



**Cambridge
Primary
Checkpoint**

UNIVERSITY OF CAMBRIDGE INTERNATIONAL EXAMINATIONS
Cambridge Primary Checkpoint

CANDIDATE
NAME

CENTRE
NUMBER

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CANDIDATE
NUMBER

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SCIENCE

0846/02

Paper 2

October 2012

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.

For Examiner's Use	
1	
2	
3	
4	
5	
6	
7	
8	
9	
10	
11	
12	
13	
14	
Total	

This document consists of **16** printed pages.





1 The pictures show some living things found in a desert.



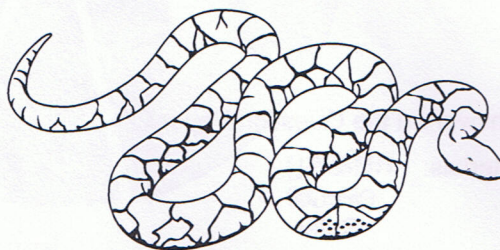
ant



plant



lizard



snake

(a) Draw arrows (→) between the pictures to make a food chain. [2]

(b) Name the producer in this food chain.

..... [1]

DO NOT WRITE IN THIS MARGIN



(c) The producer uses energy.

Where does it get its energy from?

Tick (✓) **one** box.

food	
rain	
soil	
Sun	
wind	

[1]

(d) Name **one** predator in this food chain.

.....

[1]

(e) Use **one** word to complete the sentence.

plant

predator

prey

producer

An animal being hunted by another animal is the

[1]





2 Felipe investigates four water samples.

He measures the melting point and the boiling point of each water sample.

Here are his results.

water sample	melting point in °C	boiling point in °C
A	-10	108
B	0	100
C	-2	102
D	-5	104

(a) Water sample A is salt solution.

Which water sample is pure water?

.....

Explain how you could tell from the information in the table.

.....

.....

[2]

(b) Complete the sentence about melting.

Choose words from the list.

solid

liquid

gas

During melting a changes into a

[1]



(c) Complete the sentence about boiling.

Choose words from the list.

solid

liquid

gas

During boiling a changes into a [1]

3 For thousands of years people have studied the movement of the Earth and Moon.

(a) Which of the following takes 24 hours?

Tick (✓) **one** box.

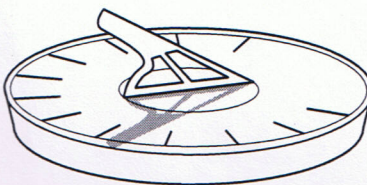
One full rotation of the Earth on its axis

One orbit of the Earth around the Sun

One orbit of the Moon around the Earth

[1]

(b) The shadow on a sundial can be used to tell the time during the day.



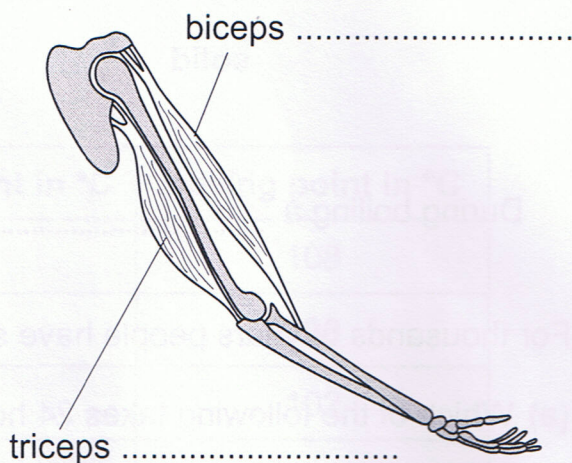
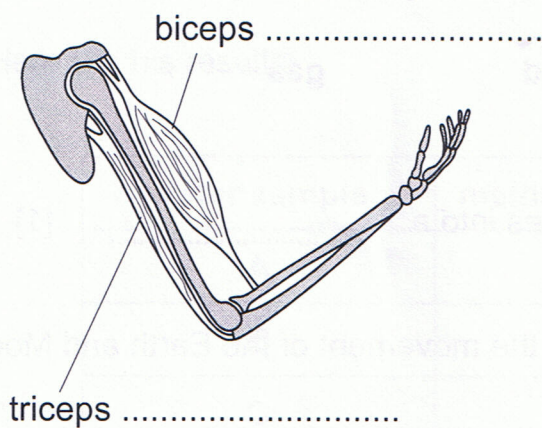
What **two** things change about the shadow during the day?

1.

