



Cambridge Assessment International Education
Cambridge Primary Checkpoint

CANDIDATE
NAME

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NUMBER

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SCIENCE

0846/01

Paper 1

April 2019

45 minutes

Candidates answer on the Question Paper.

Additional Materials:

Pen
Pencil
Ruler

Calculator

READ THESE INSTRUCTIONS FIRST

Write your Centre number, candidate number and name in the spaces at the top of this page.
Write in dark blue or black pen.

DO **NOT** WRITE IN ANY BARCODES.

Answer **all** questions.

The number of marks is given in brackets [] at the end of each question or part question.
You should show all your working in the booklet.
The total number of marks for this paper is 50.

This document consists of **19** printed pages and **1** blank page.

1 Complete the sentences about human senses.

One has been done for you.

I feel with my **skin**

I hear with my

I see with my

I smell with my

I taste with my

[1]

2 Ice melts into liquid water.

(a) The melting of ice is a **reversible** process.

Explain why.

.....
..... [1]

(b) Complete the sentences.

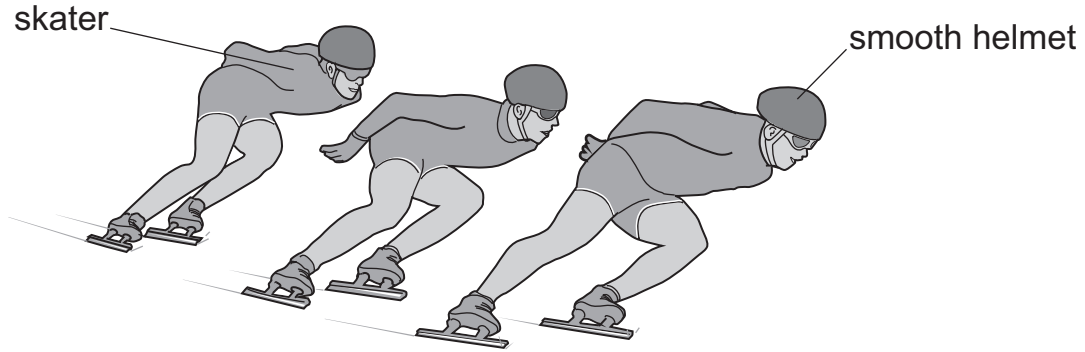
The melting point of ice is °C.

The boiling point of water is °C. [2]

3 Air resistance is a force.

It slows down moving objects.

Skaters want to move fast.



Skaters reduce air resistance by wearing smooth helmets.

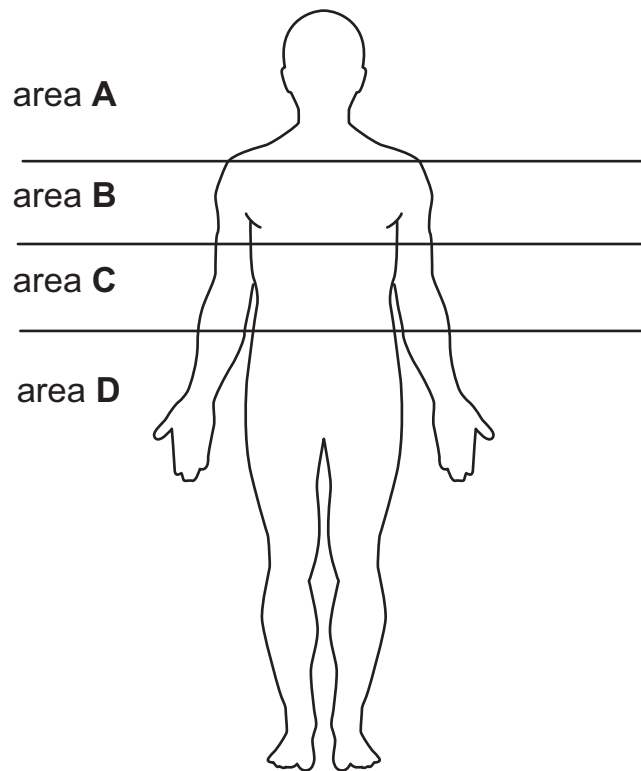
Write down two **other** ways skaters reduce air resistance.

