

MAHA BODHI SCHOOL

SIA2

2004 SEMESTRAL ASSESSMENT 2

SCIENCE

SIA2

PRIMARY 3

Name: _____ ()

Date: 4 Nov 2004

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 11 pages, excluding this page.

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. Which of the following statements about living things are correct?

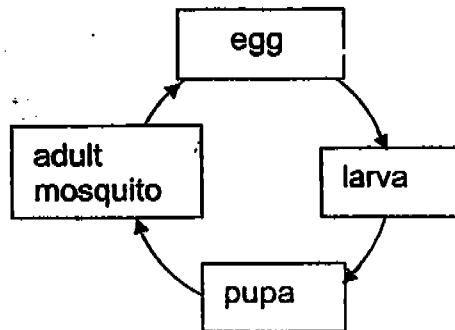
- (A) Living things need air, food and water.
- (B) All living things can grow, reproduce and die.
- (C) All living things move and respond to changes around them.

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

2. Bacteria is classified as a _____.

- (1) plant
- (2) fungus
- (3) animal
- (4) micro-organism

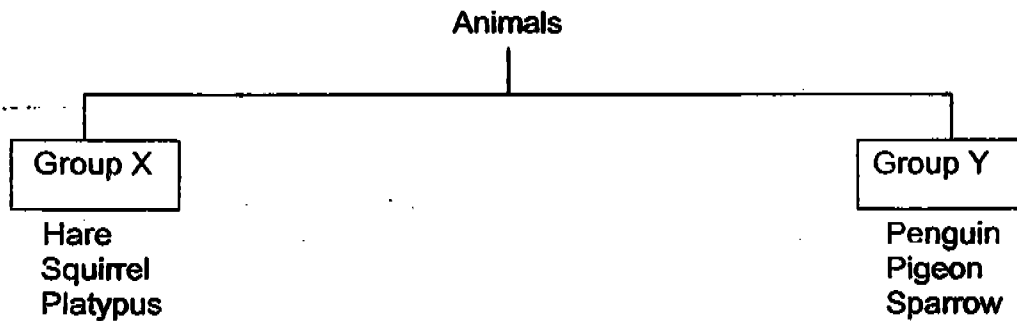
3. The diagram shows the life cycle of a mosquito.



Which one of the following animals has a similar life cycle as the mosquito?

- (1) Frog
- (2) Beetle
- (3) Cockroach
- (4) Grasshopper

4. Study the classification table below.



Which of the following sets of headings for Groups X and Y are possible?

	Group X	Group Y
(A)	Animal-eaters	Plant-eaters
(B)	Mammals	Birds
(C)	Animals covered with hair	Animals covered with feathers
(D)	Animals that give birth to their young alive	Animals that lay eggs

- (1) A and B only
 (2) B and C only
 (3) C and D only
 (4) A, B, C and D
5. As a seed germinates, where does it get its food?
- (1) From the roots.
 (2) From the shoots.
 (3) From the seed leaves.
 (4) It makes its own food.
6. A blind person can read Braille by using his or her sense of _____.
- (1) sight
 (2) smell
 (3) touch
 (4) hearing

7. Jim is having a flu and he has no appetite for food. He does not enjoy his favourite durian puffs as his senses of _____ are affected.

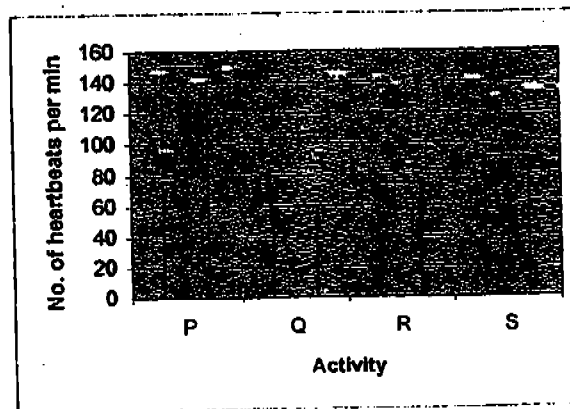
- (1) taste and smell
- (2) sight and taste
- (3) touch and smell
- (4) taste and touch

8. A kitten is mewling outside Jenny's house. She comes out of her house and strokes its soft fur. Which of the following senses is Jenny using?

