Cambridge Primary Progression Test

Question paper

Cambridge Primary

45 minutes

Science Paper 1

Stage 5

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	
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Total	

UNIVERSITY of CAMBRIDGE International Examinations

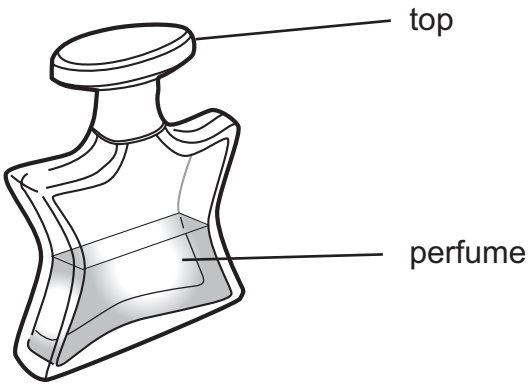
For Teacher's Use

1 Draw lines from the **description** of the Sun to the correct **position** of the Sun.

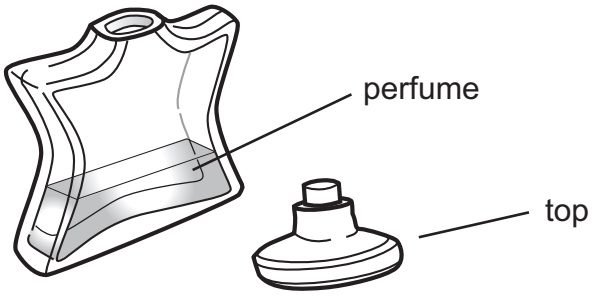
description	position
The Sun is at its highest position in the sky.	The Sun is in the east.
The Sun is appearing to rise.	The Sun is in the south.
The Sun is appearing to set.	The Sun is in the west.

[2]

2 Klara uses a bottle of perfume.



She forgets to put the top back on the bottle.
When she comes back the next day there is less perfume in the bottle.



(a) Why is there less perfume in the bottle?

.....

[1]

(b) Which of these has a strong smell?
Tick (✓) **three** boxes.

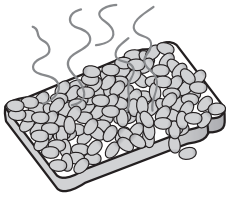
For Teacher's Use

coffee which has just been made ☐

cold cup of coffee ☐

freshly baked bread ☐

glass of water ☐



hot baked beans ☐

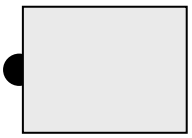
unopened tin of meat ☐

[2]

For Teacher's Use

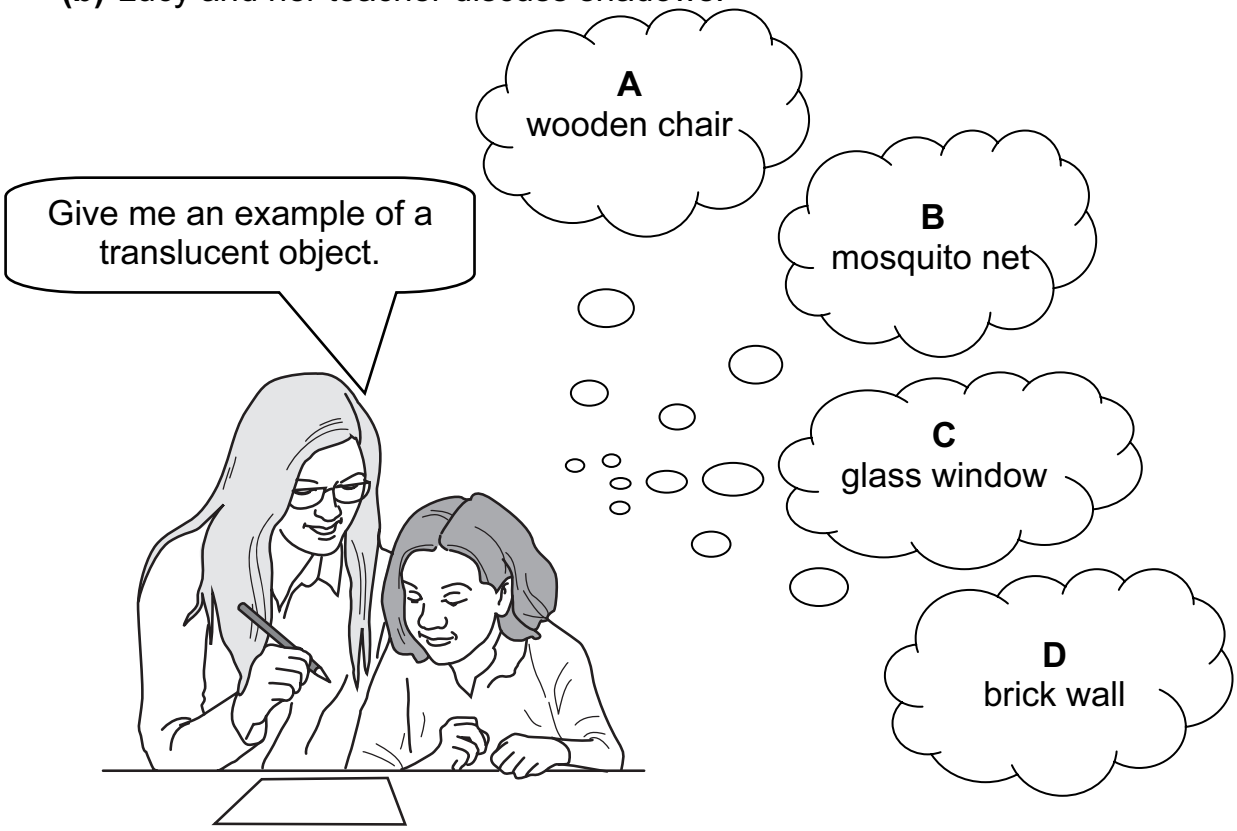
3 Different materials allow different amounts of light to pass through them.

