

Year	Autumn Term 1	Autumn Term 2	Spring Term 1	Spring Term 2	Summer Term 1	Summer Term 2
7	<p>Forces and Motion: <i>Why does the motion of objects change?</i></p>	<p>Waves and Sound: <i>How does sound travel? How do we use ultra-sound?</i></p> <p>The Solar System: <i>What things exist in our solar system? What things exist outside our solar system?</i></p>	<p>Energy and Power <i>How can we understand changes in terms of the ways that energy is stored and transferred?</i></p>	<p>Electrostatics: <i>Why are sparks sometimes produced when objects are rubbed together?</i></p>	<p>Electric Circuits: <i>How can we understand what happens in a circuit, using the ideas of Voltage, Current and Resistance?</i></p>	<p>Investigative Skills: <i>How are we to plan and carry out an investigation that will allow us to accurately answer a question?</i></p>
8	<p>Light and Colour: <i>How do we see things? Why are objects different colours?</i></p>	<p>Nuclear Physics and Stars: <i>What is going on inside stars and inside nuclear power stations?</i></p>	<p>Motion and Forces at Work <i>How can we calculate and represent speed? How can we use our knowledge of turning forces to make jobs easier?</i></p>	<p>Energy in the Home <i>How is electricity generated? How does it travel from power station to our homes?</i></p>	<p>Magnets and Electromagnetism <i>How can we create magnets using electricity? What uses do we make of electromagnets?</i></p>	<p>Investigating Forces <i>What factors affect the speed of a toy car?</i></p>
9	<p>Forces, Motion and Springs <i>Newton's 3 laws of motion used to explain scenarios. Hooke's Law Stopping distances</i></p>	<p>Development of Atomic Model and Space Exploration <i>Rutherford, Bohr and Chadwick Solar system; colonising space; ethics of space exploration</i></p>	<p>Electrical Circuits <i>Investigating resistance of circuits, ohmic and non-ohmic conductors. Series and Parallel Circuits</i></p>	<p>Mains Electricity <i>Safe use of mains electricity National Grid</i></p>	<p>Energy resources and Efficiency <i>Electricity generation Improving efficiency.</i></p>	<p>Waves and the Electromagnetic Spectrum <i>Waves key definitions Uses of EM spectrum</i></p>

<p><b>10</b> AQA</p>	<p>Waves and Sound <i>Reflection and seeing with sound</i></p>	<p>Heat Transfer and Radioactivity <i>Reducing heat transfer</i> 3 types of radioactivity and their uses</p>	<p>Magnetism <i>Understanding and representing magnetic fields</i></p>	<p>Electrostatics <i>Understanding and representing electric fields</i></p>	<p>Motion Graphs and Moments <i>Representing the motion of objects on distance-time and speed-time graphs.</i> <i>Moments calculations.</i></p>	<p>Resultant Forces and Satellites <i>Resultant force diagrams involving scale drawings.</i> <i>Satellite orbits and circular motion</i></p>
<p><b>11</b> AQA</p>	<p>Lenses, Momentum and Pressure <i>How light is manipulated with lenses.</i> <i>Momentum Calculations</i> <i>Understanding the use of gases in order to power engines etc.</i></p>	<p>Electromagnetism <i>Electromagnetic induction, generators and dynamos</i></p>	<p>Life Cycle of Stars and Big Bang Theory <i>Changes within Stars and formation of elements.</i> <i>Evidence for Big Bang as origin of Universe</i></p>	<p>Revision</p>		
<p><b>12</b> AQA</p>	<p>(All A-level codes for AQA specification) Progressive Waves: 3.3.1.1 and 2 Particle Physics: 3.2.1</p>	<p>Stationary Waves: 3.3.1.3 Quantum Physics: 3.2.2</p>	<p>Reflection and Refraction: 3.3.2 Mechanics: 3.4.1 to 6</p>	<p>Electrical Circuits: 3.5.1 to 4 Energy and Momentum: 3.4.7 and 8</p>	<p>Applications of Electrical Circuits: 3.5.1.5 and 6 Materials: 3.4.2</p>	<p>Thermal Physics: 3.6.2.1 Further Mechanics: 3.6.1</p>
<p><b>13</b> AQA</p>	<p>Thermal Physics: 3.6.2.2 and 3 Gravitational Fields: 3.7.2</p>	<p>Radioactive Decay: 3.8.1.1 to 5 Electric Fields: 3.7.3 and 4</p>	<p>Fission and Fusion: 3.8.1.6 to 8 Magnetic Fields: 3.7.5.1 to 3</p>	<p>Turning Points in Physics: 3.12 Magnetic Fields: 3.7.5.4 to 6</p>		