



南洋小學

NANYANG PRIMARY SCHOOL

PRIMARY THREE SCIENCE

SEMESTRAL ASSESSMENT 2

2010

BOOKLET A

Date : 29th October 2010

Duration : 1 h 45 min

Name : _____

Class: Primary _____

Marks Scored:

Booklet A:		60
Booklet B :		40
Total :		100

Parent's signature: _____

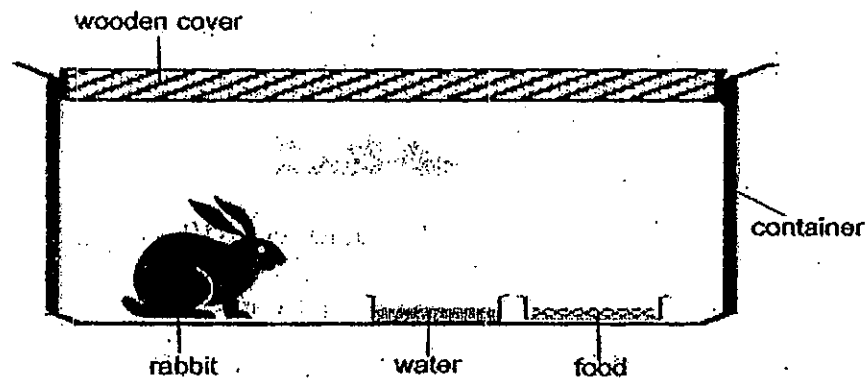
DO NOT OPEN THIS BOOKLET UNTIL YOU ARE TOLD TO DO SO.
FOLLOW ALL INSTRUCTIONS CAREFULLY.

Booklet A consists of 23 printed pages including this cover page.

Section A (30 x 2 marks = 60 marks)

For each question from 1 to 30, 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 provided.

1. The diagram below shows Lily's pet rabbit in a sealed container.



A few days later, Lily found her pet rabbit dead. Which of the following is most likely the reason that caused her pet rabbit to die?

- (1) The rabbit did not reproduce in the container.
- (2) The rabbit did not have enough air in the container.
- (3) The rabbit did not have enough food in the container.
- (4) The rabbit did not have enough space in the container.

2...The table below gives some information on organisms V, W, X, Y and Z.

	Organisms				
	V	W	X	Y	Z
Is it able to move on its own?	Yes	Yes	Yes	No	No
Does it feed on other plants or animal?	Yes	Yes	Yes	Yes	No
Does it lay eggs?	Yes	Yes	No	No	No
Is it a mammal?	Yes	No	Yes	No	No

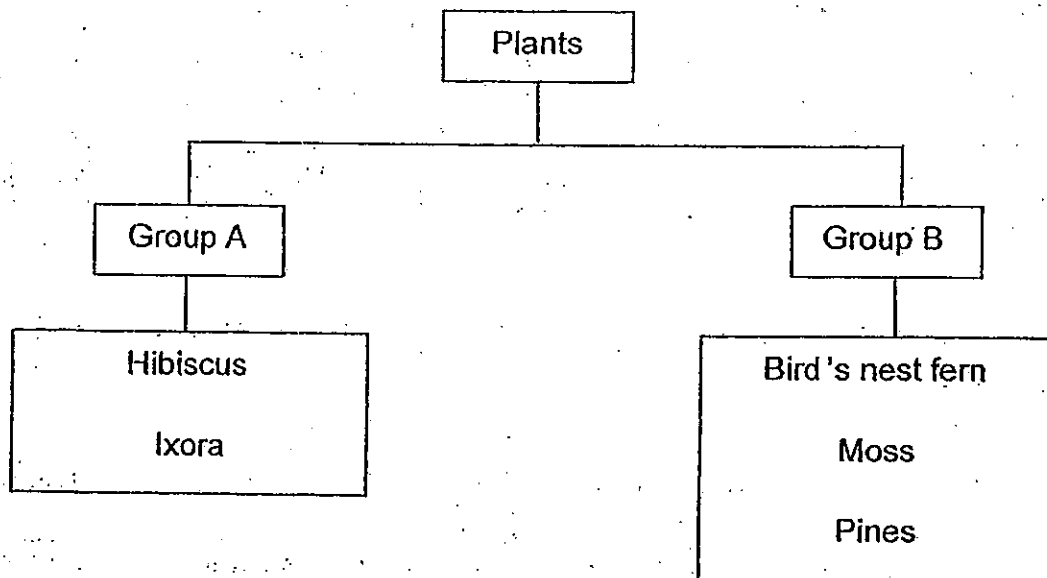
Which of the organisms in the table below correctly represents V, W, X, Y and Z?

	V	W	X	Y	Z
(1)	Dolphin	Mosquitos	Spiny anteater	Hibiscus	Toadstool
(2)	Dragonfly	Dolphin	Platypus	Allamanda	Mould
(3)	Platypus	Dragonfly	Dolphin	Mould	Allamanda
(4)	Spiny anteater	Whale	Mosquitos	Toadstool	Hibiscus

3. Which statement correctly describes the similarity between fungi and bacteria?

- (1) They can make their own food.
- (2) They need air, food and water to survive.
- (3) They are able to move freely by themselves.
- (4) They can be seen only with the help of a mircoscope.

4. Study the chart below carefully.



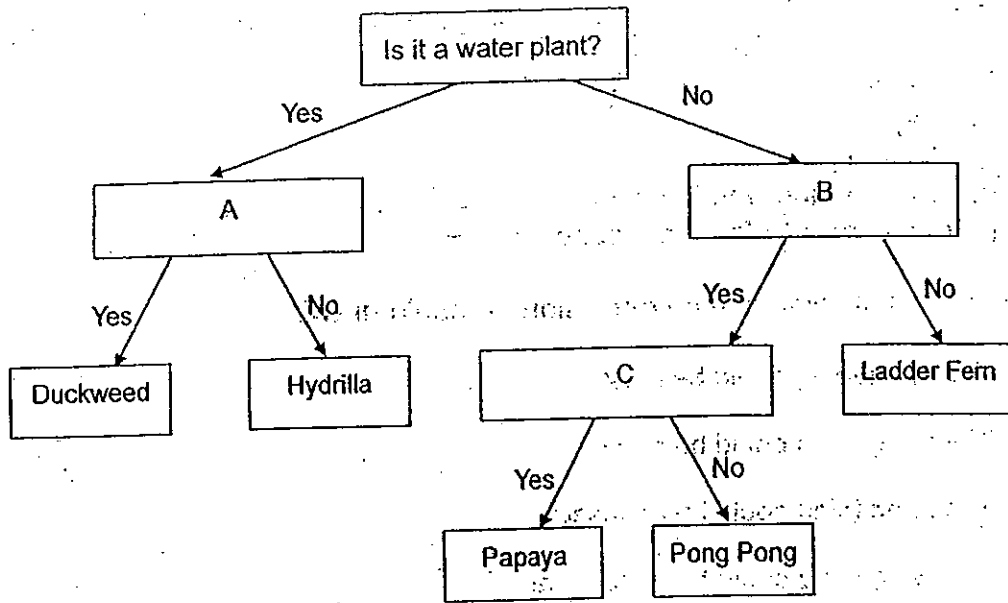
Which one of the following belongs to Group A?

