



NAN HUA PRIMARY SCHOOL  
SEMESTRAL ASSESSMENT 2 - 2009  
PRIMARY 3

SCIENCE

BOOKLET A

30 Multiple Choice Questions (60 marks)

Total Time for Booklets A and B : 1 hour 45 minutes

INSTRUCTIONS TO CANDIDATES

1. Write your name and index number in the space provided.
2. Do not turn over the page until you are told to do so.
3. Follow all instructions carefully.
4. Answer all questions.
5. Shade your answers in the Optical Answer Sheet (OAS) provided.

Marks Obtained

Booklet A		/ 60
Booklet B		/ 40
Total		/100

Name: \_\_\_\_\_ (      ) Class: P 3 \_\_\_\_\_

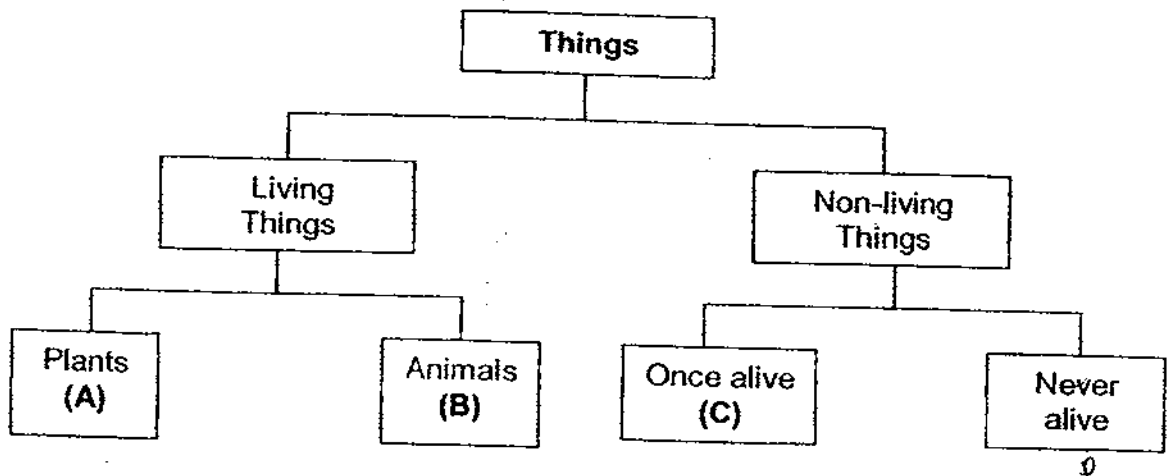
Date : 29 October 2009

Parent's Signature: \_\_\_\_\_

**Section A: (30 x 2marks = 60marks)**

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.

1. Study the classification table below. A, B, C and D are things that are classified according to the groups that they belong to.



Which one of the following best represents A, B, C and D respectively?

	<b>A</b>	<b>B</b>	<b>C</b>	<b>D</b>
(1)	grass	leather	eraser	key
(2)	fern	eagle	book	magnet
(3)	tree	lizard	pencil	envelope
(4)	hibiscus	lion	glass	tyre

2. Which of the following groups is made up of only living things?

- (1) Palm tree, ball, mouse
- (2) Panda, rose plant, clock
- (3) Snake, elephant, water lily
- (4) Hibiscus, squirrel, telephone

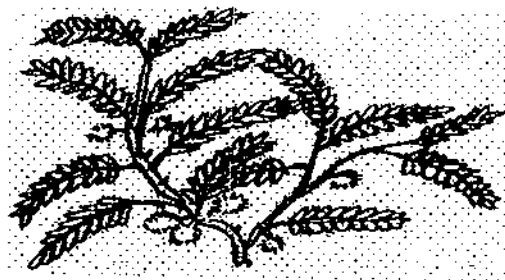
3. Sally placed two things, X and Y, into two jars. She also placed the same type and amount of food in each jar. She then made some observations of X and Y as shown below.

X	Y
Moves slowly	Does not move
Feeds on the food	The food was untouched
Grown bigger after 5 days	No change in size after 5 days

Which one of the following most possibly is X and Y respectively?

(1)	Stone	Brick
(2)	Caterpillar	Rock
(3)	Beetle	Butterfly
(4)	Earthworm	Dragonfly

4. The diagram shows a mimosa plant. When you touch it, its leaves will close up.

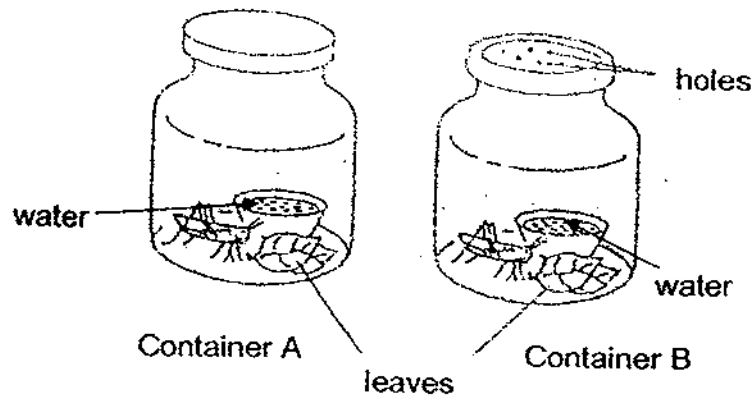


Mimosa plant

This shows that it \_\_\_\_\_

- (1) bears flowers
- (2) responds to changes
- (3) grows towards water
- (4) grows towards sunlight

5. Janice placed 2 grasshoppers in 2 different containers. He then covered the 2 containers with a plastic cover each as shown below.



The containers were placed inside a wooden cupboard. After one day, the grasshopper in Container A died but the grasshopper in Container B was still alive.

This experiment shows that \_\_\_\_\_

- (1) living things need air
- (2) living things need food
- (3) living things need water
- (4) living things need sunlight

6. Compare the following living things.



Mushroom



Fern

Which one of the following statements about the mushroom and the fern is correct?

