LKS2 Science Knowledge Organiser : Electricity

Key Vocabulary
Learn these words and their definitions.

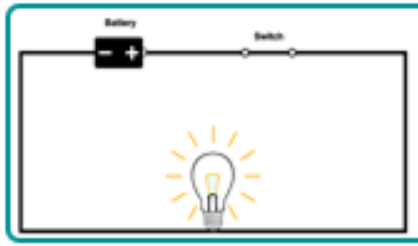
Key Word	Definition
Simple (series) circuit	A looped circuit where the electricity flows from the positive to negative terminal of the battery.
Circuit diagram	Electrical components shown in a picture by using standard symbols.
Parallel circuit	A circuit with two or more pathways for the current to flow through.
Conductor	Materials which allow electricity to flow through them with ease.
Insulator	Materials that do not allow electricity to pass through them with ease.
Loop	A complete circuit.
Switch	A toggle which is changed by someone as way of controlling an electrical circuit or system.
Resistance	A measure of how much an object opposes the flow of electrons.

Key Facts

1. A circuit contains a battery (cell), wires and a component that requires electricity to work (bulb, motor or buzzer).
2. Electrical current flows through the wires from the bulb, motor or buzzer.
3. A switch can break or reconnect a circuit.
4. A switch controls the flow of the electrical current around the circuit. When the switch is off, the current cannot flow. This is not the same as an incomplete circuit.

Conductors and Insulators

- Materials that allow electricity to pass through to create a complete circuit are called electrical conductors.
- Materials that do not allow electricity to pass through and do not complete a circuit are called electrical insulators.

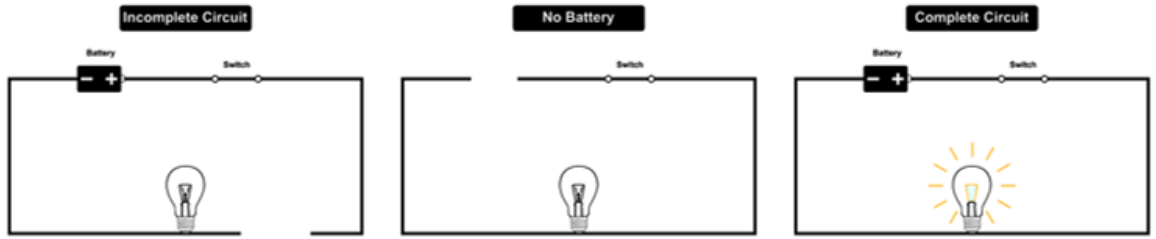


Simple Circuit

A **complete** circuit is a **loop** that allows electrical current to flow through wires.

Simple Electrical Circuit

These are complete circuits - they have a battery (cell) and a component (bulb). The wires are placed in the right places of the battery for the circuit to work.



These circuits will not work as they are incomplete.

Electrical Components