

CATHOLIC HIGH SCHOOL
PRIMARY THREE
SEMESTRAL ASSESSMENT 2
2008

SCIENCE

Name: _____ ()

Class : Primary 3 _____

Date : 8th Oct 2008

BOOKLET A

30 Questions
60 Marks

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

Instructions to Candidates

There is a total of 17 pages in this booklet.

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

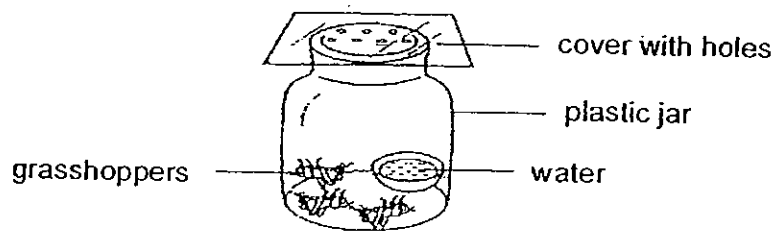
Section A : Multiple Choice Questions (60 marks)

For each question from 1 to 20, 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 of the following is a characteristic of all living things?

- (1) They feed on plants.
- (2) They need sunlight to grow.
- (3) They can grow from young to adult.
- (4) They reproduce by giving birth to their young.

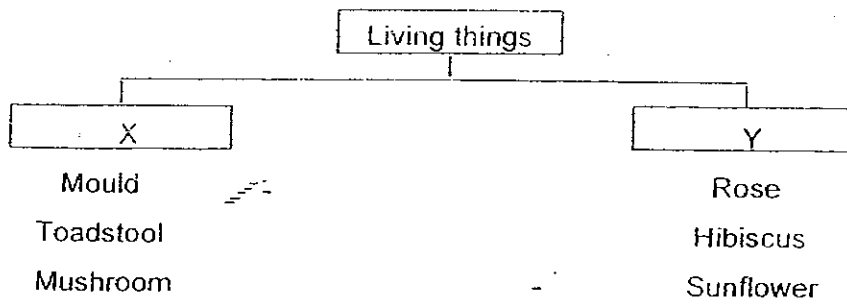
2. Study the diagram below.



Jane put three grasshoppers and water in a plastic jar. She used a cover with some tiny holes to cover the jar. After a few days, the grasshoppers died. What could Jane have done so that the grasshoppers would stay alive?

- (1) Take out two grasshoppers.
- (2) Place the jar in an open field.
- (3) Put some moist soil into the jar.
- (4) Put some grass into the jar every day.

3. Study the classification table below.



Which of the following is the most suitable headings for both X and Y?

	X	Y
(1)	Yeast	Land Plants
(2)	Fungi	Flowering Plants
(3)	Micro-organisms	Flowering Plants
(4)	Micro-organisms	Non-Flowering Plants

4. Study the two animals below.



Eagle



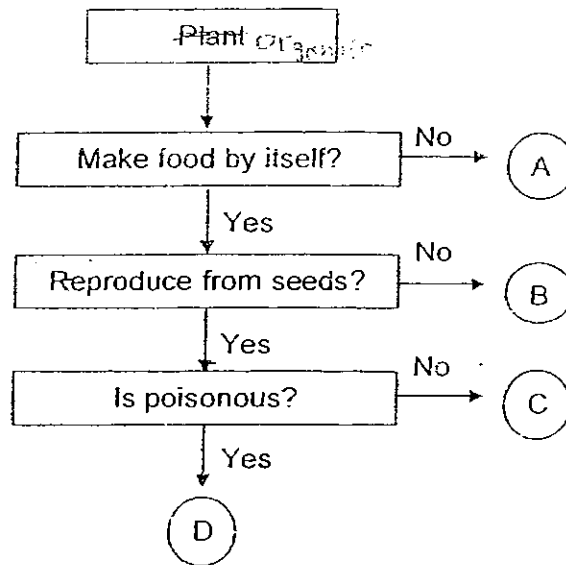
Penguin

How are the two animals different from each other?

- A Their outer coverings
- B The manner in which they move
- C The way they reproduce

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

5. Study the flow chart below.



Which of the following best represents the fern?

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

6. The _____ system of the human body works together with the digestive system by carrying the digested food to the different parts of the body.

- (1) skeletal
- (2) muscular
- (3) circulatory
- (4) respiratory

7. Which of the following is not a system?

(1)



A nose

(2)



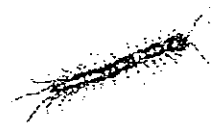
A plant

(3)



A computer

(4)



A centipede

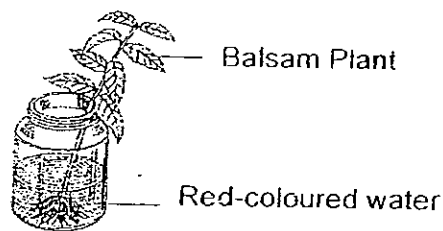
8. Which of the following options under the headings is classified wrongly?

	Digestive System	Respiratory System
(1)	Gullet	Heart
(2)	Mouth	Lungs
(3)	Large intestine	Muscles <i>Skull</i>
(4)	Small intestine	Nose

9. How does the transport system of a plant and the circulatory system of a human being differ?

	Plant Transport System	Human Circulatory System
(1)	Has only one tube	Have many tubes
(2)	Does not have a heart	Has a heart
(3)	Transports many substances	Transports only one substance
(4)	Works only when there is sunlight	Works all the time

10. In the experiment below, Bryan puts a balsam plant into a beaker of red coloured water. A few days later, he observes that some parts of the plant have turned red.



