

PHYSICS CURRICULUM MAP

KS3 AQA Science
KS4 AQA trilogy combined science. Triple science

GCSE EXAM

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.

8. Space (Triple)

REVISION

Paper 1:
Topic 1-4
Paper 2:
Topics 5-7

ASK:

How do we know that the Earth's core is magnetic?

7. Magnetism

ASK:

What are the properties of the different types of waves?

MOCK EXAM

6. Waves

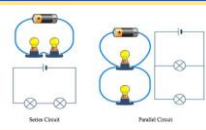
YEAR 11

MOCK EXAM Forces

4. Atomic structure

ASK:

What happens to an object when the resultant force is zero? How do we calculate stopping distance?



ASK:

How has the model of the atom changed? Which type of radiation is the most ionising?



ASK:

What is the relationship between potential difference and current?

1. Energy

2. Electricity

YEAR 10

3. Particle model of matter

ASK:

What are the energy changes when a ball is bounced? How do we calculate energy changes?

ASK:

How do waves affect the things they pass through? How can we use wave technology in the real world?

ASK:

How do we prevent heat loss from objects?

The start of your first GCSE unit

Getting GCSE Ready Applied Physics

YEAR 9

Waves
Wave effect
Wave properties

Energy
Work
Heat and cooling

ASK:

Can energy be made or destroyed? What do we mean by renewable energy? How do we calculate the cost of energy?



ASK:

How do we calculate work done? How do levers make work easier?

ASK:

What is a magnetic field? How do we increase the strength of an electromagnet?

Energy
Energy transfer
Energy cost

Waves
Sound
Light

YEAR 8

Forces
Contact forces
Pressure

Electromagnetics
Magnets and magnetic field
Electromagnets

ASK:

What is the difference between current flow in a series and parallel circuit? What is the relationship between potential difference and current?

Electromagnetics
Potential difference
Resistance
Current

ASK:

Where do forces come from? How do we measure speed? Is the force of gravity the same on the moon?

ASK:

Why is there so little friction on some surfaces? Why do you get put on weighing scales before you do a bungee jump? Why don't earthmovers sink?

Forces
Speed
Gravity

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