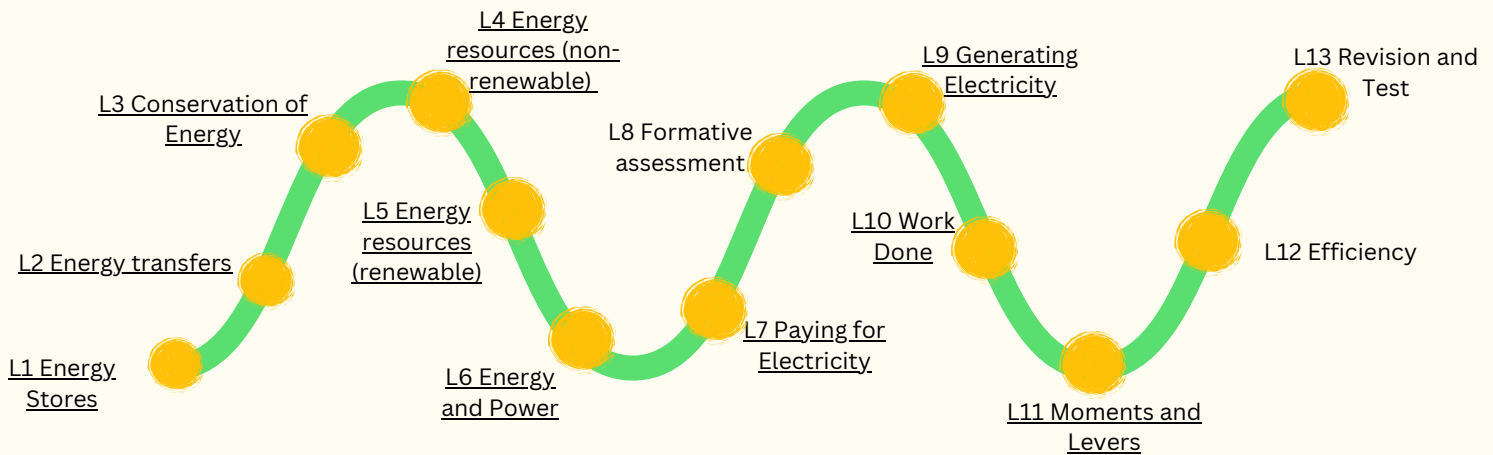


In Energy, you will learn how energy is transferred between stores and how it flows through systems, such as in heating, movement, and electricity. You will explore different energy resources, how electricity is generated, and compare renewable and non-renewable sources. You will also study how forces cause work to be done, how levers and moments can make tasks easier, and how to calculate and improve efficiency in systems.



Prior learning link: Energy may not have been learnt before KS3.

Key words

- Energy – The ability to do work; it exists in different forms such as heat, light, and movement.
- Energy store – A way of keeping energy, such as chemical, kinetic, thermal, or gravitational potential.
- Energy transfer – When energy moves from one store to another or changes form.
- Thermal energy – Energy stored in an object due to its temperature.
- Kinetic energy – The energy of a moving object.
- Gravitational potential energy – Energy stored in an object because of its height.
- Chemical energy – Energy stored in fuels, food, or batteries.
- Sound energy – Energy carried by vibrations through a medium such as air.
- Light energy – Energy carried by light waves, often from the Sun or electrical devices.
- Work done – Energy transferred when a force moves an object over a distance.
- Power – The rate at which energy is transferred or work is done, measured in watts (W).
- Efficiency – A measure of how much input energy is usefully transferred (not wasted), usually shown as a percentage.
- Wasted energy – Energy that is not usefully transferred, often as heat or sound.
- Renewable resource – An energy resource that will not run out and can be replaced naturally (e.g. solar, wind).
- Non-renewable resource – An energy resource that will run out over time (e.g. coal, oil, gas).
- Fossil fuels – Fuels formed from ancient remains of living things (e.g. coal, oil, natural gas).
- Moment – The turning effect of a force, calculated by force \times distance from pivot.
- Lever – A simple machine that helps lift or move loads more easily by turning around a pivot.

Revision Resources

[BBC KS3 Energy](#)