- (1) Grass
- (2) Toadstool
- (3) Staghorn fern
- (4) Dragon scales fern

5. Which one of the statements is true for both mushroom and fern?

- (1) They feed on other trees.
- (2) They are non-flowering plants.
- (3) They can reproduce by spores.
- (4) They are able to make their own food.

6. Study the flow chart below.



Which one of the following correctly states the questions for A, B and C?

	A	B	C
(1)	Does it float on water?	Do the flowers grow in clusters?	Does it produce spores?
(2)	Is it partially submerged in water?	Does it produce spores?	Is it a flowering plant?
✓(3)	Does it float on water?	Is it a flowering plant?	Can the fruit be eaten?
(4)	Is it submerged in water?	Can it make its own food?	Do the flowers grow in clusters?

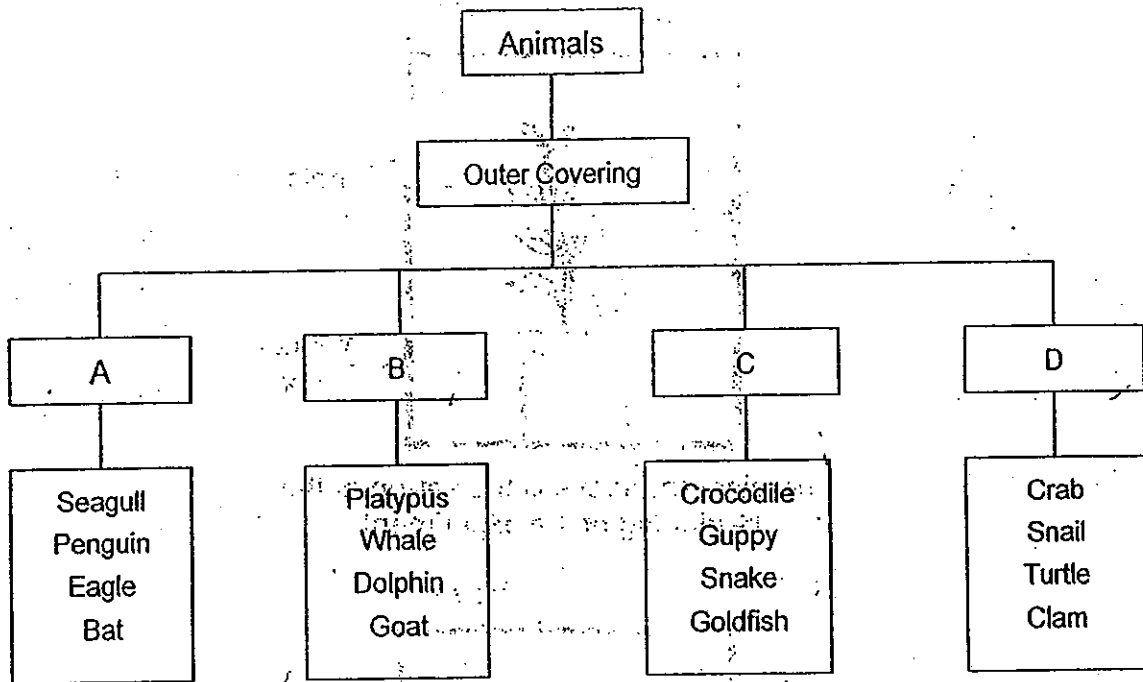
7. Four-year old Justin saw a living thing in the forest but did not know what it was. He observed and recorded the following information.

- It has hairs.
- It has legs.
- It has four legs.
- It can live on land and in water.
- It produces milk to feed its young

Which of the following is the conclusion he could draw?

- (1) The living thing could be a fish.
- (2) The living thing could be a bird.
- (3) The living thing could be an insect.
- (4) The living thing could be a mammal.

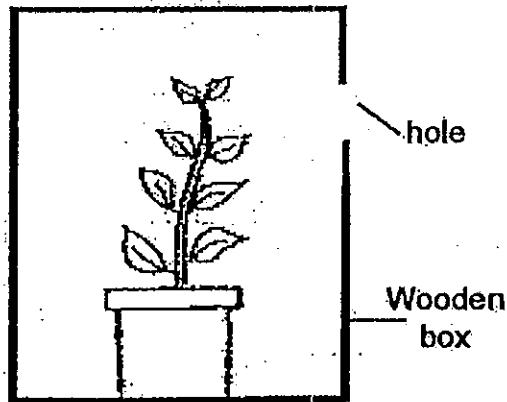
8. The following shows the classification of animals based on their outer coverings.



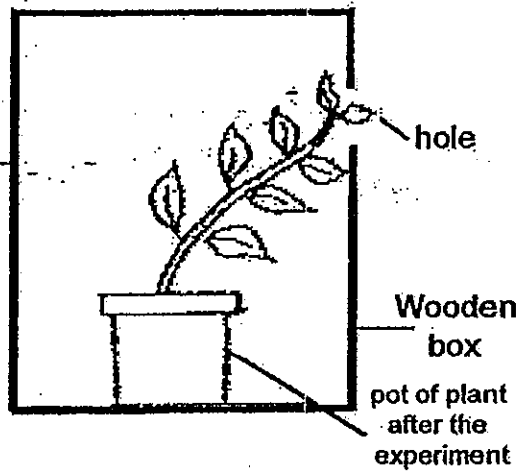
A, B, C and D represent the types of body coverings for the various animals of the group. Which group has an animal that has been classified wrongly?

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

9. Study the diagrams below.



The diagram above is the set-up at the beginning of the experiment.



The diagram above shows how the plant looked after a week.

What does the experiment show about the plant?

- (1) It grows.
- (2) It needs sunlight to grow.
- (3) It responds to its surroundings.
- (4) It needs air, food and water to survive.

10. In which one of the following groups are all materials obtained from living things?

- (1) plastic, wood, clay, iron
- (2) plastic, clay, cotton, soil
- (3) leather, paper, silk, wool
- (4) glass, leather, cotton, soil

11. Julie was about to leave school when it started to rain. As she had forgotten to bring her umbrella, she has to find something else to shelter her from the rain. All the materials stated below are of the same size. Which one of the following items should she use to shelter herself?

