Cambridge Assessment International Education

Cambridge Primary Sample Test

For use with curriculum published in September 2020

Science Paper 1

Stage 5

35 minutes

Name .....

No additional materials are needed.

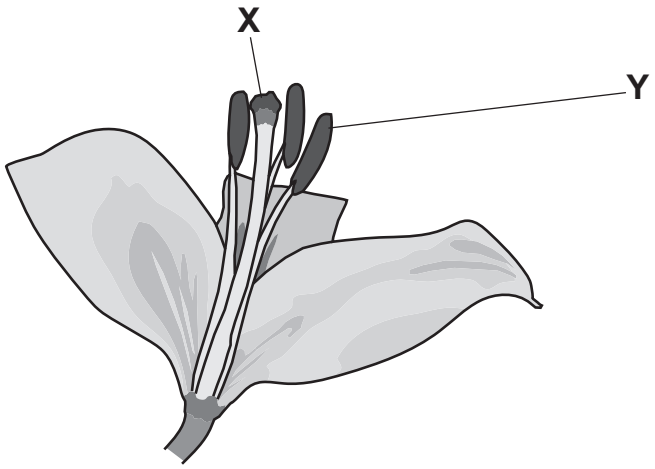
INSTRUCTIONS

- Answer **all** questions.
- Write your answer to each question in the space provided.
- You should show all your working on the question paper.

INFORMATION

- The total mark for this paper is 40.
- The number of marks for each question or part question is shown in brackets [ ].

1 The diagram shows parts of a flower.



(a) Name part **X** and part **Y**.

Choose from the list.

anther **filament** **ovary** **sepal** **stigma** **style**

part **X** .....

part **Y** .....

[2]

(b) This flower is brightly coloured to attract insects for pollination.

Describe two **other** ways flowers are adapted to attract insects.

1 .....

2 .....

[2]

(c) Which stage in the life cycle of a flower happens just after pollination?

Circle the correct answer.

fertilisation

fruit production

germination

seed production

[1]

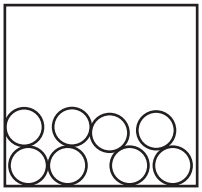
2 **(a)** Which of these statements about water are true and which are false?

Tick (✓) the correct box next to each statement.

statement	true	false
the boiling point of pure water is 110 °C	☐	☐
pure water freezes at 0 °C	☐	☐
water expands when it freezes	☐	☐
water is a liquid at room temperature	☐	☐

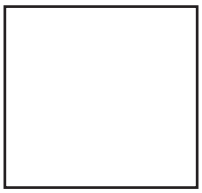
[2]

(b) The diagram shows the arrangement of liquid water particles.



The water changes to a gas.

Draw the arrangement of particles in a gas.



[1]

(c) Water vapour is a gas.

Write down the name of another substance that is a gas at room temperature.

..... [1]

3 Oliver investigates if different solids dissolve in water.

He adds 1 g of a solid to 30 cm^3 of water and stirs the mixture.

He repeats this for each solid.

(a) Write down **one** control variable in his investigation.

..... [1]

(b) Here are his results.

solid	observation
A	blue liquid with **no** solid
B	white liquid with solid
C	clear liquid with **no** solid
D	solid sinks
E	clear liquid with **no** solid

Oliver groups the solids into those that dissolve and those that do **not** dissolve.

Write down the letter of each solid in the correct group.

dissolve	do <u>not</u> dissolve

[1]

