

END-OF-YEAR EXAMINATION 2016
SCIENCE
PRIMARY THREE
(BOOKLET A)

Name: _____ ()

Class: Primary 3 ____

Date: 25 October 2016

Duration of paper: 1 h 30 min

Parent's/Guardian's signature

INSTRUCTION TO CANDIDATES

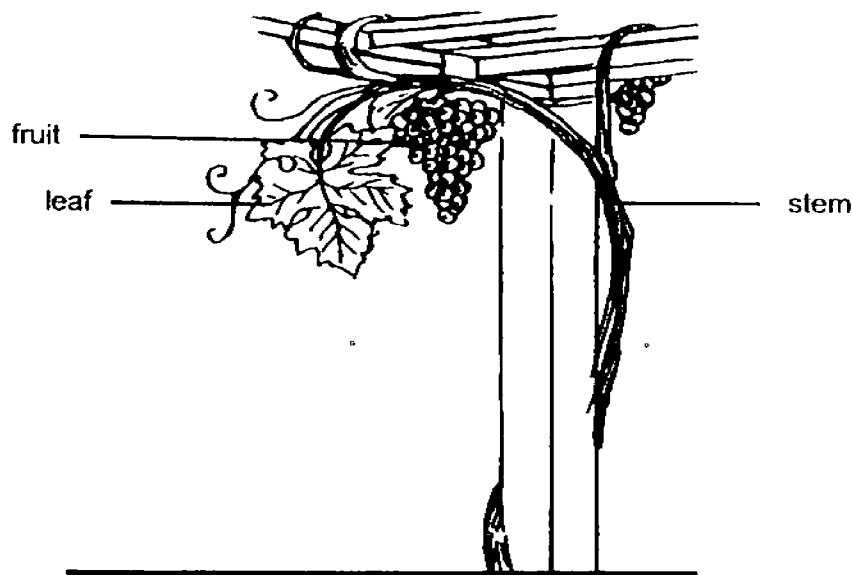
1. This question paper consists of **15** printed pages including this cover page.
2. Do not turn over this page until you are told to do so.
3. Follow all instructions carefully.
4. Answer all questions.
5. Shade your answer on the Optical Answer Sheet (OAS) provided.

For each of the following questions from 1 to 24, four options are given. One of them is the correct answer. Make your choice (1, 2, 3 or 4). Shade the correct oval (1, 2, 3 or 4) on the Optical Answer Sheet. [48 marks]

- 1 Gordon found an organism which has moist skin, lays eggs and can live on both land and in water. Which group of animals does it most likely belong to?

- (1) Fish
- (2) Birds
- (3) Mammals
- (4) Amphibians

- 2 Hassan found a plant in a garden as shown in the diagram below.



Based on your observation of the plant above, which of the following statements are true about the plant?

- A It has a weak stem.
- B It is a flowering plant.
- C It cannot make its own food.

- (1) A and B only
- (2) B and C only
- (3) A and C only
- (4) A, B and C only

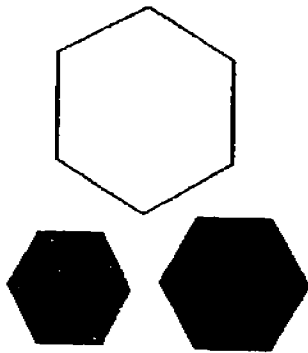
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3 Which of the following statements about fungi are true?

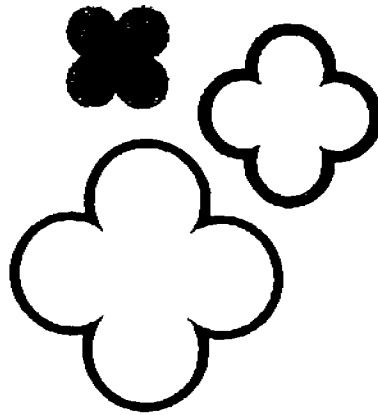
- A All fungi can be eaten.
- B All fungi reproduce from spores.
- C All fungi grow only on rotten logs.
- D All fungi feed on other living things that are dead or alive.

- (1) A and C only
- (2) B and D only
- (3) A, C and D only
- (4) A, B and C only

4 Joe classified some stickers into two groups as shown below.



Group A

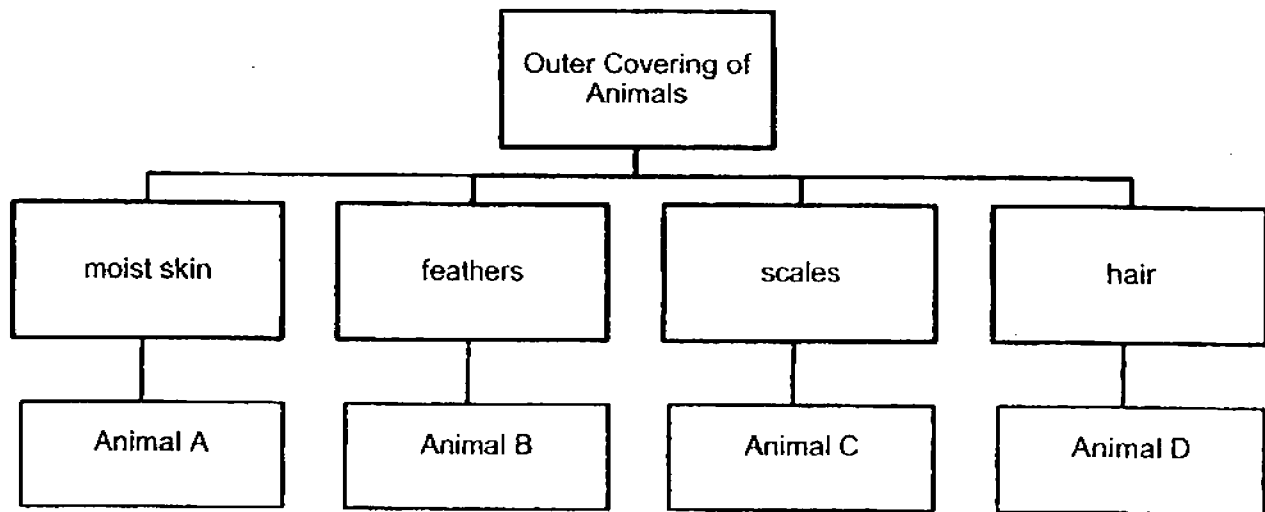


Group B

The stickers above are grouped according to their _____.

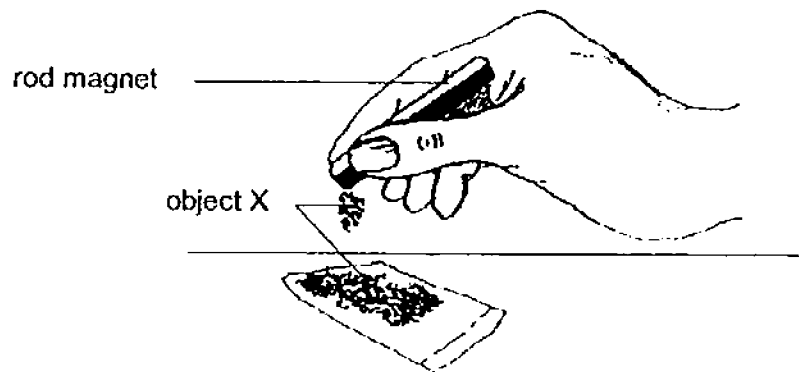
- A sizes
 - B shapes
 - C colours
- (1) A only
 - (2) B only
 - (3) A and B only
 - (4) B and C only

- 5 Study the classification chart below.



