



SA2

Rosyth School
Second Semestral Assessment for 2004
SCIENCE
Primary 3



Total
Marks:

Name: _____

Class: Pr 3 _____ Register No. _____ Duration: _____

Date: 3.11.2004

Parent's Signature: _____

Booklet A

Instructions to Pupils:

1. Do not open the booklets A and/or B until you are told to do so.
2. Follow all instructions carefully.
3. This paper consists of 2 booklets, A and B.
4. For questions 1 to 30 in Booklet A, shade the correct ovals on the Optical Answer Sheet (OAS) provided using a 2B pencil.
5. For questions 31 to 46, give your answers in the spaces given in the Booklet B.

	Maximum	Marks Obtained
Booklet A	60 marks	
Booklet B	40 marks	
Total	100 marks	

* This booklet consists of 12 pages.

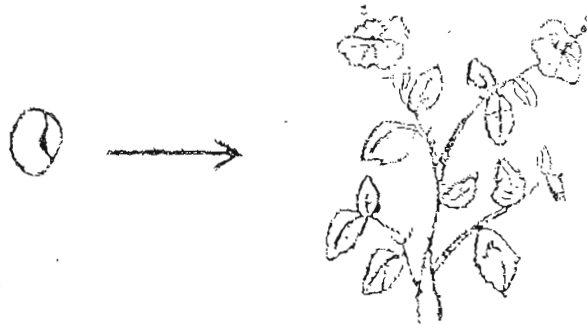
PART I (60 MARKS)

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 oval (1, 2, 3 or 4) on the Optical Answer Sheet.

1. Which one of the following statements about the mushroom and mould is true?

- (1) They are both fungi.
- (2) They feed on spores.
- (3) They grow on stale bread.
- (4) They grow well in dry places.

2. Look at the diagram below.



What does the diagram show?

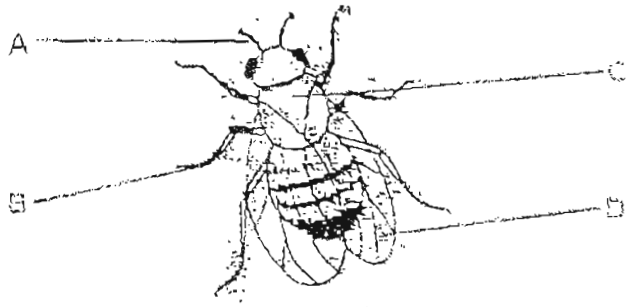
- (1) A seed grows.
- (2) A seed moves.
- (3) A seed reproduces.
- (4) A seed responds to the surrounding.

3. Which one of the following pairs of objects is made of the same type of material?

- (1) Car tyre and stapler
- (2) Needle and door key
- (3) Drinking straw and eraser
- (4) Garden spade and handkerchief

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4. The diagram below shows an insect.



Which part of the insect is NOT common in all insects?

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

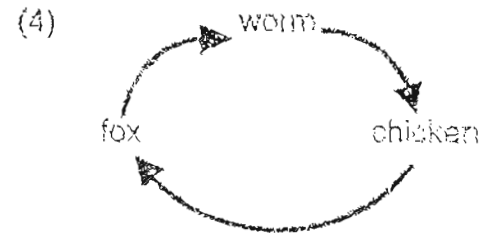
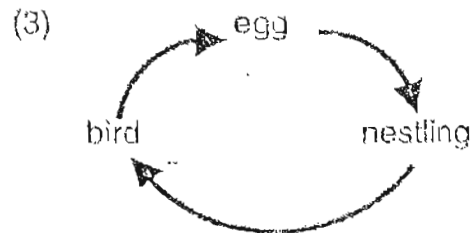
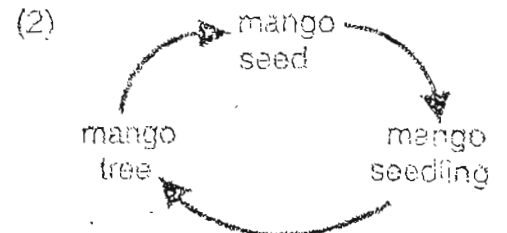
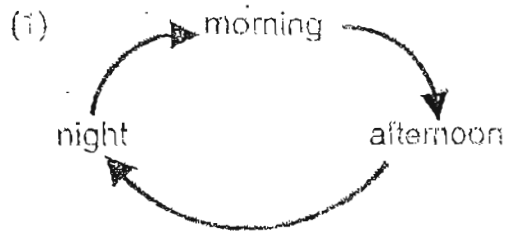
5. Some fruits are classified into two groups as shown below.