2. [2]



4 Class four are looking at a diagram of the human arm.



(a) What are biceps and triceps?

..... [1]

(b) To make the arm move the biceps and triceps either relax or contract.

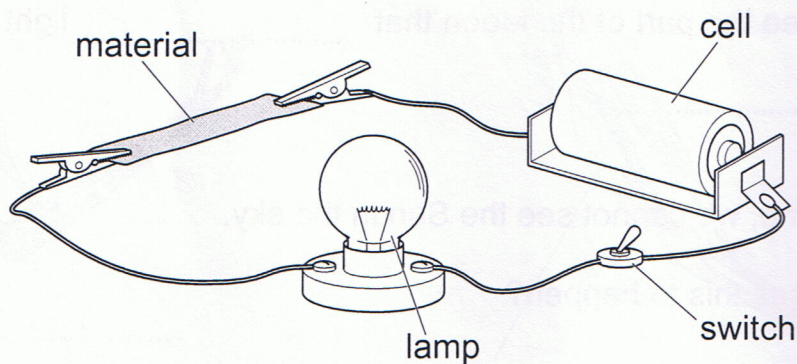
Write **contract** or **relax** after biceps and triceps to say what is happening in each diagram.

[2]



6 Tomas and Jakub investigate electrical conductors.

They put different materials in an electric circuit.



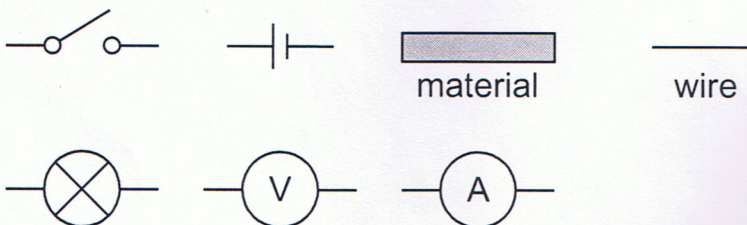
(a) They keep the length of the material the same each time.

Why do they do this?

..... [1]

(b) Draw the circuit diagram for **this** experiment.

Choose the **correct** symbols from those shown.

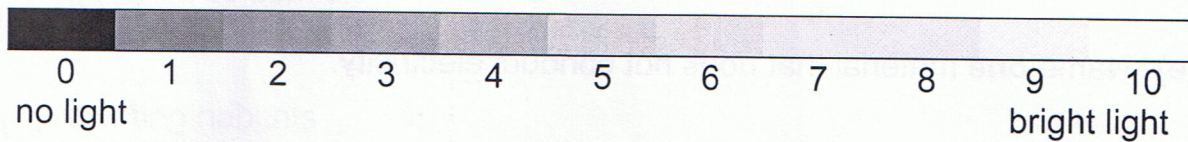


[2]



(c) Tomas and Jakub measure the brightness of the lamp for each material they test.

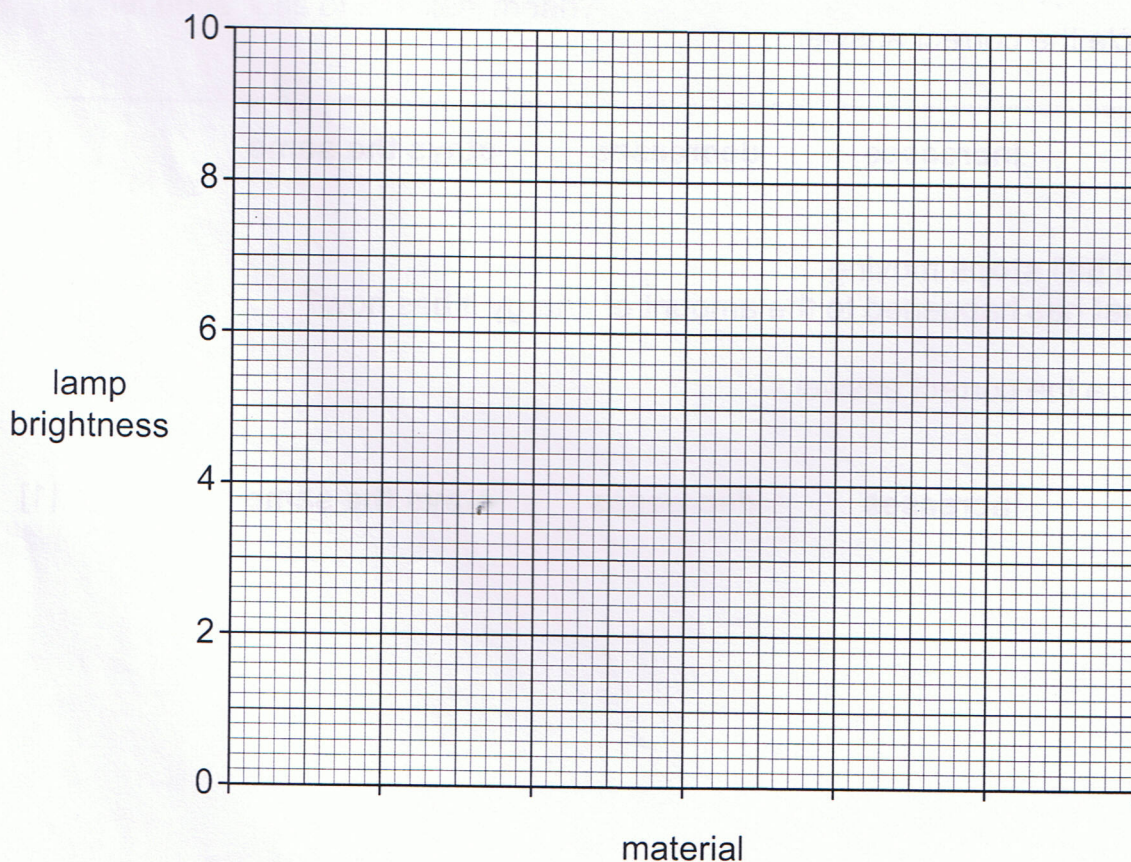
Here is their scale for lamp brightness.



