



Physics- Curriculum Overview

Year 10 Separate Physics

Half Term:	Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2
Topics:	Energy: 4.1 L1. Energy Stores & Systems L2. Energy transfers and Efficiency L3. Reducing Energy Losses L4. Required Practical 2- Investigating Insulators (PO) L5. Power L6&7. Energy changes- Ek, Ee, Ep L8&9. Energy resources	Particles 4.3 L1. Density L2&3. ALL: Required Practical 5- Density L4. Changes of state L5. Particle motion in Gases (kinetic theory) L6. Pressure in gases and increasing pressure (PO) L7. Changes of heat & Latent Heat L8. Energy changes in systems (specific heat) & internal energy L9. ALL: Required Practical 1- Specific heat capacity	Atomic Structure 4.4 L1. The Structure of the Atom & Mass No, Atomic No & Isotopes L2. Development- Model of Atom (in Chem too) L3. Radioactive Decay & Nuclear Radiation L4. Nuclear Equations L5&6. Half-life & Random Nature L7. Hazards: Background, Contamination & irradiation L8. Uses of Nuclear Radiation inc medicine	Atomic Structure 4.4 contd L1. Nuclear Fission & Fusion (PO) L2. Static and electric fields (PO) Electricity 4.2 L3. Circuit Symbols and Current L4 Potential Difference L5 Resistance L6. Series Circuit-s Current, Resistance and Voltage L7. Parallel Circuits - Current, Resistance and Voltage L8&9. ALL: Required Practical 3- Resistance	Electricity 4.2 L1 ALL: Required Practical 4- V-I graphs. L2. V-I graphs L3. Thermistors and LDR'S L4. DC and AC and mains electricity L5. Mains electricity- Plugs and fuses L6. Energy transfers in Appliances L7. Power (Using V and I) L8. The National Grid	Space 4.8 L1. Life Cycle of a Star (PO) L2. Our Solar System (PO) L3. Orbital motion & satellites (PO) L4. Red Shift (PO) Energy Revision Particles Revision Atomic Structure Revision Electricity Revision
Assessment & End Points:	Energy Exam Question Energy test	Particles test Atomic structure exam question	Atomic structure test	Required practical exam question Electricity test	Mock	Exam Question: national grid Exam question: Space Paper 1 revision question