(a) Draw lines from the **material** to the **amount of light that passes through it** and to the **type of shadow** it forms.

material	amount of light that passes through it	type of shadow
opaque	lets lots of light through	
translucent	lets no light through	
transparent	lets some light through	

[3]

(b) Lucy and her teacher discuss shadows.



Lucy thinks of four possible answers to the teacher's question.

Write the correct answer.

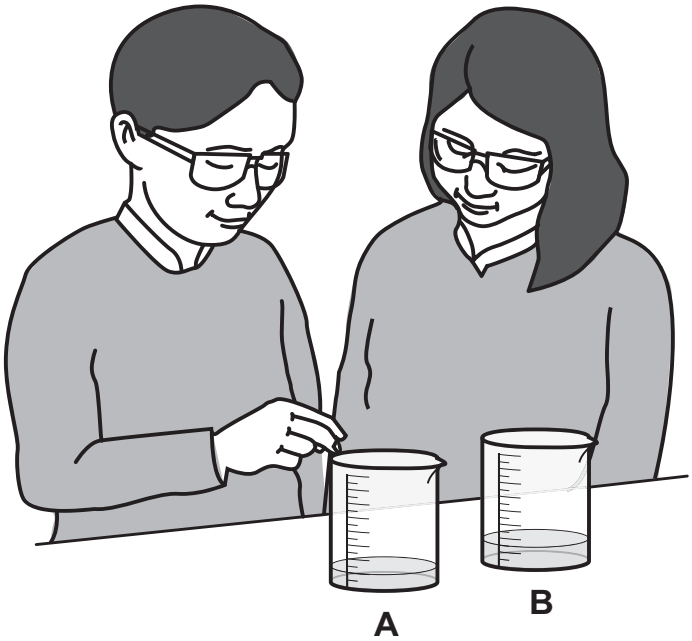
..... [1]

For Teacher's Use

For Teacher's Use

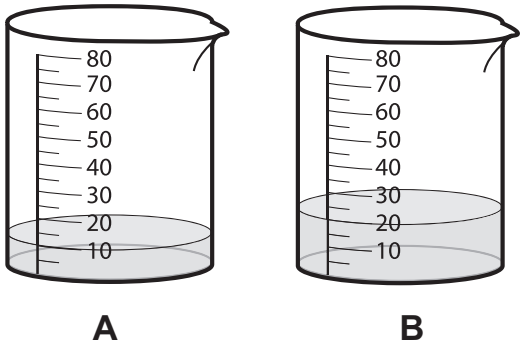
4 Chung and Ho investigate evaporation.

At the start, beaker **A** has a depth of 16mm of water in it.
Beaker **B** has a depth of 26mm of water in it.



They put the beakers next to each other in a warm room.

Every day for two weeks they measure the depth of the water.

