



# Science

Stage 4

Paper 2

**2024**

## Cambridge Primary Progression Test

Name

Class

Date

**30 minutes**

No additional materials are needed.

### INSTRUCTIONS

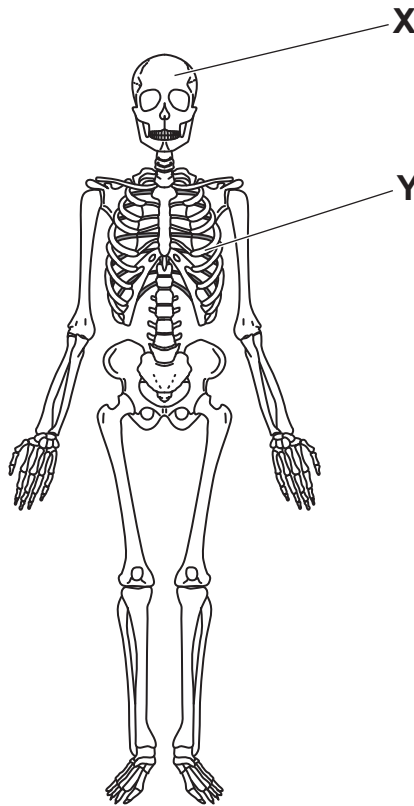
- Answer **all** questions.
- Write your answer to each question in the space provided.
- You should show all your working on the question paper.

### INFORMATION

- The total mark for this paper is 30.
- The number of marks for each question or part question is shown in brackets [ ].

1 A human body has a skeleton.

Look at the diagram of a human skeleton.



(a) Write down the name of part **X** and the name of part **Y**.

**X** .....

**Y** .....

[2]

(b) One function of the skeleton is to protect organs.

Write down **two other** functions of the skeleton.

1 .....

2 .....

[2]

2 Yuri is learning about chemical reactions.

(a) Write down what happens in a chemical reaction.

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

(b) Yuri writes a list of chemical reactions and physical processes.

Circle **all** the chemical reactions.

**baking a cake**

**chocolate melting**

**wood burning**

**cooking an egg**

**freezing a lolly**

**water boiling**

[2]

3 Blessy investigates different types of exercise.

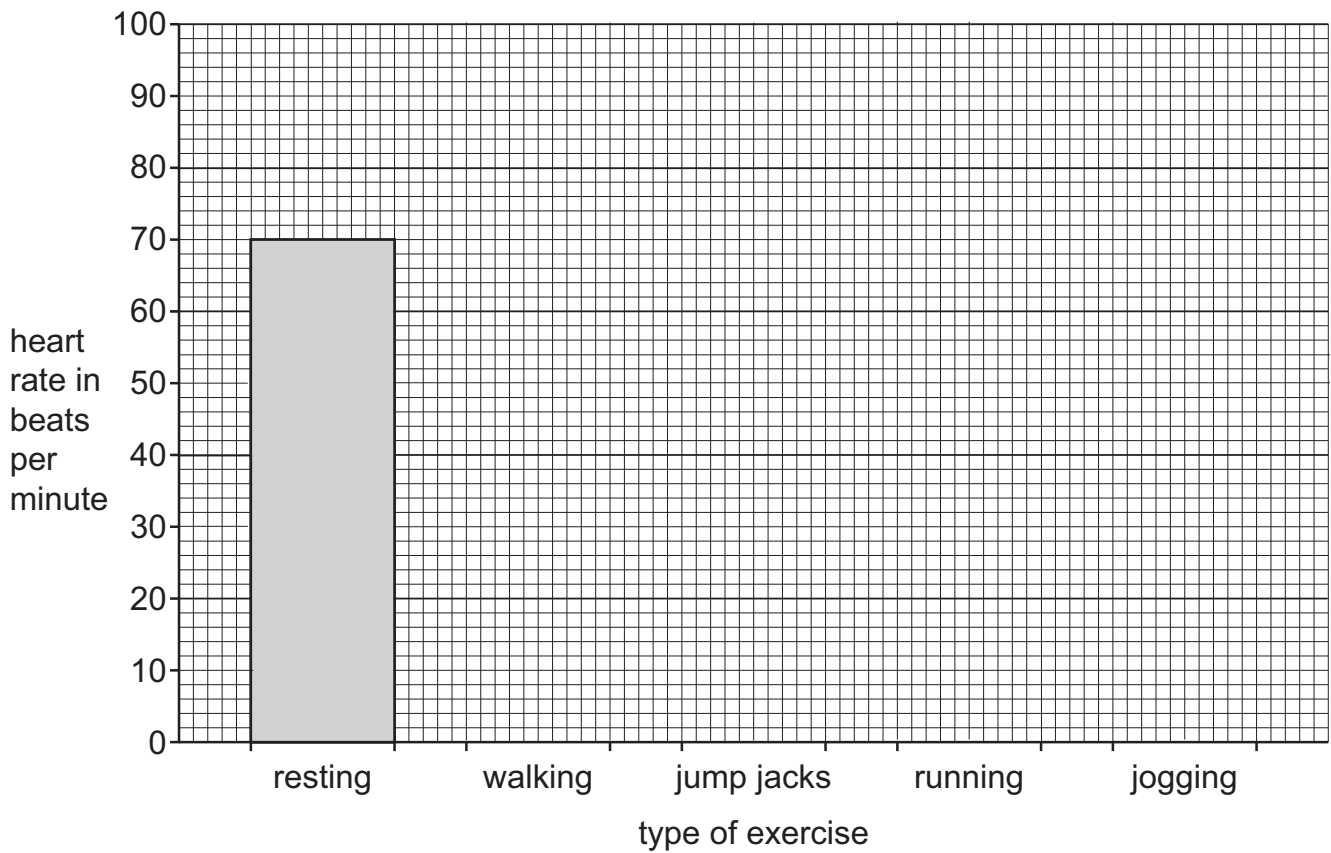
She measures her heartbeat after doing each type of exercise for 10 minutes.