Which animal best represents Animal C?

- (1) Whale
 - (2) Snake
 - (3) Rabbit
 - (4) Grasshopper
- 6 Mabel used a rod magnet to attract object X as shown in the diagram below.

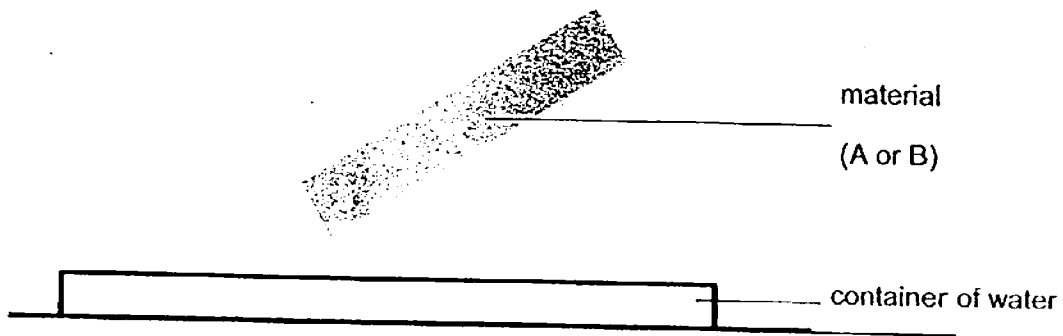


What material could object X be made of?

- (1) Iron
- (2) Wood
- (3) Glass
- (4) Aluminium

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- 7 Mohan had two types of materials, A and B, which were of the same size and thickness. He wanted to find out which material was able to absorb the most amount of water in the same amount of time. He put the material, one at a time, into a container containing various amounts of water as shown in the table below.

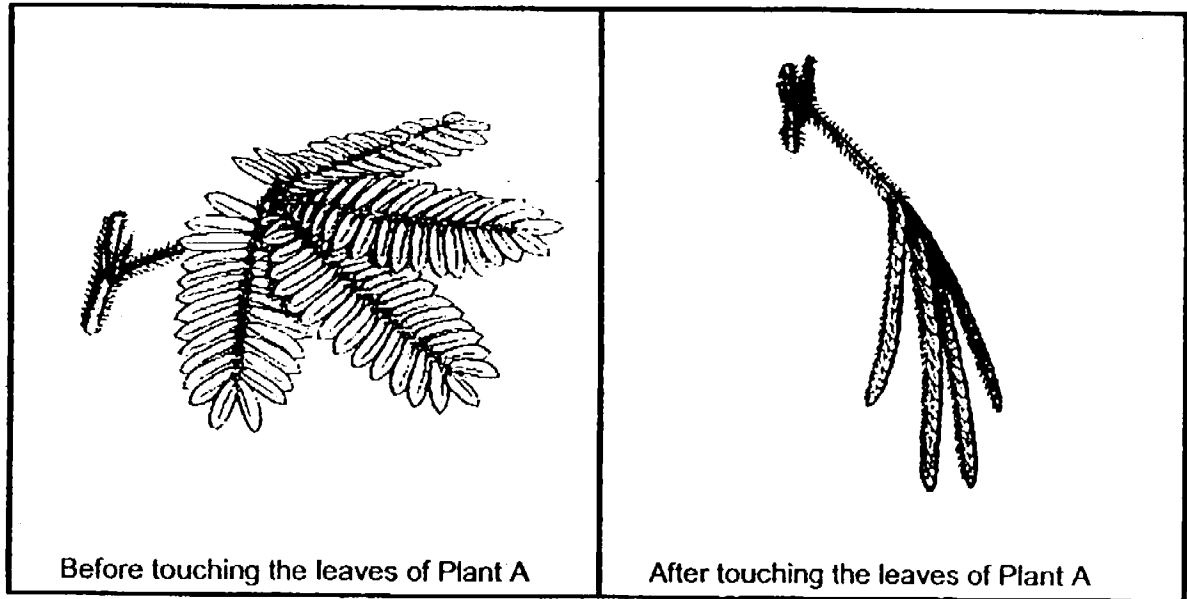


Set-up	Materials	Amount of water in container at first (ml)
P	A	20
Q	B	30
R	A	50
S	B	20

Which two set-ups should he choose to conduct a fair test in this experiment?

- (1) P and Q
- (2) P and S
- (3) Q and R
- (4) R and S

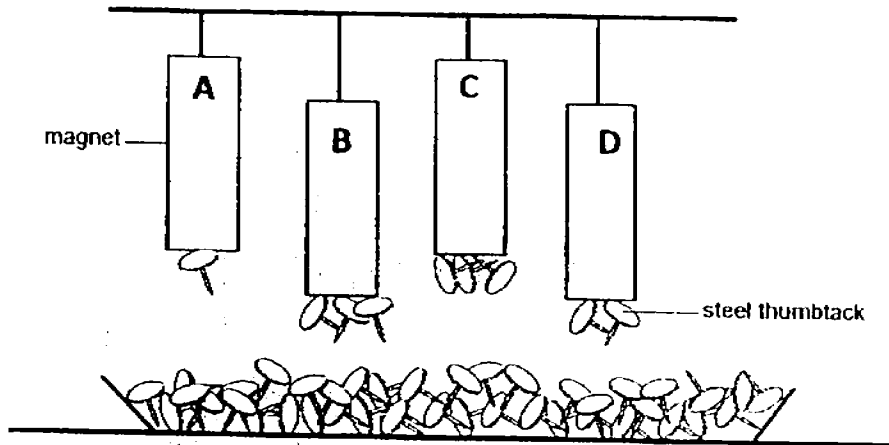
- 8 Peter found plant A growing in his garden. He made the following observations shown below.



Which characteristic of living things is shown by Plant A?

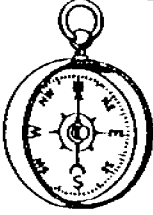
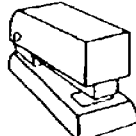
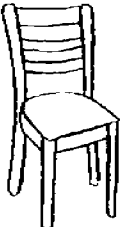
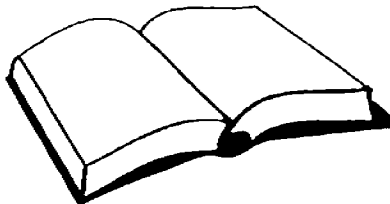
- (1) Living things can grow.
- (2) Living things can reproduce.
- (3) Living things need air, food and water to survive.
- (4) Living things can respond to changes around them.

- 9 Jolin hung four magnets, A, B, C and D, above a tray of steel thumbtacks and recorded her observation as shown below.