Group A	Group B
Apple	Rambutan
Watermelon	Mango

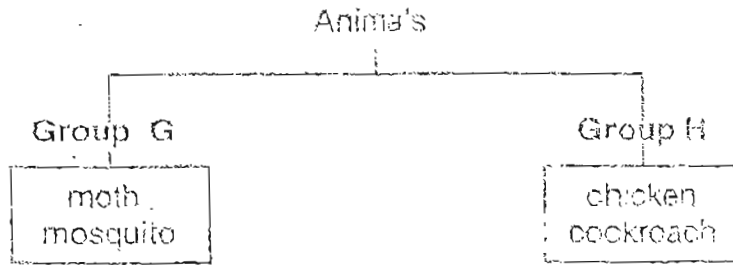
Which one of the following pairs of fruits can be placed in Groups A and B?

	Group A	Group B
(1)	Pear	Papaya
(2)	Kiwi	Longan
(3)	Orange	Pineapple
(4)	Guava	Lime

6. Which one of the following diagrams below does not follow a cycle?



7. Study the table below.



Based on the table above, how are the animals grouped?

	Group G	Group H
(1)	Animals with feelers	Animals without feelers
(2)	Animals with no wings	Animals with a pair of wings
(3)	Animals with 4-stage life cycle	Animals with 3-stage life cycle
(4)	Animals with segmented body	Animals without segmented body

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8. The two living things shown below are a caterpillar and a nymph.



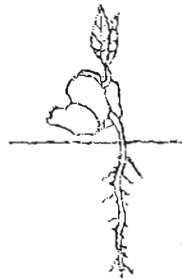
caterpillar



nymph

In what way are the two living things similar?

- (1) Both move about very quickly.
 - (2) Both eat only leaves of plants.
 - (3) Both have more than 3 pairs of legs.
 - (4) Both grow new skin and shed the old one.
9. Justin made the following statements after observing a germinating seed, as shown below.



Which one of the statements made is incorrect?

- (1) The first leaf grows from the shoot.
 - (2) The root grows out before the shoot.
 - (3) The root and shoot grow in opposite direction.
 - (4) The seed will get food only when the first leaf appears.
10. Which one of the following statements about the life cycle of a plant is correct?
- (1) The plant will only make food at the adult stage.
 - (2) The seed needs air, water and light to germinate.
 - (3) The seedling will bear flowers before it bears fruits.
 - (4) The seed leaves provide food for the germinating seed.

(Go on to the next page)

11. Baby brother cries whenever the thunder roars.
Which one of the following senses is he responding to?

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

12. Yan Ling gave the following description of an object.

- It is colourful.
- It is round.
- It makes a sound when it is dropped.
- It has sharp edges.

How many sense organs did she use to enable her to give the descriptions?

- (1) Two
- (2) Three
- (3) Four
- (4) Five

13. Which one of the following is a function of the digestive system?

- (1) It uses digested food to make energy.
- (2) It supports the body by giving it shape.
- (3) It breaks down food into simpler substances.
- (4) It carries away carbon dioxide from the body.

14. Which one of the following is removed in the large intestine?

- (1) Air
- (2) Food
- (3) Blood
- (4) Water

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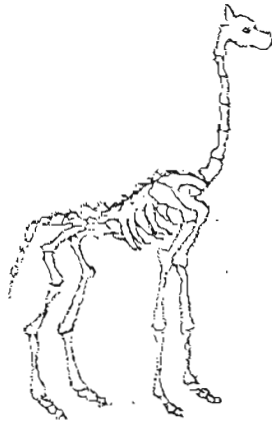
15. Tim took his lunch a few hours ago. How did the food travel in his body before it was passed out?

