



Cambridge International Examinations
Cambridge Primary Checkpoint

CANDIDATE
NAME

CENTRE
NUMBER

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SCIENCE

0846/01

Paper 1

October 2018

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 Oliver is learning to organise animals using keys.

(a) He organises four insects **W**, **X**, **Y** and **Z**.



W



X

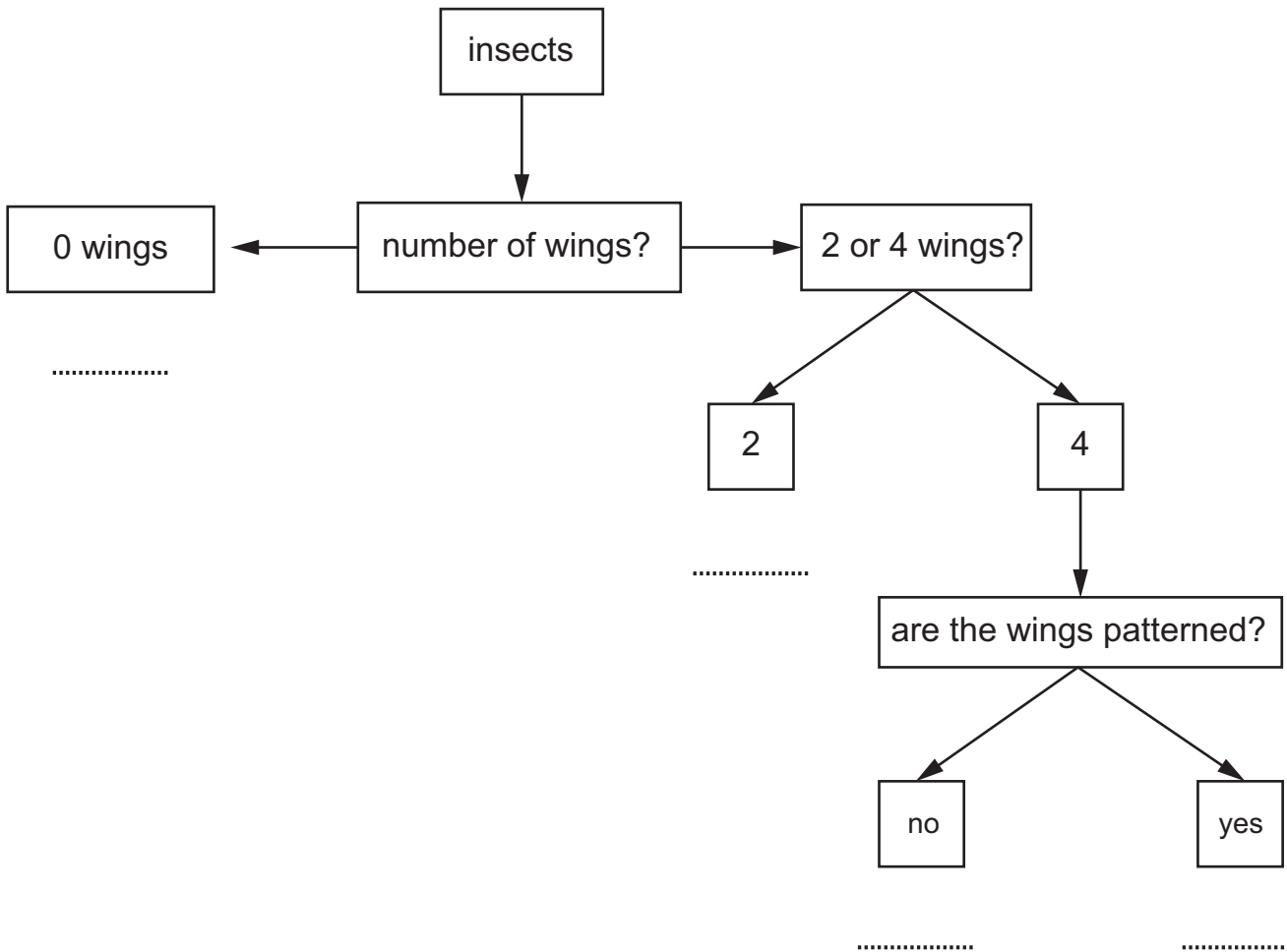


Y



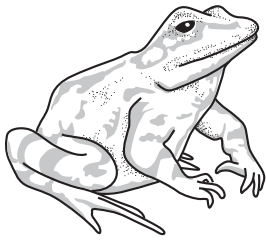
Z

Put the letters **W**, **X**, **Y** and **Z** in the correct place on the key.

