

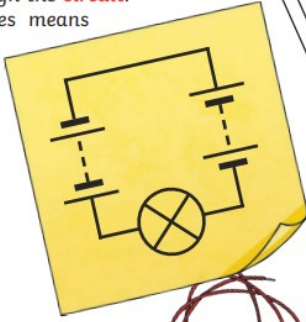


# Electricity

## Key Knowledge

What will make a bulb brighter or a buzzer louder?

- More **batteries** or a higher **voltage** create more power to flow through the **circuit**.
- Shortening the wires means the **electrons** have less **resistance** to flow through.

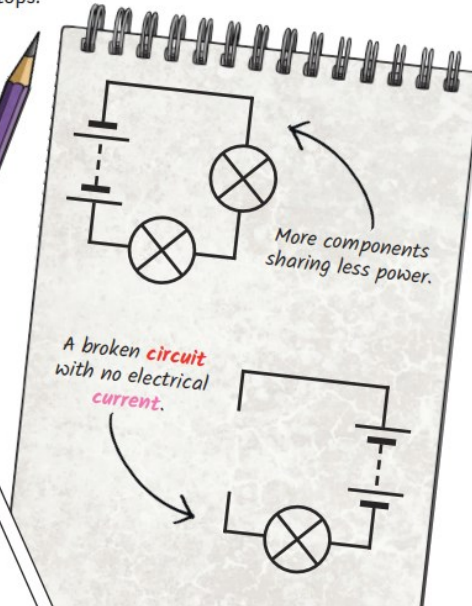


What will make a bulb dimmer or a buzzer quieter?

- Fewer **batteries** or a lower **voltage** give less power to the **circuit**.
- More buzzers or bulbs mean the power is shared by more components.
- Lengthening the wires means the **electrons** have to travel through more **resistance**.

### Series Circuit

A **circuit** that has only one route for the **current** to take. If more bulbs or buzzers are added, the power has to be shared and so they will be dimmer or quieter. If just one part of this series **circuit** breaks, the **circuit** is broken and the flow of **current** stops.



## Key symbols in a circuit

Components of a **Circuit** and Their **Symbols**

lamp/bulb (indicator)		wire	
motor		switch (open)	
cell		switch (closed)	
lamp/bulb (lighting)		buzzer	
battery			

These **symbols** can be used to create electrical **circuit** diagrams.

## Useful Vocabulary

**Circuit** A path that an electrical current can flow around.

**Symbol** A visual picture that stands for something else.

**Cell/battery** A device that stores chemical energy until it is needed. A cell is a single unit. A battery is a collection of cells.

**Current** The flow of electrons, measured in amps. amps How electric current is measured.

**Voltage** The force that makes the electric current move through the wires. The greater the voltage, the more current will flow.

**Resistance** The difficulty that the electric current has when flowing around a circuit.

**Electrons** Very small particles that travel around an electrical circuit.