Cambridge Primary Progression Test

Question paper

Cambridge Primary

45 minutes

Science Paper 1

Stage 6

Name .....

Additional materials: Ruler

READ THESE INSTRUCTIONS FIRST

Answer **all** questions in the spaces provided on the question paper.

You should show all your working on the question paper.

The number of marks is given in brackets [ ] at the end of each question or part question.

The total number of marks for this paper is 50.

For Teacher's Use	
Page	Mark
1	
2	
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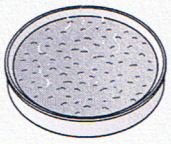
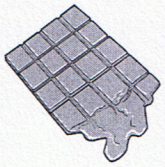
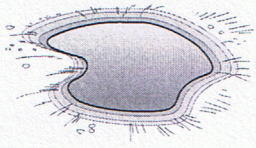
17	
18	
Total	

V1

UNIVERSITY of CAMBRIDGE
International Examinations

1 The table shows some processes.
Some processes are **reversible** and others are **irreversible**.

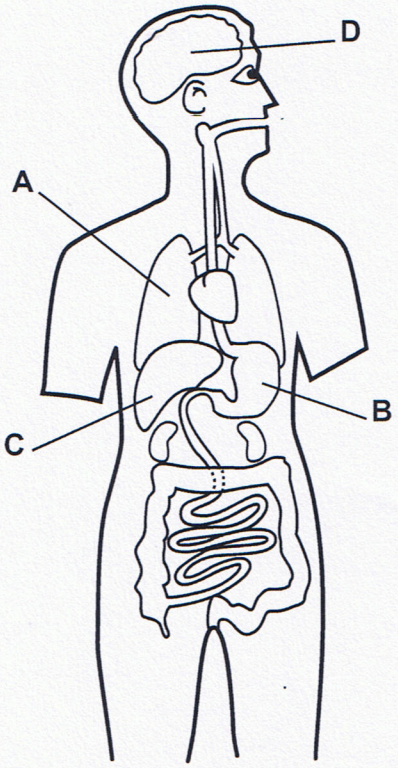
Tick (✓) to show if the change is **reversible** or **irreversible**.

process	reversible	irreversible
 **baking cakes**		
 **melting chocolate**		
 **cooking soup**		
 **evaporating puddle of water**		

[2]

For Teacher Use

2 The diagram shows some organs of the body.



(a) Name the organs.

A .....

B .....

C .....

D ..... [3]

(b) Each organ in the body has a job to do.
Write the letter of the **organ** next to its **job** in the table.

job	organ
controls the body's actions	
digests food	
exchanges gases	

[2]

[Turn over

For Teacher's Use

3 Imre and Boris investigate adding solids to water.
They add one spatula measure of each solid to a beaker of water and stir.

They have not written down their observations next to the correct solid.
Can you help them?

(a) Draw a line between the **solid** and the correct **observation**.

solid	observation
instant coffee powder	Grey solid is at the bottom of the beaker.
iron filings	White solid is at the bottom of the beaker.
red powder paint	Bubbles are in the water. Solid cannot be seen.
chalk	Water turns brown.
sugar	Water turns red.
indigestion tablet	Water is colourless. Solid cannot be seen.

[4]

(b) Which of the solids reacts chemically with the water?

.....

[1]

(c) Which **two** solids do **not** dissolve in the water?

1 .....