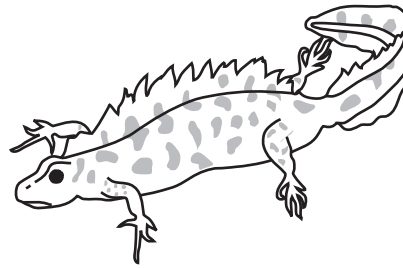


[2]

(b) Look at the picture of a frog and a newt.



frog



newt

Oliver wants to ask a question to separate them into different groups.

Which question does he use?

Circle the correct answer.

Does it have an eye?

Does it have four legs?

Does it have a mouth?

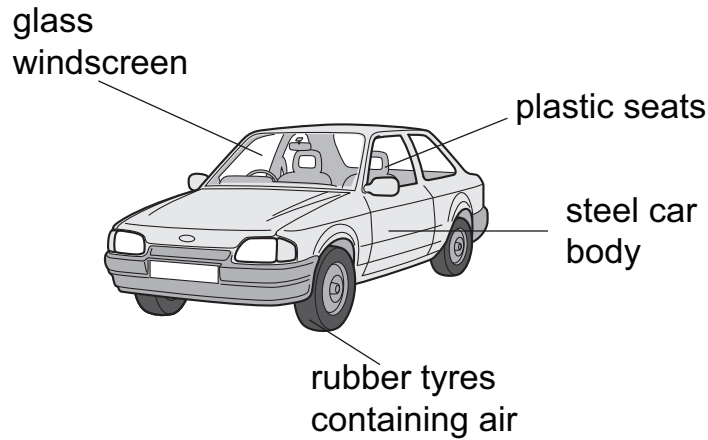
Does it have a patterned body?

Does it have a tail?

[1]

2 Safia owns a motor car.

The diagram shows some of the materials used to make her car.



(a) Which labelled material in the diagram is attracted to a magnet?

..... [1]

(b) Give one reason why glass is used to make the car windscreen.

..... [1]

(c) Steel is used to make the car body because it will **not** rust and is quite cheap.

Give one **other** reason why steel is suitable to make the car body.

..... [1]

(d) The car engine burns gasoline.

What type of change is the burning of gasoline?

Circle the correct answer.

irreversible **reversible**

Explain your answer.

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

3 Class 6 go to their local park to pick up litter.

Class 6 do **not** put this litter in the bin.

They take the litter to a recycling centre.

Write **two** reasons why they do this.

reason 1

.....

reason 2

.....

[2]

4 There are five stages in the lifecycle of a flowering plant.

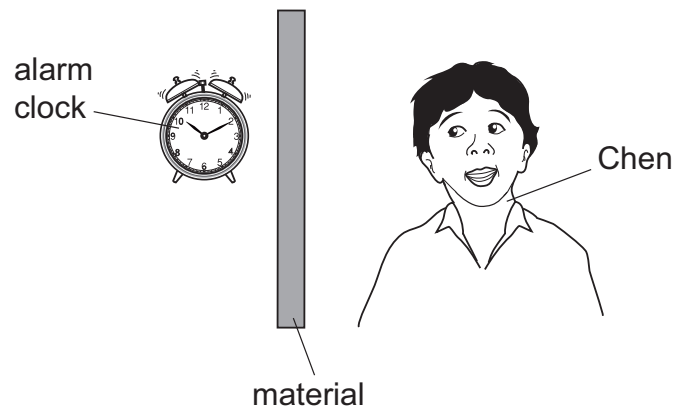
Three of these stages are

- seed production
- seed dispersal
- germination.

What are the **other** two stages?

..... and [2]

5 Chen investigates sound.



Chen measures the volume of sound the alarm clock makes.

He puts different materials between him and the alarm clock.

(a) What apparatus does Chen use to measure the volume of sound?

..... [1]

(b) Complete the sentence.

The volume of sound is measured in

[1]

Choose from these words.

decibels

hours

metres

newtons

seconds

(c) Chen's alarm clock makes a high sound.

Complete the sentence.

A high sound and a low sound are different in

[1]

Choose from these words.

length

loudness

pitch

softness

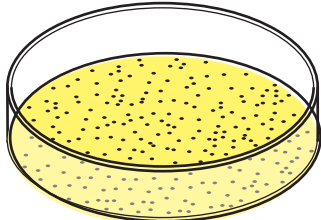
volume

6 Priya is investigating seed germination.

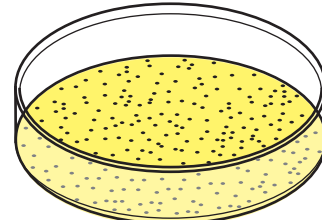
She has four dishes.