- (A) Sight
- (B) Touch
- (C) Smell
- (D) Hearing

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

9. The bar graph below shows Mr Tan's heartbeat rate (number of heartbeats per minute) when he was doing different activities, P, Q, R and S.



What is Activity P most likely to be?

- (1) Washing the car
- (2) Reading the newspaper
- (3) Jogging around the park
- (4) Watching television programme

10. Joe eats some bread. Which one of the following correctly shows the path that the bread takes in Joe's digestive system?

- (1) Mouth → Small intestine → Stomach → Large intestine
- (2) Mouth → Gullet → Stomach → Small intestine
- (3) Mouth → Stomach → Large intestine → Small intestine
- (4) Mouth → Gullet → Small intestine → Stomach

11. Digestive juices are not added to the food in the _____.

- (1) mouth
- (2) gullet
- (3) stomach
- (4) small intestine

12. The ribcage protects the _____ and _____.

- (A) brain
 - (B) heart
 - (C) lungs
 - (D) spinal cord
- (1) A and B only
 - (2) A and D only
 - (3) B and C only
 - (4) C and D only

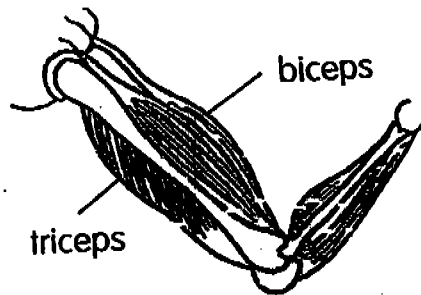
13. Look at the classification table below.

Group A	Group B
Skull	Thigh bone
Ribs	Finger bone

Which one of the following is the most suitable set of headings for Groups A and B?

- (1) Hard bones ... Soft bones
- (2) Long bones ... Short bones
- (3) Large bones ... Small bones
- (4) Curved bones ... Straight bones

14. Look at the diagram below. It shows the bones and muscles in our arm.



In order to bend our arm, the biceps _____ but the triceps _____ to pull on the bones.

- (1) relax ... contract
 - (2) relax ... relax
 - (3) contract ... relax
 - (4) contract ... contract
15. Which of the following statement(s) is/ are **TRUE** about the muscular system?

- (A) All the muscles in our body are attached to bones.
- (B) Muscles work in pairs, while one relaxes, the other contracts.
- (C) The muscular and skeletal systems work together to enable movement.

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

16. Water enters a plant through its _____. Its _____ then transport(s) the water to various parts of the plant.

- (1) bark ... roots
- (2) roots ... leaves
- (3) leaves...stem
- (4) roots ... stem

17.



