



# Knowledge Organiser

Science—Electricity

Year 4

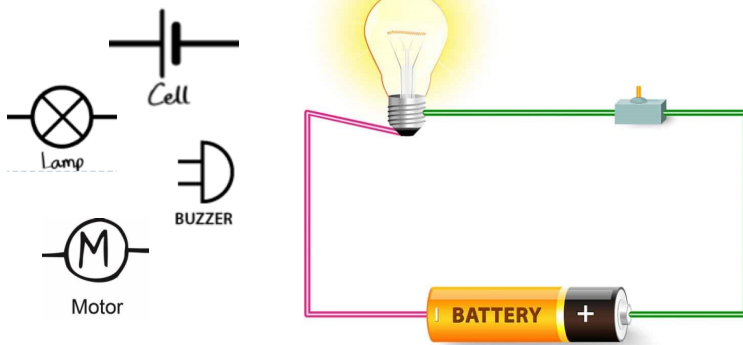
## Electricity in our Homes

- Our houses and school are filled with electrical appliances that need to be plugged in to work.
- Some appliances use electricity to make light, some make sound, some heat and some movement. Some will do a number of these things.
- Some appliances are very good at using electricity well, but others will waste it. For example, a TV might get hot when it is used; this is it wasting electricity. Our houses and school are filled with electrical appliances that need to be plugged in to work.
- If we aren't careful with electricity, it can be very dangerous. We must make sure that we dry our hands before touching something electrical as water conducts electricity well, meaning that it could give us an electrical shock.
- Metals are also good at letting electricity flow through them.

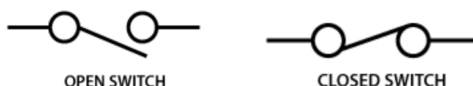


## Drawing Circuits

- We can draw circuits to show how electricity can flow around them. Sometimes we use symbols to show this.



- Switches can be used to open a circuit, stopping the electricity from flowing and turning the components off.



## Key Vocabulary

<b>Appliance</b>	Appliances are items that need to be plugged in in order to function.
<b>Battery</b>	A container containing cells, where electricity is stored as chemical energy.
<b>Bulb</b>	Something that provides light using electricity.
<b>Buzzer</b>	A device that makes a buzzing noise.
<b>Circuit</b>	A continuous path of wires and devices through which electricity can flow.
<b>Motor</b>	A machine that moves when electricity goes through it.
<b>Switch</b>	A device that makes or breaks a circuit.

## What I can do at home

<b>Learn</b>	Look around your house. What are the most useful appliances that you have? What simple things do you do at home to keep electricity safe?
<b>Investigate</b>	Some appliances use huge amounts of electricity. Use the internet to find out which things in your house use the most electricity.

## Communicate

Talk to an adult at home about the things below. You don't need to record this.

We cannot usually see electricity but it helps and is present in almost every area of our lives.

Is electricity the most important 'invisible' thing around us?