Which of the following statements explain(s) his observation?

- A The roots of the plant absorbed the water.
 - B The leaves of the plant transport the water to the roots.
 - C The water-carrying tubes of the plant transport the water to the leaves.
 - D The food-carrying tubes of the plant transport the water to the leaves.
- (1) A only
(2) A and B only
(3) A and C only
(4) A, C and D only

11. Study the statements about a plant below.

- A It is a plant part.
- B It carries food made by the leaves to the rest of the plant.
- C It carries water and mineral salts from the roots to the rest of the plant.
- D It holds the leaves and enables them to reach for sunlight which is needed for making food.

Which of the following is the correct plant part?

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

12. Peter is cycling to work as shown below.



Which of the following system(s) in his body is he using?

- A Skeletal
 - B Muscular
 - C Digestive
-
- (1) A only
 - (2) A and B only
 - (3) A and C only
 - (4) B and C only

13. Which of the following statement(s) about the human digestive system is/are true?

- A The saliva in the mouth digests all types of food completely.
- B The small intestine is longer and narrower than the large intestine.
- C Undigested food passes through the wall of the gullet and gets into the bloodstream.
- D If undigested food is held too long in the large intestine, watery waste will be passed out.

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

14. We have different types of teeth, incisors, premolars and molars.



How do teeth help in digestion?

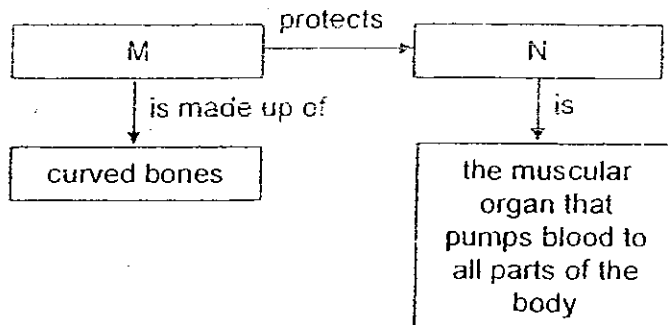
- (1) They produce digestive juices.
- (2) They protect our digestive organs.
- (3) They break down food into simpler substances.
- (4) They tear, cut, crush or grind food into smaller pieces.

15. What are the functions of the human skeletal system?

- A To maintain the shape of the body.
- B To protect the key internal organs such as the heart and brain.
- C To enable movement by working together with the muscular system.
- D To allow the brain to receive the information collected by the sense organs.

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

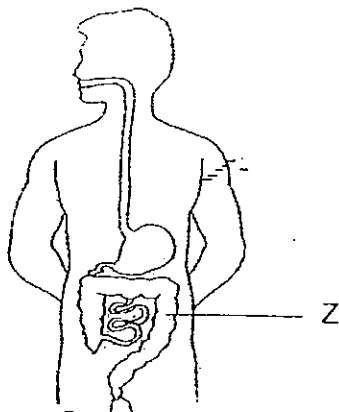
16. Study the concept map below.



Which of the following is the most suitable headings for both M and N?

	M	N
(1)	Skull	Brain
(2)	Pelvis	Heart
(3)	Ribcage	Brain
(4)	Ribcage	Heart

The diagram below shows the human digestive system. Use the diagram to answer Q17.



17. What happens at the part labelled Z?

- (1) Digestion is completed.
- (2) Digested food is stored.
- (3) Excess water is absorbed.
- (4) Digested food is absorbed.

18. Which of the following statements about the small intestine in the human digestive system are true?

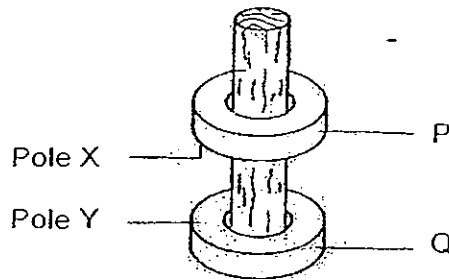
- A Digestion is completed in the small intestine.
- B Mineral salts are removed in the small intestine. ✓
- C Most of the water is removed in the small intestine. ✓
- D Digested food is absorbed through the walls of the small intestine and into the bloodstream. ✓

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

19. Which of the following objects would not be attracted by a magnet?

- (1) Needle
- (2) Safety Pin
- (3) Paper Clip
- (4) Aluminum Foil

20. Study the diagram below.

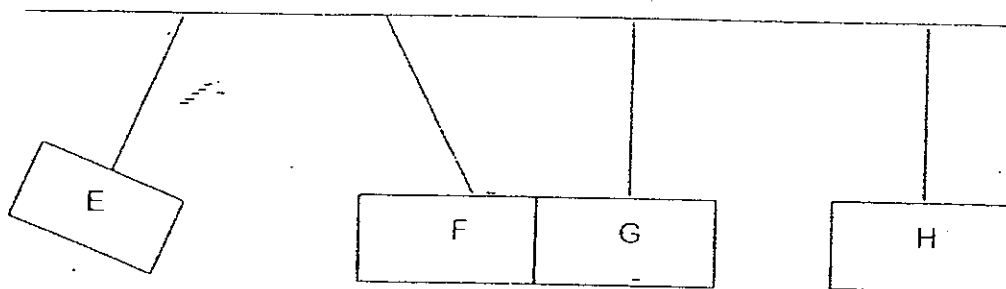


For Magnet P to float above Magnet Q, what can poles X and Y be?

	Pole X	Pole Y
A	N-pole	N-pole
B	N-pole	S-pole
C	S-pole	N-pole
D	S-pole	S-pole

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

21. The diagram below shows what happened when 4 bars of different Materials, E, F, G and H were suspended next to one another.

