



NAN HUA PRIMARY SCHOOL
SEMESTRAL ASSESSMENT 2 – 2010
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: 28 October 2010

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

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

2. Which of the following comparisons is true?

| | Water moss fern | Mimosa |
|-----|--------------------|----------------------------|
| (1) | Non-flowering | Flowering |
| (2) | Land | Water |
| (3) | Makes its own food | Does not make its own food |
| (4) | Poisonous | Non-poisonous |

3. Which one of the following shows the similarity between plants and animals?

- (1) They make their own food.
- (2) They need air, water and food.
- (3) They respond quickly to changes.
- (4) They can move from place to place.

4. Sally placed two specimens, 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.

| Observations on X | Observations on Y |
|---|--|
| Moves slowly when touched with an ice-cream stick | Does not move when touched with an ice-cream stick |
| Feeds on the food provided | The food provided was untouched |
| Has grown bigger after 10 days | No change in size after 10 days |

Which one of the following could X and Y be?

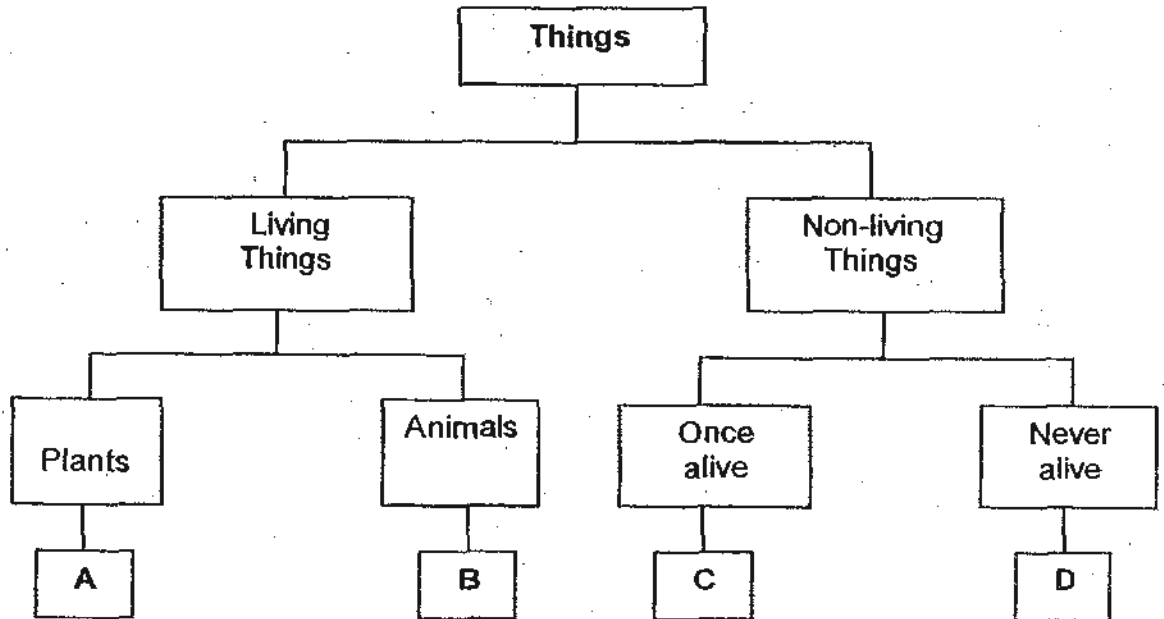
| | X | Y |
|-----|-----------|-------------|
| (1) | Stone | Brick |
| (2) | Mealworm | Stone |
| (3) | Book | Caterpillar |
| (4) | Earthworm | Dragonfly |

5. Which one of the following is/are the function(s) of the leaves of a plant?

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

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

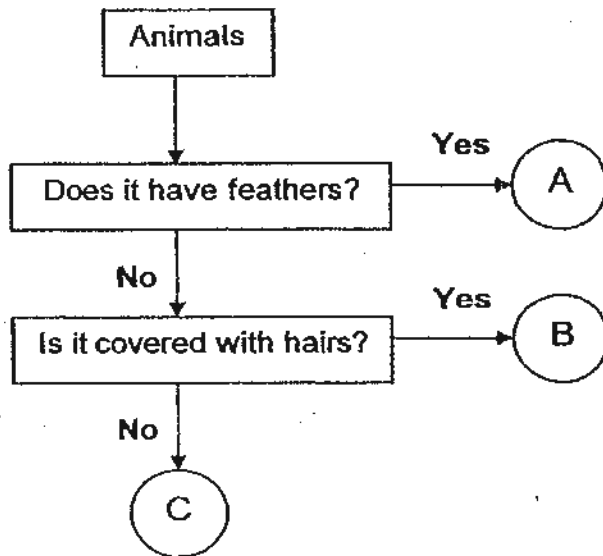
6. Study the classification table below. A, B, C and D are objects that are classified according to the groups that they belong to.



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

| | A | B | C | D |
|-----|----------|---------|--------|----------|
| (1) | grass | leather | eraser | key |
| (2) | fern | penguin | book | magnet |
| (3) | tree | lizard | pencil | envelope |
| (4) | hibiscus | tiger | glass | raincoat |

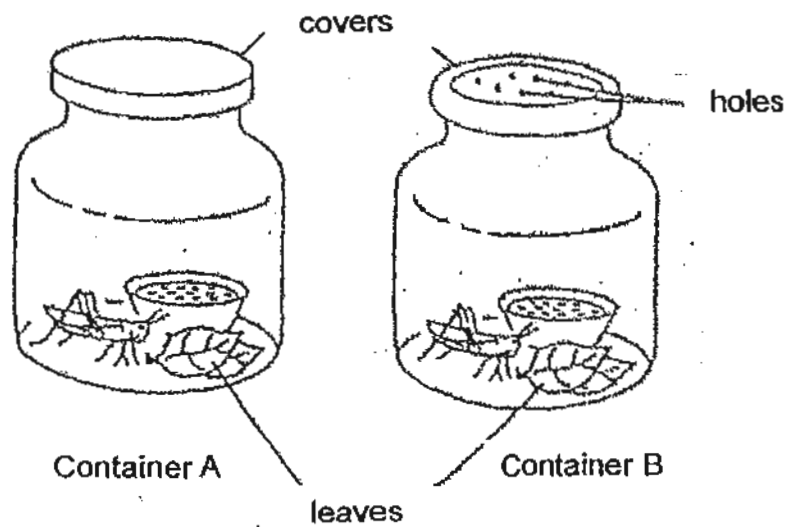
7. Study the flow chart below.



