

Golden Concepts

Asking scientific questions and making observations

Planning an investigation

Collecting, presenting and interpreting data

Errors and uncertainty

Science in our world

Key Vocabulary

Sanky diagrams	A diagram we use to show useful and wasted energy transfers
Chemical	Energy stored in the bonds of chemicals can be released during chemical reactions
Electrical	Electrical energy can be transferred through wires
Sound	Sound energy is transferred by moving particles
Gravitational	When an object is lifted off the ground it stores gravitational potential energy
Light	Light energy is a type of energy given out by luminous objects
Thermal	The hotter something is the more thermal energy it stores
Nuclear	Nuclear energy is the energy stored in the nucleus of an atom.
Elastic	Elastic energy is the energy stored when a material is stretched
Kinetic	Kinetic energy is the energy stored in the movement of an object.
Efficiency	Efficiency is a measure of how much energy is transferred to a useful form and how much is wasted

Energy Transfers 89 - Knowledge Organiser

Types of Energy:

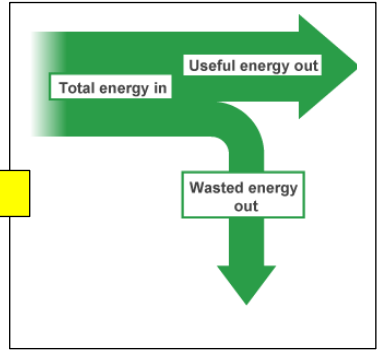
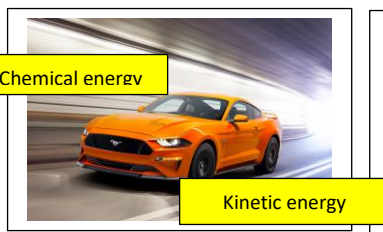
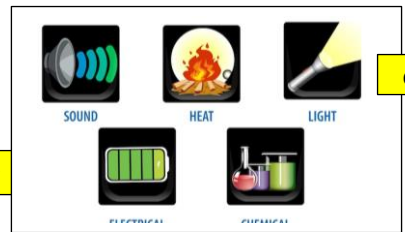
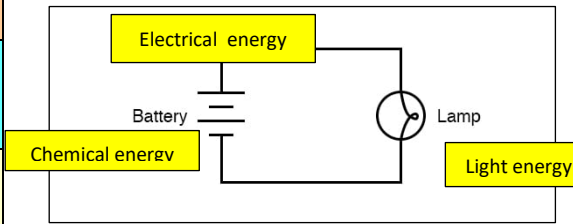
- Detailed exploration of various types of energy, including thermal, chemical, electrical, and sound energy.
- Students should be able to identify different types of energy in a given example
- Students should begin to describe energy stores

Energy Transfer Mechanisms:

- Understanding how energy can be transferred through conduction, convection, and radiation.
- Examples of everyday situations involving these transfer mechanisms
- Using Sanky diagrams to understand the term efficiency

Renewable and Non renewable Resources:

- Identifying sources of energy as renewable and non renewable. evaluating sources of energy



Dissipated	Energy that is wasted or transferred to the environment is said to be dissipated
Energy transfers	Energy cannot be created or destroyed, it can only be transferred from one type to another
Renewable	Renewable energy are ones which can be made without limit. Eg, solar energy
Non renewable	Non renewable energy sources are being used faster than they can be replaced e.g. coal