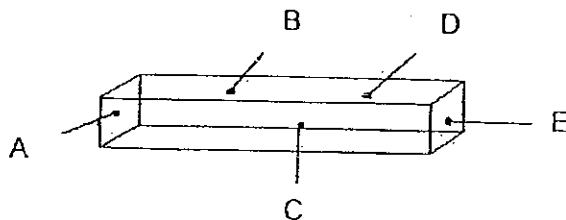


Which of the following statements about the four bars is/are true?

- A E is a non-magnet.
- B F is a magnet.
- C G is magnetic.
- D H is non-magnetic.

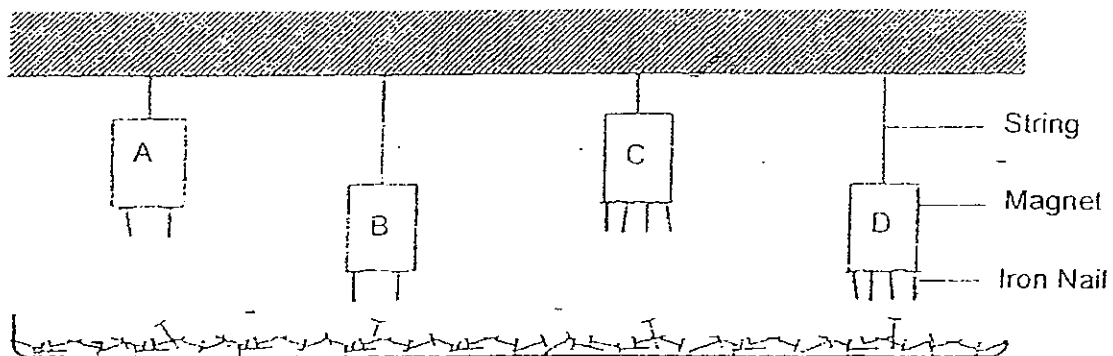
- (1) B only
- (2) A and C only
- (3) B and D only
- (4) B, C and D only

22. Which parts of the magnet shown below can attract the most nails?



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

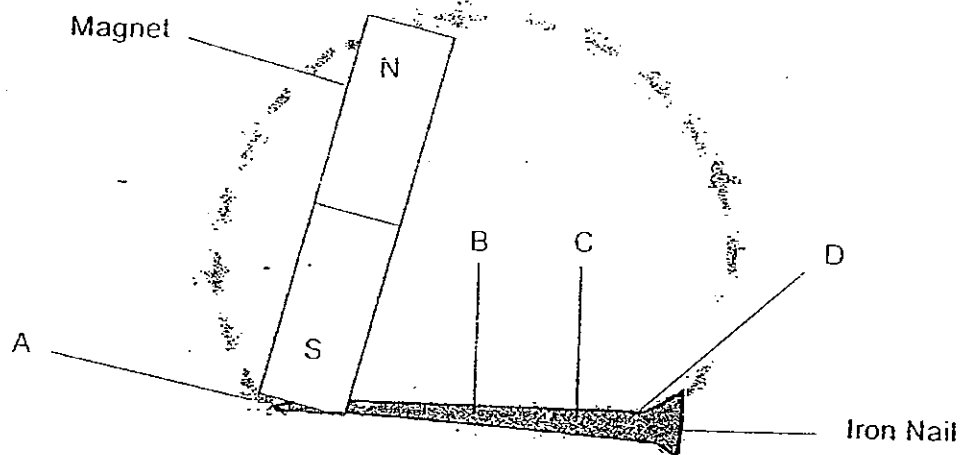
23. Ken hung four different magnets, A, B, C and D above a tray of iron nails. The magnets were hung at different distances above the tray. The diagram below shows the number of iron nails that were attracted by each magnet.



Which of the magnets has the strongest magnetic strength?

- (1) A
(2) B
(3) C
(4) D
24. What are the use(s) of a magnet?
- A To separate iron filings from sand.
B To hold a piece of paper onto a magnetic board.
C To keep the door of a refrigerator tightly closed.
- (1) A only
(2) C only
(3) B and C only
(4) A, B and C

25. An iron nail was magnetised using the method as shown in the diagram below.



Which part of the iron nail would the N-pole be?

- (1) A
 - (2) B
 - (3) C
 - (4) D
26. Gary says, "Material X can scratch Material Y but Material Y cannot scratch Material X."
What can you conclude from Gary's statement?
- (1) X is harder than Y.
 - (2) X is stronger than Y.
 - (3) X is more flexible than Y.
 - (4) X can float but Y sinks in water.

27. Which of the following options under the headings is classified wrongly?

	From the ground	From animals
(1)	coai	wool
(2)	clay	fur
(3)	plastic	nylon
(4)	gold	silk

28. Which of the following objects is made of only one material?

- (1) Nail
- (2) Shoe
- (3) Pencil
- (4) Computer

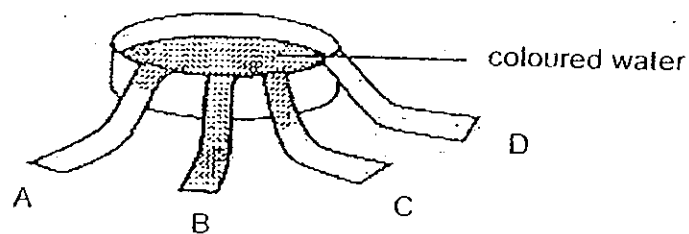
29. Study the statements about an object below.

