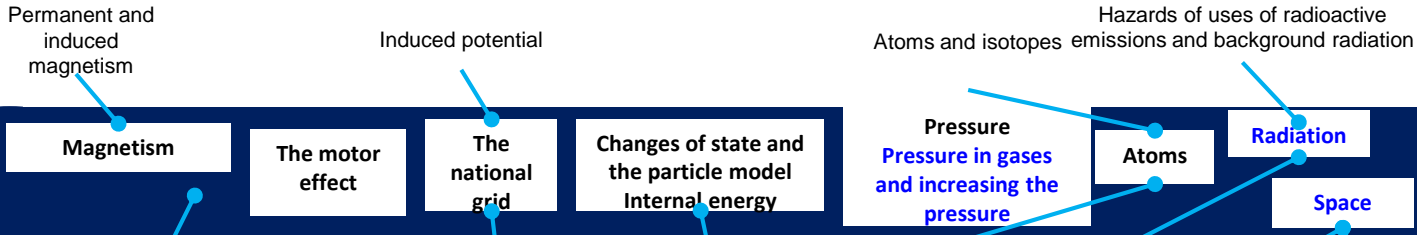




SECONDARY SCIENCE LEARNING JOURNEY: PHYSICS

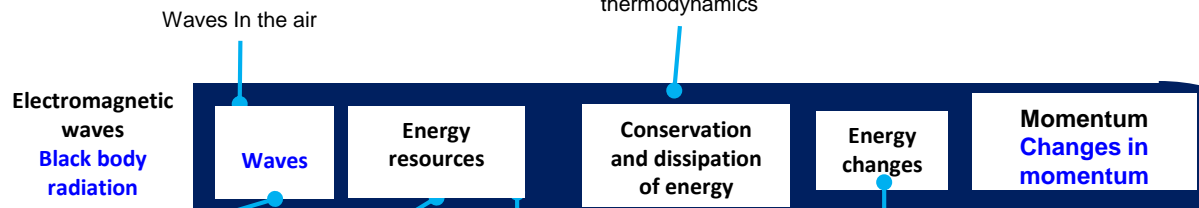
REVISION AND
COMMUNICATION

YEAR
11



Current, potential difference and resistance
Series and Parallel
Domestic uses and safety
Energy Transfers
Static electricity

YEAR
10



Text in blue is GCSE separate science Physics only and will not be covered by the combined science course

Forces and motion

Moments levers & gears
Pressure

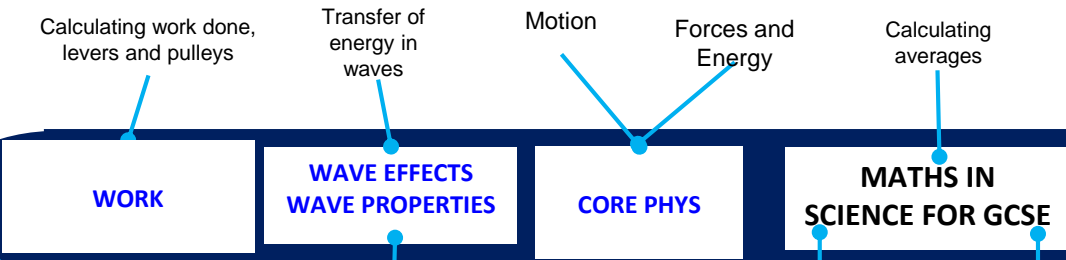
Elasticity

Work done

Forces

Understanding work done as energy transferred

YEAR
9



GCSE CONTENT BEGINS

Models of waves

Probability

Graph Skills

MAGNETISM

PRESSURE

CONTACT FORCES

LIGHT

SOUND

YEAR
8

Permanent magnets and electromagnets

Drag, friction and Hooke's law

Reflection and refraction

Speed of sound and how we hear

Use the formula: weight (N) = mass (kg) x gravitational field strength (N/kg).

Calculate resistance using the formula: resistance (Ω) = potential difference (V) ÷ current (A).

ENERGY TRANSFER

GRAVITY

VOLTAGE

CURRENT

ENERGY COSTS

When energy is transferred, the total is conserved, but some energy is dissipated, reducing the useful energy.

SPEED

Use the formula: speed = distance (m)/time (s) or distance-time graphs, to calculate speed

Compare and explain current flow in different parts of a circuit

Calculate the cost of home energy usage

YEAR
7

Schemes of learning are designed to ensure students progress based on their security of understanding and readiness for the next stage. STRETCH and CHALLENGE is at the heart of our curriculum

The scheme is designed with INTERLEAVING as a key element

Applying the scientific method, seeing the world analytically and using information learned to explain phenomena and make predictions

Curiosity about the world around us and an ability to communicate scientific concepts and solve problems.

Topic tests and termly assessments are designed to accurately assess knowledge and maximise progression.

