CATHOLIC HIGH SCHOOL
PRIMARY 3
SEMESTRAL ASSESSMENT 2
2012

SCIENCE

Name : _____( )

Class : Primary 3 _____

Date : 25 October 2012

BOOKLET A

30 Questions
60 Marks

Total Time for Booklets A & B : 1 hour 30 minutes

Instructions to Candidates

Do not open this booklet until you are told to do so.
Follow all instructions carefully.
Answer all questions.

3048

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Section A : Multiple Choice Questions (60 marks)

For each question from 1 to 30, four options are given. One of them is the most suitable answer. Make your choice (1, 2, 3 or 4) on the Optical Answer Sheet.

1. Which one of the following is a characteristic of all living things?

   (1) They give birth to young alive.
   (2) They eat plants or animals as food.
   (3) They can move freely from place to place.
   (4) They respond to changes in the surroundings.

2. Which one of the following animals does not have the same kind of outer covering as the other three?

   (1) Bat
   (2) Sheep
   (3) Whale
   (4) Sparrow

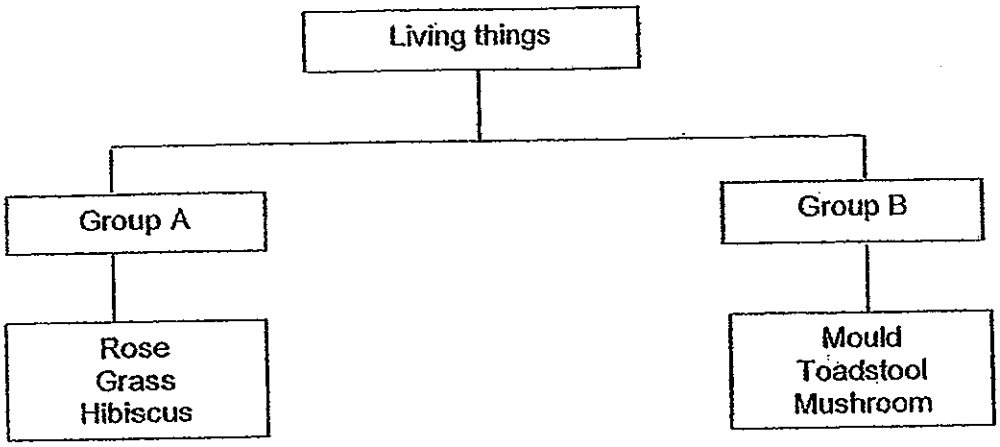
3. 4 students made some statements about a part of a plant.

   Jane: It is a plant part.
   Tom: It carries food made by the leaves to the rest of the plant.
   Mark: It carries water and mineral salts from the roots to the rest of the plant.
   John: It holds the leaves and enables them to reach for sunlight which is needed for making food.

   Which one of the following plant parts best fits the descriptions above?

   (1) Fruit
   (2) Seed
   (3) Stem
   (4) Flower

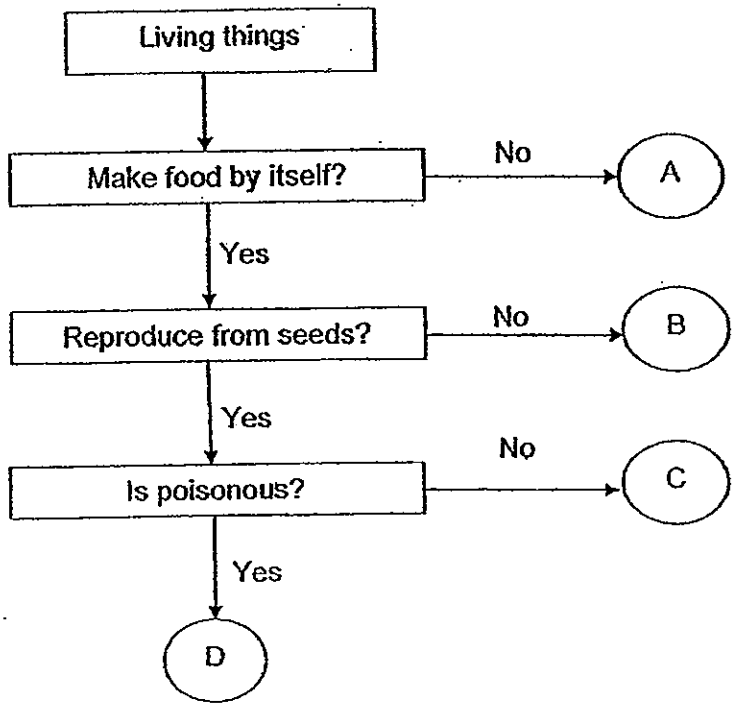
4. The table below shows some characteristics of living things.



Which one of the following pairs is the most suitable headings for both Group A and Group B?

	Group A	Group B
(1)	Land plants	Yeast
(2)	Flowering plants	Fungi
(3)	Flowering plants	Micro-organisms
(4)	Non-flowering plants	Fungi

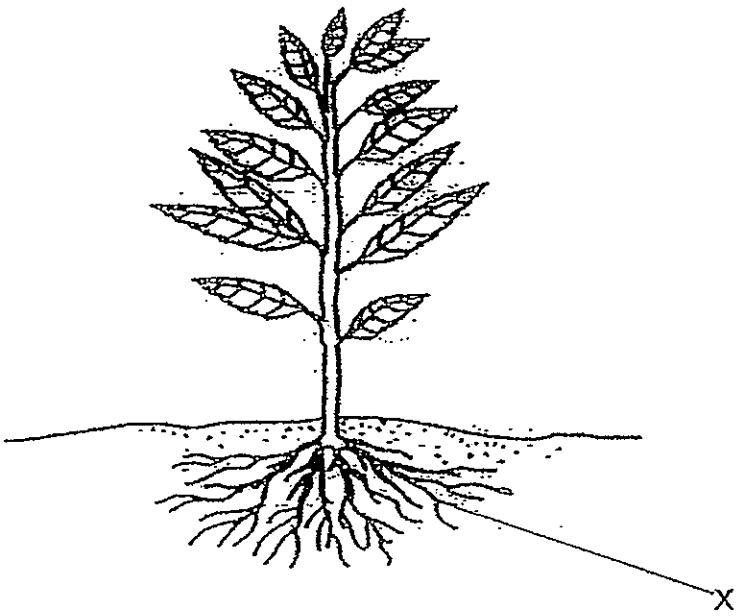
5. Study the flowchart below carefully.



Which one of the following best represents fern?

