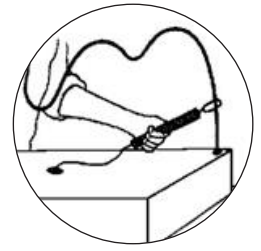


Science - Test Your Skills

Year 6 Electricity



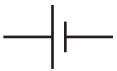
1. Write the name of each part next to its circuit symbol. One is done for you.





buzzer

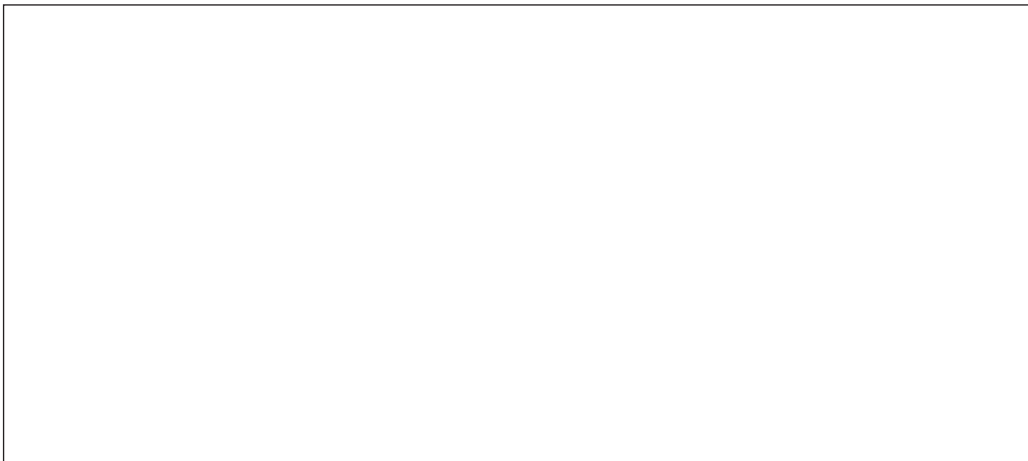




1 mark

2. George uses one bulb, one cell (battery) and two wires to make a circuit.

Draw the circuit diagram using the correct symbols for the lighthouse.



2 marks

3. What component should George add to his circuit to make the light brighter?

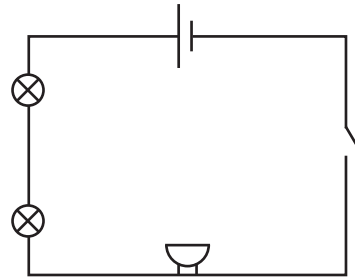
1 mark

4. The children make this circuit. The buzzer only makes a quiet sound.

How could the children change the circuit to make the buzzer louder?
Give **two** ways.

1)

2)



2 marks

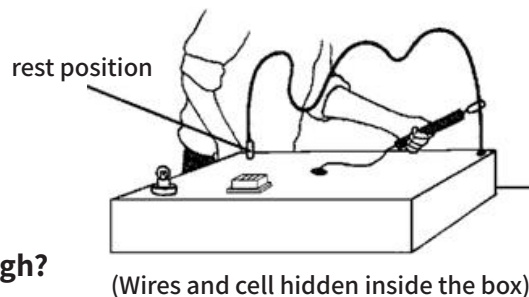
5. Sita has made a game in her game, she has to move a metal ring along a piece of thick wire until it reaches the rest position.

When she is moving it, the metal ring must not touch the wire.

If it touches the wire, a bulb will light and a buzzer will make a noise.

The metal ring and the thick wire both let electricity through.

What is the scientific name for materials that let electricity through?



1 mark

6. Sita made the rest position by covering the wire with an insulating material. When she puts the metal ring down on the rest position, the bulb and buzzer cannot work.

Which materials might Sita have used to insulate the wire for the rest position? Tick the **three** correct boxes.

clear sticky tape

copper wire

plasticine

newspaper

steel wool

aluminium foil

2 marks

7. Jill made circuits with different lengths of wire, the same battery and the same bulb. The wire is coated in plastic.

She recorded her results in a table.

Length of wire (m)	Brightness of light from bulb
40	no light
30	dim glow
20	faint light
10	bright light
1	very bright light

Look at the table.

Describe how changing the length of the wire in the circuit affects the brightness of the light.

1 mark

/10

Total