

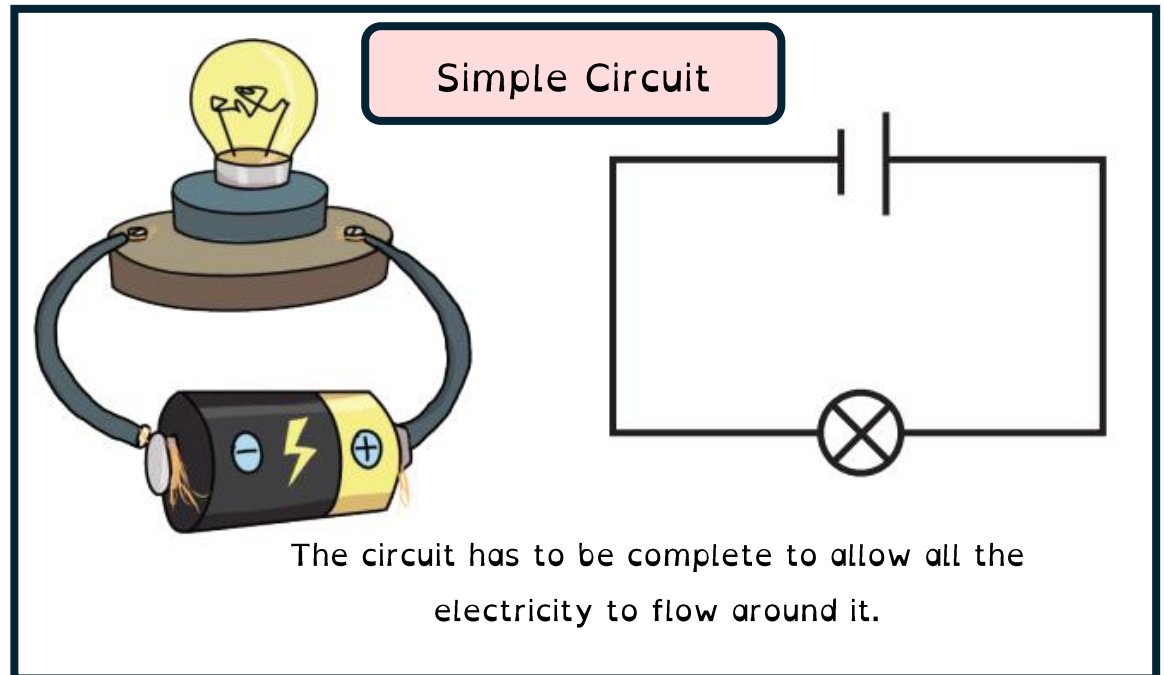
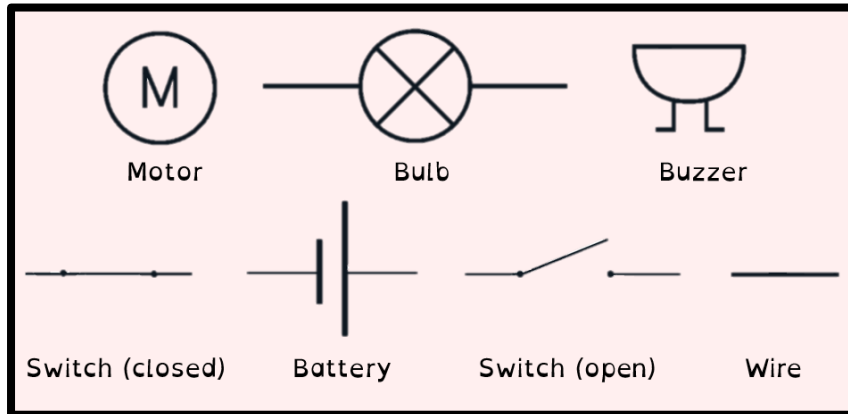
Electricity

Prior Year 4 Learning:

- identify common appliances that run on electricity
- construct a simple series electrical circuit, identifying and naming its basic parts, including cells, wires, bulbs, switches and buzzers
- identify whether or not a lamp will light in a simple series circuit, based on whether or not the lamp is part of a complete loop with a battery
- recognise that a switch opens and closes a circuit and associate this with whether or not a lamp lights in a simple series circuit
- recognise some common conductors and insulators, and associate metals with being good conductors

Year 6 Learning:

- use recognised symbols when representing a simple circuit in a diagram.
- associate the brightness of a lamp or the volume of a buzzer with the number and voltage of cells used in the circuit
- compare and give reasons for variations in how components function, including the brightness of bulbs, the loudness of buzzers and the on/off position of switches



How much of my life is dependent on electricity?

Voltage	Voltage is the force that pushes electrons through a circuit
Current	Current is the rate of flow of electrons.
Filament	A fine wire that lights or heats up when electric current is passed through it.
Circuits components	The parts of an electric circuit that work together to allow the flow of electricity.
Circuit symbols	Pictures that represent electrical components in a circuit diagram.
Circuit diagram	A circuit diagram is a simplified drawing that shows how electrical components are connected.
Negative terminal	The negative terminal of a battery is the electrode where electrons flow out of the battery. It's also known as the cathode, often marked with a minus sign (-).
Positive terminal	Is like the "exit" for electricity, it's the end of the battery where the electric current flows out, usually marked with a plus sign (+). It is also called the anode.

Switches

When we put a switch in an electrical circuit and turn it to the on position (closed), it completes the circuit and allows electricity to flow around the circuit. When we turn the switch to the off position (open), this creates a break in the circuit meaning the electricity cannot flow anymore and the appliance will not work.