2 ..... [2]

For Teacher Use

4 The picture shows a person parachuting.

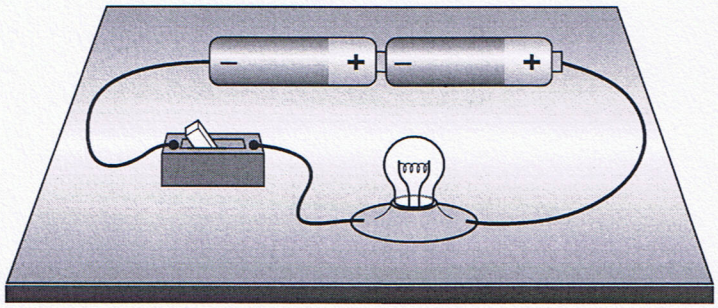
What is the name of the upward force on the parachute?
Tick (✓)**one** box.

air resistance	☐
gravity	☐
magnetism	☐
weight	☐

[1]

5 The diagram shows an electrical circuit.

For Teacher Use



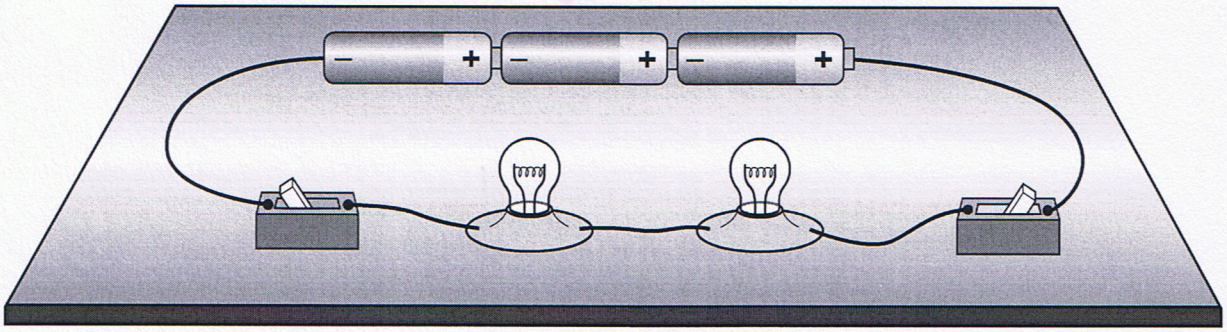
(a) Tick (✓) **one** box to show how the lamp can be made brighter by changing the circuit.

add another lamp	☐
add another cell	☐
make the wires longer	☐
remove one of the cells	☐

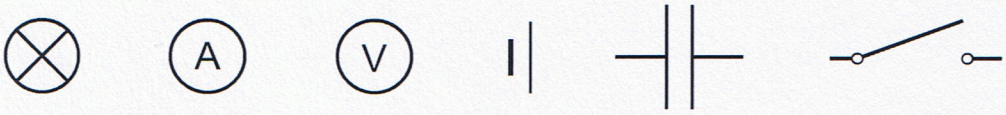
[1]

(b) The diagram shows an electrical circuit.

For Teacher Use



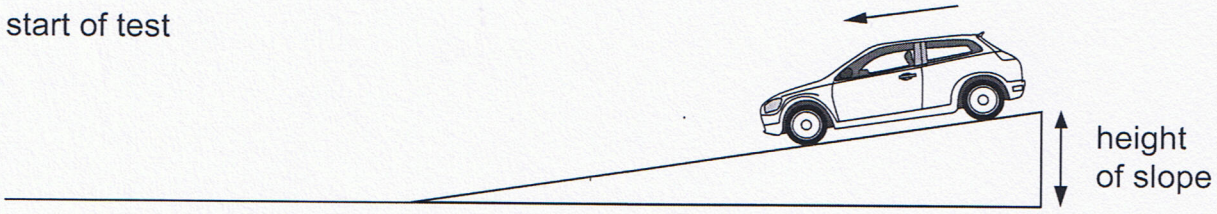
Draw the circuit diagram. Choose the **correct** symbols from those shown.

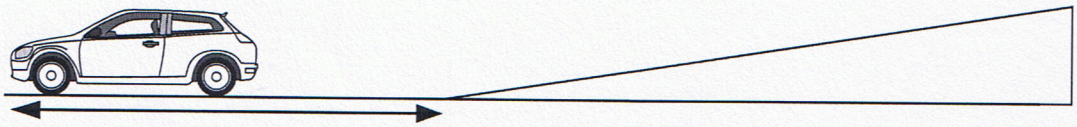


[2]

6 Giulietta investigates the distance a car travels when it goes down a slope.

She makes a slope 1 m long and 12 cm high.
She releases a car at the top of the slope and waits for it to stop.