- (1) a piece of cotton cloth
- (2) a piece of newspaper
- (3) a piece of plastic sheet
- (4) a sheet of mahjong paper

12. The picture below shows a pair of goggles for swimming.

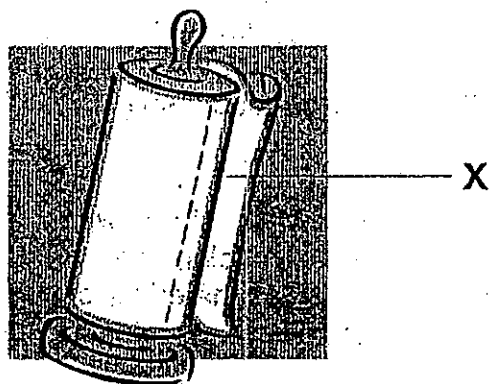


What properties must the material used to make part A and B have?

	Property of material used to make A	Property of material used to make B
(1)	Strong	Thin
(2)	Absorb water	Waterproof
(3)	Stretchable	Transparent
(4)	Thin	Breakable

labelled X

13. The diagram below shows a roll of paper towel. The paper towel is used in the kitchen to wipe spills.



Which of the following properties of paper are important for it to be used to make the paper towel?

- A Paper absorbs liquid.
- B Paper can be torn easily.
- C Paper can be dyed to other colours.
- D Paper allows some light to pass through.

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

14. Some objects were classified into Group A and Group B as shown below.

Group A	Group B
Silk scarf Cotton pyjamas	Wooden chair Glass window

Which of the following items have been correctly classified based on the properties of the 2 groups?

	Group A	Group B
(1)	Plastic raincoat	Steel plate
(2)	Nylon rope	Aluminium foil
(3)	Sheet of paper	Rubber casing for wires
(4)	Woollen sweater	Copper wire

15. Which of the following properties are the reasons why shopping bags are usually made of plastics?

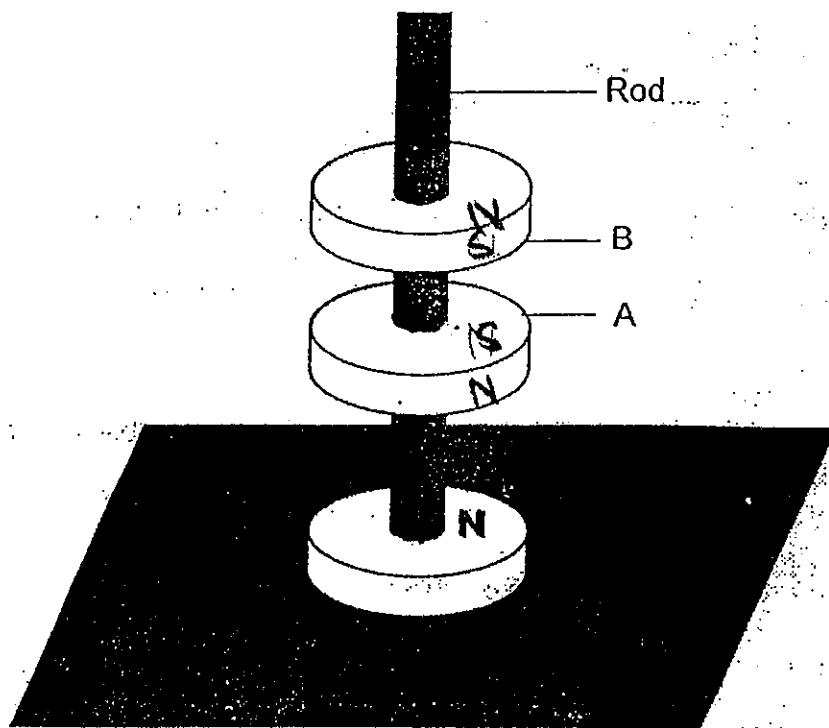
- A Plastic is light.
- B Plastic is strong.
- C Plastic cannot decompose.

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

16. Which one of the following groups of objects consists of objects that can be attracted by a magnet?

- (1) ^{Copper} Coin, paper clip and safety pins
- (2) Needles, safety pins and screw
- (3) Gold ring, scissors and thumbtacks
- (4) Iron nail, copper wire and pen knife

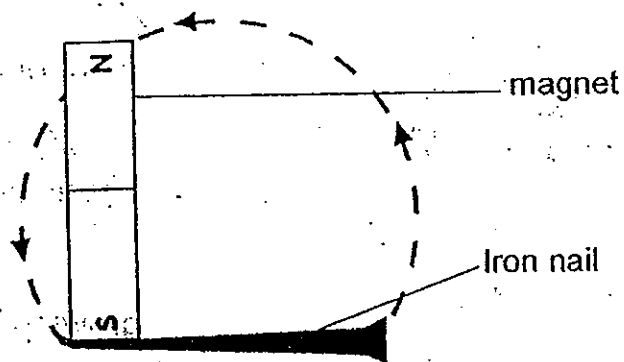
17. The diagram below shows 3 ring magnets.



Which of the following options correctly shows the poles of part A and part B of the magnets?

	A	B
(1)	South-seeking Pole	South-seeking Pole
(2)	South-seeking Pole	North-seeking Pole
(3)	North-seeking Pole	South-seeking Pole
(4)	North-seeking Pole	North-seeking Pole

18. Julian turned an iron nail into a magnet by stroking it with a magnet for 20 times.



Which of the following methods will increase the magnetic strength of the iron nail?

- A Increase the number of strokes.
- B Use the nail to stroke the magnet instead.
- C Increase the strength of magnet used and stroke the nail 20 times
- D Increase the size of the iron nail without increasing the number of strokes.

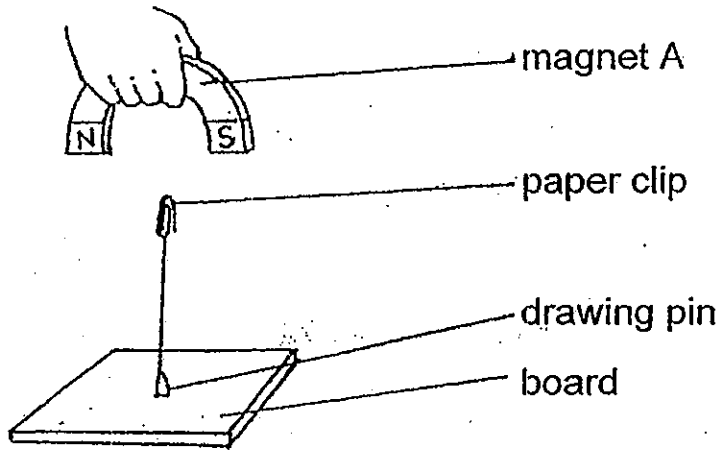
(1) A and B only

(2) A and C only

(3) A, B and C only

(4) A, B and D only

19. Saunders set up an experiment as shown below. The paperclip was suspended in the air. He then placed different items between the magnet and the paper clip.