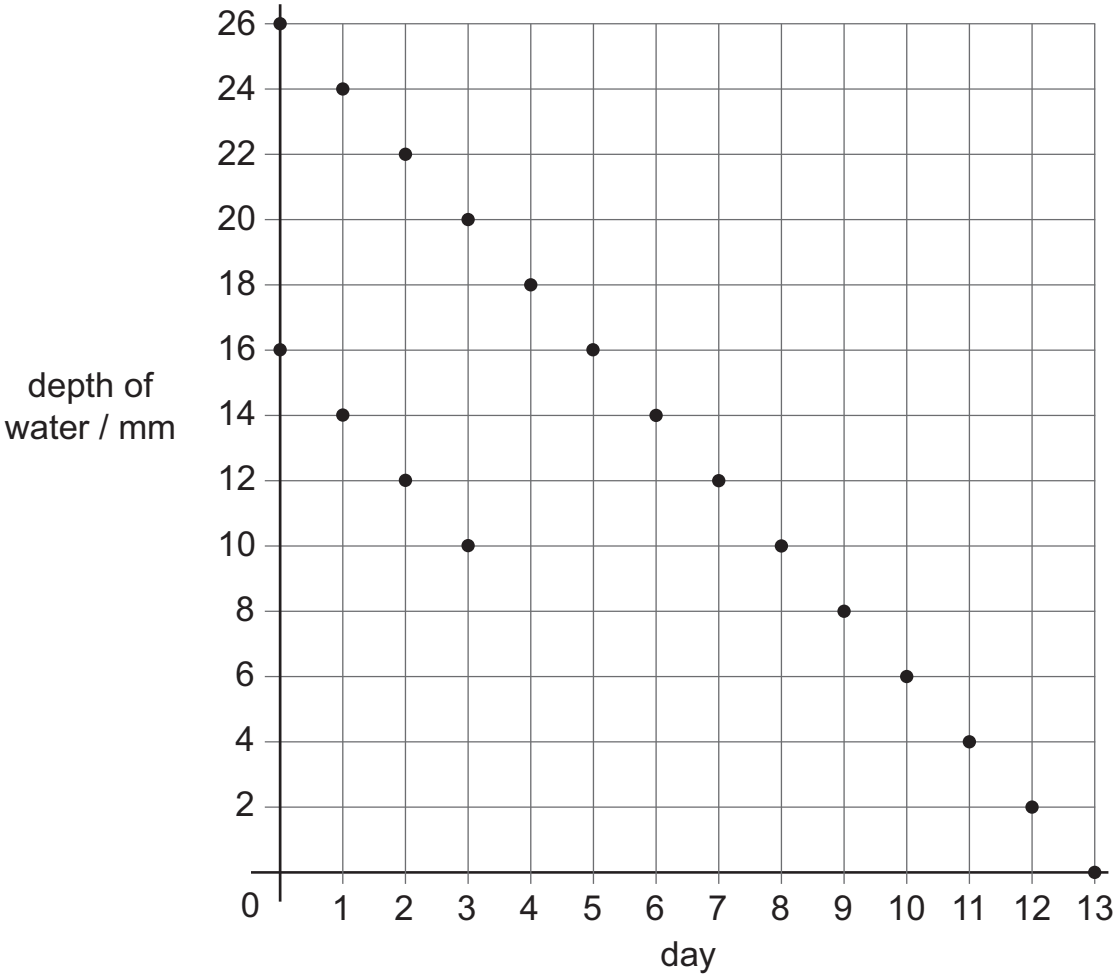


Here are their results.

day	0	1	2	3	4	5	6	7	8	9	10	11	12	13
depth of water in A in mm	16	14	12	10	8	6	4	2	0					
depth of water in B in mm	26	24	22	20	18	16	14	12	10	8	6	4	2	0

For Teacher's Use

(a) Draw a line graph for the results of beaker **A**.
Draw a line graph for the results of beaker **B** on the same graph.
Some of the points have been drawn for you.



[3]

(b) What factor varies during their experiment?
Underline **one** answer.

size of beakers

position of beakers in room

depth of water in the beakers

total number of days of the investigation

[1]

(c) Complete Chung and Ho's conclusion.

The ..... the depth of water there is in the beaker, the

..... it will take for it all to evaporate. [1]

For Teacher's Use

5 These statements are about fruits and seeds.

Decide if each statement is **true** or **false**.

