



## Physics: Curriculum Overview

### Year 13

Term	Topic studied	What will I learn?	How will I be assessed?
Year 13 Autumn	<i>Teacher 1</i>		
	<i>Electric Fields</i>	<i>Electric Fields</i> <i>Electrical Potential</i> <i>Comparing Electric and Gravitational Fields</i>	<b>End of topic test</b>
	<i>Capacitors</i>	<i>Capacitors</i> <i>Energy Stored by a capacitor</i> <i>Dielectrics</i> <i>Charging and Discharging</i> <i>Time Constant and Time to Halve.</i>	<b>Practical assessment - Investigating Capacitors</b> <b>End of topic test</b>
	<i>Thermal Physics</i>	<i>Thermal Energy Transfer</i> <i>The three gas laws</i> <i>The Ideal Gas Equation</i> <i>Kinetic Theory and the pressure of an ideal gas</i> <i>Kinetic Energy of Gas Molecules</i> <i>Development of theories</i>	<b>Practical assessment - Investigating Charles Law</b> <b>Practical assessment - Investigating Boyle's Law</b> <b>Practical assessment - Investigating Pressure Law</b>  <b>End of topic test</b>
	<i>Teacher 2</i>		
<i>Magnetic Fields</i>	<i>Magnetic Flux Density</i> <i>Investigating a Current Carrying Wire</i> <i>Forces on Charged Particles</i> <i>Electromagnetic Induction</i> <i>Investigating Flux Linkage</i> <i>Faraday's and Lenz's Law</i> <i>Alternating Current</i> <i>Transformers</i>	<b>Practical assessment <math>F=BIL</math></b> <b>Practical assessment Investigating Flux Linkage</b>  <b>End of topic test</b>	
<i>Nuclear Physics</i>	<i>Rutherford Scattering</i> <i>Measuring Nuclear Radius</i> <i>Nuclear Radius and Density</i> <i>Properties of Nuclear Radiation</i> <i>Background Radiation and Intensity</i> <i>Exponential Law of Decay</i> <i>Half life and its Applications</i> <i>Nuclear Decay</i> <i>Mass Defect and Binding Energy</i> <i>Nuclear Fission and Fusion</i> <i>Nuclear Fission Reactors</i>	<b>Practical assessment Investigating the inverse Square Law</b>  <b>End of topic test</b>	



Year 13 Summer	<i>Revision</i>	<i>Revision of key principles from year 12 study. Revision of key principles from year 13 study.</i>	<b><i>Practical assessment</i></b> - Completion of lab book assessment and any missed practicals  <b><i>Test assessment</i></b> - past paper practices  <b><i>Final exam</i></b>
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