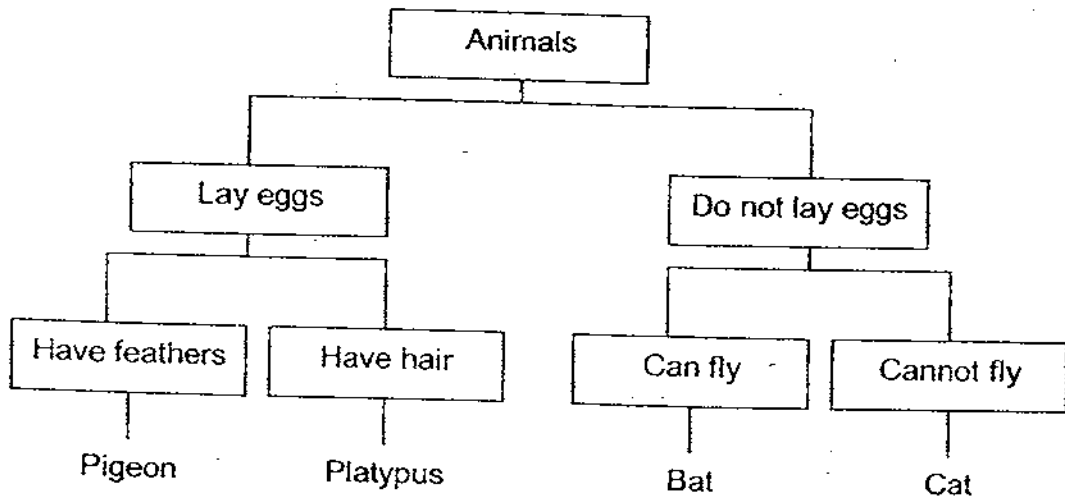
- (1) They are fungi.
- (2) They are flowering plants.
- (3) They reproduce from spores.
- (4) They are able to make their own food.

7. Glass is used to make fish tanks because it is \_\_\_\_\_

A	fragile
B	waterproof
C	transparent

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

8. The table below shows how some animals can be classified.



Based on the above classification chart, which one of the following statements is most possibly true?

- (1) A bat and a platypus lay eggs.
- (2) A cat and a bat move in the same manner.
- (3) A bat and a cat give birth to its young alive.
- (4) A pigeon and a platypus have the same body covering.

9. The table below shows the properties of some objects.

Object	Properties	
	Floats on water	Breaks easily
Metal spoon	Yes	No
Ceramic bowl	No	Yes
Ping pong ball	No	Yes
Iron anchor	Yes	Yes

Which of the following objects has its properties stated correctly?

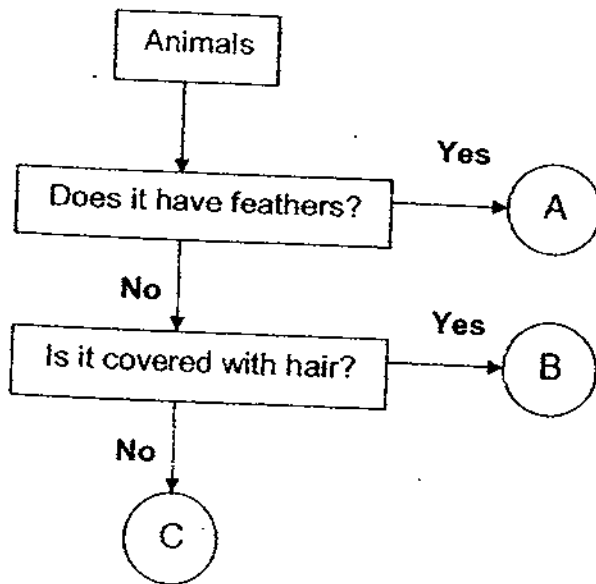
- (1) Metal spoon
  - (2) Ceramic bowl
  - (3) Ping Pong ball
  - (4) Iron anchor
10. Justin had 2 types of materials X and Y, each of the same size. He wanted to find out which material would absorb the most amount of water. The table below shows the set-ups he had done.

Set-up	Material	Amount of water added to material
A	Y	100ml
B	X	50ml
C	Y	30ml
D	X	100ml

Which 2 set-ups should Justin choose in order for his test to be a fair one?

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

11. Study the flow chart below.



Which set of animals in the table below represents A, B and C correctly?

	A	B	C
(1)	Duck	Penguin	Tilapia
(2)	Hen	Cow	Goldfish
(3)	Seagull	Fish	Monkey
(4)	Parrot	Horse	Pig

12. How are the objects grouped in the table below?

Group A	Group B
iron nails	eraser
paper clips	tissue paper
thumbtacks	marbles
safety pins	plastic buttons

	Group A	Group B
1)	durable	non-durable
2)	magnetic	non-magnetic
3)	flexible	non-flexible
4)	non-living things	living things

13. Keith was strolling in the Singapore Botanic Garden when he came across some plants. He noticed that these plants had leaves that were spread out as shown in the diagram below.



Why were the leaves spread out in this manner?

- A: To trap more air.
- B: To get more sunlight
- C: To trap rainwater when it rains.

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

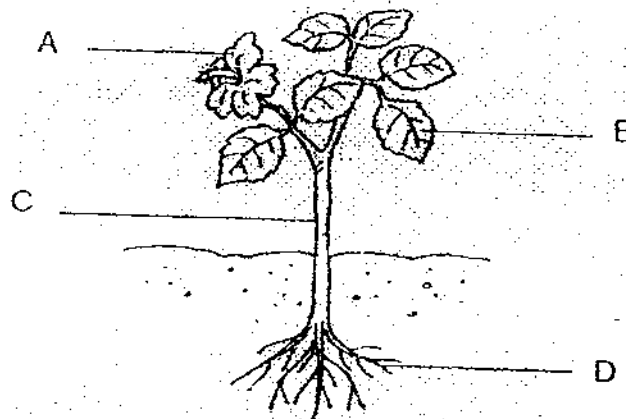


14. Which of the following are functions of the leaves of a plant?

- A: Make food for the plant.
- B: Take in sunlight for the plant.
- C: Take in water and mineral salts for the plant.
- D: Transport water and nutrients to all parts of the plant.

