Name: _____

Class: Primary 4 _____

CHIJ ST NICHOLAS GIRLS' SCHOOL

SIMPLE IN VIRTUE

STEADFAST IN DUTY

德 纯 义 学

Primary 4
First Continual Assessment – 2008
SCIENCE

BOOKLET A

27th February 2008

Total Time for Booklets A and B: 1 hour 30 minutes

20 questions
40 marks

Do not open this booklet until you are told to do so.
Follow all instructions carefully.
Answer all questions.

Section A : (20 x 2 MARKS)

For each question from 1 to 20, 4 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) in the Optical Answer Sheet (OAS) provided.

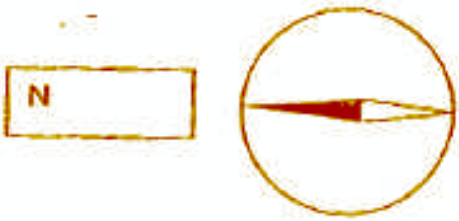
1. Sharifah wants to leave a note for her mother. With a piece of magnet, she can stick the note onto the _____.

A: whiteboard
B: wooden door
C: aluminium grille
D: door of the refrigerator

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

2. A compass is placed near one end of a bar magnet.
Which one of the diagrams below shows the correct position of the compass needle?

(1)

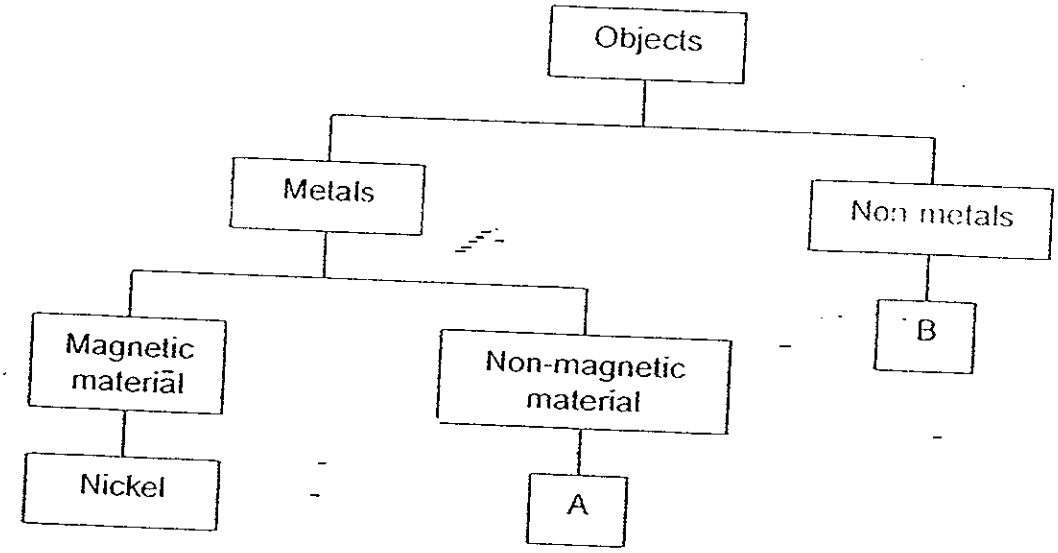


(2)

(3)

(4)

3. Study the classification chart below.



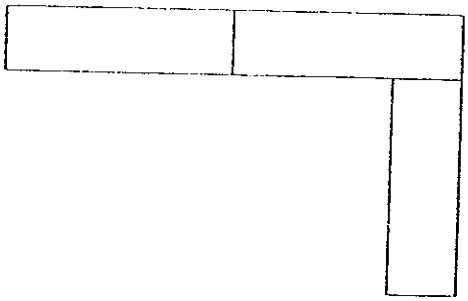
What can A and B be?

