



Curriculum Plan  
2016

Autumn Term	Spring Term	Summer Term
<p>ISA</p> <p>1.1 Energy transfer by heating processes Infrared radiation Kinetic theory Conduction and convection Rate of energy transfer Saving energy in the home Specific heat capacity</p> <p>1.2 Energy and efficiency Energy transfer Efficiency in machines Sankey diagrams</p> <p>1.3 The usefulness of electrical appliances The cost of electricity Choosing electrical applications</p> <p>1.4 Methods we use to generate electricity Energy sources and powerstations Choosing energy sources Electricity and the national grid</p> <p>1.5 Waves Waves basics Wave properties Em waves Communications Imaging Reflection Sound Doppler and red shift</p>	<p>2.3 Currents in electrical circuits Static electricity Basic circuits Current and pd Resistance Diodes and LED's LDR's and Thermistors Series Circuits Parallel Circuits</p> <p>2.4 Mains electricity and appliances Mains electricity Electricity in the home Safety devices in circuits Energy in circuits Power Energy transfers</p>	<p>Past papers and revision</p>
<p>HALF TERM</p>		

Bishop Milner Catholic College



<p>2.1 Forces and their effects</p> <ul style="list-style-type: none"><li>Distance time/velocity time graph</li><li>Resultant forces</li><li>Acceleration</li><li>Weight and reaction forces</li><li>Friction and terminal velocity</li><li>Stopping distance</li><li>Forces and elasticity</li></ul> <p>2.2 The kinetic energy of objects</p> <ul style="list-style-type: none"><li>Work and potential</li><li>Kinetic energy</li><li>Power</li><li>Momentum</li><li>Car design</li></ul>	<p>2.5 Atomic structure and radioactivity</p> <ul style="list-style-type: none"><li>Rutherford Scattering</li><li>Atoms and Isotopes</li><li>Radioactivity</li><li>Half-Life</li><li>Exposure to Radiation</li><li>Dangers of radioactivity</li><li>Uses of Radioactivity</li></ul> <p>2.6 Nuclear fission and nuclear fusion</p> <ul style="list-style-type: none"><li>Nuclear Fission</li><li>Nuclear Fusion</li><li>Life Cycle of Star</li></ul>	<p>CONTINUED</p>
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