



Cambridge International Examinations
Cambridge Primary Checkpoint

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SCIENCE

0846/01

Paper 1

October 2015

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.

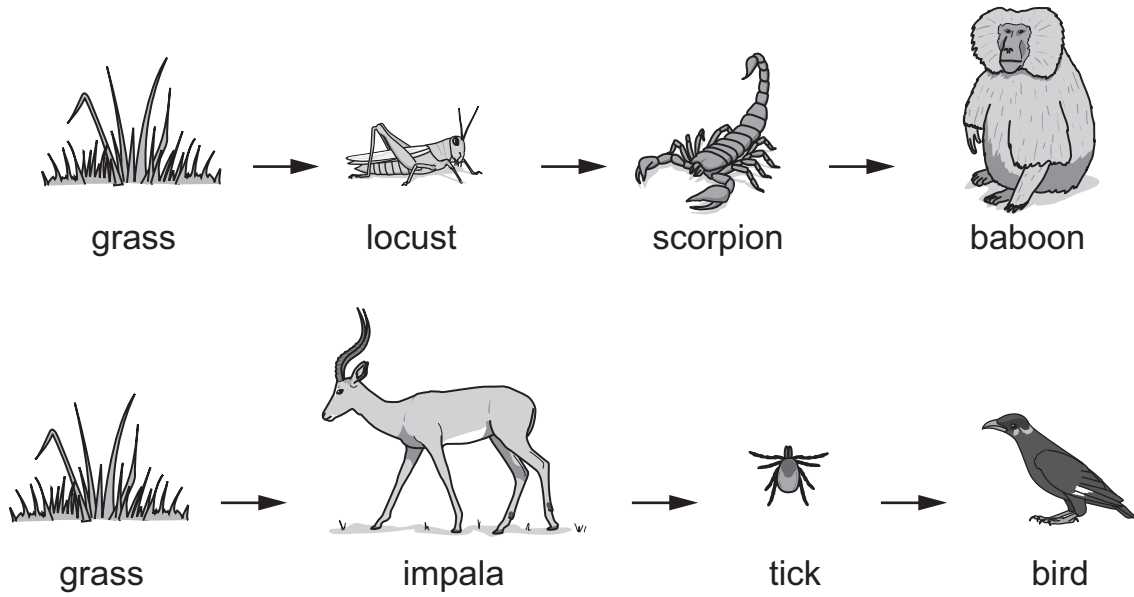
DO **NOT** WRITE IN ANY BARCODES.

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 **22** printed pages and **2** blank pages.

1 There are food chains in the jungle.



(a) Which is a producer?

Circle the correct answer.

- bird** **grass** **locust** **scorpion**

[1]

(b) What does the impala eat?

..... [1]

(c) What is eaten by the scorpion?

..... [1]

(d) Circle the word that describes the baboon in the food chain.

- producer** **predator** **prey**

[1]

(e) The baboon also eats ticks.



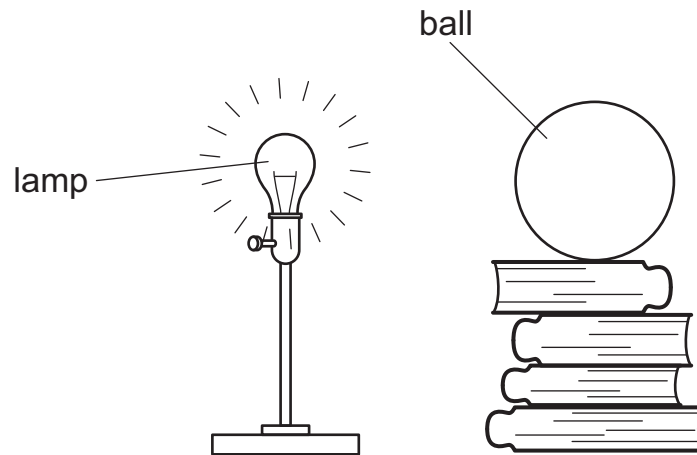
baboon



tick

On the picture draw an arrow (→) to show that the baboon eats the tick. [1]

2 The teacher makes a model of the Sun and Earth.



The lamp in the model is the Sun.

