



MAHA BODHI SCHOOL  
2005 SEMESTRAL ASSESSMENT 2  
PRIMARY 3 SCIENCE

Name: \_\_\_\_\_ (      )

Date: 27 Oct 2005

Class: Primary 3 (      )

**BOOKLET A**

30 Questions

30 marks

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

**Instructions to Candidates**

Do not open this booklet until you are told to do so.

Follow all instructions carefully.

Check all the pages carefully to make sure that all the questions are in order.

Answer all the questions.

If a question is difficult, go on to the next one. Do not waste time.





This booklet consists of 12 pages, excluding the cover sheet.

**PART I: (30 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 answer (1, 2, 3 or 4) on the Optical Answer Sheet (OAS).

1. Study the 2 groups of things shown below.

Group X	Group Y
 twig	 key
 dried leaf	 cup

Which one of the following sets of headings for Group X and Group Y is correct?

	Group X	Group Y
(1)	Plants	Animals
(2)	Living Things	Non-living things
(3)	Things that were once alive	Things that are never alive
(4)	Things that are made of plant parts	Things that are made of animal parts

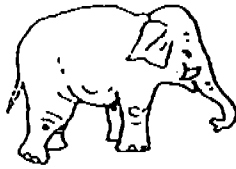
2. Raincoats are usually made of plastic because the material \_\_\_\_\_.

- (A) is light
- (B) is waterproof
- (C) tears easily

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

3. Which one of the following animals are mammals?

(A)



(B)



(C)



(D)



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

4. Which one of the following statements about micro-organisms is incorrect?

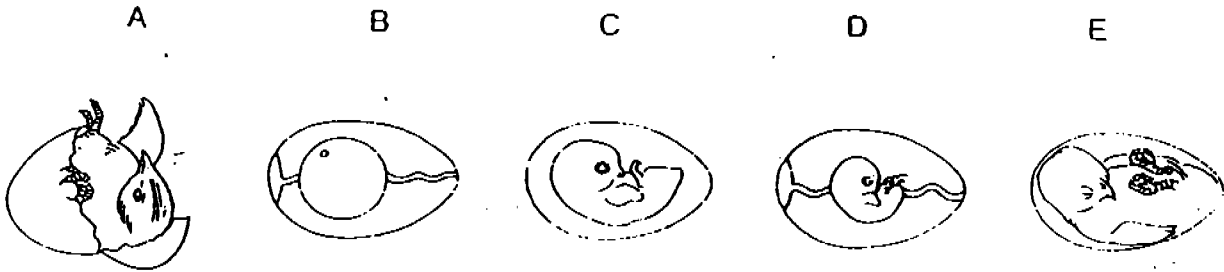
- (1) All micro-organisms are harmful to man.
- (2) Some micro-organisms help in the decomposition of dead matter.
- (3) Micro-organisms can only be seen under the microscope.
- (4) Micro-organisms can be found in our bodies.

5. For a seed to grow into a seedling, it will need \_\_\_\_\_.

- (A) air
- (B) fertilizer
- (C) water
- (D) warmth

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

6. Which one of the following shows the correct order in the development of a chick from a fertilized egg?



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

7. Dogs are often used to locate missing people because of their keen sense of \_\_\_\_\_.

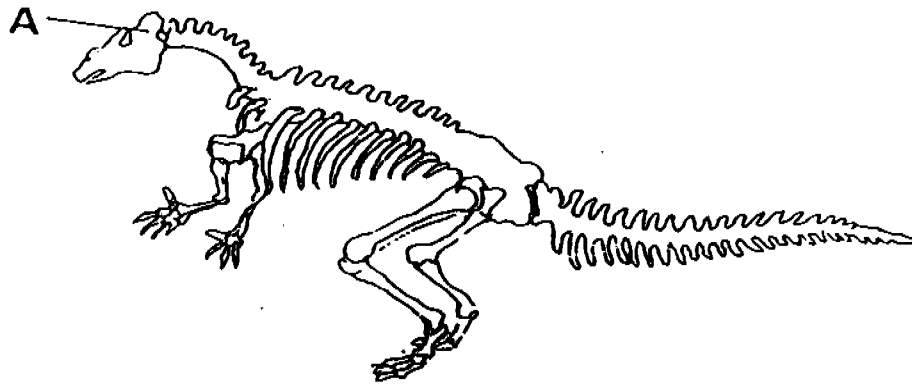
- (1) hearing  
(2) smell  
(3) sight  
(4) touch

