

Name:	Class:	Date given:
		Date due in:

Electricity

1. Draw the correct symbol to represent each of the circuit components listed below. [4]

a. cell

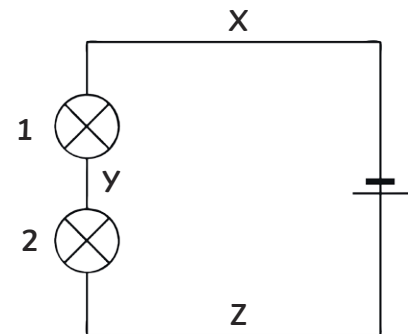
b. lamp

c. open switch

d. ammeter

Look at the circuit drawing.

2a. Describe the current at the points X, Y and Z on the circuit. [1]



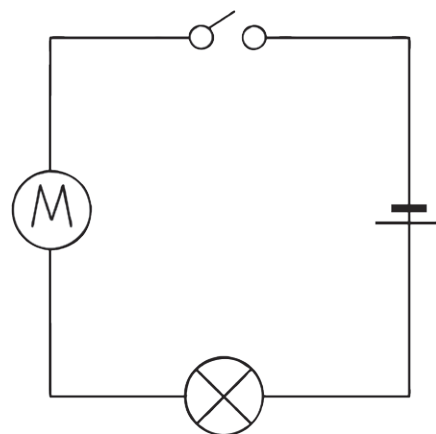
2b. What is the name of the electrical component used to measure the current in a circuit? [1]

2c. Tick one answer to describe the bulb brightness (assuming both bulbs are identical). [1]

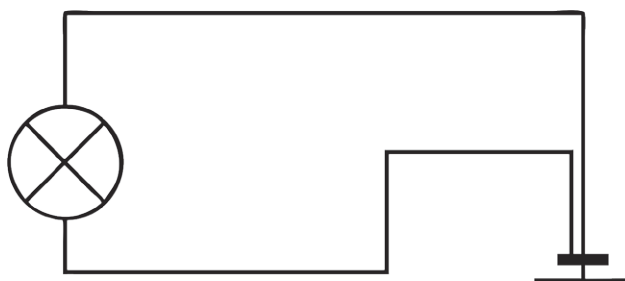
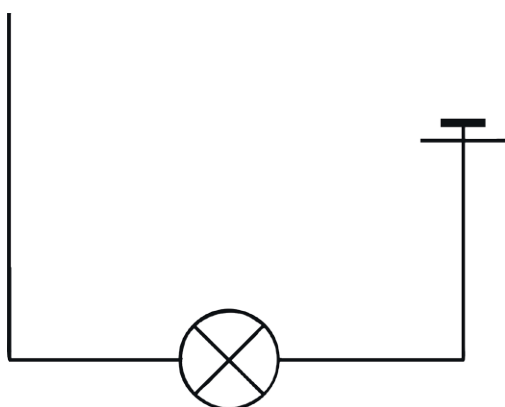
- A. equal brightness ☐
- B. bulb 1 brightest ☐
- C. bulb 2 brightest ☐

2d. What would happen to bulb 2 if bulb 1 went out? [1]

3. Add to this diagram to show where you would place a voltmeter in order to measure the potential difference across the motor in this circuit. [2]



- 4a. In each circuit shown below, the ammeter reading is zero; there is no current flowing.



Explain why. [1]

- 4b. Draw a circuit diagram containing the components from the circuits shown above, and include an ammeter to show the current will flow. [3]

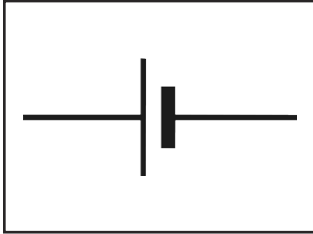
Learning Outcomes (tick if achieved)

Q1	I can draw correct circuit symbols for common components.	
Q2	I can describe current in an electrical circuit.	
Q3	I know how to measure potential difference in a circuit.	
Q4	I can identify and draw a complete circuit diagram.	