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

6. Study the plant shown below carefully.

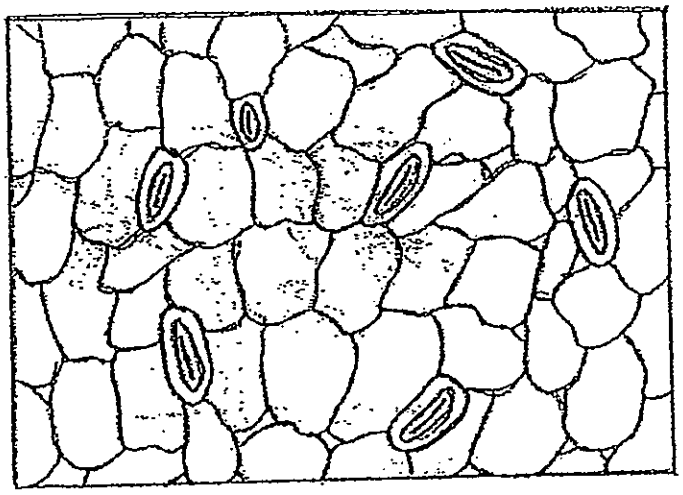


What is the function of part X?

A To take in food for the plant
B To absorb water for the plant
C To hold the plant firmly to the ground
D To absorb mineral salts for the plant

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

7. The diagram below shows tiny openings which are mostly found on the underside of leaves.

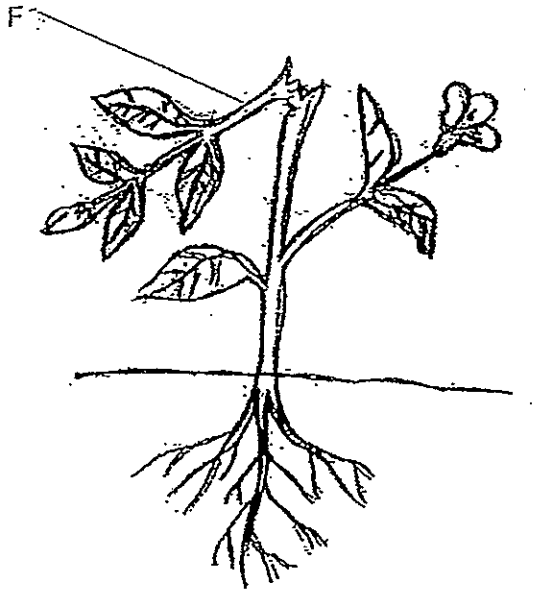


What is/are their function(s)?

A To allow surrounding air to enter
B To allow excess water to escape
C To take in water and mineral salts for the plant

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

8. Study the diagram shown below carefully.



While gardening, Caleb accidentally broke part of the plant labelled F. He noticed that part F died after a few days.

What had caused part F to die?

(1) Part F did not bear fruits as there were no flowers.
(2) The leaves in part F were unable to reach for sunlight.
(3) There was no exchange of gases that took place in part F.
(4) The leaves were unable to make food as water was not transported to part F.

9. Which of the following substance(s) is/are absorbed from the soil and carried up the stem of a plant?

A Water
B Sugars
C Oxygen
D Mineral salts

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

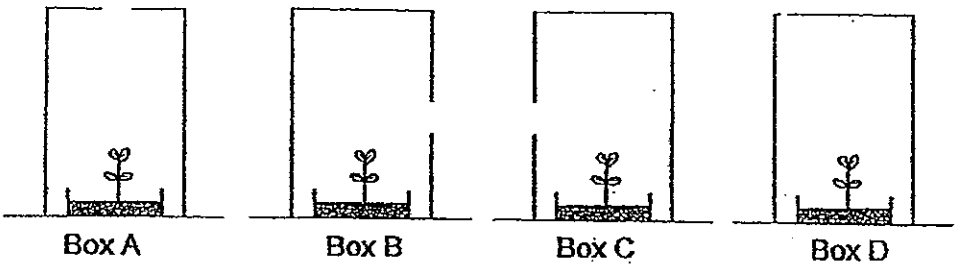
10. Three children each made a statement about the leaves of plants.

Benjamin:	The leaves absorb water and mineral salts.
Caleb:	The leaves of spinach provide us with food.
Dann:	The leaves allow the exchange of gases to take place.

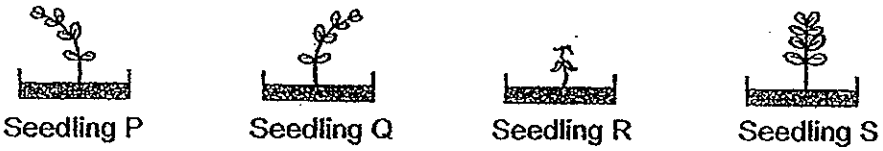
Who has made the correct statement(s) about the leaves of plants?

(1) Caleb only
(2) Dann only
(3) Caleb and Dann only
(4) Benjamin and Dann only

11. Four seedlings were put into four black boxes, A, B, C and D, as shown in the diagrams below.



The diagrams below show the growth of the seedlings two weeks later.



Match seedlings P, Q, R and S to the boxes they were grown in.

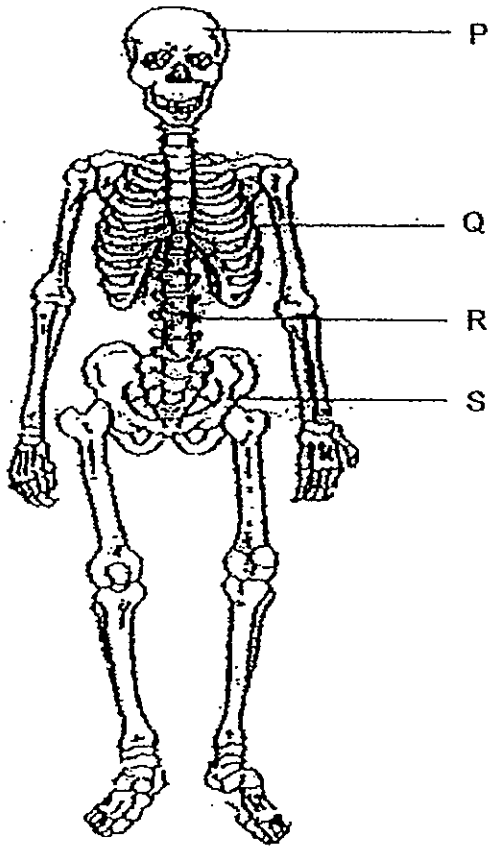
	Box A	Box B	Box C	Box D
(1)	R	P	Q	S
(2)	P	S	R	Q
(3)	S	Q	P	R
(4)	Q	P	S	R

