Year 4 Science Pentecost Term: Electricity - Physics

Key Vocabulary	
Electricity	The flow of an electric current through a material.
Appliance	Equipment or a device designed to perform a particular job.
Circuit	A pathway that electricity can flow around,
Electrical conductor	A material that will allow electricity to flow through it.
Mains electricity	Electricity supplied through wires to a building.
Battery-powered	To make battery-powered appliances work, you need batteries – these could be rechargeable.

Key Learning

- Identify common appliances that run on electricity.
- Construct a simple series electrical circuit, identifying and naming its basic parts, including cells, wires, bulbs, switches and buzzers.
- Identify if a lamp/switch will light in a simple series circuit, based on whether or not the lamp/switch is part of a complete loop with a battery.
- Recognise some common conductors and insulators, and associate metals with being good conductors.

Components (Parts) of a Circuit

Normally referred as a battery, scientifically this is a **cell**. It is the power supply for a circuit.

Bulbs light up in a complete circuit. They are placed in a bulb holder.

Buzzers make noise in a complete circuit.

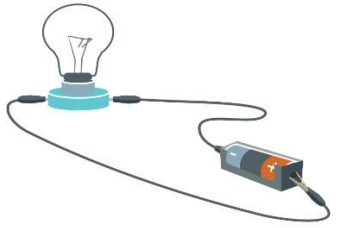
Wires are used to connect the different components of a circuit together.

Motors produce movement in a complete circuit.

A **switch** may be used to turn other components in a circuit on or off. They work as a 'break' in the circuit.

Complete Circuits

Electricity can flow through complete circuits and the components will all work as they should.



Incomplete Circuits

There is a break in the circuit that prevents the flow of electricity. The components will not work.