

# Electricity



## Curriculum Links:

- 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

## Key Facts:

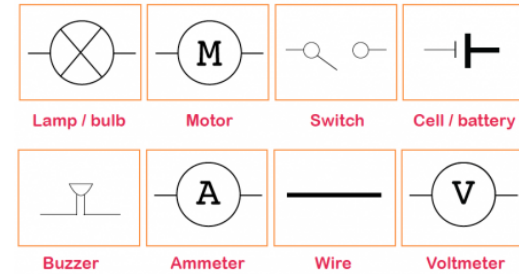
- Electricity is generated using energy from sources such as oil, wind or water
- Appliances can either use batteries or mains electricity to power them. Batteries comes in a number of sizes depending on how much power the appliance needs
- A complete circuit allows an electrical current to flow around it
- A circuit contains a battery/cell, wires and an appliance (bulb, motor, buzzer etc)
- A switch can break or reconnect a circuit. It controls the flow of the electrical current, if the switch is off, the current cannot flow—this is not the same as an incomplete circuit
- Some objects placed in the circuit may not allow electricity to flow through
- Materials which allow electricity to flow through are electrical conductors
- Materials which do not allow electricity to flow through are electrical insulators

## Possible experiences:

- Make a variety of circuits—investigate which work and why
- Create switches
- Investigate electrical conductors and insulators
- Create electrical safety guides
- Draw circuits using symbols

## We should already know:

- Electricity is a type of energy
- Electricity is carried by wires and is used for heating, lighting and providing power
- Sources of light and sound need electricity to work



## Key Vocabulary

Battery	A device which provides power for electrical items
Bulb	The part of an electric lamp which gives out light when electricity passes through it
Buzzer	An electrical device which makes a buzzing sound when electricity passes through
Cell	A battery
Circuit	A complete route which an electric current can pass through
Conductor	A substance heat or electricity can pass through
Component	Parts that something is made of
Current	The flow of electricity through a wire or circuit
Electricity	A form of energy carried by wires to provide power for devices
Insulator	A non-conductor of electricity or heat
Motor	A device which uses electricity to create a movement
Switch	A control for an electrical device which can be used to turn it on and off
Wires	Long pieces of metal which carry electrical current