	A	B
(1)	Iron	Plastic
(2)	Gold	Rubber
(3)	Silver	Aluminium
(4)	Plastic	Copper

4. When a seed starts to germinate, which of the following will grow first?

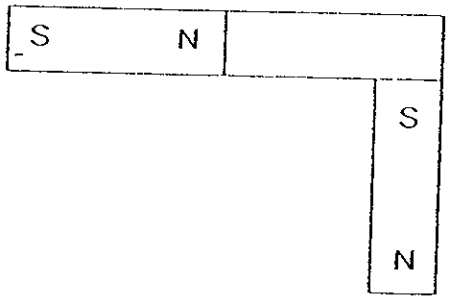
(1) root
(2) stem
(3) shoot
(4) leaves

5. Three magnets are joined together as shown in the picture below

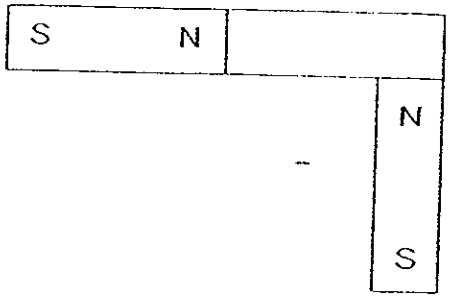


Which of the following pictures show the correct arrangement of their poles?

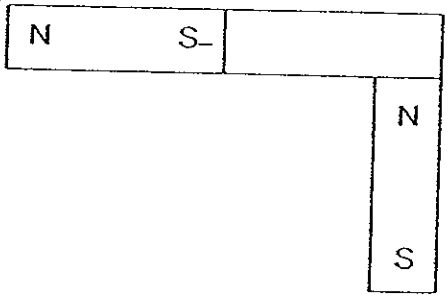
(A)



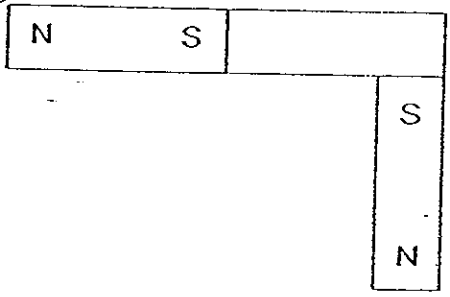
(B)



(C)



(D)

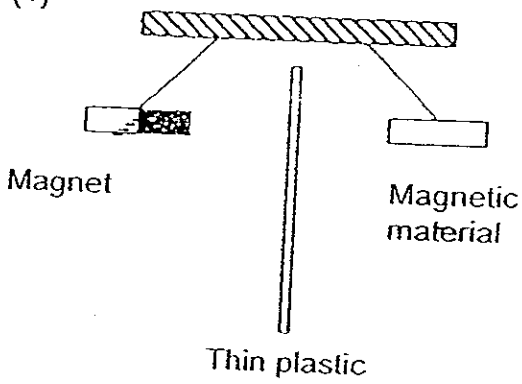


(1) A and C
(2) A and D
(3) B and C
(4) B and D

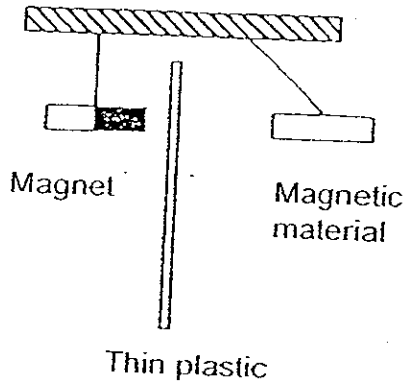
6. A bar magnet and a piece of magnetic material are suspended by strings and separated by a thin plastic.

Which one of the following diagrams would correctly represent the result?