8. Old Uncle Sam is blind. He is unable to tell the \_\_\_\_\_ of an object.

- (1) size  
(2) shape  
(3) colour  
(4) texture

9. When we are eating or cutting chillies, we know that they are spicy. Which one of the following sense organs tells us that?
- (1) Eyes
  - (2) Ears
  - (3) Tongue
  - (4) Skin
10. The \_\_\_\_\_ system takes oxygen into the body and removes carbon dioxide from the body.
- (1) digestive
  - (2) circulatory
  - (3) respiratory
  - (4) skeletal
11. Which one of the following paths shows correctly how food travels through our body?
- (1) Mouth → gullet → stomach → small intestine → large intestine
  - (2) Gullet → mouth → stomach → large intestine → small intestine
  - (3) Mouth → stomach → gullet → small intestine → large intestine
  - (4) Gullet → mouth → small intestine → stomach → large intestine
12. Undigested food goes into the \_\_\_\_\_ where most of the water is removed from the food.
- (1) anus
  - (2) stomach
  - (3) small intestine
  - (4) large intestine
13. The function of the skeletal system is to \_\_\_\_\_
- (A) give shape to our body
  - (B) protect the important organs in our body
  - (C) enable the movement of our body
- (1) A only
  - (2) A and B only
  - (3) B and C only
  - (4) A, B and C

14. The diagram below shows the skeleton of a dinosaur.



What is the part marked 'A'?

- (1) Skull
  - (2) Hip bone
  - (3) Ribcage
  - (4) Thigh bone
15. Which one of the following statements is **not** true of the muscular system?
- (1) Muscles work together with the skeletal system to enable a person to move his body.
  - (2) There are some muscles in the body that work without having the person to control them.
  - (3) The main function of the muscular system is to protect the organs in the body.
  - (4) Most muscles work in pairs to bring about movement
16. We need our muscles when we \_\_\_\_\_
- (A) smile
  - (B) pick up litter from the ground
  - (C) climb up the stairs
  - (D) nod our head
- (1) A and C only
  - (2) B and C only
  - (3) B, C, and D only
  - (4) A, B, C and D

17. Chlorophyll is the green substance in leaves. Which one of the following is the correct function of chlorophyll?

- (1) It traps water.
- (2) It traps energy from the sun.
- (3) It traps carbon dioxide.
- (4) It produces food.

18. The \_\_\_\_\_ of a plant protect(s) its seeds.

- (1) leaves
- (2) flowers
- (3) fruits
- (4) stem

19. In a Science TV programme, Alice learnt that some fruits contain seeds. Based on this definition, which one of the following is not a fruit?

(1)



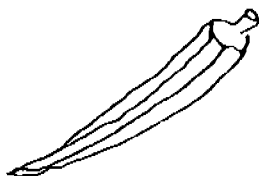
pumpkin

(2)



potato

(3)



lady's finger

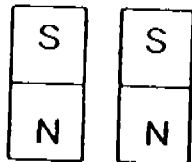
(4)



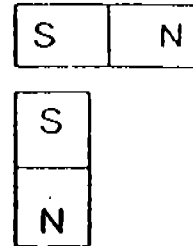
chilli

20. Which one of the following pairs of magnets will attract each other?

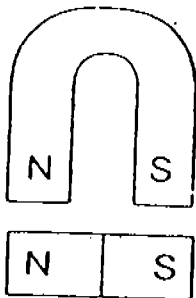
(1)



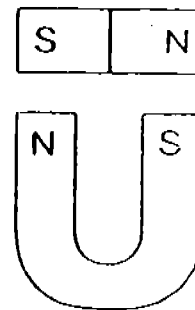
(2)