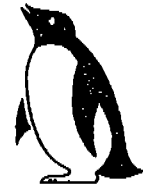
Ostrich



Dove



Owl



Penguin

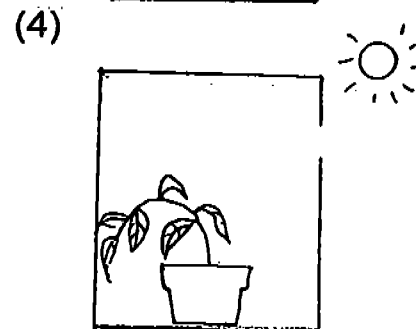
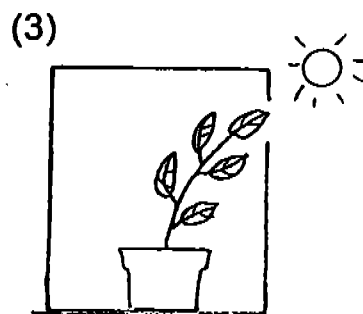
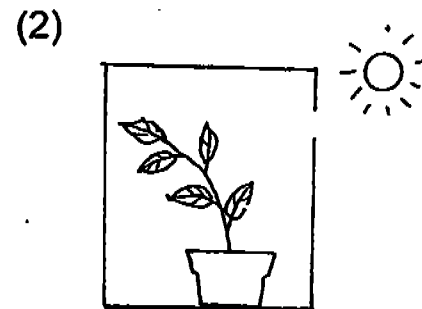
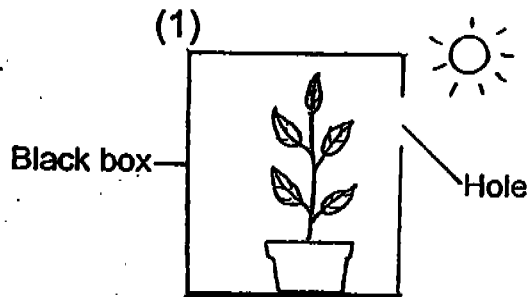
Mary is asked to classify the above animals equally such that there are two animals in each group. Which one of the following pairs of headings is correct?

	Group A	Group B
(1)	Can fly	Cannot fly
(2)	Plant eaters	Animal eaters
(3)	With feelers	Without feelers
(4)	Have feathers as outer covering	Have hair as outer covering

18. Plants make food in the _____.

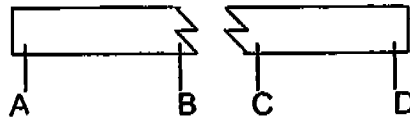
- (1) roots
- (2) leaves
- (3) flowers
- (4) stems

19. Which one of the following correctly shows how a plant responds to sunlight? All the plants have been placed under the same conditions in a black box for a few days.



6

20. A bar magnet is broken into two parts as shown in the picture below.



Which one of the following correctly shows what the poles of the magnets are?

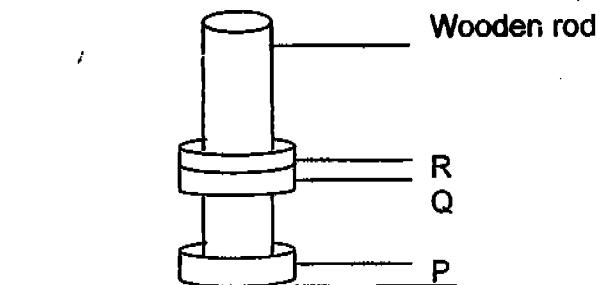
Poles				
	A	B	C	D
(1)	N	S	S	N
(2)	S	S	N	N
(3)	N	N	S	S
(4)	S	N	S	N

21. A magnet attracts things made of _____.

- (A) iron
- (B) steel
- (C) silver
- (D) copper

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

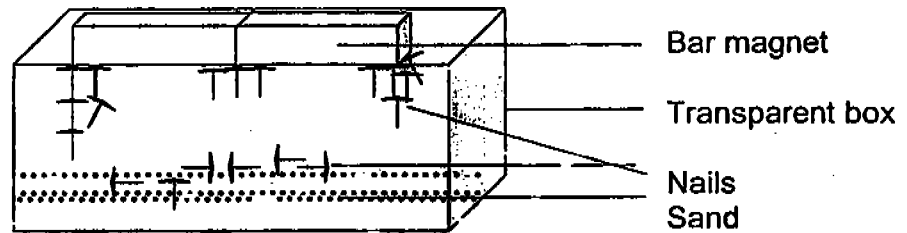
- 22.



Joan made a few statements about the above set-up. Which one of them is **not necessarily correct**?