12. Which of the following work together to help us move?

A Skeletal System
B Digestive System
C Muscular System
D Circulatory System

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

13. Study the diagram of the human skeletal system shown below carefully.

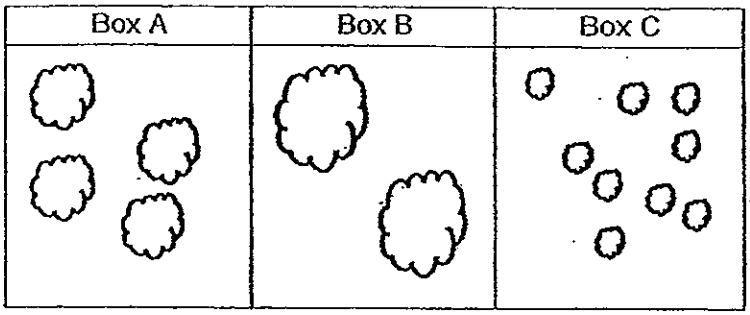


Which of the following statements about this system is/are true?

A P protects the brain.
B Q protects the heart only.
C P, Q, R and S are made up of bones of different shapes and sizes.

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

14. Bits of food were retrieved from a dead animal's mouth, stomach and small intestine. The food was placed into 3 boxes according to their sizes.



Which one of the following shows the correct classification of where the food was retrieved from?

	mouth	stomach	small intestine
(1)	A	B	C
(2)	B	A	C
(3)	C	A	B
(4)	B	C	A

15. When a person is unwell and passes out watery waste, which part of the digestive system is not working well?

(1) Anus
(2) Stomach
(3) Small intestine
(4) Large intestine

16. Rosy was lying on the sofa and eating some snacks while watching television. She suddenly started coughing very hard.

What caused Rosy to cough so hard?

(1) The snacks were too dry and difficult to swallow.
(2) Rosy had eaten too much snacks and had fallen sick.
(3) The snacks had gone down the windpipe and caused her to choke.
(4) The snacks got stuck in the gullet since Rosy was lying down and not sitting upright.

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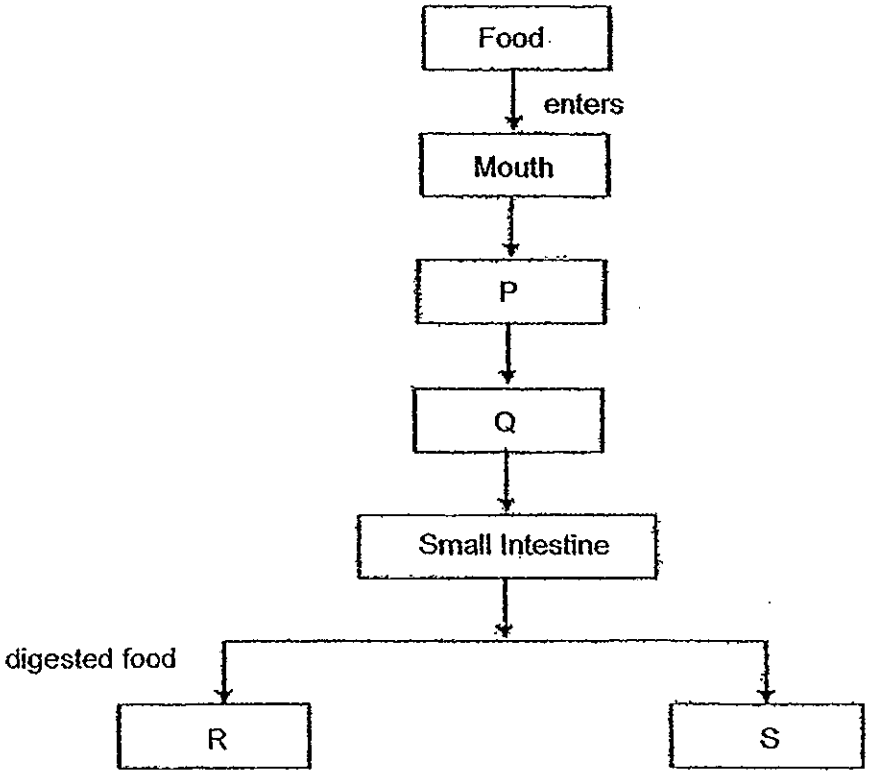
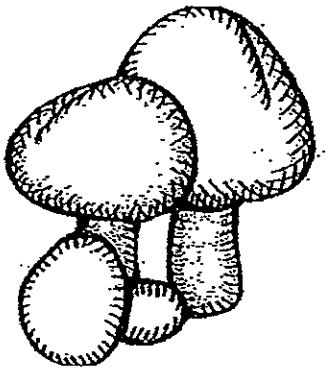
17. The flow chart below shows the path which food travels in the digestive system.



Which of the following does P, Q, R and S represent?

	P	Q	R	S
(1)	Gullet	Stomach	Large intestine	Blood
(2)	Stomach	Gullet	Small intestine	Blood
(3)	Gullet	Large intestine	Blood	Stomach
(4)	Gullet	Stomach	Blood	Large intestine

18. The diagram below shows a mushroom and a fern.



mushroom

fern

What is the similarity between the mushroom and the fern?

(1) Both do not make food.
(2) Both are flowering plants.
(3) Both reproduce from spores.
(4) Both are non-flowering plants.

19. Which of the following objects are obtained from plants?

A Leather bag
B Newspaper
C Rubber band
D Wooden ruler

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

20. Which one of the following pairs is classified under the wrong heading?

	From animals	From the ground
(1)	Fur	Coal
(2)	Silk	Gold
(3)	Wool	Clay
(4)	Rubber	Nylon

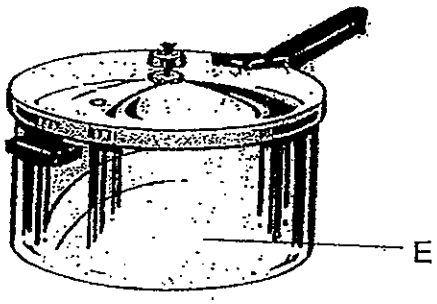
21. Jacob conducted two tests on four different materials. He recorded the results in the table below.

Material	Is it flexible?	Is it waterproof?
A	No	Yes
B	No	No
C	Yes	Yes
D	Yes	No

Which one of the following materials is most suitable for making a garden hose?

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

22. Felicia is going to cook instant noodles for lunch.



Which one of the following materials would not be a suitable choice to make the part labelled E?

