Bishop Milner Catholic College

Curriculum Plan year 11 physics triple curriculum

2016

Autumn Term	Spring Term	Summer Term
ISA 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 1.2 Energy and efficiency Energy transfer Efficiency in machines Sankey diagrams 1.3 The usefulness of electrical appliances The cost of electricity Choosing electrical applications 1.4 Methods we use to generate electricity Energy sources and powerstations Choosing energy sources Electricity and the national grid 1.5 Waves Waves basics Wave properties Em waves Communications Imaging Reflection Sound Doppler and red shift	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 2.4 Mains electricity and appliances Mains electricity Electricity in the home Safety devices in circuits Energy in circuits Power Energy transfers	.1 Medical Applications of Physics Xrays Ultrasound Refraction Ray diagrams The eye and vision Medical uses of light 3.2 Using Physics to make things work Centre of mass Moments Hydrauliucs Circular motion 3.3 Keeping things moving Magnetic fields The motor effect Electromagnetic induction Transformers Past papers and revision
HALF TERM		

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2.1 Forces and their effects Distance time/velocity time graph Resulatant forces Acceleration Weight and reaction forces Friction and terminal velocity Stopping distance Forces and elasticity 2.2 The kinetic energy of objects Work and potential Kinetic energy Power Momentum Car design	2.5 Atomic structure and radioactivity Rutherford Scattering Atoms and Isotopes Radioactivity Half-Life Exposure to Radiation Dangers of radioactivity Uses of Radioactivity 2.6 Nuclear fission and nuclear fusion Nuclear Fission Nuclear Fusion Life Cycle of Star	CONTINUED