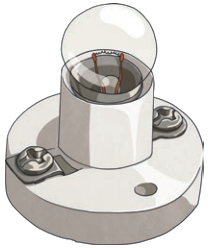
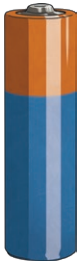
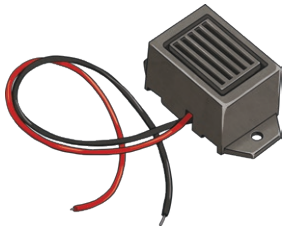
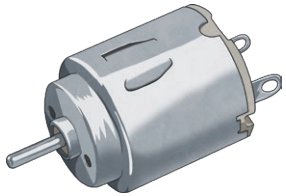
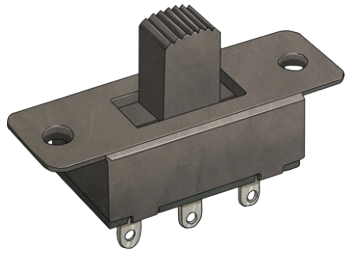
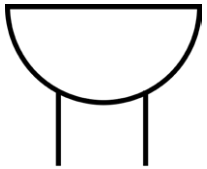
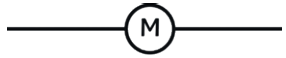
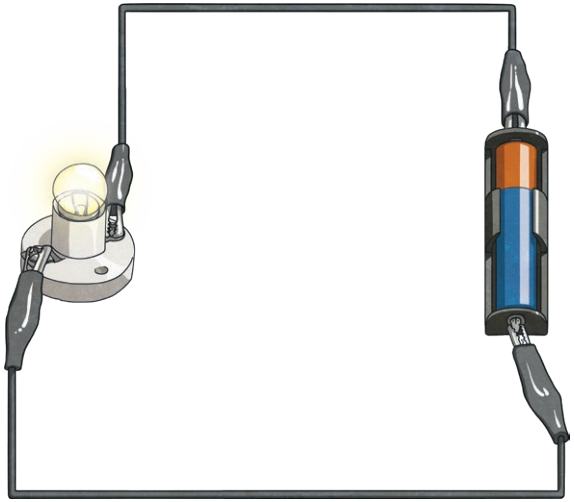
Key Vocabulary Overview	
series circuit	a circuit where every component is in one loop
cell	a component which acts as a source of electrical power
battery	a collection of cells
bulb	a component which produces light
current	the flow of electricity around a circuit
voltage	the electrical force, provided by the cell or battery in the circuit, that causes current to move around a circuit
component	a piece of equipment that is used in a circuit, such as a bulb or a cell
buzzer	a circuit component that makes a noise
switch	a circuit component that allows the circuit to open or close
incomplete circuit	a circuit with a break in it that prevents the current from flowing
complete circuit	a circuit which does not have a break in it. The current can flow around the circuit
controlled variable	a variable that will be kept the same in the investigation
dependent variable	what is measured in the investigation
independent variable	what is changed in the investigation
repeatability	how likely it is you would get similar results if you repeated the experiment
evaluate	to think about how repeatable and accurate results are and how the investigation could be improved
accurate	how close your result is to the true value

Symbols

Bulb	Cell	Wires	Buzzer	Motor	Open Switch	Closed Switch
						
						

Series Circuit

A **series circuit** is a circuit where all of the **components** are connected in a circle, each one linking to the next. The electricity flows through each **component** in turn.