Here are her results.

type of exercise	heart rate in beats per minute
resting	70
walking	75
jump jacks	87
running	93
jogging	85

(a) Complete the bar chart of her results.

The first bar has been drawn for you.



[2]

(b) Write down the type of exercise that gives Blessy the highest heart rate.

..... [1]

(c) Exercise helps to keep our body healthy by making our heart stronger.

Write down **one other** example of how exercise helps to keep our body healthy.

..... [1]

4 Chen finds a picture of a girl looking at a book.



He starts to draw a ray diagram to show how the girl sees the book.

(a) Complete the ray diagram.

[2]

(b) Describe what happens to the ray of light so the girl sees the book.

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

5 Safia is learning about solids and liquids.

Safia:

- puts a very small block of ice into a beaker
- heats the ice in the beaker
- records the time it takes for all the ice to melt
- repeats this method using different sizes of blocks of ice.

(a) Which equipment does Safia use to measure the time?

Circle the correct answer.

balance

beaker

ruler

stopclock

thermometer

[1]

(b) Safia makes this prediction,

**'I predict the larger the block of ice the more time it will take to melt.'**

Here are her results.

size of block of ice	time taken to melt in seconds
very small	63
small	120
medium	185
large	243
very large	303

Do the results support Safia's prediction?

Tick (✓) to show if Safia's prediction is correct.

yes

no

Explain your answer.

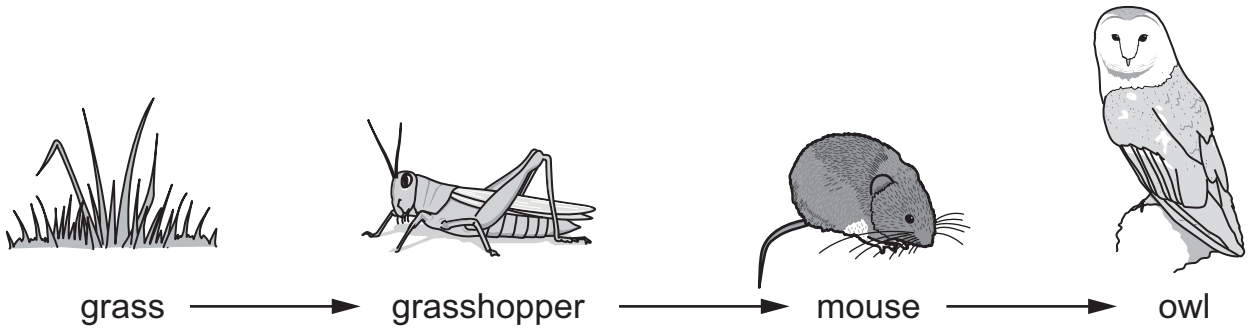
.....  
 ..... [1]

(c) Suggest how Safia improves her results to make them more reliable.

..... [1]

6 Mike is learning about food chains.

He draws this food chain.



Complete the sentences about this food chain.

The herbivore is the .....