1 Skaters reduce air resistance by

2 Skaters reduce air resistance by

[2]

4 Here is an outline of a human.



(a) Which organ has a position in area B?

Circle the correct answer.

brain **intestines** **liver** **lung** **stomach**

[1]

(b) Which organ has a position in area D?

Circle the correct answer.

brain **intestines** **liver** **lung** **stomach**

[1]

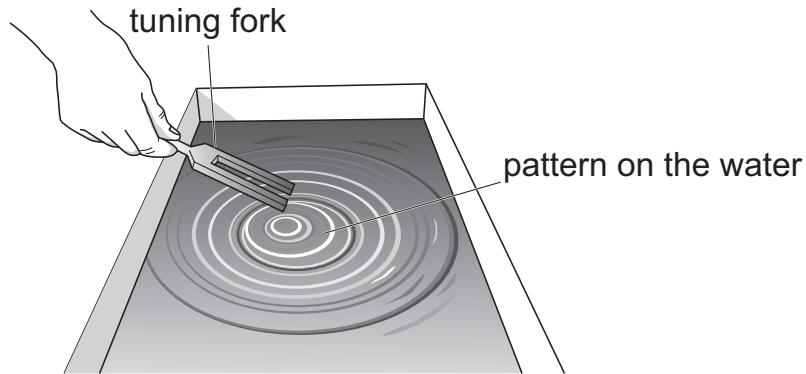
(c) In which area would you find the heart?

Circle the correct answer.

A **B** **C** **D**

[1]

- 5 Yuri hits the tuning fork to make a sound.
He puts the tuning fork on water.



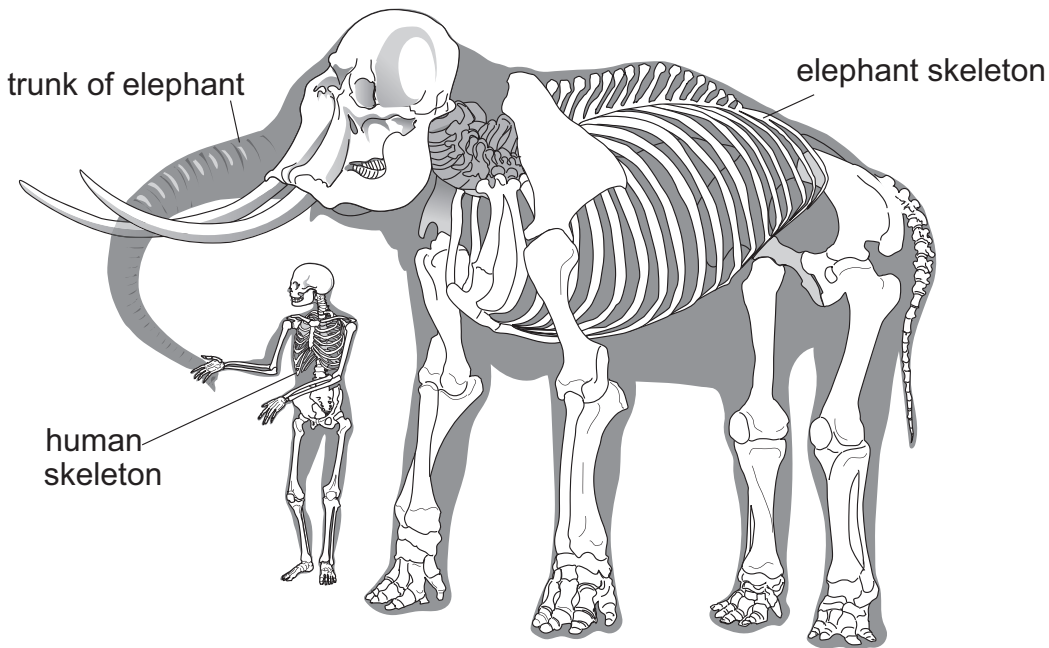
Explain why there is a pattern on the water.