Here are their results.

material	lamp brightness
brass	4
copper	9
wood	0
silver	10
plastic	0
lead	3

Draw a bar chart of their results.



[3]





(d) Which material is the best electrical conductor?

..... [1]

(e) Name **one** material that does not conduct electricity.

..... [1]

7 A ball rolls along the ground.
It has energy because it is moving.

(a) The ball rolls **faster**.
What has happened to the amount of energy it has now?

Circle the correct answer.

increases decreases stays the same [1]

(b) The ball rolls **slower**.
What has happened to the amount of energy it has now?

Circle the correct answer

increases decreases stays the same [1]

(c) The ball **stops** moving.
What has happened to the amount of energy it has now?

Circle the correct answer.

increases decreases stays the same [1]



8 Humans can have positive and negative effects on the environment.

(a) From the list choose three things that are **positive** effects.

Tick (✓) **three** boxes.

protecting habitats

overfishing

removing trees

recycling

not littering

[2]

(b) Another negative effect is 'loss of species'.

What does 'loss of species' mean?

.....

[1]



DO NOT WRITE IN THIS MARGIN



9 (a) Draw a line to connect the **word** and the **explanation**.

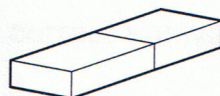
word	explanation
soluble	a solid that does not dissolve in a liquid
insoluble	a solid that dissolves in a liquid
solvent	a liquid that dissolves a solid

[2]

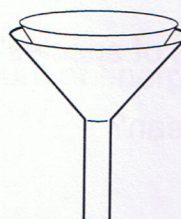
(b) Complete the sentence.

Some solids dissolve in water to form a [1]

10 Look at these pictures of apparatus **A**, **B** and **C**.



bar magnet
A



filter paper in funnel
B



water
C

(a) Which apparatus would you use to separate sand from water?

..... [1]

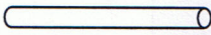


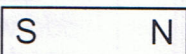

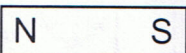


(b) Which apparatus would you use to separate a mixture of sand and iron filings?

..... [1]



11 A magnet is moved close to four objects.

Tick (✓) the correct boxes to show what happens.

object		attract	repel	no effect
 plastic straw	 magnet			
 magnet	 magnet			
 iron nail	 magnet			
 candle	 magnet			

[3]

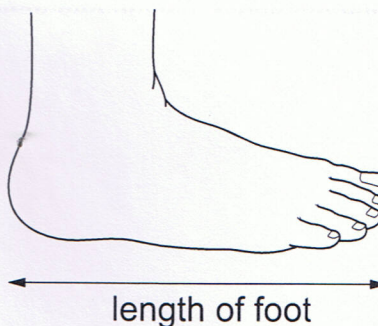
12 The foot bones of the skeleton grow as humans grow.

(a) Why do foot bones need to grow as humans get older?

.....

[1]

(b) The length of a foot can be measured.



What piece of apparatus do you use to measure the length of a foot?

.....