She adds some seeds to each dish.

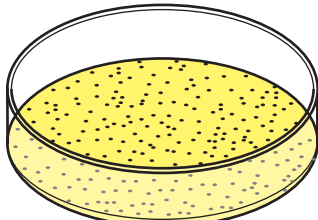
Look at the dishes in the pictures.



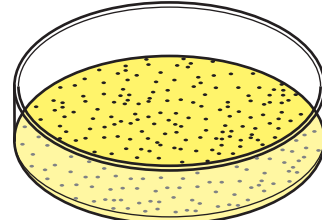
A
seeds with light
and water



B
seeds in a dark cupboard
with water



C
seeds with light
and no water



D
seeds in a dark cupboard
and no water

(a) Priya thinks that only the seeds in dish **A** will germinate.

Is she correct?

.....

Explain your answer.

.....

.....

[2]

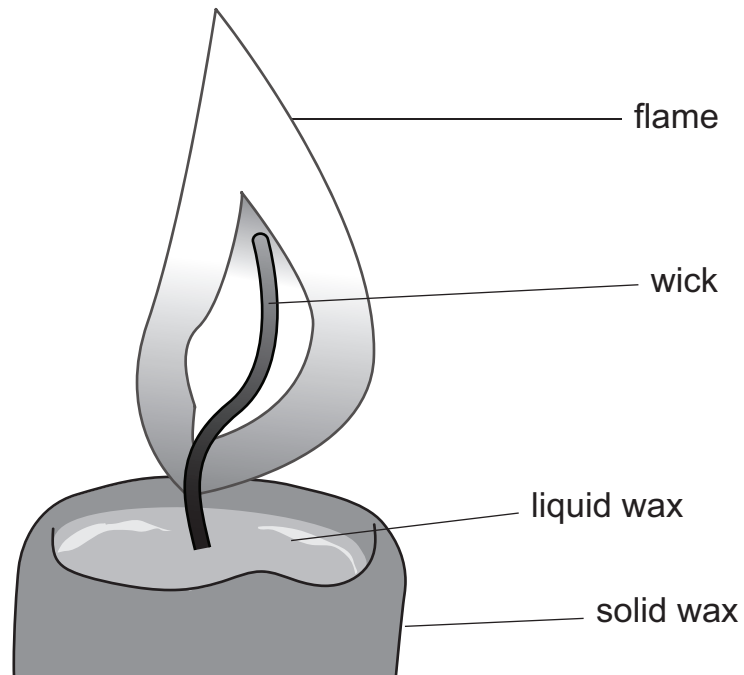
(b) Priya repeats the investigation in the winter.

The seeds do **not** germinate.

Explain why.

..... [1]

7 A candle is made from a solid called wax.



(a) At the top of the candle **solid** wax changes into **liquid** wax.

What is the name of this process?

..... [1]

(b) Solid wax changing into liquid wax is a **reversible** change.

Explain why.

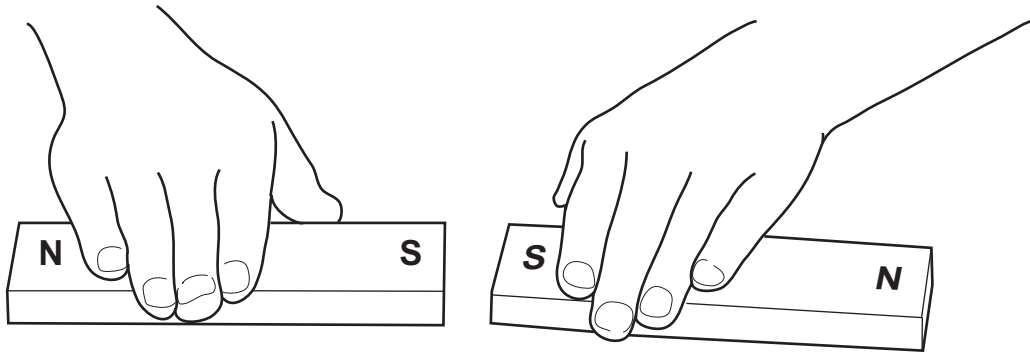
.....
 [1]

(c) Some of the **liquid** wax changes into a **gas**.

What is the name of this process?