Which of the following items will **not** cause the paperclip to drop to the board?

- A an iron sheet
- B a steel sheet
- C a plastic sheet
- D a sheet of paper

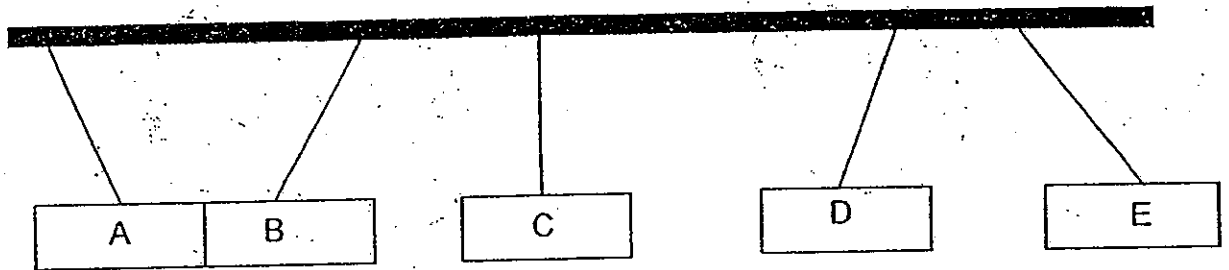
(1) A and B only

(2) A and C only

(3) B and C only

(4) C and D only

20. Peter has 5 bars A, B, C, D and E. He hung them close to each other and the bars could move freely. The diagram below shows what he observed.



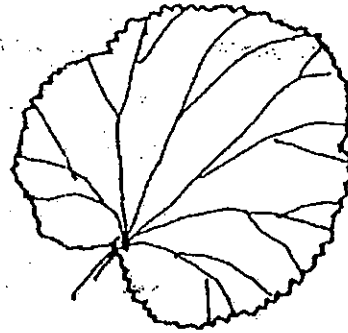
Which of the following options correctly identify bars A, B, C, D and E?

	A	B	C	D	E
(1)	Magnet	Magnetic material	Magnetic material	Non-magnetic material	Magnet
(2)	Magnet	Magnet	Non-magnetic material	Magnet	Non-magnetic material
(3)	Magnetic material	Magnetic material	Magnet	Non-magnetic material	Magnet
(4)	Magnet	Magnetic Material	Non-magnetic material	Magnet	Magnet

21. Xiulin collected the leaves shown below.



A



B

Which of the following statement(s) below is/are true for both leaves?

- A Both leaves have the same shape.
- B Both leaves have the same edges.
- C Both leaves have the same type of vein pattern.

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

22. Gopal was asked to classify the leaves shown below.



A



B



C



D

He then came up with the classification below.

Group A	Group B
A	B
D	C

Which property has he used to classify the leaves?

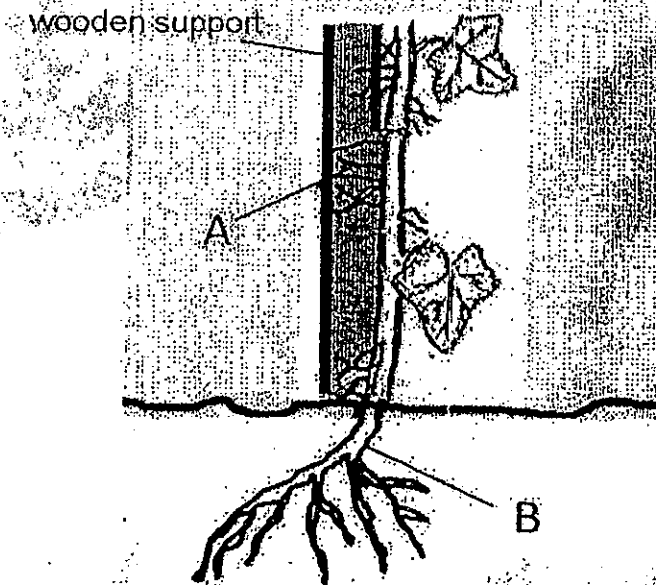
(1) shape

(2) edge

(3) vein pattern

(4) texture

23. The diagram below shows a plant that June saw in her garden. The plant had two types of roots labeled A and B in the diagram.

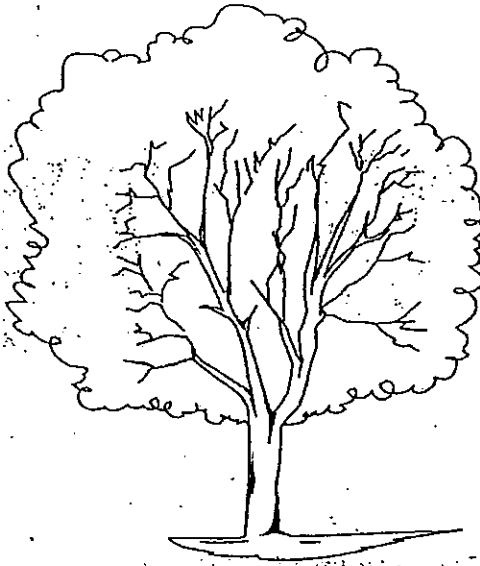


Root B grew in the soil while root A grew on a wooden support.

Which of the following correctly states the function of root A and root B?

	Function of root A	Function of root B
(1)	Absorbs air	Anchor the plant firmly in soil
(2)	Helps the plant to climb to get sunlight	Absorbs water and mineral salts
(3)	Helps the plant to make food	Anchor the plant firmly in soil
(4)	Absorbs water and mineral salts	Absorbs water and mineral salts

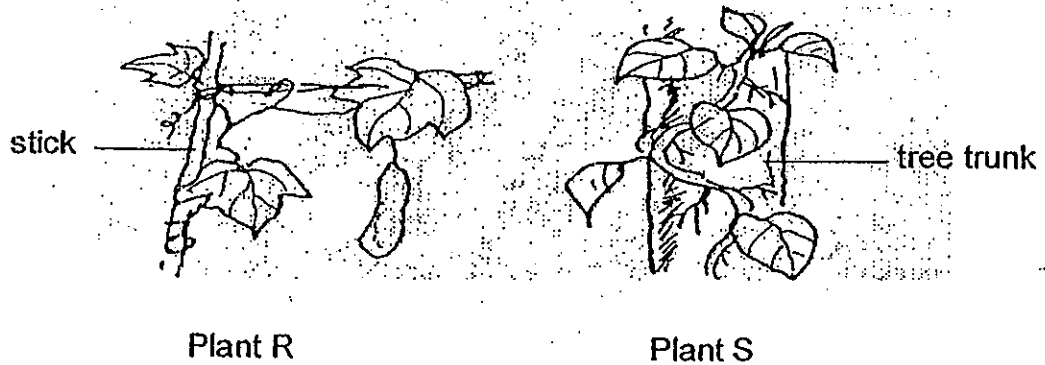
24. The diagram below shows a tree that Jack saw on his way to school.