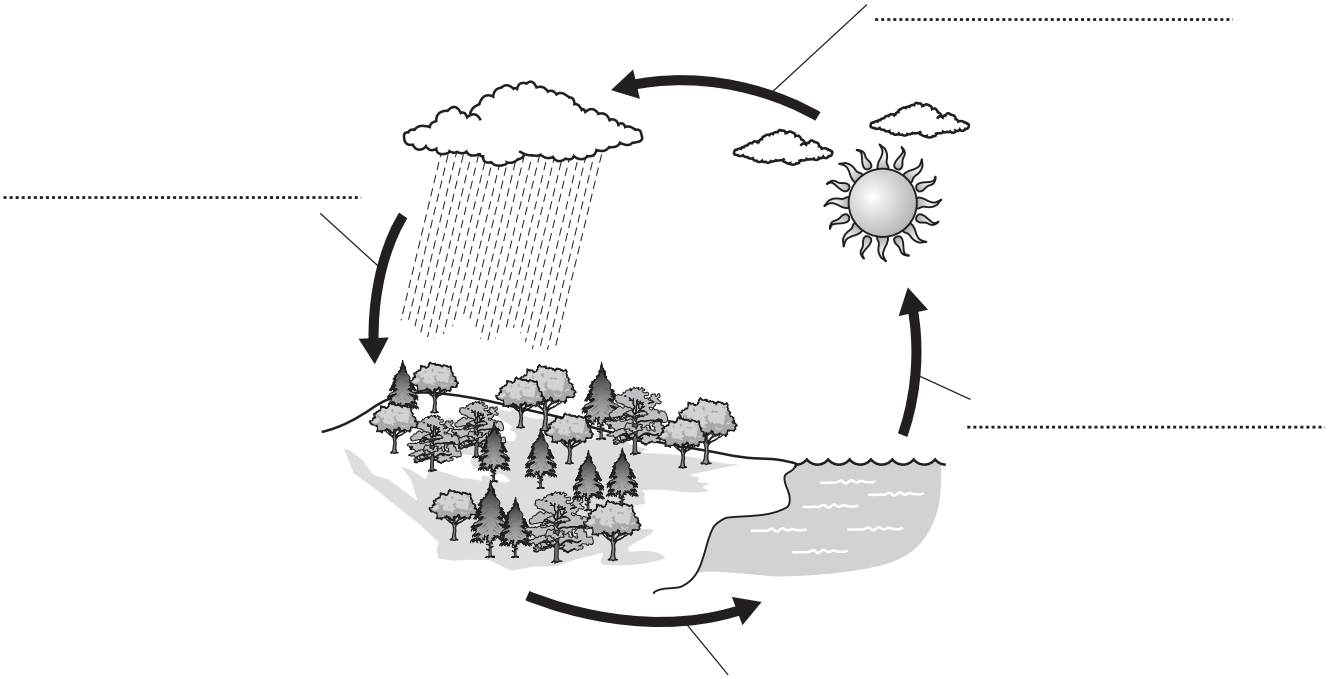
(c) Complete the sentences.

A mixture of a dissolved solid in a liquid is called a ..... .

A solid that dissolves in a liquid is called a ..... .

[2]

4 Complete the diagram of the water cycle.



[2]

5 **(a)** The ocean is polluted by different sources.

The table shows **all** the different sources of pollution (100%).

sources of pollution	amount of pollution in the ocean in %
boats	8
air	15
farming	25
factories	12
drilling oil	4
litter	6
sewage	.....

The amount of pollution in the ocean from sewage is missing.

Complete the table.

Show your working. [2]

(b) Use the information in the table to put the sources of pollution in order.

Order from the **largest** amount of pollution to the **least** amount of pollution.

largest amount

least amount

.....

.....

.....

.....

.....

.....

..... [1]

(c) Suggest **one** way pollution harms the ocean environment.

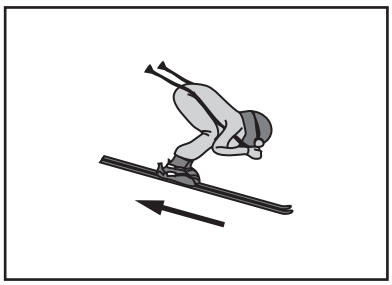
..... [1]

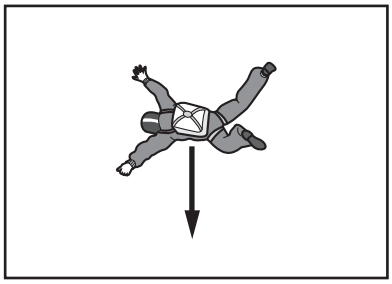
6 The diagrams show different types of forces.