- (1) Stomach → gullet → small intestine → anus
- (2) Gullet → small intestine → large intestine → stomach
- (3) Mouth → stomach → gullet → small intestine → anus
- (4) Mouth → gullet → stomach → small intestine → large intestine

16. Which one of the following protects our heart and lungs?

- (1) Skull
- (2) Spine
- (3) Ribcage
- (4) Blood vessels

17. The diagram below shows the skeleton of an animal.

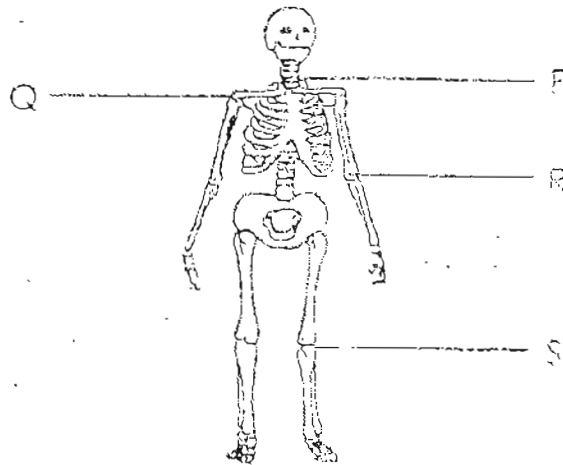


Which one of the following is most likely the animal?

- (1) Goat
- (2) Zebra
- (3) Giraffe
- (4) Elephant

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18. The diagram below shows the human skeletal system.

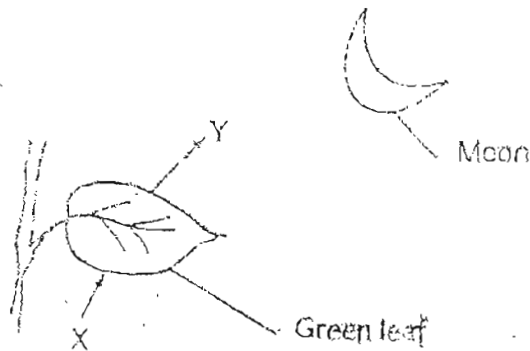


Which parts of the body allow movement in only one direction?

- (1) P and Q only
 - (2) R and S only
 - (3) P, Q and R only
 - (4) P, Q, R and S
19. Susan walks to school everyday.
Which one of the following pairs work together to enable her to move?
- (1) Veins and brain
 - (2) Brain and bones
 - (3) Muscles and veins
 - (4) Bones and muscles
20. Which two actions listed below make use of arm and hand muscles?
- (1) Talking and winking
 - (2) Drawing and smiling
 - (3) Painting and writing
 - (4) Swimming and breathing

(Go on to the next page)

21. Look at the diagram below.



What one of the following correctly represents X and Y?

	X	Y
(1)	Oxygen	Carbon dioxide
(2)	Water vapour	Oxygen
(3)	Carbon dioxide	Oxygen
(4)	Carbon dioxide	Water vapour

22. A farmer planted 10 mango trees in each of the four locations, D, E, F and G. The soils at these locations were different. The number of flowers produced by the mango trees was recorded after a period of time in the table below.

Location	D	E	F	G
Number of flowers	21	7	56	34

In which location would the mango trees most likely produce the greatest number of fruits?

- (1) D
- (2) E
- (3) F
- (4) G

23. Bryan strokes each item in his pencil box with a magnet in one direction for several times. Which one of the following items will most probably be magnetised?

- (1) eraser
- (2) pencil
- (3) scissors
- (4) plastic ruler

(Go on to the next page)

24. When two magnets are brought near to each other, they will move in the directions indicated by the arrows.



What does this tell you about the two magnets?