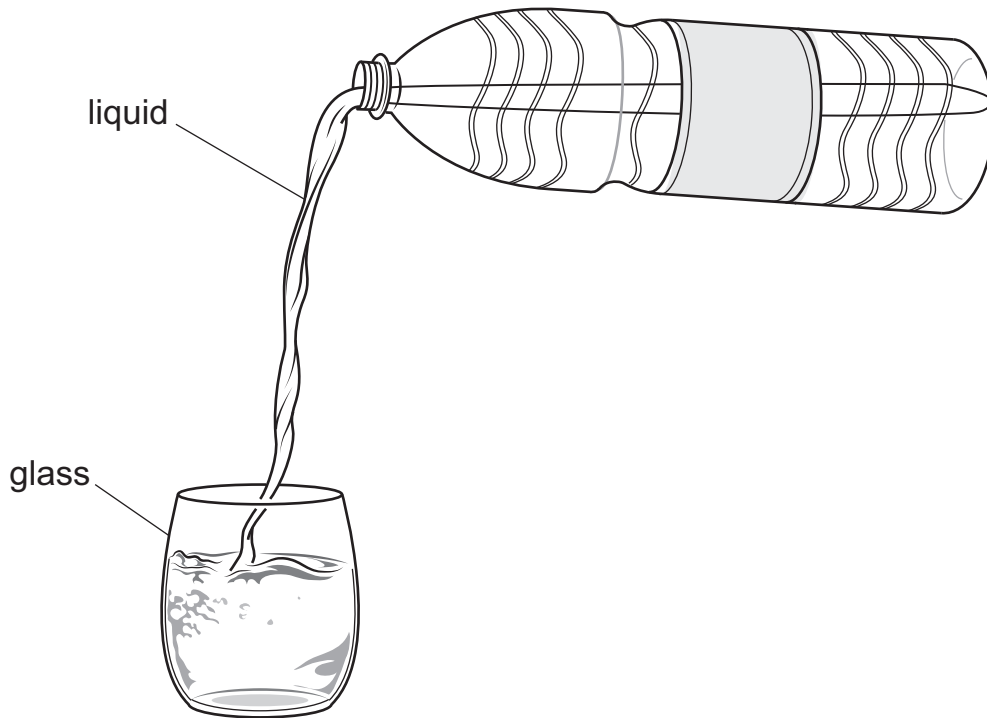
The prey is the ..... and the .....

The predators are the ..... and the .....

[2]



7 Look at the liquid being poured into a glass.



(a) The shape of the liquid changes as it is poured into the glass.

Explain why.

Use ideas about the particle model.

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

(b) Which of these solids pour like a liquid?

Circle **all** the correct answers.

**baking powder**

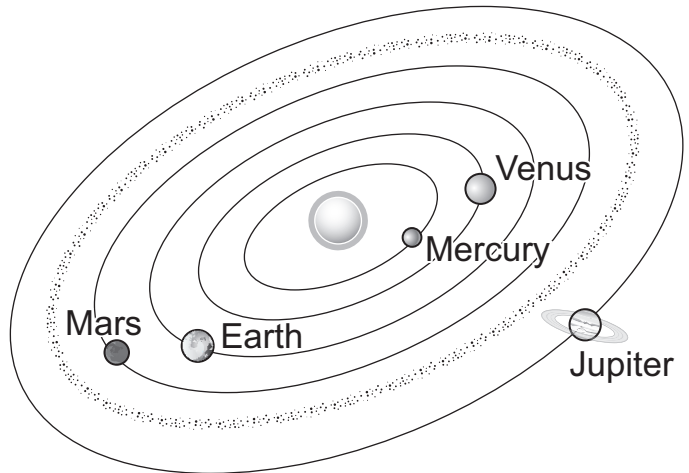
**iron nail**

**sand grains**

**wood cube**

[1]

8 The diagram shows part of our Solar System.



(a) Write down the name of the object which all the planets are orbiting.

..... [1]

(b) The picture shows a star and planets.

Write down the name of **one other** object found in our Solar System.

..... [1]

(c) Three planets are missing from this diagram of the Solar System.

Write down the names of **two** of these planets.

1 .....

2 .....

[2]

(d) Venus, Mars and Earth have day and night.

Explain why these planets have day and night.

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

9 This question is about energy.

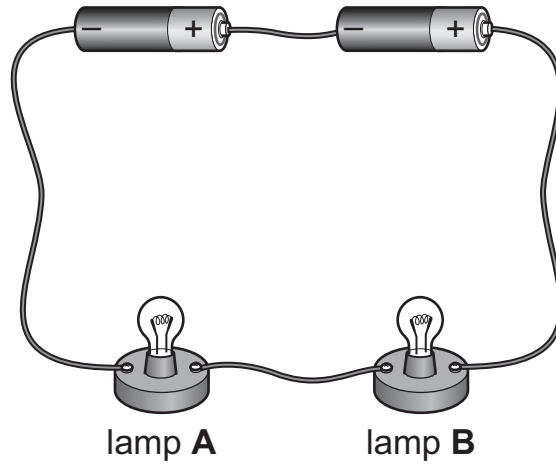
Tick (✓) to show if these sentences are **true** or **false**.

	<b>true</b>	<b>false</b>
Energy can be made.	<input type="checkbox"/>	<input type="checkbox"/>
Energy <b>cannot</b> be lost.	<input type="checkbox"/>	<input type="checkbox"/>
Energy <b>cannot</b> be destroyed.	<input type="checkbox"/>	<input type="checkbox"/>
Energy can be transferred.	<input type="checkbox"/>	<input type="checkbox"/>

[2]

10 Jamila investigates electrical circuits.

She makes this circuit.



What does Jamila do to make lamp **A** brighter?

Circle **all** the correct answers.

**add another cell**

**add another lamp**

**remove a cell**

**remove lamp B**

**add a switch**

[2]

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