



MAHA BODHI SCHOOL  
2006 SEMESTRAL ASSESSMENT 2  
PRIMARY 3 SCIENCE

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

Date : 26 October 2006

Class : P 3 ( )

Duration : 1 h 30 min ( Parts I & II )

**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 table given below.

Group A	Group B
Coin	Book
Button magnet	Ruler
Compact disc (CD)	Drawing paper

The things in Group A and Group B are classified according to their \_\_\_\_\_.

- (1) size
- (2) mass
- (3) shape
- (4) material

2. Dion and his family were having satay at Satay Club. Dion and his siblings made the following statements.

- Amanda : The satay is made from things that were once alive.
- Betina : The satay stick is made from things that were once alive.
- Carol : The styrofoam plate is made from things that were once alive.
- Dion : The ketupat (rice dumping) is made from things that were once alive.

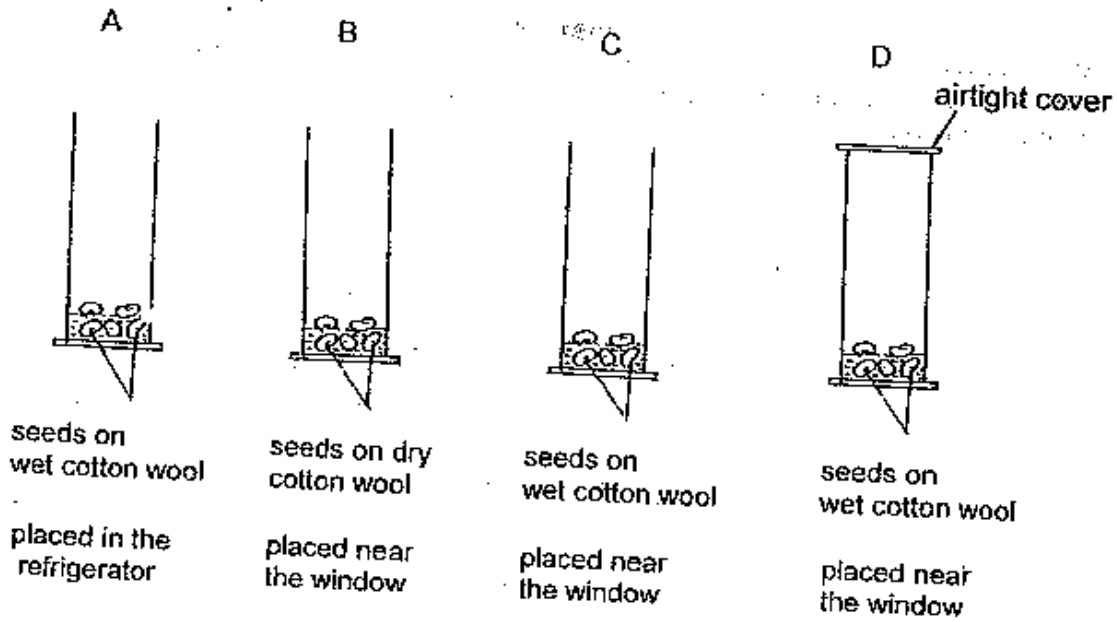
Who made a wrong statement?

- (1) Amanda
- (2) Betina
- (3) Carol
- (4) Dion

3. Mae needs to keep some biscuits in a container. Her mother reminds her to keep it in a container that she can see through. The container must be light and does not break easily. Which material should the container be made of?

- (1) Clay
- (2) Glass
- (3) Metal
- (4) Plastic

4. The diagrams below show 4 jars, A, B, C and D with 5 seeds each. Jar A is placed in the refrigerator while Jars B, C and D are placed near the window.



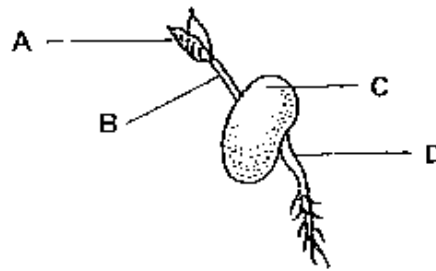
The seeds in Jar \_\_\_\_\_ will grow into seedlings.

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

5. Which one of the following animals has a 4-stage life cycle?

- (1) Chicken
- (2) Butterfly
- (3) Cockroach
- (4) Grasshopper

6. The diagram below shows a green bean seed.



Which part will first appear as the green bean seed germinates into a seedling?

