



PHYSICS CURRICULUM MAP

EXAMS

FURTHER STUDY

Pure Physics • Engineering • Radiology • Acoustic engineering • Biophysics • Mechanics • Civil engineering •

CAREER PATHS

Research Scientist • Engineer • Education • Journalism & Broadcasting • Coding • Marketing • Forensics • Politics • Science Writer • Management Consultant • Stockbroker •

SKILLS

Analysis • Evaluating • Numeracy • Abstract thinking • Memory • Literacy • Organisation • Problem solving • Future planning • Research • Logical Thinking

INTEREST

We can think of how the universe operates on many different levels. We can not only describe the world around us, but the universe.

Space physics (Triple only)

REVISION

Paper 1
• Written exam: 1 hour 15 minutes
• Foundation and Higher Tier
• 70 marks
• 16.7% of GCSE

Paper 2
• Written exam: 1 hour 15 minutes
• Foundation and Higher Tier
• 70 marks
• 16.7% of GCSE

Magnetism and electromagnetism

Scientific vocabulary, quantities, units, symbols and nomenclature.

End of Year Assessment

YEAR 11

Waves and electromagnetic waves

Revision techniques

Forces in motion, Velocity, acceleration

Forces, Newton's laws

Full paper 1

The start of your first GCSE unit

End of Year Assessment

Practice Half Paper

Energy stores and systems

Changes in energy Resources

Electricity, circuits, static electricity

The national grid Domestic electricity

YEAR 10

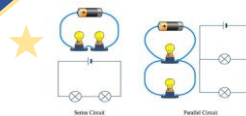
Particle model of matter

Atoms and radiation

ASK: What is the difference between mass and weight?

Analysis & evaluation.

End of Year Assessment



ASK: Which type of radiation is the most ionising?

Forces in motion

Forces

YEAR 9

Revision Techniques

Electricity

- ★ Current, potential difference
- ★ Resistance in the circuit
- ★ Series and parallel circuits
- ★ The national grid
- ★ Transformers

Practical Skills and Enrichment

Development of scientific thinking

End of Year Assessment

Waves

- ★ Properties of waves
- ★ Reflection and refraction
- ★ Sound and ultrasound
- ★ Electromagnetic Spectrum

Space

- ★ Solar system
- ★ Life cycle of a star
- ★ Mass and weight
- ★ Our galaxy – The milky way

Revision Techniques

YEAR 8

Magnets and their uses

- ★ Attraction and repulsion
- ★ Earth's magnetic field
- ★ Electromagnetism
- ★ How to increase the magnetic field

ASK: How can ultrasound be used in radar?

ASK: How can we increase the strength of an electromagnet?

Particle Model

- ★ Three states of matter
- ★ Melting and boiling points
- ★ Graph skills
- ★ Density equation
- ★ Gas pressure

Experimental skills and strategies.

Lab Safety and Skills

YEAR 7



A01

PHYSICS SKILL

Demonstrating knowledge & understanding

A02

PHYSICS SKILL

Apply knowledge of scientific ideas, enquiries & techniques

A03

PHYSICS SKILL

Interpret, evaluate, judge & make conclusions from given information