.....

.....

..... [2]

- 6 Humans and elephants have bony skeletons.



The trunk of the elephant does **not** have a bony skeleton.

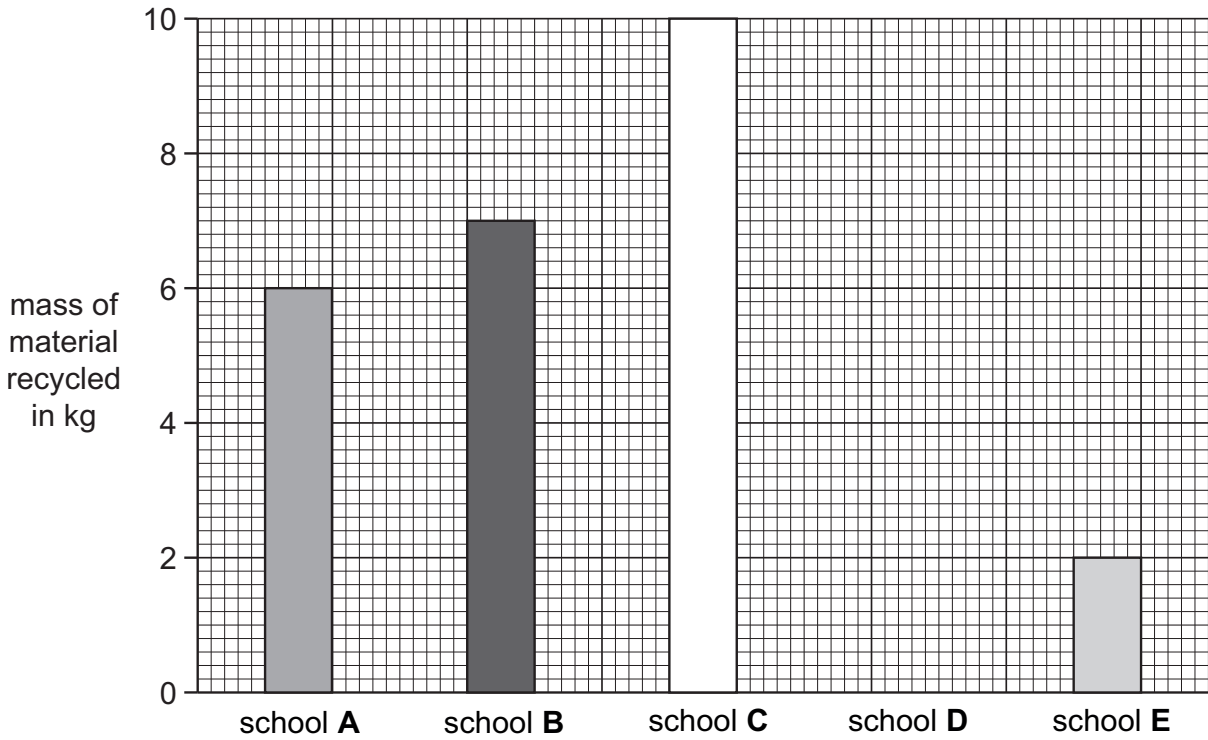
Explain why.

.....

.....

..... [2]

7 Chen collects information about recycling in different schools.



(a) Write down the mass of material recycled by school B.

..... kg [1]

(b) School D recycles 1kg less than School A.

Draw the bar for school D on the bar chart. [1]

(c) Chen makes a conclusion.

He says

‘School C recycles the most.