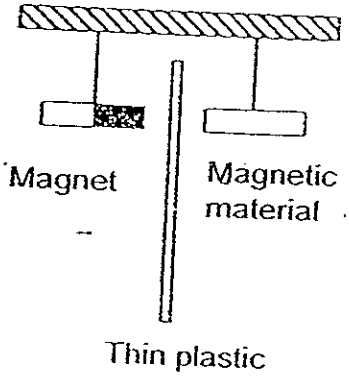
(1)



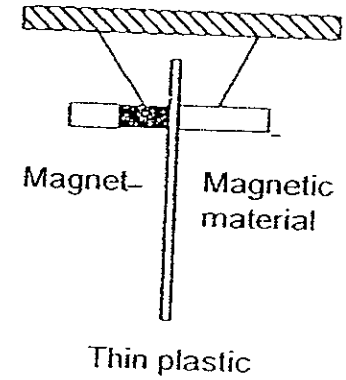
(2)



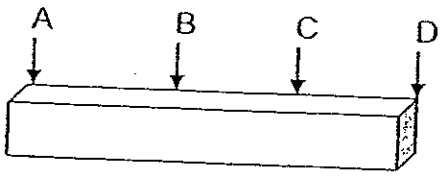
(3)



(4)



7. Look at the picture of the bar magnet below.



Which parts of the magnet will attract the most paper clips?

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

8. Study the diagrams below.

Object X Object Y

When object X is placed near point C of object Y, object Y moves towards it

Object X Object Y

When object X is placed near point D of object Y, object Y also moves towards it.

Which of the following statements are true about object X and object Y?

(A) Object X could be a magnet.
(B) Object Y is made of iron or steel.
(C) Both object X and object Y are magnets.

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

9. Peter wants to grow a green bean plant from its seed. What conditions are needed for the seed to germinate?

A: air
B: water
C: sunlight
D: warmth

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

10. Magnet S is hung from a spring as shown in Diagram A. Magnet T is then placed on the ground, directly below Magnet S as shown in Diagram B.

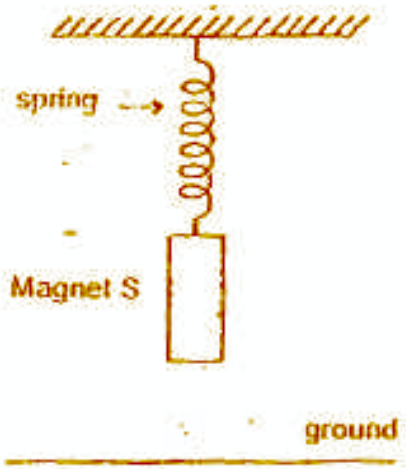


Diagram A

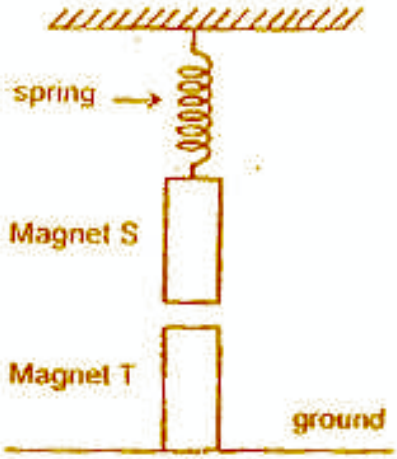


Diagram B

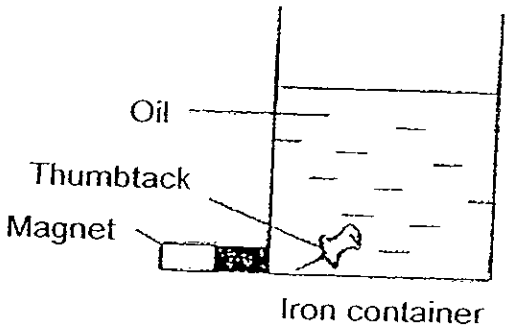
Why does the spring stretch less in the arrangement shown in Diagram B?

(1) The spring becomes weaker.
(2) The weight of Magnet S is smaller.
(3) Magnet S pulls Magnet T upwards.
(4) Magnet T pushes Magnet S upwards.

