



**Cambridge International Examinations**  
Cambridge Primary Checkpoint

CANDIDATE  
NAME

CENTRE  
NUMBER

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NUMBER

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**SCIENCE**

**0846/01**

Paper 1

**October 2016**

**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.

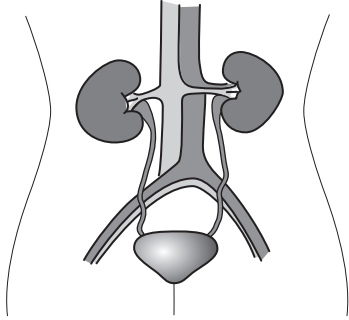
Answer **all** questions.

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.

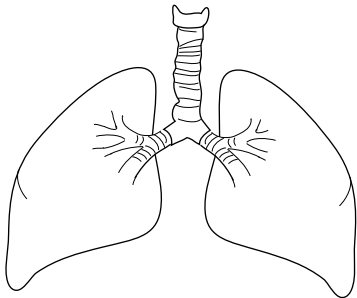
1 Here are some organs found in the human body.

Complete the sentences.



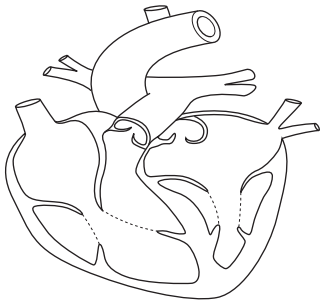
The organs that filter waste are called the

.....



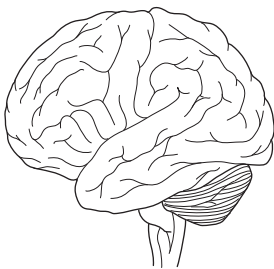
The organs that help us breathe are called the

.....



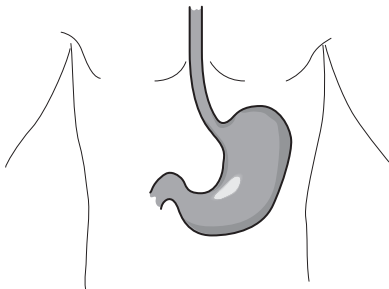
The major organ of the circulatory system is the

.....



The major organ of the nervous system is the

.....



An important organ of the digestive system is the

.....

2 Complete the sentences about friction.

Choose the **best** words from the list.