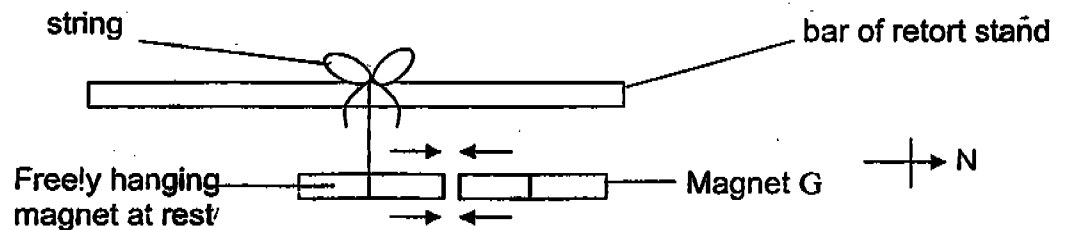
- (1) Object P is a magnet.
- (2) Object Q is not a magnet.
- (3) Object R is definitely a magnet.
- (4) The poles of objects P and Q repel each other.

23. When a bar magnet is put on top of a box of nails and sand, only the nails "jump up" to be attracted to the magnet.



The experiment shows that the _____.

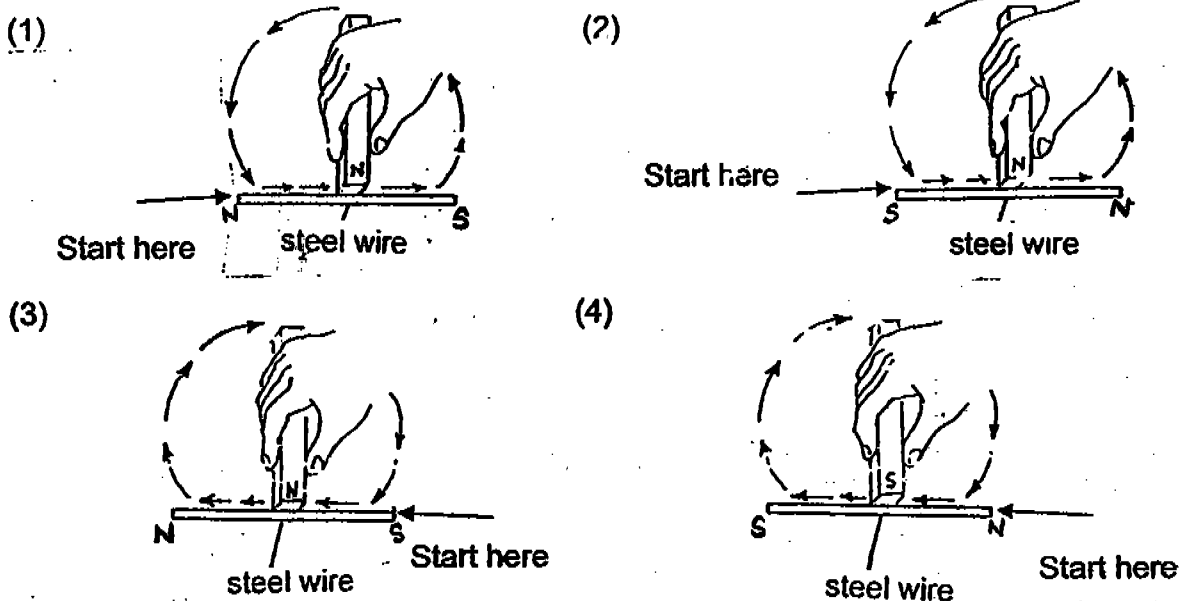
- (A) sand is too heavy to be attracted
 (B) nails are probably made of a magnetic material
 (C) attraction of the magnet is strongest at its poles
- (1) A and B only
 (2) A and C only
 (3) B and C only
 (4) A, B and C
24. Michael set up the experiment as shown below. He brought a magnet, G, close to the freely hanging magnet.



Which one of the following diagrams shows the correct arrangement of the magnets?