Tick (✓) the correct box beside each statement.

	true	**false**
All plants grow fruit.	☐	☐
Seeds are formed when pollen fertilises the ovum.	☐	☐
Fruit contains seeds.	☐	☐
Seeds are produced in the roots.	☐	☐

[3]

6 These statements are about boiling pure water.
Decide if each statement is **true** or **false**.

Tick (✓) the correct box beside each statement.

	true	**false**
When you heat water, it sometimes boils at 125°C.	☐	☐
When water reaches 100°C, it boils.	☐	☐
When water boils, it gets hotter.	☐	☐
When water boils, it turns into a gas.	☐	☐

[3]

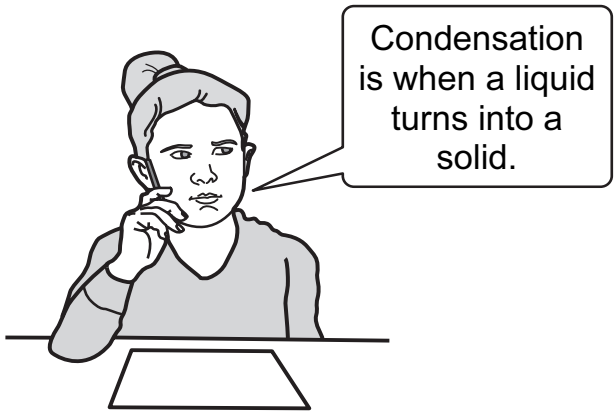
7 Some students from Class 5 discuss condensation.

For Teacher's Use

A

B

C



D

(a) One student has the correct definition.
Write the correct letter.

.....

[1]

(b) Which of the following processes is the reverse (opposite) of condensing?
Tick (✓) the correct box.

boiling	☐	evaporating	☐
freezing	☐	melting	☐

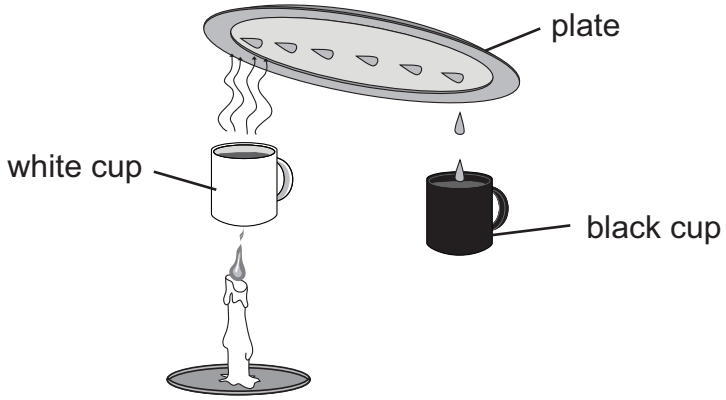
[1]

For Teacher's Use

8 Sara and Ruth are shipwrecked on a desert island.

They are very thirsty and make some drinking water from sea water.

Sara and Ruth use things they find from the shipwreck.
Here is their apparatus.



(a) Which cup contains the sea water at the start? .....

Give a reason for your answer.

.....

..... [1]

(b) The water is separated from the salt of the sea water.
Tick (✓) **two** boxes to explain how this happens.

Salt evaporates when it is heated. ☐

Only the water evaporates when it is heated. ☐

After boiling the salt disappears. ☐

Water vapour condenses when it is cooled. ☐

[1]

For Teacher's Use

(c) Which part of the apparatus condenses the water?

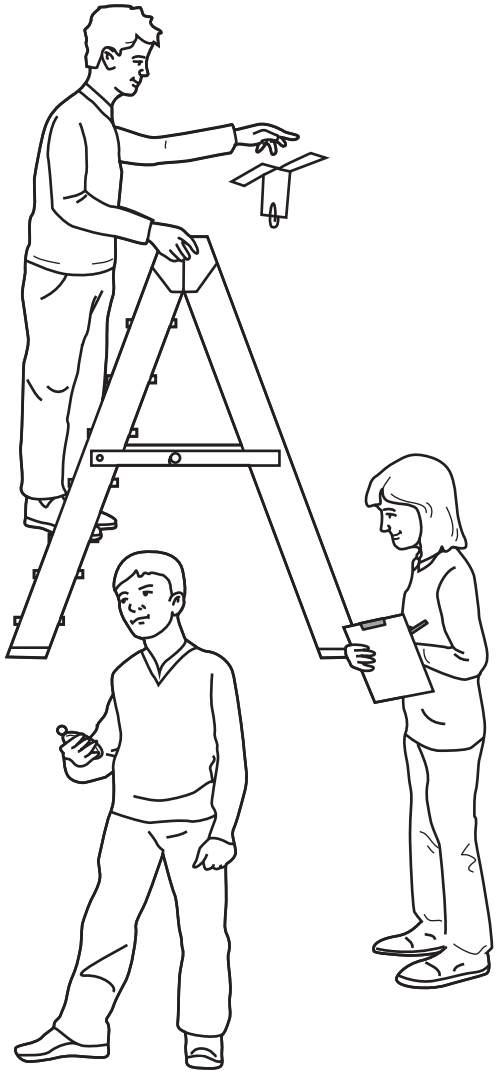
..... [1]