[1]



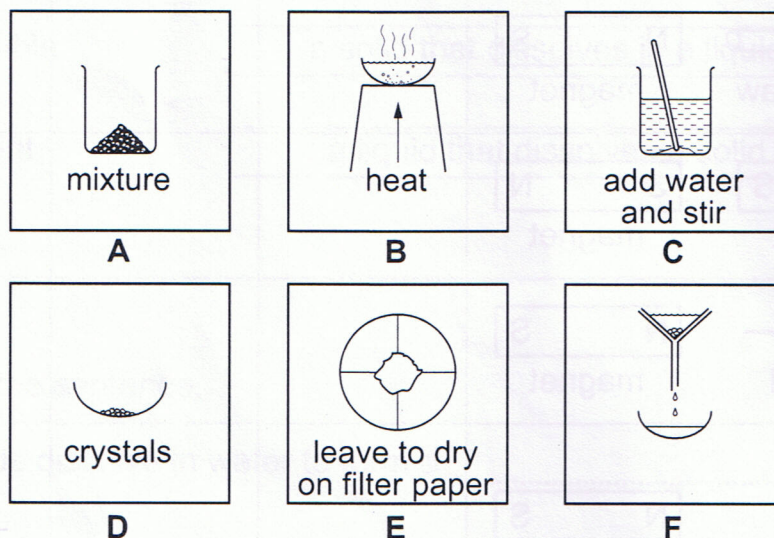
DO NOT WRITE IN THIS MARGIN



13 Minahil wants to separate a mixture of salt and sand.

The diagram shows the steps she uses.

They are not in the correct order.



(a) Put the steps in the correct order.

Two have been done for you.

A			E		
---	--	--	---	--	--

[2]

(b) Which solid substance is on the filter paper in step E?


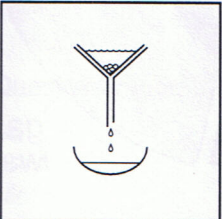
.....

[1]



(c) Steps **B** and **F** are processes.

Draw a line between the **step** and the **process** that happens.

step	process
	<div style="border: 1px solid black; padding: 5px; width: fit-content; margin-bottom: 10px;">condensation</div> <div style="border: 1px solid black; padding: 5px; width: fit-content; margin-bottom: 10px;">dissolution</div>
	<div style="border: 1px solid black; padding: 5px; width: fit-content; margin-bottom: 10px;">evaporation</div> <div style="border: 1px solid black; padding: 5px; width: fit-content;">filtration</div>

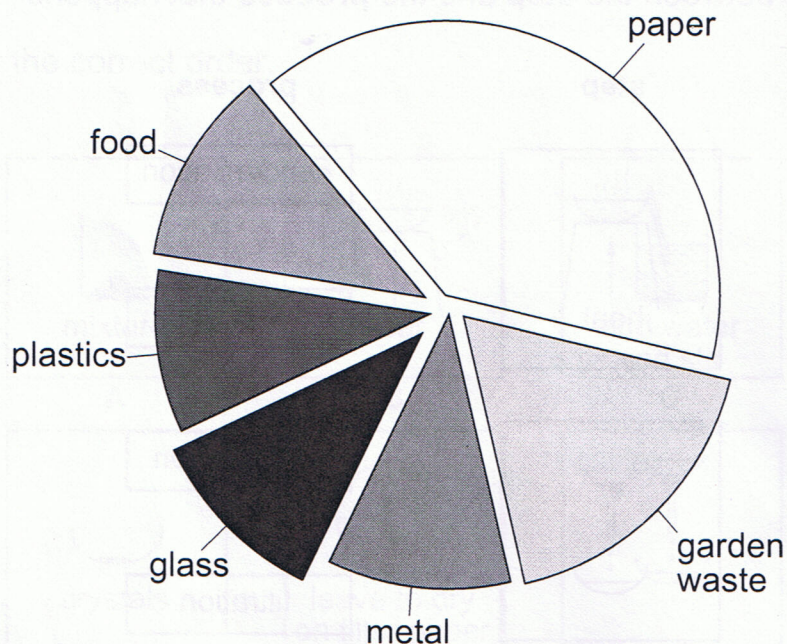
[2]

DO NOT WRITE IN THIS MARGIN





14 The pie chart shows some of the waste produced by humans.



Use the pie chart to answer the questions.

(a) The largest amount of waste produced is [1]

(b) Some of these waste products can be decomposed.

Name **two**.

..... and [1]

(c) Suggest how the amount of waste glass can be reduced.

..... [1]

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