**air resistance**

**a force**

**gravity**

**a mass**

**slow down**

**speed up**

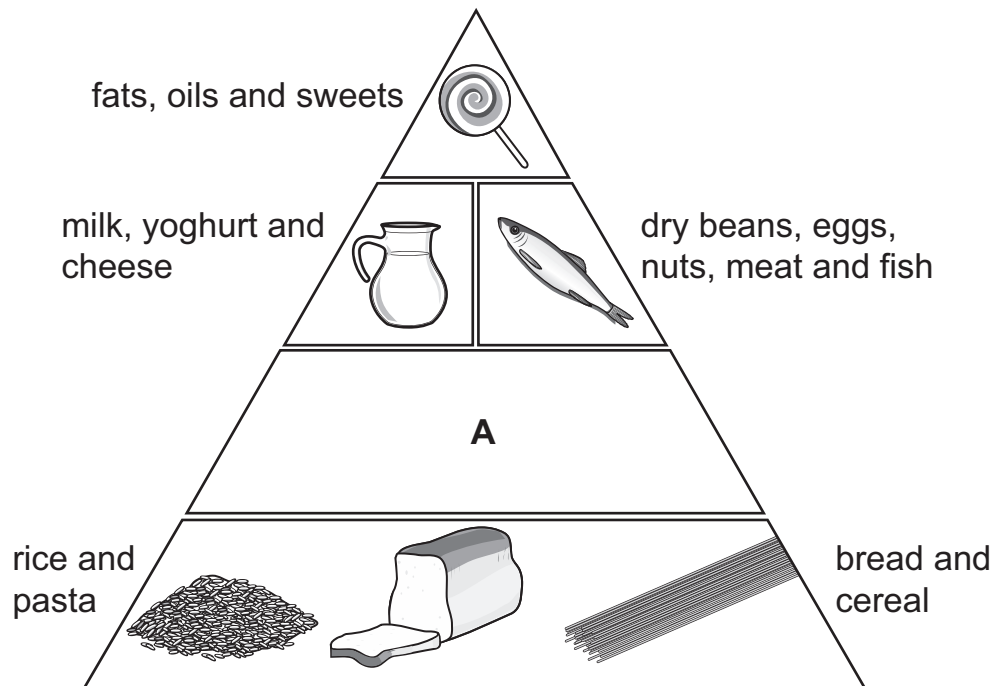
**stay the same**

Friction is .....

Friction makes a moving object .....

A type of friction is ..... [3]

## 3 Humans need a varied diet.



A food pyramid shows humans how much to eat of each food type.

**(a)** Which food type should we eat the **least** of to stay healthy?

..... [1]

**(b)** Which food type is in part **A** on the pyramid?

..... [1]

**4** Changes to materials are either reversible or irreversible.

For each of the following changes decide if the change is reversible or irreversible.

Tick (✓) the correct boxes.

<b>change</b>	<b>reversible</b>	<b>irreversible</b>
cooking rice		
dissolving sugar in water		
burning wood		
evaporating salt water		
melting iron		
attracting a piece of steel to a magnet		
baking bread		

[4]

5 Here is Mia with a box of materials for recycling.



(a) Name two **different** materials Mia could recycle.

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






(b) Mia wants to care for the environment.

She recycles as much as possible.

Write down one **other** way she could care for the environment.

..... [1]

6 Draw a line to connect the **type of electrical component** to the correct **symbol**.

type of electrical component	symbol
switch	
wire	
lamp	
cell	
resistor	

[3]

7 Every material has its own set of properties.

Complete the table about some materials and their properties.

Some answers have been done for you.

material	properties			
	Is it hard?	Is it a liquid at room temperature?	Is it soluble in water?	Is it attracted to a magnet?
mercury	no		no	
iron				
salt	yes			no
sand	yes	no		no
wood	yes	no		

[5]

8 Flowering plants make seeds.

Complete the sentence.

Choose from the following words.

**develops**

**disperses**

**fertilises**

**produces**

Seeds are made when pollen ..... the ovum. [1]

9 Class 6 investigate the sense of smell.



- The class cover their eyes.
- The teacher asks them to smell five different foods.
- The class write down the names of the five different foods.

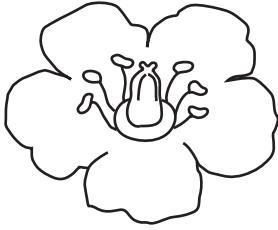
Why do the class cover their eyes for this investigation?

..... [1]

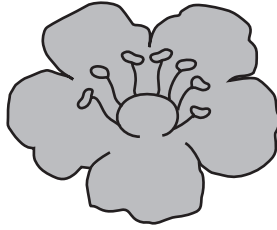


10 Flowers have male and female organs.

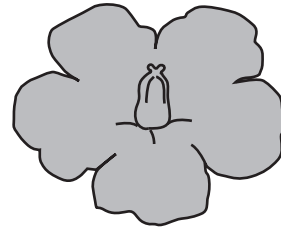
Here are three different flowers.



flower **A**



flower **B**



flower **C**

Complete the sentences.

Choose from the flowers **A B C**.

The flower that has male **and** female organs is flower .....

The flower that has **female** organs **only** is flower .....

The flower that has **male** organs **only** is flower .....

[1]

11 Anastasia has a mobile phone.



The mobile phone rings.

(a) She measures the **volume** of the sound with a sound level meter.

In what **units** is the sound level measured?

