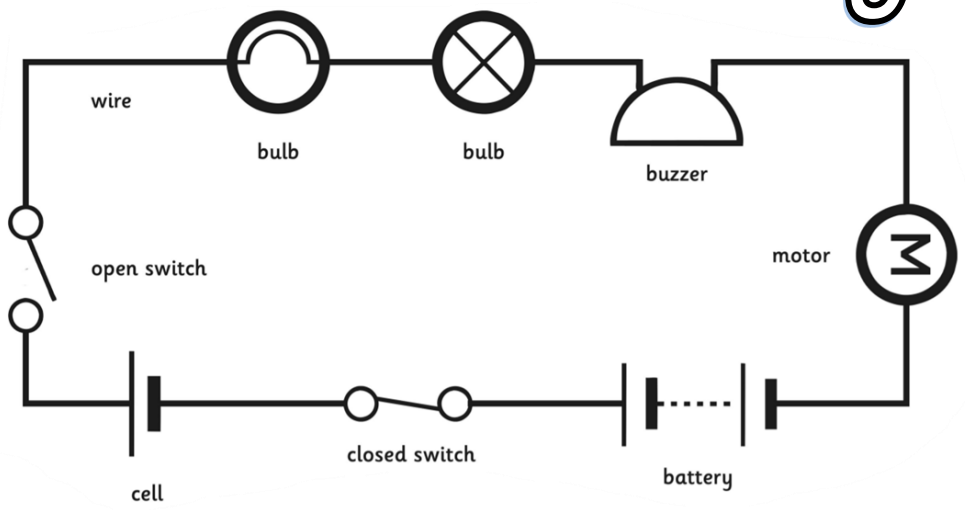
Electricity



Thomas Edison was a famous inventor who helped us make the most of electricity from bulbs to fuses.

Did you know?	The brightness of a bulb is associated with the voltage.	Electricity travels at the speed of light. That's more than 186,000 miles per second!
Electricity comes from the power station (a place where electricity is created and sent to our homes), the wind, the sun, water and even an animal's poo!	Electricity is a type of energy that builds up in one place (static), or flows from one place to another (current electricity).	Electric fields work in a similar way to gravity. Whereas gravity always attracts, electric fields can either attract or repel.
A bolt of lightning can measure up to 3,000,000 volts, and lasts less than one second!	When an electric charge builds up on the surface of an object it makes static electricity. This is why we sometimes have a small electric shock.	One flash of lightning could power houses for a whole year.

Circuit	A completed path through which an electrical current flows.
Conductor	An object or type of material that allows the flow of an electrical current in more than one direction. Some materials let electricity pass through them easily. These materials are known as electrical conductors.
Insulator	A material whose internal electric charges do not flow freely. Plastic, wood, glass and rubber are good electrical insulators.
Battery	A device that stores chemical energy and makes it available in an electrical form.
Cells	An electrical cell is a device that is used to generate electricity, or one that is used to make chemical reactions possible by applying electricity.
Switch	An electrical component that can 'make' or 'break' an electrical circuit.
Socket	Allows electrical equipment to be connected to the alternating current (AC) power supply in buildings and at other sites. A socket is a safe device to plug your electrical items into at home. Almost every room at home will have at least one socket.
Appliance	A device that uses electricity to perform a function.
Series circuits	Components are connected along a single path, so the same current flows through all of the components. A series circuit is one that has more than one resistor, but only one path through which the electricity (electrons) flows.
Volts	Voltage is an electrical potential difference, the difference in electric potential between two places.
Generator	A machine that converts energy into electricity.
Turbine	A machine that creates continuous power in which a wheel, or something similar, moves round and round by fast moving water, steam, gas or air.
Fuses	These are safety devices. A fuse is a strip of wire that melts and breaks an electric circuit if it goes over a safe level.