

Science Knowledge Organiser

Electricity: Circuits

Year 4
Autumn 2



Key Vocabulary

circuit battery wires conductors insulators switch
appliance mains generate renewable non-renewable

Key Knowledge

Many everyday appliances rely on electricity for them to work. Some appliances use mains electricity (are plugged into a socket) and others have a battery to make them work.

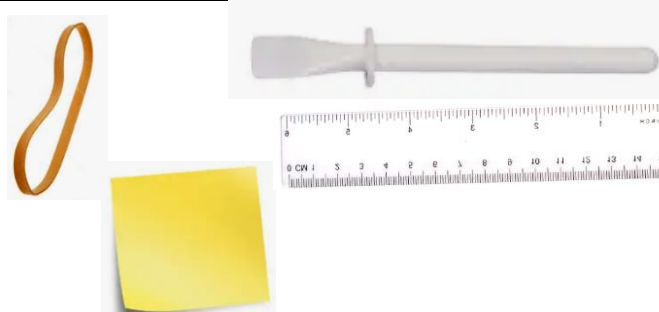
Conductor or Insulator?

A conductor of electricity is a material that will allow electricity to flow through it. Metals are good conductors. Materials that are electrical insulators do not allow electricity to flow through them. Wood, plastic and glass are good insulators.

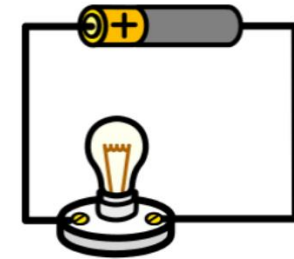
Electrical Conductors



Electrical Insulators



Electrical Circuits



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 and close the circuit.