- | | Freely-hanging magnet | Magnet G |
|-----|-----------------------|----------|
| (1) | N S | S N |
| (2) | N S | N S |
| (3) | S N | S N |
| (4) | S N | N S |

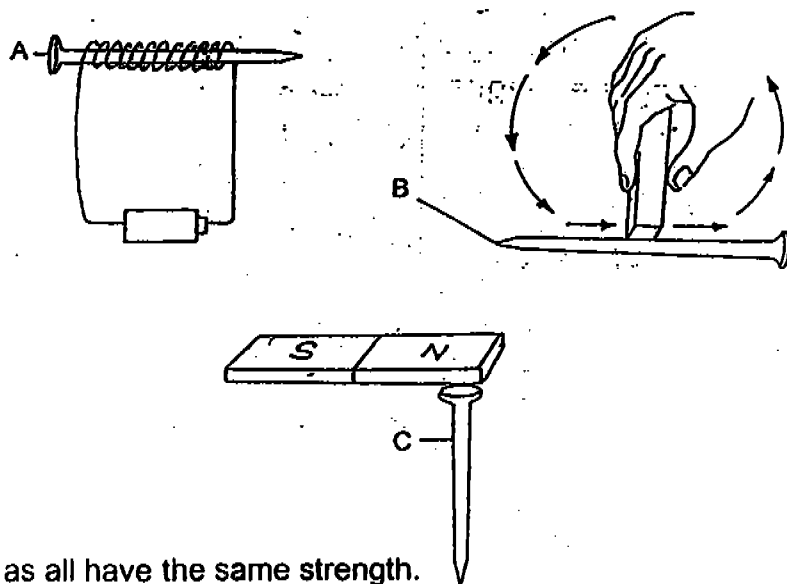
25. A steel wire can be made into a magnet by the stroking method. Which one of the following correctly shows the poles of the temporary magnet when it is stroked in the direction indicated?



26. The pull of magnet is unlikely to pass through a _____.
(Assume same thickness of the materials.)

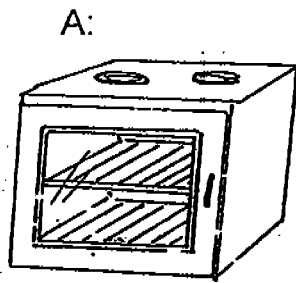
- (1) piece of glass
- (2) plastic wrapper
- (3) piece of steel plate
- (4) piece of tracing paper

27. Janelle tried to magnetise an iron nail using the following methods shown below. Which of the following iron nail(s) would be able to attract the most number of paper clips?

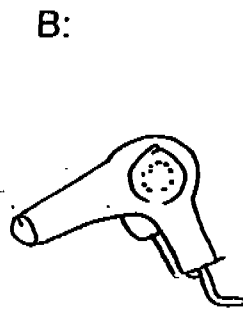


- (1) A only
- (2) B only
- (3) C only
- (4) A, B and C as all have the same strength.

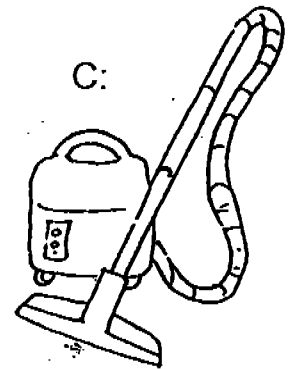
28. Which of the following objects use magnetism to work?



oven



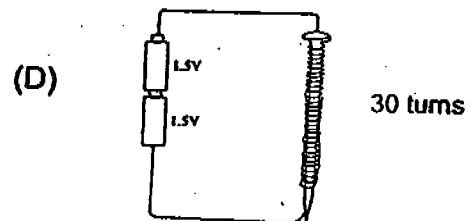
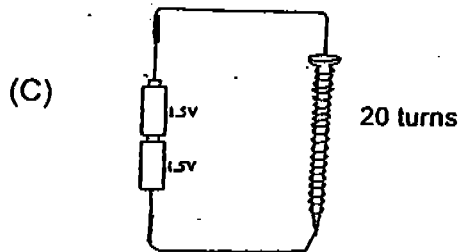
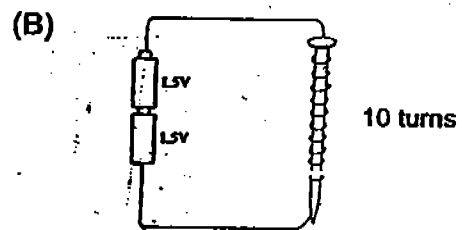
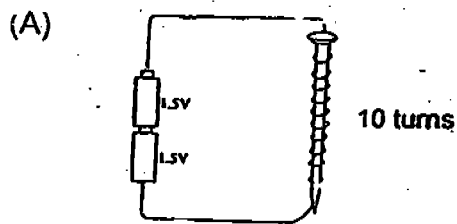
hair dryer