The ball in the model is the Earth.

(a) Draw the letter **D** on the ball to show where it is day.

Draw the letter **N** on the ball to show where it is night.

[1]

(b) The teacher uses the model to show how day becomes night.

Circle what she does to the model.

spins the lamp on its own axis

spins the ball on its own axis

moves the lamp around the ball

moves the ball around the lamp

[1]

3 Ahmed and Lily are playing a game.

They are trying to identify different objects without looking at them.



They have a bag with an object inside the bag.

(a) They try to guess what the object is using their hands.

What sense are they using?

..... [1]

(b) Complete the sentence.

Choose from the words.

conclusion

prediction

question

result

When they guess what the object is this is called a [1]

(c) They are allowed to look and see if they have guessed correctly.

What sense are they using?

..... [1]

4 Angelique has a sound meter.

(a) Circle the thing she measures.

the mass
of an object

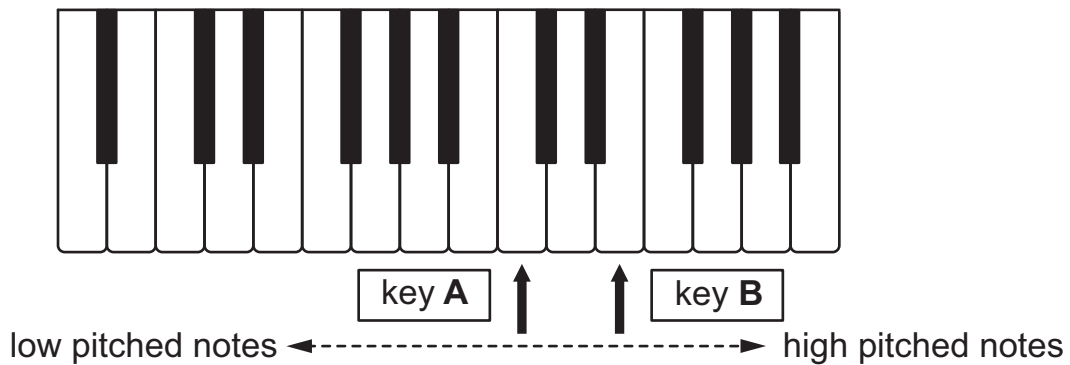
the weight
of an object

the loudness
of a sound

the speed
of a sound

[1]

(b) Here is a picture of a piano keyboard.



Angelique pushes key **A** and key **B**.

She uses the same force each time.

Tick (✓) the correct sentence.

Key **A** has a higher pitch than key **B**.

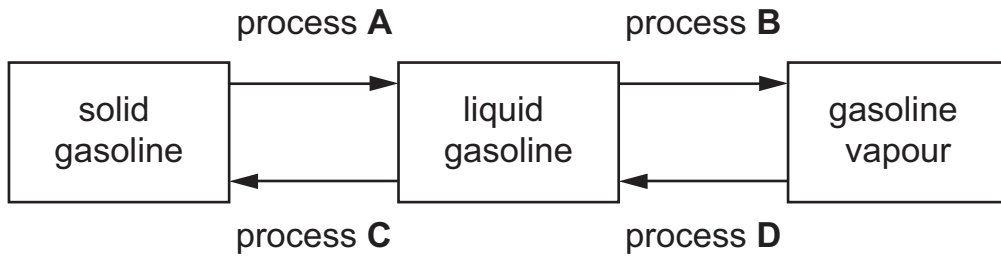
Key **B** has a higher pitch than key **A**.

Key **A** is louder than key **B**.

Key **B** is louder than key **A**.

[1]

5 Gasoline can exist as a solid, liquid or a gas.



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

..... [1]

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

..... [1]

(c) What is the name of process **C** in the diagram?

..... [1]

(d) What is the name of process **D** in the diagram?

..... [1]

6 Materials are chosen for certain purposes because of their properties.

Glass is used to make windows.

This is because glass is colourless.

Complete each of the following sentences about the uses of materials.