- (1) A and C are like poles.
 - (2) B and C are unlike poles.
 - (3) Pole B will be attracted to Pole D.
 - (4) Pole D will be attracted to Pole A.
25. Which pair of objects listed below make use of magnets to work?
- (1) floppy disk and radio
 - (2) door knob and mirror
 - (3) hole-puncher and compass
 - (4) cassette tape and ball-point pen

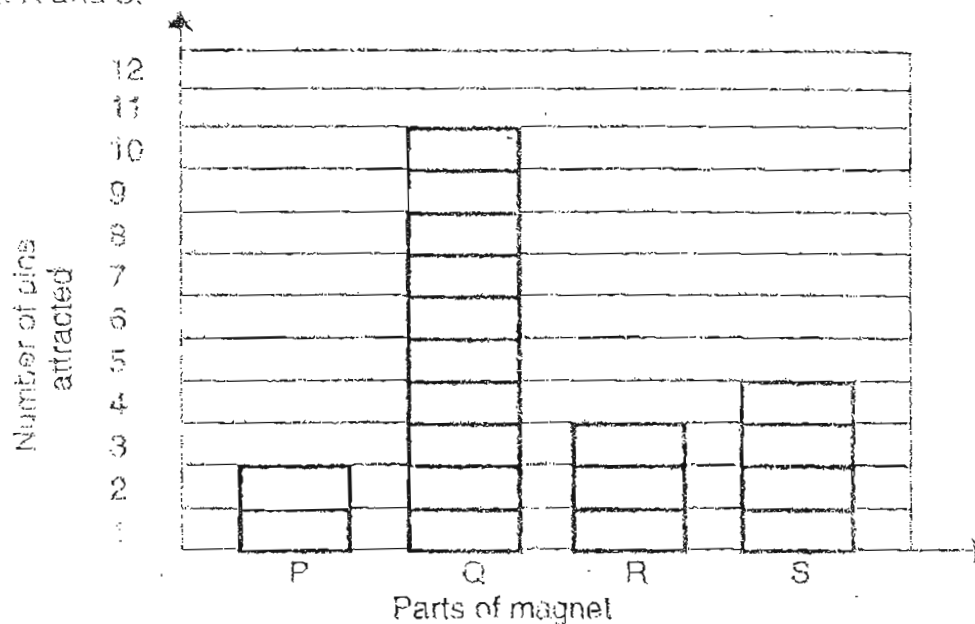
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For questions 26 and 27, refer to the diagram below.

Ada lowered a bar magnet into a tray of pins and then counted the number of pins attracted to the magnet.

She did this with the same magnet but each time, she used a different part of the magnet to face the tray of pins as she lowered it.

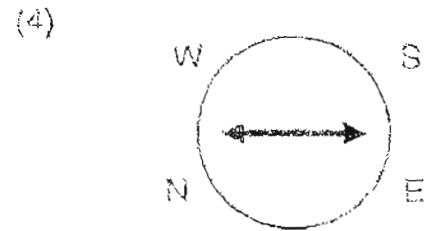
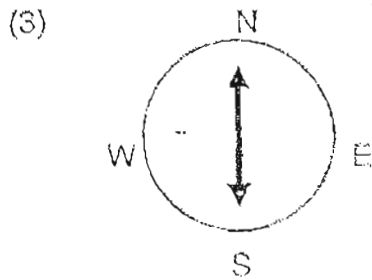
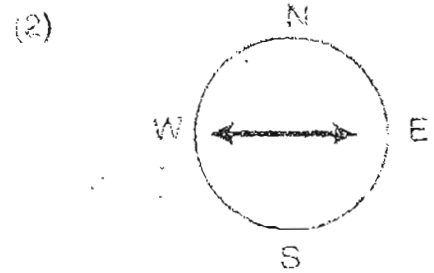
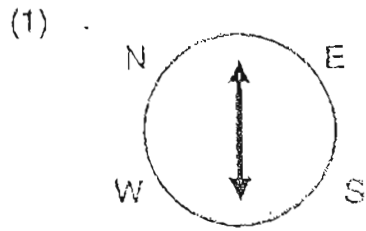
She then plotted her result in a bar graph, naming the different parts of the magnet, P, Q, R and S.