Which animals in the table below best represent A, B and C respectively?

| | A | B | C |
|-----|---------|----------|---------|
| (1) | Duck | Penguin | Tilapia |
| (2) | Chicken | Sheep | Guppy |
| (3) | Seagull | Goldfish | Monkey |
| (4) | Parrot | Horse | Pig |

8. Eunice placed 2 grasshoppers in 2 different containers as shown in the diagrams below.



After one day, the grasshopper in Container A died but the grasshopper in Container B was still alive.

This experiment shows that living things need _____.

- (1) air
- (2) food
- (3) water
- (4) sunlight

9. Plastic is used to make raincoats because it is _____.

| | |
|---|------------|
| A | fragile |
| B | waterproof |
| C | flexible |

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

10. The following objects are grouped based on a common property that they have.

| Objects in Group A | Objects in Group B |
|--------------------|--------------------|
| plasticine | iron nail |
| silk | thumb tack |
| tissue paper | marbles |

Which of the following best represents how the objects in Group A and B are classified respectively?

| | Group A | Group B |
|-----|----------------|--------------|
| (1) | hard | soft |
| (2) | magnetic | non-magnetic |
| (3) | flexible | non-flexible |
| (4) | non-waterproof | waterproof |

11. Which of the following statements about saliva is/are true?

A : Saliva helps to digest food.

B : Saliva makes food easier to swallow.

C : Saliva helps food to be absorbed in the stomach.

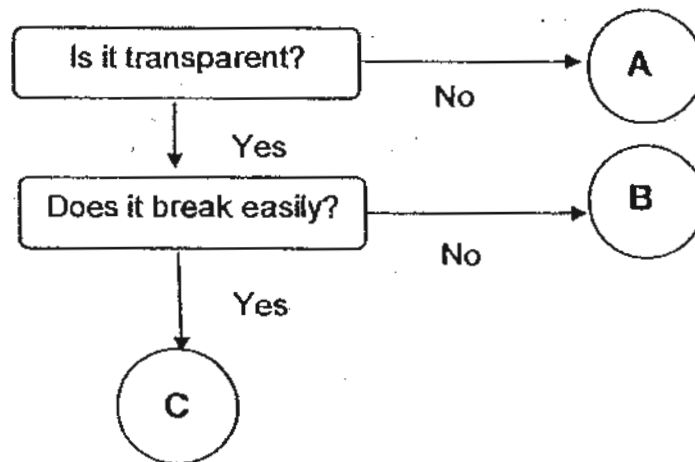
- (1) A only
(2) B only
(3) A and B only
(4) B and C only

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

Which of the following objects is matched to its properties correctly?

| | Object | Properties | |
|-----|----------------|---------------|---------------|
| | | Sink in water | Breaks easily |
| (1) | Metal spoon | √ | √ |
| (2) | Glass bowl | | |
| (3) | Ping pong ball | √ | √ |
| (4) | Iron anchor | √ | |

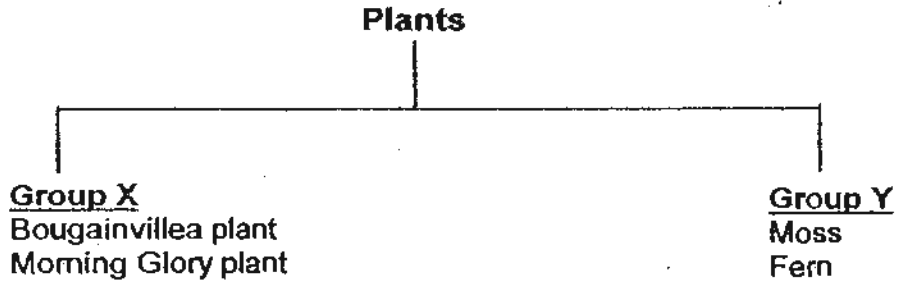
13. The flow chart below shows the characteristics of some materials.



What materials are A, B and C?

| | A | B | C |
|-----|---------|---------|--------|
| (1) | Wood | Plastic | Glass |
| (2) | Plastic | Glass | Wood |
| (3) | Plastic | Rubber | Glass |
| (4) | Wood | Glass | Rubber |

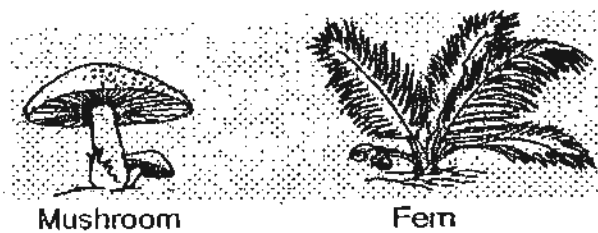
14. Study the classification table below.



Which one of the following best represents Group X and Y respectively?

| | Group X | Group Y |
|-----|------------------|----------------------|
| (1) | Edible plants | Inedible plants |
| (2) | Land plants | Water plants |
| (3) | Flowering plants | Non-flowering plants |
| (4) | Poisonous plants | Non-poisonous plants |

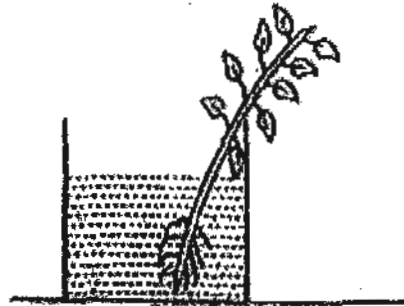
15. Compare the following plants.



In what way are the mushroom and the fern similar?

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

16. Hannah placed a balsam plant in a beaker of red coloured water. After 5 days, she cut the stem of the plant and noticed that the tubes found in the stem had turned red.



Balsam plant

From this experiment, what can Hannah conclude about the function of the tubes in the stem?

The function of the tubes in the stem is to _____.

