

Year 4 Science Knowledge Organiser What can electricity do?



Star Vocabulary

electricity	The flow of an electric current through a material.
generate	To make or produce.
renewable	A source of electricity that will not run out.
non-renewable	This source energy will eventually run out and so will no longer be able to make electricity.
appliances	A piece of equipment or a device designed to perform a particular job.
battery	A device that stores electrical energy as a chemical.
circuit	A pathway that electricity can flow around. It includes wires and a power supply and may include bulbs, switches or buzzers.

Know similarities and differences in relation to places, objects, materials and

Use recognised symbols when representing a simple circuit in a diagram.

Some materials let electricity pass through them easily. These are known as **conductors**. Many metals are good electrical conductors such as copper, iron and steel.



Electrical Conductors

Some materials do not let electricity pass through them. These materials are known as **insulators**. Plastic, wood, glass and rubber are good electrical



Electrical Insulators



Electricity can only flow around a complete circuit with no gaps. There must be wires connected to both the positive and negative end of the power supply/battery.

Progression

Identify common appliances that run on electricity

Identify whether or not a lamp will light in a simple series circuit

Recognise some common conductors and insulators

Construct a simple series electrical circuit, identifying and naming its basic parts

Recognise that a switch opens and closes a circuit

Test and review what electricity can do