I think this is because school C is the biggest school with the most children.’

Suggest one **other** reason why school C recycles the most.

..... [1]

8 The table below shows some properties of six materials.

material	hardness (1 = soft and 10 = hard)	melting point (1 = low and 10 = high)	soluble in water	strength (1 = weak and 10 = strong)
A	9	10	yes	9
B	4	10	no	1
C	5	9	no	10
D	10	10	no	10
E	4	4	no	6
F	9	9	no	9

(a) Material **E** has a low melting point.

What is the meaning of the words melting point?

.....

.....

..... [2]

(b) A cutting tool needs to be very hard, have a high melting point and be very strong.

Which material is the best to make a cutting tool?

Circle the correct answer.

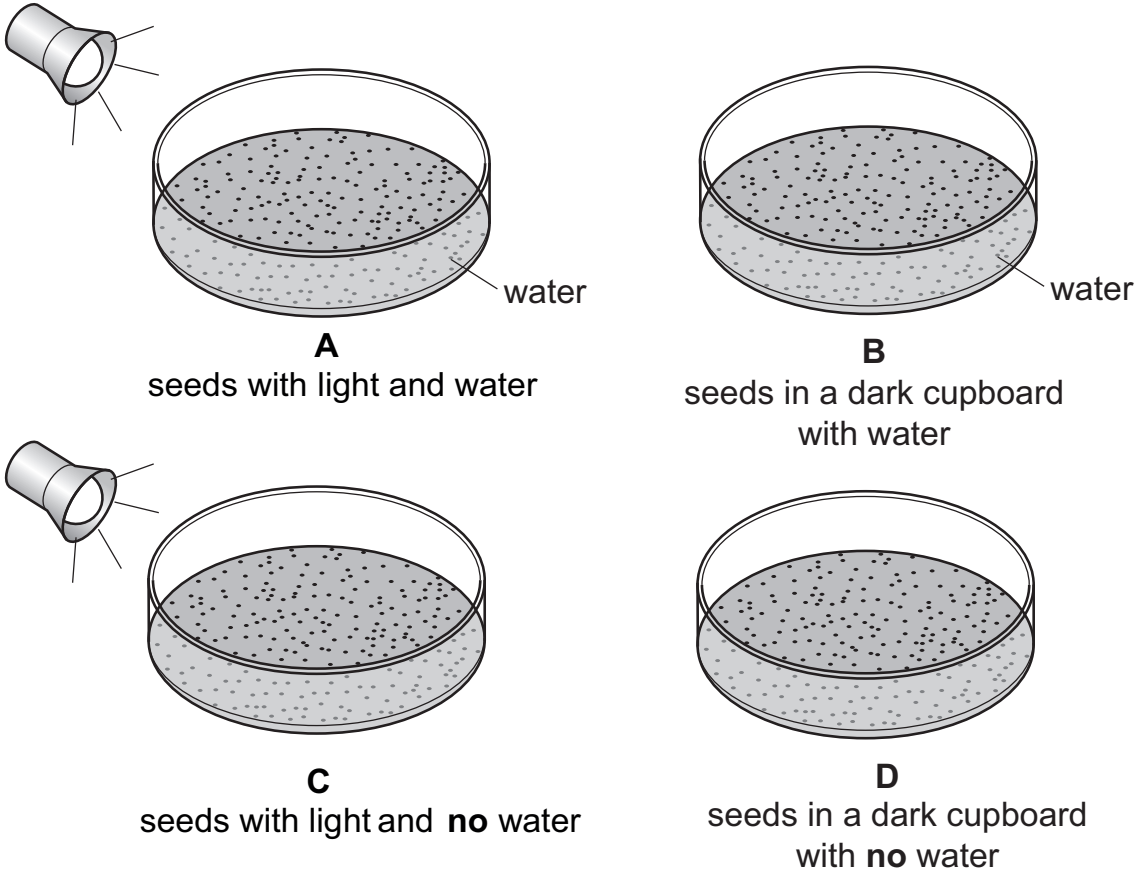
A B C D E F

[1]

9 Safia is investigating seed germination.

- she has four dishes
- she adds some seeds to each dish

Look at the dishes in the pictures.