..... [1]

8 Blessy puts two magnets near each other.



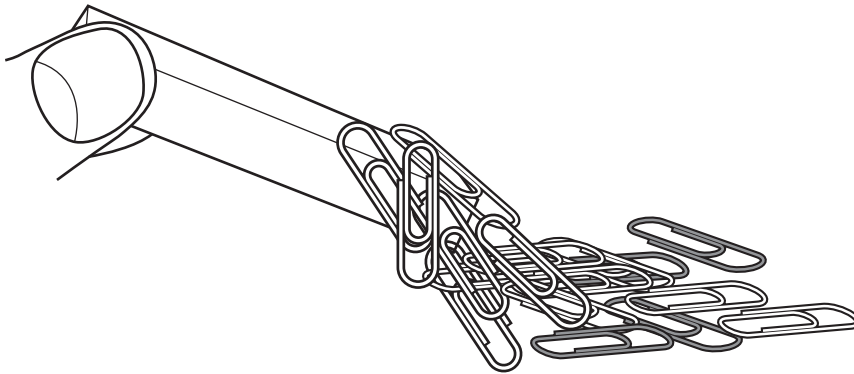
The magnets **repel** each other.

(a) Blessy wants to make these magnets **attract** each other.

What does she do?

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

(b) Blessy uses one of the magnets to attract paper clips.



This magnet only attracts five of the paper clips.

The other paper clips have **not** been attracted.

Give **two** reasons why these paper clips are **not** attracted to the magnet.

reason 1

.....

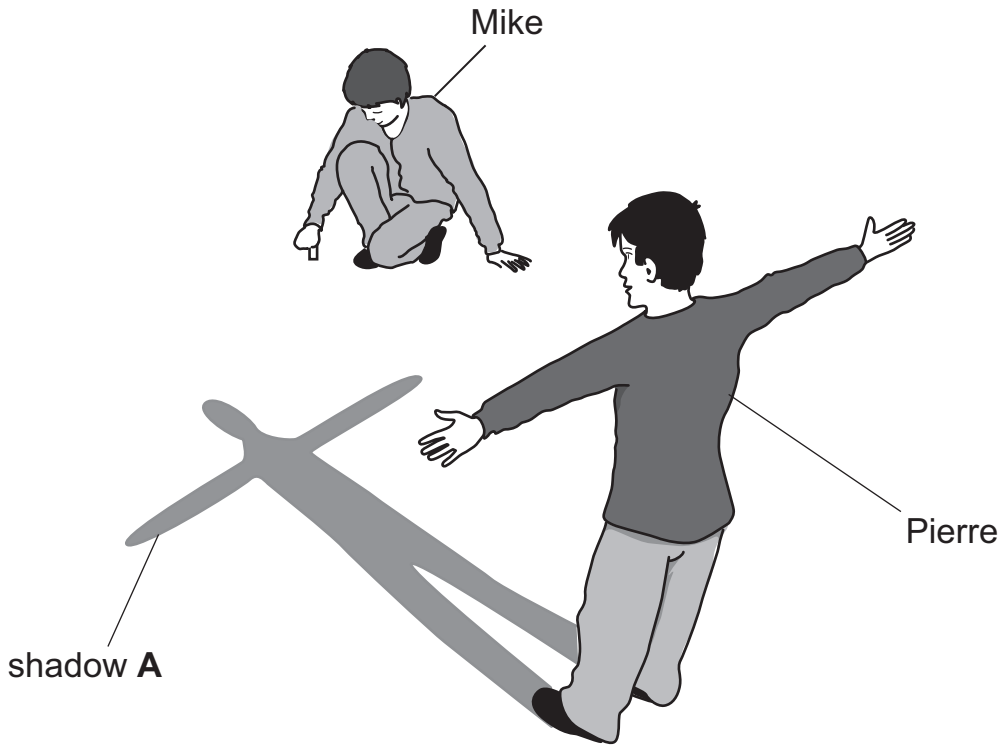
reason 2

.....

[2]

9 Pierre and Mike investigate shadows.

Pierre makes a shadow. Mike draws around the shadow.

