learning be assessed?</b> "Life of a star" extended writing task. Half-termly exam.</p>		
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