

Science Revision sheet 1

Topic: Changing Circuits.

1. Underline the correct answer.

a) In a simple series circuit, why does the bulb light when you close the switch?

Because the switch produces electricity.

Because closing the switch completes the circuit

Because closing the switch breaks the circuit

b). In a simple series circuit, why does the bulb go out when you open the switch?

Because the battery goes flat.

Because opening the switch breaks the circuit.

Because too much electricity flows through the bulb.

c). Imagine a simple series circuit with one 1.5V battery and one bulb. When the 1.5V battery is replaced with a 3V battery...

the bulb gets brighter.

the bulb gets dimmer.

the bulb stays at the same level of brightness .

d). Imagine a circuit with a 1.5V battery and one bulb. Imagine a similar circuit with a 3V battery and two bulbs. Which has the brightest bulbs?

The circuit with a 1.5V battery and one bulb.

The circuit with a 3V battery and two bulbs.

The bulbs in both circuits are of similar brightness levels.

e). Why might a bulb flash and go out when a 1.5V battery and a 3V battery are both connected across it in a simple series circuit?

There is not enough electricity flowing around the circuit.

Too much electricity flows through the bulb's filament and the bulb blows.

The batteries are flat.

f).What is the effect of changing the wire in a circuit from a straight thick wire to a straight thin wire?

g).In a circuit diagram, what does a circle with a cross inside it represent?

A light bulb.

A motor.

A battery

i).What do the long straight lines represent in a circuit diagram?

Motors.

Light bulbs

Wires

j).How is a battery represented in a circuit diagram?

A circle with a cross inside it
line.

A circle with an M inside it

A long line and a short