(a) In which dishes will she find germinated seeds after 2 days?

Circle the correct answer.

A and B **A and C** **B and D** **C and D**

[1]

(b) What **else** do seeds need to germinate?

.....

[1]

10 Blessy's head makes a shadow on a screen.



(a) Complete the sentences to explain why there is a shadow on the screen.

A shadow is made because Blessy's head the light.

Blessy's head makes a shadow because it is made of
material.

[2]

(b) Blessy moves towards the light source.

What happens to the size of the shadow of Blessy's head?

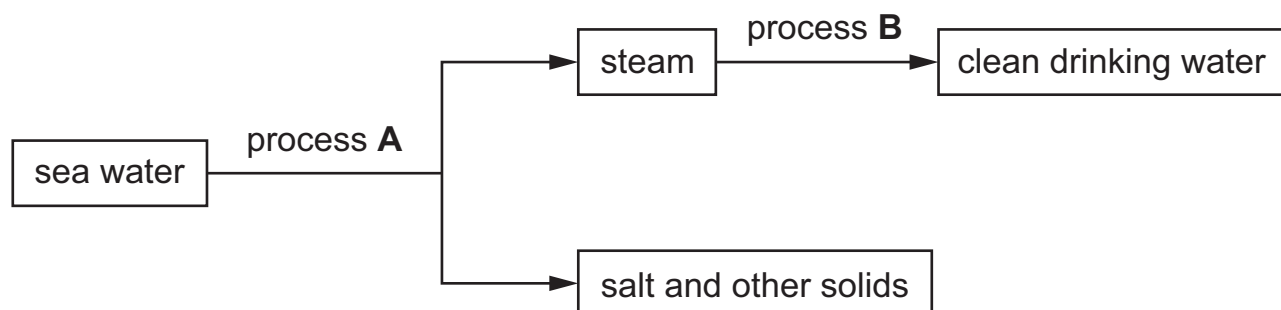
.....

[1]

11 Sea water contains many substances dissolved in water.

One of these substances is salt.

Look at the chart describing how clean drinking water is made from sea water.



(a) What is the name of process **A**?

..... [1]

(b) What is the name of process **B**?