(1) Glass
(2) Steel
(3) Wood
(4) Ceramics

23. The table below shows the properties of some objects. Study the table carefully.

Properties	Objects			
	W	X	Y	Z
Sinks easily?	Yes	Yes	Yes	No
Breaks easily?	Yes	No	No	Yes
Gets scratched easily?	No	No	No	Yes
Bends and shapes easily?	No	No	Yes	Yes

Which one of the objects is most likely to be an iron nail?

(1) W
(2) X
(3) Y
(4) Z

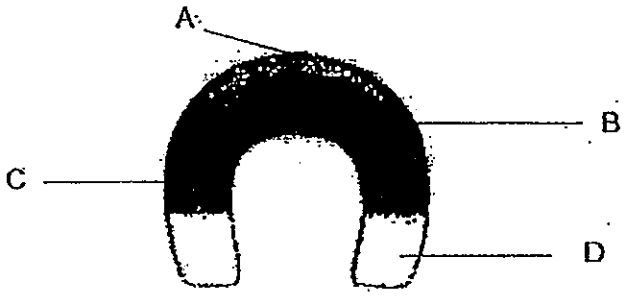
24. Which of the following statements about magnetic force are true?

A Magnetic force can act at a distance.
B Magnetic force can pass through paper.
C Magnetic force is strongest at both the poles of a magnet.
D Magnetic force allows a magnet to attract a piece of cotton.

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

/5

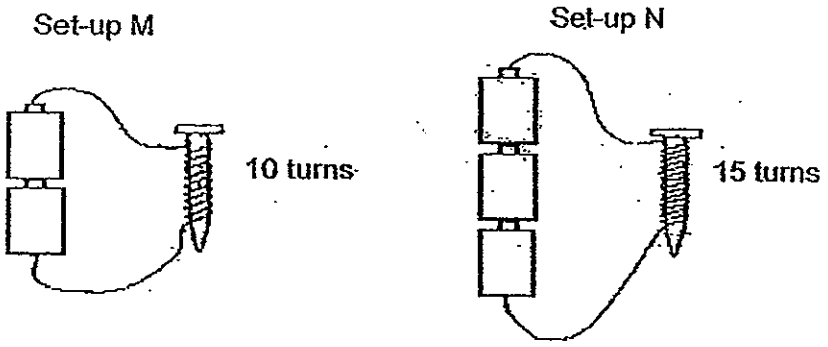
25. The diagram below shows a horseshoe magnet.



If part B of this magnet is able to attract 7 iron nails, which of the following shows the number of nails most likely to be attracted by parts A, C and D of the magnet?

	A	C	D
(1)	3	13	15
(2)	3	15	13
(3)	7	15	13
(4)	7	13	15

26. Look at the two set-ups below.



Which of the following explains why the iron nail in Set-up N is able to attract more paper clips?

A More batteries are used in set-up N.
B The wire in set-up N is longer.
C The wire is coiled more times around the nail in set-up N.

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

27. Which of the following methods will cause a magnet to lose its magnetism?

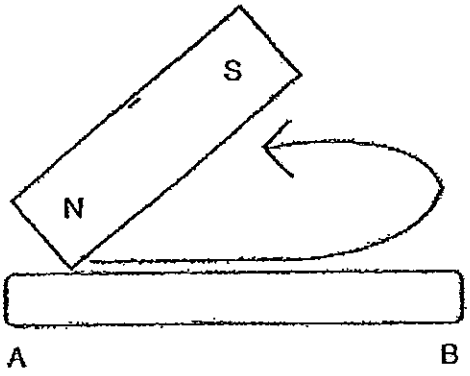
A Heating it for some time
B Dropping it from a height
C Stroking it with a non-magnetic object
D Coiling wires around it and running an electric current through the wire

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

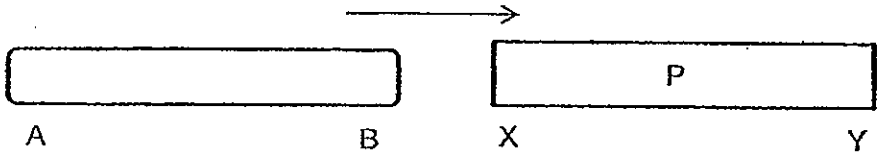
28. Richard dropped his keychain into a drain. To get it out, he made use of a magnet. Why was this possible?

(1) His magnet was very strong.
(2) His magnet has north and south poles.
(3) His keychain was made of a magnetic material.
(4) His keychain was made of a non-magnetic material.

29. Mr Peter magnetised a steel rod using the 'stroke' method as shown below.



When the steel rod is brought near another magnet P, it was pushed away.



What would poles X and Y of magnet P be?

	X	Y
(1)	North	South
(2)	North	North
(3)	South	North
(4)	South	South

30. Russell set up an experiment to find out how three objects, A, B and C, would interact with a magnet. He brought the magnet close to each of the three objects, A, B and C. Russell recorded his observations in the table below.

Object	Observations
A	It moved towards the magnet.
B	It did not move.
C	It moved away from the magnet.

Based on the above observations, which of the following most likely represents objects A, B and C?

	Object A	Object B	Object C
(1)	Aluminium foil	Iron nail	Eraser
(2)	Iron nail	Copper wire	Magnet
(3)	Copper wire	Eraser	Magnet
(4)	Magnet	Aluminium foil	Iron nail

-End of Section A-

CATHOLIC HIGH SCHOOL
PRIMARY 3
SEMESTRAL ASSESSMENT 2
2012

SCIENCE

Name : _____ ( )

Class : Primary 3 _____

Date : 25 October 2012

BOOKLET B

14 Questions
40 Marks

Total Time for Booklets A & B: 1 hour 30 minutes

Instructions to Candidates

Follow all instructions carefully.
Answer all questions.

Score	
Section A	60
Section B	40
Total	100

Parent's Signature:_____

Date: _____

Section B : Open-Ended Questions (40 marks)
Read questions 31 to 44 carefully and write your answers in the space provided. The maximum marks that can be awarded are shown at the end of each question or part-question.

31. John and his brother, Ben, observed the heights of 2 objects over a period of 4 weeks and recorded their findings below.