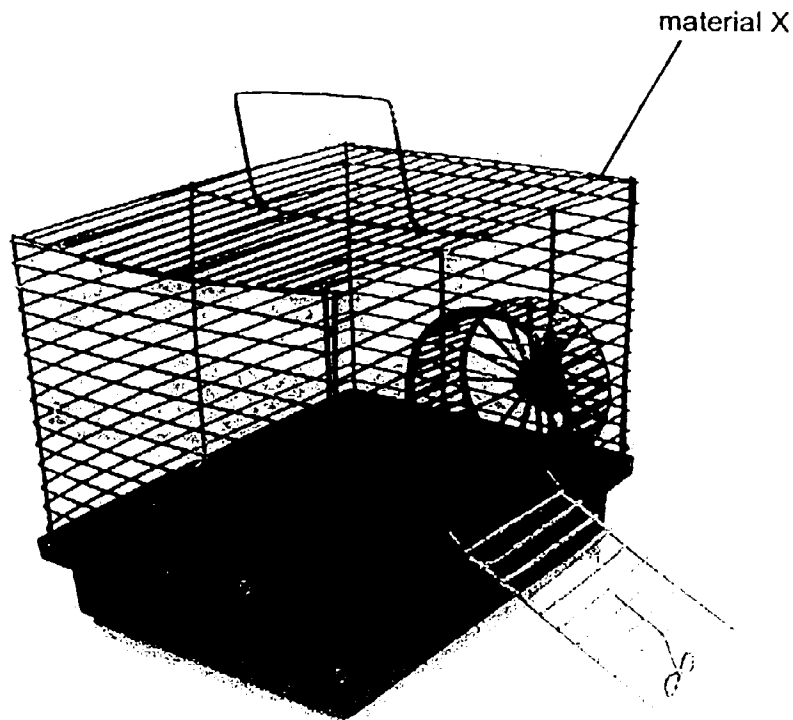
From her observation above, which magnet, A, B, C or D is the strongest?

- (1) A
 - (2) B
 - (3) C
 - (4) D
- 10 Which one of the following objects shown below uses a magnet to work?

<p>(1)</p>  <p>Compass</p>	<p>(2)</p>  <p>Stapler</p>
<p>(3)</p>  <p>Chair</p>	<p>(4)</p>  <p>Book</p>

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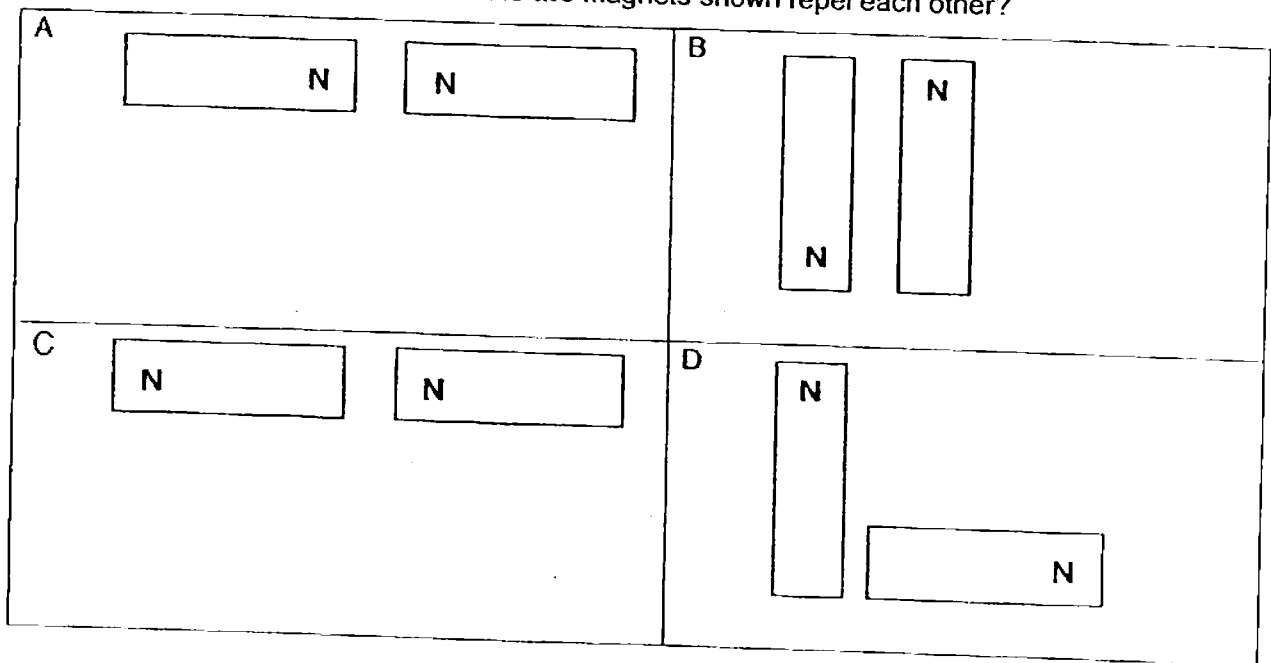
- 11 Si Min is choosing a cage for her pet hamster. She would like the cage to be able to withstand 10 kg of mass. Which property of material X makes it suitable for making the hamster cage?



- (1) Strong
 - (2) Flexible
 - (3) Waterproof
 - (4) Ability to float
- 12 Which two actions will cause a magnet to lose its magnetism?
- A Dropping a magnet many times
 - B Heating a magnet over a flame
 - C Putting a magnet near a stronger magnet
 - D Putting a magnet near a weaker magnet
- (1) A and B
 - (2) B and C
 - (3) C and D
 - (4) A and D

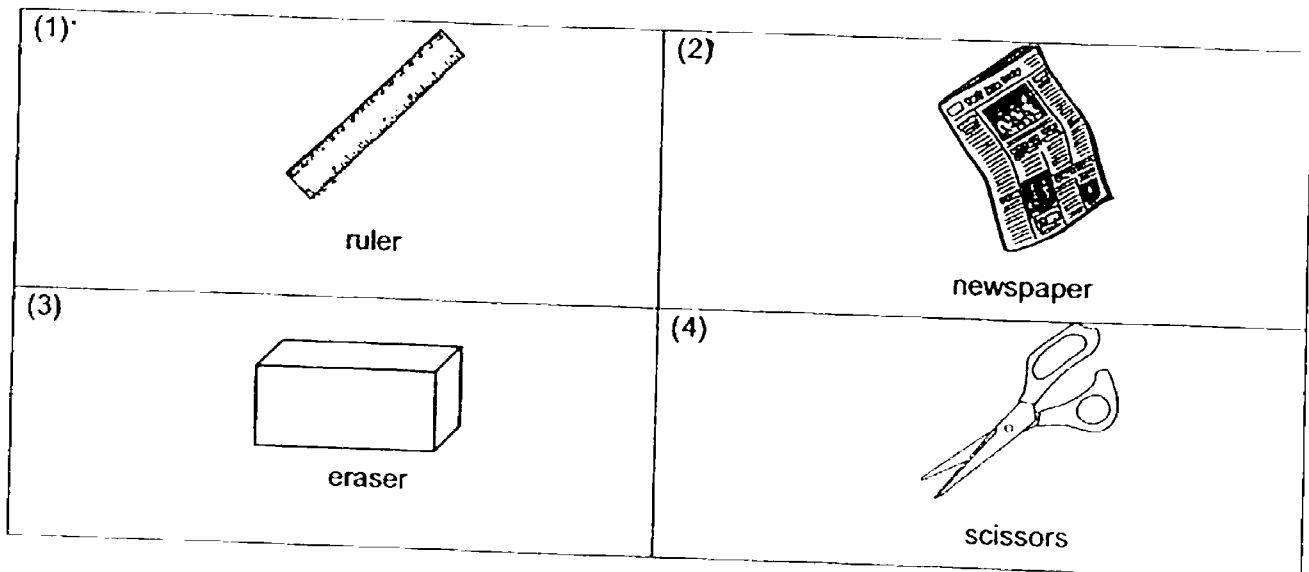
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13 In which of the following situations will the two magnets shown repel each other?