vacuum cleaner

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

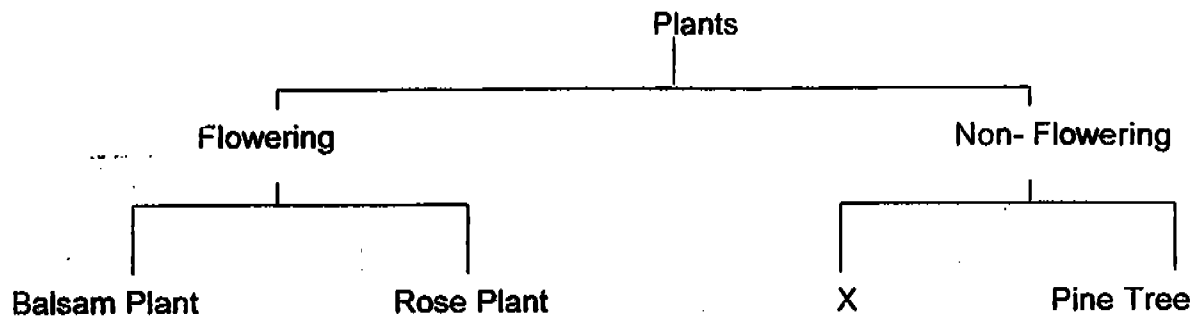
29. Amy was asked to find out whether the strength of an electromagnet was dependent on the number of coils round the nail. Which pair of set-ups should she NOT use?



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

30.

30.



Which one of the following can X be?

- (1) Rain tree
- (2) Dumbcane
- (3) Mushroom
- (4) Bird's nest fern

----- End of Part I -----

MAHA BODHI SCHOOL
2004 SEMESTRAL ASSESSMENT 2
SCIENCE
PRIMARY 3

Name: _____ ()

Date: 4 Nov 2004

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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This booklet consists of 5 pages, excluding this page.

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

Part II: (20 marks)

Write your answers for questions 31 to 40 in this script.

31. (a) Draw the life cycle of a chicken in the space provided below.



- b) Other than starting with an egg, state another similarity between the life-cycle of a chicken and that of a duck. (1 m)

(1 m)

32. Lixuan was drinking a glass of water when she suddenly started choking. (2 m)

33. Classify the following into 2 groups.

elbow hip knee shoulder

Ball and socket joints	Hinge joints

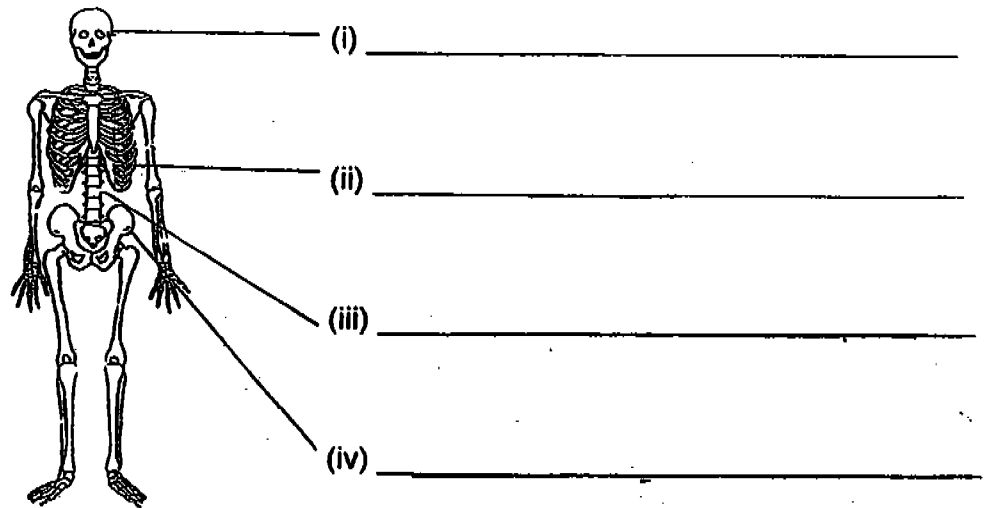
34. State two reasons as to why roots are important to plants. (2m)