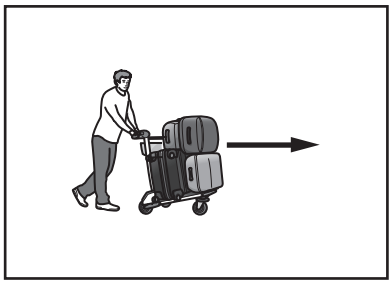
On each diagram there is an **arrow** to show the direction of the force.

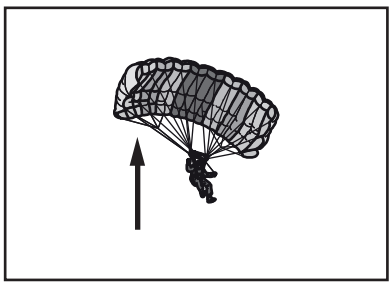
Draw a line from each **force diagram** to the correct **force**.

force diagram









force

air resistance

applied force

friction

gravity

water resistance

[3]

7 Mia investigates seed germination.

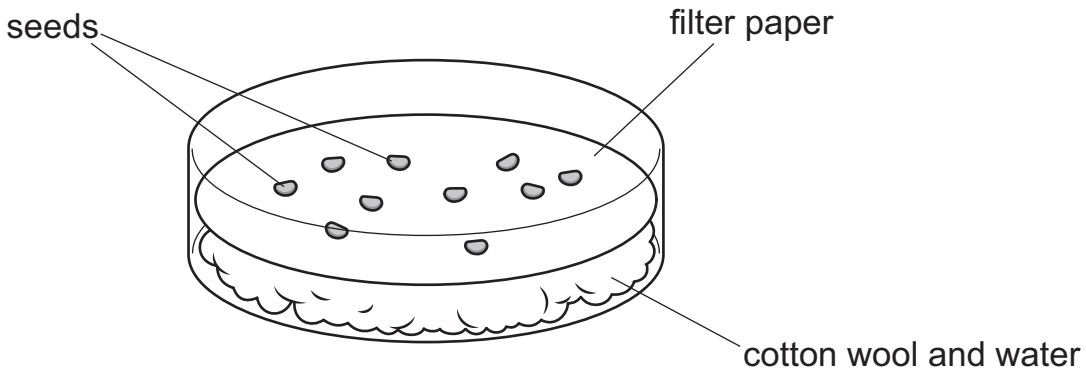
Mia has four dishes **A**, **B**, **C** and **D**.

Into each dish she puts:

- filter paper
- cotton wool
- seeds
- 3 cm^3 of water.

She puts the dishes in different places for five days.

The diagram shows dish **A**.



Here are her results.

dish	number of seeds in each dish	light or dark	warm or cold	number of seeds germinated
A	10	light	warm	8
B	8	light	cold	1
C	10	dark	warm	7
D	9	dark	cold	0

(a) What is the **dependent** variable in Mia's investigation?

.....

[1]

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

Describe how Mia improves her investigation to make it a fair test.

.....

[1]

(c) Use the results in the table to complete the sentences.

A condition needed for these seeds to germinate is ..... .

The evidence in the table is .....

.....

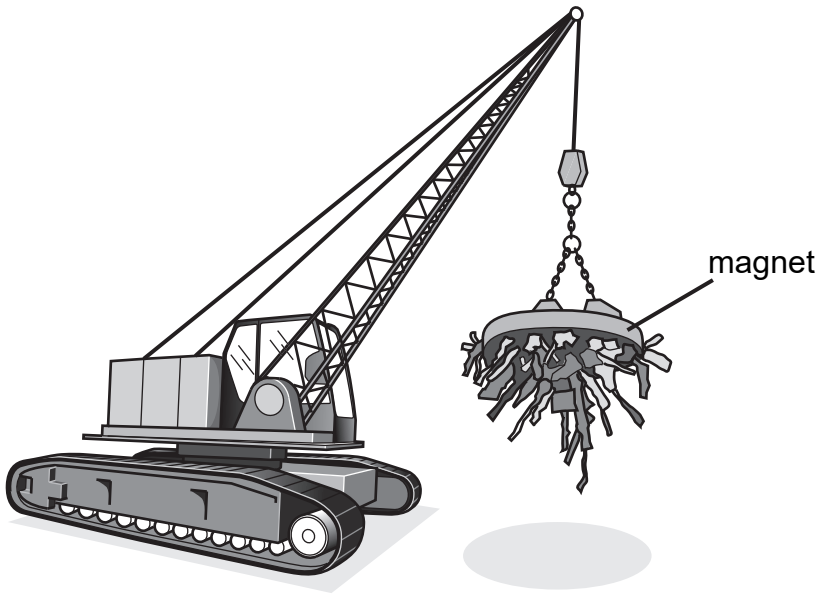
A condition **not** needed for these seeds to germinate is ..... .