- A It is waterproof.
- B It breaks easily.
- C It feels smooth when I touch it.

Which of the following is the object most likely to be?

- (1) Coin
- (2) Tree branch
- (3) Handkerchief
- (4) Porcelain plate

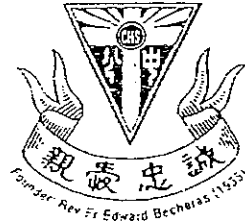
30. There are four different materials, A, B, C and D. Jason cut a strip from each material. Each strip had an equal size. He then placed one end of each strip into a dish half-filled with some coloured water. The diagram below shows the results at the end of the experiment.



Which one of the four materials is the most suitable to make raincoats?

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

- End of Section A-



CATHOLIC HIGH SCHOOL
PRIMARY THREE
SEMESTRAL ASSESSMENT 2
2008

SCIENCE

Name: _____ ()

Class : Primary 3 _____

Date : 8th Oct 2008

BOOKLET B

16 Questions
40 Marks

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

Instructions to Candidates

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

Parent's Signature: _____

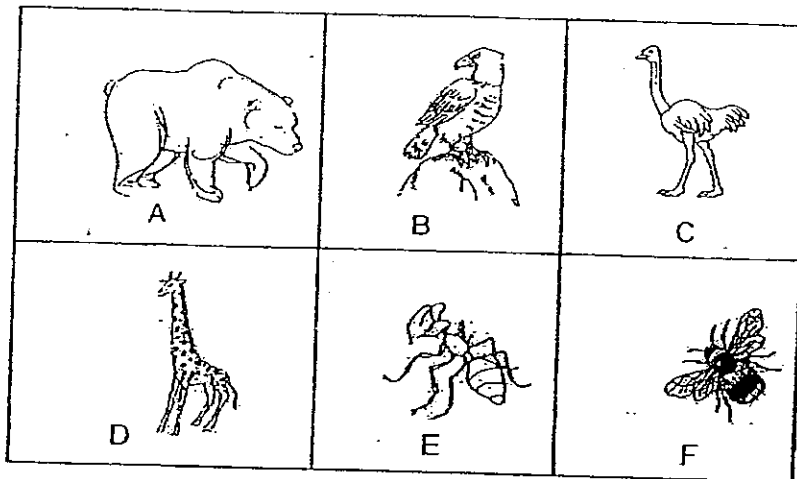
Date: _____

Score	
Section A	60
Section B	40
Total	100

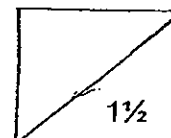
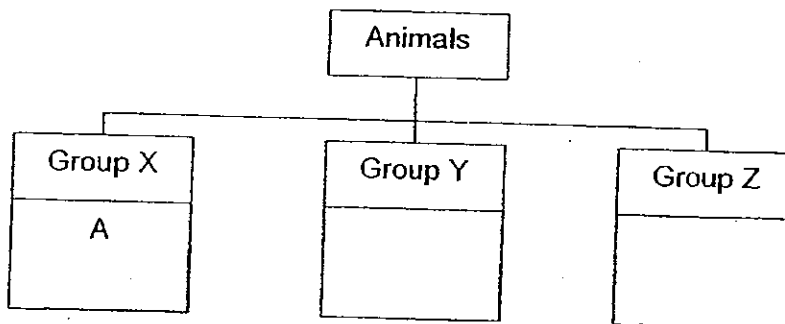
Section B : Open-Ended Questions (40 marks)

Read the following questions carefully and write your answers in the space provided. The maximum marks that can be awarded is shown at the end of each question or part-question.

31. Margaret drew some animals in her sketch book. To organize them, she decided to group them.



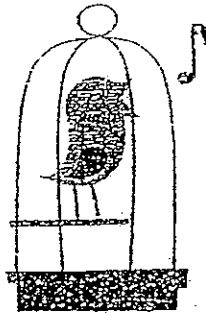
- (a) Classify the animals B, C, D and E into the classification table below. A has been classified for you. Each group can only have 2 animals. [1 ½]



- (b) Give a suitable heading for each of the following groups. [1½]

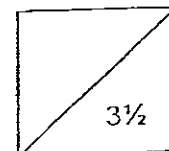
Group X	
Group Y	
Group Z	

32. Rina bought a pet bird and put it into a cage.

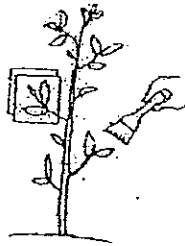


- (a) What are the things Rina should put into the cage to ensure that the bird stays alive? [1]

- (b) When Rina tried to catch the bird with her hands, it flew away. Which two characteristics of living things was the bird showing? [1]



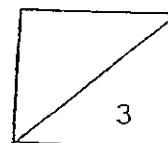
33. Diana conducted an experiment on a green plant. She covered two leaves, both on the upper and lower surfaces of the leaves, with cardboards. She smeared another two leaves, both on the upper and lower surfaces of the leaves, with a thick layer of oil. Five days later, she observed that all the four leaves had wilted.



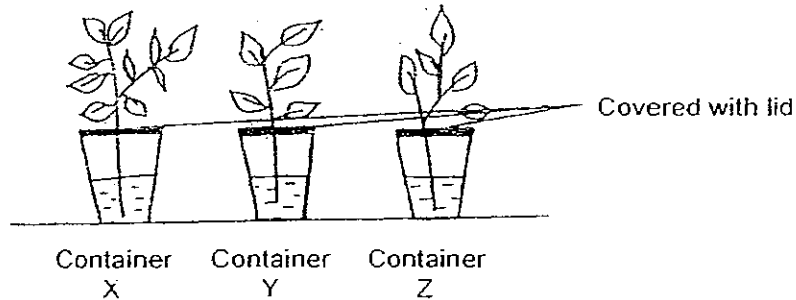
- (a) Why did the two leaves that were covered with cardboards die? [1]

- (b) Why did the two leaves that were smeared with oil die? [1]

- (c) From this experiment, what conclusion can Diana make about plants? [1]



34. Three types of plants were placed into three covered identical containers X, Y and Z, which were filled with 200ml of water each.