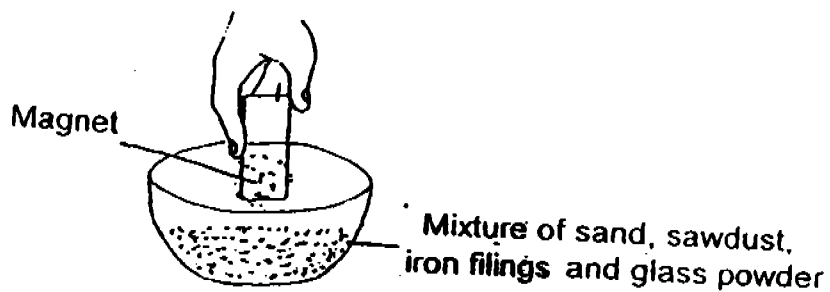
(3)



(4)



21. Ali pours a mixture of sand, sawdust, iron filings and glass powder into a bowl.

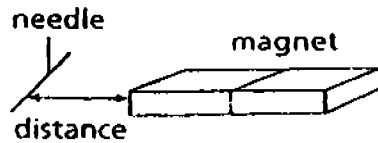


The \_\_\_\_\_ will be attracted to the magnet when the magnet is brought near the mixture.

- (1) sand
- (2) sawdust
- (3) iron filings
- (4) glass powder



Study the table below and answer Questions 22 & 23.  
 Javier wants to find out the strength of 4 pieces of bar magnets, A, B, C and D.  
 He places a needle at different distances from each magnet as shown.



The table below shows the results of his experiment.  
 A (✓) indicates that the needle is attracted to the magnet while a (x) indicates that the needle is not attracted to the magnet.

Magnet	Distance from the magnet			
	1 cm	2 cm	3 cm	4 cm
A	✓	✓	✓	✓
B	✓	✓	x	x
C	✓	✓	✓	x
D	✓	x	x	x

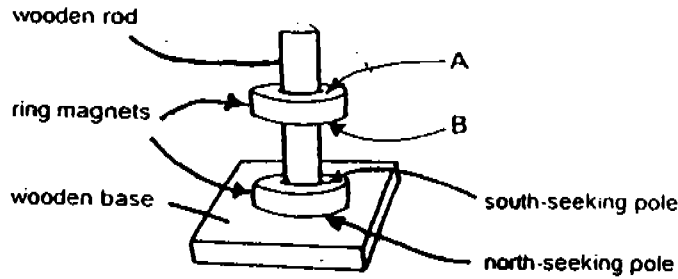
22. Magnet \_\_\_\_\_ is the strongest and Magnet \_\_\_\_\_ is the weakest.

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

23. Magnet C is stronger than Magnet(s) \_\_\_\_\_.

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

24. Study the diagram shown below. Two ring magnets are passed through a wooden rod.

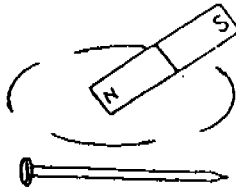


A is the \_\_\_\_\_ pole while B is the \_\_\_\_\_ pole

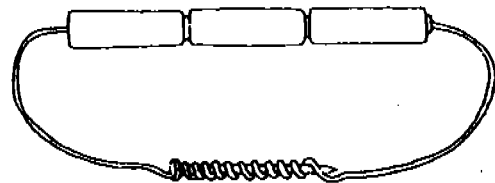
- (1) south-seeking ..... south-seeking
- (2) north-seeking ..... north-seeking
- (3) south-seeking ..... north-seeking
- (4) north-seeking ..... south-seeking

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

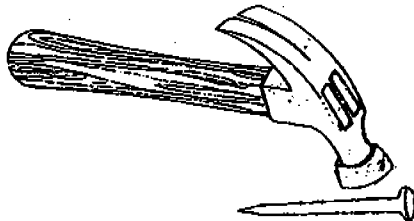
(1)



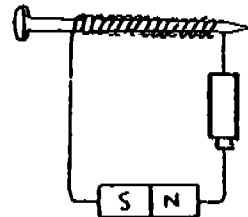
(2)