(d) Why can it do this?

..... [1]

For Teacher's Use

9 Class 5B discuss seed dispersal.
They decide to investigate the length of the wings of a spinner.
The spinner represents a seed which spins when it falls from a tree.
The wind then carries it away from the tree.
They drop each spinner from a height of 2m.



(a) Write **one** factor they change in their investigation.

.....

[1]

(b) Write **one** factor they keep the same in their investigation.

.....

[1]

For Teacher's Use

(c) Here are Class 5B's results.

length of wing in cm	time taken to fall 2m in seconds
3	1.5
5	2.3
8	3.0
10	4.6
12	5.9
16	7.8

What conclusion can you make from these results?

.....

..... [1]

(d) One group dropped each spinner three times from 2 m.

Why did they do this?

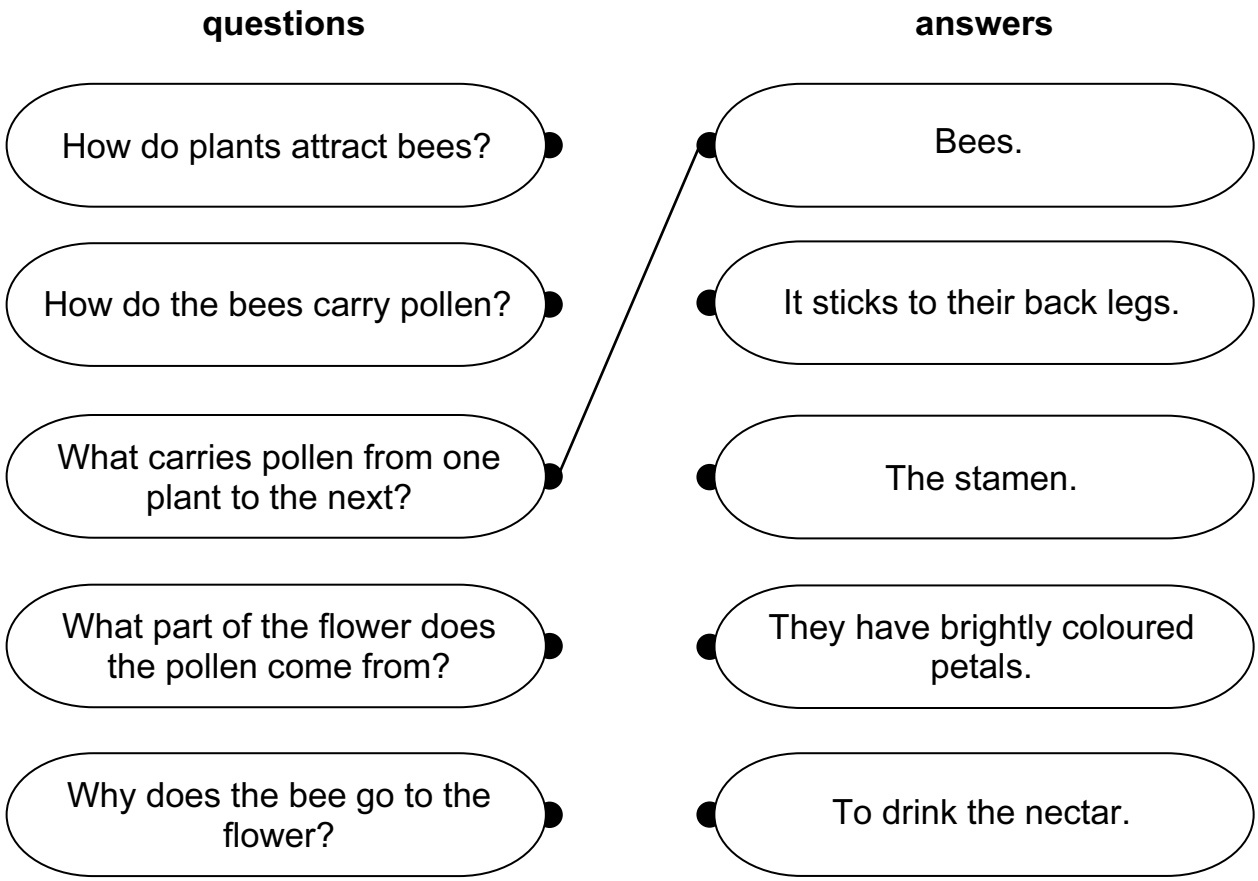
.....