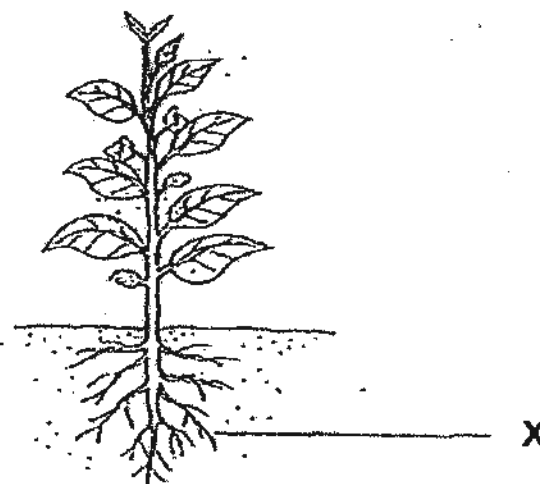
- 1) store food for the plant
 - 2) absorb water and mineral salts for the plant
 - 3) contain the green pigment that is needed to make food
 - 4) transport water from the roots to the other parts of the plant
17. Sarah observed that bees in her garden are attracted to plants with brightly coloured and sweet smelling flowers.

| Types of plant | Brightly coloured | Sweet smelling |
|---------------------|-------------------|----------------|
| Geranium | Yes | Yes |
| Water lily | Yes | No |
| Kangaroo Paw | Yes | No |
| Dragon's Scale Fern | No | No |

Which one of the following plants attracts the bees?

- (1) Geranium
- (2) Water Lily
- (3) Kangaroo Paw
- (4) Dragon's Scale Fern

18. Study the diagram below.



What are the functions of the plant part labeled X?

- A: It makes food for the plant.
- B: It holds the plant in an upright position.
- C: It takes in water and dissolved mineral salts from the soil.
- D: It transports water and dissolved mineral salts to all parts of the plant.

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

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

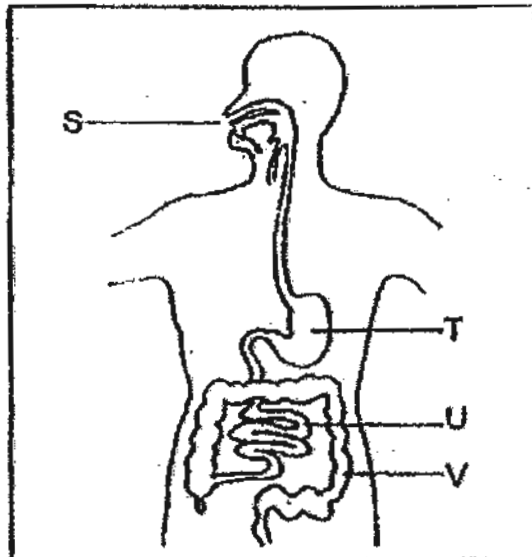
| | |
|--------------------|--|
| Statement A | Digestion is completed in the small intestine. |
| Statement B | Digested food is absorbed by the blood. |
| Statement C | Most of the water is removed in the small intestine. |

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

20. The heart and lungs are protected by the _____.

- (1) skull
- (2) ribcage
- (3) hipbone
- (4) backbone

21. The diagram below shows a system found in the human body with its parts labeled S, T, U and V.



Which of the following represents the part of system where most of the food is digested and passed into the blood?

- (1) S
- (2) T
- (3) U
- (4) V

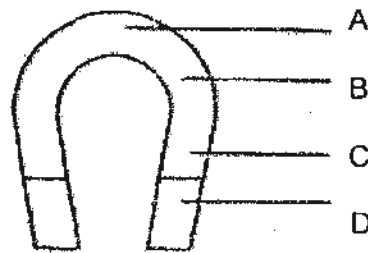
22. Which one of the following is the function of the skeletal system?

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

23. Jessica has just taken her breakfast which consists of a bowl of cereals and a glass of milk. Her food will be digested with the help of digestive juices from her mouth, _____ and _____.

- 1) gullet and stomach
- 2) gullet and large intestine
- 3) stomach and small intestine
- 4) small intestine and large intestine

24. The diagram below shows a magnet.



If part A of this magnet is able to attract 11 pins, which of the following shows the number of pins most likely to be attracted by Part B, C and D of the magnet respectively?

| | B | C | D |
|-----|----|----|----|
| (1) | 13 | 15 | 19 |
| (2) | 19 | 15 | 13 |
| (3) | 15 | 13 | 19 |
| (4) | 15 | 19 | 13 |

25. Mike had three magnets, A, B and C, as shown in the diagram below.



Magnet A



Magnet B



Magnet C

He placed each magnet near some thumbtacks from a distance and recorded the number of thumbtacks attracted to it.

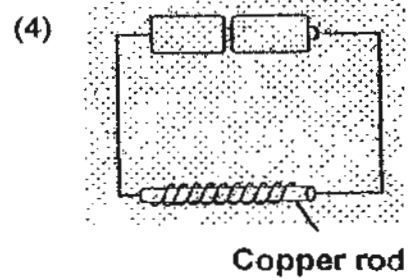
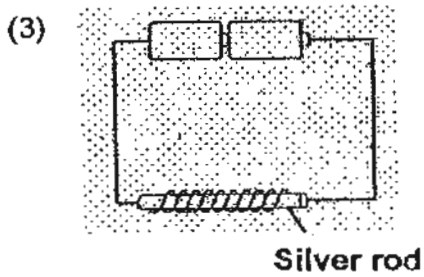
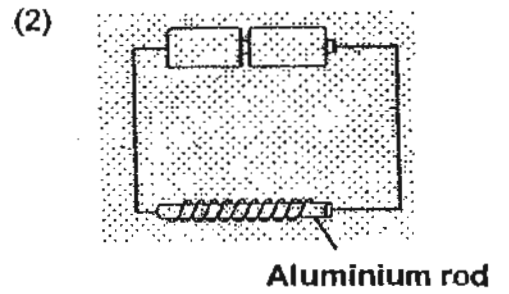
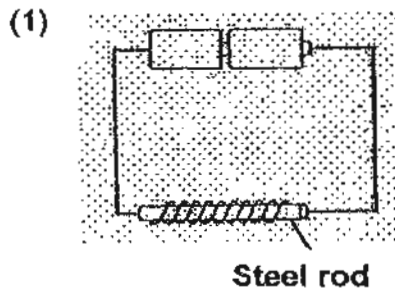
The table below shows the number of thumbtacks attracted by the magnets A, B and C.

| Magnet | Distance between magnet and thumbtacks (cm) | Number of thumbtacks attracted |
|--------|---|--------------------------------|
| A | 5 | 12 |
| B | 3 | 5 |
| C | 2 | 12 |

Which of the following statements is correct?