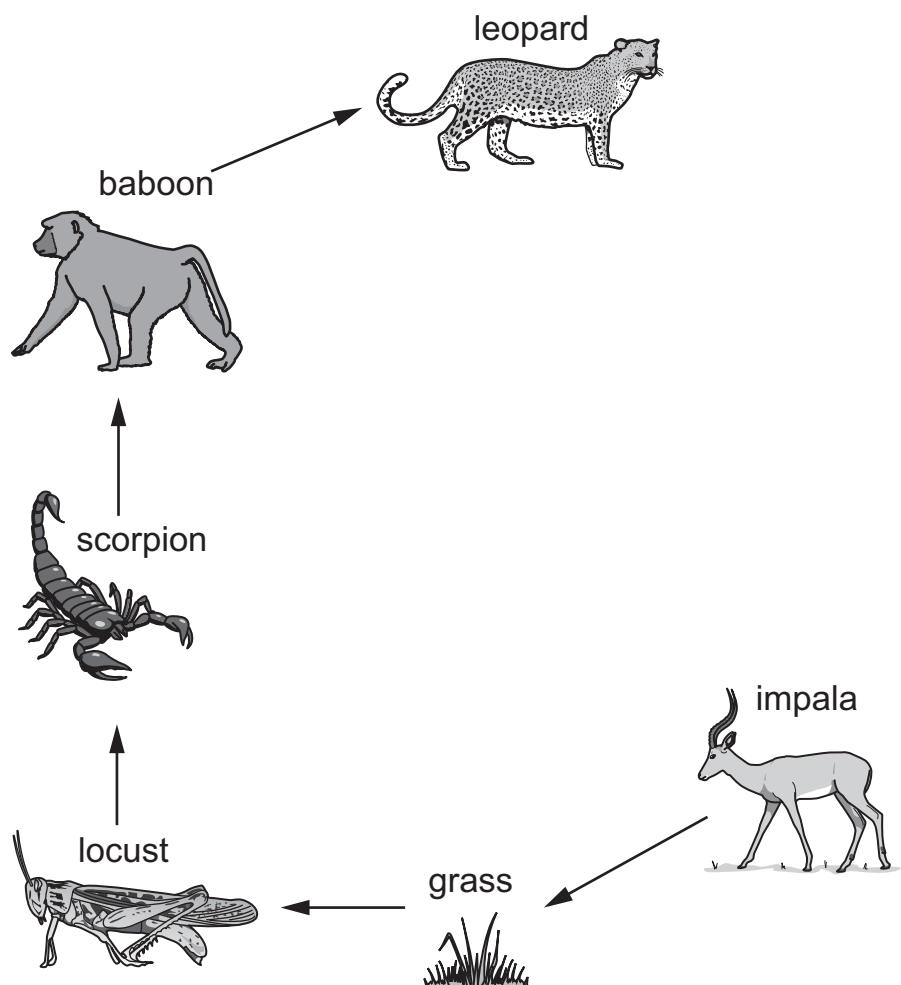
..... [1]

(c) Sea water **cannot** be filtered to remove salt to make clean drinking water.

Explain why.

.....
 [1]

12 Carlos draws a food chain.



The food chain is **wrong**.

(a) Circle the part of the food chain that is wrong. [1]

(b) The grass is a producer.

Explain why.

..... [1]

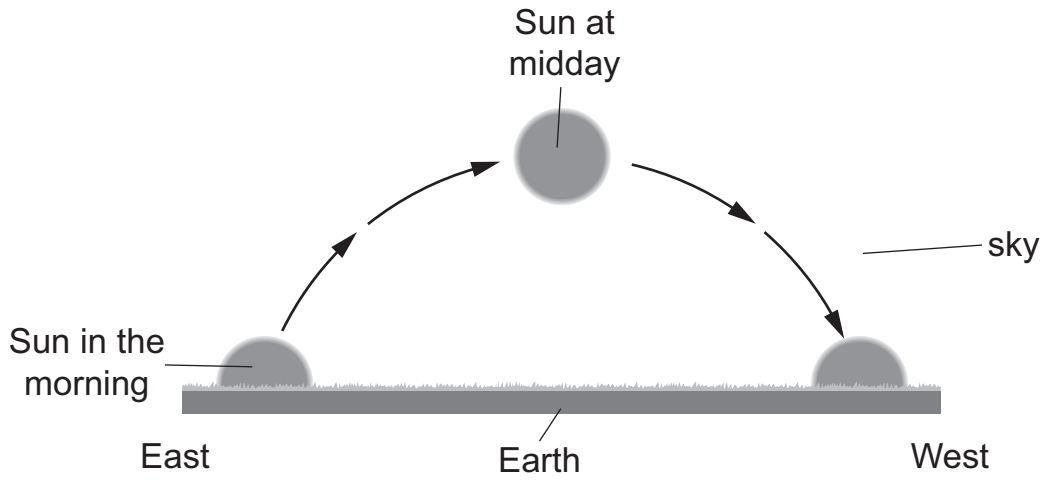
(c) The baboon is a predator.

Explain why.

..... [1]

13 Jamila learns about the Earth and the Sun.

She draws a picture.



(a) Describe what the picture shows about the Earth and the Sun.