Why are the branches of the tree spread out widely?

- (1) To receive sunlight.
- (2) To collect rain water.
- (3) To allow birds to build nests.
- (4) To provide shade for animals.

25. On a trip to a farm, Amber noticed the two plants, R and S, shown below.



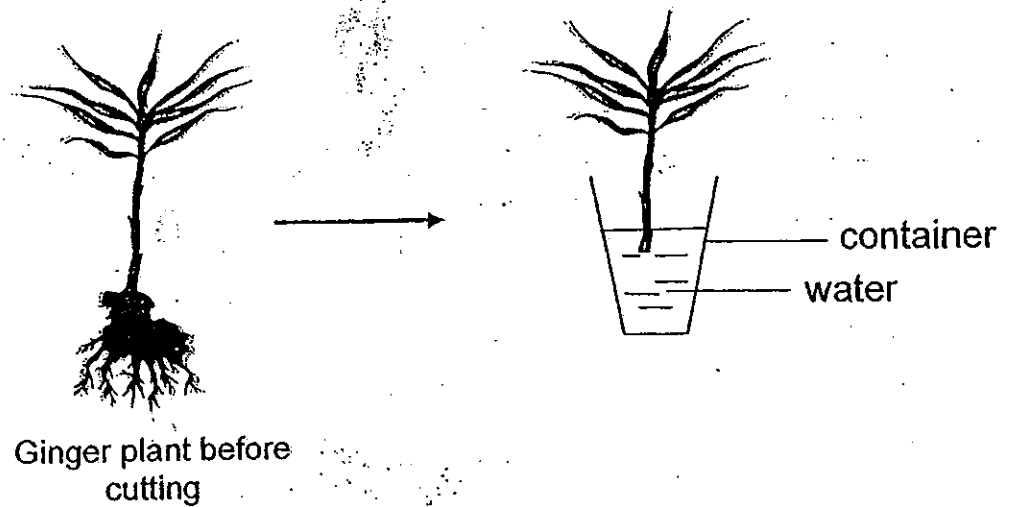
She then wrote 4 statements, A, B, C and D, about Plants R and S.

- A They both have woody stems.
- B Both stems help the plants to stand upright.
- C Both stems help the plant get as much sunlight as possible.
- D Both stems help to transport water to the other parts of the plants.

Which of the statements she wrote are true?

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

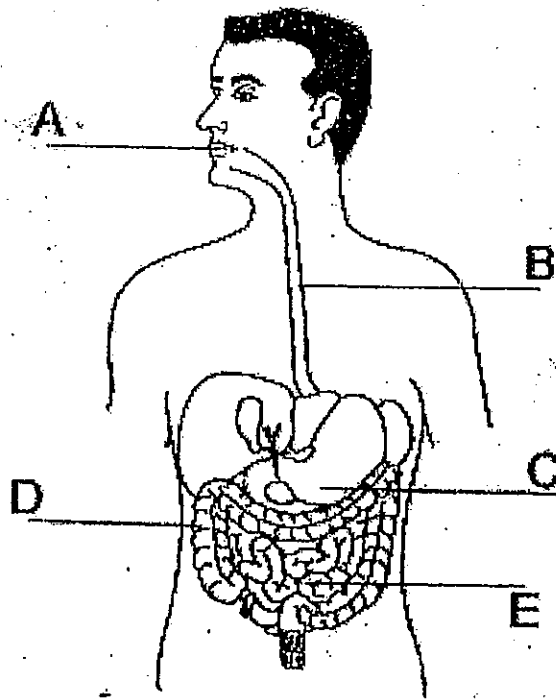
26. Samuel cut a ginger plant as shown below and placed it in a container filled with water.



He noticed that the plant was alive a few days later. Which one of the following statements best explains why the plant was able to survive?

- (1) There was still some water left in the stem and leaves.
 - (2) The ginger plant does not need a lot of water to survive.
 - (3) The roots of the ginger plant only store food for the plant.
 - (4) Water was able to enter the stem and be transported to other parts of the plant.
27. Which of the following organs are parts of the skeletal system?
- A Rib cage
 - B Muscles
 - C Back bone
 - D Skull
- (1) A and B only
 - (2) A and C only
 - (3) A, B and D only
 - (4) A, C and D only

28. Study the diagram below.



Which parts of our digestive system produce digestive juices?

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

29. Which of the following systems consists of blood vessels and the heart?

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

30. Which one of the following statements is true about systems of our body?

- (1) The muscular system works with the skeletal system to enable the body to move.
- (2) The circulatory system carries undigested food and oxygen to all parts of the body.
- (3) The digestive system carries digested food to the rectum to be removed from the body.
- (4) The respiratory system absorbs food substances and transports them to all parts of the body.



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PRIMARY THREE SCIENCE
SEMESTRAL ASSESSMENT 2

2010

BOOKLET B

Date : 29th October 2010

Duration : 1 h 45 min

Name : _____ ()

Class: Primary _____ ()

Marks Scored:

Booklet A:		60
Booklet B :		40
Total :		100

Parent's signature:

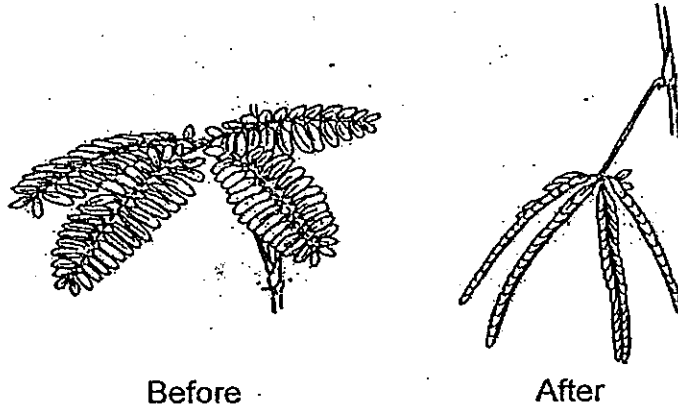
DO NOT OPEN THIS BOOKLET UNTIL YOU ARE TOLD TO DO SO.
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Booklet B consists of 15 printed pages including this cover page.

Section B (40 marks)

Write your answers to questions 31 to 44 in the spaces provided.
Marks will be deducted for misspelt key words.