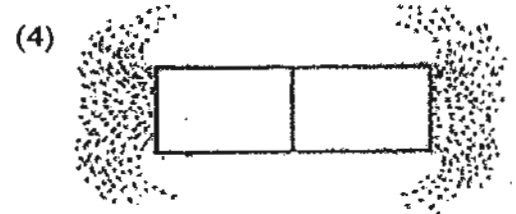
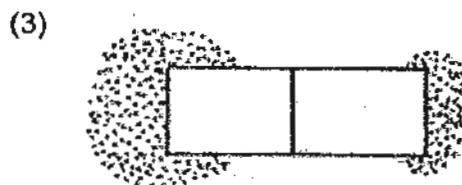
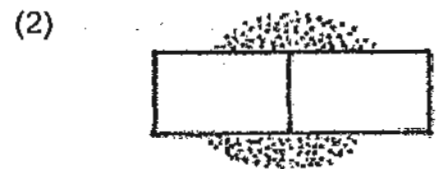
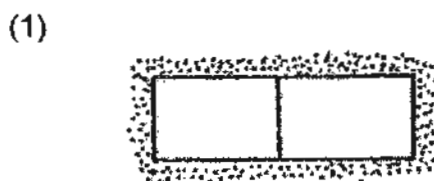
- (1) Magnet A is the strongest magnet
- (2) Magnet C is the weakest magnet
- (3) Magnet A is as strong as Magnet C.
- (4) Magnet B is a stronger magnet than A.

26. Which of the following rods will attract iron nails?



27. Mrs. Tan sprinkles some iron filings round a bar magnet.

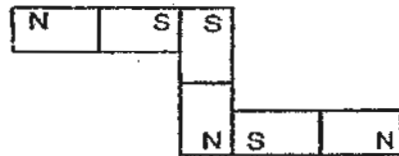
Which one of the following diagrams shows the correct pattern of the iron filings?



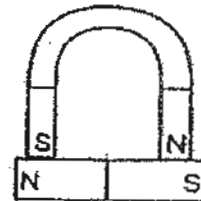
28. Study the arrangements of some magnets as shown below.

Which one of the following arrangements does not show the interaction between the magnets correctly?

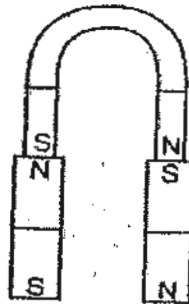
(1)



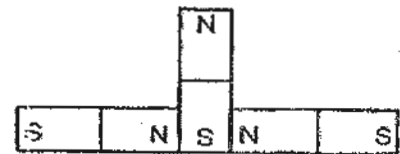
(2)



(3)



(4)

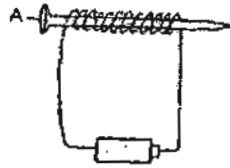


29. Which one of the following objects makes use of magnets to function?

- (1) battery
- (2) hammer
- (3) telephone
- (4) scissors

30. Which one of the following iron nails will not become a magnet?

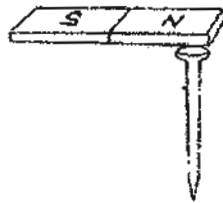
(1)



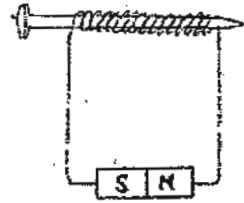
(2)



(3)



(4)





**NAN HUA PRIMARY SCHOOL
SEMESTRAL ASSESSMENT 2 – 2010
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 |
|--|-----|

Name: _____ () **Class: P 3** _____

Date: 28th October 2010

Parent's Signature: _____

Section B: (40 marks)

Write your answers to question 31 to 44 in the space provided.

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

31. The diagrams below show a mimosa plant and a leopard.



Mimosa Plant



Leopard

(a) Name one difference in the way the mimosa plant and leopard get their food. [2]

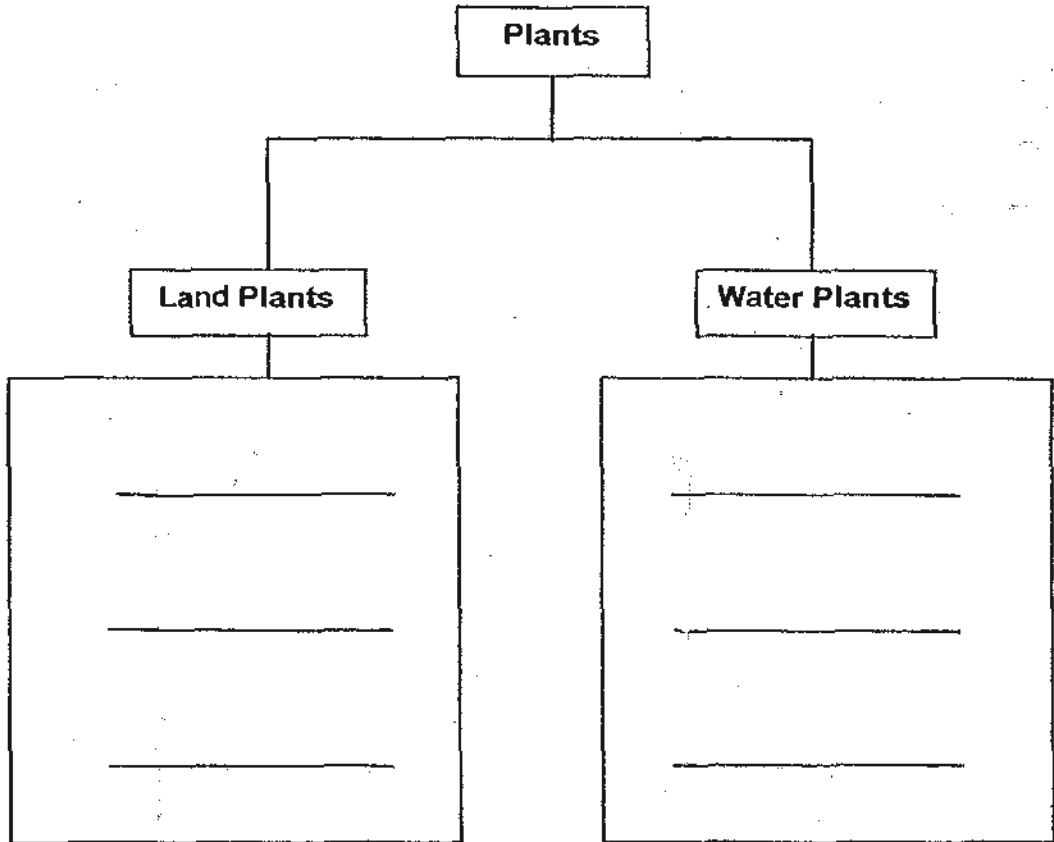
(b) Both the mimosa plant and leopard are living things. They share common characteristics. Put a tick (✓) in the appropriate box(es) that show(s) the common characteristics shared by both living things. [1]

