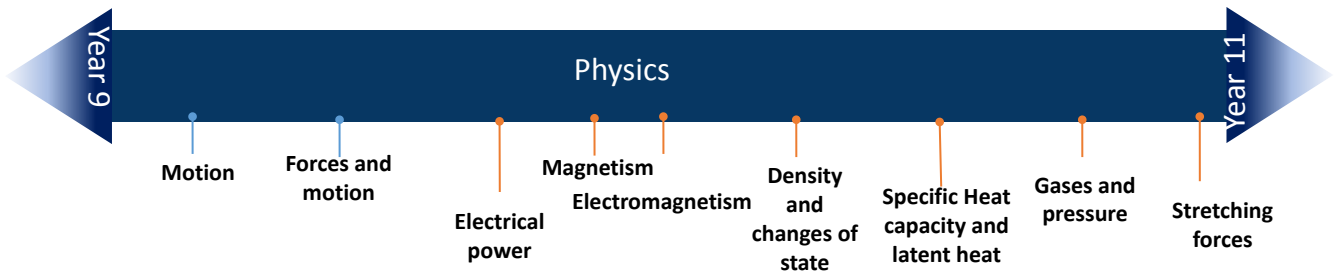


Year 10 - Triple Science: Physics

In year 9 you looked into Motion and Acceleration in detail.
 In year 10 you will study Energy by looking at Heat Transfers and Energy Efficiency. You will then build on prior knowledge to explain refraction and calculate Wave Speed, before a detailed look at Atomic Structure, Radioactive Emissions and Effects of Forces.



Energy transferred and work done are both measured in joules.

Force effects and Momentum

Momentum is calculated using $\text{momentum} = \text{mass} \times \text{velocity}$

Forces and Work Done

When a **force** causes a body to move, work is being done on the object.

When a **force** causes a body to move, work is being done on the object.

Astronomy

Geography - Energy resources
 History - Dating

DT - design & materials
 Mechanical devices

People are exposed to sources of radiation in all aspects of everyday life.

An atom's **nucleus** can only be stable if it has a certain number of **neutrons** for the number of **protons** it has.

Radioactive emissions

Radioactivity

Atoms contain subatomic particles

Some types of light can be harmful.

Properties + Uses / Dangers of the EM Spectrum

DT - Material design and communication technology

Light can change direction and speed when passing through a medium

Waves

Electromagnetic (EM) waves are transverse waves, and are caused by changing electric and magnetic fields.

Ultrasound & infrasound

Energy

Energy can be stored and can be transferred between the stores



Year 11 - Physics

In year 10 you looked in detail at how waves can reflect and refract. Then you studied the Effects of a Force before going further into the properties of EM waves and radioactivity. In year 11 you will study electromagnetism and electromagnetic induction, before studying some thermal properties of materials relating to changes of state, gases and gas pressure, and specific heat capacity.

