

Key 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 this 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

Famous Scientists

Ben Franklin

Michael Faraday

Thomas Edison

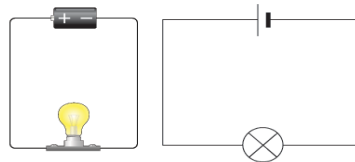
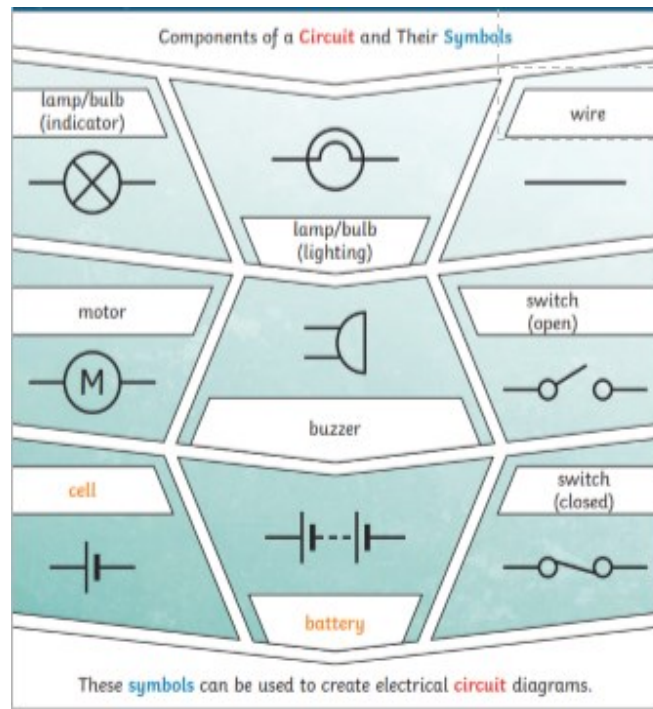
Lewis Latimer

Nikola Tesla



Lewis Latimer 1848-1928

Key knowledge



Investigation

What factors could affect the brightness of a bulb?

Which variables could you change?

Which variables will you measure/observe?

Which variables will you keep the same?

What is your question?

Key facts

What will make a bulb brighter or a buzzer louder?

More **batteries** or a higher voltage will create more power through the **circuit**

- Shortening the wires will mean that 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 that 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.