| No | Characteristic | Tick (✓) if it is a common characteristic for both the mimosa plant and leopard. |
|----|---------------------------------|--|
| 1 | Both can grow. | |
| 2 | Both reproduce by giving birth. | |
| 3 | Both respond to changes. | |

| | |
|-------|---|
| Score | 3 |
|-------|---|

32. Classify the plants in the box correctly according to their groupings below. [3]

| | | | | | |
|---------|----------|---------|---------------|--------|------------|
| Tapioca | Hydrilla | Cattail | Staghorn Fern | Orchid | Water Lily |
|---------|----------|---------|---------------|--------|------------|



| | |
|-------|---|
| Score | 3 |
|-------|---|

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

| Property | Materials | | | |
|---------------------|-----------|---|---|---|
| | A | B | C | D |
| Flexible | | √ | | √ |
| Can be stretched | | | | √ |
| Breaks when dropped | √ | | | |
| Waterproof | √ | √ | √ | |

- (a) Based on the table above, state the properties of Material A. [1]

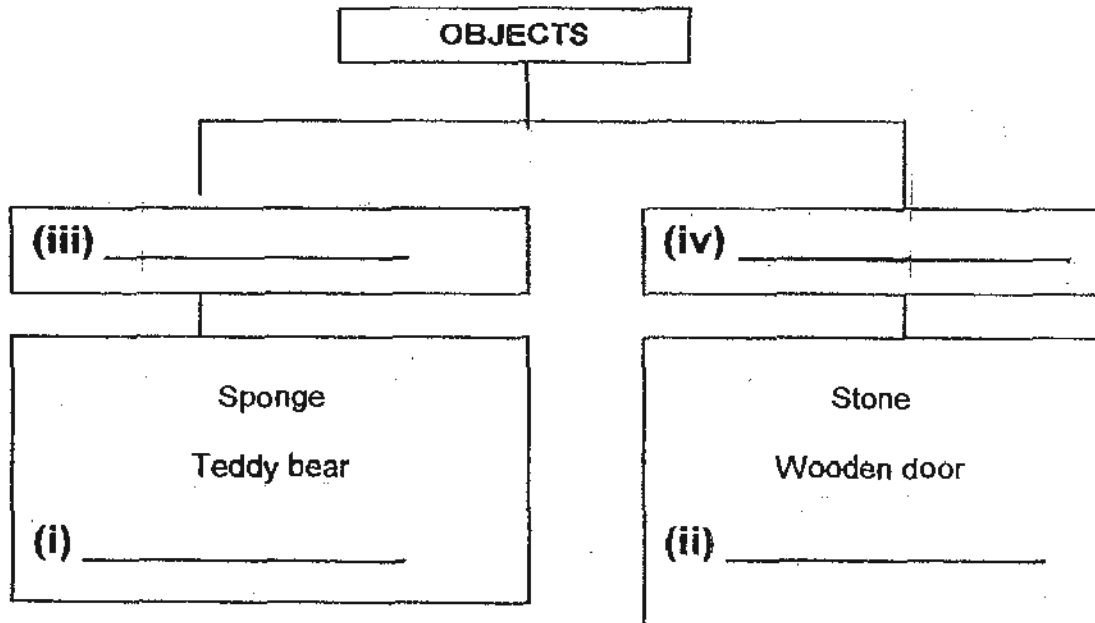
- (b) Is Material A suitable to make into a water hose? Give a reason for your answer. [1]

- (c) Based on the table above, which one of the above materials A, B, C or D is likely to be rubber band? [1]

Material _____

| | |
|-------|---|
| Score | 3 |
|-------|---|

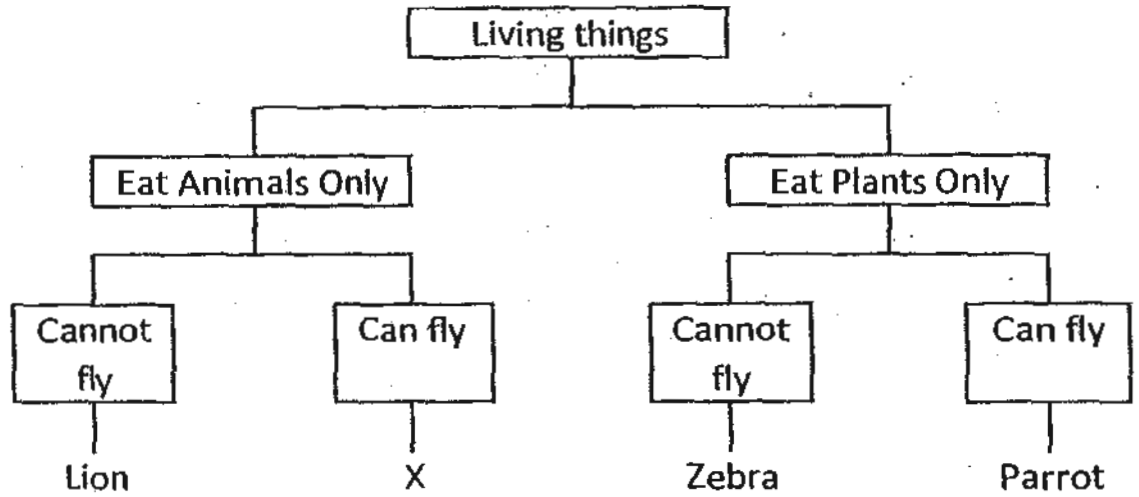
34. John's teacher displayed a few objects in class and classified them into two groups according to the physical properties of the materials they were made of.



