

KS4 Physics

BIG PICTURE

There are six papers: two biology, two chemistry and two physics. Each of the papers will assess knowledge and understanding from distinct topic areas.

Physics Paper 1

Area of specification	Subtopics	Required Practical
Energy	Energy changes in a system, and the ways energy is stored before and after such changes Conservation and dissipation of energy National and global energy resources	Specific heat capacity
Electricity	Current, potential difference and resistance Series and parallel circuits Domestic uses and safety Energy transfers	Resistance I-V characteristics
Particle model of matter	Changes of state and the particle model Internal energy and energy transfers Particle model and pressure	Density
Atomic structure	Atoms and isotopes Atoms and nuclear radiation Hazards and uses of radioactive emissions and of background radiation	None

Physics Paper 2

Area of specification	Subtopics	Required Practical
Forces	Forces and their interactions Work done and energy transfer Forces and elasticity Pressure Forces and motion Momentum	Acceleration Force and extension In a spring
Waves	Waves in air, fluids and solids Electromagnetic waves	Waves – in liquid and solid
Magnetism and electromagnetism	Permanent and induced magnetism, magnetic forces and fields The motor effect	

How it is assessed:

- Written exam: 1hr 15minutes
- Foundation and Higher tiers
- 70 marks
- 16.7% of GCSE

A mixed of multiple choice, structure, closed short answer and open response.