11. Philip wanted to remove the thumbtack in each of the container as shown in the diagram below. All the containers contained an equal amount of oil. He used a magnet and moved it along the outer wall of the container to bring the thumbtack up to the rim of the container.

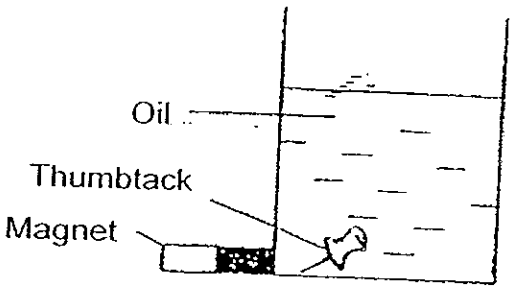
Which one of the set-ups below would he find difficulty in removing the thumbtack?

(1)



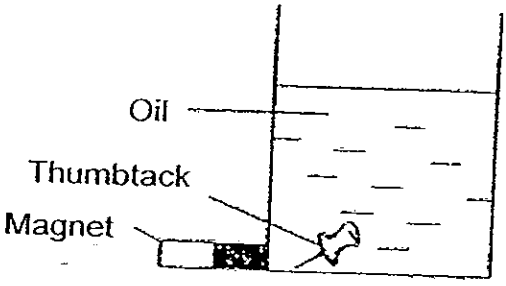
Iron container

(2)



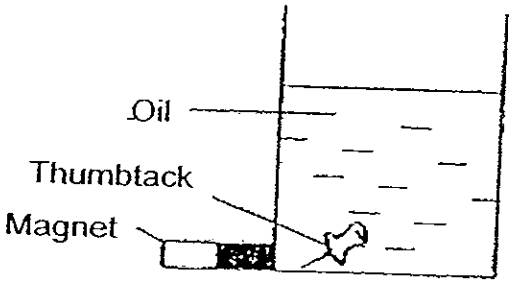
Plastic container

(3)



Glass container

(4)



Styrofoam container

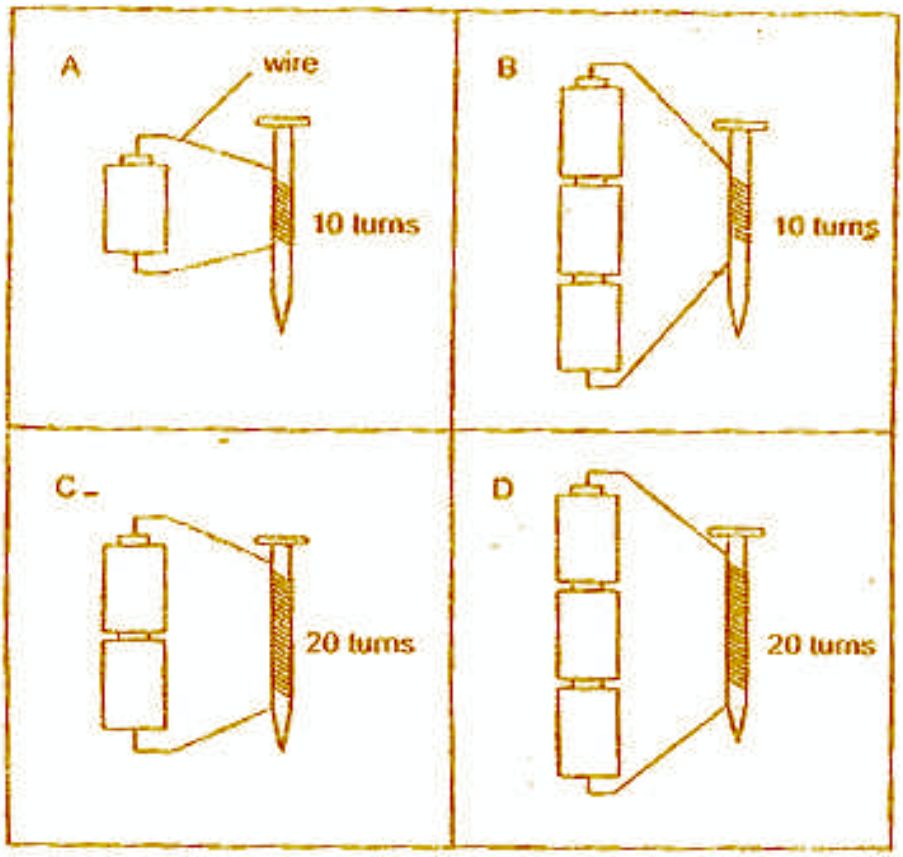
12. Which of the following animals does <u>not</u> have a pupa stage in its life cycle?