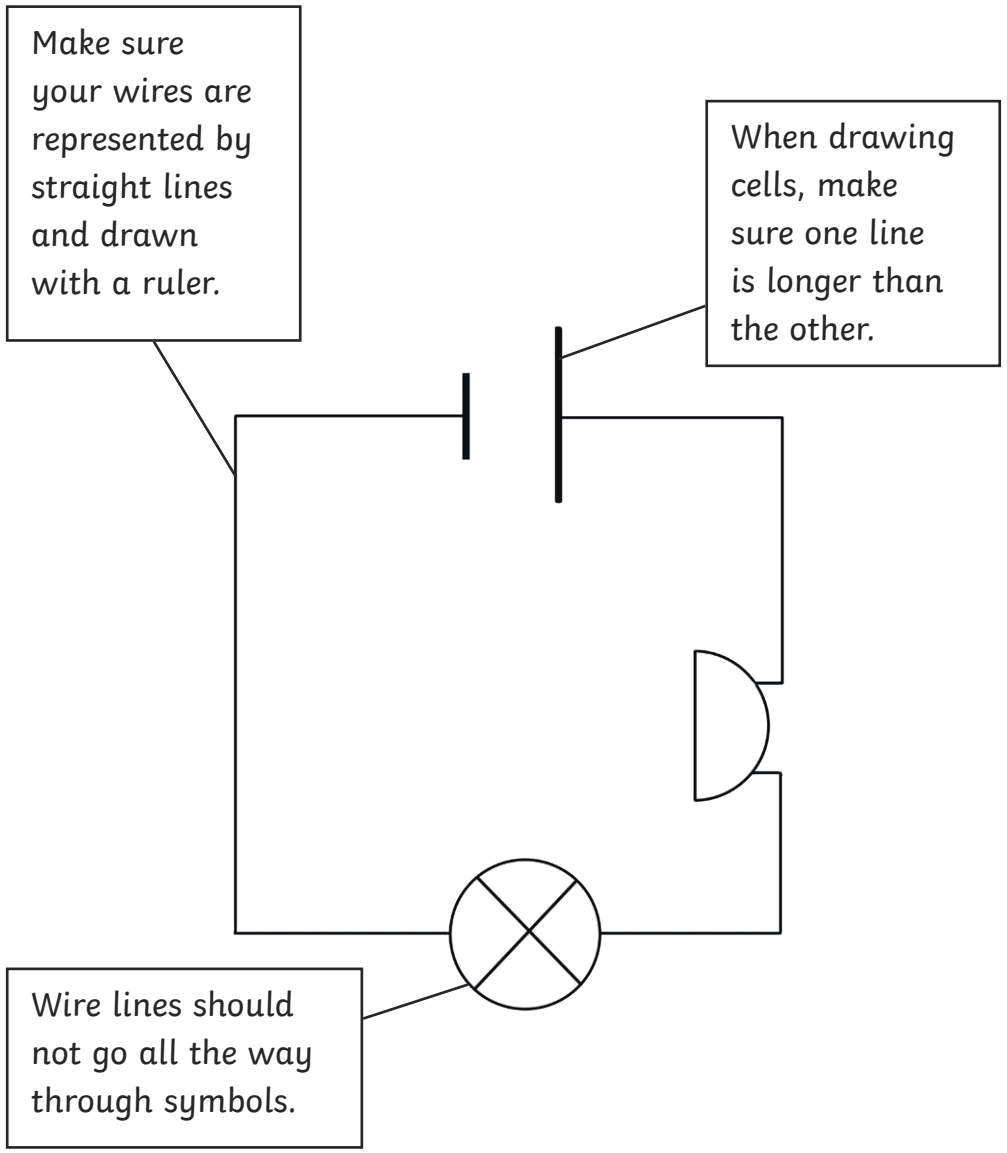


Voltage

Voltage is the electrical force that causes **current** to move around a circuit. It is what 'pushes' the **current** around the circuit. The unit of measurement for **voltage** is the volt (V) and it can be measured with a voltmeter.

Cells and **batteries** provide the **voltage** for the circuit.

Drawing a Circuit



Complete vs Incomplete Circuits

Complete circuits have no breaks in them. The **current** can flow all the way around the circuit. The outputs (**bulbs**, **buzzers** or motors) will work. **Incomplete circuits** have breaks in the circuit, which stop the **current** from flowing. Outputs will not work as electricity is not being 'pushed' through them.

Switch

A **switch** allows you to control whether a circuit is open or closed without removing any **components**. This allows you to make circuits that work when you want them to and can be turned off when you don't need them.

Variation in Circuits

The more **components** there are in a circuit, the dimmer the bulbs and/or the quieter the **buzzers**. The fewer **components** there are in a circuit, the brighter the bulbs and/or the louder the **buzzers**. This is because the **current** cannot travel as quickly through a circuit with lots of **components**.