26. What was Ada trying to find out about magnets?
- (1) Unlike poles of magnets attract.
 - (2) Magnets are strongest at the poles.
 - (3) Magnets are able to repel certain objects.
 - (4) Magnets are able to attract certain objects.
27. Which of the following is most likely a pole of the magnet?
- (1) P
 - (2) Q
 - (3) R
 - (4) S

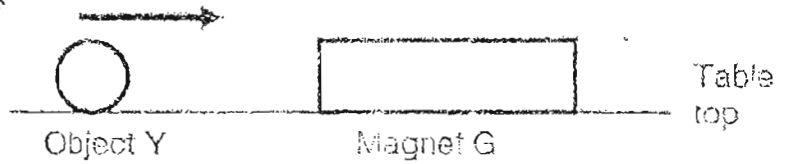
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28. Which one of the following compass needle indicates the correct direction when it comes to rest?



29. When Kennard brings Magnet G near Object Y, Object Y moves in the direction as shown by the arrow in the diagram.

Object Y moves towards Magnet G



Which one of the following is most likely to be Object Y?

- (1) A book
- (2) A penknife
- (3) A drinking straw
- (4) A table tennis ball

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30. Bernice tried to make an electromagnet by coiling an electrical wire round an object and connecting the ends of the wire to two batteries. However, when she brought the setup near some pins, the object did not pick up any pins.
What **could not** be the likely reason for this?
- (1) The batteries were weak.
 - (2) The object was made of iron.
 - (3) The number of coils was insufficient.
 - (4) The wires were not connected to the batteries properly.

End of Booklet A

PART II (40 MARKS)

For questions 31. to 46, write your answers in this booklet

31. In the table below, write down the correct movement and home of each animal.
(3 marks)

Animal	Movement	Home
		
		
		

(Go on to the next page)

32. Wei Ming was given an eraser and he carried out some tests on it. Complete the table below to show the correct results of the tests. Write "Yes" or "No" in the boxes provided. (2 marks)

An eraser	Result
(i) Is it flexible?	
(ii) Does it stretch?	
(iii) Is it waterproof?	
(iv) Does it break when dropped?	

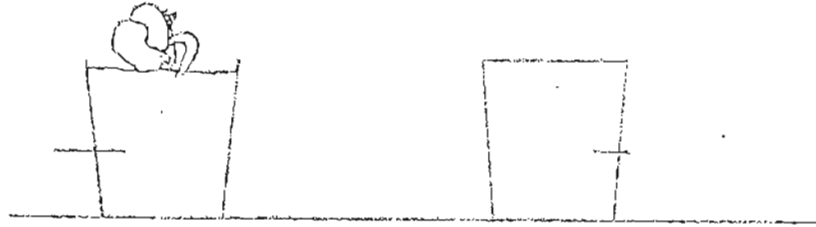
33. Amanda and Brina found a living thing in their kitchen. They gave the following description of the animal

It has six legs.
 It does not have wings.
 It has a pair of antennae.
 It eats almost anything.
 It is pale brown in colour.
 It moves very quickly.

- (a) Brina said that the living thing was an adult cockroach. Amanda claimed that it was not. Write down the 2 sentences which caused Amanda to make that claim, based on the description given. (2 marks)
- i) _____
- ii) _____
- (b) The living thing which the girls found in the kitchen was most probably a/an _____. (1 mark)

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34. Karen wanted to find out if a seed needed warmth to germinate. She planted Seed X in a plastic cup and Seed Y in a porcelain cup. She gave the same amount of water to both seeds every day. She put Seed X in the refrigerator and Seed Y under her bed. After a week, she found that Seed X did not grow and Seed Y had developed roots and shoots.