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

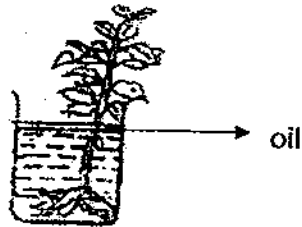
15. The diagram below shows a hibiscus plant.



Which one of the parts shown above is responsible for transporting water around the plant?

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

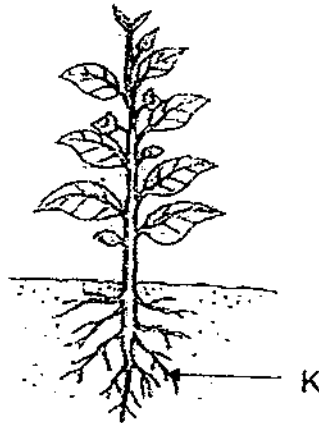
16. Benjamin sets up the experiment as shown in the diagram below to find out if the plant takes in water and nutrients.



He puts in a layer of oil to prevent the \_\_\_\_\_.

- 1) water from evaporating
  - 2) air from getting into the water
  - 3) nutrients from escaping into the air
  - 4) mosquitoes from breeding in the water
17. How do our teeth help in the digestion of our food?
- 1) They produce digestive juices.
  - 2) They push the food in our mouth to the gullet.
  - 3) They cut and grind the food into smaller pieces.
  - 4) They breakdown the food into simple substances.

18. Study the diagram below.



What are the functions of the plant part labelled K?

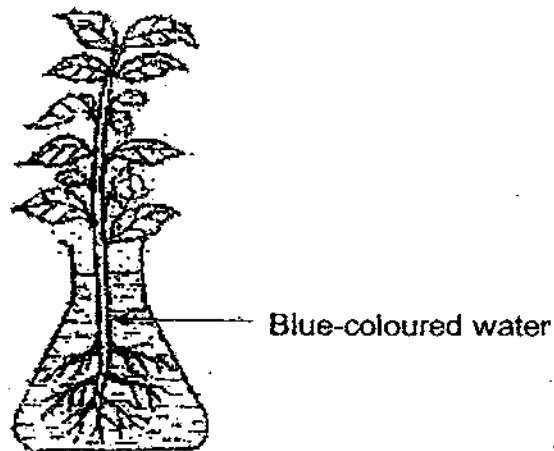
- A: It makes food for the plant.
- B: It helps to keep the plant in a fixed position.
- C: It takes in water and dissolved mineral salts from the soil.
- D: It spreads out its leaves so that more light can be captured.

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

19. Which one of the following is the function of the skeletal system?

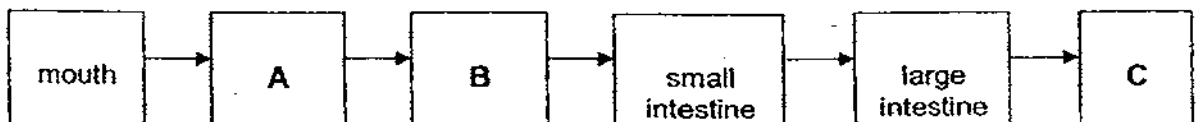
- 1) Carries materials around the body.
- 2) Supports the body and keeps it in shape.
- 3) Breaks down food into simple substances.
- 4) Takes in oxygen and gives out carbon dioxide.

20. A white rose plant is placed in a flask of blue-coloured water for a day as shown below.



Which of the following observations is **correct**?

- 1) Only the leaves turned blue.
  - 2) The flowers remained white colour.
  - 3) The leaves and flowers turned blue.
  - 4) The water level will remain the same.
21. The flow chart below shows the route taken by food through the human body.



Which one of the following shows what A, B and C represent?

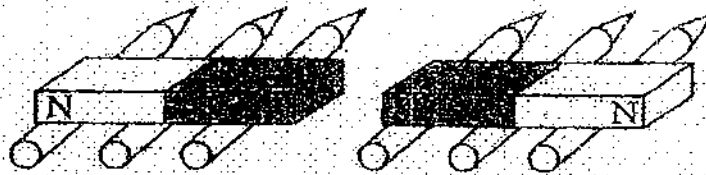
	A	B	C
1)	windpipe	lungs	ribcage
2)	gullet	windpipe	stomach
3)	lungs	stomach	anus
4)	gullet	stomach	anus

22. Jessica has just taken her breakfast which consists of two slices of bread with cheese and ham as well as a glass of milk. Her food will be digested with the help of the digestive juices from her \_\_\_\_\_.

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

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

23. The diagram below shows two magnets positioned on the pencils. What will happen when the two magnets are brought close to each other as shown in the diagram below?



They will \_\_\_\_\_

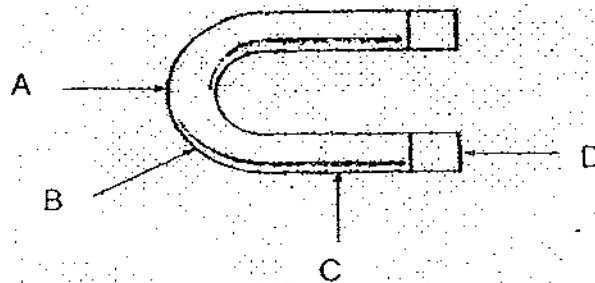
- 1) attract each other
- 2) repel each other
- 3) remain stationary
- 4) be demagnetised

24. Which of the following statements about the small intestine in the human digestive system is true?

A	Digestion is completed in the small intestine.
B	More digestive juices are produced in the small intestine.
C	Most of the water is removed in the small intestine. <i>↳ large intestine.</i>
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