Choose from the list of properties.

attracted to a magnet

not attracted to a magnet

brittle (breaks easily)

flexible (bends easily)

not poisonous

poisonous

insoluble in water

soluble in water

strong

weak

a good electrical conductor

a poor electrical conductor

(a) This bridge is made from steel.



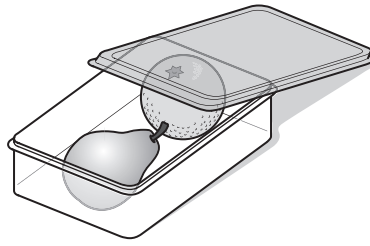
This is because steel is [1]

(b) This bar magnet is made from steel.



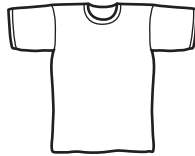
This is because steel is [1]

(c) This food box is made of plastic.



This is because plastic is [1]

(d) This T-shirt is made from cotton.



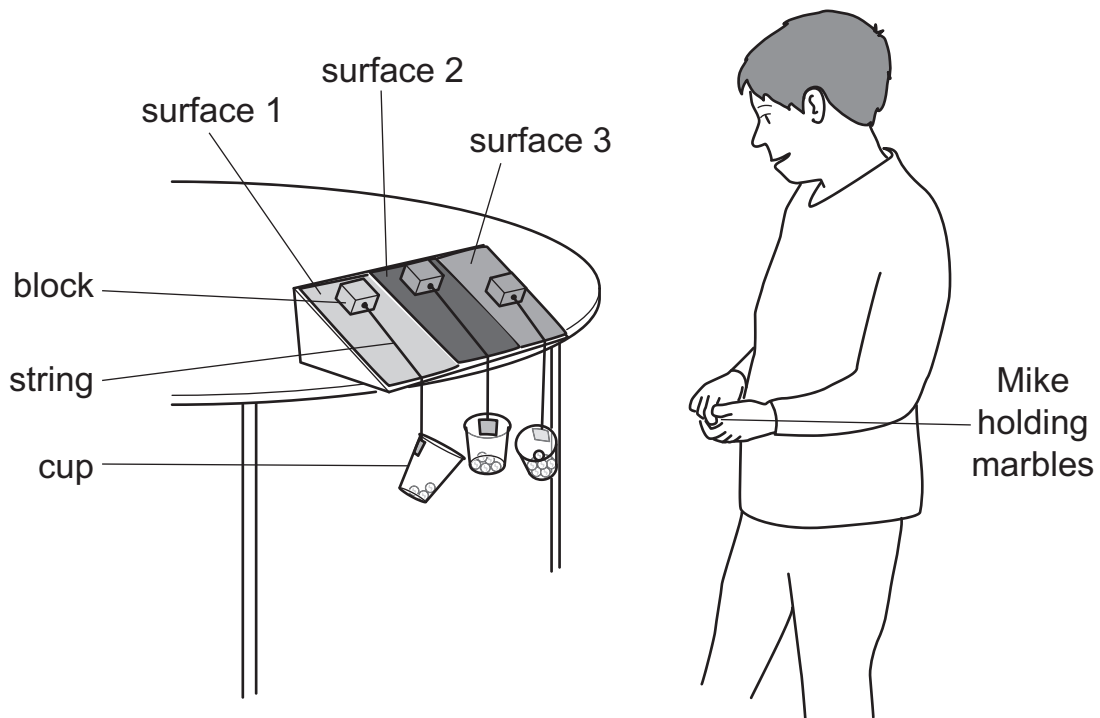
This is because cotton is [1]

(e) This cable is made using copper wire.



This is because copper is [1]

7 Mike investigates friction.



- he puts a block on three different surfaces
- he sticks a piece of string and a plastic cup to each block
- he puts one marble in each cup
- he adds more marbles until the blocks move.

(a) Here are Mike's results.

surface 1 = 5 marbles

surface 2 = 6 marbles

surface 3 = 2 marbles

Complete the table of his results.

surface
1
.....	6
.....

[2]

(b) Complete the sentences.

Choose from the following.

