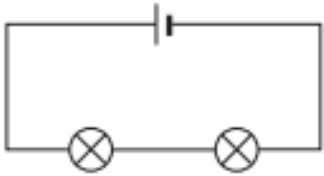


Electricity Y6

Series circuit – A circuit where all the components are in one single loop.



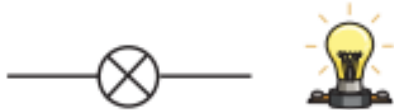
Cell – A source of electrical power (voltage).



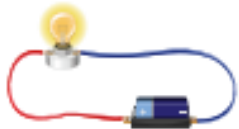
Battery – A source of electrical power (voltage). A battery is more than one cell.



Bulb – A component in a circuit that produces light.



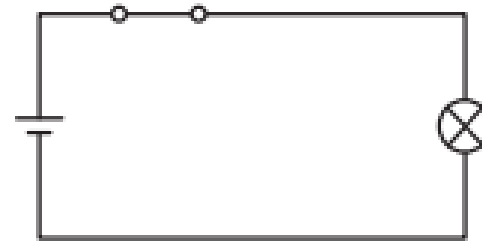
Current – The flow of electricity in a circuit.



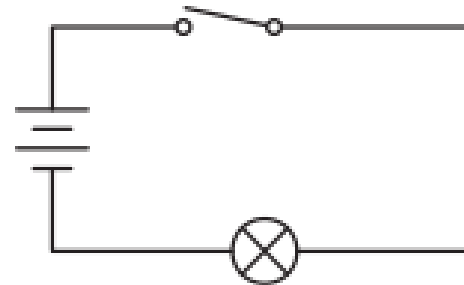
Voltage – Causes the current to flow.



- **Complete circuit** – Circuits that do not have breaks in them.



- **Incomplete circuit** – Circuits that have breaks in them, such as an open switch.



- **Switch** – Allows current in a circuit to be turned on and off.



- **Buzzer** – A component that makes a buzzing or beeping sound.



Key knowledge

Construct and draw series circuits using symbols

- A series circuit is where all the components are in one continuous loop.
- Components in a series circuit include the battery, buzzers, wires, bulbs and switches.
- Each component in a circuit has a symbol.
- Current is the flow of electricity in a circuit.
- Voltage causes the current to flow.

Complete and incomplete circuits

- For a circuit to be complete, all the components, including a battery, are connected by wires and the switch is closed.
- An incomplete circuit may have a break in the wires, a switch may be open or the battery is the wrong way in the holder.
- The current does not flow at all in an incomplete circuit.

Variations within circuits

- The more components there are in a circuit, the dimmer the bulbs and the quieter the buzzers.
- The more components there are in a circuit, the more difficult it is for current to flow.

Enquiry Question

How does the voltage in a circuit affect the brightness of a bulb and the loudness of a buzzer?

Plan - voltage experiment

- I predict that...
- I think this will happen because...
- The independent variable will be...
- The dependent variable will be...
- The controlled variables will be...