

Year 11 Mock Revision Physics

Topic P1 – Energy

Energy Stores and Systems

Kinetic and Potential Energy

Specific Heat Capacity

Conservation of Energy and Power

Reducing Unwanted Energy Transfer

Efficiency

Energy Resources and Uses

Wind, Solar and Geothermal

Hydroelectricity, Waves and Tides

Bio-fuels and Non-renewables

Trends in Energy Use

Topic 3 – Particle Model of Matter

Particle Model

Gas Motion

Density

Internal Energy

Change of State

Specific Latent State

Topic 4 – Atomic Structure

The History of the Atomic Model

Isotopes

Alpha, Beta, Gamma

Nuclear Equations

Half Life

Irradiation and Contamination

Topic 5 – Forces

Contact and Non-Contact

Weight, Mass and Gravity

Resultant Forces

Work Done

Calculating forces

Forces and Elasticity

Investigating Hooke's Law

Distance, Displacement, Speed and Velocity

Acceleration

SUVAT (Higher tier only)

Distance-time graphs

Velocity-time graphs

Terminal Velocity

Newton's First Law

Newton's Second Law and $F=ma$

Newton's Third Law and Inertia

Stopping Distances

Reaction Times

Momentum (Higher Tier)

Topic P6 – Waves

Transverse and Longitudinal Waves

Properties of Waves

Experiments with Waves

Wave behaviour

Electromagnetic Spectrum and the Wave Properties and uses

Refraction

Radiowaves (Higher only)

Infrared Radiation