25. Look at the magnet below. Which part of the magnet has the strongest pull?



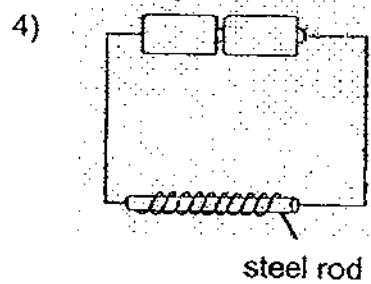
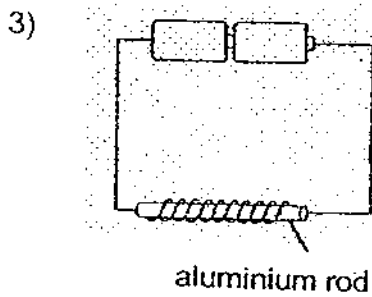
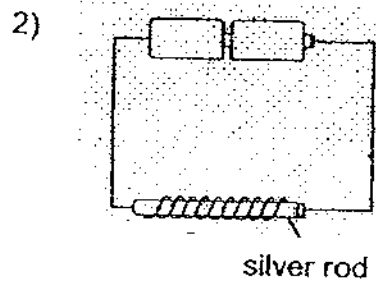
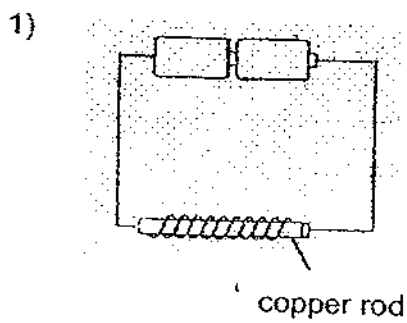
- 1) A
- 2) B
- 3) C
- 4) D

26. Our ribcage protects our \_\_\_\_\_

A	heart
B	windpipe
C	lungs
D	stomach

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

27. Which of the following rods will attract iron nails when the circuit is closed?

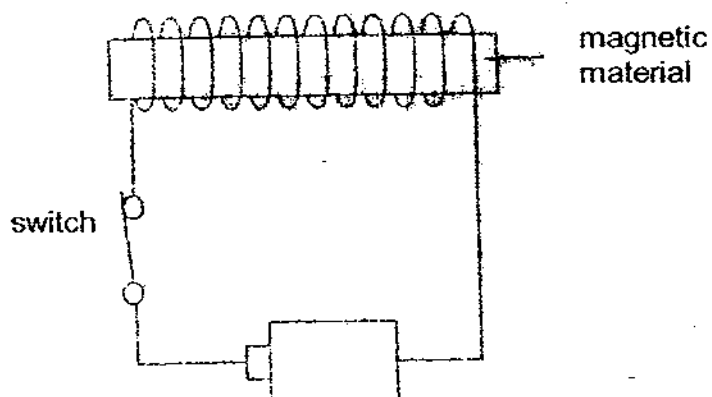


28. Which of the following make use of magnets?

- A: Doorbell
- B: Compass
- C: Telephone
- D: Loudspeaker

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

29. Which of the following will affect the strength of an electromagnet?

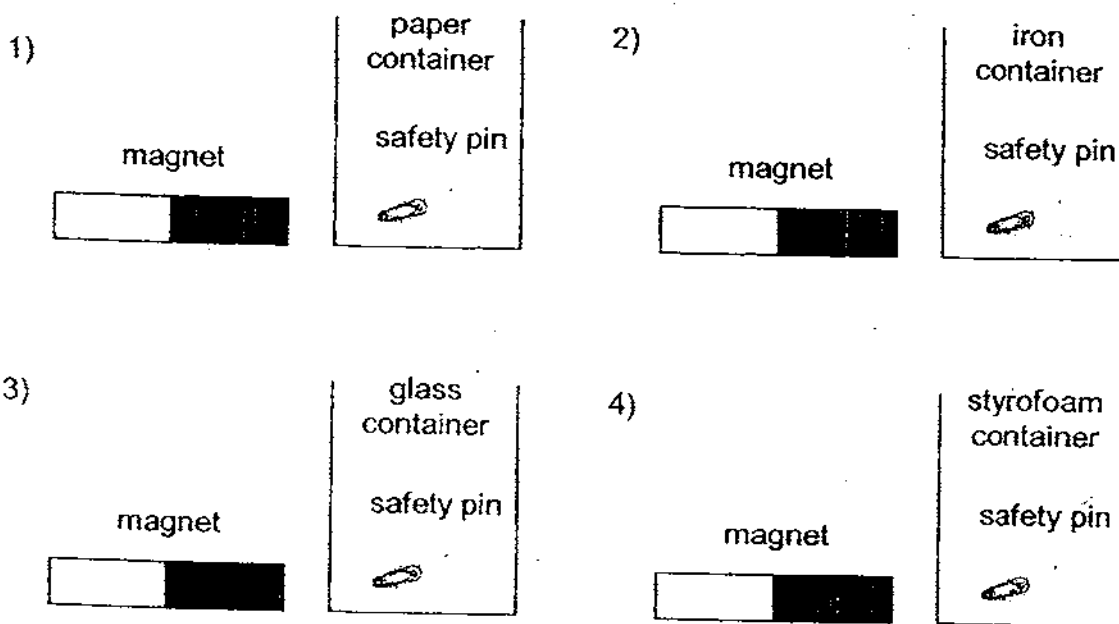


- A: Number of batteries
- B: Size of the switch
- C: Colour of the magnetic material
- D: The number of turns of wire around the magnetic material

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



30. Joshua wanted to remove the safety pin from each of the containers by sliding the magnet along the outside of the containers. Which one of following containers was he **unable** to remove the safety pin using the magnet?





NAN HUA PRIMARY SCHOOL  
SEMESTRAL ASSESSMENT 2 – 2009  
PRIMARY 3

SCIENCE

BOOKLET B

14 Open-ended questions (40 marks)

Total Time for Booklets A and B : 1 hour 45 minutes

INSTRUCTIONS TO CANDIDATES

1. Write your name and index number in the space provided.
2. Do not turn over the page until you are told to do so.
3. Follow all instructions carefully.
4. Answer all questions.
5. Write your answers in this booklet.

Marks Obtained

Section B

	/40
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Name: \_\_\_\_\_ ( ) Class: P 3 \_\_\_\_\_

Date : 29 October 2009

Parent's Signature: \_\_\_\_\_

**Section B: (40 marks)**

Write your answers to question 31 to 44.

The number of marks available is shown in brackets [ ] at the end of each question or part question.