- (a) Fill in the words "glass bottle" and "pillow" under the correct group in the space (i) and (ii) provided. [2]
-
- (b) Observe carefully how the objects are grouped.
Write down 2 suitable subheadings for the items in boxes (iii) and (iv). [2]
-

| | |
|-------|---|
| Score | 4 |
|-------|---|

35. Study the classification diagram given below.



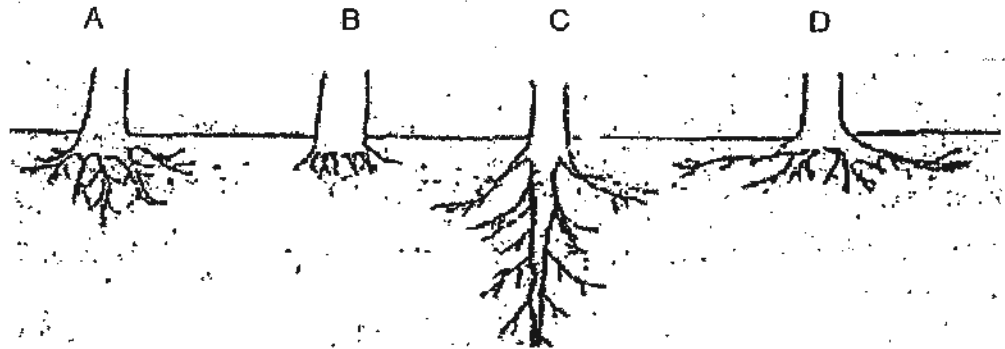
(a) Name an animal that can be X. [1]

(b) How is the parrot similar to Animal X? [1]

(c) Based on the classification diagram above, state the characteristics of the zebra. [2]

| | |
|-------|---|
| Score | / |
|-------|---|

36. The diagram below shows the roots of four different plants A, B, C and D.



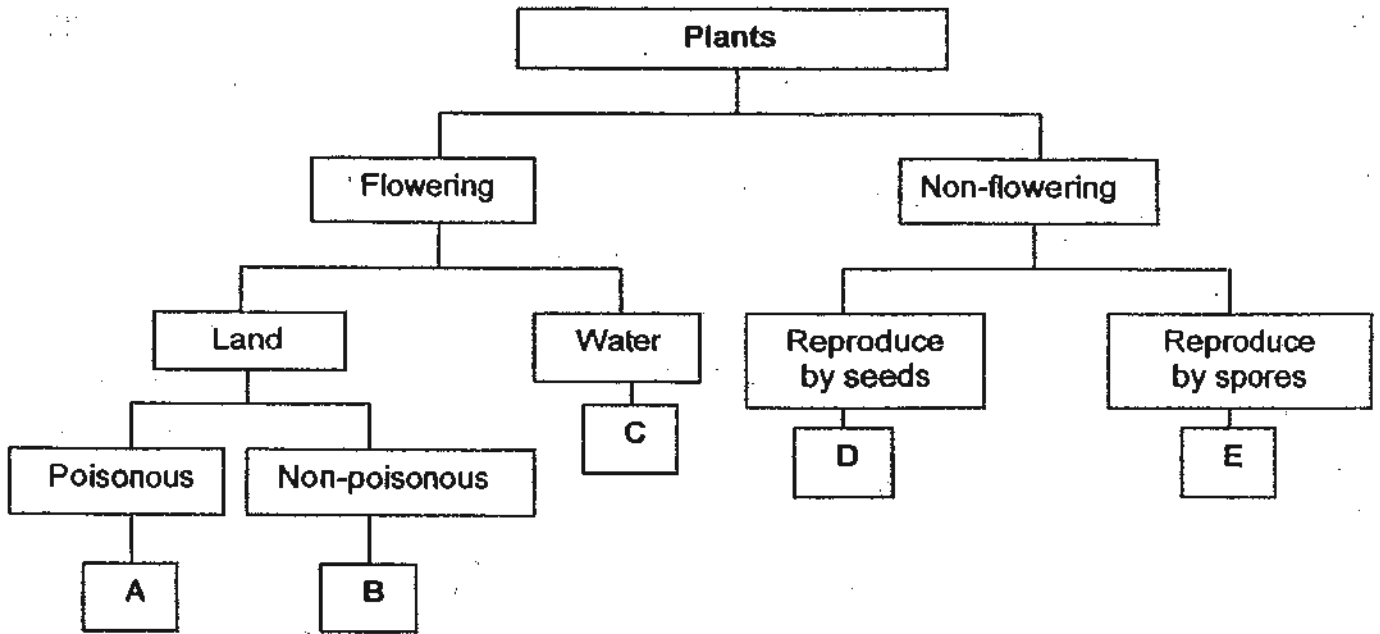
- (a) Based on the diagram above, which plant has roots that hold it most firmly to the ground? [1]

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

- (c) Give another function of the roots. [1]

| | |
|-------|-------|
| Score | <hr/> |
| | 3 |

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) Carnation _____
- (b) Duckweed _____
- (c) Staghorn fern _____
- (d) Pong pong _____

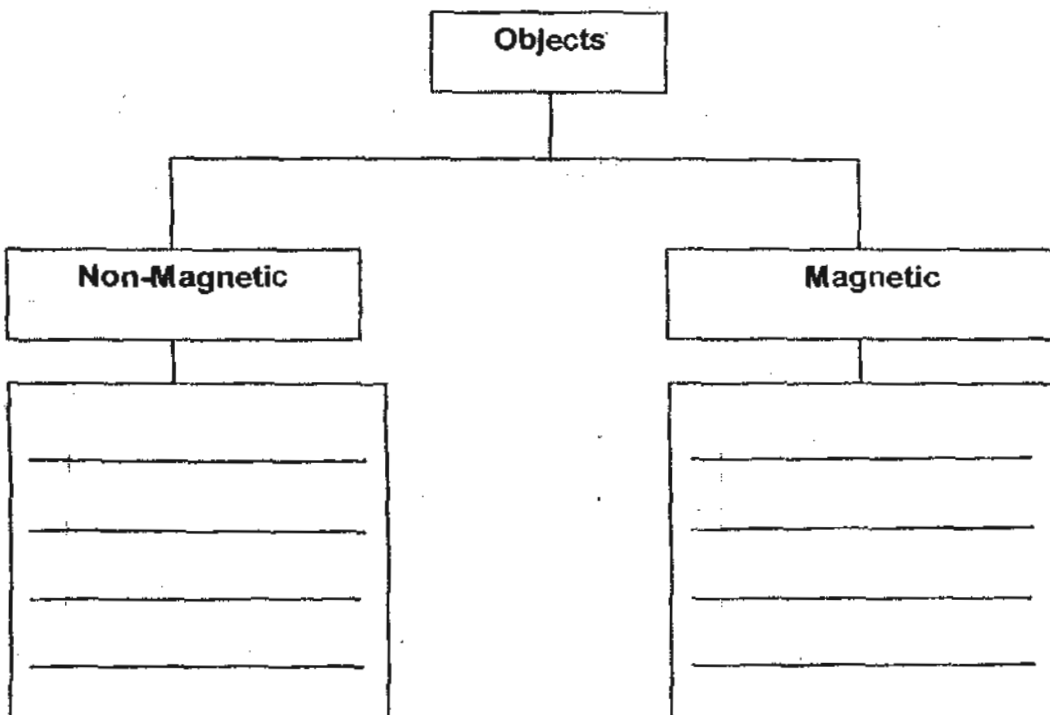
| | |
|-------|---|
| Score | 2 |
|-------|---|