1

2

3

5

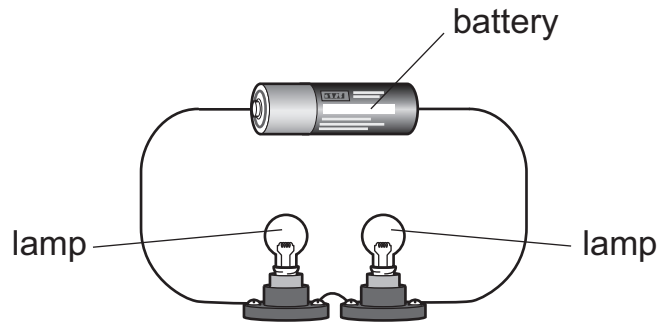
6

The surface with the **most** friction is surface

The **smoothest** surface is surface because
it takes marbles to move the block.

[2]

8 Mia makes a series circuit.



Mia makes different series circuits.

She uses the same size batteries.

She uses the same size lamps.

(a) Complete the table.

Choose from the following words.

dim

normal

bright

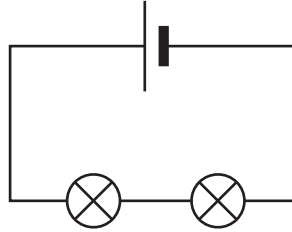
number of batteries	number of lamps	brightness of lamps
1	2	normal
2	2
1	3

[2]

(b) Mia draws a circuit diagram.

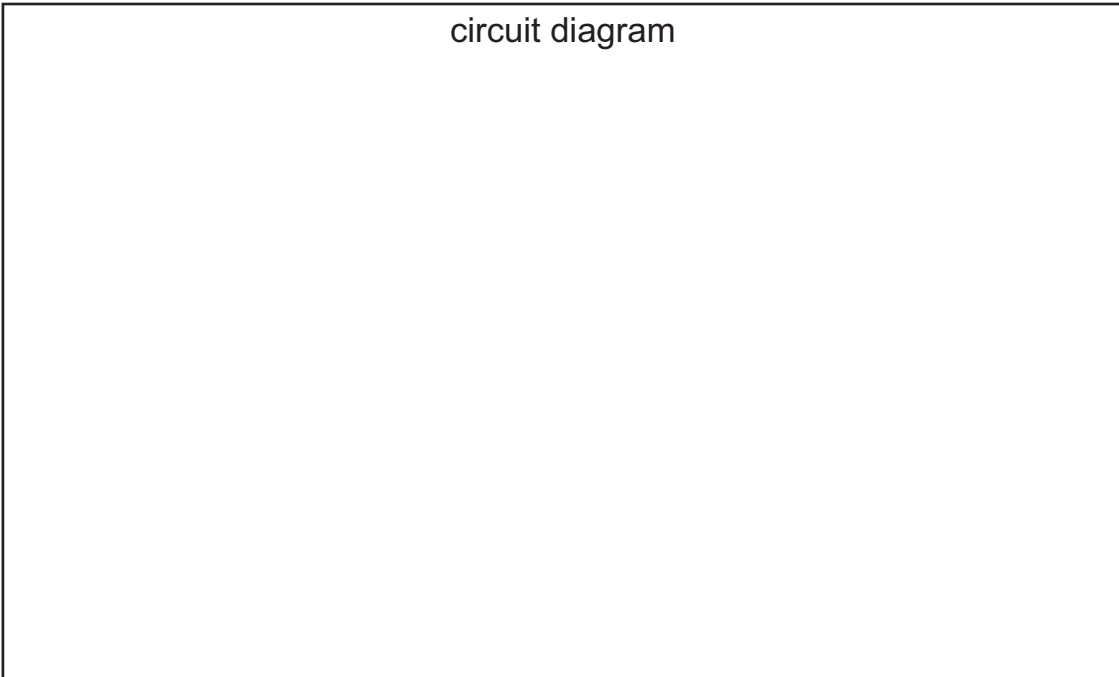
It has 1 battery and 2 lamps.

circuit diagram



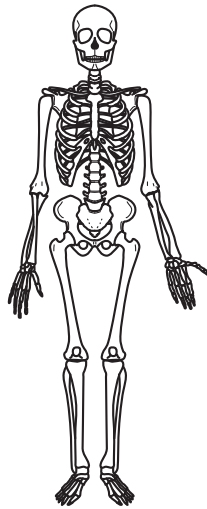
Draw a circuit diagram for 1 battery and 3 lamps.

circuit diagram



[1]

9 Humans have a skeleton inside their body.



(a) Complete the sentences.