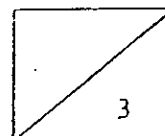
The volume of water in each container was recorded on the 5th day as shown in the table below.

Container	Volume of water / ml	
	Day 1	Day 5
X	200	181
Y	200	176
Z	200	200

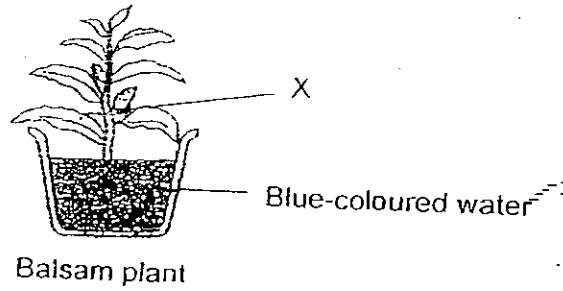
- (a) Which one of the following containers, X, Y or Z, contained a plastic plant? [1]

- (b) Explain why the water level in containers X and Y decreased after five days. [1]

- (c) From this experiment, what can we conclude about the needs of a living thing? [1]

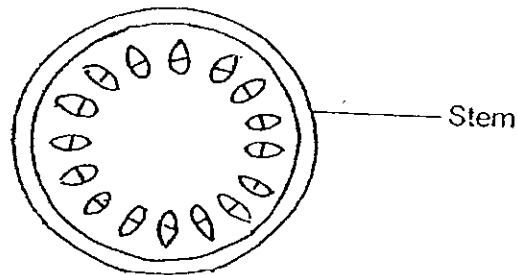


35. Joel put some blue food colouring into a jar of water. He then put a balsam plant into the jar for two days.

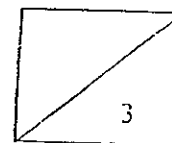


- (a) What can Joel observe about the stem and the leaves two days later? [1]

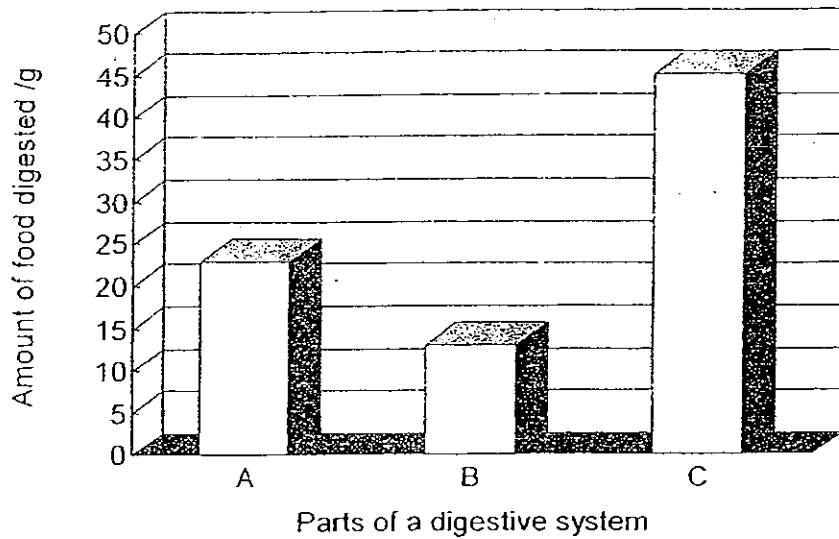
- (b) Shade the parts that will appear blue on the diagram of the cross-section of the stem below. [1]



- (c) What does this experiment tell us about the function of the stems of plants? [1]

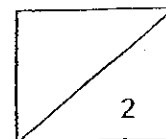


36. Jeremiah ate 50 grams of food during his recess. The graph below shows the amount of food digested by three different parts A, B and C of his digestive system.

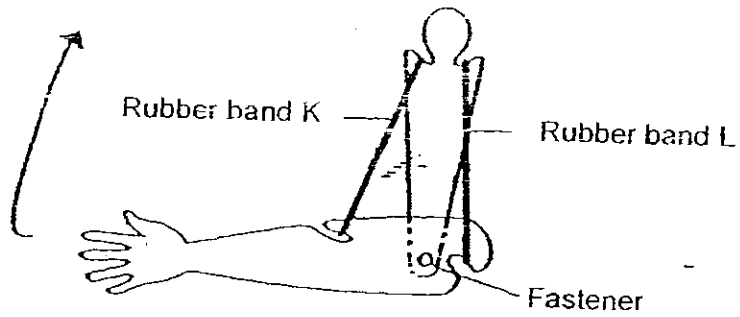


- (a) From the graph, in which part of the digestive system does most digestion takes place? [1]

- (b) Which part of the digestive system does your answer in (a) belong to? [1]