(i) _____

(ii) _____

35. Label the four different parts of the skeleton below.

(2m)



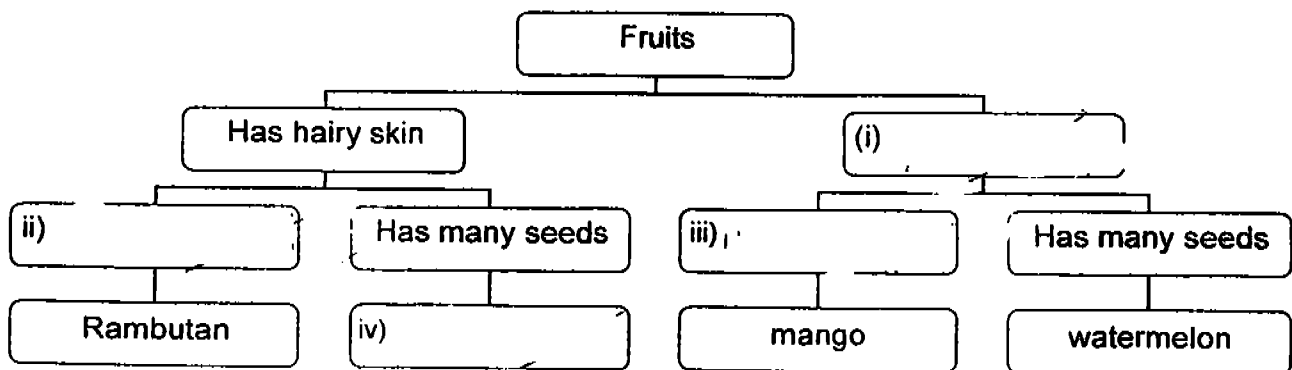
36. Match the names of the given muscles to their functions.

(2 m)

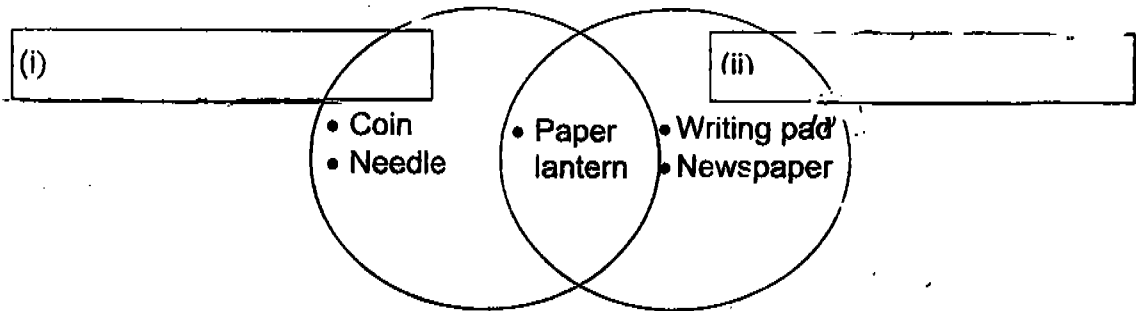
- | | | |
|-------------------|---|---|
| Neck muscles | • | • are used when we breathe |
| Chest muscles | • | • help to turn our head in different directions |
| Facial muscles | • | • help in bending |
| Abdominal muscles | • | • are used when we smile or cry |

37. Complete the classification diagram shown below.

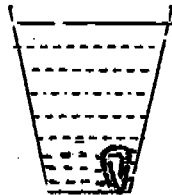
(2m)