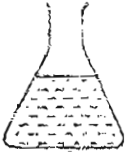
- (a) What did Karen learn from her experiment about germinating seed and warmth? (1 mark)

- (b) Karen's Science teacher told her that her experiment might not be accurate. What made the Science teacher say that? (1 mark)

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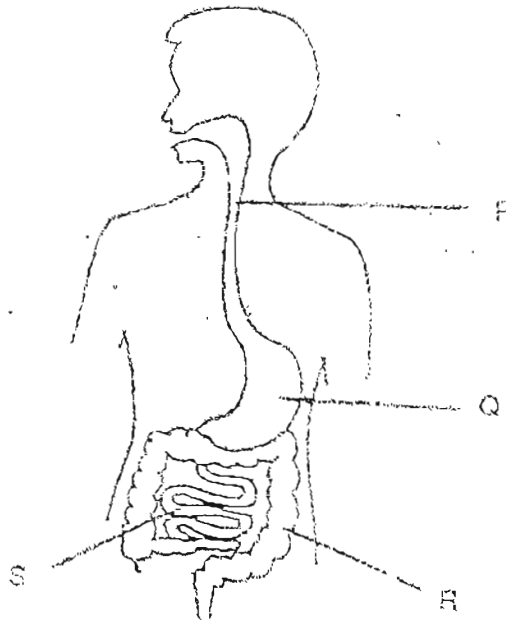
35. Raju, who was blindfolded, was given some objects and asked to identify the paper cup and the perfume.

(a) Name the sense organs that will help him to identify the paper cup and the perfume in the boxes below. (2 marks)

Task	Sense organ that will help him
<p>(i)</p> <div style="display: flex; justify-content: space-around; align-items: center;"> <div style="text-align: center;"> <p>Paper cup</p>  </div> <div style="text-align: center;">  <p>Plastic cup</p> </div> </div> <p style="text-align: center;">Which one is the paper cup?</p>	
<p>(ii)</p> <div style="display: flex; justify-content: space-around; align-items: center;"> <div style="text-align: center;"> <p>50 ml of water</p>  </div> <div style="text-align: center;">  <p>50 ml of perfume</p> </div> </div> <p style="text-align: center;">Which one is the perfume?</p>	

(b) Raju is standing alone in a park near a water fountain. He is not able to see the water fountain as it is blocked by some tall bushes. How will he know which direction to go if he wants to move towards the water fountain? (1 mark)

36. The diagram below shows the digestive system of the human body.



Name the parts labelled P, Q, R and S. (2 marks)

P : _____

Q : _____

R : _____

S : _____

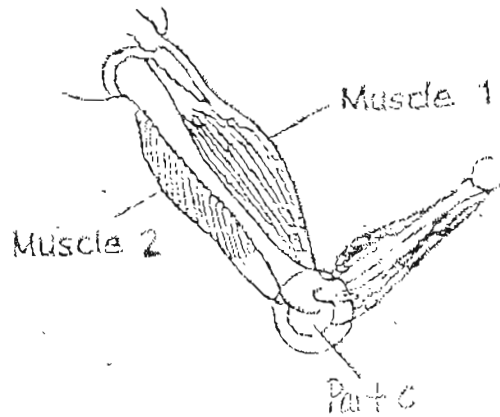
37. Write down two functions of our skeleton. (2 marks)

(a) _____

(b) _____

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38. The diagram below shows the muscles and bones of the arm.



- (a) What happens to Muscle 1 and Muscle 2 when you bend your arm?
(1 mark)

- (b) What type of joint is found in Part C? (1 mark)

39. Our body has different systems that perform different functions.

In the table below,

- (a) Name three body parts (i), (ii) and (iii), which make up the respiratory system. (3 marks)
- (b) Name the system which the heart and blood vessels belong to? (1 mark)

Respiratory system	(b) _____ system
(a) (i) _____ (ii) _____ (iii) _____	Heart Blood vessels

40. All parts of a plant must work together to keep it alive.

- (a) Name the plant parts and the functions they perform to keep the plant alive. (2 marks)

Plant Part	Function
(i) _____	Make food for the plant.
Roots	(ii) _____ _____

- (b) Name the process by which a green plant makes food. (1 mark)

- (c) The diagram below shows 2 leaves, Leaf A and Leaf B.