31. The diagram below shows a deer and a mimosa plant.



**deer**



**mimosa plant**

(a) State the **difference** in the way the two living things get their food. [2]

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(b) State **one common characteristic** that these two living things have? [1]

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Score	3
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32. Animal X has the following characteristics:

Characteristics of Animal X	
Method of reproduction	Gives birth to its young
Type of outer covering	Hair / Fur
Number of legs/limbs	4

(a) Which group of animals does Animal X belong to? [1]

(b) Give an example of Animal X. [1]

33. Henry conducted several tests on materials A, B, C and D. His results are shown in the table below.

Property	Materials			
	A	B	C	D
Is flexible	No	Yes	No	Yes
Can be stretched	No	No	No	Yes
Breaks when dropped	Yes	No	No	No
Is waterproof	Yes	Yes	Yes	No

(a) (i) Which of the above materials A, B, C or D would he use to make a raincoat?

Material \_\_\_\_\_ [1]

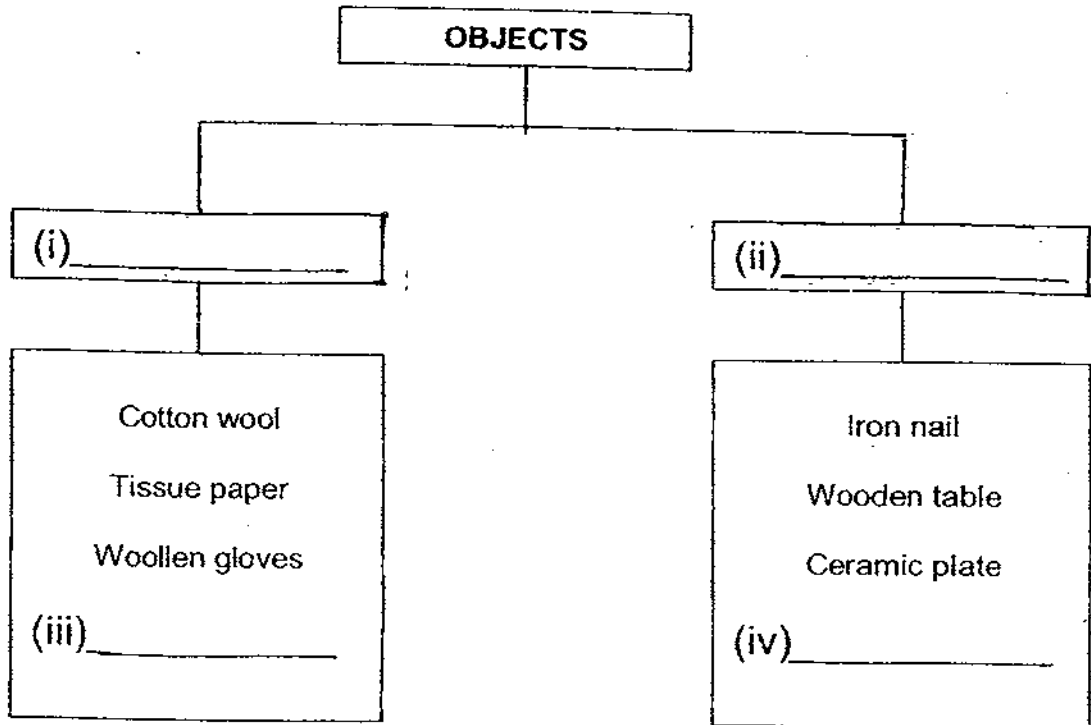
(ii) Which characteristic of the material chosen in (a)(i) is the **most important** in making the raincoat? [1]

(b) Which one of the above materials A, B, C or D is likely to be ceramic? [1]

Material \_\_\_\_\_

Score	5
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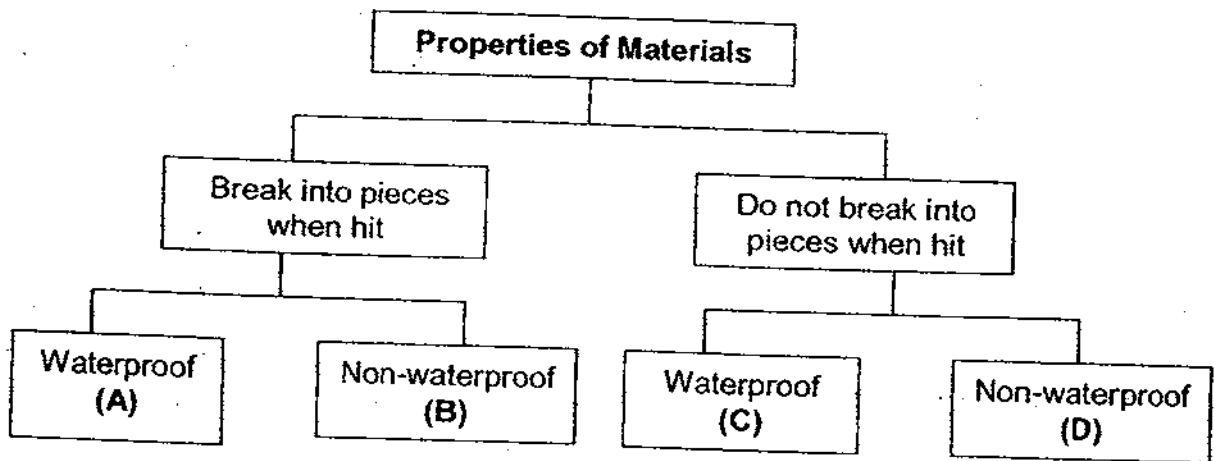
34. Paul's teacher displayed a few objects in class and classified them into two groups according to the physical properties of the materials they were made of.