	Height of Object A / cm	Height of Object B / cm
Week 1	3	8
Week 2	6	8
Week 3	9	8
Week 4	12	8

(a) Which object is most likely a living thing? [1]

_____

(b) Based on the information above, give a reason for your answer in (a)? [1]

_____

(c) What do you think the heights for Objects A and B would be in the 5th week?
Fill in the heights of Objects A and B in the table below.
[1]

	Height of Object A	Height of Object B
Week 5	_____cm	_____cm

3

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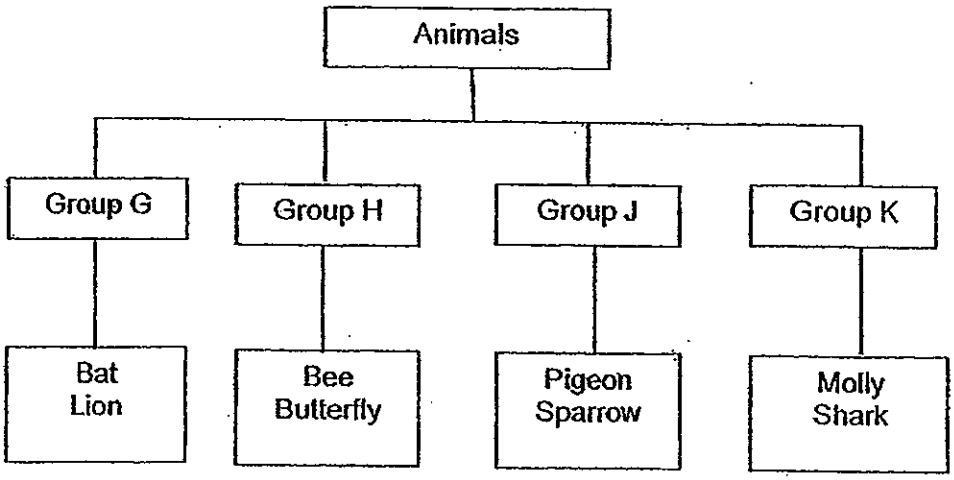
32. Study the following classification table carefully.



(a) Give a suitable heading for each of the groups. [2]

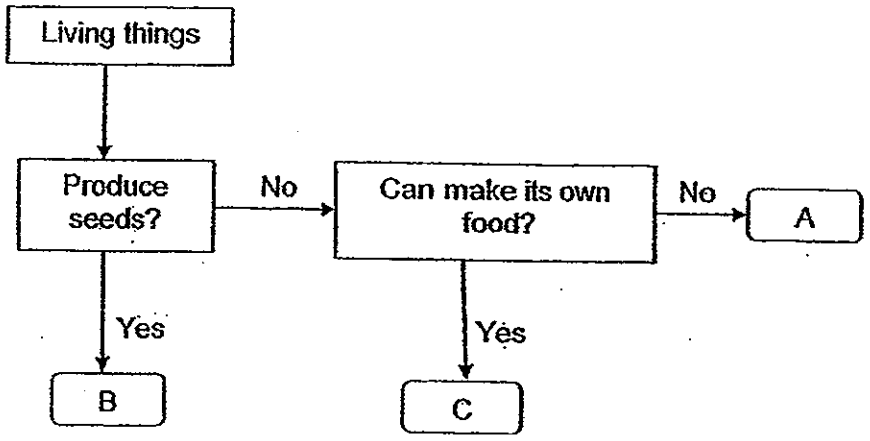
Group	Heading
G	
H	
J	
K	

(b) How do the animals in Group K move? [1]

_____

3

33. Study the flowchart below carefully.



Based on the flowchart above, where would you place the following organisms listed below? Fill in the blanks with the letters A, B or C. [3]

(a) Chilli _____

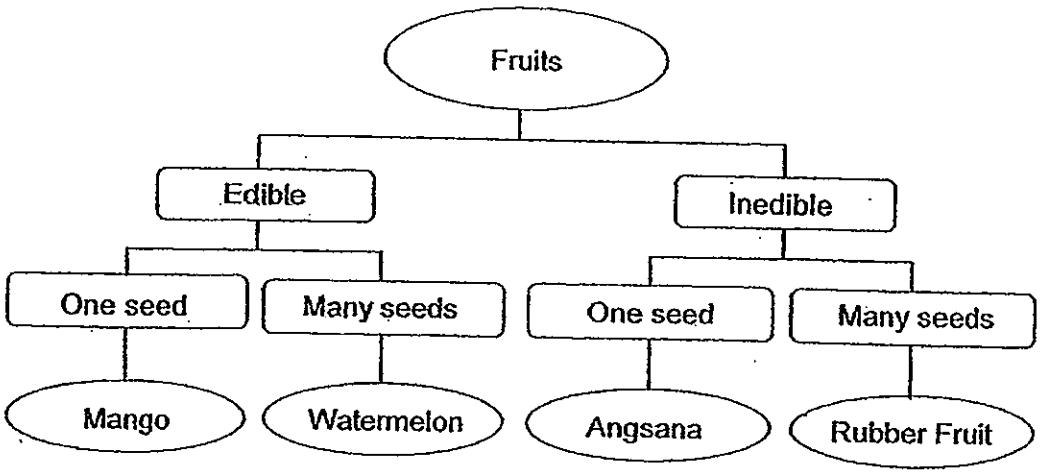
(b) Bird's nest fern _____

(c) Mould _____

3

23

34. The classification table below shows the characteristics of some fruits.



(a) Based on the chart above, list two characteristics of the watermelon.

[2]

(i) _____

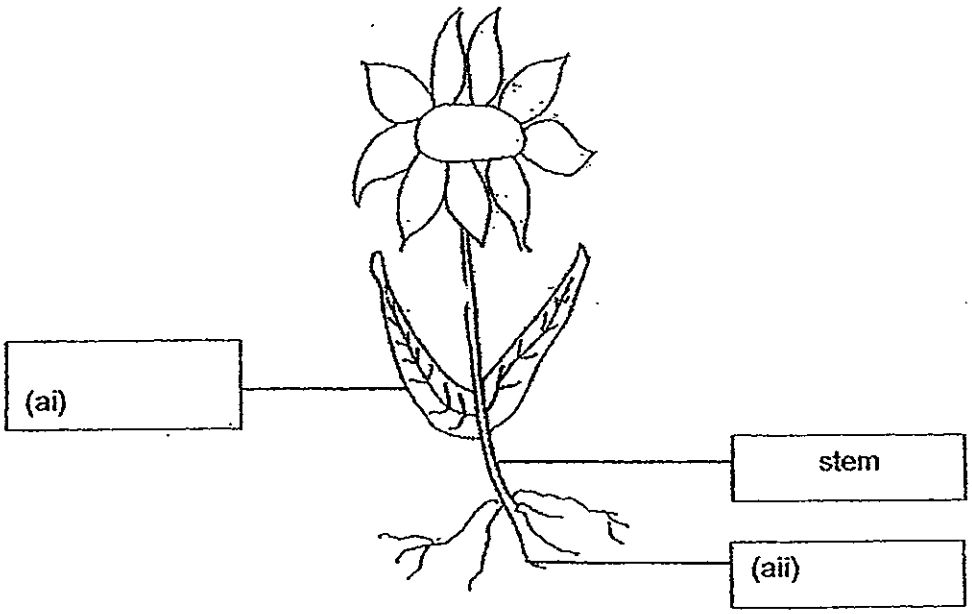
(ii) _____

(b) Which fruit (mango, watermelon, angsana or rubber fruit) should the rambutan be classified with in the chart above? [1]