..... [1]

For Teacher's Use

10 Here are some questions and answers about insect-pollinated plants.

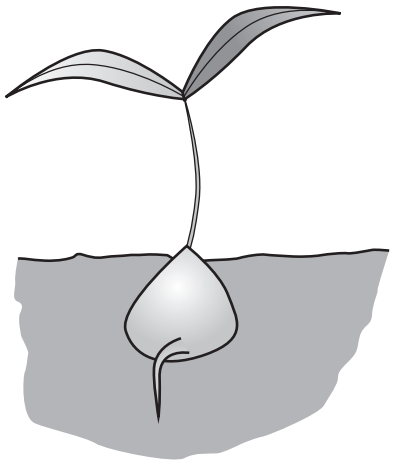
Draw lines from the **questions** to the correct **answers**.
One has been done for you.



[3]

For Teacher's Use

11 Here is a seed germinating.



(a) What is the meaning of the word germination?

.....

..... [1]

(b) These three statements are about germination.
They are not in the correct order.
Write the numbers **1**, **2** and **3** in the boxes to show the correct order.

A shoot grows up towards the light. ☐

A tiny root grows downwards into the soil. ☐

Leaves grow. ☐

[1]

(c) Write **two** things that seeds need to germinate.

1 .....

2 ..... [2]

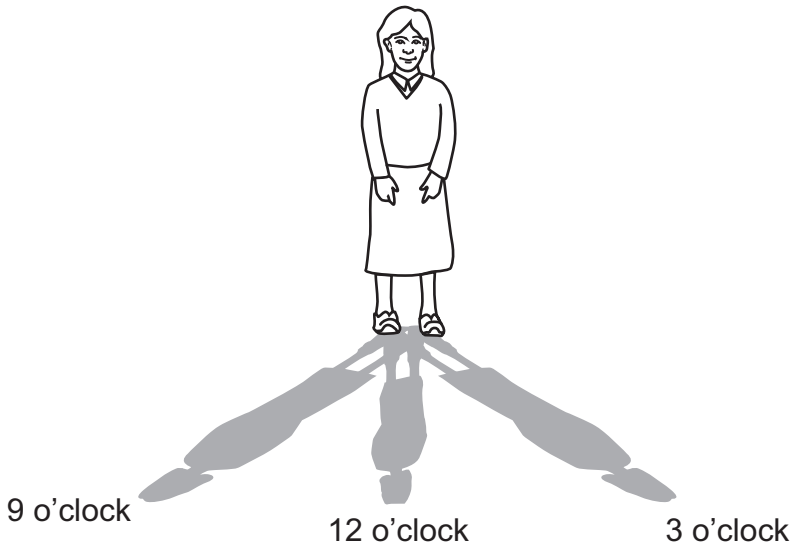
For Teacher's Use

12 Sam and Emily investigate position and length of shadows during the day.

Emily stands in the playground.
Sam draws around her feet with chalk.
At 9 o'clock in the morning he draws around her shadow to record its position and length.

He repeats this process at 12 o'clock and 3 o'clock in the afternoon.

Here are their results.



(a) Which of the following must they do to make their investigation a fair test?
Tick (✓) **two** boxes.