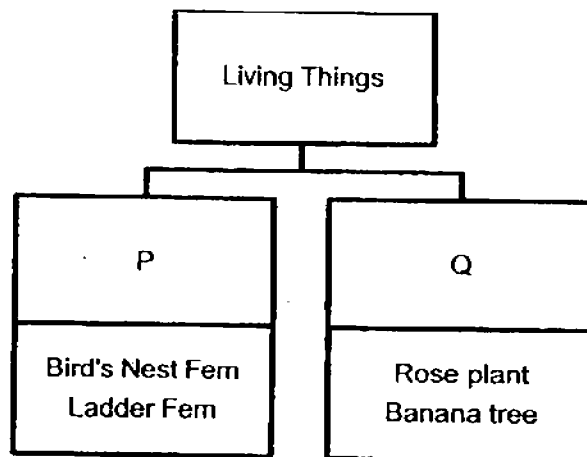
- (1) A and B only~~x~~
- (2) B and C only~~x~~
- (3) C and D only~~x~~
- (4) A and D only

14 Which one of the following objects forms a system?



(Go on to the next page)

- 15 Study the classification chart below carefully.



Based on the classification chart above, which of the following represent the correct headings for P and Q?

	P	Q
(1)	Fungi	Flowering Plants
(2)	Flowering Plants	Non-flowering Plants
(3)	Non-flowering Plants	Flowering Plants
(4)	Fungi	Non-flowering Plants

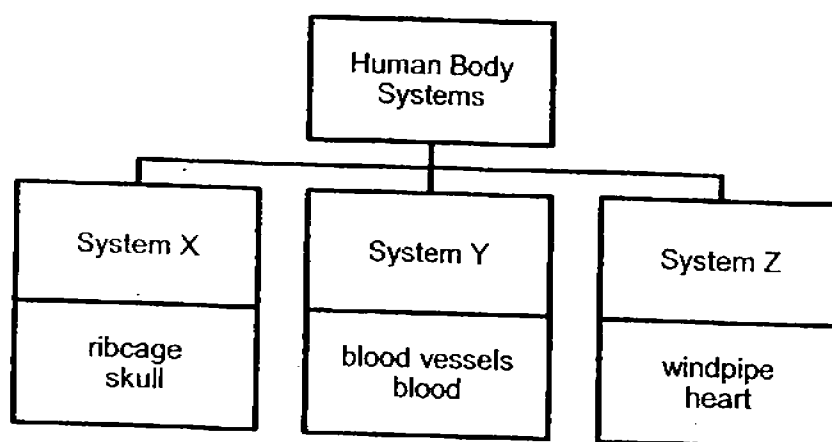
- 16 Which one of the following shows the correct path taken by the food that we eat during digestion?

A	B	C	D	E
large intestine	stomach	mouth	small intestine	gullet

- (1) E→C→B→A→D
 (2) B→E→C→D→A
 (3) C→B→E→A→D
 (4) C→E→B→D→A

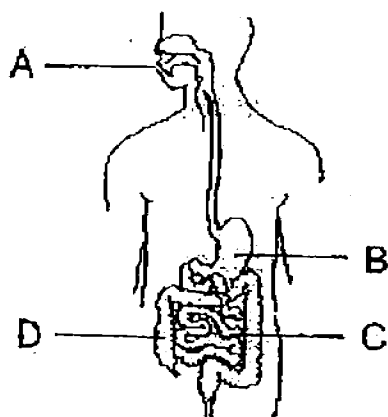
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- 17 Study the classification chart below carefully.



Which one of the following has been put under the wrong system?

- (1) Skull
 - (2) Blood
 - (3) Heart
 - (4) Ribcage
- 18 Mrs Tan would always cut carrots into small pieces when she is cooking.



Which part of the digestive system performs the same function as cutting the carrots into smaller pieces?

- (1) A
- (2) B
- (3) C
- (4) D

(Go on to the next page)

19 Which of the following human body systems have to work together in order for the digested food to be absorbed into our bodies?

- (1) Skeletal and muscular systems
- (2) Digestive and skeletal systems
- (3) Digestive and circulatory systems
- (4) Respiratory and circulatory systems

20 Study the information given in the table shown below carefully.

Parts of the digestive system	Function
A	Pushes the chewed food down into the stomach
B	Allows the digested food to be absorbed
C	Absorbs water from the undigested food

What are the parts, A, B and C, likely to be?

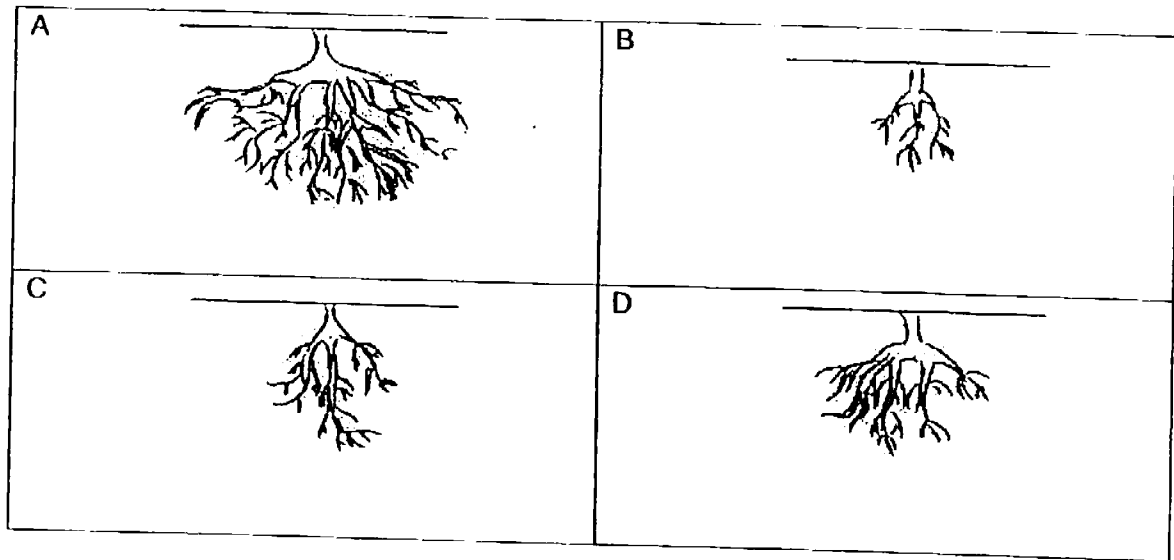
	A	B	C
(1)	tongue	small intestine	large intestine
(2)	tongue	large intestine	small intestine
(3)	gullet	small intestine	large intestine
(4)	gullet	large intestine	small intestine

21 Which part of a plant develops into fruits under the right conditions?

- (1) Roots
- (2) Stems
- (3) Leaves
- (4) Flowers

(Go on to the next page)

- 22 The diagram below shows the root systems of four different plants.