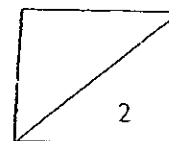


37. Kate made a model of an arm as shown in the diagram below.

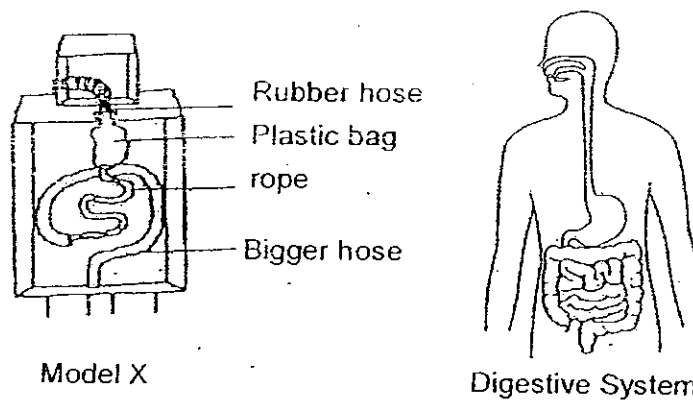


(a) Which human system does the above model represent? [1]

(b) What happens to rubber bands K and L when Karen lifts the model hand upwards? [1]

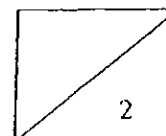


38. Randy used some recycled materials to make a model, X, as shown below, to represent parts of the digestive system.

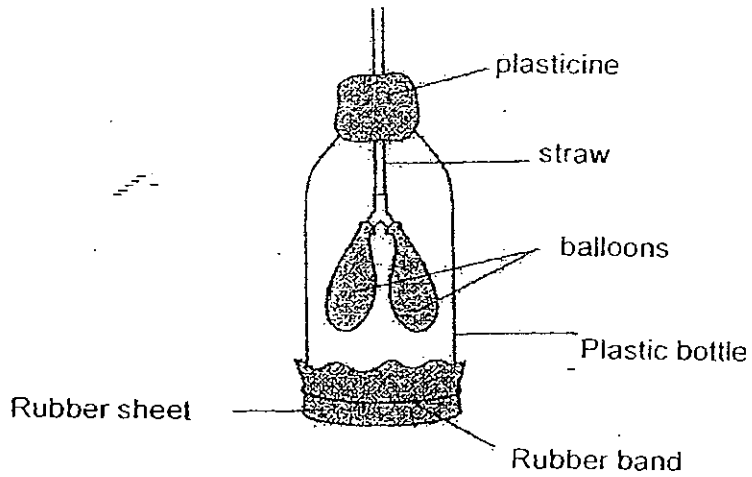


By comparing Model X with the digestive system, name the parts of the digestive system represented by each of the recycled materials used. [2]

	Scrap material	Part of the digestive system
(a)	Plastic bag	
(b)	Bigger hose	



39. David set up a model to represent the human respiratory system, as shown below.

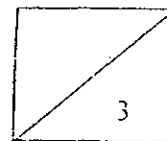


- (a) Name the organs which are represented by the following in the model. [2]

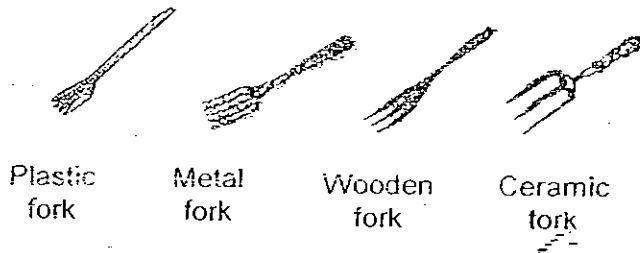
(i) straw _____

(ii) balloons _____

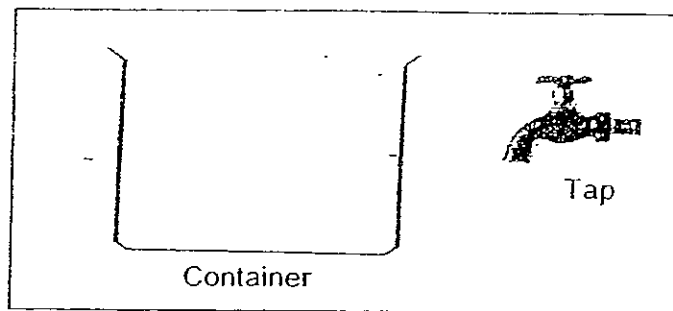
- (b) Explain the function of the human respiratory system. [1]



40. Amanda had some forks of different sizes made of different materials.



She wanted to find out if the different forks float or sink in water. She was given the following items.

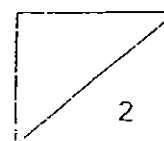


(a) List the second step she should take to find out which fork would sink or float. [1]

Step 1 She should turn on the tap and let the water flow into the container.

Step 2 _____

(b) Amanda's Science teacher said that the test was not fair. What must she do to ensure that it was a fair test? [1]

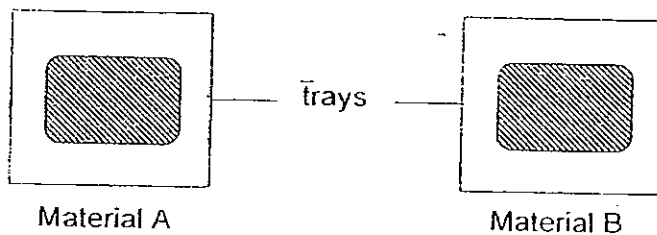


41. In an experiment conducted, two materials A and B are tested to find out which material absorbs more water. The following steps were taken to carry out the experiment.

- Step 1 Materials A and B are each placed in a similar tray.
Step 2 Equal amounts of red ink are poured onto each material until the ink covers them.
Step 3 After 5 minutes, both materials A and B are examined.

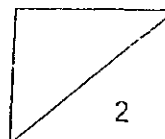
Upon examining the materials A and B, the following observations were made.

