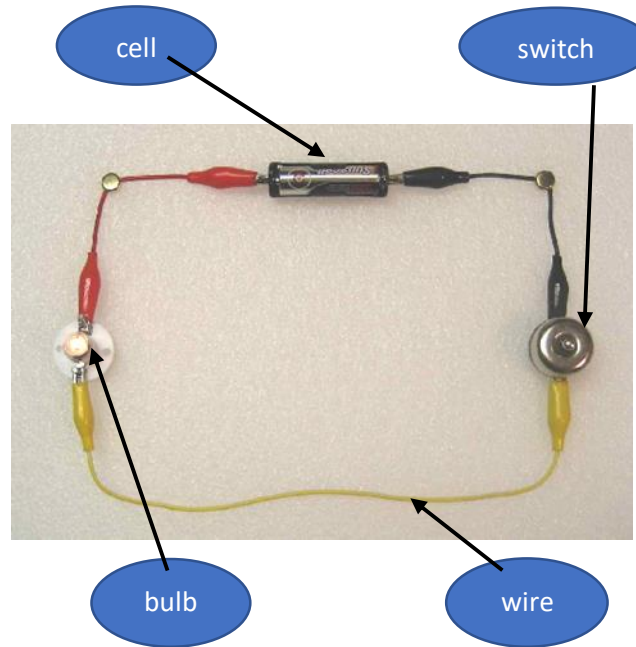


Knowledge organiser Year 4 Electricity

Key concepts		
Energy – needed for things to change and move.	Function - a specific job or procedure	Property – a characteristic of a material
Key vocabulary		
Electrical circuit	A complete path that an electric current can flow around. It flows from the battery, through wires and devices before returning to the battery. If the circuit is not complete the electric current cannot flow.	
battery	A device consisting of one or more cells.	
bulb	An electrical component that produces light.	
buzzer	An electrical component that creates a buzzing sound.	
cell	A single electrical energy source.	
Electrical component	One part of an electrical circuit.	
motor	An electrical component that creates rotary motion.	
switch	An electrical component that can make or break an electrical circuit.	
voltage	Volts are a measure of the energy of a flow of electricity.	
wire	An electrical component that allows an electrical current to pass from one component to another.	
Working Scientific Vocabulary		
Observing patterns – looking for patterns in results to draw scientific conclusions		
Diagrams – presenting ideas in a picture form with labels		

Year 4 – Electricity

Electrical circuit with a bulb

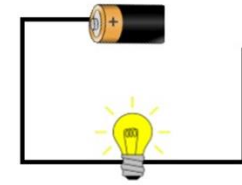


Appliances that run on electricity

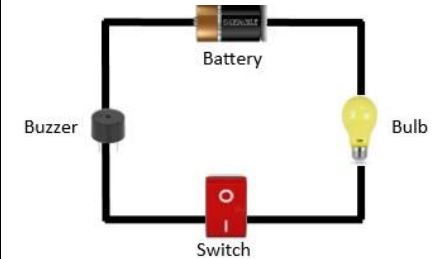
Some plug into the mains and others run on batteries.



This circuit will not work as it is not complete.



This circuit is complete so the buzzer will sound and the bulb will light.



Conductors and insulators

Conductors

Some materials let electricity pass through them easily. These are known as electrical conductors. Many metals are good electrical conductors, such as iron, copper and steel.



Insulators

Some materials do not allow electricity to pass through them. They are known as insulators. Plastic, wood, rubber and glass are good electrical insulators.