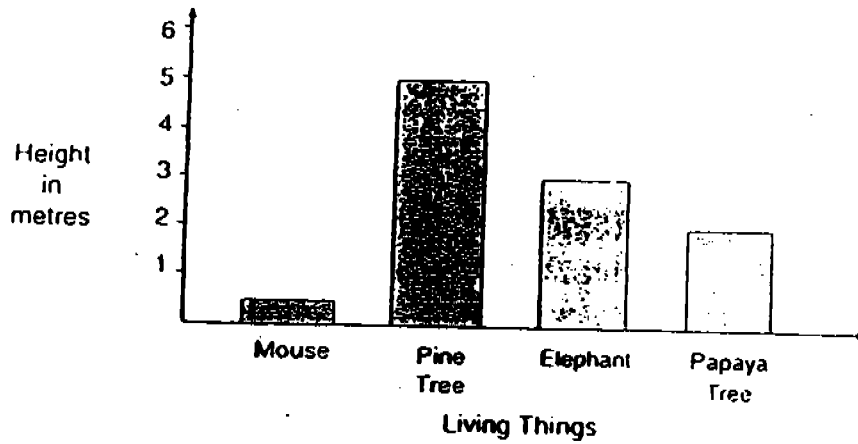
(3)



(4)



26. Study the graph below.



Arrange the living things in order of their height from the shortest to the tallest.

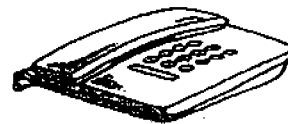
- (1) Mouse, papaya tree, elephant, pine tree
- (2) Pine tree, elephant, papaya tree, mouse
- (3) Elephant, papaya tree, pine tree, elephant
- (4) Papaya tree, mouse, elephant, pine tree

27. Which one of the following objects does not need magnets to work?

(1)



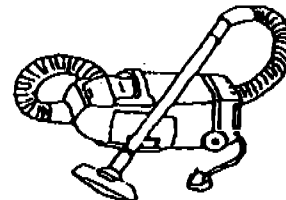
(2)



(3)



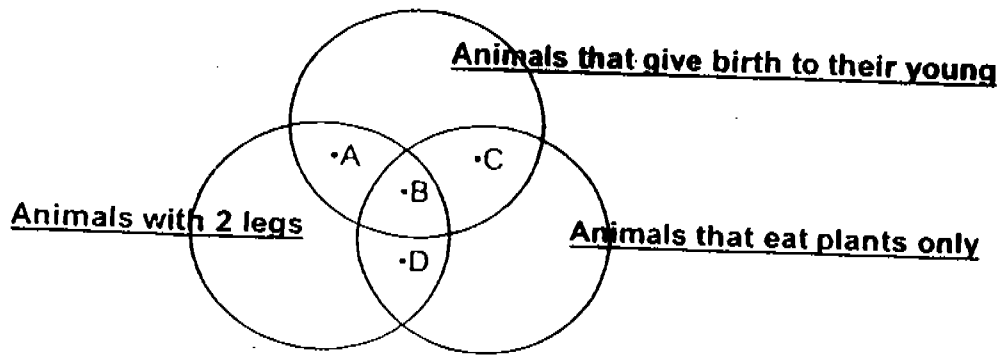
(4)



28. Kelly placed a piece of paper on the door of a refrigerator by putting 4 button magnets at the corners of the paper. She replaced the piece of paper with a piece of iron sheet and noticed that the iron sheet would not stick on the door. Why was this so?

- (1) The iron sheet was too heavy.
- (2) The 4 button magnets were not strong enough.
- (3) The 4 button magnets were not attracted to the iron sheet.
- (4) The pull of the 4 button magnets could not pass through the iron sheet.

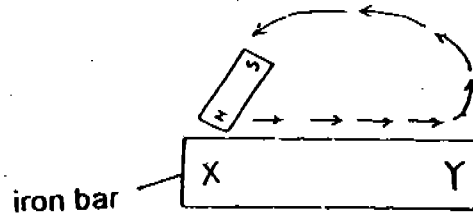
29. Study the Venn diagram below.



Where should "rabbit" be placed?

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

30. Charlotte made a magnet using the "stroking" method. She started stroking the iron bar at X with a magnet and continued stroking in the direction shown below.



Which poles do X and Y represent?

