



Cambridge Primary Progression Test

Science paper 2

Stage 6



45 minutes

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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22	
Total	

- 1 Each body system in humans contains a major organ.

Complete the table to show the major organs in some body systems.

One has been done for you.

body system	major organ
excretory	kidneys
circulatory	
respiratory	
nervous	
digestive	

[4]



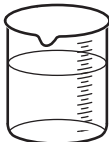
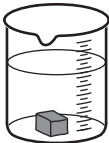
2 (a) Yuri adds different solids to water.

He stirs them for one minute.

Here are his results.

Complete the table.

One has been done for you.

name of solid	results after one minute	soluble or insoluble
clay		
chalk		insoluble
salt		
copper		

[2]

(b) Yuri adds sugar to water.

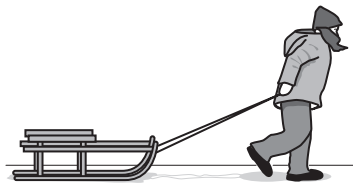
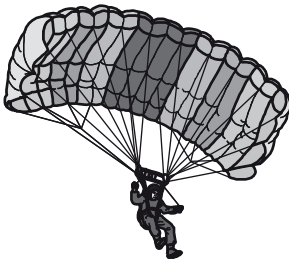
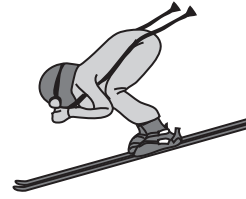
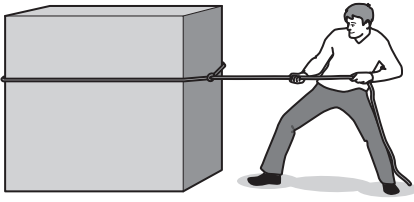
He stirs the mixture for one minute.

What does he see?

..... [1]

3 On each picture draw an arrow to show the direction of the friction force.

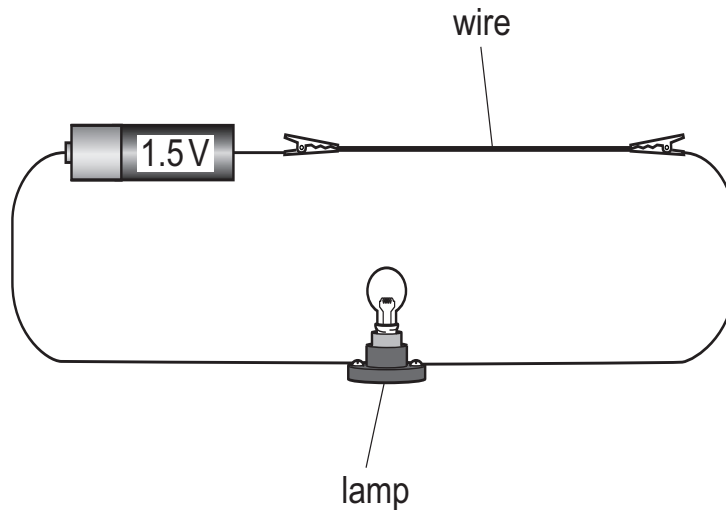
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[3]

4 Jamila makes an electrical circuit.

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Use



She uses wires made of different materials.

(a) Each wire is the same length and the same thickness.

Why does she make sure each wire is the same size?

..... [1]

(b) What does she use to measure the length of the wire?

..... [1]

(c) What will happen?

Complete the sentence.

If the wire is a good conductor the lamp will be [1]

5 Scientific changes are either reversible or irreversible.

For each change decide if it is reversible **or** irreversible.

Tick (✓) the correct boxes.

change	reversible	irreversible
baking bread		
condensing water vapour		
boiling water		
burning wood		
digesting food		
rusting of iron		
filtering sand and water		
dissolving salt		

[4]