Circle the correct answer.

centigrade

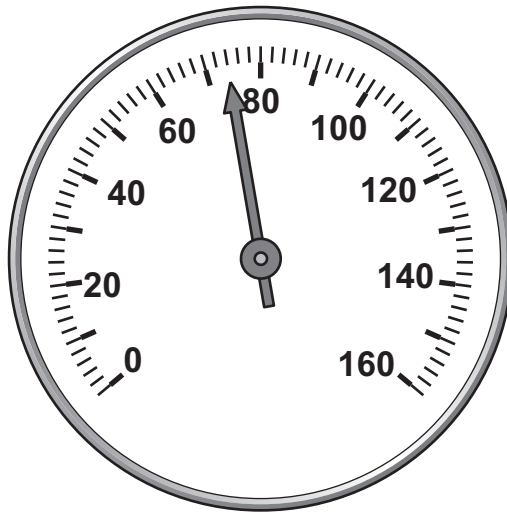
decibels

newtons

seconds

[1]

(b) Look at the reading on the sound level meter.



What is the reading on the sound level meter?

Circle the correct answer.

**67**

**74**

**84**

**86**

[1]

(c) Anastasia's phone is 1 metre from the sound level meter.

She moves it 5 metres away from the sound level meter.

What happens to the reading on the sound level meter?

Circle the correct answer.

**decreases**

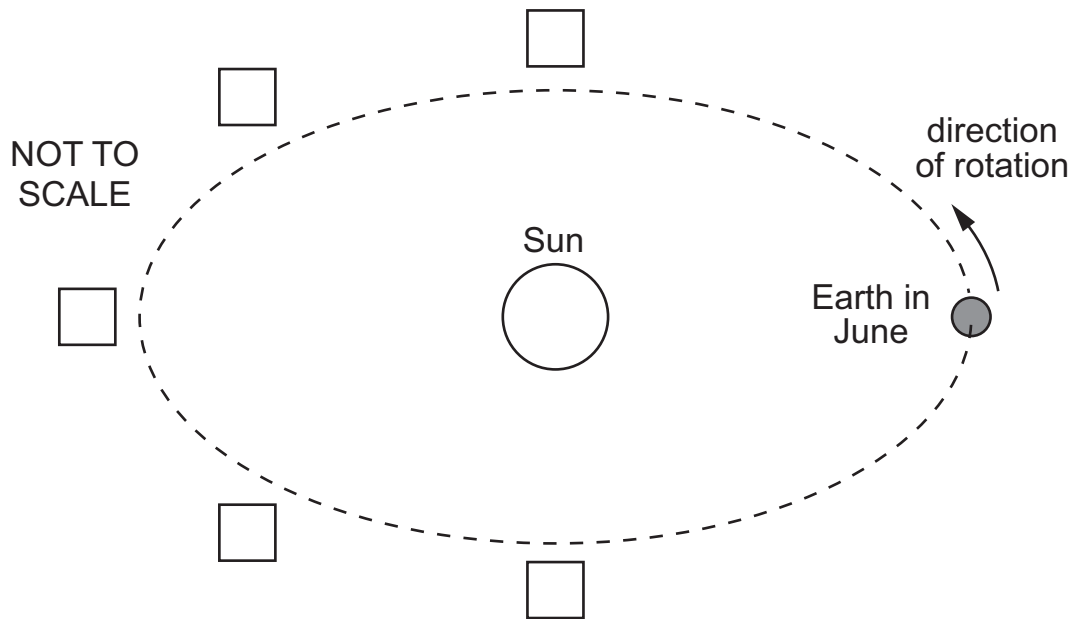
**increases**

**stays the same**

[1]

12 This question is about the Earth, the Sun and the Moon.

Lily draws a diagram to show the position of the Earth in the month of June.

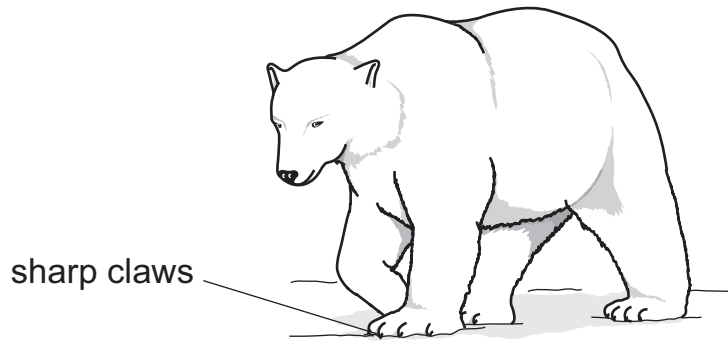


Put number **6** in the correct box to show where the Earth will be **6** months later.