.....
.....
..... [2]

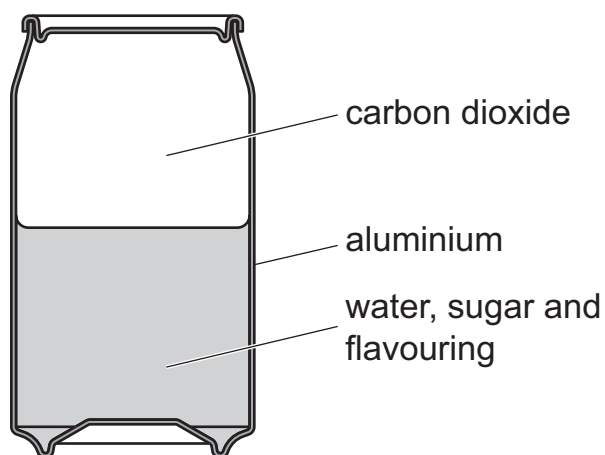
(b) Jamila says the Sun is **not** moving.

The Sun appears to move.

Explain why the Sun appears to move.

.....
..... [1]

14 Look at the diagram of a fizzy drinks container.



(a) Which material shown in the diagram is a gas?

..... [1]

(b) Aluminium is used to make the fizzy drinks container because of its properties.

One of these properties is that it does **not** corrode.

Write down two **other** properties.

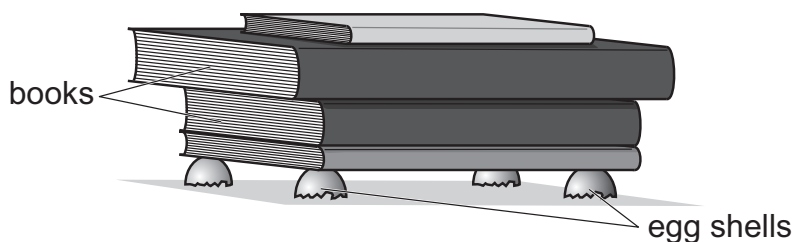
1

2

[2]

15 Safia investigates forces.

She puts books on four egg shells.



Safia adds books until the egg shells break.

She records the number of books needed to break the egg shells.

She repeats the investigation. Each time she uses new egg shells.

Here are her results.

investigation number	number of books to break the egg shells
1	5
2	5
3	6
4	2
5	6

(a) Safia thinks one of her investigations is not correct.

Which investigation does she think is not correct?

Explain why.

Investigation number

Explanation [1]

(b) Safia's investigation is **not** a fair test.

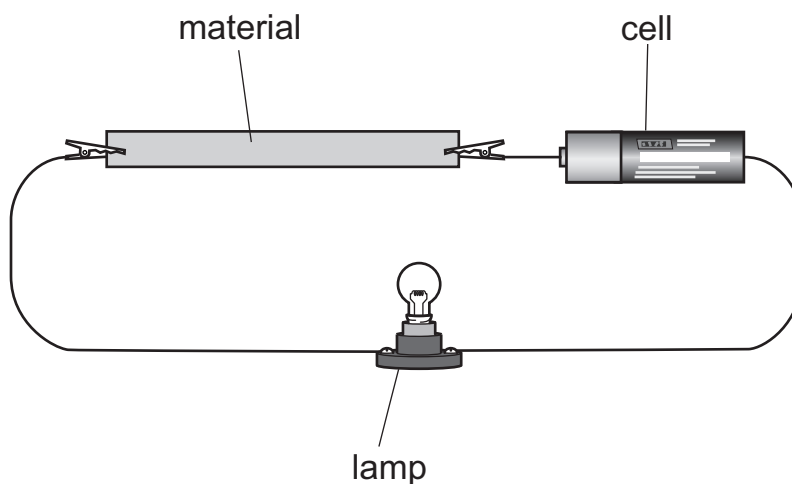
Describe why it is **not** a fair test.

.....