- (a) Observe carefully how the objects are grouped.  
**Write down 2 suitable subheadings** for the items under (i) and (ii). [2]
- (b) **Write down 2 other objects** that can be placed in each of the classification tables under (iii) and (iv). [2]

Score	4
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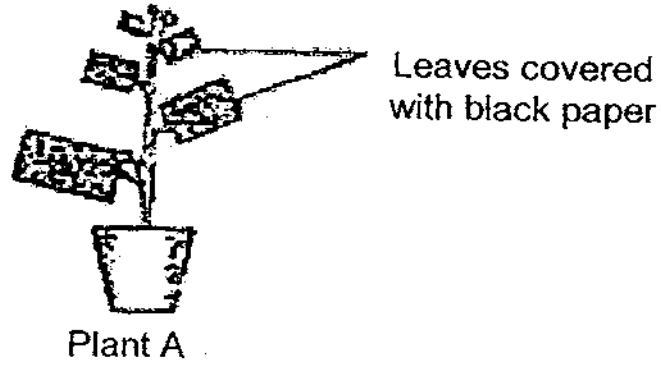
35. Study the classification diagram given below.  
Fill in the blanks with the letters A, B, C and D.



- (a) \_\_\_\_\_ can be a wine glass. [1]
- (b) Cotton rug can be placed in \_\_\_\_\_ [1]

Score	2
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36. Look at the diagram below.



All the leaves of Plant A were completely covered with black paper.

The plant was left in the sun and given enough water.

- (a) What will happen to the plant after one month? [1]

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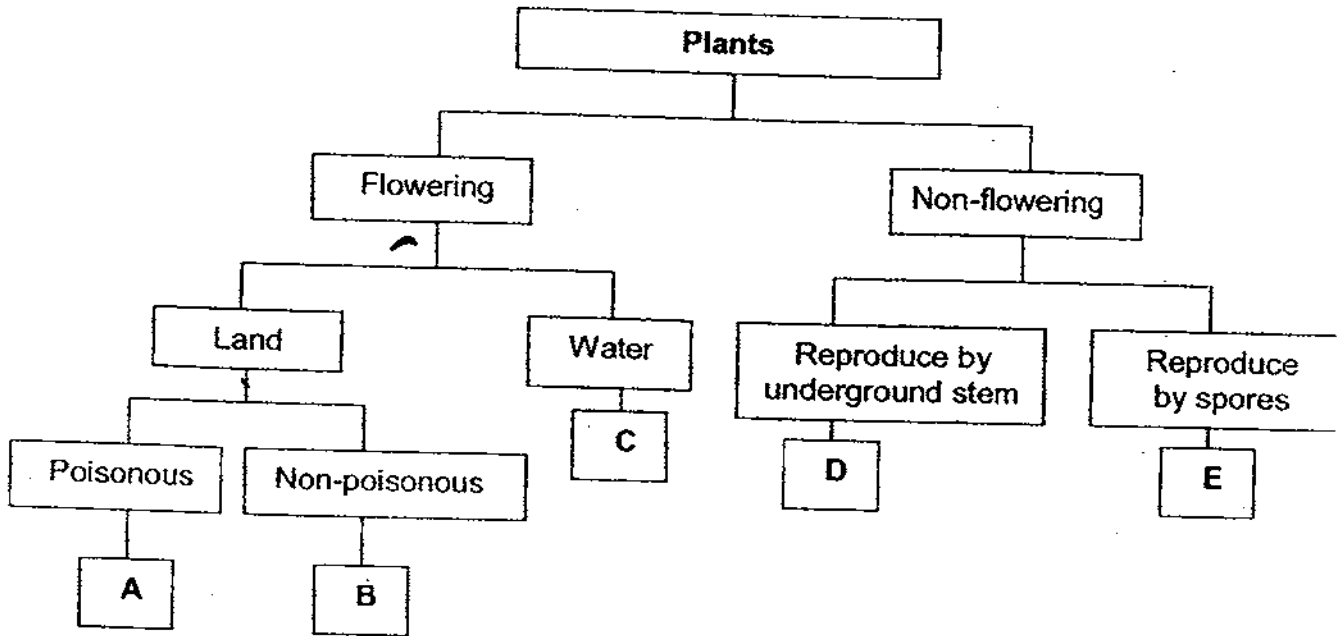
- (b) Give a reason for your answer in (a). [2]

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Score	3
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37. Study the classification below.



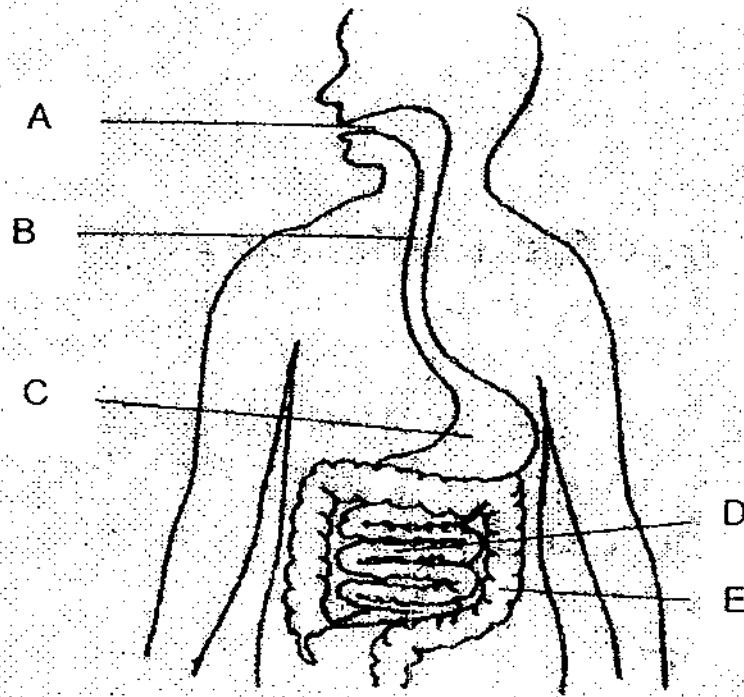
Based on the classification table above, where would you put the following plants? Write the correct answer (A, B, C, D or E) in each blank. [2]

- (a) Orchid \_\_\_\_\_
- (b) Water Lily \_\_\_\_\_
- (c) Bird's nest fern \_\_\_\_\_
- (d) Pong pong \_\_\_\_\_

Score	2
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38. Refer to the diagram below.



Each of the processes below takes place in different parts of the digestive system. Write the correct letter (A, B, C, D and E) in each blank. [2]

(a) Food is churned into smaller pieces and becomes partially digested after two to five hours.

(b) The process of digestion is completed here.