_____

3

35. Study the diagram below carefully.



(a) Label the two parts of the plant in the diagram above by filling in the boxes. [1]

(b) Choose a part you have identified in (ai) or (aii) and explain why the plant will die if it is removed. [1]

(i) Part: _____

(ii) If removed, the plant will die because

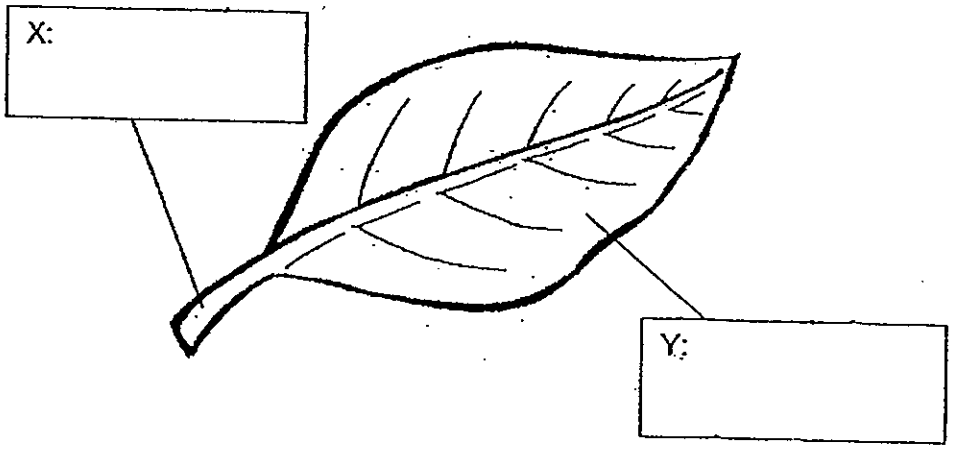
_____

_____

_____

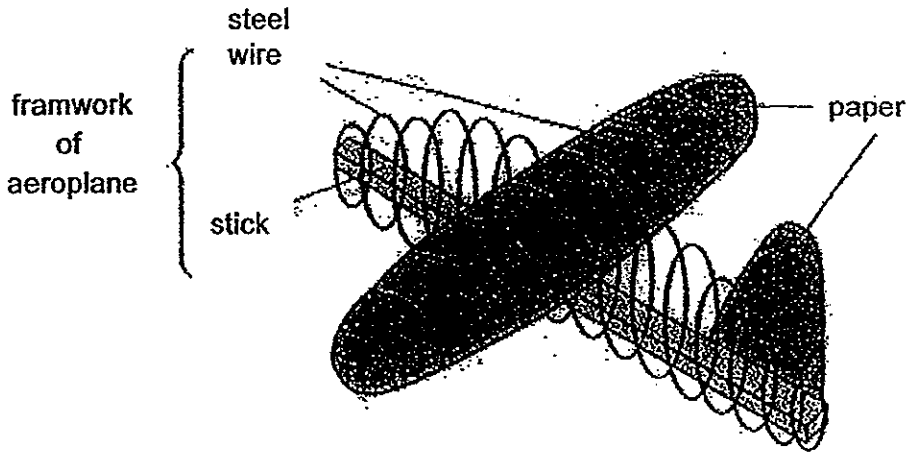
2

35. (c) Identify the parts labelled X and Y [1]



1

36 Irene builds an aeroplane with her father using a stick some steel wires and paper as shown below. Her father tells her that the framework of the aeroplane is the stic and steel wires.



(a) Name the human body system that serves the same function as the framwork of the aeroplane [1]

_____

(b) Based on your answer in (a), state two functions of this human body system [2]

(i) _____

_____

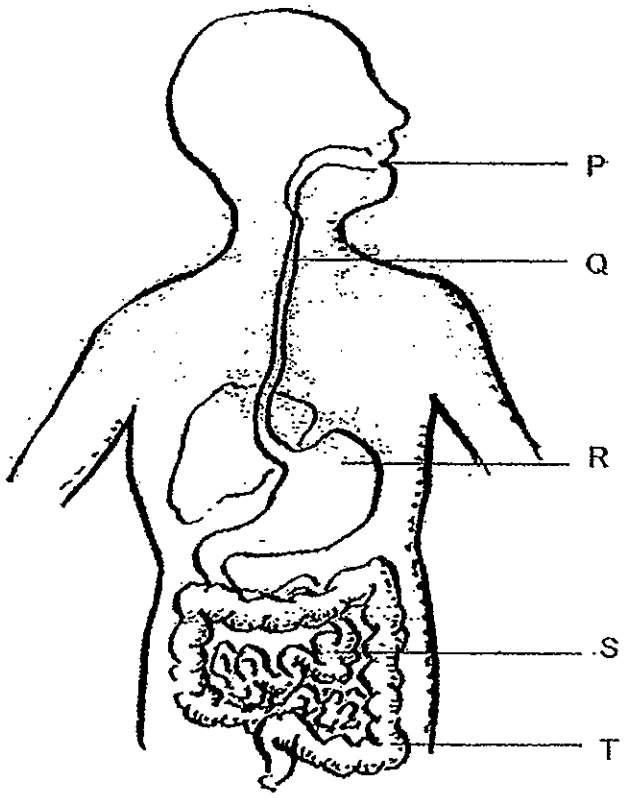
(ii) _____

_____

3

>7

37. The diagram below shows the digestive system of human body.



(a) Which part P, Q, R, S or T connects the mouth to the stomach in the diagram above? [1]

_____

(b) in which part P, Q, R, S or T is digestion completed? [1]