31. The diagram below shows a mimosa plant before and after it is touched.



- a) Based only on the observation above, state one characteristic of living things. (1 mark)

- b) When a grasshopper is touched, it hops away. Explain the difference in the way the mimosa plant and the grasshopper responded when touched. (1 mark)

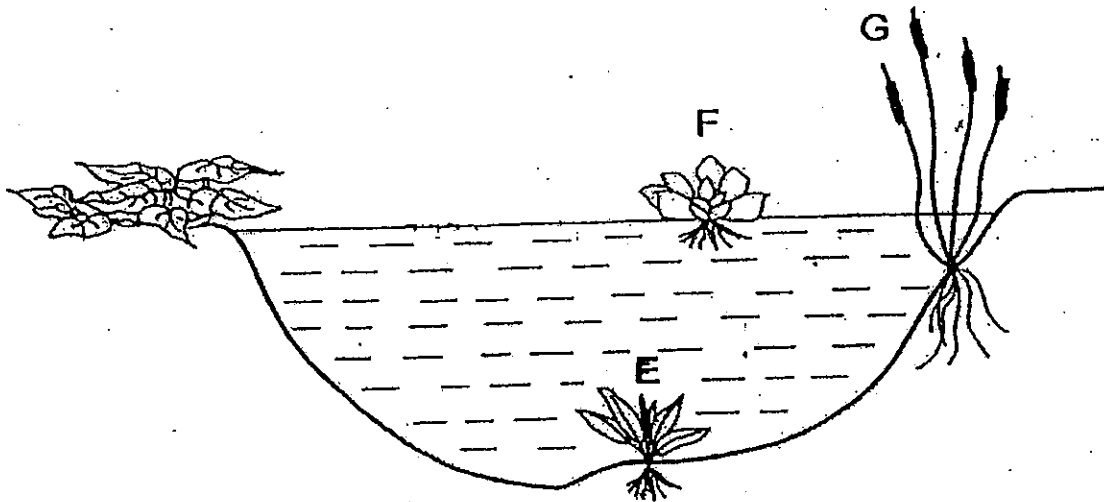
- c) Plants respond to light by growing towards it. Why is this response important to plants? (1 mark)

32. The table below shows the characteristics of 3 organisms X, Y and Z. A tick (✓) indicates that the organism has the characteristic mentioned.

	Makes food	Grows on other plants	Have flowers
X	✓	✓	
Y		✓	
Z	✓		

- (a) Which organism(s) could be a fungi? (1 mark)
-
- (b) Which organism(s) could be a fern? (1 mark)
-
- (c) Based on the information in table, how is a moss similar to X? (1 mark)
-
-

33. The diagram below shows 3 plants E, F and G that Jerry saw at a pond.



- (a) Jerry noticed that when the water in the pond becomes cloudy, one of the plants did not grow well.

Which plant E, F or G did not grow well when the pond water became dark and cloudy? Explain your choice (1 mark)

- (b) Jerry noticed that the roots of the plant G were anchored to the soil at the bottom of the pond but not the roots of plant F.

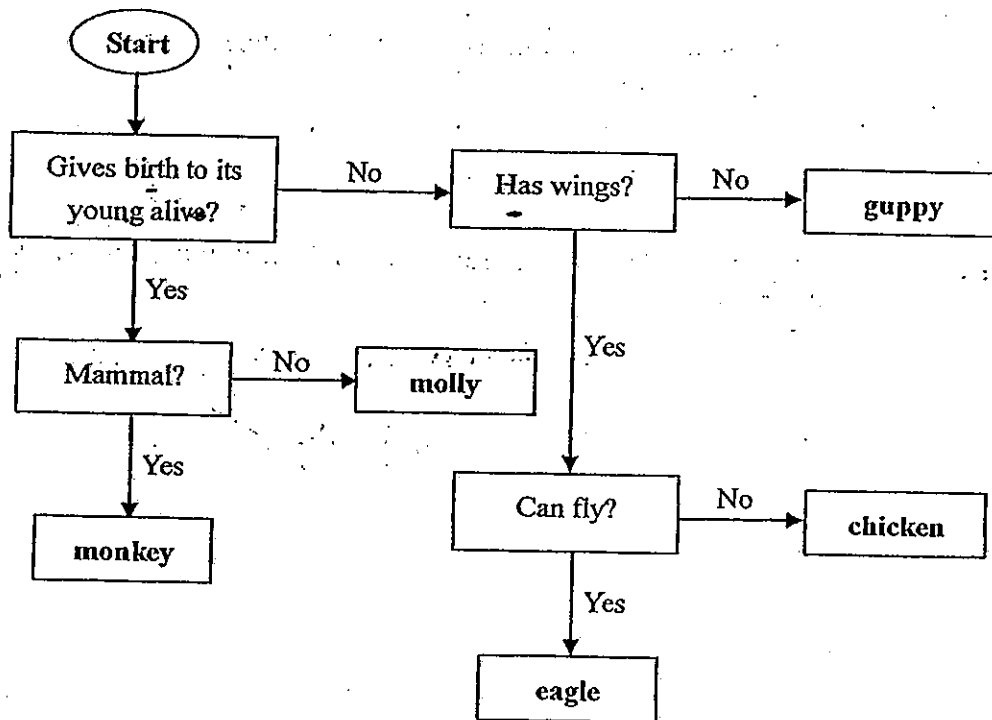
State how plant G and plant F obtain the water and mineral salts that they need. (1 mark)

- (c) Jerry also noticed that there were some animals living in the pond. Explain how the plants were important to the animals living in the pond. (1 mark)

34. Professor Franklin saw a type of weird-looking living organism in a forest. He had never seen it before. He wanted to find out if it is an insect so he brought a few of the organisms back to his laboratory.

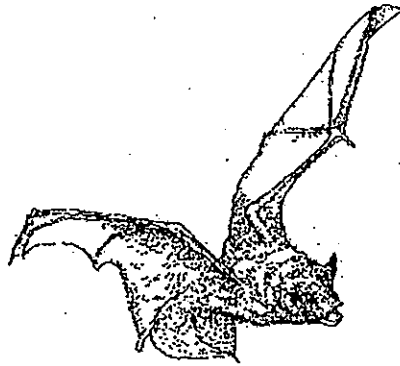
Describe 2 characteristics that Professor Franklin needs to look out for in order to classify the living organism as an insect. (2 marks)

35. Study the following flow chart below carefully.

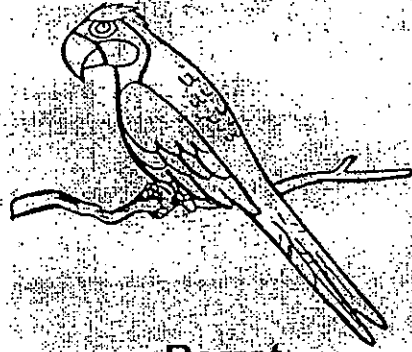


- (a) Which of the above animals has been classified wrongly? Explain your choice. (2 marks)