- Observation 1 Material A was relatively dry. Only a few droplets of red ink could be seen. Upon shaking, these droplets could roll off.
Observation 2 Material B was wet and completely red. It had gone soft. Upon shaking, some droplets of ink could be shaken off.



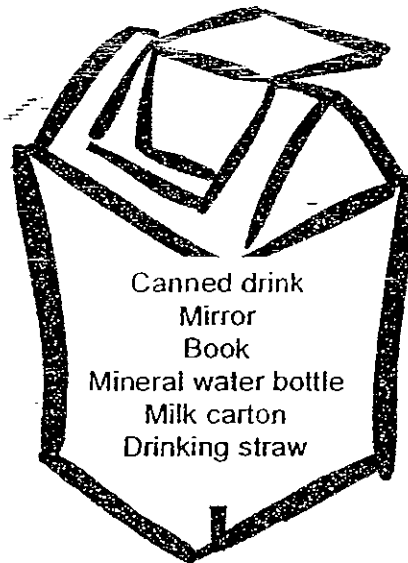
- (a) Which material do you think is more suitable to be made into tissue paper? [1]

- (b) State a reason for your answer in (a). [1]



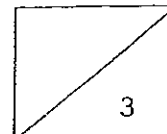
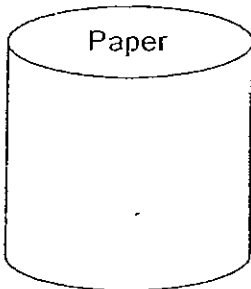
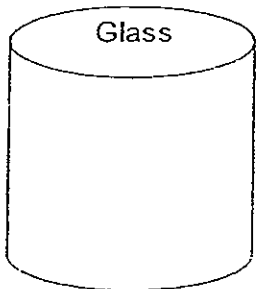
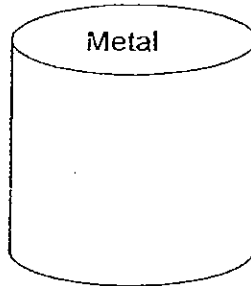
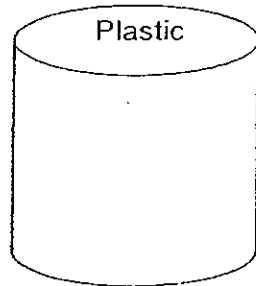
42. In a Science lesson, Maria learnt that before waste could be recycled, the waste must first be sorted into groups according to the materials they are made of.

Below is a list of things that Maria found in the recycling bin.

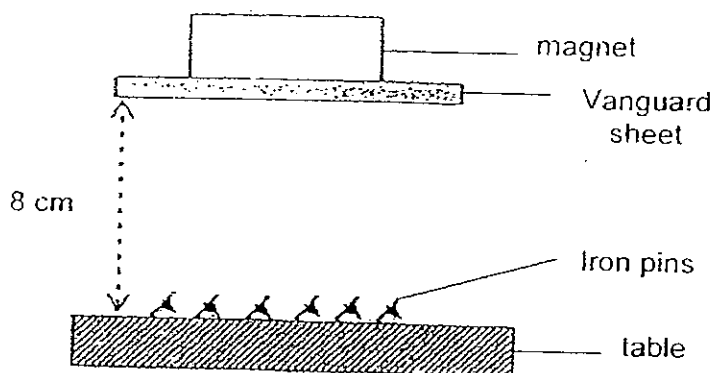


Recycling Bin

Based on the materials they are made of, place the items listed above in the correct groups below. [3]



43. Claudia pasted a piece of vanguard sheet under a magnet and placed them above 6 iron pins as shown below. He lowered the magnet to a height of 8 cm above the table. He then recorded the number of pins that were attracted by the magnet.

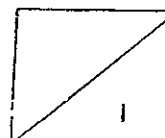


He repeated the experiment using 2, 3 and 4 pieces of vanguard sheets respectively and lowered the magnet to the same height.

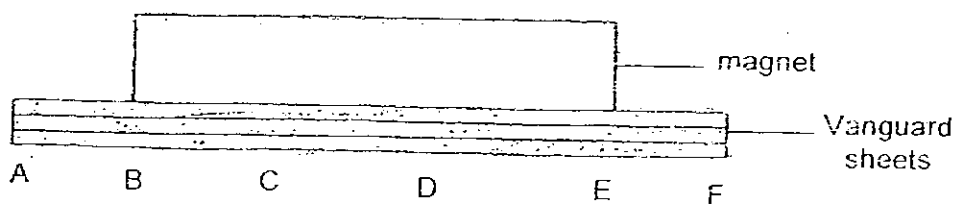
The result is shown in the table below.

Number of vanguard sheets	Number of iron pins attracted
1	6
2	5
3	2
4	0

- (a) What was the aim of Claudia's experiment? [1]

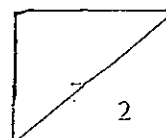


(b) When 3 vanguard sheets were used, 2 metal pins were attracted.

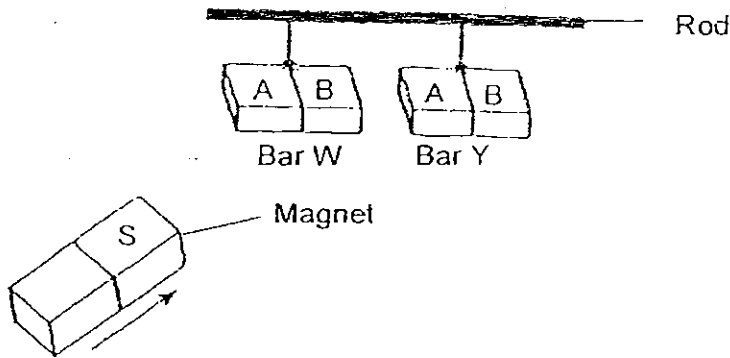


Using the diagram above, at which 2 positions (A, B, C, D, E or F) would the iron pins most likely to be found under the vanguard sheet? Why?