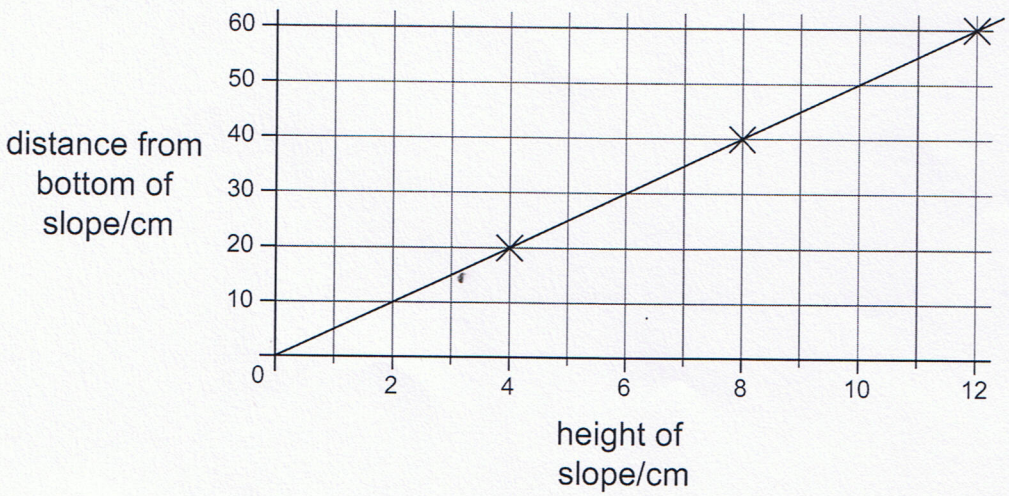




She measures the distance from the car to the bottom of the slope.
She does this one more time at 4 cm high.

Giulietta repeats the test with the slope at 8 cm

All her results are shown on the graph.



(a) Giulietta uses the graph to make predictions.

(i) If the height of the slope is 10 cm.

What is the distance the car travels from the bottom of the slope?

..... cm [1]

(ii) If the car travels 30 cm from the bottom of the slope.

How high is the slope?

..... cm [1]

(b) Complete this sentence to write a conclusion for this investigation.

The ..... the slope the ..... the car travels from the bottom of the slope. [1]

7 Tick (✓) **one** box for each statement to show whether it is **true** or **false**.

	true	**false**
Salt will dissolve in water.	☐	☐
Sugar dissolves quicker in hot water than cold water.	☐	☐
When sweet tea is heated, the sugar evaporates.	☐	☐
Stirring makes insoluble solids dissolve quicker.	☐	☐

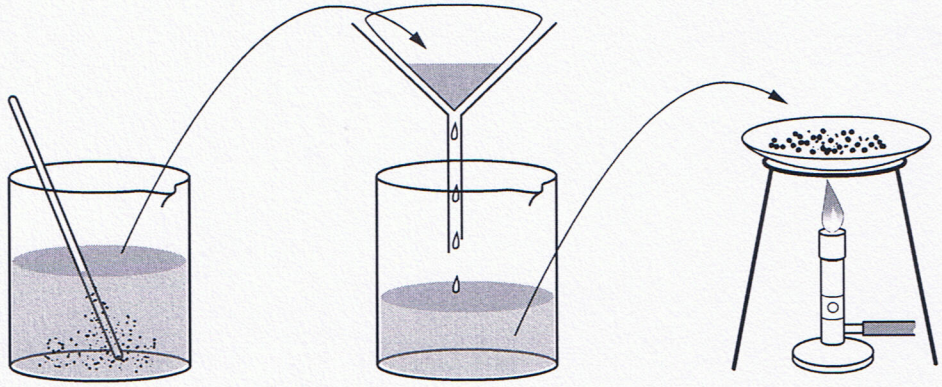
[2]

[Turn over

For Teacher Use

8 Bruce and Sara are separating a mixture of sugar and sand.

This is the method they use.



