



She is best known for designing the first solar-powered heating system for houses.

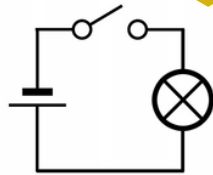


Mária Telkes the 'Sun Queen'

is a scientist and inventor who worked on solar energy technologies.

Switches

can control circuits. A circuit is broken when the switch is open. When a switch is closed, then the circuit is complete.



The switch is open.
The bulb will not light.

In order for electricity to flow, a circuit needs **3** things

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

We can draw a simple circuit in a diagram. We use **symbols** to represent each component

buzzer	motor	bulb	closed switch	open switch	wire	battery	cell

Year Six Electricity

voltage increasing



dim

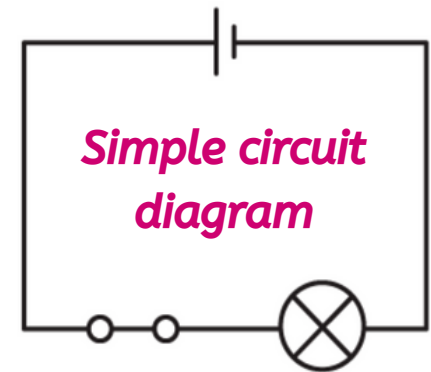


bright



Autumn 2

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.



Simple circuit diagram

Glossary

- Battery/cell**- a device that stores energy as a chemical until it is needed. A cell is a single unit and a battery is more than one
- Bulb**- a glass bulb that provides light when an electrical current passes through it
- Buzzer**- an electrical device that makes a buzzing sound
- Circuit**- a path that an electrical current can flow around
- Conductor**- a material that allows heat or electricity to pass through
- Current**- the flow of electrons, measured in amps
- Electricity**- a form of energy
- Electrons**- very small particles that travel around an electrical circuit
- Motor**- a machine powered by electricity which causes movement
- Resistance** - the difficulty that the electric current has when flowing around a circuit
- Switch**- a device to allow a circuit to be open or closed
- Voltage**- the force that makes electricity move through the wire