



**Cambridge International Examinations**  
Cambridge Primary Checkpoint

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**SCIENCE**

**0846/02**

Paper 2

**For Examination from 2014**

SPECIMEN PAPER

**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.

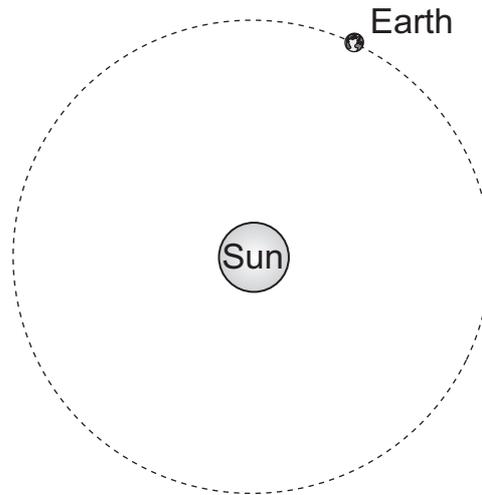
Answer **all** questions.

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 **16** printed pages.

1 The diagram shows the Sun and Earth.



**NOT TO  
SCALE**

Tick (✓) the **two** correct sentences.

The Sun takes 1 year to orbit the Earth.

The Earth takes 1 year to orbit the Sun.

The Earth takes 24 hours to orbit the Sun.

The Earth spins on its axis once every 24 hours.

The Earth spins on its axis once every year.

[2]

2 (a) Some things are living things.

Others have never lived.

Write down each word in the correct box in the table.

kangaroo rat rock sand seaweed

living things	things that have never lived
.....	.....
.....	.....
.....	.....
.....	.....
.....	.....

[1]

(b) Which of the following observations would help to identify a living thing?

Tick (✓) the **two** correct answers.

it grows

it feels warm

it can get smaller

it makes young ones

[1]

3 Here are some substances that are solids, liquids or gases.

**butter chocolate ice orange juice steam water**

<b>solid</b>	<b>liquid</b>	<b>gas</b>
.....	.....	.....
.....	.....	.....
.....	.....	.....
.....	.....	.....
.....	.....	.....
.....	.....	.....

(a) Write down the substances in the correct column, **solid**, **liquid** or **gas**. [1]

(b) When ice is warmed, it changes.

Write down the name of this process.

..... [1]

(c) If water was cooled to 0°C it changes.

Write down the name of this process.

..... [1]

(d) What will happen to water if it boils?

..... [1]

4 (a) Draw a line to connect the **term** to the correct **meaning**.

term	meaning
producer	an animal that eats another animal
predator	a green plant that makes its own food
prey	an animal that is eaten

[2]

(b) What is a consumer?

Circle the correct answer.

**a plant that eats another plant**

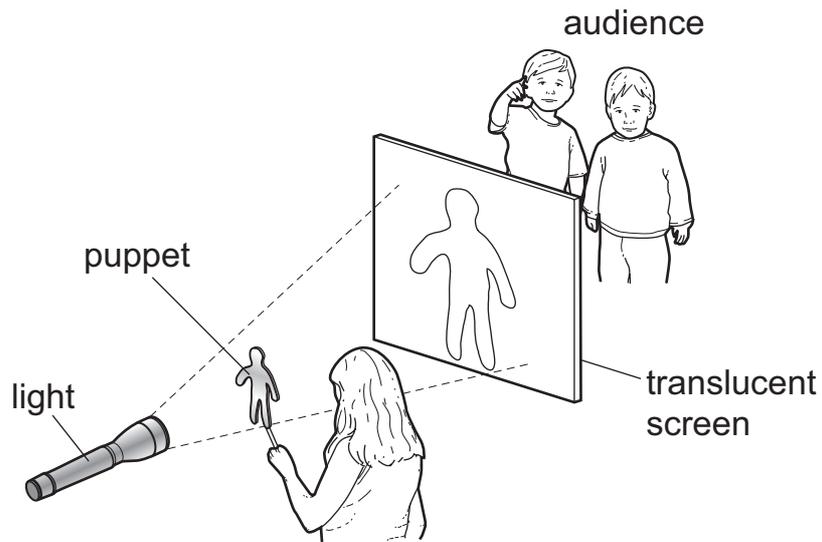
**a plant that eats an animal**

**an animal that eats a plant**

**a plant that eats plants and animals**

[1]

5 Here is a diagram of a puppet show.



(a) Complete this sentence.