Which one of the root systems above will hold the plant most firmly to the ground?

- (1) A
- (2) B
- (3) C
- (4) D

(Go on to the next page)

- 23 Kenneth took four identical plants, A, B, C and D, and removed some parts from each plant as shown in the table below.

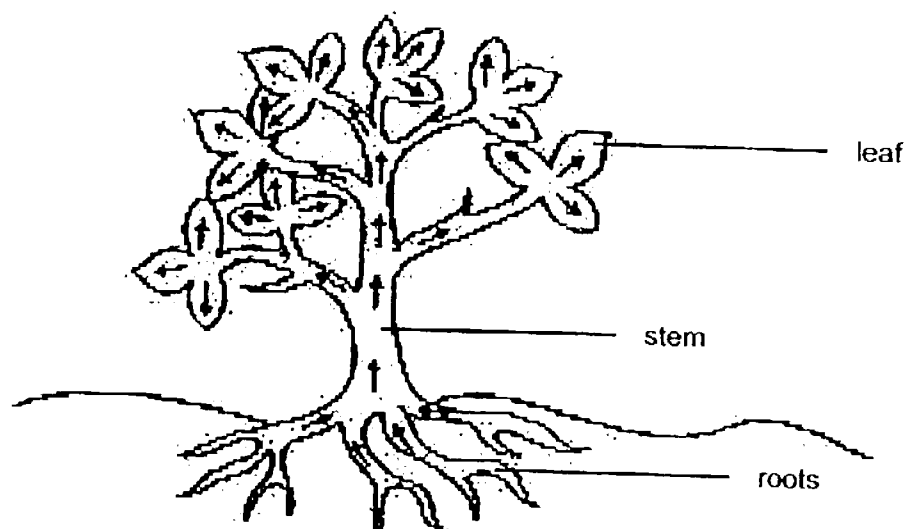
Plant	Parts that were removed
A	All fruits and flowers
B	All flowers and leaves
C	All leaves and roots
D	All roots and fruits

Which one of the following plants would most likely survive the longest?

- (1) A
- (2) B
- (3) C
- (4) D

(Go on to the next page)

- 24 Study the diagram below carefully. The arrows represent things that get transported throughout the plant.



What do the arrows represent?

- A Food
- B Water
- C Oxygen
- D Mineral salts

- (1) A and B only
- (2) A and D only
- (3) B and C only
- (4) B and D only

End of Booklet A

Please go on to Booklet B.

**END-OF-YEAR EXAMINATION 2016
SCIENCE
PRIMARY THREE
BOOKLET B**

Name: _____ ()

Class: Primary 3 _____

Date : 25 October 2016

Duration of paper: 1 h 30 min

Parent's/Guardian's signature

INSTRUCTION TO CANDIDATES

1. This question paper consists of **11** printed pages including this cover page.
2. Do not turn over this page until you are told to do so.
3. Follow all instructions carefully.
4. Answer all questions.
5. Write your answers in this booklet.

Booklet	Maximum marks	Marks obtained
A	48	
B	32	
Total	80	

For questions 25 to 34, write your answers in the spaces provided in this booklet. The number of marks available is shown in the brackets [] at the end of each question or part question.
(32 marks)

- 25 Using a ruler and pen, draw straight lines to match the different body systems to their correct function. Join the correct black dots on the left to those on the right. [2]

Body System	Function
Muscular system •	<ul style="list-style-type: none"> Absorbs digested food, nutrients, minerals and water to be used by the body.
Skeletal system •	<ul style="list-style-type: none"> Takes in oxygen to be used by the body and removes carbon dioxide from the body.
Digestive system •	<ul style="list-style-type: none"> Supports the body and gives it shape.
Respiratory system •	<ul style="list-style-type: none"> Enables different parts of the body to move.

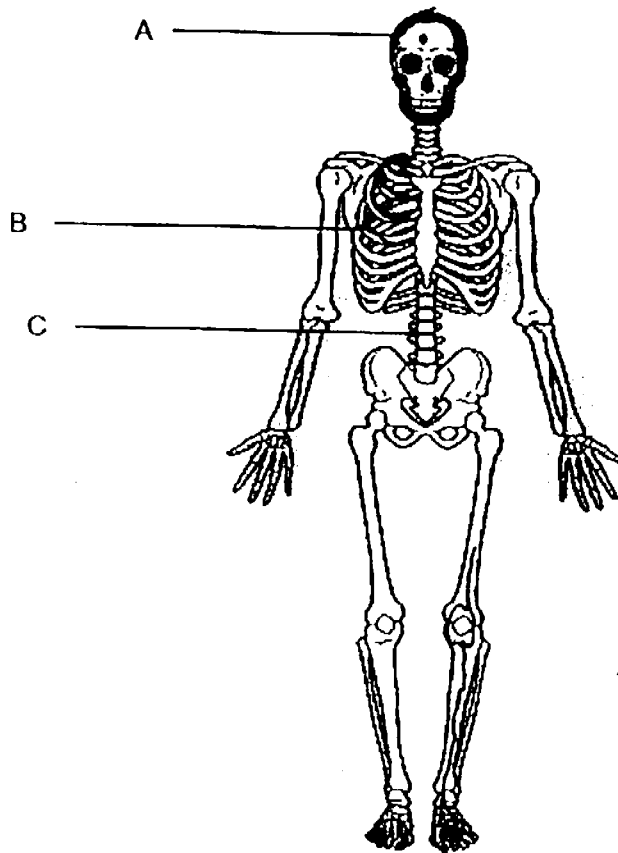
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SCORE	2
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26 Study the human system below carefully.

(a) Label the parts, A, B and C.

[3]



A: _____

B: _____

C: _____

(b) Name the human system shown in the diagram above.

