



Knowledge Organiser—Year 4

“What would our world be without electricity?”

Vocabulary

Electricity—A form of energy resulting from the existence of charged particles.

Appliance—A device or piece of equipment designed to perform a specific task.

Electrical circuit—A complete and closed path around which a circulating electric current can flow.

Wire—A metal drawn out into the form of a thin flexible thread or rod.

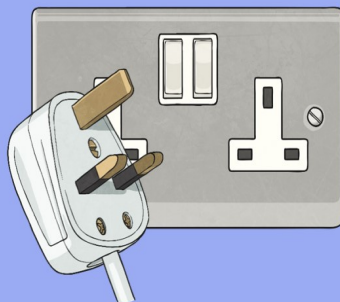
Bulb—A glass bulb which provides light by passing an electrical current through a filament.

Battery—A container consisting of one or more cells, in which chemical energy is converted into electricity and used as a source of power.

Buzzer—An electrical device that makes a buzzing noise and is used for signalling.

Switch—A device for making and breaking the connection in an electric circuit.

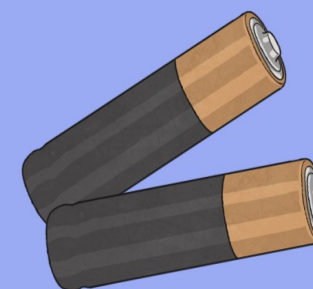
Components—Circuits inside pieces of electronic equipment.



Mains electricity: which is an alternating current (AC).



Lightning



Batteries: which generate a direct current (DC).

Key dates

600BC: Greek philosopher Thales of Miletus discovered static electricity.

1600AD: English scientist William Gilbert was the first person to use the word "electricity".

1733AD: French scientist Charles du Fay found that there were two different kinds of static electric charge.

1752AD: American scientist, Benjamin Franklin showed that lightning is a form of electricity.

1800AD: Italian physics professor Alessandro Volta found out how to make electricity by joining different metals together and invented batteries.

1821AD: British scientist Michael Faraday developed the first motor which transformed electricity into kinetic (movement) energy.

1883AD: The first electric railway arrived in the UK.

1893AD: Alan MacMaster invented the first electric toaster in Edinburgh, Scotland.

1918AD: The first electrical washing machines and refrigerators became available in the UK.

1926AD: The electricity supply act in the First National Grid was introduced.

1936AD: The first television was invented by John Baird.