	X	Y
(1)	N - Pole	N - Pole
(2)	N - Pole	S - Pole
(3)	S - Pole	N - Pole
(4)	S - Pole	S - Pole

END OF PART I



MAHA BODHI SCHOOL  
2005 SEMESTRAL ASSESSMENT  
PRIMARY 3 SCIENCE

Name: \_\_\_\_\_ ( )

Date: 27 Oct 2005

Class: Primary 3 ( )

**BOOKLET B**

10 Questions

20 marks

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

Instructions to Candidates

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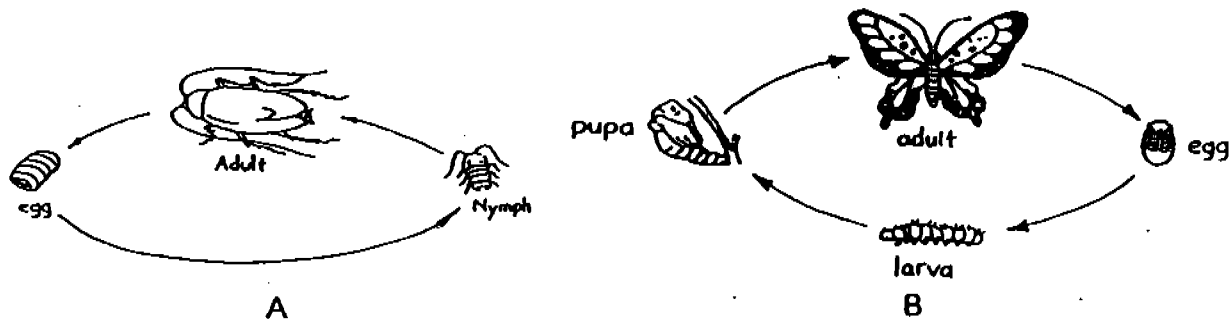
If a question is difficult, go on to the next one. Do not waste time.

This booklet consists of 6 pages, excluding the cover sheet.

	Max. Marks	Actual Marks
Booklet A	30	
Booklet B	20	
Total	50	
	100	
Parent's Signature		



33. The diagrams below show 2 life cycles, A and B.



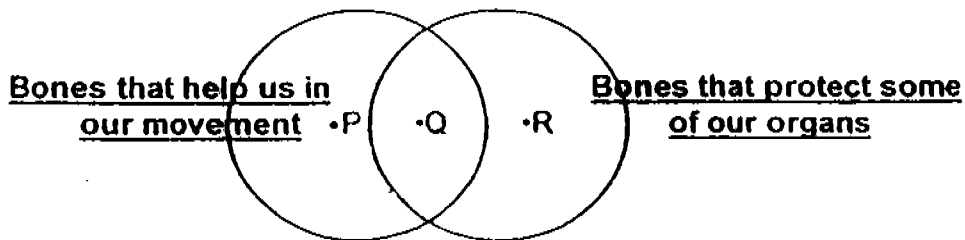
(a) Based on the diagrams, compare and state a difference between life-cycles A and B. [1]

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(b) Name the process when the pupa in life cycle B grows a new skin and sheds the old one. [1]

---

34. In the Venn diagram below, P, Q and R represent 3 different bones found in our body.



Identify the letter that represents each of the following types of bones.