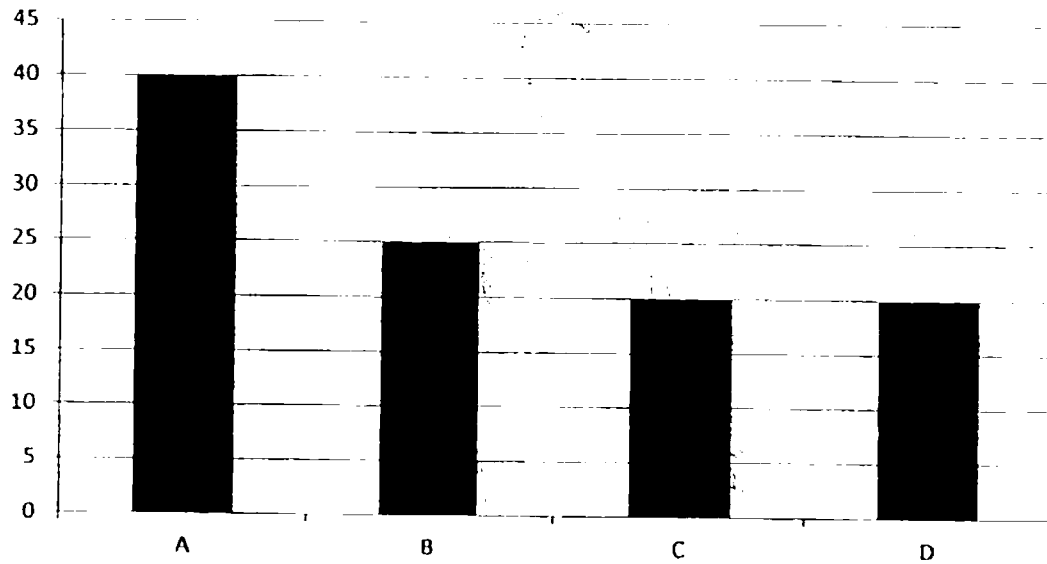
[1]

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SCORE	
	4

- 27 The graph below shows the amount of undigested food found in four different parts of a human digestive system.

Amount of undigested food (g)



Parts of the human digestive system

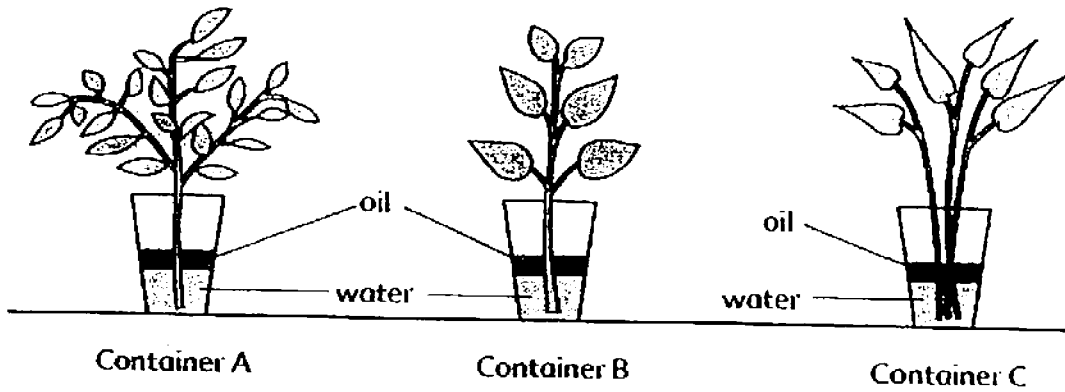
- (a) Which part, A, B, C or D, represents the mouth? [1]

- (b) Why is the amount of undigested food the same at parts C and D? [1]

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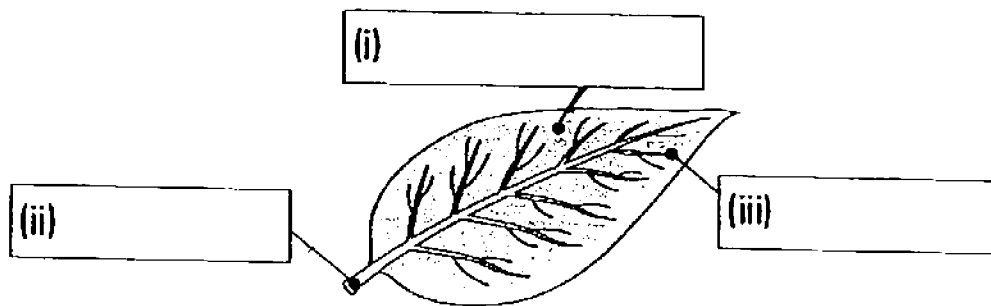
SCORE	<div style="text-align: right;">2</div>
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- 28 Ahmad wanted to find out if the type of plant affects the amount of water taken by the plant. He set up the following experiment. Oil was added to prevent evaporation of water.



- (a) Was Ahmad's experiment a fair one? Explain. [1]

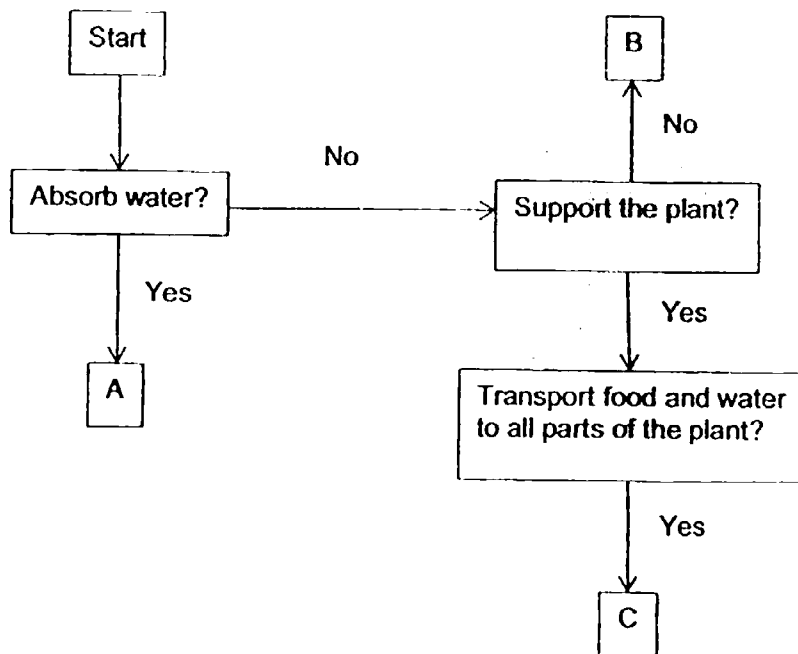
- (b) Label the parts of a leaf in the space provided below. [3]



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SCORE	
	4

- 29 The flow chart below summarises the different plant parts and their functions.



Identify the parts, A, B and C.