Dissolve in beaker and stir.

Filter through filter paper in a funnel.

Heat in an evaporating dish.

Stage **A**

Stage **B**

Stage **C**

(a) (i) What can they do to make Stage **A** quicker?

.....

..... [1]

(ii) What substance is removed at Stage **B**?

..... [1]

(iii) What substance remains in the evaporating dish at Stage **C**?

..... [1]

(b) Complete these **two** sentences. Choose words from the list.

insoluble **solvent** **solid** **soluble** **solution**

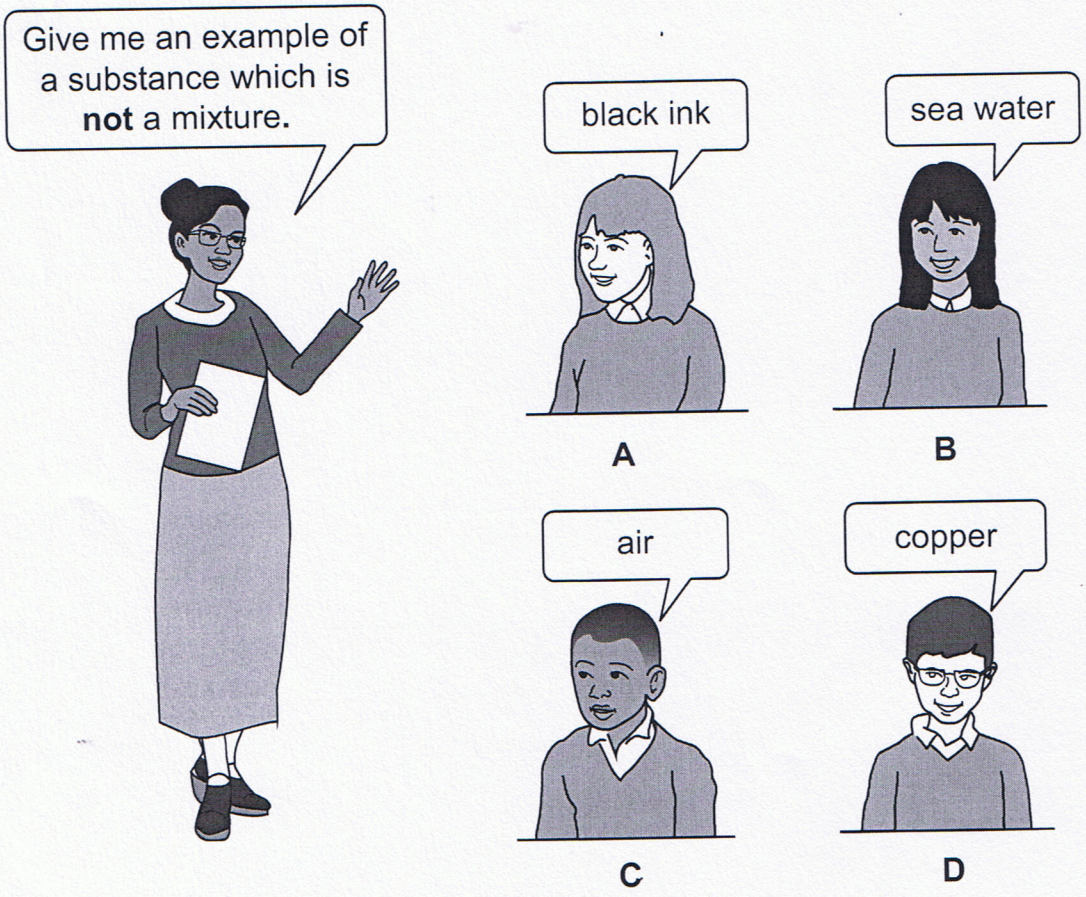
A solid dissolved in water is a .....