38. What are the functions of the stomach?
 Look at the statements given below, write 'True' or 'False' in the boxes
 beside them. [3]

| | |
|--|--|
| (a) Produce saliva | |
| (b) Break the food received from the gullet into smaller pieces. | |
| (c) Mix digestive juices with the food. | |

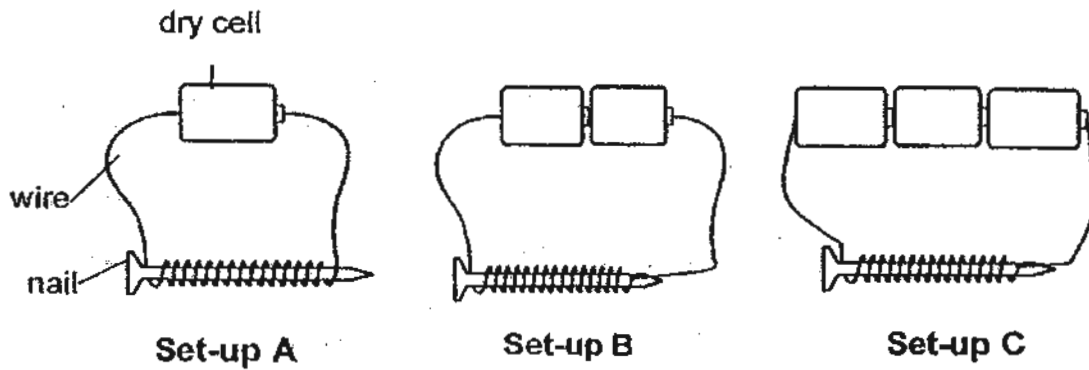
39. Look at the object in the box below and put them in the correct group. [3]
 Use each set of words ONCE only.

| | | |
|-----------------|------------|-------------|
| silver bracelet | paper-clip | gold-chain |
| safety pin | thumb-tack | copper-wire |



| | |
|-------|---|
| Score | 6 |
|-------|---|

40. Jeremy sets up an experiment on electromagnets as shown below.



He recorded his results as shown in the table.

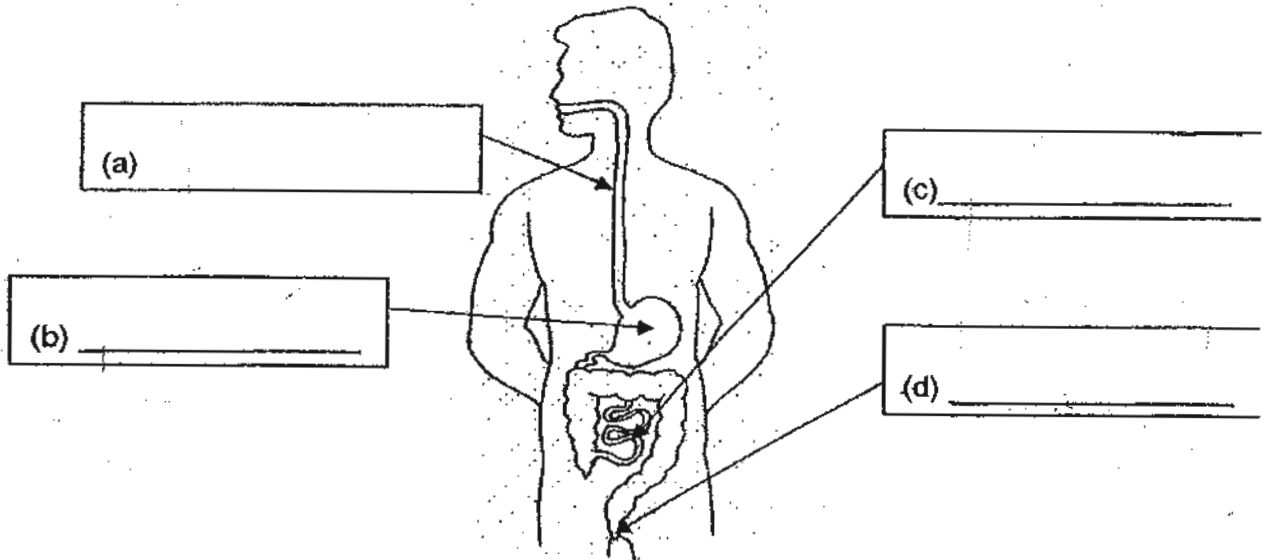
| Set-up | Number of dry cells | Number of coils of wire round the nail | Number of paper clips attracted |
|--------|---------------------|--|---------------------------------|
| A | 1 | 20 | 2 |
| B | 2 | 20 | 5 |
| C | 3 | 20 | 7 |

(a) State the aim of his experiment. [1]

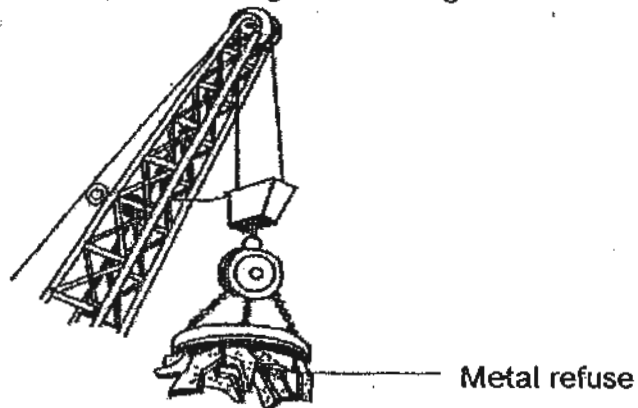
(b) Suggest **another** way to increase the number of paper clips to be attracted to the electromagnet. [1]

| | |
|-------|---|
| Score | 2 |
|-------|---|

41. The diagram below shows some internal organs of the digestive system. Name parts labeled (a) to (d) in the diagram below. [2]



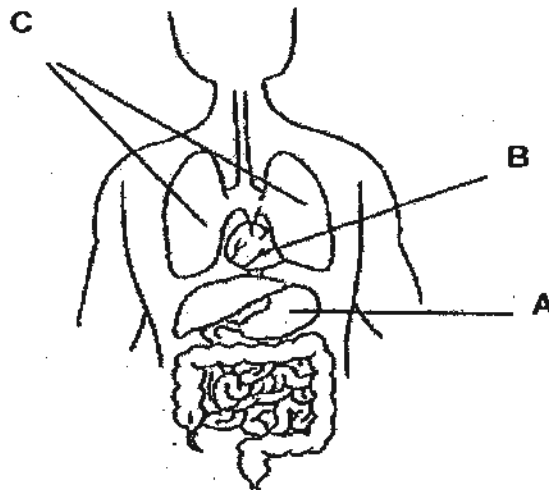
42. The diagram below shows a large electromagnet. [1]



- (a) Explain how the electromagnet is useful at the refuse dump. [1]

- (b) How do you drop the metal refuse that has been attracted by the electromagnet? [1]

43. The diagram below shows some organs in the human body.



(a) Name the following organs.