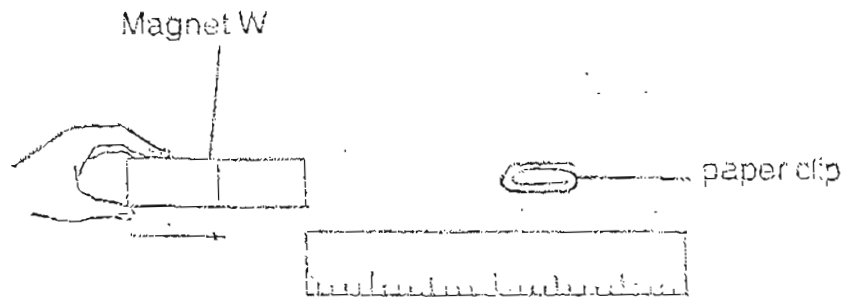
Leaf A



Leaf B

Based on only what you can see in the diagram, write down one difference between the 2 leaves. (1 mark)

41. Jane conducted an experiment using four new magnets of the same size and thickness. She moved each magnet slowly towards a paper clip in the way shown below and measured the distance at which the paper clip was attracted to the magnet.



She recorded her result in the table below.

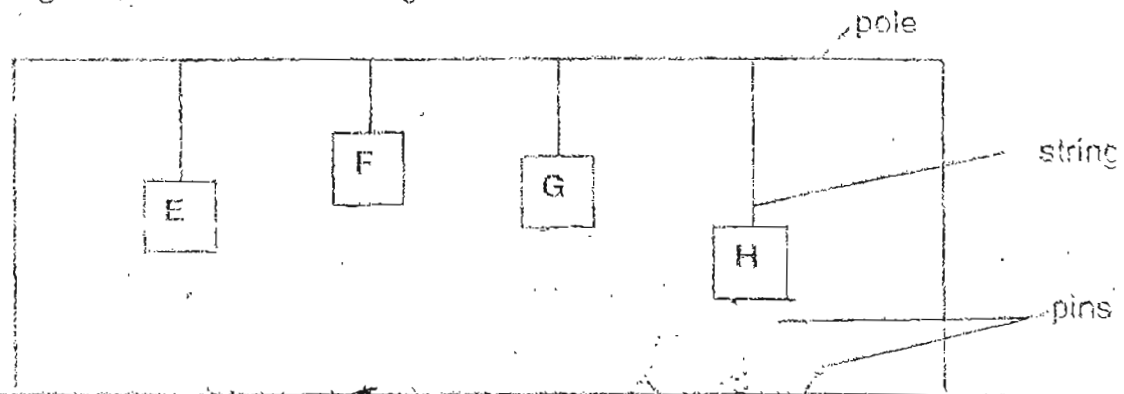
Magnet	Distance at which paper clip was attracted (cm)
W	6
X	3
Y	10
Z	?

- (a) Jane put Magnet Z over a flame for about half an hour before the experiment. Predict the result for Magnet Z. (1 mark)

- (b) Explain your answer in (a). (1 mark)

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42. Peter hung 4 different magnets, E, F, G and H from a pole to test the strength of the magnets, as shown in the diagram below.

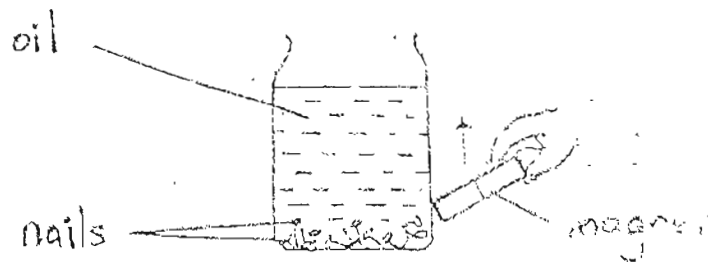


- (a) Based on the result shown above,
- which was the weakest magnet? (½ mark)

 - which was the strongest magnet? (½ mark)

- (b) Write down two things that might happen if Magnet E was a powerful magnet. (2 marks)
- _____
 - _____

43. Rachel tried to remove some nails in a glass jar filled with oil using a magnet, as shown in the diagram below.



What does this experiment tell you about magnetic force and glass?
(1 mark)

44. For each of the following statements, decide whether the statement is True or False. Write 'True' or 'False' in the bracket for each statement. (2 marks)

