

Year 6 - Electricity

| Key vocabulary | | | | |
|----------------|--|--|--|--|
| battery | A container consisting of one or more cells where chemical energy is converted into electricity and used as a source of power. | | | |
| bulb | A glass bulb which provides light by passing an electrical current through a filament. | | | |
| buzzer | An electrical device that makes a buzzing sound and can be used for signalling. | | | |
| cell | A device containing electrodes that is used for generating current. | | | |
| circuit | A complete and closed path around which a circulating electric current can flow. | | | |
| conductor | A material or device which allows heat or electricity to carry through. | | | |
| current | A flow of electricity which results from the movement of electrically charged particles. | | | |
| electricity | A form of energy resulting from the existence of charged particles. | | | |
| filament | A conducting wire or thread with a high melting point that forms part of an electric bulb. | | | |
| motor | A machine powered by electricity that supplies motive power for a vehicle or other moveable device. | | | |
| switch | A device for making and breaking the connection in an electric circuit. | | | |
| voltage | An electrical foce that makes electricity move through a wire. It is measured in volts. | | | |

| A Complete Circuit |
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| filament wire bulb holder current bulb holder |

| History of Electricity | | | | |
|------------------------|--|--|--|--|
| Benjamin Franklin | in the 1700s, when he flew a kite in a thunderstorm he felt a spark of electricity, proving that lightning produced electricity. | | | |
| Luigi Galvani | Discovered that frog legs twitch when struck by a spark of electricity, leading him to believe that electric was present in living things. | | | |
| Alessandro Volta | Invented the first battery. It provided a steady source of electricity. | | | |
| Nikola Tesla | In the 1800s, he developed ways to carry electricity over long distances, allowing cities to be powered. | | | |
| Thomas Edison | Invented the light bulb, making it possible to use electricity to light homes instead of candles. | | | |

Circuit symbols

| Cell | ─ └ | Three-way switch | 000 |
|------------------------------|---------------------|-------------------|----------------|
| Battery (2 or more cells) | - | Push switch | _ _ |
| Lamp | $-\otimes$ | Resistor | |
| Buzzer | A | Variable resistor | - |
| Motor | M | Wires | |
| Open switch | ~ ~ | Where wires join | |
| Closed switch | | Where wires cross | ++ |