

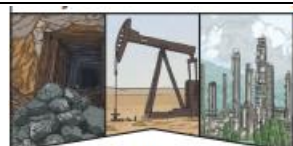
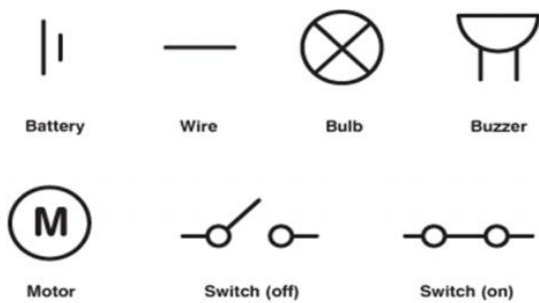
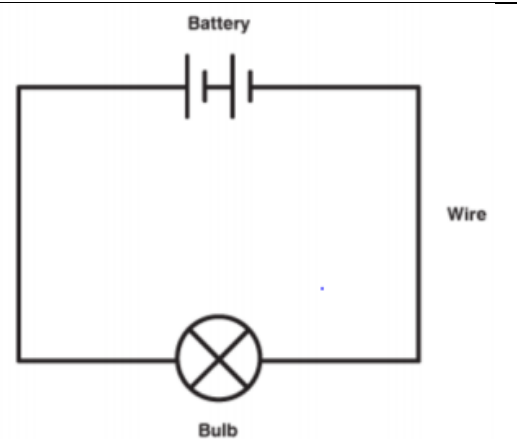


What should I already know?

- No discreet teaching of electricity before, but they will have some knowledge from ICT lessons and ICT safety precautions.

Scientific Skills I will develop:

- Make some of the planning decisions about what to change and measure/observe.
- Recognise obvious risks and how to keep myself and others safe.
- With some independence, analyse results /observations by writing a sentence that matches the evidence i.e. deciding the important aspect of the result and summarising in a conclusion (e.g. metals tend to be good conductors of electricity).



Coal, oil and natural gases are fossil fuels which, when burnt, produce heat which can be used to generate electricity.

Electricity can be generated from wind power used to turn windmills and hydroelectric power from water used in dams. The Sun's rays can be converted into electricity by solar panels.



Nuclear energy is created when atoms are split. This creates heat which can be used to generate electricity. Geothermal energy is heat from the Earth that is converted into electricity.

Common electrical hazards

1. Overloading a plug extension socket.
2. Exposed wires.
3. Damaged wall sockets.
4. Wires left along the carpet for people to trip over.
5. Placing metal into electrical appliances or open sockets.
6. Electrical appliances and wires near water.

NOTE: WATER IS AN EXCELLENT ELECTRICAL CONDUCTOR SO IT CAN BE VERY DANGEROUS TO HAVE ELECTRICAL DEVICES NEAR WATER

- Some appliances use batteries and some use mains electricity.
- Batteries come in different sizes depending on how much and for how long the appliance is used.
- Common appliances that use electricity.



Key Vocabulary (including definition: (see parts of digestive system in previous box).

Electricity: The flow of an electric current through a material e.g. from a power source through wires to an appliance.

Generate: To make or produce.

Renewable: A source of electricity that will not run out. Includes solar, nuclear, hydro and wind.

Non-renewable: A source of energy that will run out eventually. Includes coal, oil and natural gas.

Appliances: A piece of equipment or device designed to perform a particular job.

Battery: A device that stores electrical energy as a chemical.

Circuit: A complete route which an electrical current can flow around.

Wire: Long, thin piece of metal that carries electrical current.

Bulb: Electrical device that lights up.

Cell: A device used to generate electricity e.g. a battery.

Switch: A component that can turn the electrical device on or off.