36. Study the two animals below.



Bat

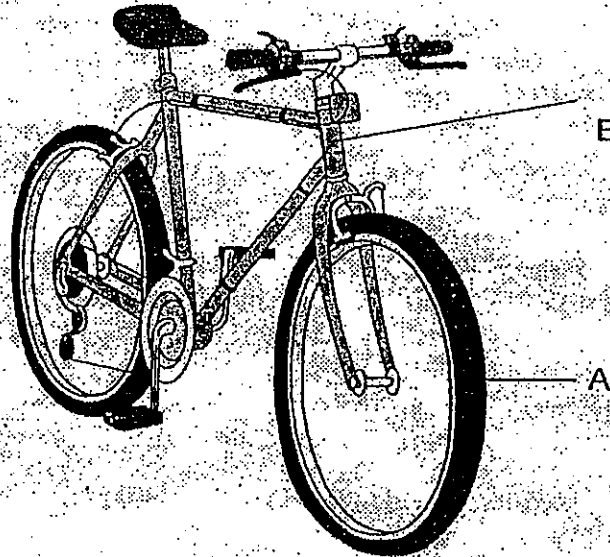


Parrot

- (a) State what the bat and parrot have to allow them to move in a similar manner? (1 mark)

- (b) State how the bat and parrot are different in the way they feed their young. (1 mark)

37. The diagram below shows a bicycle.

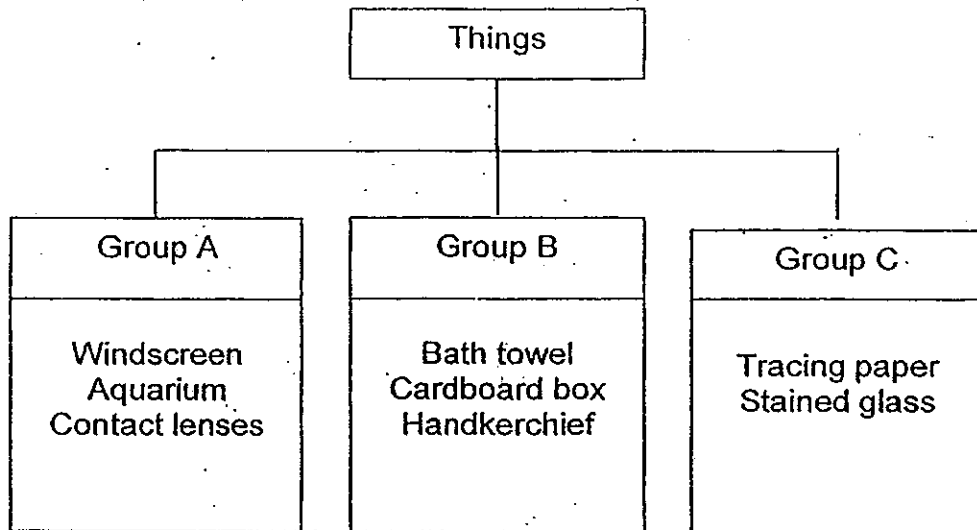


(a) i) Suggest a material for making the part labelled A. (1 mark)

ii) Suggest a reason why the material you have chosen in (i) is the most suitable. (1 mark)

(b) Part B is the body of the bicycle. It is usually made of metal. List one property of metal that makes it suitable to be used to make Part B. (1 mark)

38. Study the three groups of things given in the classification diagram below.

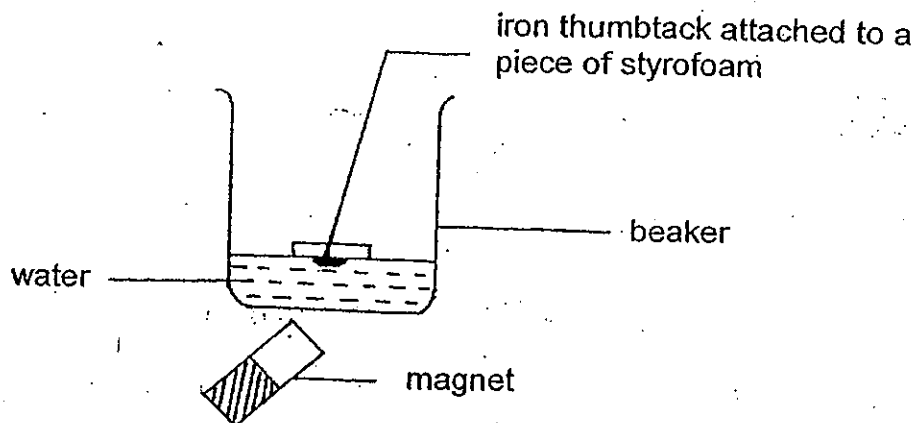


(a) What property was used to classify the items into groups A, B and C above? (1 mark)

(b) In which group would you place lamp shades? (1 mark)

(c) Explain why it is difficult to place microwave oven into any of the groups above. (1 mark)

39. Jasmine set up an experiment as shown below.



She noticed that as she brought the magnet closer to the bottom of the beaker, the thumbtack together with the styrofoam moved closer to the bottom of the beaker too. She measured the both distances of the thumbtack and magnet from the bottom of the beaker and recorded them as below.

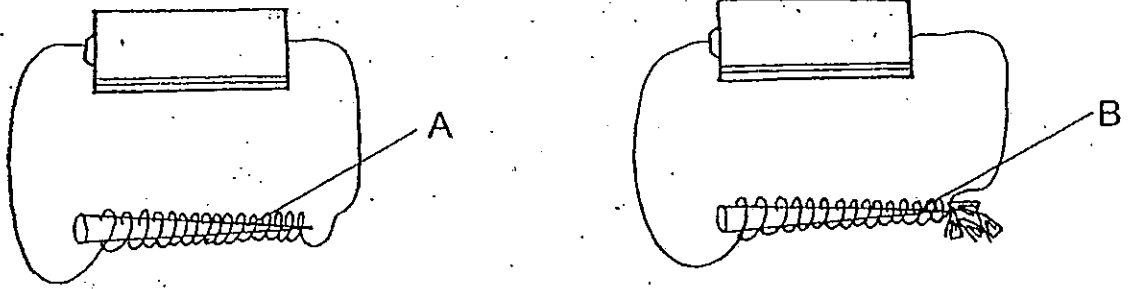
Distance of magnet from bottom of beaker (cm)	7	5	3	1
Distance of thumbtack from bottom of beaker (cm)	5	X	A	0

(a) What could be a possible value of X? (1 mark)

(b) What was the purpose of the styrofoam? (1 mark)

(c) Based on the data he collected, what is the relationship between the distance of the magnet from the bottom of the beaker and the strength of the magnet's pull on the thumbtack? (1 mark)

40. Siva conducted an experiment using the set-up of an electromagnet below.



For both set ups, he used the same type of battery and copper wire. The copper wires were of the same length and the same number of coils around materials A and B. However, he noticed that only B attracted paper clips.

