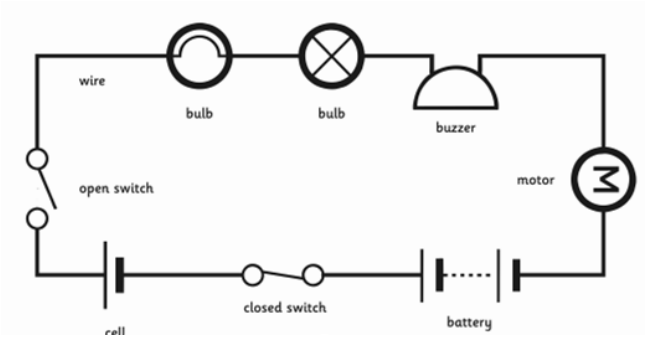
Y6 Science: Electricity



Why are we learning about electricity?

It is important to know about electricity because it is a huge part of our everyday lives. We are incredibly reliant on this form of energy, so having a basic understanding of what it is and how it works is important. We will learn what electricity is and how it can be altered in a range of circuits.

We are building on our previous learning about…

Y4—Electricity

Years 1-6—Working scientifically, planning and carrying out investigations.

Important questions to answer:

- What is electricity and what key electrical discoveries do you know about?
- What are electrical symbols and how are they used?
- What are the benefits of a parallel rather than series circuit?
- How do different Volts affect electrical circuits?
- What investigations can we carry out about electrical circuits?

Experiences we will have:

- Creating our own electrical investigations changing a variety of variables.

Things we need to know:

- To know that electricity is a form of energy and that it was discovered rather than invented
- To know a range of electrical symbols, such as for bulbs, switches, batteries and motors, and how they are used
- To know that parallel circuits can be expanded and if one component breaks the rest of the circuit will still work however, series circuits use less wire.
- To know that the higher the voltage, the more electricity flowing around the circuit at a higher rate
- To know that electrical circuits can be affected by the voltage of batteries, conductivity of components and the number of devices being powered.

Skills we need to learn:

- I can **explain** that electricity is a form of energy and **research** electrical discoveries
- I can **record** circuits using scientific diagrams
- I can **compare** and **explain** the difference between parallel and series circuits
- I can **observe, explain** and **analyse** the effects of differing volts in a circuit.
- I can **design** a fair test, **draw conclusions**, **evaluate** my results and **interpret** data in a graph

Subject Specific Vocabulary:

flow	current	series
switch	conductor	motor
circuit	insulator	buzzer
electrical	positive	cell
parallel	negative	battery
component	electrons	Volt