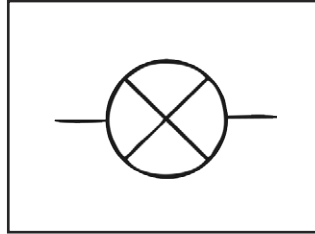
Electricity Answers

1. Draw the correct symbol to represent each of the circuit components listed below. [4]

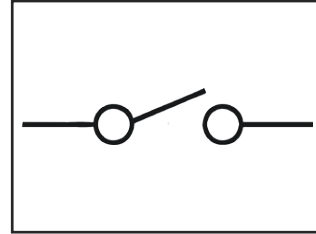
a. cell



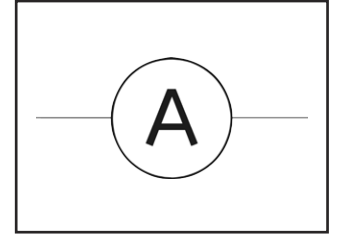
b. lamp



c. open switch



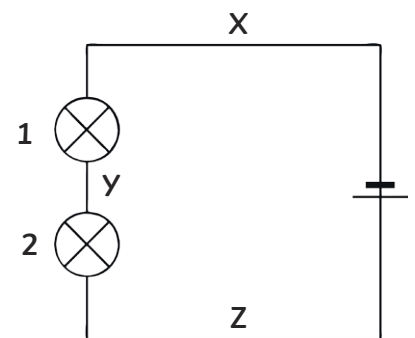
d. ammeter



Look at the circuit drawing.

2a. Describe the current at the points X, Y and Z on the circuit. [1]

The current is equal / the same at these points



2b. What is the name of the electrical component used to measure the current in a circuit? [1]

Ammeter

2c. Tick one answer to describe the bulb brightness (assuming both bulbs are identical). [1]

A. equal brightness ☒

B. bulb 1 brightest ☐

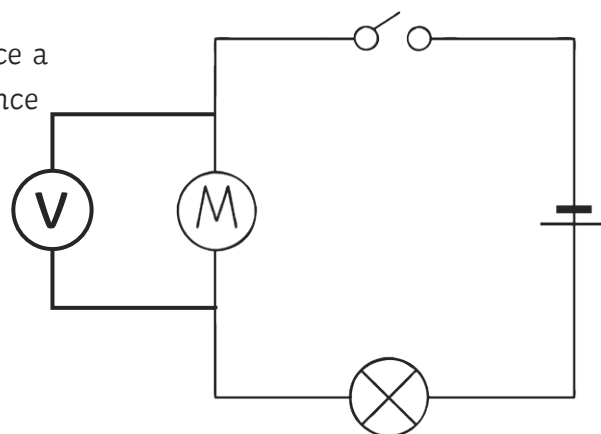
C. bulb 2 brightest ☐

2d. What would happen to bulb 2 if bulb 1 went out? [1]

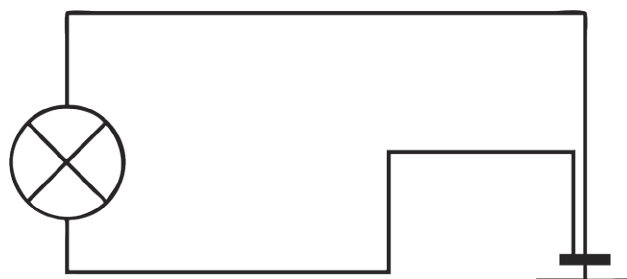
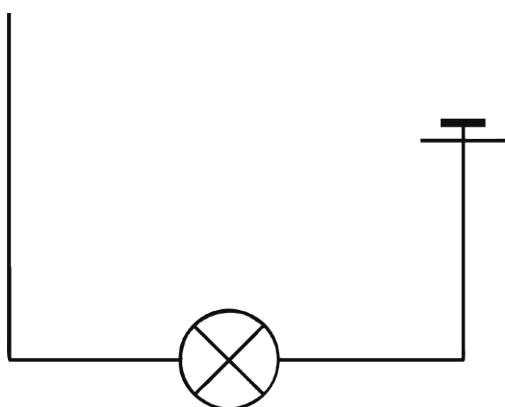
It would also go out / wouldn't work / circuit incomplete

3. Add to this diagram to show where you would place a voltmeter in order to measure the potential difference across the motor in this circuit. [2]

1 mark for correct symbol used, 1 mark for correct position (in parallel to motor)



- 4a. In each circuit shown below, the ammeter reading is zero; there is no current flowing.



Explain why. [1]

They are incomplete circuits

- 4b. Draw a circuit diagram containing the components from the circuits shown above, and include an ammeter to show the current will flow. [3]