[2]



44. Alan has two metal bars W and Y. He hung the two bars onto a rod as shown below. He labeled the ends of each A and B. He then brought the south-seeking pole of a magnet near the ends of each bar.



He observed what happened to each bar and recorded the results as shown in the table below.

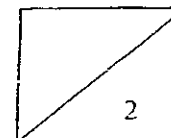
Bars	What happened between	
	Magnet and A	Magnet and B
W	Attracted	Attracted
Y	Nothing happened	Nothing happened

- (a) Give an example of the material that each bar is made from. [1]

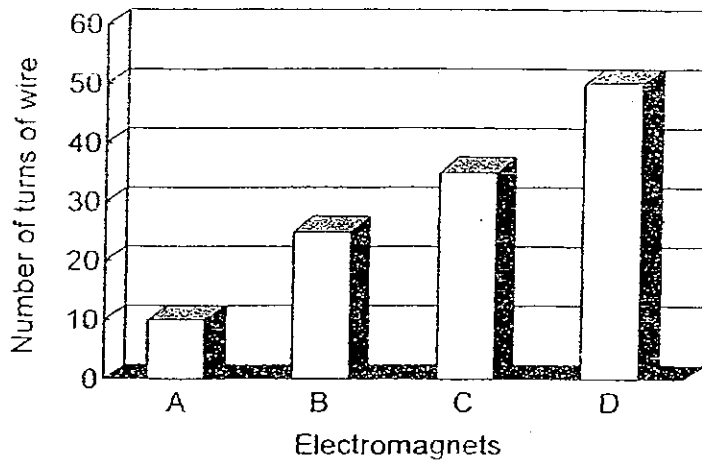
W _____

Y _____

- (b) State one method how Bar W can be magnetised? [1]

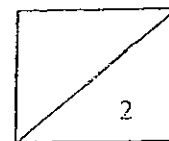


45. The graph below shows the number of turns of wire needed to produce an electromagnet of different strengths.

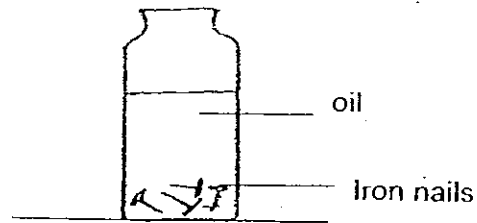


- (a) How many turns of the wire are needed to make electromagnet B? [1]

- (b) From the graph above, how does the number of turns of wire affect the strength of a magnet? [1]



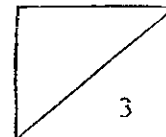
46. Look at the diagram below. Belle wants to take out some iron nails from the glass jar without touching or pouring away the oil.



- (a) What can Belle use to enable her to take the iron nails out from the jar? [1]

- (b) Describe how she could use her answer in (a) to take the iron nails out from the jar. [1]

- (c) Why was she able to do so? [1]



- End Of Paper -

ANSWER SHEET

EXAM PAPER 2008

SCHOOL : CATHOLIC HIGH PRIMARY SCHOOL
SUBJECT : PRIMARY 3 SCIENCE

TERM : SA 2

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

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

- 31)a) X= A,D Y= E,F Z= B,C
b) X= Mammals Y= Insects Z= Birds

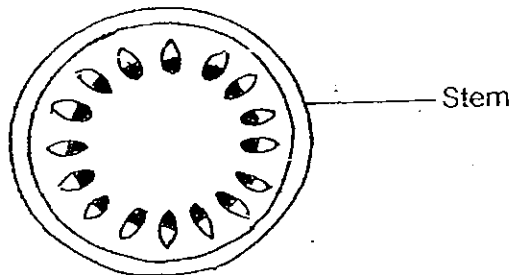
- 32)a) Water and food.
b) They respond to changes around them.

- 33)a) The cardboard blocked sunlight from reaching the leaves so they could not make food and died.
b) They could not get air.
c) Plants need sunlight and air to survive.

- 34)a) Z
b) The roots absorb water for the plants.
c) A living thing needs water to live.

- 35)a) They are blue in colour.

b)



- 35)c)The stems of plants transport water from the roots to the leaves and other parts of the plants.
- 36)a)C b)Stomach
- 37)a)Muscular system
b)K contracts and L relaxes.
- 38)a)Stomach b)Large intestine
- 39)a)i)Windpipe ii)Lung
b)It enables the exchange of gases with the surroundings.
- 40)a)2)Place all the forks into the container.
b)The fork must be of the same sizes.
- 41)a)Material B
b)Material B can absorb more water than Material A.
- 42)Plastic – Mineral water bottle
Metal – Canned drink
Glass -- Mirror
Paper – Book, Milk carton
- 43)a)It was to find out how the number of vanguard sheets affects the number of iron pins attracted.
b)B and E. They are the poles.
- 44)a)W= Steel Y= Gold
b)Stroke Bar W in the same direction with one pole of a magnet.

45)a)25 turns

b)The more the number of turns of the wire, the greater is the strength of a magnet.

46)a)She can use a magnet.

b)She should put a magnet on the side of the jar and slowly move the magnet to the brim of the jar. The iron nails will move with the magnet.

c)Magnetism can pass through glass and oil.