A substance that can dissolve in water is .....

[2]

For Teacher's Use

9 A teacher is discussing mixtures with her class.



Which student has the correct answer to the teacher's question?
Choose from student **A**, **B**, **C** or **D**.

[1]

.....

10 Use these words to complete the sentences. You must only use a word once.

consumer **environment** **habitat**

predator **prey** **producer**

Food chains always start with a .....

An animal that eats another animal is called a .....

An animal that is eaten by other animals is called a .....

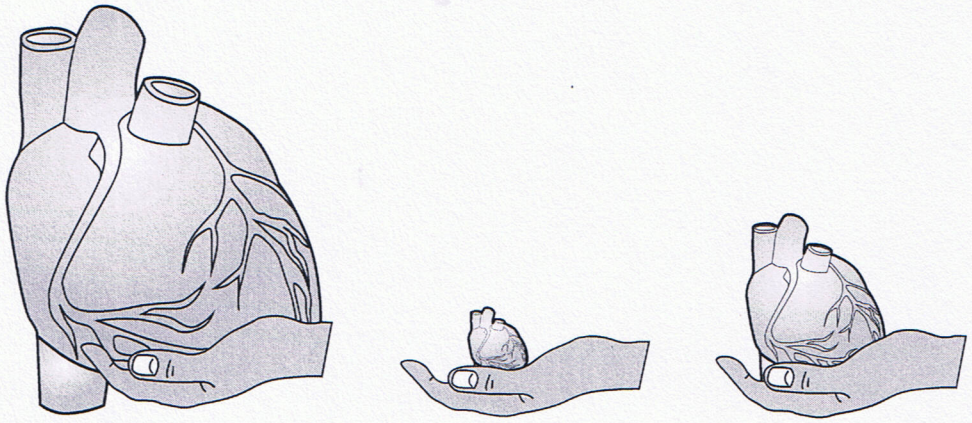
An animal that eats something else in a food chain is called a .....

[3]

[Turn over

For Teacher Use

11 The pictures show different sized hearts.



A **B** **C**

(a) Which picture shows the correct size of an adult human heart?

Write the correct letter **A**, **B** or **C**.

..... [1]

(b) Complete these sentences.

(i) The heart pumps ..... around the body. [1]

(ii) The heart makes sure that oxygen taken in by the ..... gets to the brain. [1]

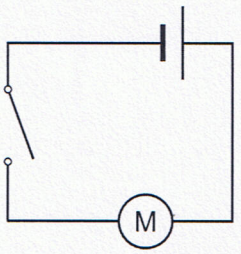
(iii) The heart is an organ made from ..... . [1]

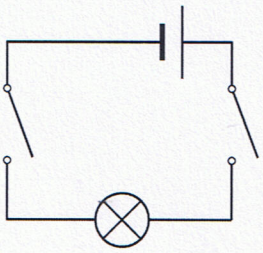
12 The diagrams and pictures show different electrical circuits.

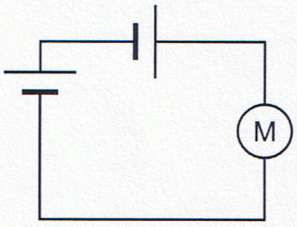
Draw lines between each circuit diagram and the correct picture.