[1]

16 Mia investigates electrical conductors.

She puts different materials in an electrical circuit.



(a) The symbol for the cell is



Draw the symbol for the lamp.

[1]

(b) Some materials are good conductors of electricity.

What happens to the lamp if the material is a good conductor of electricity?

..... [1]

(c) Which material is a good conductor of electricity?

Circle the correct answer.

paper **plastic** **rubber** **silver** **wood**

[1]

17 Yuri investigates the evaporation of water.

In his first experiment Yuri

- puts 50 cm^3 of water into a glass beaker
- puts the glass beaker into an oven for 24 hours
- measures the volume of water left in the beaker.

Yuri does this experiment at different temperatures.

Yuri predicts

‘As the temperature of the oven increases the volume of water left in the beaker decreases.’

(a) Here are Yuri’s results.

Complete the table.

temperature in $^{\circ}\text{C}$	volume of water in beaker at start in cm^3	volume of water left in beaker in cm^3	volume of water evaporated in cm^3
30	50	45
40	50	40
50	50	30
60	50	10
70	50	0

[1]

(b) Do the results support Yuri’s prediction?

.....

Use the results from the table to explain your answer.

.....

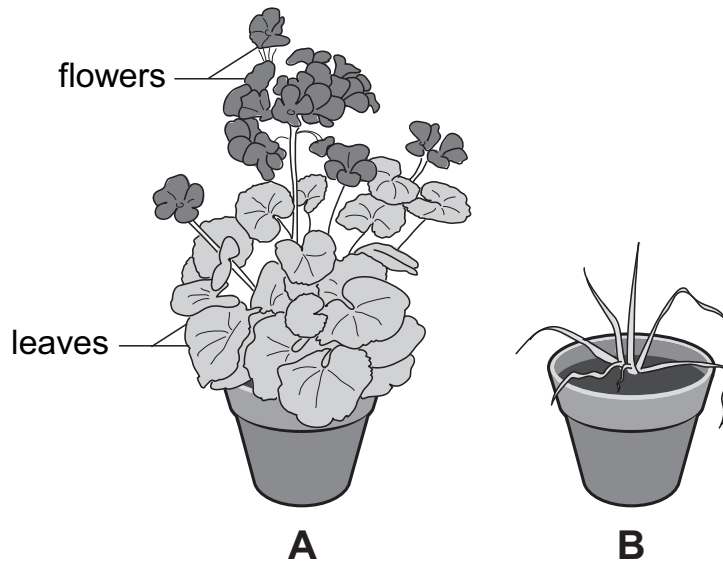
..... [1]

18 Mia has two plants.

She

- removes all the leaves from one of the plants
- gives both plants water
- gives both plants light
- puts both plants in the same classroom for 5 days.

Mia draws the result.



(a) Plant **B** has no leaves.

Describe **one other** difference between plant **A** and plant **B**.

.....
..... [1]

(b) Why does the plant need leaves?

.....
..... [1]

19 People on an island make lots of rubbish.

The rubbish contains food waste, glass, metals, paper and plastic.

(a) The people on the island must remove all of this rubbish.

Write down **one** problem that happens if the rubbish is **not** removed.

.....
..... [1]

(b) One way to remove the rubbish is to use recycling.

Explain how a magnet can be used to remove some metals from the rubbish.

.....
..... [1]

(c) Some of the rubbish is burnt.

This makes smoke and gases.

Suggest how burning rubbish can have a negative effect on the environment.

.....
..... [1]

20 The table shows the properties of some substances.

substance	state at room temperature	colour	soluble in water
chalk	solid	white	no
copper sulfate	solid	blue	yes
gasoline	liquid	colourless	no
iron sulfate	solid	green	yes
magnesium sulfate	solid	white	yes

(a) Which substances are insoluble in water?

..... [1]

(b) Rajiv mixes gasoline and water.

Suggest what he would see.

.....
..... [1]

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