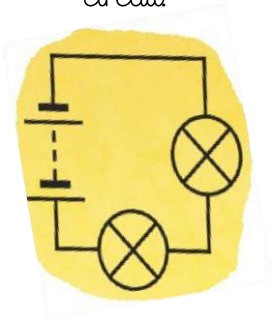
Year 6 Science
Autumn 2

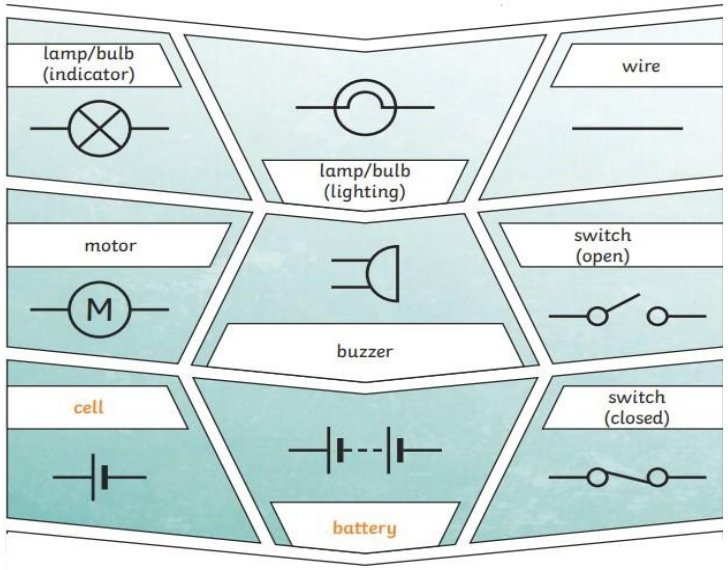
Electricity

Batteries and Power

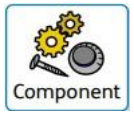
Fewer batteries or a lower voltage gives less power to the circuit. More buzzers or bulbs mean the power is shared by more components. More batteries or higher voltage creates more power to flow through the circuit.



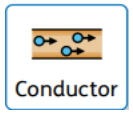
Electrical Symbols



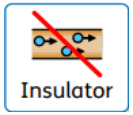
Key Vocabulary



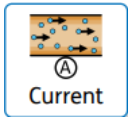
Component: part of an electrical circuit



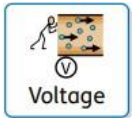
Electrical conductor: Materials that permit electrons to flow through it.



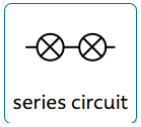
Electrical insulator: Materials that do not permit electrons to flow through it.



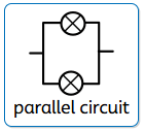
Current: Flow of electrons around a circuit



Voltage: The 'push' that makes electricity flow around a circuit. Measured in **Volts.**



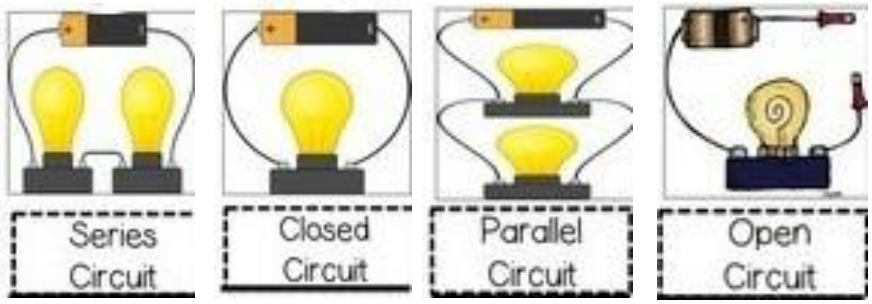
Series circuit: all components are connected one after another in a single path.



Parallel circuit: components connect across multiple independent paths, allowing current to branch out and flow through each path.

Types of circuit

If the circuit is open, the components within the circuit will not work.
If the circuit is closed, all of the components should work.



Links to prior learning:

Year 4 learning: To identify common appliances that run on electricity.

To construct a simple series electrical circuit, identifying and naming its basic parts, including cells, wires, bulbs, switches and buzzers.

To 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.

To recognise that a switch opens and closes a circuit and associate this with whether or not a lamp lights in a simple series circuit.

To recognise some common conductors and insulators, and associate metals with being good conductors.