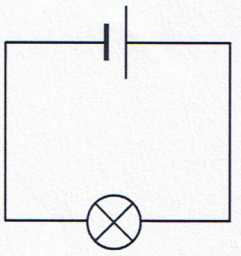
For Teacher Use

circuit diagram

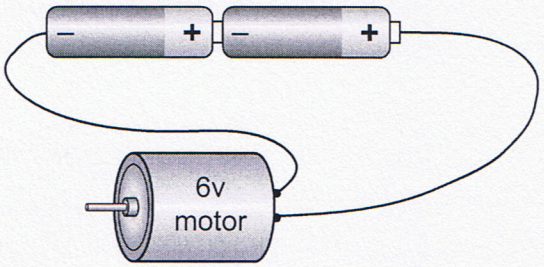


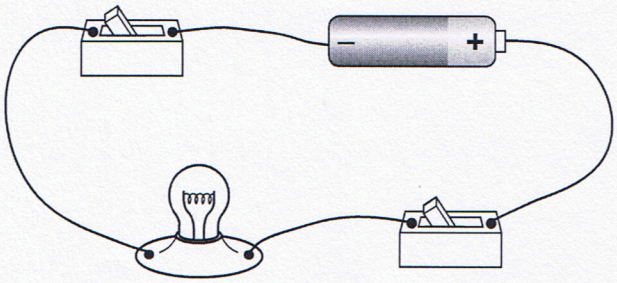


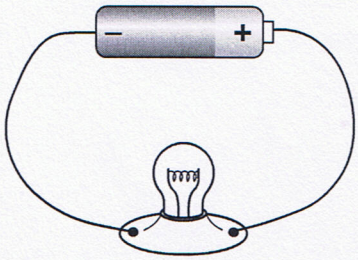


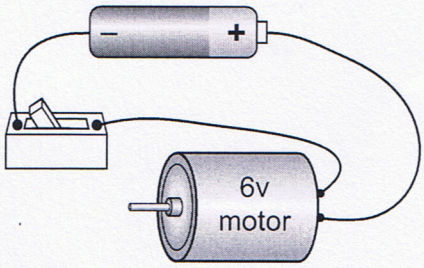


picture







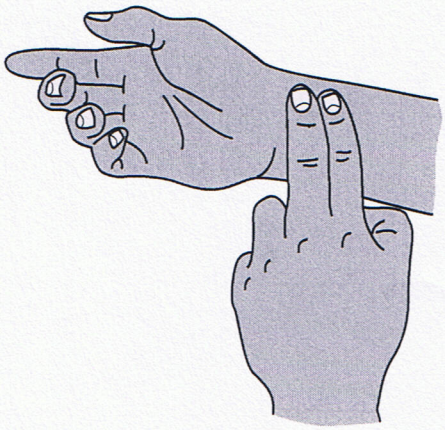


[3]

13 Liz measures her pulse rate.

The pulse rate is how many times per minute the heart beats.

The picture shows how she measures her pulse rate.



She counts the number of beats in 10 seconds and multiplies the results by 6 to get the pulse rate. She records the result in a table.

She repeats this five times.

(a) Complete her table to show her pulse rates.

beats in 10 seconds	X 6 = pulse rate
11	
10	
10	
11	
9	
9	

[2]

(b) What is Liz's average (mean) pulse rate?

.....

[1]

For Teacher Use

(c) (i) What measuring instrument does she need for this investigation?

.....

[1]

(ii) Liz's pulse rate is not the same for all the measurements.
Why not? Tick (✓) **one** box.

Everybody's heartbeat is always the same. ☐

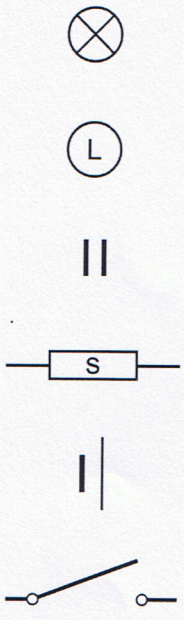
Sometimes your blood flows backwards. ☐

Everybody's pulse rate varies even when sitting still. ☐

[1]

14 Look at the circuit symbols.

Draw a line between the **name** of the symbol and the correct **symbol**.

