

Knowledge Organiser – Electricity

Household Appliances

Many everyday appliances rely on electricity for them to work. Some appliances need to be plugged into a socket (mains electricity) and others have a battery to make them work.

Electricity can be generated from wind power used to turn windmills and hydroelectric power from water used in dams. The Sun's rays can be converted into electricity by solar panels.

What you will know at the end of this term

- You will be able to identify appliances that run on electricity.
- You will be able to construct a simple circuit.
- You will be able to name each part of a circuit.
- You will be able to draw a circuit using pictures to represent it.
- You will be able to describe how a switch effects a circuit.
- You will be able to name simple conductors and insulators.

What I should know....

- Electricity is a form of energy that can be carried by wires and is used for heating and lighting, and to provide power for devices.
- Sources of light and sound may need electricity to work.

Electrical symbols that must be used when drawing a circuit:

KEY VOCABULARY AND SPELLINGS

Electricity: The flow of an electric current or charge through a material.

Conductor: A material that allows electricity to pass through it.

Insulator: A material that stops electricity passing through it.

Cell: A device containing electrodes immersed in an electrolyte, used for generating current.

Battery: A container containing one or more cell.

Current: A flow of charges/electrons.

Source: Where something comes from

Voltage: Potential difference in charge between two points.

Circuit: a complete route which an electric current can flow around