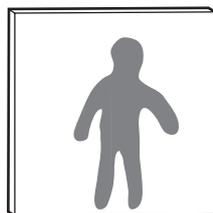
The puppet makes an image called a ..... on the screen. [1]

(b) What must the girl do to the puppet to make this image smaller?

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

(c) What do the audience see?

Tick (✓) **one** box.





[1]

(d) What would the audience see if the screen were opaque?

..... [1]

6 The table shows the boiling points of some liquids.

liquid	boiling point in °C
A	105
B	78
C	100
D	96
E	1064

(a) Which liquid has the **lowest** boiling point?

..... [1]

(b) Which liquid is pure water?

..... [1]

(c) Complete the sentences about boiling and freezing.

During boiling liquid changes into a .....

During freezing liquid changes into a ..... [2]

7 Suzy is growing sunflower seeds.

She thinks that seeds will grow better in a bigger pot

- she puts one seed into each of four different sized pots
- she puts them in the same warm place and waters them regularly
- after four days the seeds begin to grow
- she measures the height of the shoot every day.

What does Suzy do to make it a fair test?

Tick (✓) **one** box.

measure the shoots

put the pots in the same place

measures each shoot on a different day

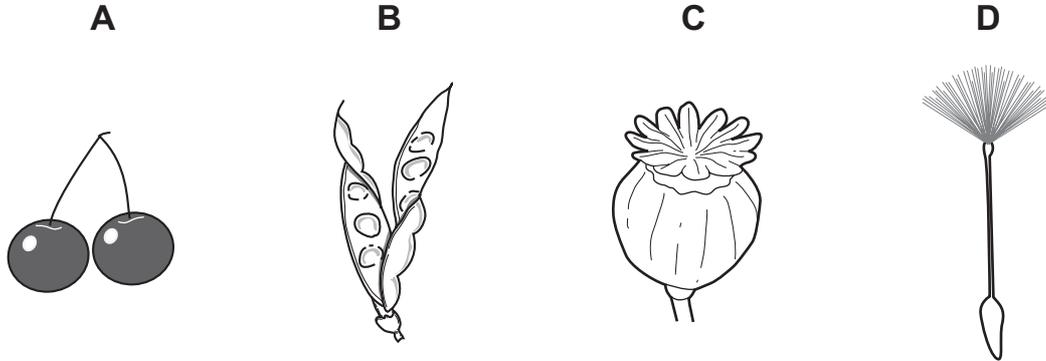
uses four different pots

[1]

8 Seeds are dispersed from plants so they have a better chance to grow.

Here are some diagrams of fruits containing seeds.

Use these examples to answer the questions.



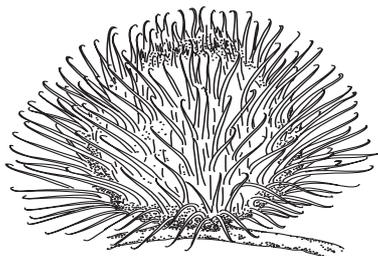
(a) Which **two** fruits from **A, B, C** or **D** dry to release the seeds?

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

(b) Which fruit **A, B, C** or **D** is dispersed by the wind?

..... [1]

(c) This diagram shows another fruit.



Describe how this fruit is dispersed.

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

9 Maria is investigating what happens when indigestion tablets are added to water.

- she measures  $100\text{ cm}^3$  of water and puts this into a beaker
- she adds a 1 g indigestion tablet to the water
- she measures the change in temperature of the water.