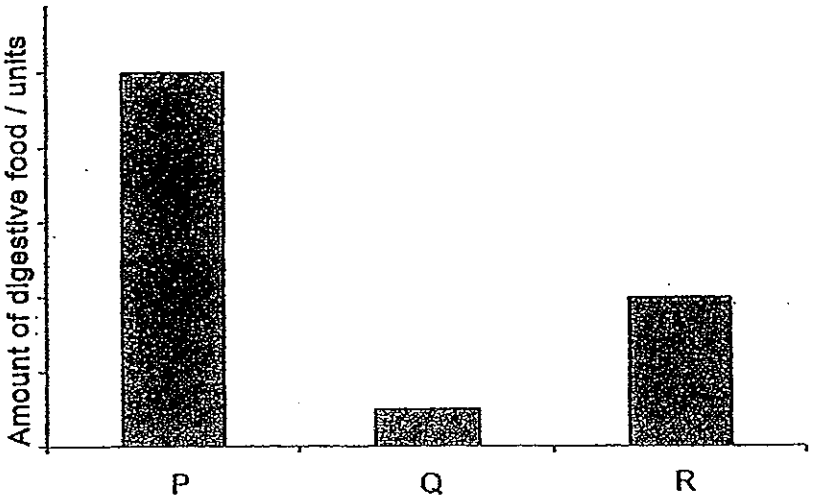
_____

(c) Identify all the parts where there digestive juices. [1]

_____

3

38. Philip ate a sandwich for lunch. The graph below shows the amount of food from the sandwich that is digested at different parts of his digestive system after his lunch.



Use the graph above to answer the following questions.

(a) Match the follwoing parts of the digestive system to the correct lettes P, Q or R. Write the letters in the boxes provided. [1]

Parts	Letter
Mouth	
Stomach	
Small Intestine	

(b) Blood vessels carry blood to and from parts of the digestive system Explain why there are many blood vessels in the walls of the small intestine. [2]

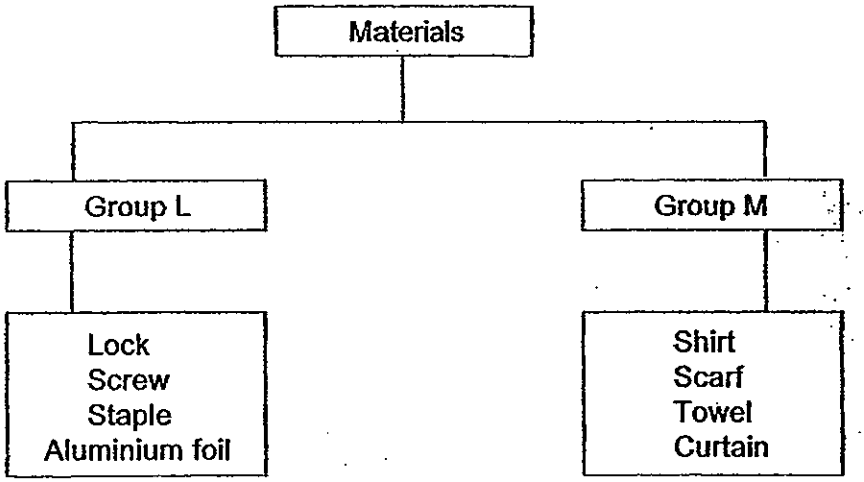
_____

_____

3

29

39. The classification diagram below shows the properties of some materials. Study it carefully.



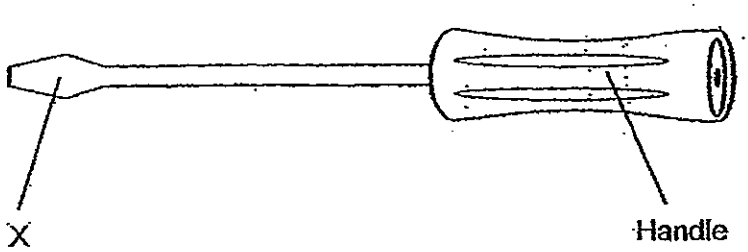
Write a suitable heading for Group L and Group M. [2]

(a) Group L: _____

(b) Group M: _____

2

40. The Diagram below shows a screwdiver.



(a) Give a reason why part X of the screwdiver is made of metal? [1]

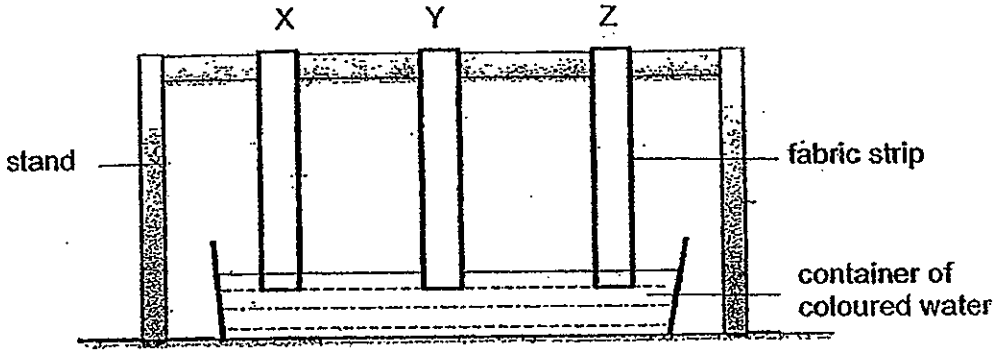
_____

(b) Suggest a material that the handle of the screwdriver can be made of [1]

_____

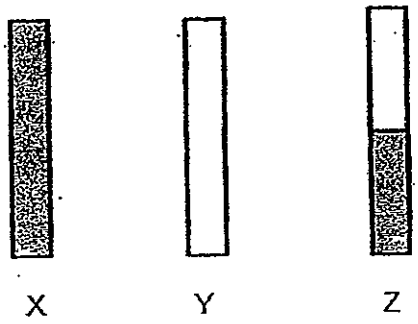
2

41. Nelson carried out an experiment on 3 types of fabrics, X, Y and Z of equal size and thickness, as shown in the diagram below.



He hung each strip of fabric from the stand such that they had their tips dipped into the container of coloured water.

He removed the strips after two hours and recorded his observations as shown in the diagram below.



The shaded parts indicate how much coloured water the fabrics had absorded.