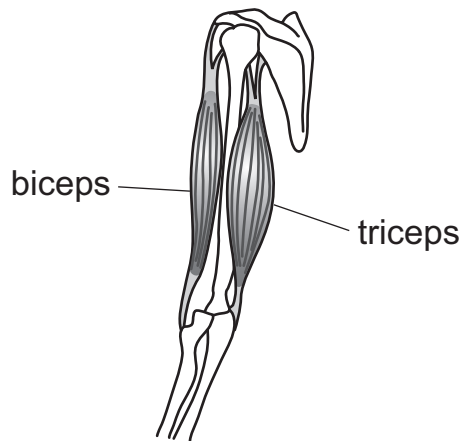
The protects the brain.

[1]

The protects the lungs.

[1]

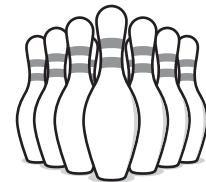
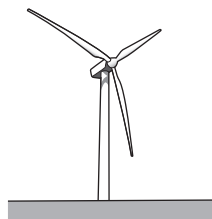
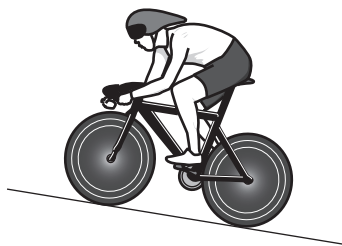
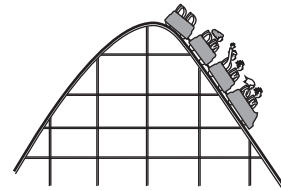
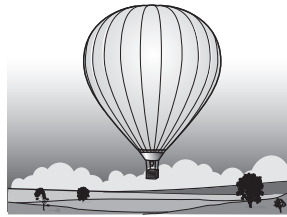
(b) Muscles are used to make bones move.



What happens to your biceps muscle when you bend your arm?

..... [1]

10 Here are some pictures.



(a) Circle the pictures that have energy because they are moving.

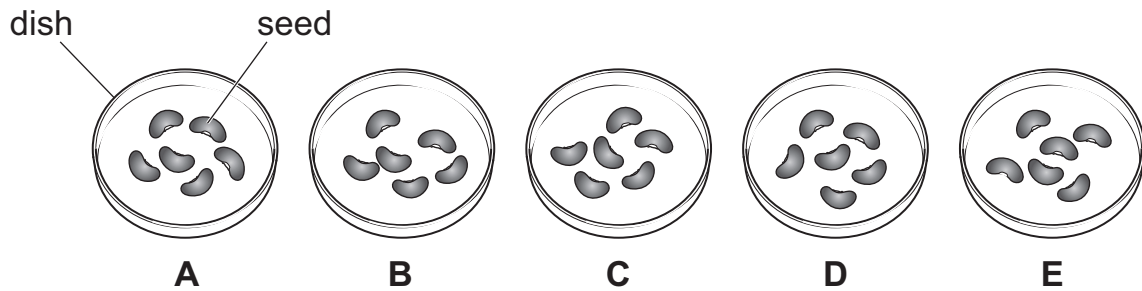
The first one has been done for you. [2]

(b) Describe how the animal in the first picture can increase its movement energy.