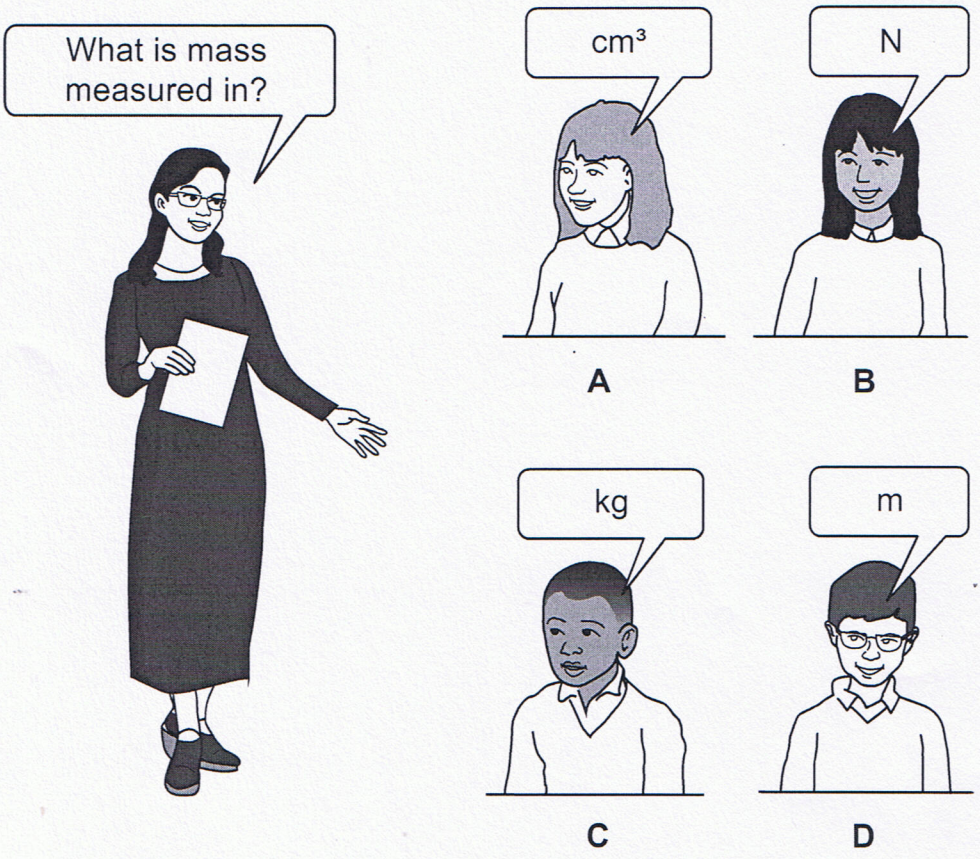
name	**symbol**
cell	
lamp	
switch	

[2]

15 Class 6C are discussing mass and weight with their teacher.

She asks them two questions.

(a)



Which student has the correct answer?

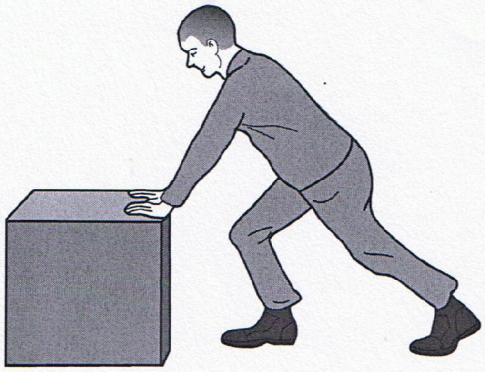
Write the correct letter **A**, **B**, **C** or **D**.

.....

[1]

For Teacher's Use

16 Ahmed is pushing a box across the floor.



(a) Draw an arrow to show the direction of the frictional force.

[1]

(b) Which of these surfaces has the least friction when the box is pushed over it?

Tick (✓) **one** box.

cardboard ☐

carpet ☐

concrete ☐

ice ☐

[1]