B : _____ [1]

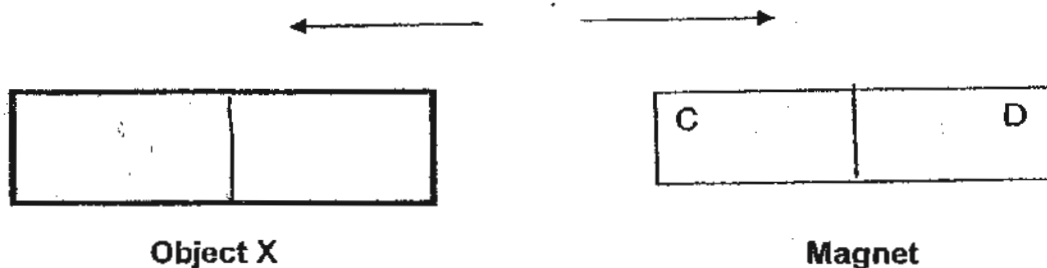
C : _____ [1]

(b) Which organ(s), A, B or C belong(s) to the respiratory system?

[1]

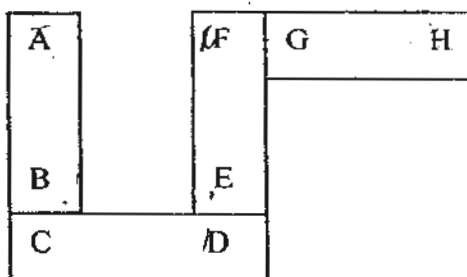
| | |
|-------|---|
| Score | 3 |
|-------|---|

44. In an experiment, Sarah placed an object X close to the magnet. She observed that they moved in the directions as shown by the arrows, in the diagram below.



- (a) Based on the observation made by Sarah, what is Object X most likely to be? [1]

- (b) What can Sarah conclude from the experiment above? [1]



- (c) If A is the South pole of the first magnet, what pole could G be? [1]

- END OF PAPER -

| | |
|-------|---|
| Score | 3 |
|-------|---|

ANSWER SHEET

EXAM PAPER 2010

**SCHOOL : NAN HUA PRIMARY
SUBJECT : PRIMARY 3 SCIENCE**

TERM : SEMESTRAL ASSESSMENT 2

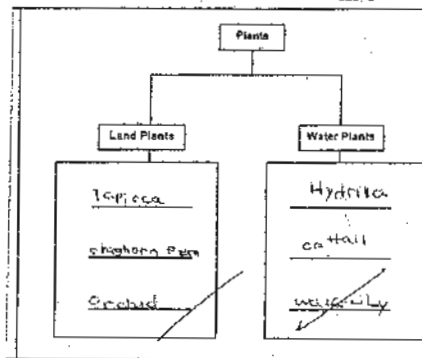
| | | | | | | | | | | | | | | | | |
|----|----|----|----|----|----|----|----|----|-----|-----|-----|-----|-----|-----|-----|-----|
| Q1 | Q2 | Q3 | Q4 | Q5 | Q6 | Q7 | Q8 | Q9 | Q10 | Q11 | Q12 | Q13 | Q14 | Q15 | Q16 | Q17 |
| 3 | 1 | 2 | 2 | 1 | 2 | 2 | 1 | 3 | 3 | 3 | 4 | 1 | 3 | 3 | 4 | 1 |

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

**Q31a) The leopard search for its food but the mimosa plant makes its own food.
b)**

| No | Characteristic | Tick (✓) if it is a common characteristic for both the mimosa plant and leopard. |
|----|---------------------------------|--|
| 1 | Both can grow. | ✓ |
| 2 | Both reproduce by giving birth. | |
| 3 | Both respond to changes. | ✓ |

Q32)



Q33a) It is waterproof and breaks when dropped.

**b) No. It is because if anyone dropped the rubber hose, material A will break.
c) Material D**

Q34ai) pillow

ii) glass bottle

biii) Non-waterproof

iv) Waterproof

Q35a) Vulture

b) They both can fly.

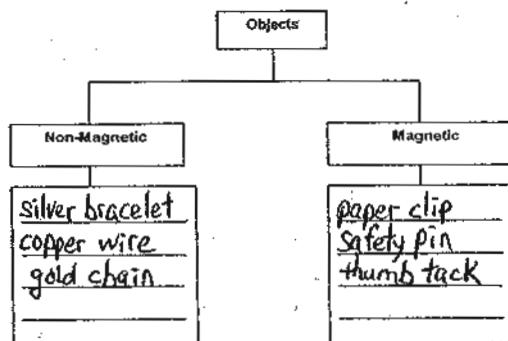
c) It cannot fly and eats plants only.

- Q36a) C plant can hold the plant most firmly to the ground.
 b) It is because plant C root grew the deepest among the others.
 c) It absorbs water and mineral salts from the ground.

- Q37a) B
 b) C
 c) E
 d) A

- Q38a) False
 b) True
 c) True

Q39)



- Q40a) The aim of his experiment is to find out how dry cells affect the number of paper clips the nail can attract.
 b) Turn more coils around the electromagnet.

- Q41a) gullet
 b) stomach
 c) small intestine
 d) anus

- Q42a) It separates the magnetic from the non-magnetic materials.
 b) Cut off the electricity so the magnetism of the electromagnet will be stopped and the magnetic material will be dropped.

- Q43a) B: Heart C: Lungs
 b) Organ C belongs to the respiratory system.

- Q44a) A magnet.
 b) The like poles are facing each other therefore object X and the magnet will repel.
 c) G could be south pole.