[3]

A: _____

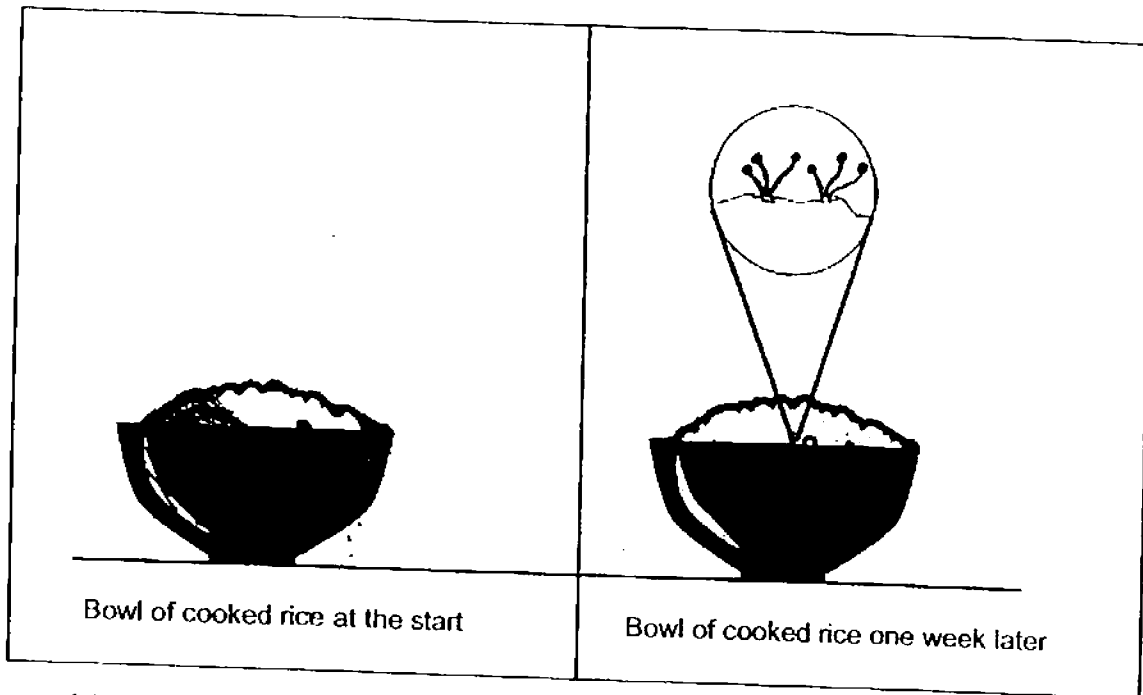
B: _____

C: _____

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SCORE	<div style="border: 1px solid black; width: 100%; height: 100%; position: relative;"><div style="position: absolute; bottom: 0; right: 0; width: 50px; height: 50px; transform: rotate(45deg); border: 1px solid black; background: white;"></div></div>
	3

- 30 Dave left a bowl of cooked rice on a table as shown in the diagram below. After one week, he noticed some living things growing on the cooked rice.



- (a) Based on the diagram above, what did Dave observe growing on the bowl of cooked rice after one week? [1]

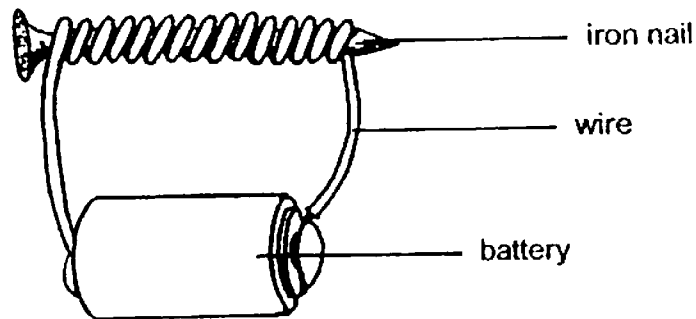
- (b) How does the living thing growing on the bowl of cooked rice reproduce? [1]

- (c) What does the living thing feed on? [1]

(Go on to the next page)

SCORE	
	3

- 31 Ismail used an electromagnet as shown below to find out how the number of coils of wire around the iron nail affects its magnetic strength.



He recorded the results of his experiment in the table below.

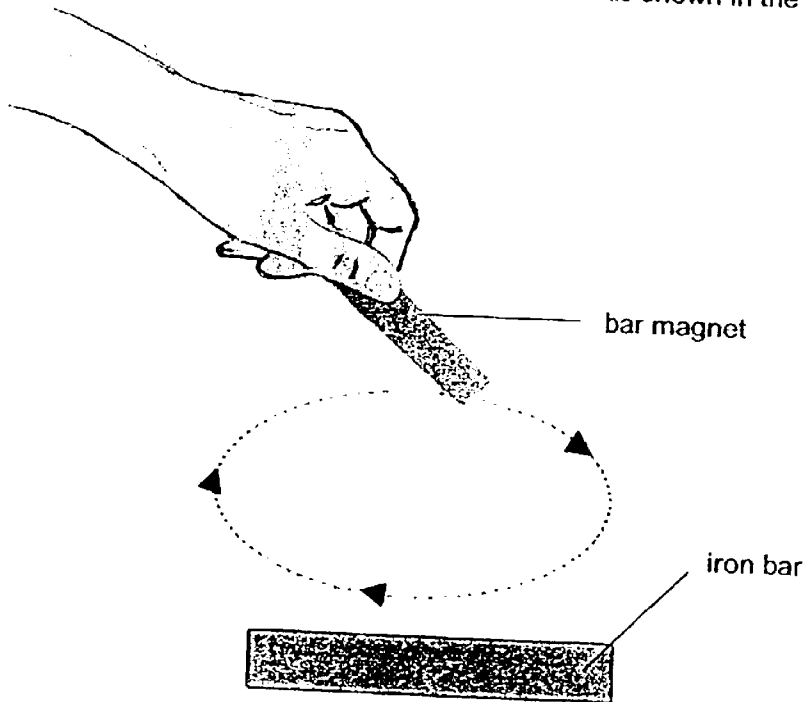
Number of coils of wire around the iron nail	20	30	40	50	60
Number of paperclips attracted to the electromagnet	3	5	?	9	12

- (a) Based on Ismail's findings, how many paperclips could the electromagnet attract when there were 40 coils of wire around its iron nail? [1]
- _____
- (b) State the relationship between the number of coils of wire around the iron nail and the number of paperclips that got attracted. [1]
- _____
- (c) Besides increasing the number of coils of wire around the iron nail, what else could Ismail have done to increase the magnetic strength of the electromagnet? [1]
- _____

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SCORE	3
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- 32 Jim used a bar magnet to magnetise an iron bar as shown in the diagram below.

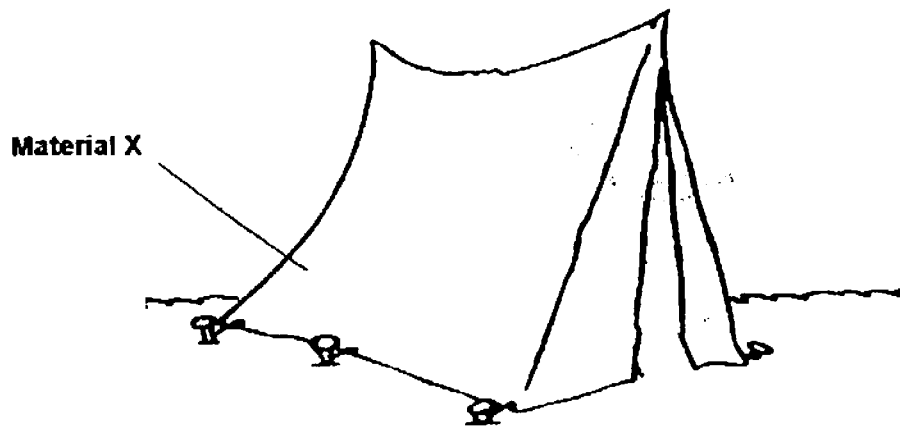


- (a) What is the name of the method which Jim used to magnetise the iron bar? [1]
- _____
- (b) Using the method shown above, state two actions that Jim can take to increase the magnetism of the iron bar? [2]
- (i) _____
- (ii) _____

(Go on to the next page)

SCORE	
	3

- 33 Bobby set up a tent for his Scouts Camp as shown in the diagram below.