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

7. On a stormy day, we can tell that there is lightning and thunder by using our sense of \_\_\_\_\_.

- (A) sight
- (B) touch
- (C) hearing

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

8. Maria is having a cold. Her sense of \_\_\_\_\_ will be affected.

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

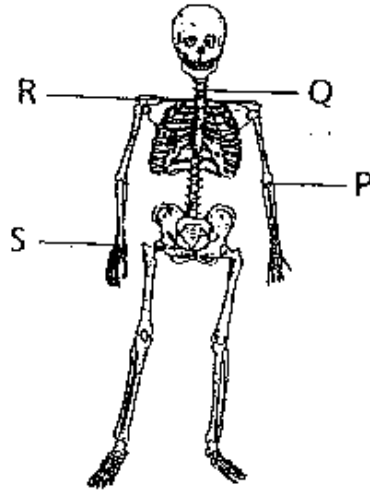
9. Which one of the following animals does not have a skeletal system?

- (1) Man
- (2) Parrot
- (3) Spider
- (4) Goat

10. Undigested food goes into the \_\_\_\_\_ where most of the water is removed from the food.

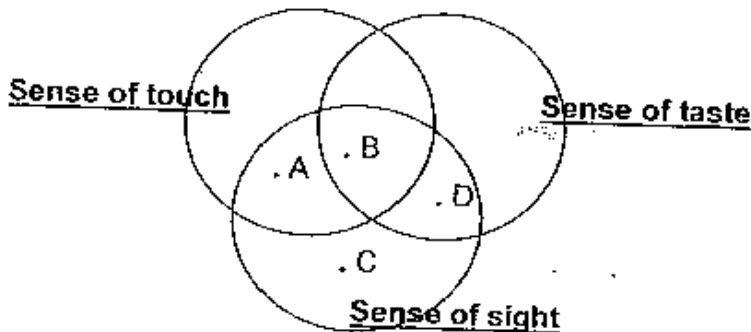
- (1) anus
- (2) stomach
- (3) small intestine
- (4) large intestine

11. Some joints allow movement in only one direction. Which one of the following joints allows movement in only one direction?



- (1) P
- (2) Q
- (3) R
- (4) S

12. Study the Venn diagram below.



June tastes a liquid and said, "This green liquid is so sour!" Which one of the following letters represents correctly the senses that June uses to make her observations?

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

13. The ribcage \_\_\_\_\_

- (A) helps us to bend our body
- (B) protects our heart and lungs
- (C) provides support to our arms
- (D) helps our heart to expand and contract

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

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



The curved bone marked X is the \_\_\_\_\_

- (1) rib
- (2) hip bone
- (3) backbone
- (4) breastbone

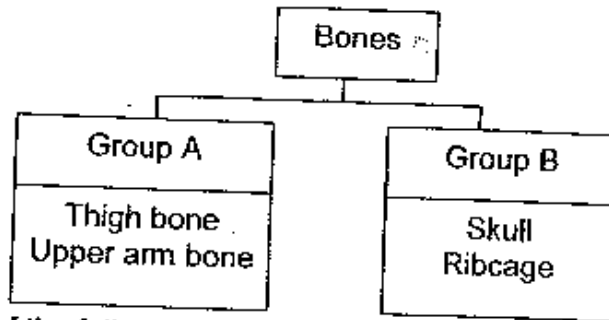
15. Sarah is stirring some soup in a pot. The \_\_\_\_\_ in her hand help her to do the work.

- (A) bones
- (B) joints
- (C) muscles

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

16. The \_\_\_\_\_ of a plant protects its seeds.

- (1) leaf
- (2) flower
- (3) fruit
- (4) stem



Which one of the following sets of headings is most suitable for Group A and Group B?