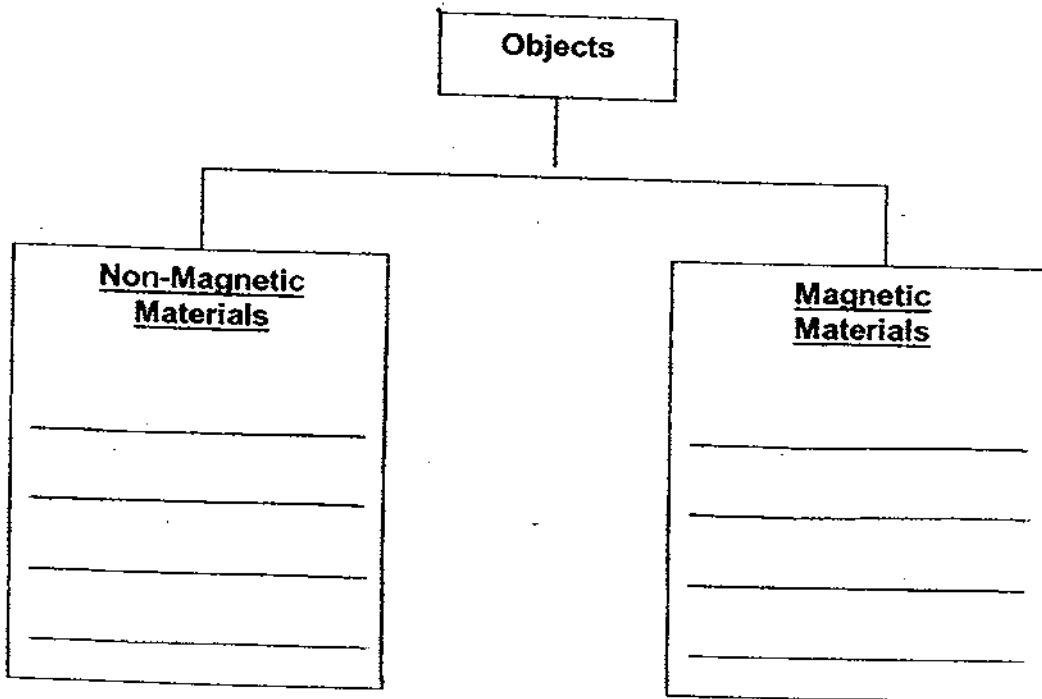
(c) The muscular contractions in it push the food into the stomach.

(d) Undigested food is stored here for a while before it is removed from the body as faeces.

Score	2
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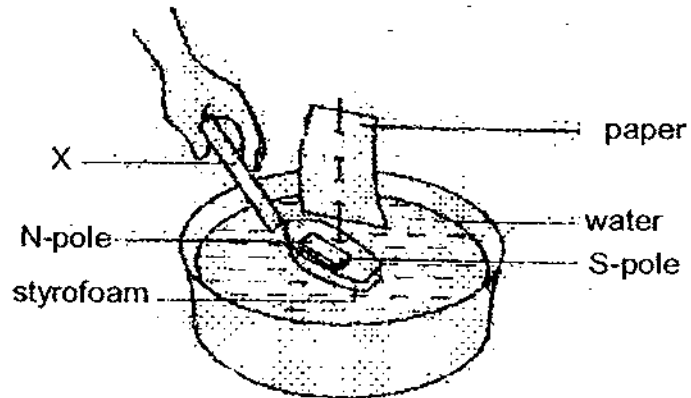
39. Look at the objects in the box below and put them in the correct group. Use each of the objects ONCE only. [3]

<del>aluminum foil</del> aluminium foil	aluminium steel spoon	gold chain
iron nail	paper file	copper wire



Score	3
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40. Study the diagram below carefully. It shows a 'sailing boat' floating in a basin of water.



When Peter brought a rod, X, near to the boat, it moved away from X.

- (a) What could X most probably be? [1]

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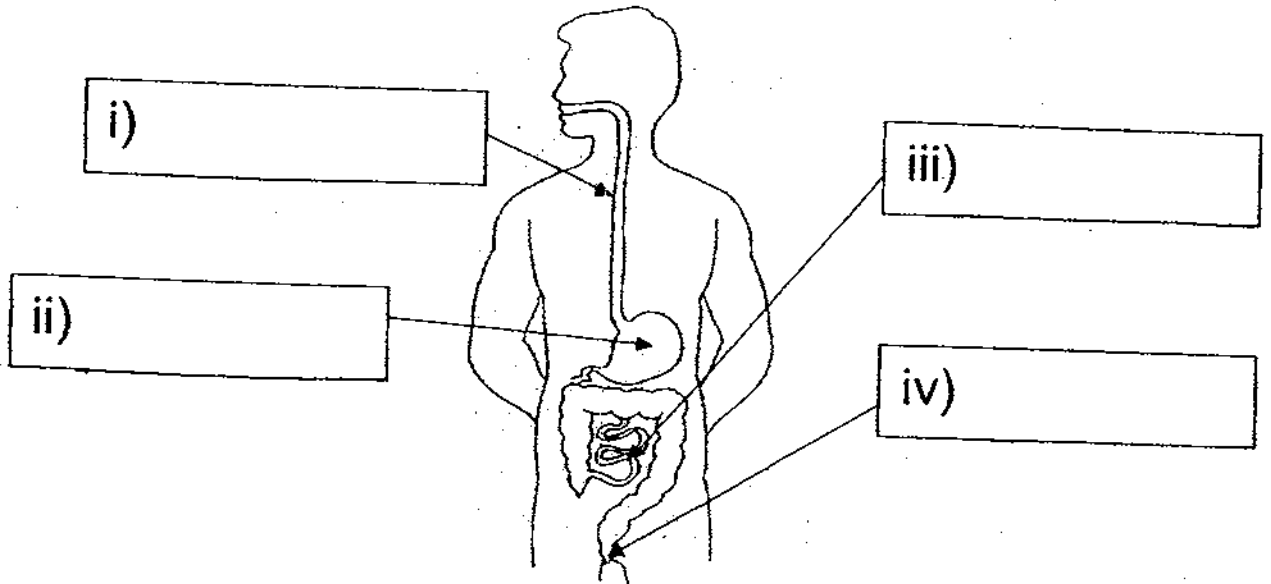
- (b) Give a reason why the boat moved away from X. [2]