..... [1]

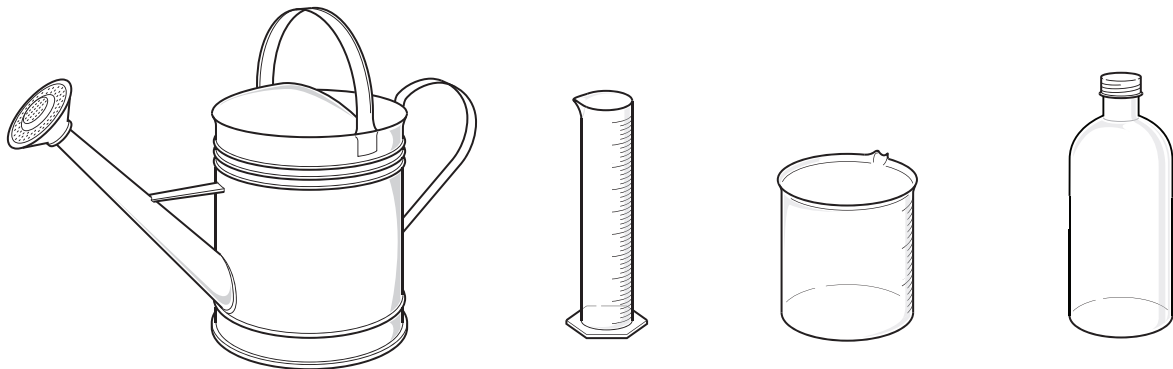
11 Jamila and Safia investigate the germination of seeds.

They put six seeds in each dish.



(a) Safia pours the same **volume** of water into each dish.

Circle the apparatus she uses to measure the volume accurately.



[1]

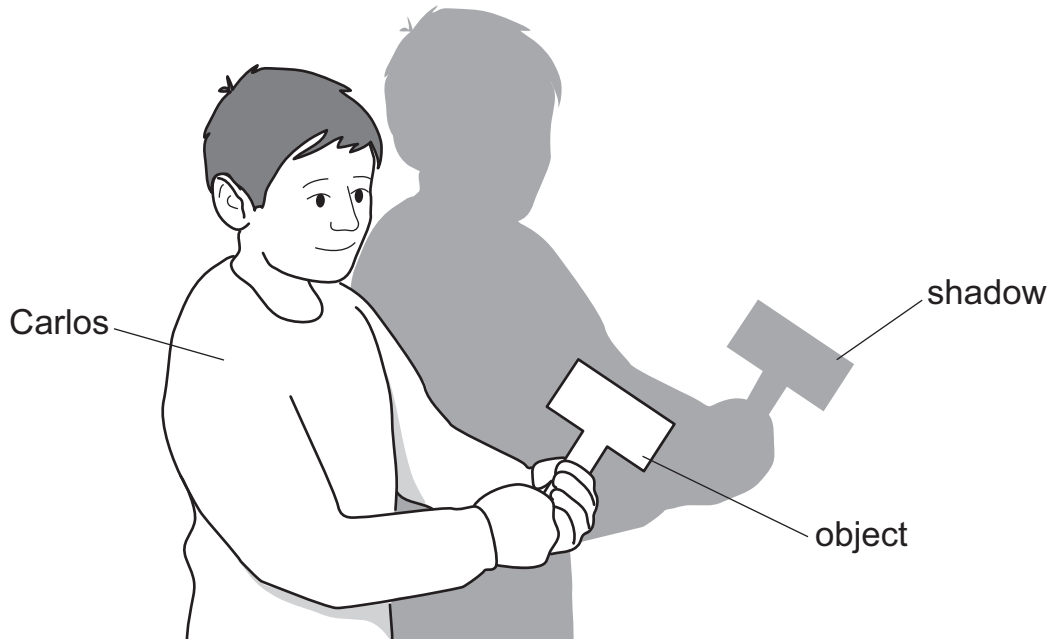
(b) Jamila puts the dishes in areas with different temperatures.

She measures the temperature of each dish.

What equipment does she use?

..... [1]

12 Carlos uses different materials to investigate shadows.



(a) Look at the shadow.

Circle the correct description of the object.

the object is opaque

the object is transparent

the object is transparent and opaque

[1]

(b) Carlos moves closer to the source of light.

What happens to the size of the shadow?

Circle the correct answer.

decreases

increases

stays the same

[1]

(c) Carlos stops moving.

The intensity of the light is increased.

What happens to the size of the shadow?