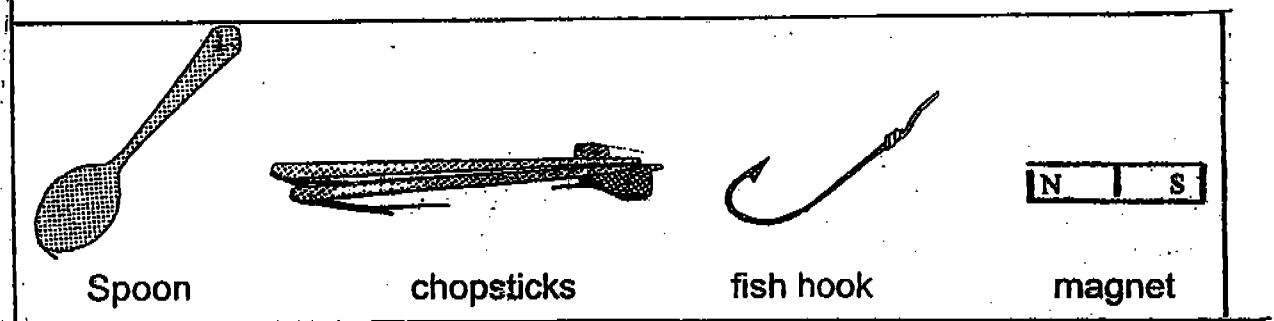
38. Complete the following Venn Diagram by filling in the blanks with a suitable heading each. (2m)



39. Aileen accidentally dropped a paper clip into a glass of water.



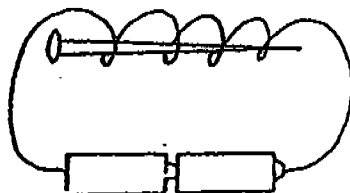
Look at the four objects given in the box below.



- (a) Which object would you use to get the paper clip out of the glass? You cannot make the object wet or pour water out of the glass. (1 m)

- (b) Describe how you would do it. (1 m)

40. Matthew tries to make an iron nail into a temporary magnet. He uses a wire and two batteries as shown below.



To test the strength of the magnet, he puts paper clips near the magnet and records the number of paper clips that are attracted to it. Study the table below.

Number of coils of wire on the iron nail	No. of paper clips attracted to the iron nail
5	10
10	20
?	30
20	40

- (a) What is the relationship between the number of coils and the strength of the iron nail? Fill in the blanks with "greater" or "smaller". Each word can be used more than once. (1 m)


The _____ the number of coils, the _____ the strength of the magnets.

- (b) How many coils of the wire are required for 30 paper clips to be attracted? (1 m)

----- End of Paper -----

MAHA BODHI SCHOOL
2004 SEMESTRAL ASSESSMENT 2
PRIMARY 3 SCIENCE

SA2

- 1) 4 28) 4 29) 1 30) 4
- 2) 4 31) egg
- 3) 2 chicken chick
- 4) 2
- 5) 3 32) The water had gone into the windpipe instead of the gullet.
- 6) 3 33) hip elbow
- 7) 1 shoulder knee
- 8) 4 34) i) They take in water for the plant.
- 9) 3 ii) They grip firmly onto the soil to prevent the wind and rain from blowing them away.
- 10) 2 35) i) skull ii) ribcage iii) backbone iv) hipbone
- 11) 2 36) 
- 12) 3
- 13) 4
- 14) 3 37) i) Has no hairy skin ii) Has one seed
- 15) 4 iii) Has one seed iv) kiwi
- 16) 4 38) i) Made of metal ii) Made of paper
- 17) 1 39) a) The object is the magnet.
- 18) 2 b) Slide the magnet along the outer edge of the glass until the paper clip moves out of the water.
- 19) 3
- 20) 4 40) a) greater greater
- 21) 1 b) 15 coils are required for 30 paper clips to be attracted.
- 22) 3
- 23) 3
- 24) 3
- 25) 1
- 26) 3
- 27) 1