Do the investigation on a cloudy day.	☐
Emily should stand up straight when Sam draws the shadow.	☐
Emily should stand in a different place each time.	☐
Emily should move so the shadows move.	☐
Emily should stand on the chalk marks each time Sam draws the shadow.	☐

[2]

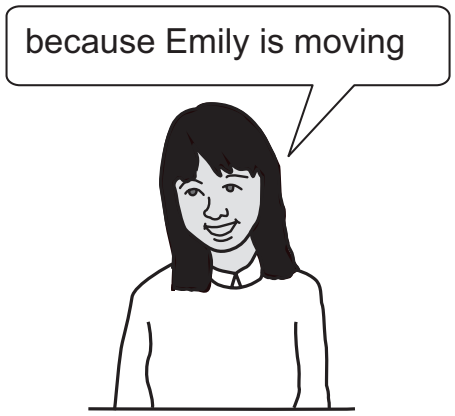
(b) Why does Emily have a shadow?

.....

..... [1]

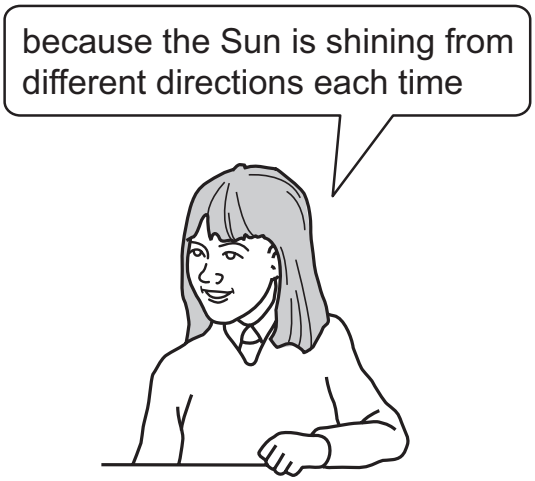
(c) Sam does not know why Emily's shadow moves.
He asks his friends.

Carlos



Nadia

Sam



Maya

Which friend has the correct answer?

..... [1]

(d) Why does the Sun look as if it is moving across the sky?

.....

..... [1]

For Teacher's Use

13 Here are some plants growing in a pot.

(a) The plants are put in a cupboard with no light for a few days.

What will they look like after being in the cupboard?

.....

..... [1]

(b) The plants are taken out of the cupboard.

They are put in the light for a few days.

What will they look like after a few days in the light?

.....

..... [1]

(c) The plants are put back into the cupboard with no light for a few weeks.

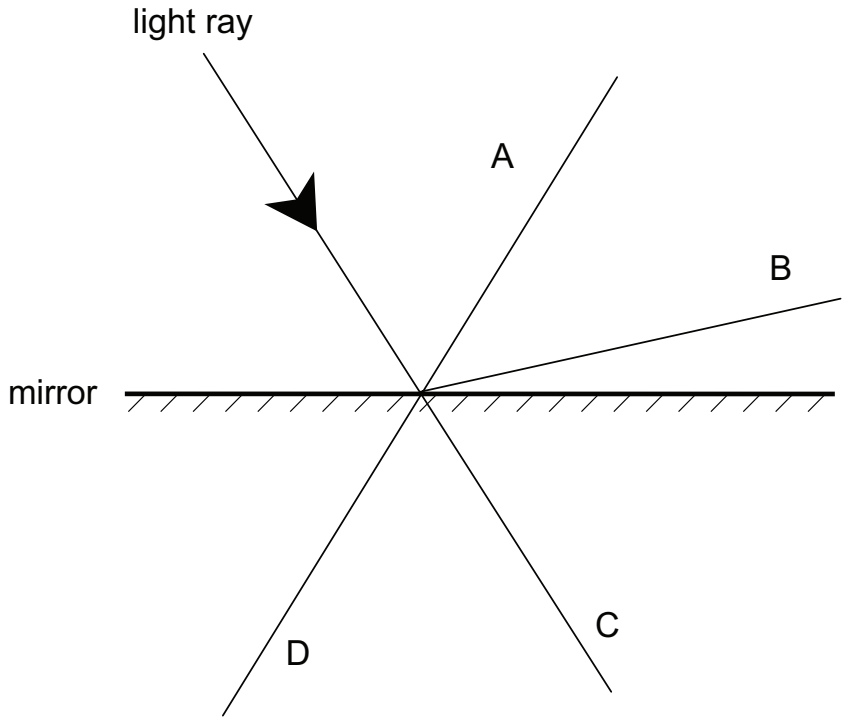
What will happen to the plants after a few weeks in the cupboard?

.....

..... [1]

For Teacher's Use

14 Here is a light ray hitting a mirror.



(a) Which letter represents the reflected ray?

.....