	Group A	Group B
(1)	Long bones	Short bones
(2)	Bones that do not protect organs	Bones that protect organs
(3)	Long and curved bones	Short and straight bones
(4)	Long and straight bones	Short and curved bones

18. The part marked 'X' in the diagram below is a \_\_\_\_\_



- (1) bone
- (2) joint
- (3) muscle
- (4) nerve

19. Which one of the following **cannot** make its own food?



Fern  
(1)



Mushroom  
(2)



Waterlily  
(3)



Balsam plant  
(4)

20. Some water plants are given below.



water hyacinth

(A)



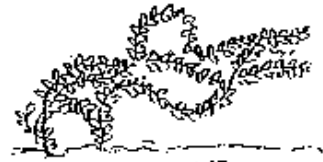
water lettuce

(B)



water lily

(C)



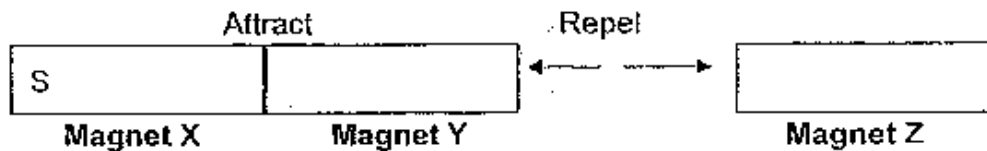
hydrilla

(D)

Which of them are floating plants?

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

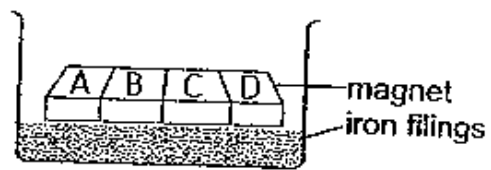
21. Look at the diagram carefully.



When the three bar magnets (X, Y and Z) are placed near one another, magnets X and Y are attracted to each other but magnets Y and Z repel each other. Which one of the following diagrams shows the correct poles for Magnets Y and Z?

- |     | Magnet Y |   | Magnet Z |   |
|-----|----------|---|----------|---|
| (1) | S        | N | S        | N |
| (2) | N        | S | N        | S |
| (3) | S        | N | N        | S |
| (4) | N        | S | S        | N |

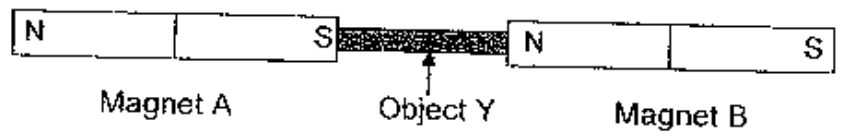
22. Bob lowered a bar magnet into a container of iron filings. Before he lifted the magnet, he asked his friends to predict the amount of iron filings that would be attracted to each of the four parts marked A, B, C and D.



The table below shows their predictions. Who made the most accurate prediction?

		Part A	Part B	Part C	Part D	
(1)	John	4 grams	3 grams	11 grams	10 grams	X
(2)	Kaili	4 grams	1 gram	10 grams	3 grams	X
(3)	Lipeng	11 grams	4 grams	3 grams	10 grams	✓
(4)	Prema	11 grams	10 grams	4 grams	3 grams	X

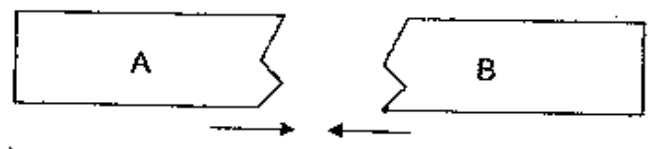
- 23.



Both Magnets A and B attract Object Y as shown above. Object Y cannot be \_\_\_\_\_.

- (1) iron
- (2) nickel
- (3) copper
- (4) a magnet

24. Andy broke a bar magnet into 2 pieces, A and B



When he put the 2 broken pieces together as shown above, he found that A and B were attracted to each other. What conclusion could Andy make?

- (1) When a magnet is broken, it loses its magnetism.
- (2) When a magnet is broken, the two halves become a magnet each.
- (3) When a magnet is broken, there are no north-seeking poles.
- (4) When a magnet is broken, there are 4 north-seeking poles.

