

# Electricity

## Glossary

**battery** a container consisting of one or more cells that is used for generating current

**bulb** a glass bulb which provides light by passing an electrical current through a filament

**buzzer** an electrical device that makes a buzzing noise - used for signalling e.g. a burglar alarm

**circuit** a complete and closed path around which a circulating current can flow

**conductor** a material or device which allows heat or electricity to pass through

**current** a flow of electrical charge which travels down wires

**electricity** a form of energy resulting from the existence of charged particles

**filament** conducting wire or thread with a high melting point which forms part of an electric bulb

**insulator** a material that will not allow electricity to pass through

**motor** an electrically powered machine which provides power to moveable devices e.g. vehicle

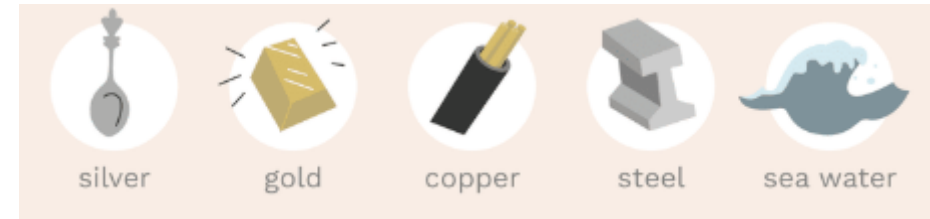
**resistance** the difficulty that the electric current has when flowing around a circuit

**static** a stationary electric charge, often produced by friction, which causes sparks or  
**electricity** crackling or the attraction of dust

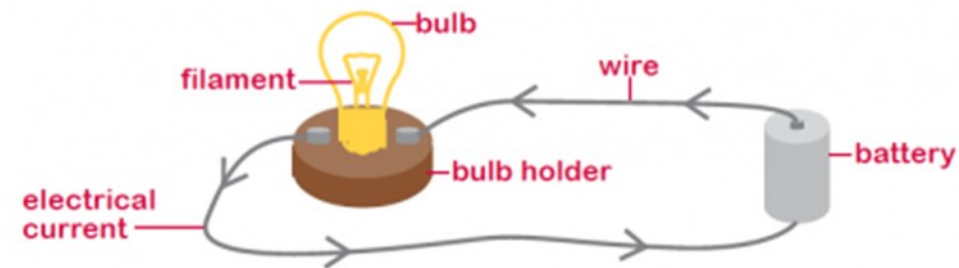
**switch** a device for making and breaking the connection in a circuit

**voltage** the force that makes electricity move through a wire

## Electrical Conductors















## Electrical Insulators



SCIENCE

# Circuits

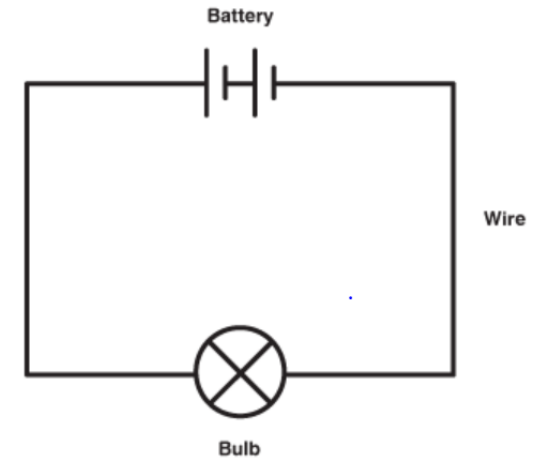


Symbol	Definition	Image
	<b>bulb (lamp)</b> a component which lights up when electricity passes through it in a circuit	
	<b>motor</b> a component which moves (spins) when electricity passes through it in a circuit	
	<b>buzzer</b> a component which makes a sound when electricity passes through it in a circuit	
	<b>wire</b> plastic-coated electrical wire which conducts electricity around a circuit	
	<b>switch</b> part of a circuit which can easily be opened or closed to control the flow of electric current	
	<b>cell- 1 battery</b> a safe power source & store of chemical potential energy that can power a circuit	

## Simple series circuit

In order for electricity to flow, a circuit needs three things:

1. a source of electricity
2. no gaps in the circuit
3. conductors



**By changing the components (parts) in a circuit we can vary:**

The volume of a buzzer  
(louder / quieter)



The brightness of a bulb  
(brighter / dimmer)

