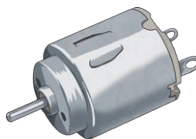
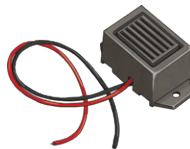
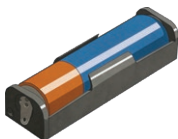
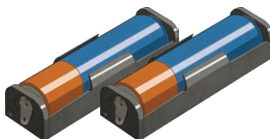
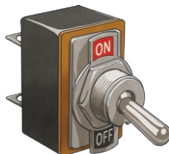
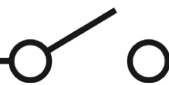
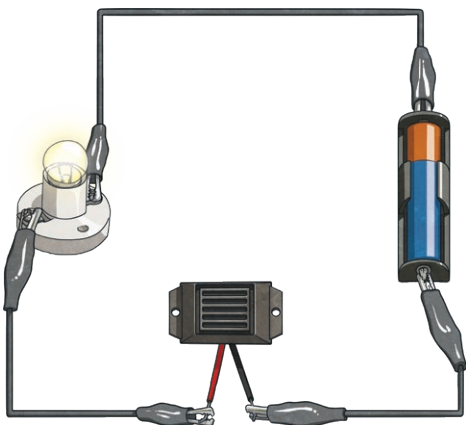
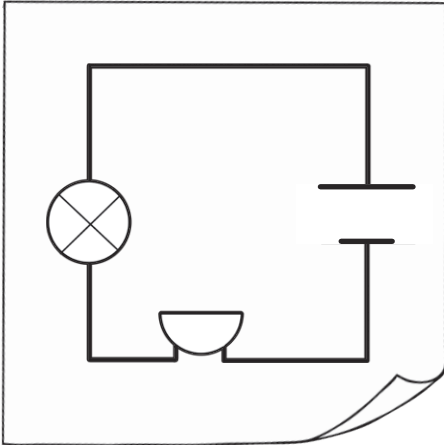


Key Vocabulary	
electricity	Electricity is a type of energy that can flow through certain materials, e.g. from a power source through wires to an appliance.
cell	A cell is a component that stores electrical energy until it is needed. A cell is a single unit.
battery	A battery is a collection of cells .
wires	Wires are an electrical component that allow electrical current to flow to other components .
bulb	A bulb is an electrical component that produces light.
motor	A motor is an electrical component that produces movement.
buzzer	A buzzer is an electrical component that produces sound.
switch	A switch is an electrical component that allows a circuit to open and close.

Bulb  	Motor  	Buzzer  	Wire  
Cell  	Battery  	Open Switch  	Closed Switch  
Circuit Diagram  			

Key Vocabulary

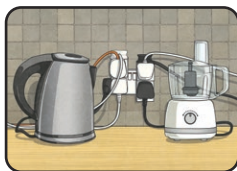
component	A component is a piece of equipment used in a circuit .
circuit	A circuit is a path that an electrical current can flow around.
conductor	An electrical conductor allows electricity to pass through it.
insulator	An electrical insulator does not allow electricity to pass through it.
voltage	Voltage is the electrical force that pushes electrical charge around a circuit . Voltage is provided by the cell or battery in the circuit .

Electrical Safety

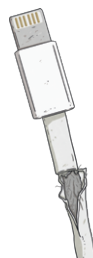
Be cautious when seeing this sign.



Do not overload sockets or place near water.

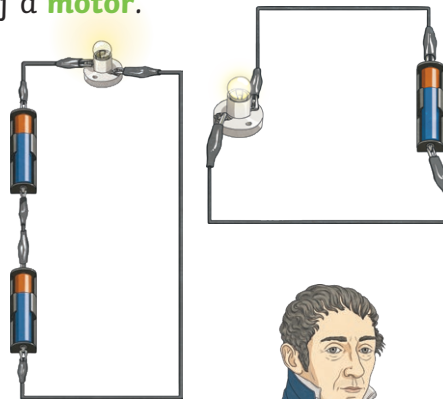


Avoid touching damaged **components**.



Voltage

Adding multiple **cells** to a **circuit** can increase the **voltage**. This can increase the brightness of a **bulb**, volume of a **buzzer** or speed of a **motor**.



Thomas Edison
(1847–1931)

He is most famous for his work in developing the electric lightbulb. He created a filament that would allow a lightbulb to run for approximately 1200 hours.

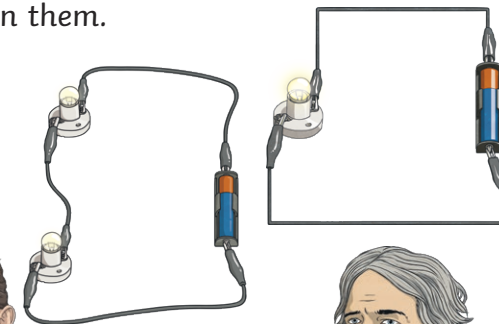
Alessandro Volta
(1745–1827)

He is most famous for his invention of the **battery** through his development of the voltaic pile.

The unit for measuring electrical force, the volt (V), is named after him.

Varied Components

Adding additional **components** has an effect on the **circuit**. Adding additional **bulbs**, for example, can result in dimmer **bulbs**, since **voltage** has to be shared between them.



Nikola Tesla
(1856–1943)

He is most famous for developing the alternating-current (AC) system. Other notable work includes developing the technologies behind X-rays, lasers and remote controls.

Michael Faraday
(1791–1867)

He is most famous for his work in electromagnetism and for developing a generator. He also developed the Faraday Cage, which protects objects from electrostatic current.