| Knowledge Organiser | Electricity | Year 4 |
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Vocabulary

| Key Vocabulary | |
|---|---|
| **electricity** | A form of energy used for lighting, heating, making sound and making machines work. |
| **electrical appliance** | A machine or device that runs on electricity. |
| **mains** | The electricity supplied to households from power stations. |
| **electrical circuit** | This consists of a cell or battery connected to a component using wires. It needs to be a complete circuit to work. |
| **cell and battery** | A cell is a single unit and a battery is a collection of cells. |
| **electrical component** | A part that combines with others to form a circuit. E.g. bulb, motor, buzzer |
| **switch** | Can be added to a circuit to turn a component on or off. It allows the electricity to flow or it stops it. |
| **conductor** | Material that allows electricity to pass through. |
| **insulator** | Material that does not allow electricity to pass through it. |

## What we will learn

### What are electrical appliances?

| Mains | Battery |
|---|---|
|  |  |
|  |  |

### What are conductors?

**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.




### What are insulators?

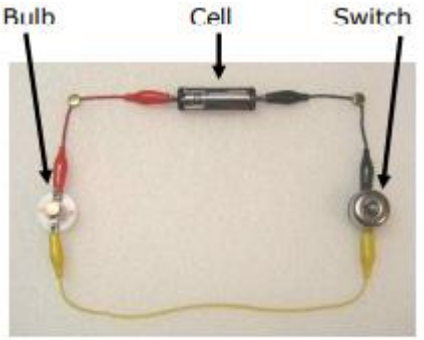
**Insulators**
Some materials do not allow electricity to pass through them. They are known as insulators. Plastic, wood, rubber and glass are good electrical insulators.



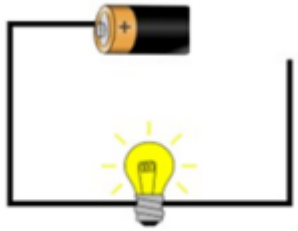

Activate Windows
Go to Settings to activate Windows.

**Key Knowledge (including facts)**

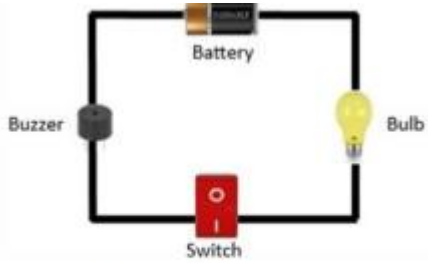
## Electrical circuits




The switch opens and closes the circuit.
The bulb lights because the switch is



This circuit will not work as it is not complete




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

## What else can you do?

Look around your house to find electrical objects. Identify those that work off a battery and those that use mains electricity.