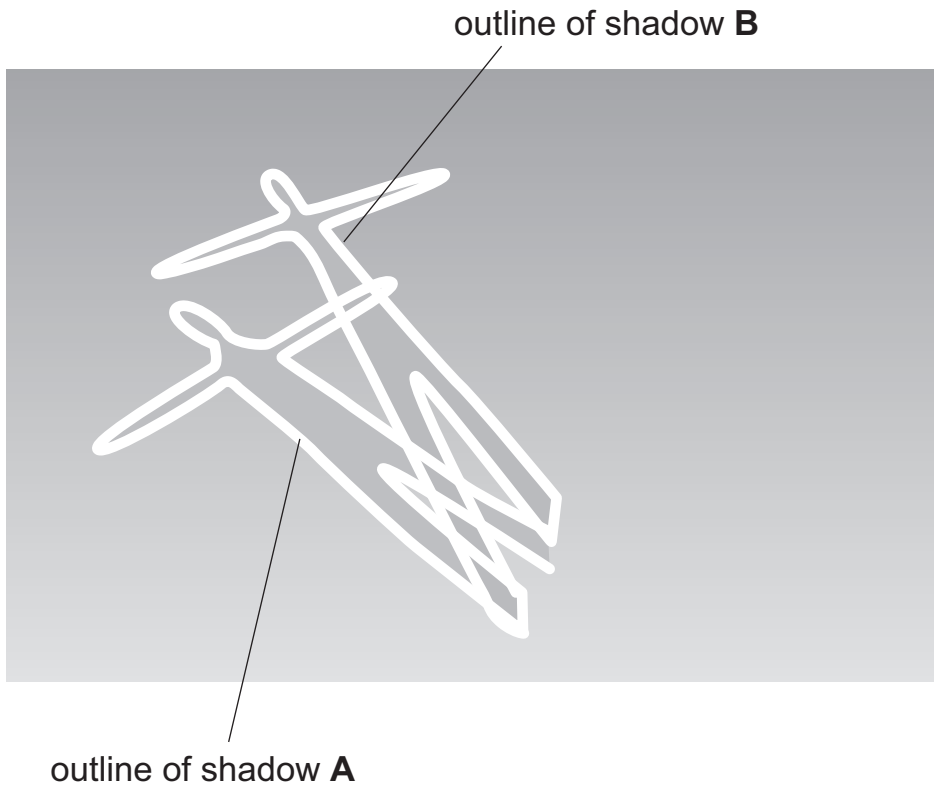


(a) Explain why there is a shadow.

..... [1]

Pierre makes another shadow. Mike draws around this shadow.

Here are their results.



(b) Describe **two** differences between shadow **A** and shadow **B**.

difference 1

.....

difference 2

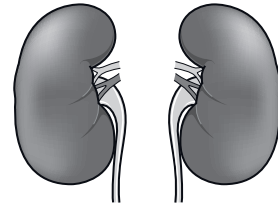
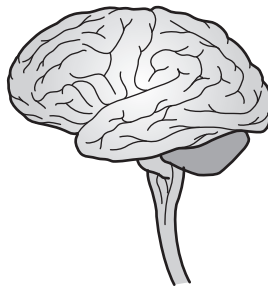
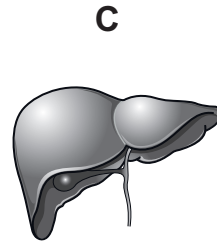
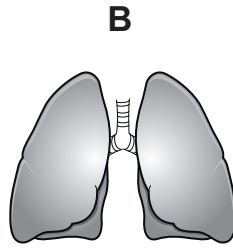
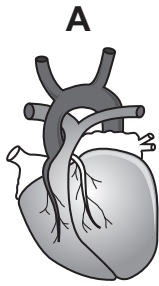
.....

[2]

(c) Why is there a difference between shadow **A** and shadow **B**?

..... [1]

10 Rajiv draws some organs found in the human body.



D

E

F

(a) Write the name of each organ.

One has been done for you.

A

B

C **liver**

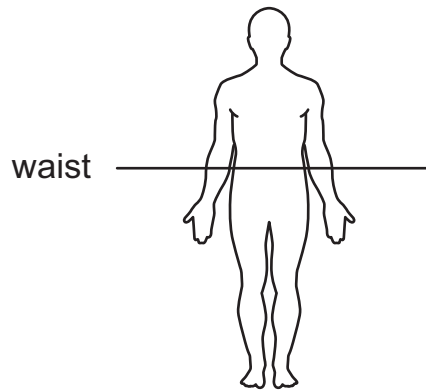
D

E

F

[2]

(b) Which organ is found below the waist and near the back of the body?

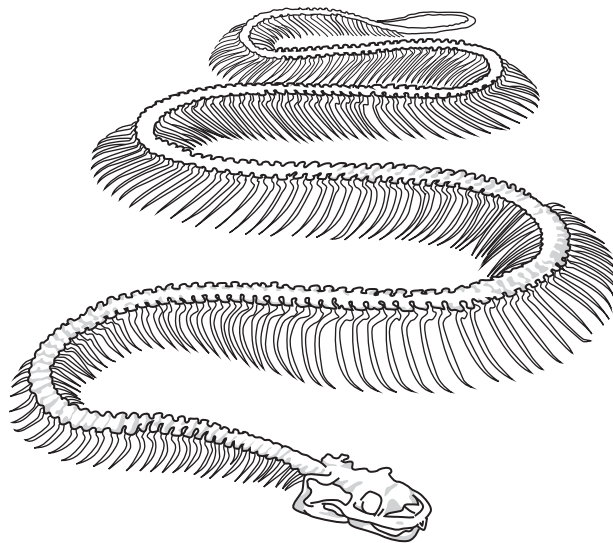


Circle the correct answer.

