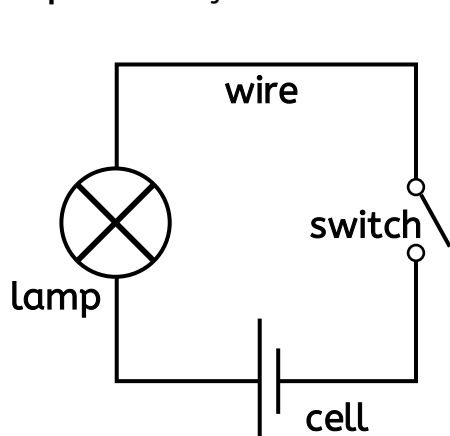


Electricity

Circuit symbols and diagrams

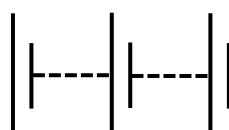
When drawing an electrical circuit, use straight lines and symbols to represent the **components** of the circuit.



motor



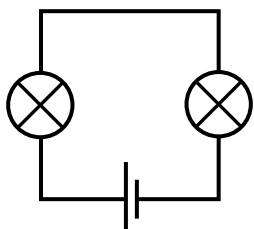
buzzer



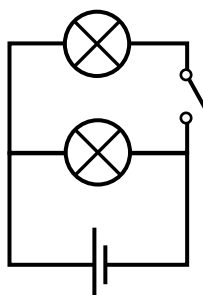
battery (which is formed when we connect two or more cells. Adding more cells increases the voltage of the circuit.)

Series and parallel circuits

More than one lamp (or other component) can be placed in a circuit.



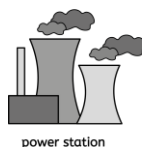
If the lamps are placed in one continuous loop, it is a **series circuit**.



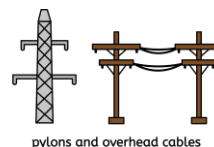
If lamps are placed in separate loops that both connect to the cell, it is a **parallel circuit**.

Generating electricity

Power stations **generate** mains electricity. The electricity is transferred to our homes and school by overhead cables.



power station



pylons and overhead cables



home



Some power stations burn **fossil fuels** (coal, oil and gas) to generate electricity.

These are **non-renewable** sources of energy.

Renewable sources of energy include:



solar



wind



geothermal



tidal