- (a) Based on the observation above, what conclusion can he make about material A. (1 mark)

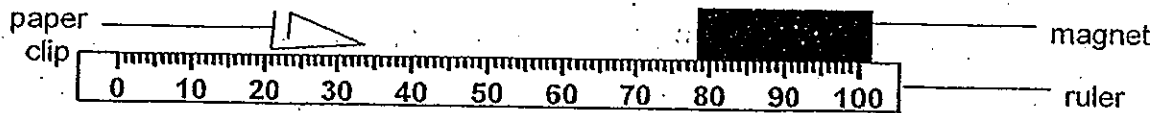
- (b) Suggest two ways that will make material B attract more paper clips. (2 marks)

(i) _____

(ii) _____

- (c) Suggest one use of electromagnets. (1 mark)

41. The diagram below shows an investigation carried out by Tim with 3 magnets T, U and V



Tim moved the steel paper clip slowly towards the magnet and recorded the longest distance between the magnet and the paper clip before the clip was attracted to the magnet. He repeated the investigation with the other magnets and recorded his result in the table below.

magnet	T	U	V
longest distance between magnet and clip before it is attracted / cm	5	10	7

- a) Based on his result, which magnet, T, U or V has the strongest magnetic pull? Explain your choice. (2 mark)

- b) Instead of using steel paper clip, could Tim use a copper clip for his experiment? Explain your answer. (1mark)

42. Complete the following passage about the heart and our body system by filling in the blanks with appropriate words. (2 marks)

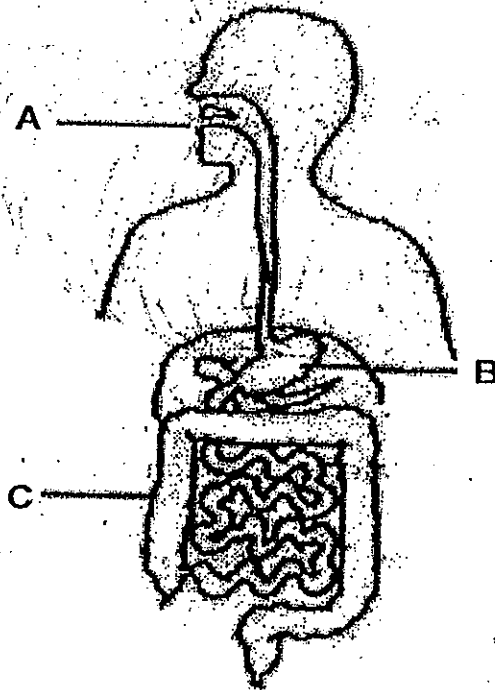
Our circulatory system and respiratory systems are two organ systems that enable our bodies to function properly.

The respiratory system helps to take in _____ into the body and gives out _____ and water vapour from the body.

The circulatory system will carry the _____ food and oxygen to all parts of the body.

The heart helps to pumps blood around the body. The heart of an average adult beats about 72 times per minute. The heart beat will _____ when a person exercises.

43. The diagram below shows the human digestive system.

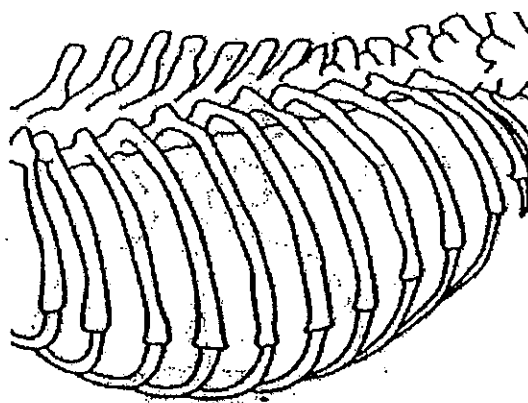


(a) Explain how food is broken down to smaller pieces in part A. (1 mark)

(b) Explain how food is broken down to simpler substance at part B. (1 mark)

(c) State the function of part C. (1 mark)

44. A group of pupils found part A of an animal in their school garden as shown in the diagram below.



Part A

- (a) Identify and state the function of part A. (2 mark)

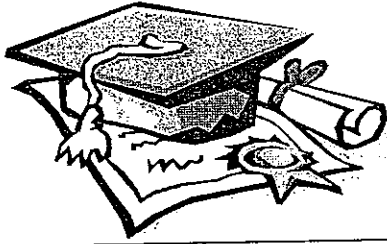
- (b) i) What was the most likely method of breathing for this animal? (1 mark)

- (b) ii) State a sea animal that uses the same breathing method as mentioned in (i). (1 mark)

-----END OF PAPER-----

Setters: Mr Mohammad
Ms Faith Lim



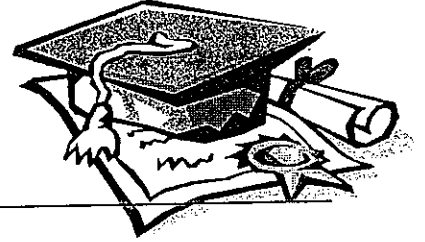


ANSWER SHEET

EXAM PAPER 2010

**SCHOOL : NANYANG PRIMARY
SUBJECT : PRIMARY 3 SCIENCE**

TERM : SA2



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

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

- 31)a)All living thing respond to changes around them.
b)Plants can't move freely but they grasshopper can move freely.
c)It is important to plants because in order to make their own food they need the sunlight.
- 32)a)Organism Y.
b)Organism X and Y.
c)They are non-flowering plants and does not bear flowers.
- 33)a)E. The water blocks out sunlight so E cannot make food.
b)Plant G needs take in mineral salts and water from the soil, while plant F take in water and mineral salts from the water.
c)The animals can eat the plants.
- 34)It must have 3 body parts and 3 pairs of legs.
- 35)a)Guppy. Guppy gives births to it young alive.
- 36)a)The wings.
b)The parrot feed its baby worms. Bats feeds their baby milk.
- 37)a)i)Rubber ii)It cannot break easily.
b)It is strong and it will balance the bicycle.
- 38)a)By their transparent.
b)Group C.
c)Some parts of the microwave over let light pass through while some do not.
- 39)a)4
b)To pull the thumbtack up.
c)The longer the distance the water the magnetic pull.

40)a)Material A is a non-magnetic material.

b)i)By turning more coils.

ii)Increase the number of batteries.

c)Electromagnet can be used for making electric bells.

41)a)It has the strongest pull because it could attract the steel pin from 10cm away.

b)No. Copper is a non-magnetic material.

42)oxygen carbon dioxide digested increase

43)a)By chewing the food into smaller pieces.

b)By mixing it with digestive juice.

c)To absorb water from the undigested food.

44)a)Part A is the ribcage. It is to protect the heart and lungs.

b)i)It breaths through its lungs.

ii)Dolphin.