- A B D E F

[1]

11 Snakes have skeletons.



Write **two** ways the skeleton helps the snake.

- 1
- 2

[2]

12 The table shows the properties of some substances.

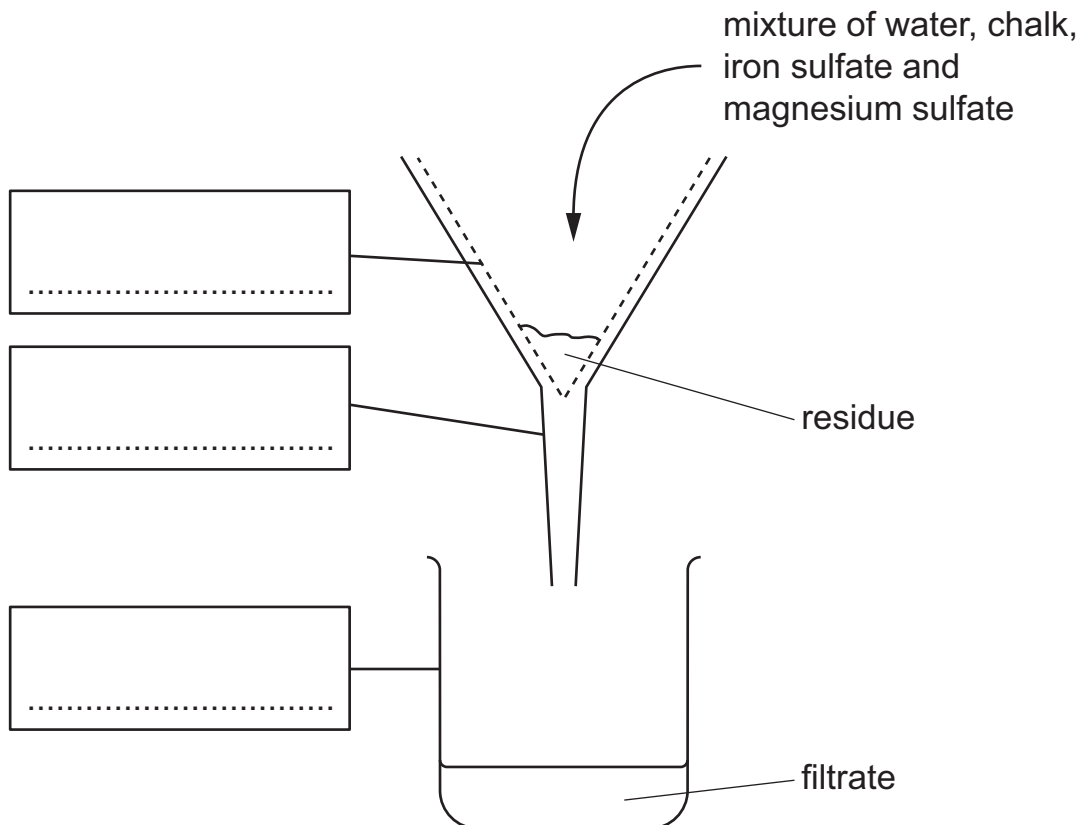
substance	state at room temperature	colour	does the substance dissolve in water?
chalk	solid	white	no
iron sulfate	solid	green	yes
magnesium sulfate	solid	white	yes

Hassan has a mixture of chalk, iron sulfate and magnesium sulfate.

He wants to separate the mixture.

He adds the mixture to water and stirs it thoroughly.

He then filters this mixture using this apparatus.



(a) Complete the labels on the diagram of the apparatus.