Put number **9** in the correct box to show where the Earth will be **9** months later.

[2]

13 Look at the picture of a polar bear.



The polar bear is suited to its environment.

It has sharp claws.

Write down two **other** ways it is suited to its environment.

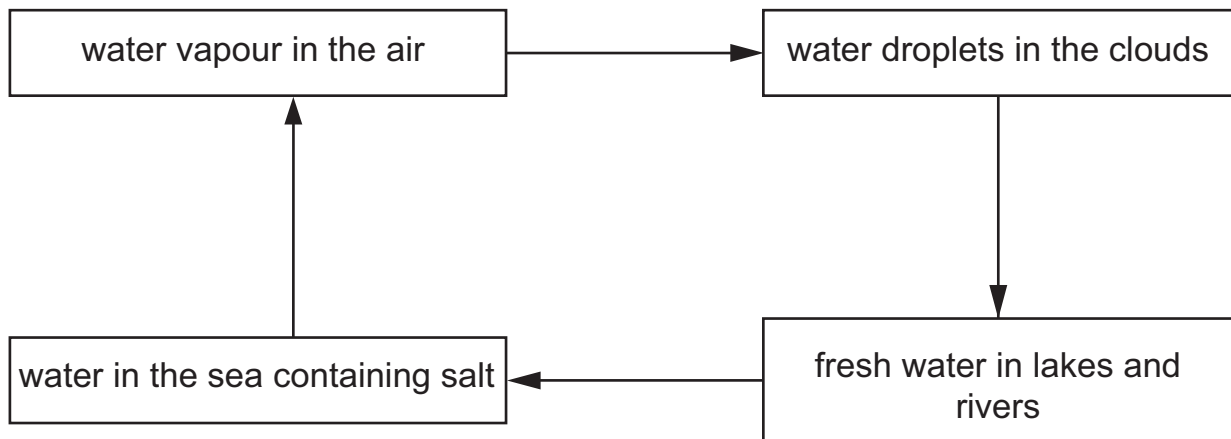
1 .....

.....

2 .....

..... [2]

14 The flow chart shows the movement of water through the environment.



(a) Name the process that changes **water in the sea** into **water vapour**.

..... [1]

(b) Name the process that changes **water vapour** into **water droplets**.

..... [1]

(c) When ice is warmed it changes into water.

What is the melting point of pure ice?

..... [1]

15 Jamila and Blessy make a model arm.

They use strings to control the movement of the arm.



(a) Blessy pulls her string.

Complete the sentence.

When Blessy pulls her string, the forearm ..... [1]

(b) Which part of the arm does the string represent?

Circle the correct answer.

**blood vessel**

**bone**

**joint**

**muscle**

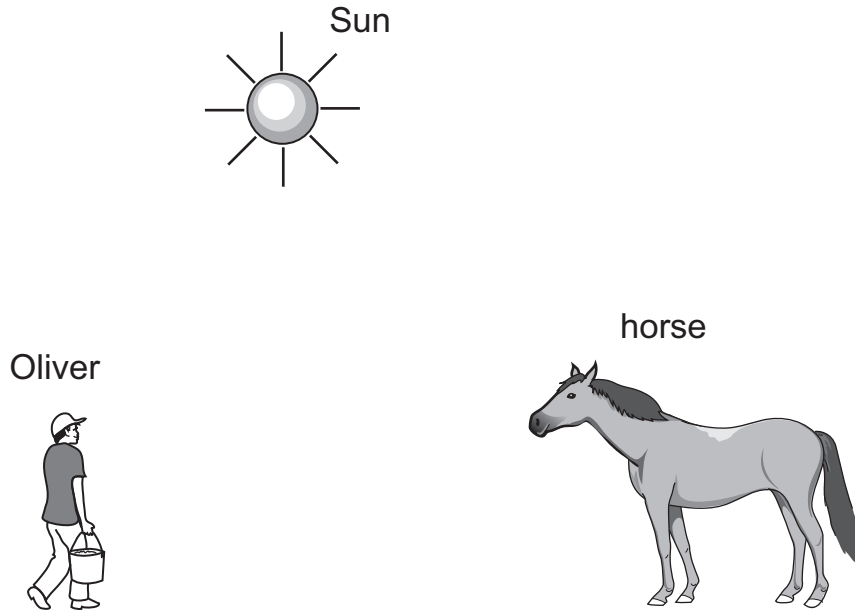
**skin**

[1]

16 Each day Oliver feeds his horse.

His horse sees him when he arrives.