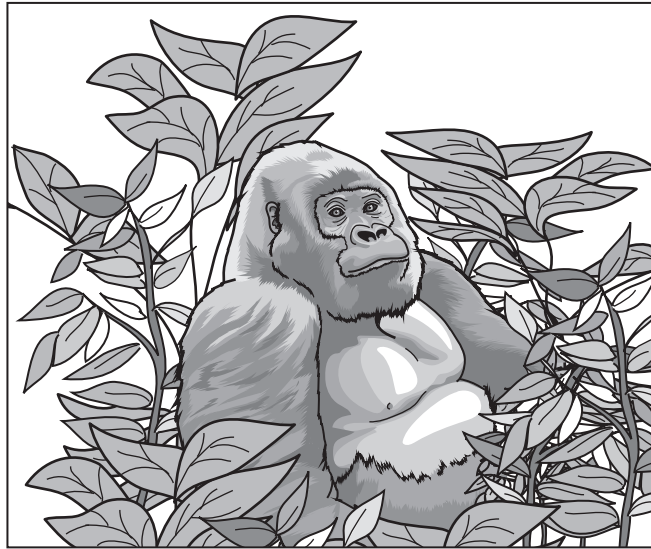
6 Draw a line from each **word** to its **meaning**.

One has been done for you.

word	meaning
consumer	an animal that eats another animal
predator	an animal that eats plants
prey	a plant at the start of a food chain
producer	an animal that gets eaten by another animal

[2]

7 The mountain gorilla is a protected species.



(a) Why does the mountain gorilla need to be protected?

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

(b) Write down two things humans can do to protect the mountain gorilla.

1

.....

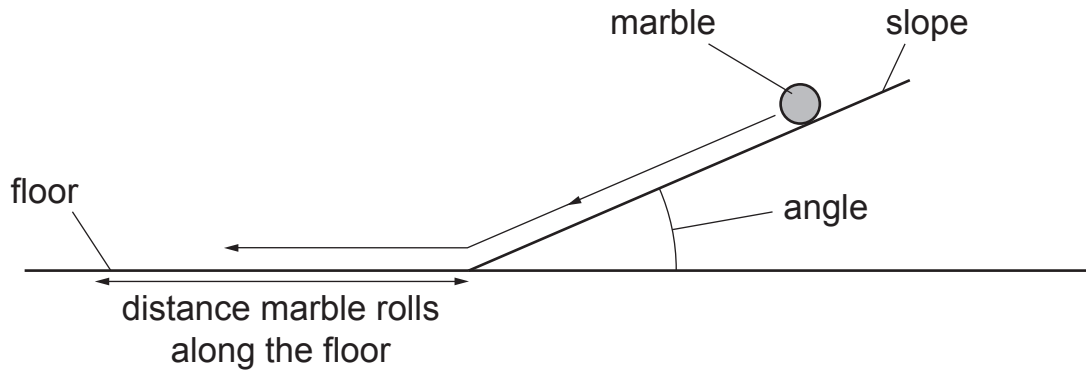
2

..... [2]

8 Mike and Lily roll marbles down a slope.

They measure the distance the marbles roll along the floor.

They change the angle of the slope and see how the distance changes.



Tick (✓) the **two** boxes that make this investigation a fair test.

keep the angle of the slope the same

repeat each test five times

start the marble from the same place each time

use the same marble

wear safety spectacles

write the results in a table

[2]

9 The table shows the properties of some solids.

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Use

solid	does it dissolve in water?	is it attracted to a magnet?
steel powder	no	yes
salt	yes	no
copper pieces	no	no
chalk	no	no

(a) Chen wants to separate a mixture of salt and chalk.

He adds water to the mixture and stirs.

He then filters the mixture.

Explain why this separates the mixture of salt and chalk.

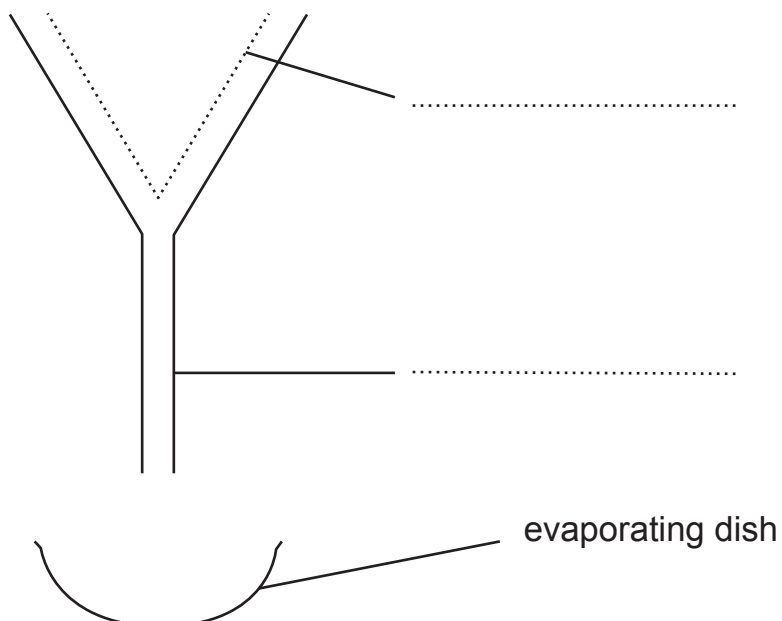
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.....