[3]

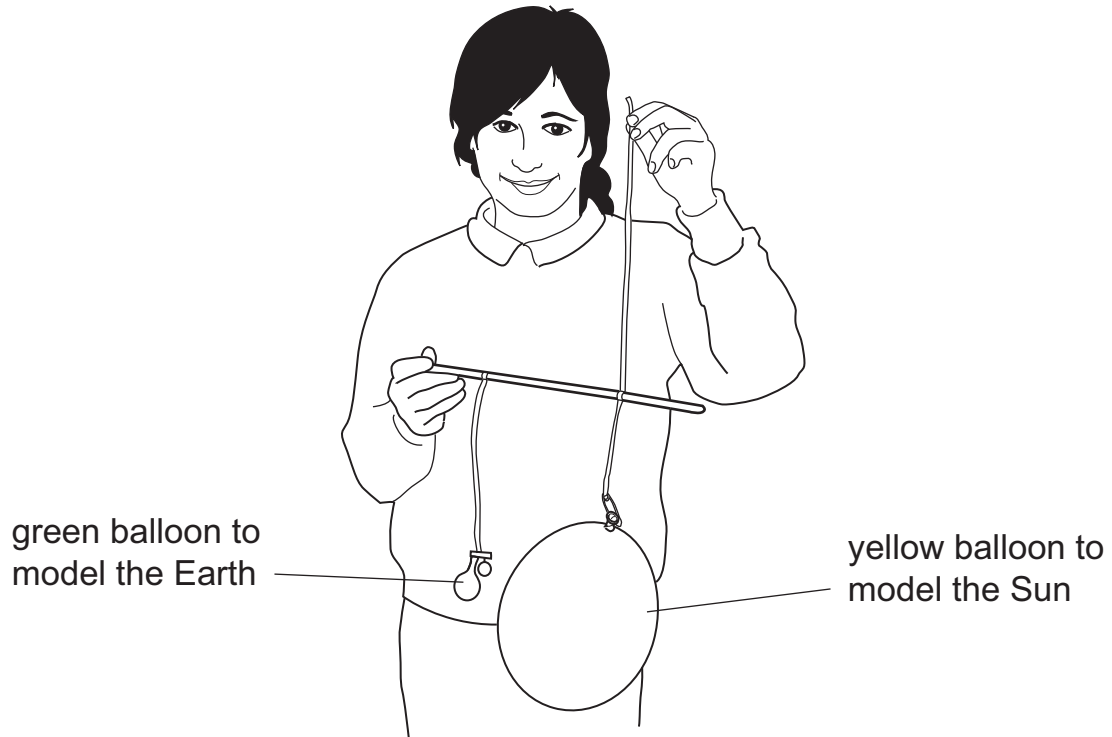
(b) Which substance is found in the **residue**?

..... [1]

(c) Which substances are found in the **filtrate**?

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

13 Mia makes a model of the Sun and the Earth.



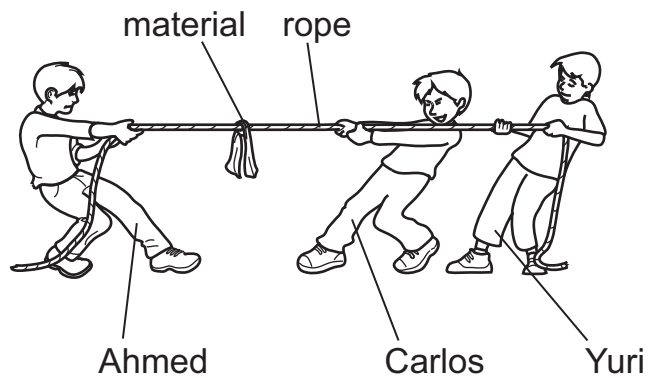
Mia wants to move the yellow and green balloons.

She wants to model what happens to the Sun and the Earth.

Describe what she does to the balloons.

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

14 Ahmed, Carlos and Yuri investigate forces.



A piece of material is tied to the middle of the rope.

Ahmed, Carlos and Yuri **all** pull the rope with the **same** force.

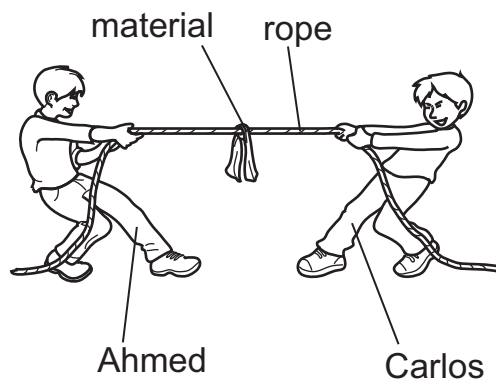
(a) Which direction will the material move?

Circle the correct answer.



[1]

(b) The boys repeat the investigation.



Only Ahmed and Carlos pull the rope.

They pull the rope with the **same** force.

Which direction will the material move?

Circle the correct answer.



[1]

(c) What is the unit for force?