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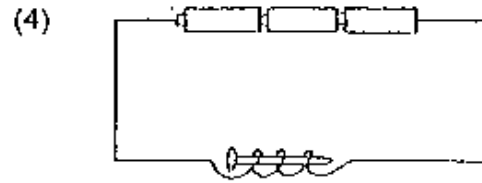
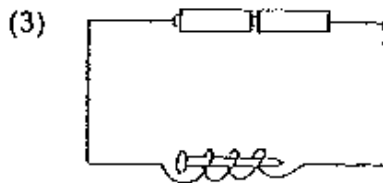
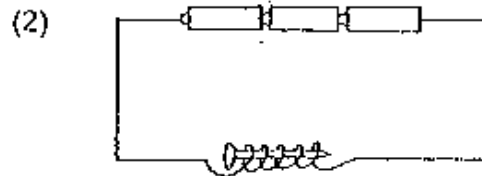
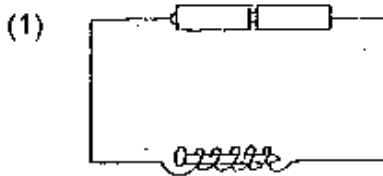


25. Liz has 4 different bar magnets. She brings each of the magnets close to some paper clips. The number of clips attracted to each of the magnets is shown in the table below.

Bar Magnet	Number of paper clips attracted
A	15
B	16
C	13
D	9

The weakest magnet is \_\_\_\_\_.

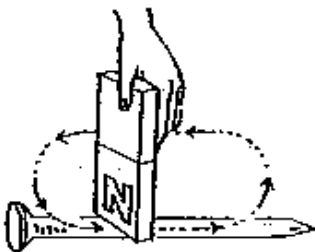
- (1) Magnet A
  - (2) Magnet B
  - (3) Magnet C
  - (4) Magnet D
26. Which one of the following produces the strongest electromagnet?



27. Which one of the following appliances does not make use of magnets to work?

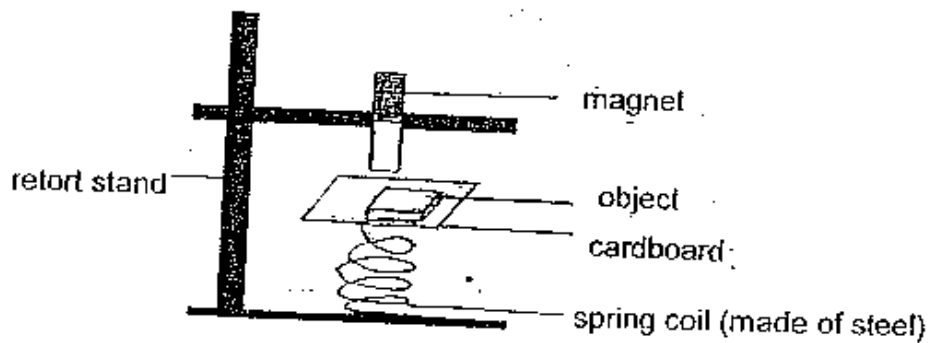
- (1) Battery
- (2) Computer
- (3) Compass
- (4) Telephone

28. John strokes an iron nail with a magnet 20 times as shown below.



What will happen when he puts the iron nail next to a paper clip?

- (1) Nothing will happen.
  - (2) The paper clip will be attracted to the iron nail.
  - (3) The paper clip will be repelled by the iron nail.
  - (4) The paper clip will become a permanent magnet.
29. Which of the following ways will destroy the magnetism of a magnet?
- (A) Hammering it
  - (B) Heating it over a flame
  - (C) Stroking it with a non-magnetic object.
  - (D) Coiling a wire around it and running current through the wire.
- (1) A only
  - (2) C only
  - (3) A and B only
  - (4) C and D only



Susan set up the experiment above. She tested four different objects, A, B, C and D by tapping them on the cardboard as shown above. She observed what happened to the spring coil and recorded her observations in the table below.

Object	Length of spring coil
A	Increase
B	Increase
C	Decrease Magnet
D	No change

Based on the observation that Susan made, what could objects A, B, C and D be?

	A	B	C	D
(1)	Aluminium bar	Magnet	Iron bar	Steel bar
(2)	Steel bar	Aluminium bar	Magnet	Iron bar
(3)	Iron bar	Steel bar	Aluminium bar	Magnet
(4)	Steel bar	Iron bar	Magnet	Aluminium bar

END OF PART I

MAHA BODHI SCHOOL  
2006 SEMESTRAL ASSESSMENT 2  
P3 SCIENCE



Part I ( 30 marks )	
Part II ( 20 marks )	
SA 2 ( 50 marks )	
SA2 ( 100 marks )	

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

Class : P 3 ( )

Duration : 1 h 30 min ( Parts I & II )

Date : 26 Oct 2006

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

Part II: ( 20 marks )

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

31. Living things need \_\_\_\_\_ and \_\_\_\_\_  
to stay alive. [2]

32. This is a picture of Brownie, the puppy.



(i) Which two dogs below are most likely its parents?