(i) Skull : \_\_\_\_\_

(ii) Ribcage : \_\_\_\_\_

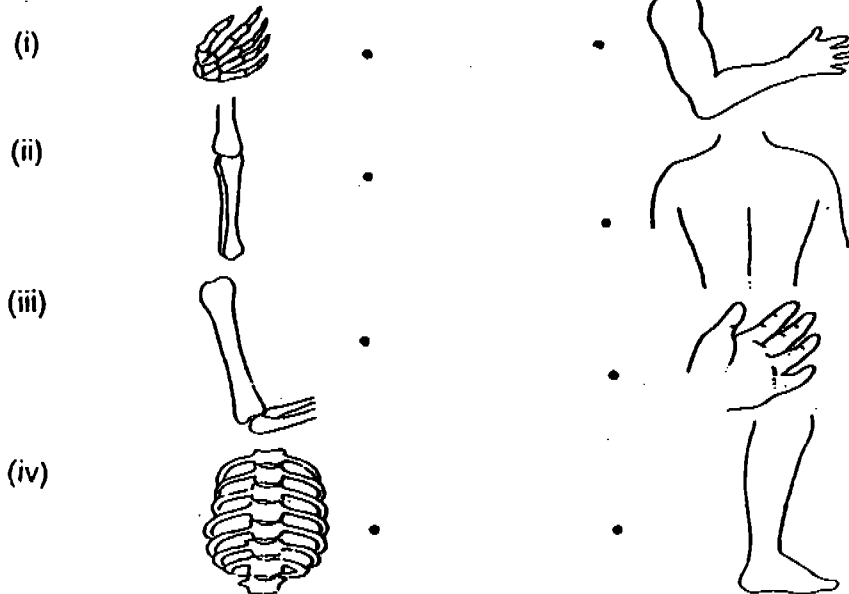
(iii) Finger bone : \_\_\_\_\_

[2]

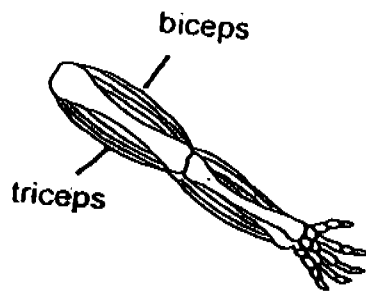


35. Match the bones to the body parts.

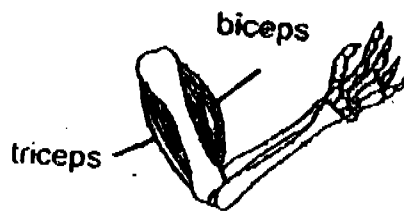
[2]



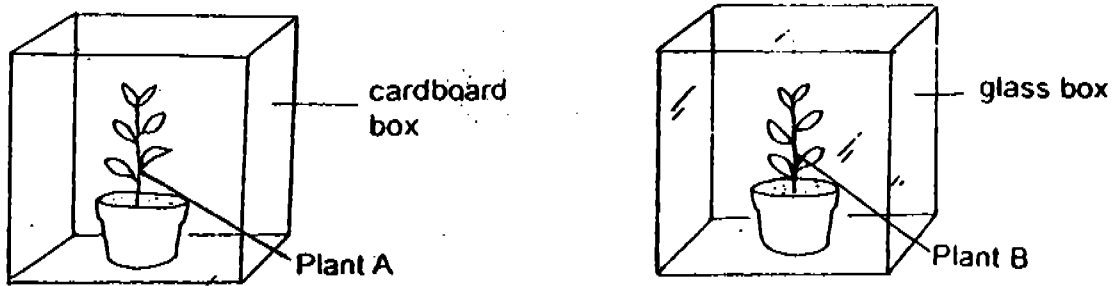
36. The diagram below shows the muscles, triceps and biceps, in the upper arm when the arm is straightened. The bicep relaxes while the triceps contracts.



However, when the arm is bent, the biceps \_\_\_\_\_ while the triceps \_\_\_\_\_ as shown in the diagram below. [1]



37. James carried out an experiment as shown below.



He grew two similar pots of plants in fertile soil and put them under the sun. He also watered them every day.

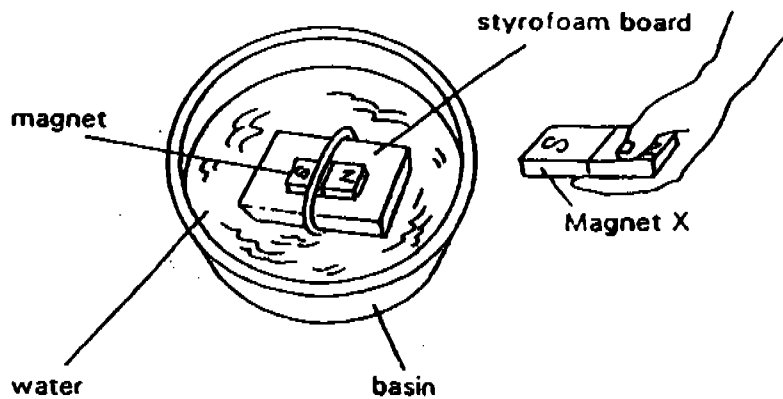
a) Which plant would not grow well? [1]

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

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38. Study the set-up shown below.