(a) Arrange the fabrics X, Y and Z beginning with the least absorbent to the most absorbent. [1]

_____ , _____ , _____

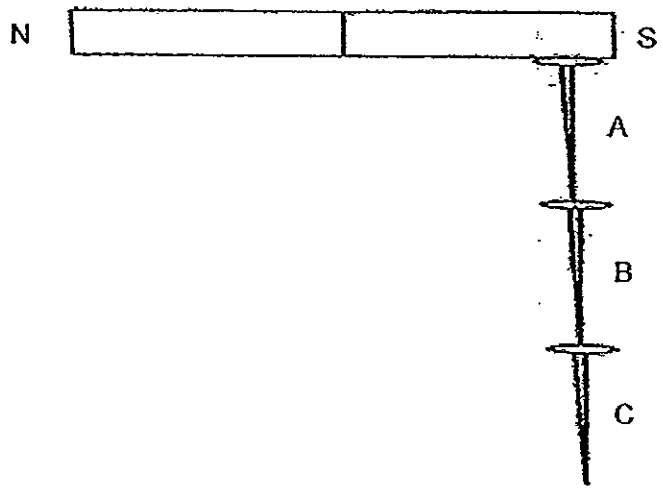
least absorbent ⟶ most absorbent

(b) Which fabric, X, Y or Z, will make a good raincoat? [1]

_____

2

42. A magnet was placed next to some pins. It was observed that the pins were attracted to the magnet as shown in the diagram below.



(a) Why was pin B able to attract pin C? [1]

_____

_____

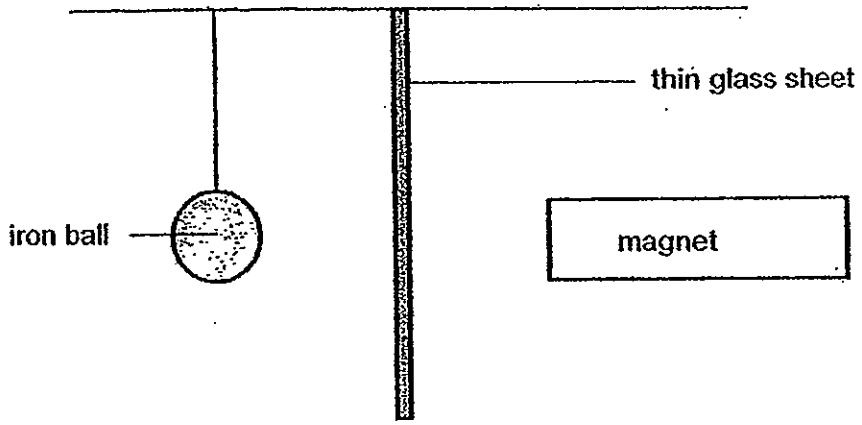
(b) The south pole of another magnet was brought close to the pin C. What would happen to pin C? Why ? [2]

_____

_____

3

43. Nita hung an iron ball from the ceiling. Next, she placed a thin glass sheet as shown in the diagram below.



(a) State what Nita would observe happening to the iron ball when a strong magnet is moved towards the glass sheet. [1]

_____

_____

(b) Explain youw answer in (a). [1]

_____

_____

(c) Nita replaces the glass sheet with an iron sheet and moves the magnet towards the iron sheet. She observes that the iron ball does not move.

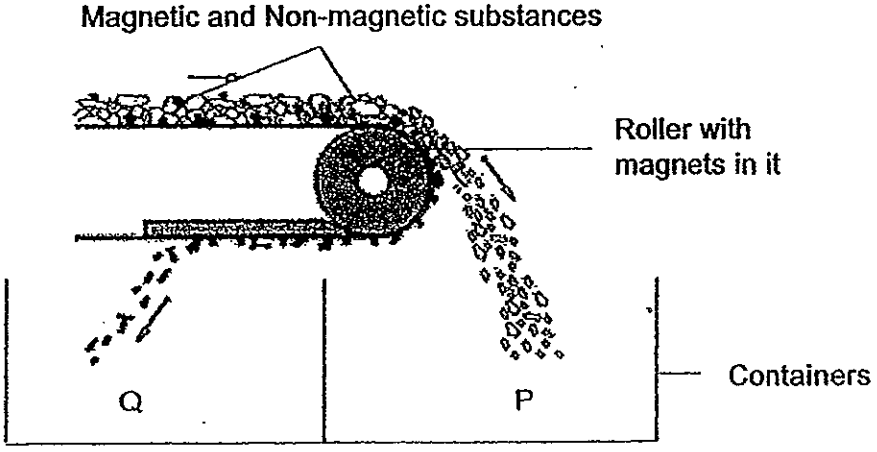
Give a reason for her observation. [1]

_____

_____

3

44. The diagram shows how a magnetic separator is used to get magnetic substances that are useful materials.



(a) The magnetic substances are natural materials found in the ground What could the magnetic substance be ? [1]

_____

(b) Write the letters P and Q in the table below to show where the magnetic and non-magnetic materials will fall into. [1]

Type of materials	Container
Magnetic	
Non-magnetic	

(c) Explain youw answer in (b). [2]

_____

_____

_____

-End of Paper-

4

35

ANSWER SHEET

EXAM PAPER 2012

SCHOOL : CATHOLIC HIGH
SUBJECT : PRIMARY 3 SCIENCE

TERM : SA2

Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9	Q10	Q11	Q12	Q13	Q14	Q15	Q16	Q17
4	4	3	2	2	3	2	4	4	3	3	1	2	2	4	3	4

Q18	Q19	Q20	Q21	Q22	Q23	Q24	Q25	Q26	Q27	Q28	Q29	Q30
3	3	4	3	3	2	3	1	3	1	3	3	2

31)a)Object A.
b)It has grow in height.
c)15cm / 8cm

32)a)G : Mammal
H : Insect
J : Bird
K : Fish
b)They swim.

33)a)B b)C c)A

34)a)i)It is edible ii)It has many seeds.
b)Mango.

35)a)i)leaf ii)root
b)i)leaf ii)It would have no food which is made by the leaf.
c)X : Leaf stalk Y : Leaf blade

36)a)Skeletal system.
b)i)It protects important organs of the body.
ii)It supports the body.

37)a)Q.
b)S.
c)P , R and S.

38)a)Q R P
b)To help absorb digested food more quickly into the blood.

39)a)Group L : Made out of metals.
Group M : Made out of fabric.

40)a)It is strong and hard.
b)Plastic.

41)a)Y , Z , X
b)Y.

42)a)It has became a temporary magnet.
b)It would repel. Like poles repel.

43)a)The iron ball moves towards the glass sheet.
b)The magnetic force of the magnet was able to pass through the glass sheet, which is made out of a non-magnetic material and attract the iron ball, which is made out of a magnetic material.
c)The magnetic force was not able to pass through the iron sheet, which is made of a magnetic material and attract the iron ball.

44)a)Piece of iron and steel.
b)Q P
c)The magnetic materials that fell into container Q were attracted to the magnet in the roller but the non-magnetic materials that fell into container P were not attracted by the magnetic in the roller.