

ENERGY STORES & TRANSFERS

From Year 7 FORCES

- Forces as pushes and pulls which can affect the motion of an object.

From Year 8 ELECTRICAL CIRCUITS

- Electrons as carriers of energy around a circuit.

From Year 8 HEATING AND COOLING

- Heat energy transfer by conduction, convection and radiation.
- Energy dissipated as heat to the surroundings as an object cools.

From Year 8 CHEMICAL ENERGY and BIOENERGETICS

- Energy stored in molecules and released during combustion or respiration.

From Year 9 SOUND AND LIGHT

- Energy transferred by waves.

PRIOR LEARNING

PRE ASSESSMENT

Consolidate prior learning

KNOWLEDGE ASSESSMENT 2

PEER ASSESSMENT

How well can I identify the energy stores in familiar scenarios?

Energy stores and pathways

Efficiency; useful & wasted energy

END OF TOPIC ASSESSMENT

SELF ASSESSMENT

How well can I describe how the energy is transferred in a machine?

Energy resources

Electrical power and the cost of electricity

KNOWLEDGE ASSESSMENT 1

LATER LEARNING

TEACHER ASSESSMENT

How well can I explain a machine which is designed to reduce effort?

Moments and levers

Work done by a force

Year 9 topic EARTH SCIENCE

- Greenhouse effect
- Climate change
- Key Stage 4 Physics
- Energy

Working scientifically

- WS 2.7 Evaluate methods and suggest possible improvements and further investigations.
- WS 3.1 Presenting observations and other data using appropriate methods.