..... [2]

(b) Here is a diagram of the apparatus Chen uses.

Complete the labels on the diagram.



(c) Priya wants to separate a mixture of copper pieces and steel powder.
She **can** use a sieve to separate this mixture but **cannot** use filtering.
Complete the sentences to explain why.

A sieve **can** be used to separate copper pieces and steel powder
because

.....

Filtering **cannot** be used to separate copper pieces and steel powder
because

.....

[2]

10 Oliver makes a food chain.



(a) What does he draw between the cards?

..... [1]

(b) What does a food chain show?

..... [1]

11 Rajiv draws a picture of a plant.

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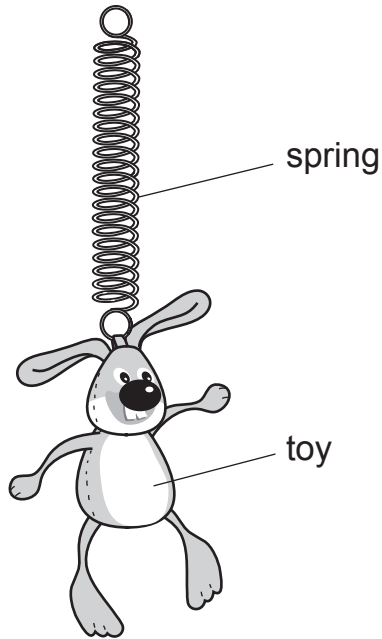


Where does the plant get its energy from?

..... [1]

12 Ahmed is bouncing a toy animal on a spring.

He investigates how the toy bounces up and down.



(a) Ahmed has some ideas.

Which of the following ideas are true?

Write down **true** or **false** in the box next to each idea.

idea	true or false
I can pull down on the toy gently.	
If I let go then the toy will not bounce up very high.
I think that the toy will stop bouncing.	
This is because of the force of friction.

[1]

(b) The time for one bounce is very short.

Ahmed wants to measure this time.

What does he do?

Tick (✓) the box next to the correct answer.

Measure the time taken for

• 20 bounces and then divide by 10

• 10 bounces and then divide by 20

• 20 bounces and then divide by 20

• 5 bounces and then divide by 10

• 10 bounces and then divide by 5.

[1]

13 Carlos and Pierre want to take care of the environment.

They collect all the materials that can be recycled in their home.



Carlos measures the **mass** of material they recycle each week.

He writes his results in a table.

week number	mass of material recycled in
1	2.1
2	2.7
3	3.6
4	3.8
5	
6	5.1
7	5.2

(a) The unit of mass is **not** in the table.

What is the unit of mass?

..... [1]

(b) The weight of the material is different to the mass.

Weight is a force.

What is the unit of force?

..... [1]

(c) Pierre says

'The mass of material we recycle each week increases.'

Why do they collect more material to recycle **each** week?

Write down a reason for this increase.

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

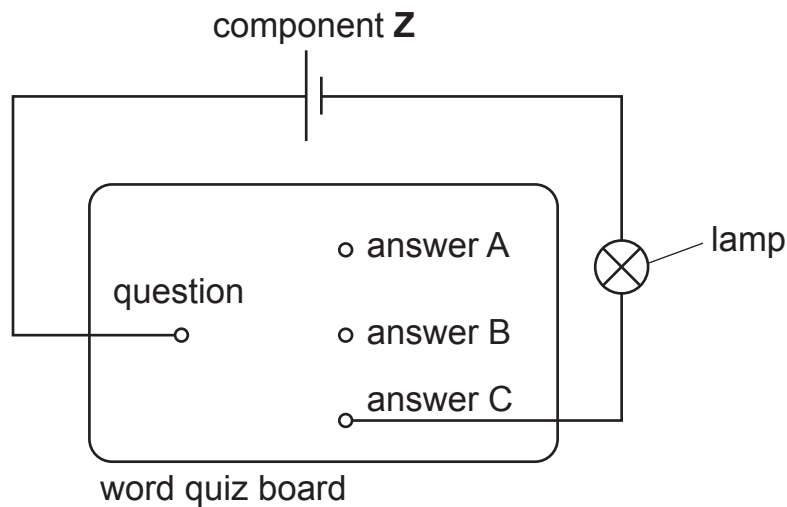
(d) Carlos forgot to write down the mass for week **5**.

