

AUTUMN 1

Energy

Energy stores, energy efficiency, Sankey diagrams.

Prior Learning
Students have had studied energy transfer in Year 7 where they are introduced to energy stores.

AUTUMN 2

Energy

Energy resources, generating electricity.

Forces

Balanced/unbalanced, speed, acceleration.

Prior Learning
In Year 7 Students study forces, speed and non-contact forces. In year 8 they cover work and pressure.

SPRING 1

Forces

Distance-time graphs, moments, work done.

Prior Learning
In Year 7 Students study Forces, speed and non-contact forces. In year 8 they cover work and pressure.

SPRING 2

Electricity

Generating electricity, potential difference & current.

Prior Learning
In year 8 students have covered electricity. They have also covered the idea of energy transfer in Year 7 and 9.

SUMMER 1

Electricity

Thermistors, Ohm's Law, LDRs, static electricity.

Prior Learning
In year 8 students have covered electricity. They have also covered the idea of energy transfer in Year 7 and 9.

SUMMER 2

Practical Skills

Electrical circuits, levers, Newton meters.

Prior Learning
Identifying variables, method writing, Handling data taught in year 7, 8, 9.

CAREERS LINKS

Engineer, radiographer, geophysics, meteorology, robotics, healthcare, energy generation, astronaut, astronomer, materials science, sound engineer, architect, mechanical engineer, structural engineer, civil engineer.

CHARACTER LINKS

Motivation, resilience and teamwork (performance virtues).
Confidence and determination
Listening, critical thinking and problem solving (intellectual virtues).
Consideration and construction of moral and ethical arguments in science (moral virtues).

KEY ASSESSMENT DATES

Summative and synoptic testing in October, February and May.