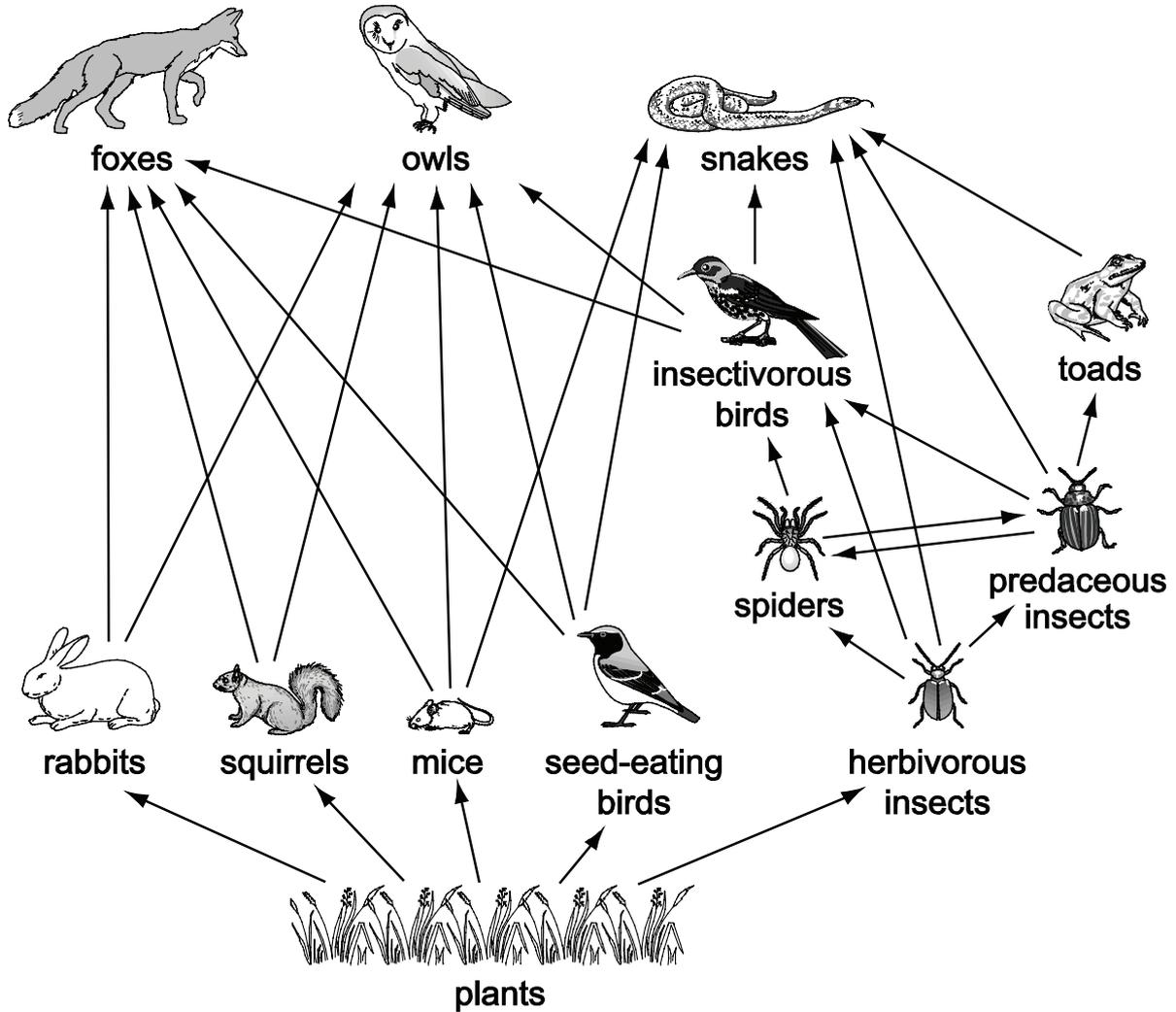
Draw a line from each **measurement** to the piece of **equipment** needed to make the measurement.

measurement	equipment
mass of tablet	ruler
temperature of the water	thermometer
volume of water	beaker
	measuring cylinder
	balance

[3]

10 Animals survive by living in food chains.

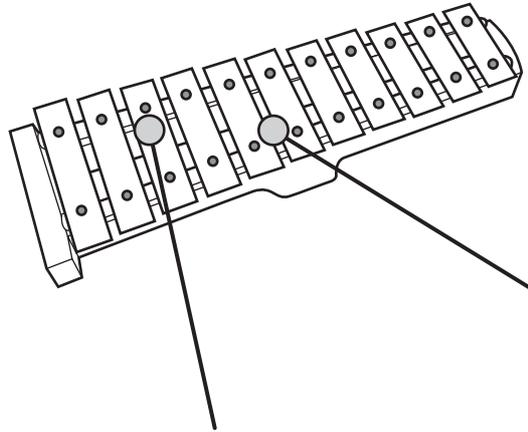
Look at the food web below.



- (a) What is the main food source for **toads**?  
 ..... [1]
- (b) Which **three** animals eat **seed-eating** birds?  
 ..... [2]
- (c) Write down **one** of the food chains for **mice**.  
 ..... [1]

11 A music studio is next to a quiet room in a library.

Erik practises the glockenspiel in the studio.



(a) Erik strikes the glockenspiel with a hammer.

What causes the sound?

..... [1]

(b) Erik makes a high pitched sound on the glockenspiel?

What does Erik do to make the pitch higher?

..... [1]

(c) Sometimes the sounds are too loud in the library and Aravinder complains.

He collects data, using a decibel meter, and records the loudness of the sound in decibels (dB).

