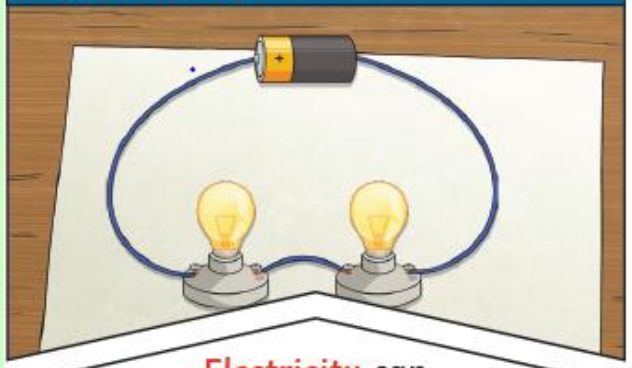
Year 4 – Electricity

Key Knowledge



Electricity can only flow around a complete **circuit** that has no gaps. There must be wires connected to both the positive and negative end of the power supply/**battery**.

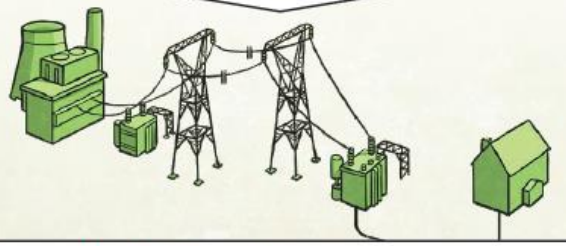
Switches can be used to open or close a **circuit**. When off, a switch 'breaks' the **circuit** to stop the flow of **electricity**. When on, a switch 'completes' the circuit and allows the **electricity** to flow.

Vocabulary Dozen	
electricity	Energy caused by the moement of electrons through matter
Series circuit	A closed circuit in which the current follows one path
conductor	Anything that carries or allows passage of heat, electricity or sound
insulator	A material that does not conduct electricity
cell	A device that makes electricity by chemical means
switch	A device that opens and closes an electrical circuit
buzzer	An electrical device that signals by buzzing
bulb	A device made of rounded glass used to create electric light
appliance	A service used for a particular purpose e.g. stoves and fridges are home appliances.
Mains electricity	Electricity supply from power stations to households.
batteries	A device that makes electricity by using chemical reactions
Power source	It supplies electrical power to at least one electric item.

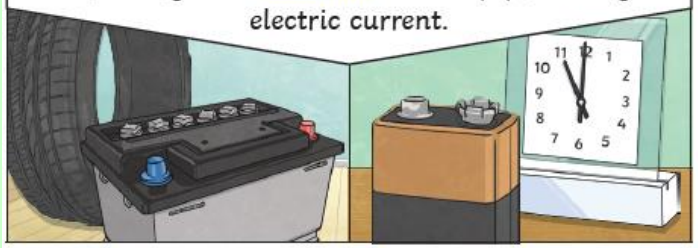
Electrical Conductors	Electrical Insulators
Copper	Rubber
Iron	Wood
Steel	Plastic
Silver	Paper
Gold	

There are two types of electric current.

Mains **electricity**: power stations send an electric charge through wires to transformers and pylons. Then, underground wires carry the electricity into our homes via wires in the walls and out through plug sockets.



Battery electricity: **batteries** store chemicals which produce an electric current. Eventually, even rechargeable **batteries** will stop producing an electric current.



I can identify some common appliances that run on electricity

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