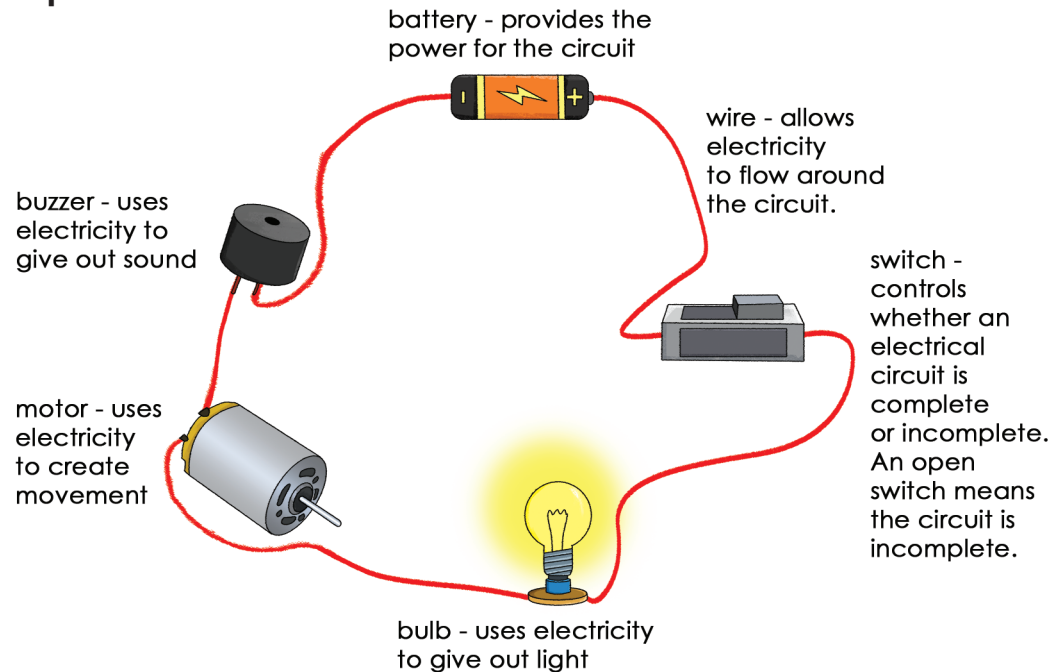


Circuits

- Electricity flows through circuits along wires. When it reaches a component, light, heat, sound, or movement are transferred.
- A complete circuit allows electricity to flow around the circuit to the components. It has no gaps that would stop the flow of electricity.

Circuit components



Adding more batteries to a circuit makes the bulbs brighter.

Adding more bulbs to a circuit makes the bulbs dimmer.



Types of material

Different materials have different properties.

Conductor:

Allows electricity to pass through it. Metals are conductors.

Insulator:

Does not allow electricity to pass through it. Plastics are insulators.

Adding a material to a circuit can tell us whether it is a conductor or an insulator of electricity.

Appliances

An appliance is a piece of equipment used to complete a task. Some use electricity, others do not.

Electrical appliances can be powered by:

- batteries
- mains – these appliances must be plugged in.



Word	Definition
appliance	A piece of equipment we use to complete a task.
battery (cell)	A power source.
brighter	Gives out more light.
bulb	A component which uses electricity to give out light.
buzzer	A part of a circuit which uses electricity to give out sound.
circuit	A route that starts and finishes in the same place.
component	Parts of a circuit.
conductor	A material that allows electricity to pass through it.
conducts	To conduct electricity or heat is to allow it to pass along.
dimmer	Gives out less light.

Word	Definition
electrical appliance	A piece of equipment we use to complete a task, powered by electricity.
electricity	A flow of power that can move from one place to another.
insulator	A material that does not allow electricity to pass through it.
mains electricity	A power supply used via a plug and plug socket.
material	Something from which an object can be made
motor	A component which uses electricity to create movement.
predict	To guess what will happen, based on what you already know.
switch	A component which can stop and start the flow of electricity.
wires	Metal made into a thin and flexible thread.