\_\_\_\_\_ and \_\_\_\_\_ [1]



(A)



(B)

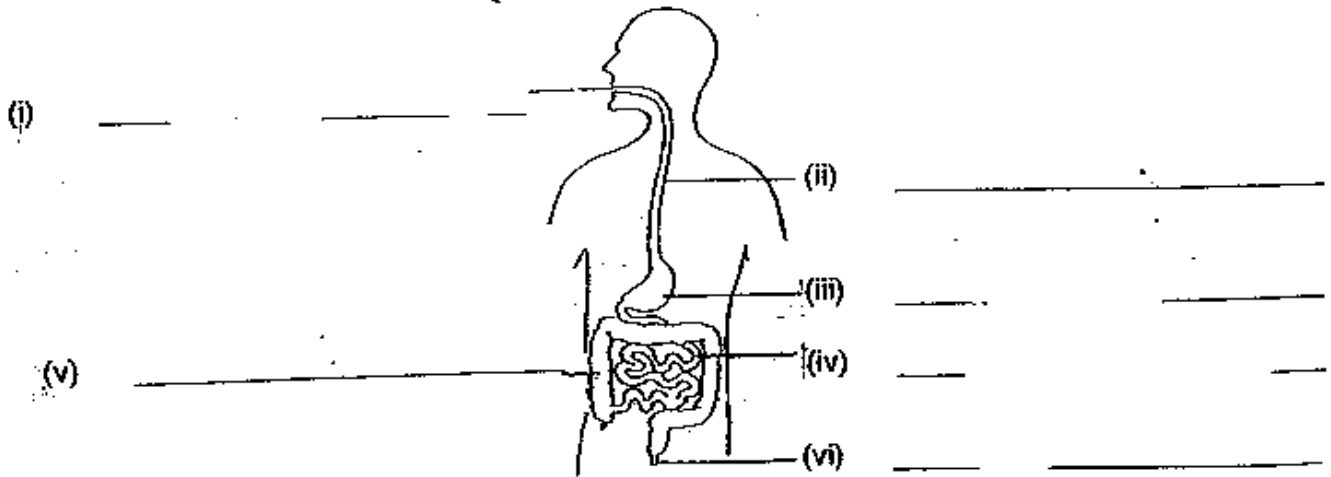


(C)

(ii) State 2 reasons why you chose the answer in (i).

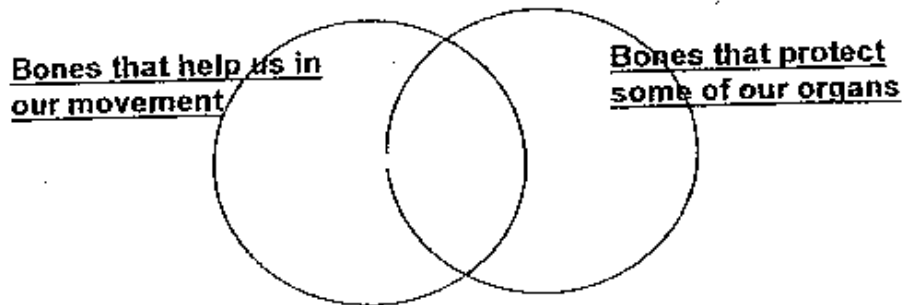
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- 33 The diagram below shows the digestive system of the human body. Name only the parts where digestion takes place.



[2]

- 34 The Venn diagram below is used to represent two different types of bones that are found in our body.



In the Venn diagram,

- (i) draw a dot (.) and the letter 'X' to represent the backbone.  
 (ii) draw a dot (.) and the letter 'Y' to represent the ribcage.  
 (iii) draw a dot (.) and the letter 'Z' to represent the finger bone.

[2]

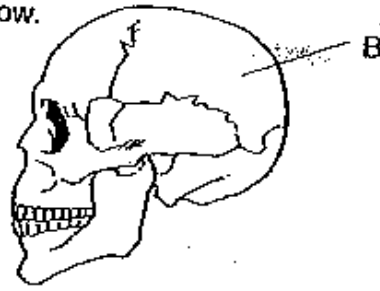
35. 4 joints are given in the box below. Classify them under the correct headings.