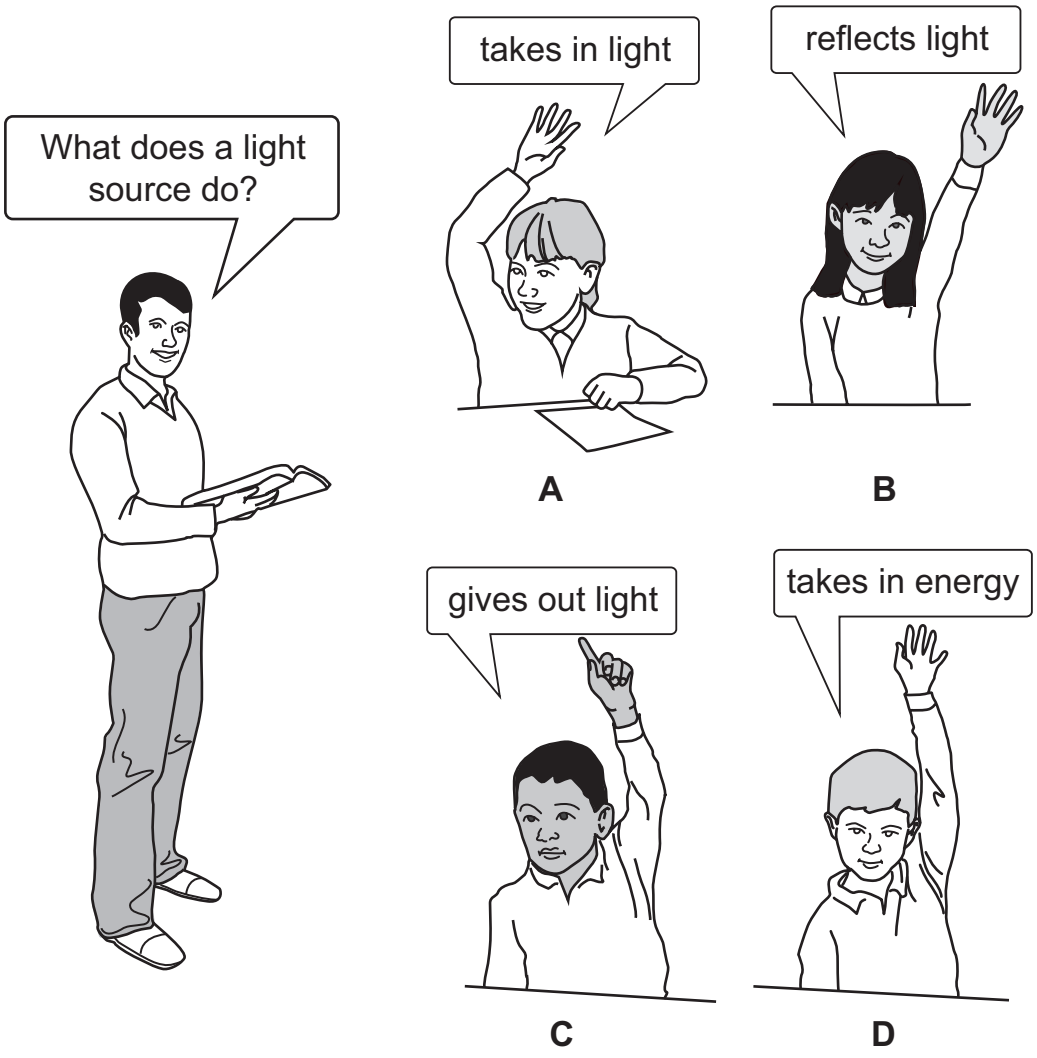
[1]

(b) Draw an arrow head on the reflected ray to show the direction the light travels.

[1]

15 Class 5 discuss light sources with their teacher.

For Teacher's Use



(a) Which student knows the correct answer to the teacher's question? Write the correct letter

.....

[1]

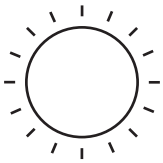
For Teacher's Use

(b) Which of the following is **not** a light source?
Tick (✓) the correct box.

candle ☐

moon ☐

stars ☐



Sun ☐

[1]

(c) These statements are about light.

Decide if each statement is **true** or **false**.

Tick (✓) the correct box beside each statement.

	true	**false**
Light intensity cannot be measured with sensors.	☐	☐
We see light when it leaves our eyes.	☐	☐
Light travels in straight lines.	☐	☐

[1]

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