- (a) What suitable material can X be made up of? [1]

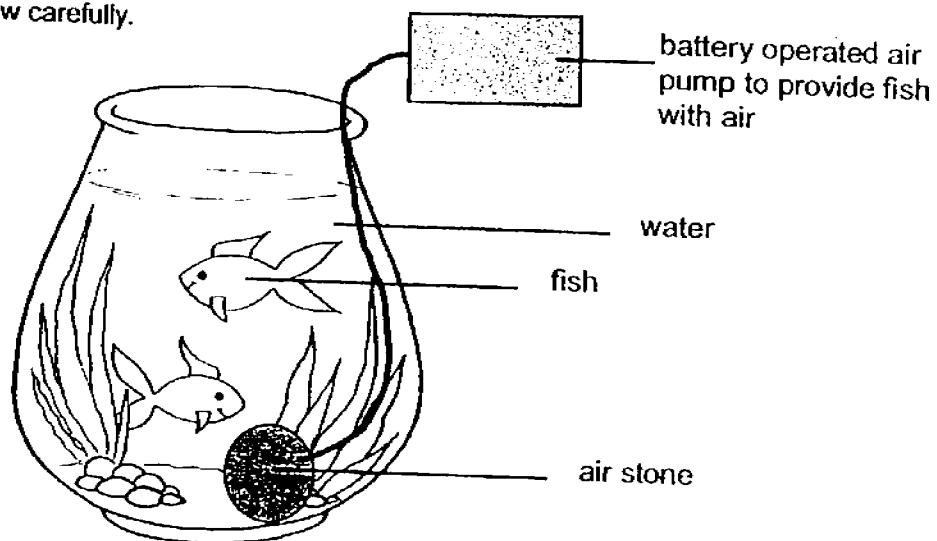
- (b) Give two properties of Material X that make it suitable to be used as part of the tent. [2]

- (c) Bobby wanted to have "windows" for his tent. Other than the properties mentioned in (b), what property must the windows have? [1]

(Go on to the next page)

SCORE	
	4

- 34 Study the diagram below carefully.



- (a) State one more condition that the fish need to continue to survive in the aquarium above. [1]

Zhi Wei set up an aquarium with 12 goldfish. The table below shows how the number of goldfish changed over time.

	January	February	March	April
Number of Goldfish	12	12	15	9

- (b) Based on the table above, what happened to the number of goldfish from February to March? [1]
- (c) Give a possible explanation for your answer in (b). [1]
- (d) In April, there was a drop in the number of goldfish in the aquarium. Suggest a reason to explain the drop in the number of goldfish. [1]

END OF BOOKLET B

Please check all your answers carefully.

SCORE	
	4

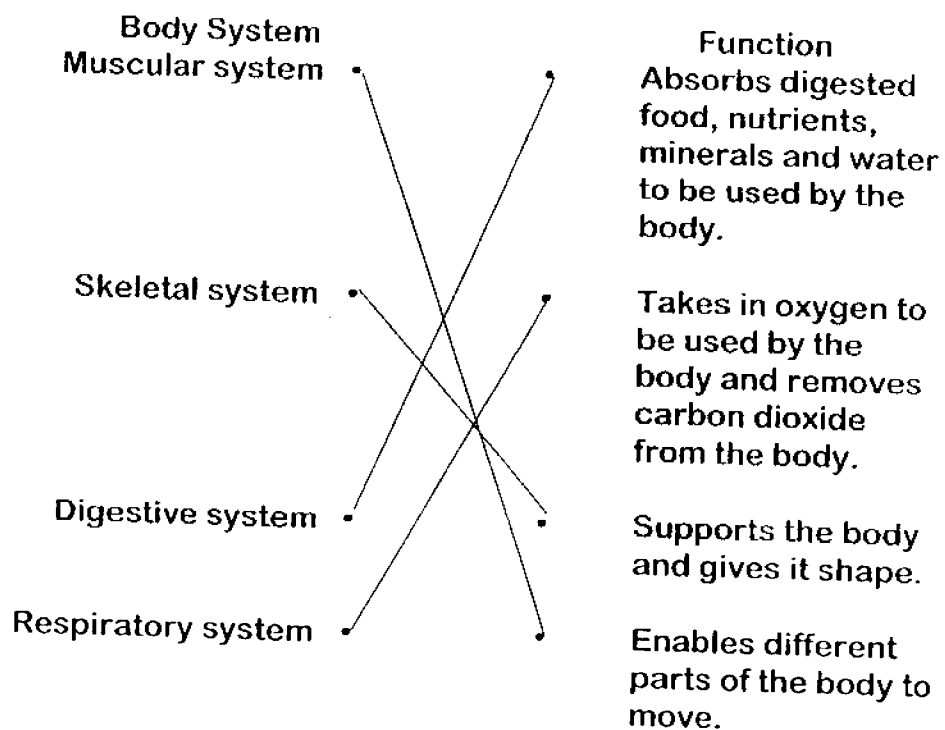
YEAR : 2016
 LEVEL : PRIMARY 3
 SCHOOL : ANGLO-CHINESE
 SUBJECT : SCIENCE
 TERM : SA2

Booklet A

Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8
4	1	2	2	2	1	2	4
Q9	Q10	Q11	Q12	Q13	Q14	Q15	Q16
3	1	1	1	4	4	3	4
Q17	Q18	Q19	Q20	Q21	Q22	Q23	Q24
3	1	3	3	4	1	1	4

Booklet B

Q25



- Q26 (a) A : Skull
 B : Rib cage
 C : Back bone
- (b) Skeletal system.
- Q27 (a) A
- (b) Parts C and D do not digest food.
- Q28 (a) No. Container A and B have one plant.
- (b) (i) Leaf blade
 (ii) Leaf stalk
 (iii) Leaf veins
- Q29 (a) Roots
- (b) Leaves
- (c) Stem
- Q30 (a) Fungus
- (b) It reproduce by spores.
- (c) It feed on dead or alive things.
- Q31 (a) 7
- (b) The increase number of coils, the increase in number of attracted paper clips.
- (c) Ismail could increase the number of battery.

- Q32**
- (a) Stroking**
 - (b) (i) Stroke the iron bar more.**
(ii) Use a strong magnet to stroke the iron bar.

- Q33**
- (a) Fabric**
 - (b) Waterproof and flexible.**
 - (c) Ability to allow light to pass through.**

- Q34**
- (a) Food**
 - (b) The number of gold fish increased.**
 - (c) Living thing reproduce.**
 - (d) Some gold fish got sick and died.**

End