The evidence in the table is .....

.....

[2]

8 The picture shows a large magnet lifting iron into the air.



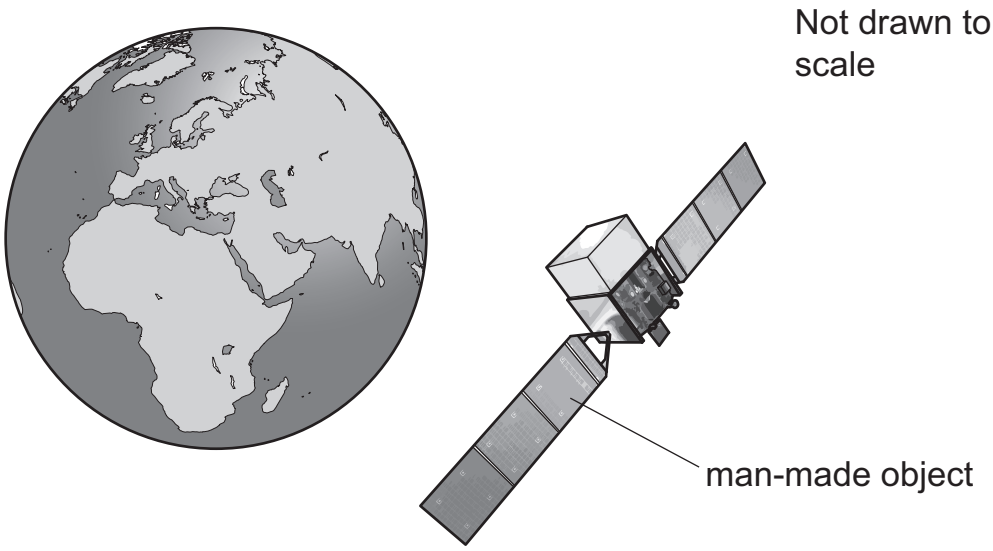
Complete the sentences.

(a) The magnet lifts the iron because iron is a ..... material. [1]

(b) There is a ..... pulling the iron to the magnet. [1]

(c) A different magnet holds **less** iron because it is ..... . [1]

9 The picture shows a man-made object orbiting the Earth.



(a) What is the name of this man-made object?

.....

[1]

(b) Write down the name of the natural object that orbits the Earth.

.....

[1]

10 Lily investigates how different surfaces affect the loudness of sound.

She drops a pen onto a surface and listens to the sound it makes.

Lily describes the loudness of the sound using numbers.

Number 1 is the quietest and number 10 is the loudest.

Here are her results.

surface	loudness of sound
A	8
B	3
C	9
D	3
E	1

(a) Which surface made the **loudest** sound?