[2]

	Hip	Elbow	Knee	Shoulder
	Ball and socket joint		Hinge Joint	
(i)				
(ii)				

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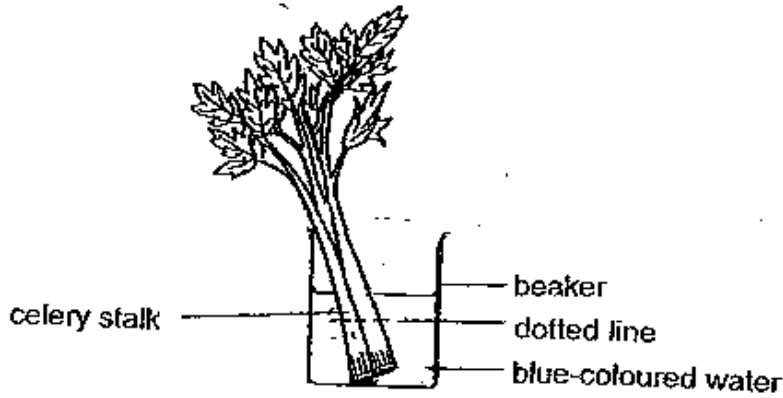
36. Study the picture below.



(i) Name part B. [1]

(ii) What is the function of part B? [1]

37. Sam placed a stalk of celery in a container of water that has been coloured blue. After a week, he took the celery out and cut the stalk along the dotted line as shown in the diagram below.

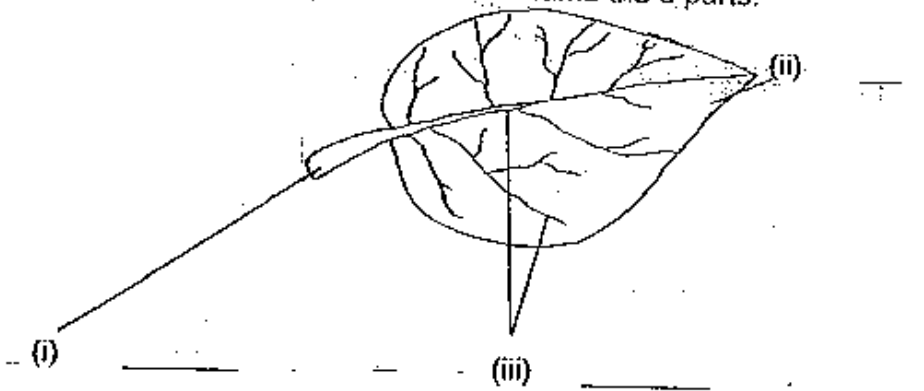


Sam saw some 'holes' on the cross-section of the celery stalk. He remembered that these holes are part of the tubes that transport water in the plant.

His friend, John, observed that some parts on the cross section had turned blue. Which are the parts? Shade them blue in the diagram below. [2]

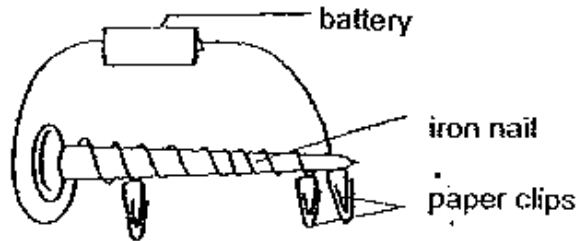


38. The diagram below shows a leaf. Name the 3 parts. [2]



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39. Charlene coiled an electrical wire around an iron nail and connected the ends to a battery. The iron nail then became an electromagnet and attracted some paper clips as shown below.



- (a) What will Charlene observe when the battery is removed? [1]

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- (b) State one thing that Charlene should do if she wants the electromagnet to attract more paper clips. [1]