Circle the correct answer.

decreases

increases

stays the same

[1]

13 Humans can have positive and negative effects on the environment.

A new road is being built near your school.

Complete the table to show if the effects are positive or negative.

reason	positive? (tick ✓)	negative? (tick ✓)
creates jobs		
removes trees		
fills in a pond		

[2]

14 Aiko investigates the time it takes sugar cubes to dissolve in water.

This is what she does in her first experiment.

- adds 100 cm³ of water to a beaker
- adds one sugar cube to the water
- stirs the water and sugar cube with a glass rod
- measures the time it takes for the sugar cube to dissolve.

(a) What piece of equipment does she use to measure the time?

..... [1]

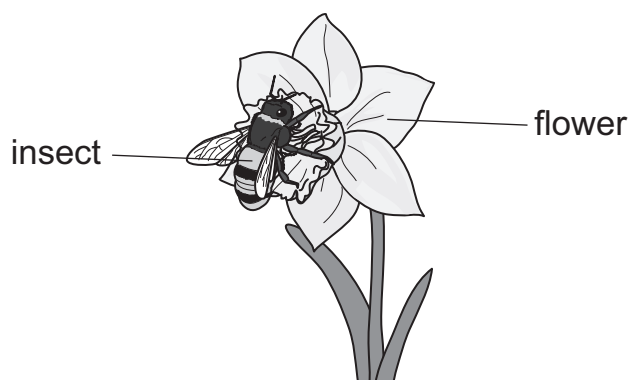
(b) In her second experiment she wants to use two sugar cubes instead of one.

She wants to do a fair test.

What volume of water should she use?

..... cm³ [1]

15 Many plants have flowers.



(a) Which **two** parts of the flower attract insects?

Circle the **two** correct answers.

carpel

nectary

petal

sepal

stigma

[1]

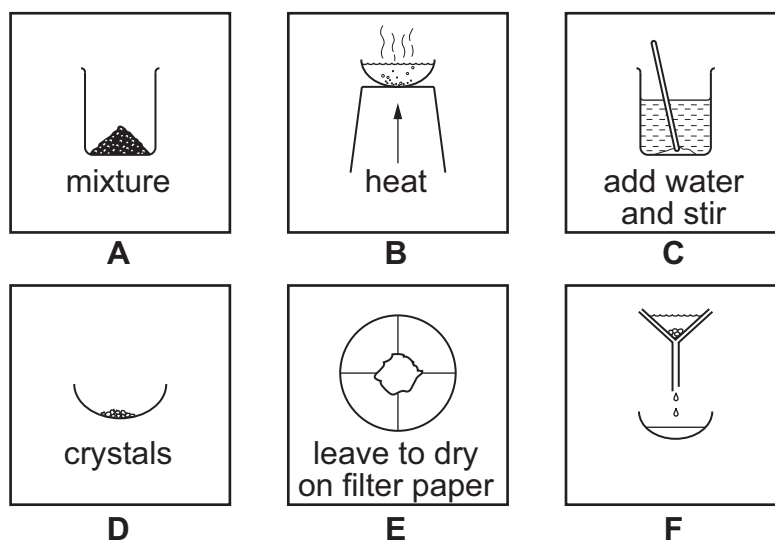
(b) Complete the sentence.

Pollen fertilises the ovum. This produces [1]

16 Gabriella wants to separate a mixture of salt and sand.

The diagram shows the steps she uses.

They are not in the correct order.



(a) Put the steps in the correct order.

Two have been done for you.

A			E		
----------	--	--	----------	--	--

[2]

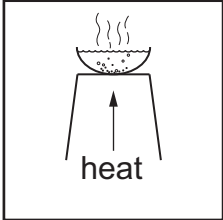
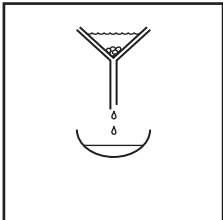
(b) Which solid substance is on the filter paper in step **E**?

.....

[1]

(c) Steps **B** and **F** are processes.

Draw a line between the **step** and the **process** that happens.

step	process
 B	condensation
 F	dissolution
	evaporation
	filtration

[2]

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