Use the table to predict the mass of material they recycled in week **5**.

I predict that they recycled a mass of in week **5**. [1]

14 Youssef makes an electrical quiz board.

Here is a diagram of his electrical quiz board with its circuit.



A connection is made from the question to an answer.

If the answer is correct the lamp lights.

(a) What is the name of component **Z**?

..... [1]

(b) Youssef makes the connection from the question to the answer.

Which materials will work?

Circle the **three** materials.

aluminium

copper

nylon

rubber

steel

string

[2]

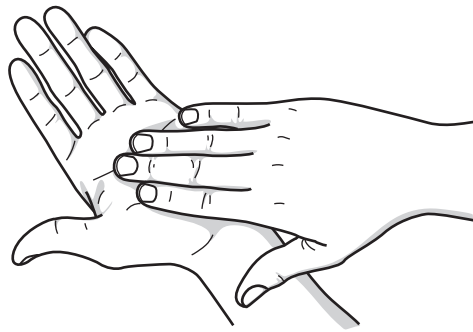
(c) Look at the diagram of this electrical quiz board.

Which is the correct answer?

..... [1]

15 Skin is the largest organ of the body.

Mia looks at the skin on her hands.



Describe three functions of the skin.

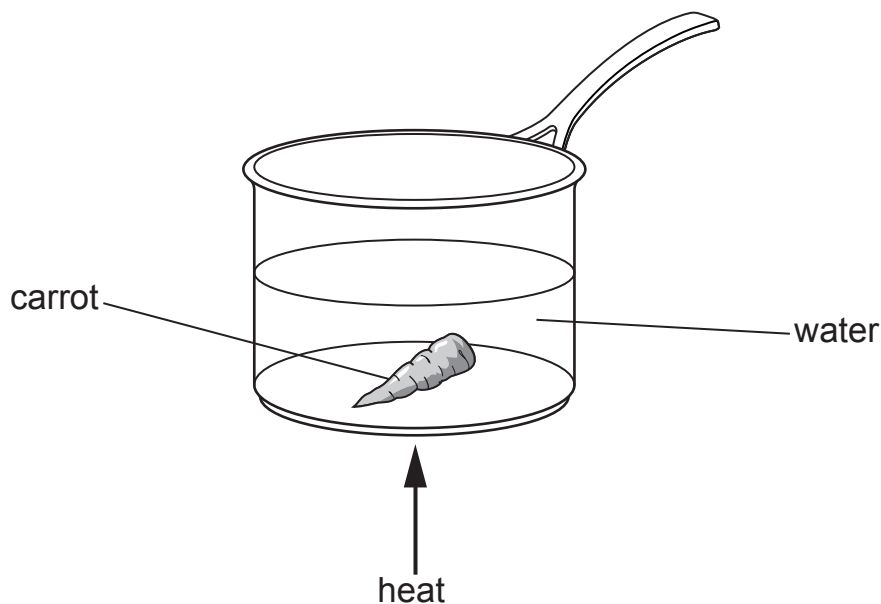
- 1
-
- 2
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- 3
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[3]

16 Carrots can be cooked by heating in water.

Cooking is an irreversible process.

Hassan investigates the time it takes to cook carrots.



He does five experiments.

Each time he uses a different temperature of water.

Here are Hassan's results.

temperature of water in °C	time needed to cook a carrot in mins
75	90
80	60
90	30
95	22
100	15

(a) Name the apparatus he uses to measure the temperature of the water.

..... [1]

(b) What does Hassan do to make his investigation a fair test?

..... [1]

(c) Describe the pattern in the results.

As the temperature of the water increases

..... [1]

(d) Predict the time it takes to cook a carrot in water at a temperature of 70 °C.

..... mins [1]

