

KEY INFORMATION AND FACTS

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



Battery



Wire



Bulb



Buzzer



Motor

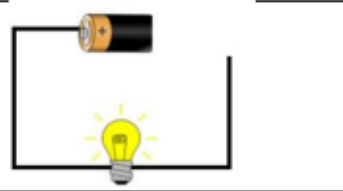


Switch (off)

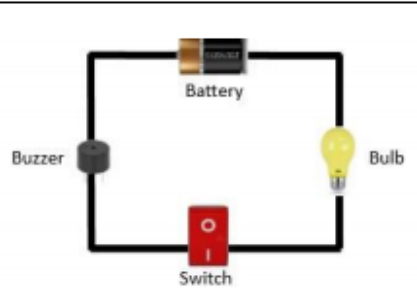


Switch (on)

This circuit will not work as it is not complete.

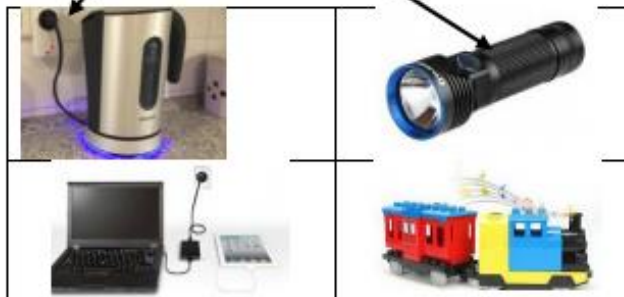


This circuit is complete so the buzzer will sound and the bulb will light.



Appliances that run on electricity

Some plug into the mains and others run on batteries.



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.



A switch opens and closes a circuit. The bulb will light if the switch is closed in a complete circuit.