(1) Ant
(2) Mosquito
(3) Grasshopper
(4) Mealworm beetle

13. An iron nail becomes a magnet when it is placed in a coil of wire joined to batteries.

Raju wants to find out whether the number of turns of the coil affects the strength of a magnet. He uses two of the following set-ups to test the strength of the magnet by counting the number of steel paper clips each can pick up.

Which two set-ups below should he use to conduct a fair test?



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

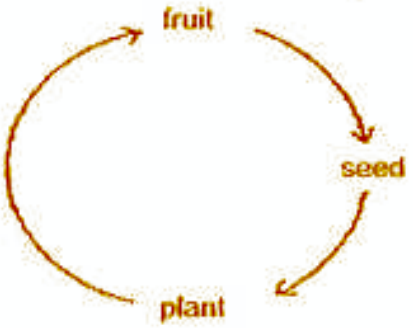
14. A magnet is dropped several times onto the floor. Its magnetic pull is tested by using safety pins. The table below shows the results. However, there was a mistake in the information provided in the table.

Which one of the following is incorrect?

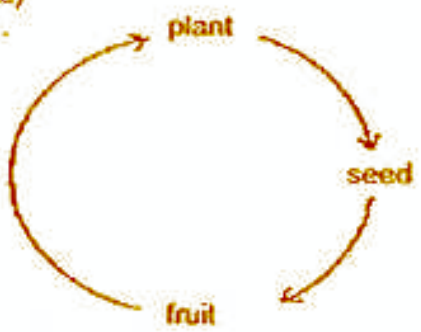
	Number of times the magnet is dropped onto the floor	Number of safety pins attracted by the magnet
(1)	0	7
(2)	3	5
(3)	7	6
(4)	14	2

15. Which diagram shows correctly the development of a plant?

(1)

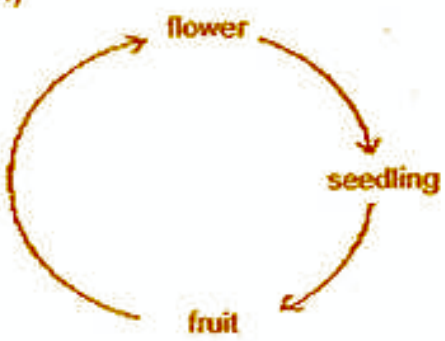


(2)



(3)

(4)



16. Study the two groups of objects given below.

Group X	Group Y
Staple	Pencil
Needle	Glass slide
Thumbtack	Rubber band

Which of the following sets of headings are suitable for Group X and Group Y?

	Group X	Group Y
A	Things made of metals.	Things made of non-metals.
B	Things that sink in water.	Things that float on water.
C	Things made of magnetic materials.	Things made of non-magnetic materials.