Circle the correct answer.

friction

gravity

kilogram

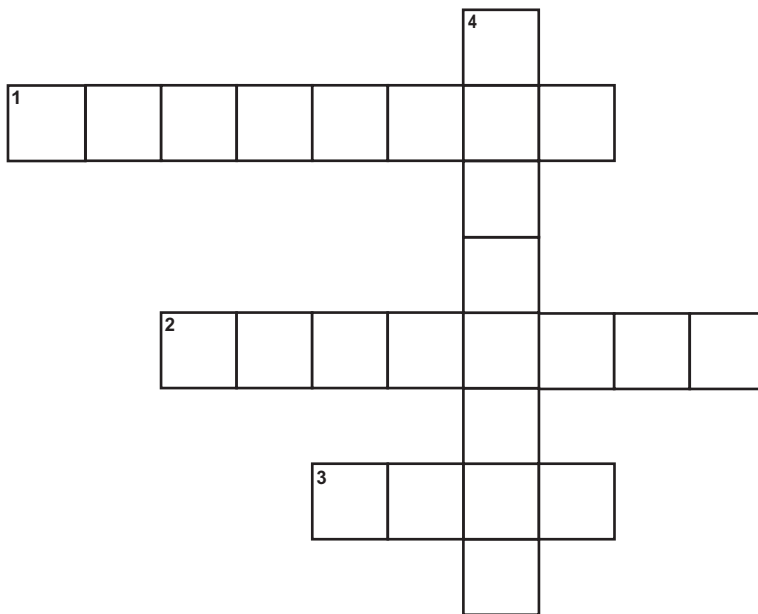
mass

newton

[1]

15 Complete the crossword about food chains.

1. An animal that hunts another animal. (8 letters)
2. A food chain always starts with this. (8 letters)
3. An animal that gets eaten by another animal. (4 letters)
4. An animal that eats plants or other animals. (8 letters)



[3]

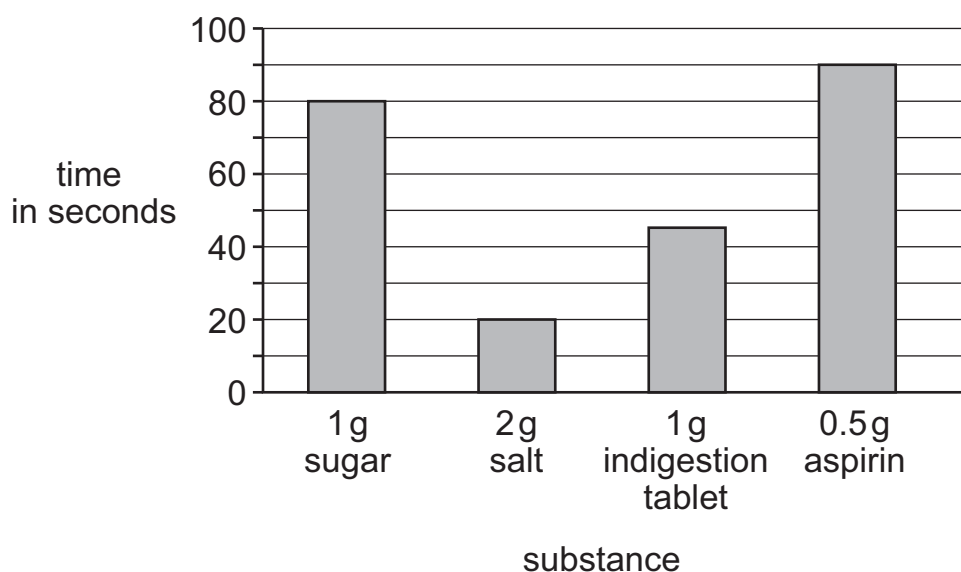
16 Jamila investigates the time it takes for different substances to dissolve in water.

In each experiment she

- uses 100 cm^3 of water and adds one of the substances
- stirs the mixture until the substance dissolves
- stirs the mixture at the same speed.

Jamila repeats the experiment with different substances.

She plots her results as a bar chart.



(a) Jamila has **not** done a fair test.

Use information from the bar chart to explain why.

..... [1]

(b) Which substance dissolves in the **shortest** time?

..... [1]

(c) How long does it take to dissolve the **indigestion tablet**?

..... seconds [1]

(d) Jamila predicts that as the mass of aspirin increases, the time taken to dissolve it increases.

She tests her prediction by doing experiments.

Tick (✓) the **three** factors she keeps constant.

mass of aspirin

speed of stirring

temperature of water

time to dissolve

volume of water

[2]

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