- (a) Any object can be magnetised by stroking it several times with a magnet in the same direction. ()
- (b) Most magnets have a south-seeking pole and a north-seeking pole. ()
- (c) Thumbtacks, needles and staples are examples of magnetic materials. ()
- (d) Iron keepers are placed across ends of a pair of magnets to make the magnetic forces last longer. ()

45. (a) What are magnets which work using electricity also known as? (1 mark)

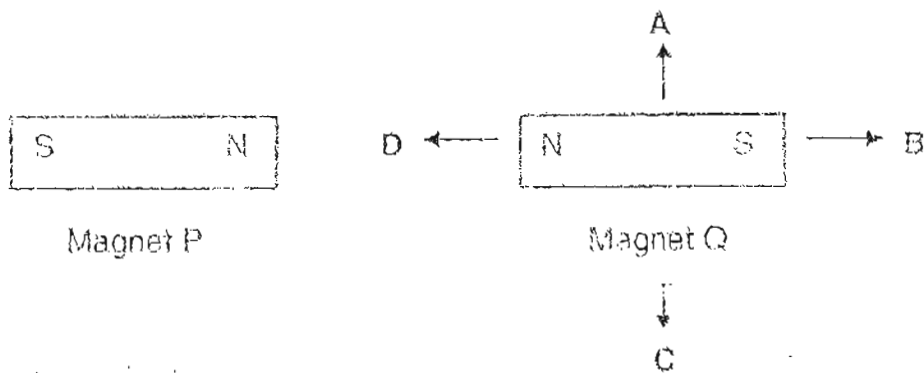
- (b) List any two materials objects should be made of in order for them to be used to make magnets using electricity. (1 mark)

(i) _____

(ii) _____

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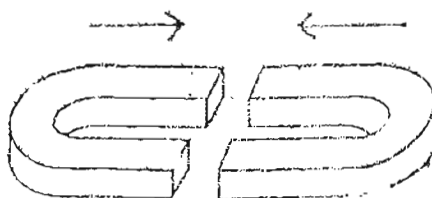
46. Magnet P was brought near Magnet Q, as shown in the diagram below.



(a) In which direction (A, B, C or D) would Magnet Q least likely move to? (1 mark)

(b) What would the answer in (a) tell you about the poles of magnets? (1 mark)

(c) The diagram below shows 2 U-shaped magnets, attracted to each other. Name the poles of the 2 magnets. Write 'N' for North and 'S' for South (1 mark)



End of Booklet B

ROSYTH SCHOOL
SECOND SEMESTRAL ASSESSMENT FOR 2004
SCIENCE
PRIMARY 3

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- 1) 1 28) 3 31) crawl shell
2) 1 29) 2 fly nest
3) 2 30) 2 swim sea
4) 4 32) i) Yes ii) No iii) Yes iv) No
5) 2 33) a) i) An adult cockroach has wings.
6) 4 ii) It is pale brown in colour.
7) 3 b) nymph
8) 4 34) a) She learnt that a seed needs warmth to
9) 4 b) She used 2 cups of different materials.
10) 4 35) a) i) Skin ii) Nose
11) 4 b) He must use the sense of hearing as the
12) 2 fountain makes a sound when there is water.
13) 3 36) P : Gullet
14) 4 Q : Stomach
15) 4 R : Large intestine
16) 3 S : Small intestine
17) 3 37) a) It keeps our body in shape.
18) 2 b) It protects our organs.
19) 4 38) a) Muscle 1 will contract while Muscle 2 will
20) 3 relax.
21) 1 b) It is a hinge joint.
22) 3 39) a) i) lung ii) Nose iii) Windpipe
23) 3 b) Circulatory
24) 3 40) i) Leaves ii) Absorb water from the soil.
25) 1 b) Photosynthesis.
26) 2 c) Leaf A has jagged edges but leaf B has
27) 2 smooth edges.
41) a) 2 cm or 1 cm or 0 cm
42) a) i) Magnet H ii) Magnet E
b) i) It will attract more pins.
ii) It will attract or repel magnet F.

43) The magnetic force can go through the glass.

44) a) False

b) False

c) True

d) True

45) a) Electromagnets

b) i) steel

ii) Iron

46) a) D

b) Like poles repel.

c)