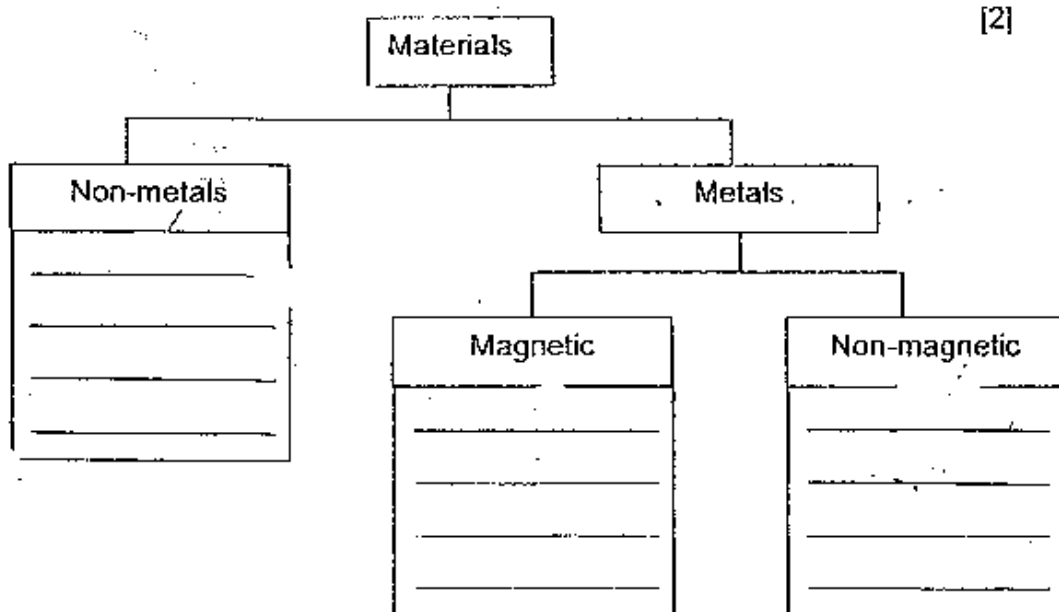
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40. Complete the classification table below using the materials listed in the box.

Clay	Silk	Gold
Plastic	Copper	Steel



END OF PAPER

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**Answer Sheets**  
**Maha Bodhi Pri 3 SA2 / 2006 Science**

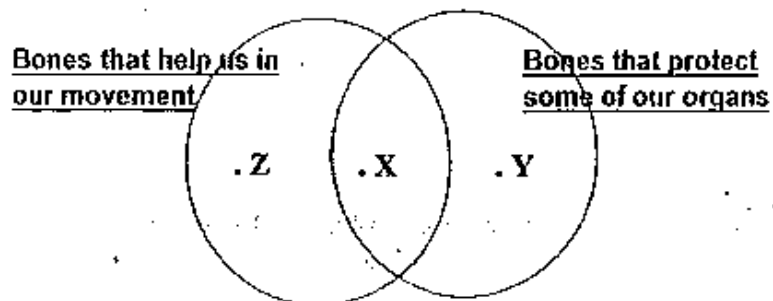
- 1) 3    2) 3    3) 4    4) 3    5) 2  
 6) 4    7) 3    8) 3    9) 3    10) 4  
 11) 1    12) 4    13) 2    14) 3    15) 4  
 16) 3    17) 2    18) 2    19) 2    20) 1  
 21) 3    22) 3    23) 3    24) 2    25) 4  
 26) 2    27) 1    28) 2    29) 3    30) 4

Q31. Living things need air, food and water to stay alive.

- Q32.(i) A and B  
 (ii) Brownie has curly hair like B and long ear like A.

- Q33.(i) Mouth  
 (ii) Gullet  
 (iii) Stomach  
 (iv) Small intestine  
 (v) Large intestine  
 (vi) anus

Q34.



35.

	Ball and socket joint	Hinge joint
(i)	Hip	Knee
(ii)	Shoulder	Knee

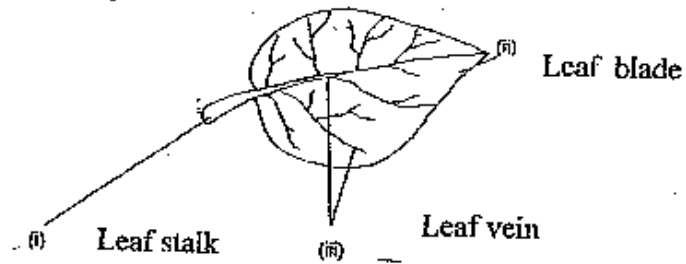


- Q36 (i). Skull  
(ii) To protect our brain

Q37.



Q38.



- Q39a. All the iron nails will drop.  
b. Increase the number of batteries / Increase the number of turns of the coils around the nail.

- Q40. Non-metals : silk, clay, plastic  
Magnetic : steel  
Non-magnetic : gold, copper