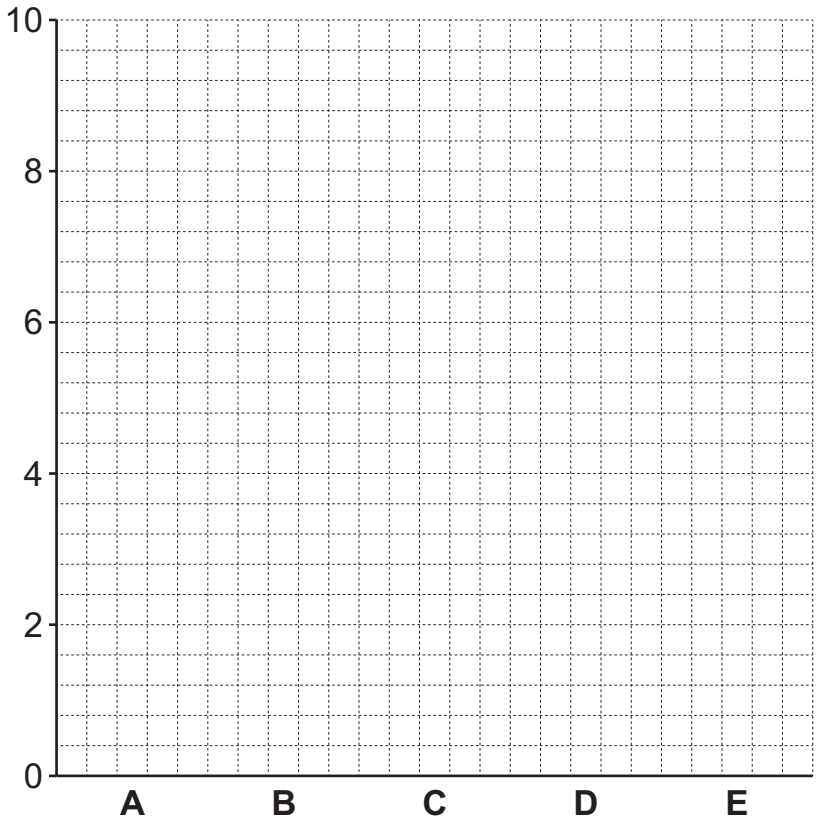
Circle the correct answer.

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

[1]

(b) Complete the bar chart to show the loudness of sound for each material.

.....



.....

[3]

(c) Complete these sentences about sound.

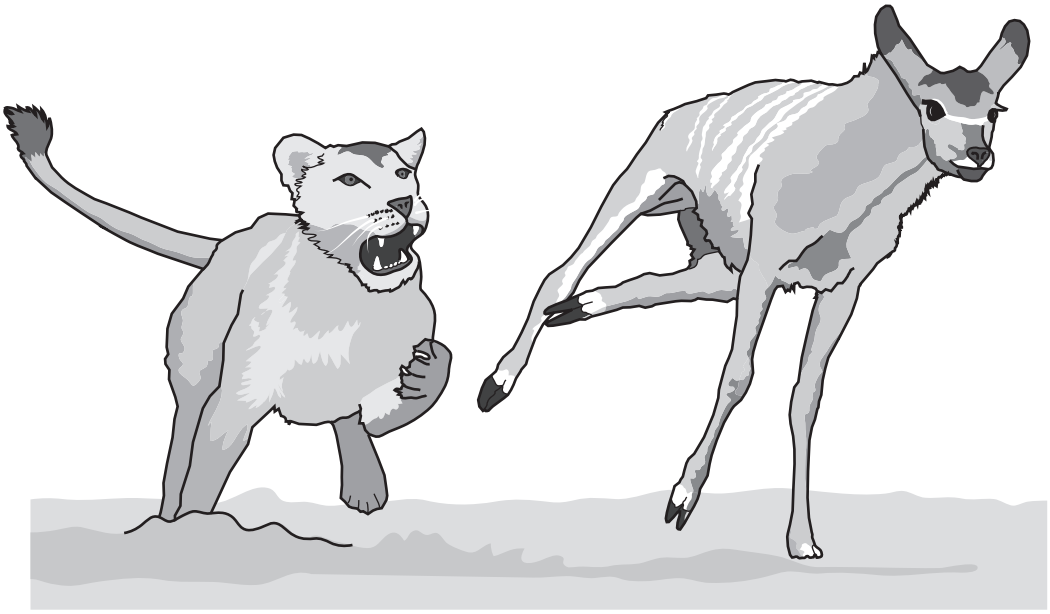
Sound is made when an object .....

Loud and quiet describe the volume of a sound.

High and low describe the ..... of a sound.

[2]

11 The picture shows a lion chasing its prey.



The lion has adaptations to help catch its prey.

Complete the sentences to explain three **different** adaptations.

1 The lion has .....

because it needs to ..... .

2 The lion has .....

because it needs to ..... .

3 The lion has .....

because it needs to ..... .

[3]