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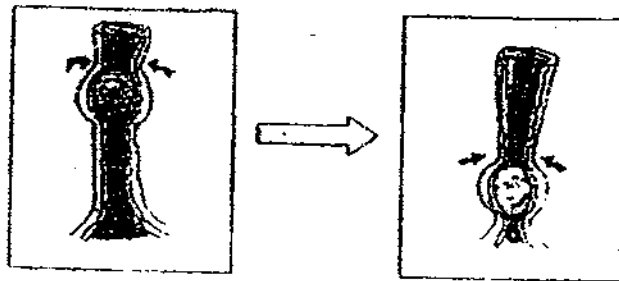
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Score	
	3

41. The diagram below shows some internal organs of the human system. Identify all the organs in the diagram. [4]



42. The diagram below shows an organ that forms the digestive system in the human body.

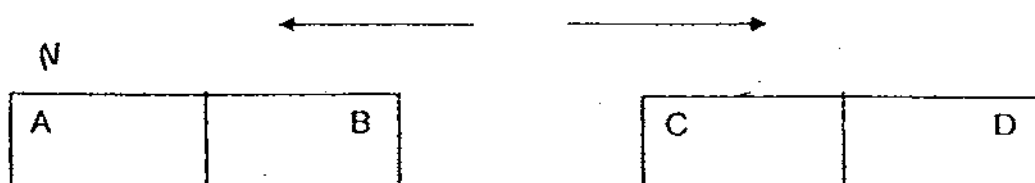


When we eat, the food will be pushed down a tube as shown in the diagram above.

- (a) Name the organ shown above. [1]  
 \_\_\_\_\_
- (b) The movement of the \_\_\_\_\_ in this organ allows the food to go down the tube. [1]
- (c) Where will this food go next in the digestive system? [1]  
 \_\_\_\_\_

Score	7
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43. In an experiment, David arranged two bar magnets near each other. He observed that they moved in the directions as shown by the arrows, in the diagram below.



- (a) What can David conclude from the observation which he made from the experiment? [2]

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- (b) If B is the South pole of the first magnet, what pole could D be? [1]

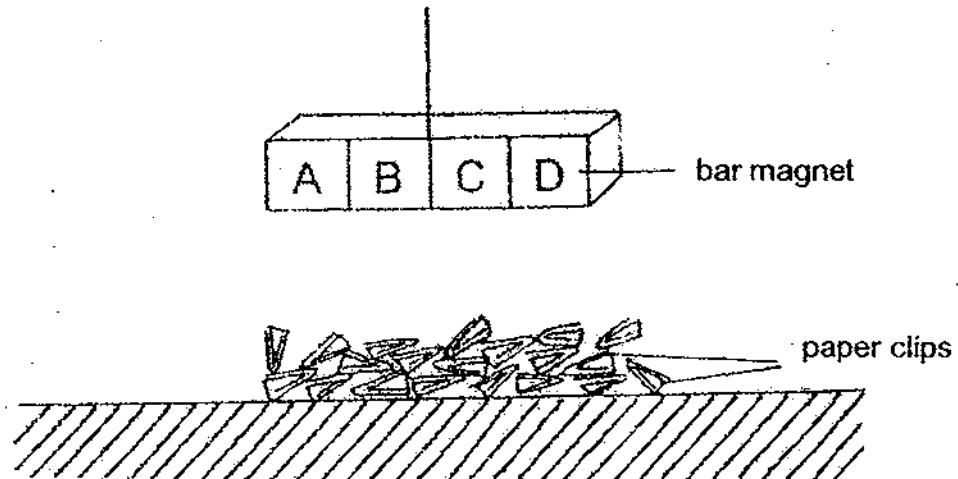
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Score	3
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44. A bar of magnet is divided into four equal parts, A, B, C and D. Before Mark brought the magnet near to a number of paper clips as shown in the diagram below, he asked his friends to predict the number of paper clips that would be attracted to each of the four parts. The table below shows their predictions.



Names of friends	Number of paperclips attracted			
	Part A	Part B	Part C	Part D
Sam	2	9	8	1
Jack	1	2	8	9
Tom	8	2	1	9

- (a) Which one of Mark's' friends made the most accurate prediction? [1]

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- (b) Give a reason for your answer in (a). [2]

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- END OF PAPER -

Score	3
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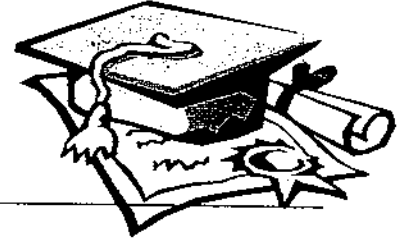


# ANSWER SHEET

**EXAM PAPER 2009**

**SCHOOL : NAN HUA 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	2	1	3	4	3	2	3	2	2	1	1	3	1	3

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

31)a)The deer must look for food while the mimosa plant can make its own food.

b)They both need air, food and water to survive.

32)a)Mammal.      b)Cat.

33)a)i)B      ii)Waterproof      b)A

34)a)i)Flexible      ii)Non-flexible  
iii)Rubber boots      iv)Metal spoon

35)a)A      b)D

36)a)It will die.

b)The black paper blocks / keep out sunlight from the leaves . So the leaves cannot take in sunlight to make food for the plant to survive.

37)a)B      b)C      c)E      d)A

38)a)C      b)D      c)B      d)E

**39) Non-Magnetic Materials**

Paper file  
Aluminum foil  
Gold chain  
Copper wire

**Magnetic Materials**

iron nail  
steel spoon

40)a) A magnet.

b) The like poles of the two magnets are facing each other so the two magnets repel.

41)i) gullet

ii) stomach

iii) small intestine

iv) anus

42)a) Gullet.

b) muscles.

c) Stomach.

43)a) When like poles are facing each other they repel.

b) N-pole.

44)a) Tom.

b) The attraction of the magnet is the strongest at poles/end/tips/sides and weakest in the middle/centre.