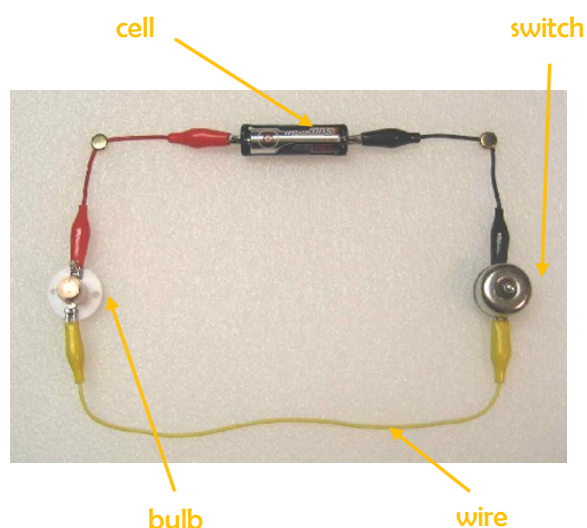




### Key Vocabulary

|                      |   |
|----------------------|---|
| 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.  |

### Electrical circuit



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

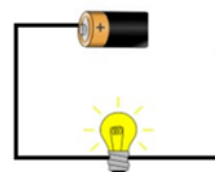
### Appliances that run on electricity

Some plug into the mains and others run on batteries.

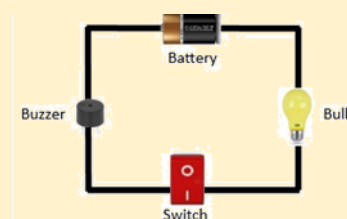


### Circuits

This circuit will not work as it is not complete



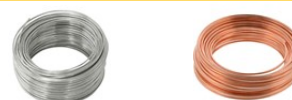
This circuit is complete so the buzzer will sound and the bulb will light up



### 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.