Here is a diagram of Oliver and his horse.

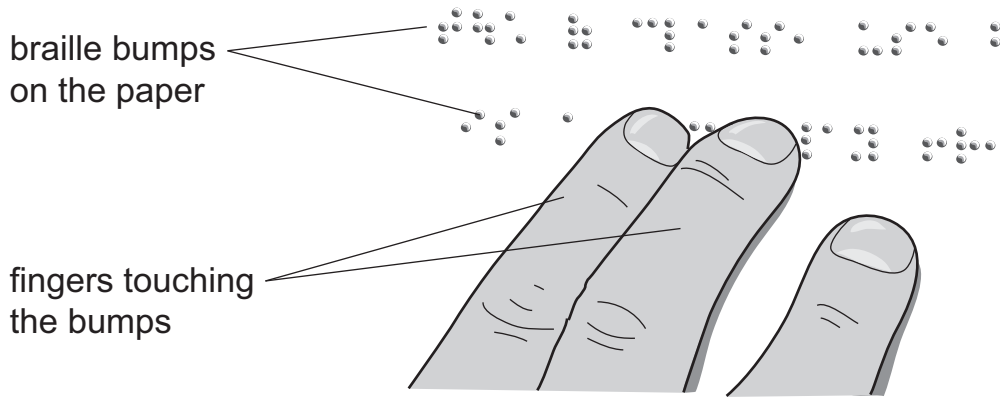


Draw rays of light on the diagram to show how the **horse** can see Oliver.

[3]

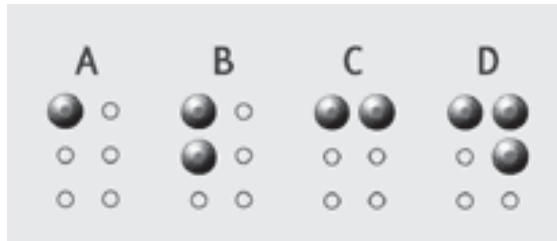


17 People who cannot see use braille to read.



Yuri investigates how people learn to read braille.

- Yuri asks six friends to feel a letter in braille.
- He shows the six friends the codes for different letters.



- He asks the six friends to say what letter they have felt.
- He repeats the tests until his friends know which letter it is.

(a) Yuri predicts that letter **A** will be the easiest letter to feel.

Why will letter **A** be the easiest letter to feel?

..... [1]

(b) Describe how Yuri will know which of the six friends is the best at feeling braille.

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

18 Potassium nitrate is a fertiliser.

- Class 6 investigate **how much** of this fertiliser can be dissolved in  $10\text{ cm}^3$  of water.
- They do several experiments.
- Each experiment has water at a different temperature.
- Class 6 then repeat the experiments to get a second set of results.

Here are their results.

temperature of water in °C	mass of fertiliser that can be dissolved in g	
	first experiment	second experiment
20	4.5	4.3
30	5.5	5.4
40	6.7	6.6
50	8.0	2.0
60	11.0	11.2

(a) They measure the temperature of the water.

What piece of apparatus do they use?

..... [1]

(b) They measure the **mass** of the fertiliser.

What piece of apparatus do they use?

..... [1]

(c) Why do they always use  $10\text{ cm}^3$  of water in each experiment?

..... [1]

(d) Class 6 decide that their results for **one** temperature need checking.

Which temperature is this?

..... °C

Explain your answer.

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

(e) Predict the mass of the fertiliser that can be dissolved in 10 cm<sup>3</sup> of water at 70 °C.

The mass of the fertiliser is

..... g

Explain your answer.

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

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