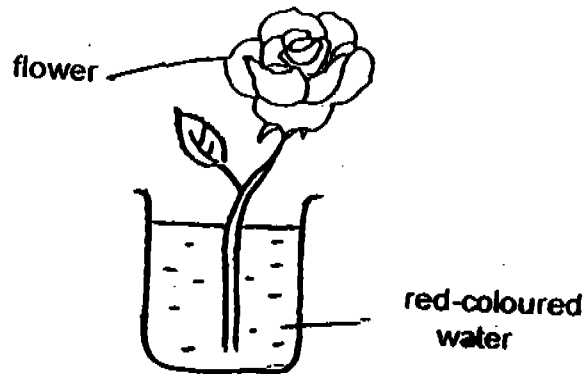
(a) What will happen to the styrofoam board when Lynn brings Magnet X near the basin as indicated in the diagram? [1]

---

(b) Why does it behave that way? [1]

---

39. Janet put a white flower in a beaker of red-coloured water for two days.



- (a) What would Janet observe about the flower at the end of the second day? [1]

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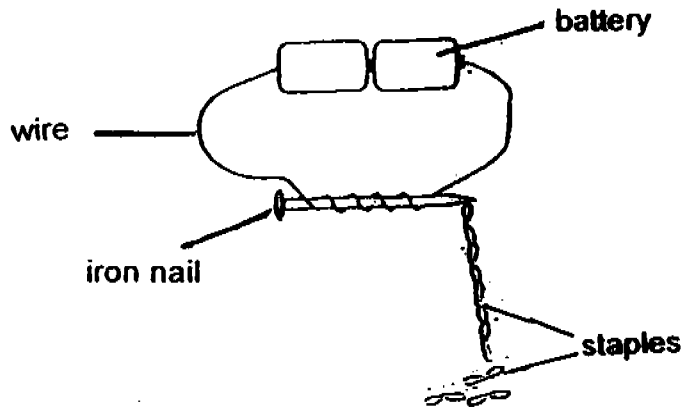
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- (b) Explain your answer in (a). [1]

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40. Mary set up the experiment below using 2 batteries, wires and an iron nail. She put some staples on the table.



- (a) After 3 minutes, the iron nail was able to attract some of the staples. Explain what has happened. [1]

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- (b) Write down one way to increase the number of staples that are attracted to the iron nail. [1]

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END OF PAPER

MAHA BODHI PIMARY SCHOOL  
PRIMARY 3 SCIENCE 2005  
SEMESTRAL ASSESSMENT 2

ANSWER SHEETS

- 1. 3
- 2. 1
- 3. 1
- 4. 1
- 5. 3
- 6. 3
- 7. 2
- 8. 3
- 9. 4
- 10. 3
- 11. 1
- 12. 4
- 13. 2
- 14. 1
- 15. 3
- 16. 4
- 17. 2
- 18. 3
- 19. 2
- 20. 4
- 21. 3
- 22. 1
- 23. 3
- 24. 4
- 25. 3
- 26. 1
- 27. 3
- 28. 4
- 29. 3
- 30. 2

31. 

<u>Flowering</u>	<u>Non-flowering</u>
<u>Rose</u>	<u>Moss</u>
<u>Orchid</u>	<u>Algae</u>
<u>Hibiscus</u>	<u>Bird's nest fern</u>
32. a) The water had gone into his wind pipe  
b) The water should have entered to his gullet instead.
33. a) Life cycle A has three stages while life cycle B has four stages.  
b) The process is moulting.
34. i) R    ii) Q    iii) P
35. i)   
ii)   
iii)   
iv)
36. contracts, relaxes
37. a) plant A  
b) Sunlight is not able to pass through the cardboard box and so plant A did not get any sunlight to make food.
38. a) It will move towards magnet X.  
b) The north-seeking pole of the magnet on the styrofoam board is attracted to the south-seeking pole of magnet X.
39. a) The white flower will soon become a red flower.  
b) The stem takes in the red water and carries it to the flower.
40. a) The iron nail will become an electromagnet.  
b) To add more batteries.