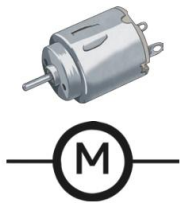
Year 6 Science Knowledge Organiser Spring
Electricity

Key Vocabulary

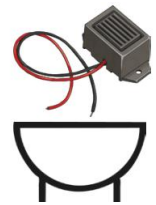
electricity	Electricity is a type of energy that can flow through certain materials, e.g. from a power source through wires to an appliance.
cell	A cell is a component that stores electrical energy until it is needed. A cell is a single unit.
battery	A battery is a collection of cells
wires	Wires are 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

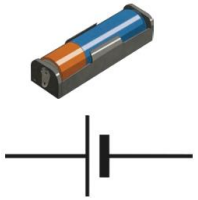


Buzzer

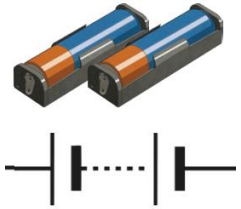


Wire

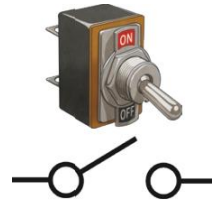
Cell



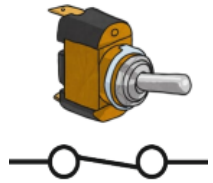
Battery



Open Switch

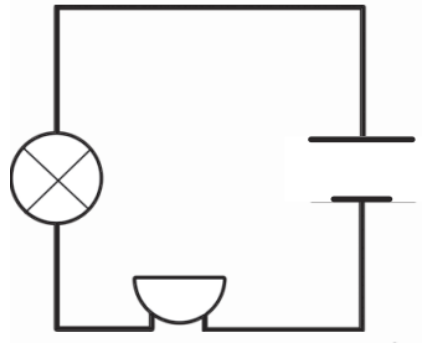


Closed Switch



Circuit Diagram

Scientific Diagram



Key Vocabulary

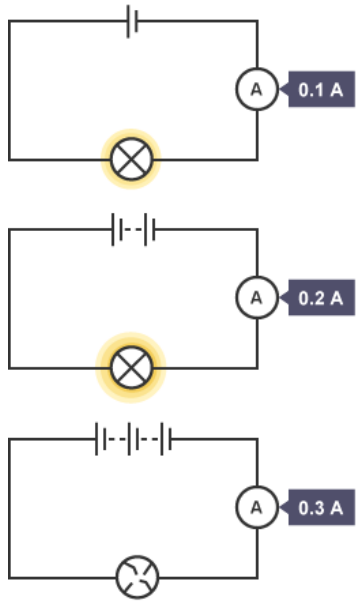
component	A component is a piece of equipment used in a circuit.
circuit	A circuit is a path that an electrical current can flow around.
conductor	An electrical conductor allows electricity to pass through it.
insulator	An electrical insulator does not allow electricity to pass through it.
voltage	Voltage 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 the sign shown below.
- Do not overload sockets or place near water.
- Avoid touching damaged components.

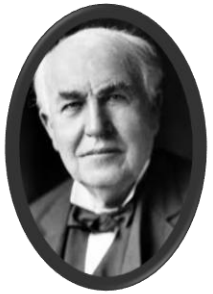
Voltage

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.



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.



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.

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.