<b>time</b>	10:00	11:00	12:00	13:00	14:00	15:00
<b>decibel meter reading in dB</b>	22	24	67	87	43	22

At what time is the sound from the studio the loudest?

..... [1]

(d) Describe what happens to the sound level between 10:00 and 15:00.

..... [1]

(e) Aravinder suggests the wall between the library and the studio is lined with foam.

Why is the foam useful?

..... [1]

12 Nara puts 2g of chalk and 3g of sugar into 30cm<sup>3</sup> of water and stirs the mixture.

She then filters the mixture.

A white solid is left on the filter paper.

She dries this solid and measures the mass of the solid.

(a) What is the white solid left on the filter paper?

..... [1]

(b) Write down the name of the liquid that passes through the filter paper.

..... [1]

(c) What is the mass of the solid that is left on the filter paper after Nara dries it?

..... g [1]

13 Blood is pumped to and from parts of the body.

(a) Which **two** of these are correct for blood flow from the pump?

Tick (✓) **two** boxes.

from	→	to	
the body	→	the heart	<input type="checkbox"/>
the lungs	→	the body	<input type="checkbox"/>
the heart	→	the lungs	<input type="checkbox"/>
the heart	→	the body	<input type="checkbox"/>

[2]

(b) Name two substances that the blood carries to be **used** by the cells in the body.

- 1 .....
- 2 ..... [2]

(c) Name **one** substance carried by the blood to the lungs so it can be removed from the body.

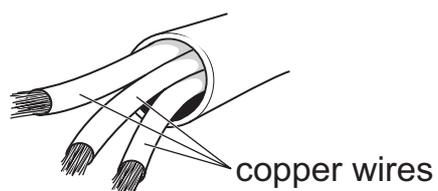
..... [1]

14 Some of the properties of copper are shown in the table.

property
good conductor of electricity
good conductor of heat
high boiling point
high melting point
hard
shiny

(a) Why is copper used to make electrical wires?

Choose from **the table**.

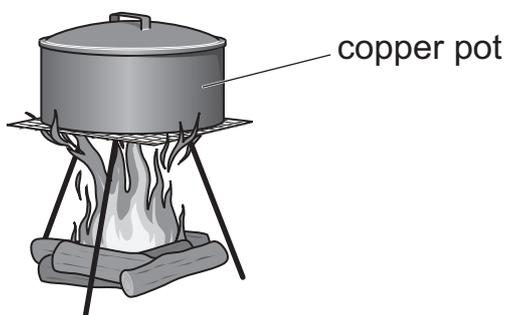


.....

[1]

(b) Why is copper used to make cooking pots and pans?

Choose the best two reasons from **the table**.

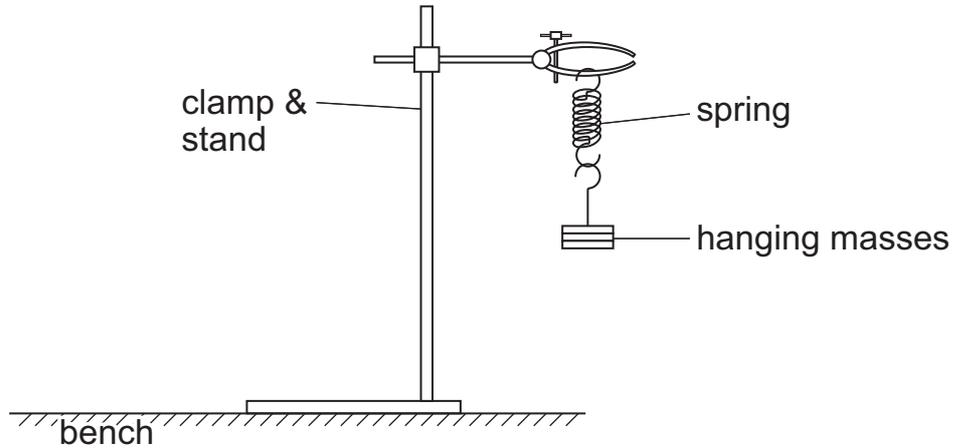


1 .....

2 .....

[2]

15 Joshi is investigating how much a spring stretches when different masses are added.



(a) What could he use to measure how much the spring stretches?

..... [1]

(b) Before his experiment Joshi thinks that the spring will stretch more if he adds **more** masses to the spring.

What type of statement is this?

Circle the correct answer.

**conclusion**      **measurement**      **method**      **prediction**      [1]

(c) When doing his investigation what must Joshi do to keep himself safe?

..... [1]

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