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

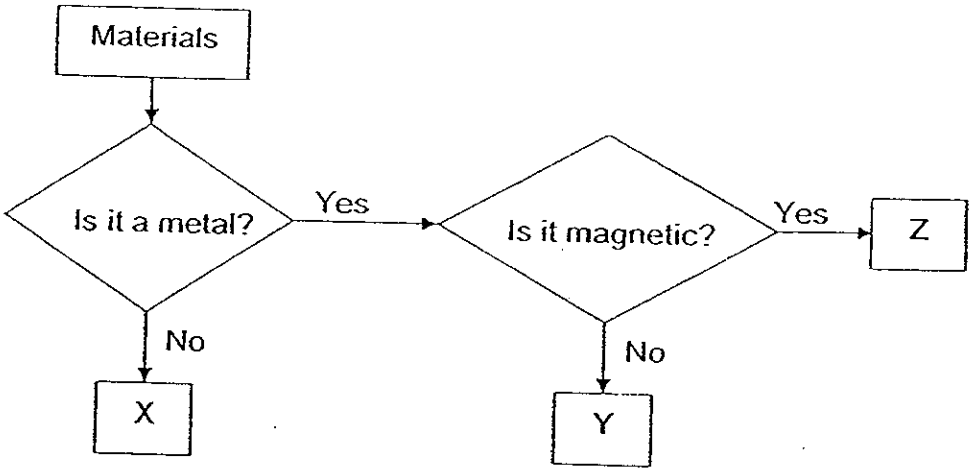
17. Faridah did a study on two animals, X and Y. She drew a checklist and placed a tick (✓) in the box when she made the observation.
At the end of her study, the completed checklist is as follows:

Observation	Animal X	Animal Y
It has six legs.	✓	✓
Eggs are laid in water.	✓	
There are 3 stages in the life cycle.		✓

Which of the following would be correct?

	Animal X	Animal Y
(1)	frog	cockroach
(2)	butterfly	frog
(3)	mosquito	butterfly
(4)	mosquito	cockroach

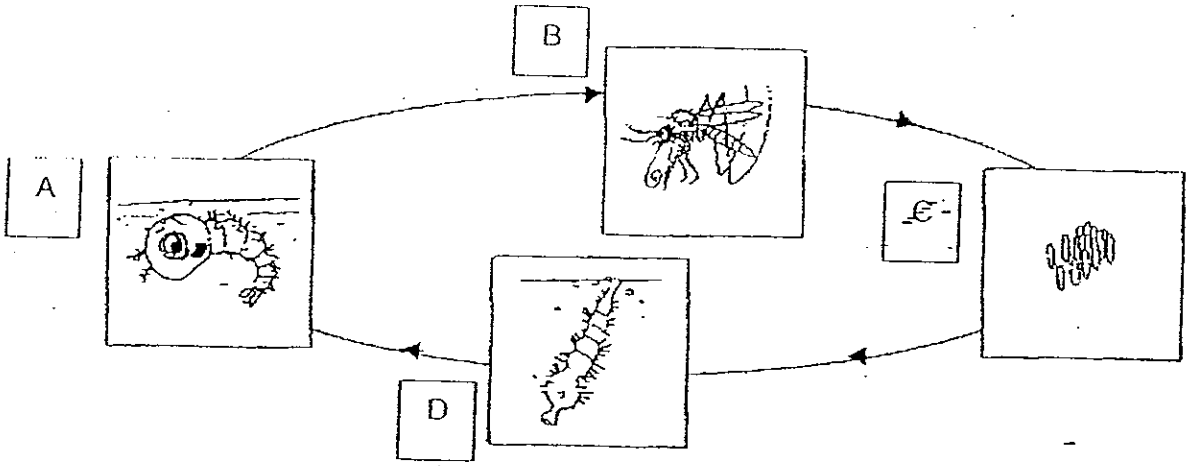
18. Study the flowchart below.



Which of the following represents X, Y and Z respectively?

	X	Y	Z
(1)	Copper	Aluminium	Silver
(2)	Cotton	Nickel	Steel
(3)	Paper	Steel	Nickel
(4)	Rubber	Copper	Iron

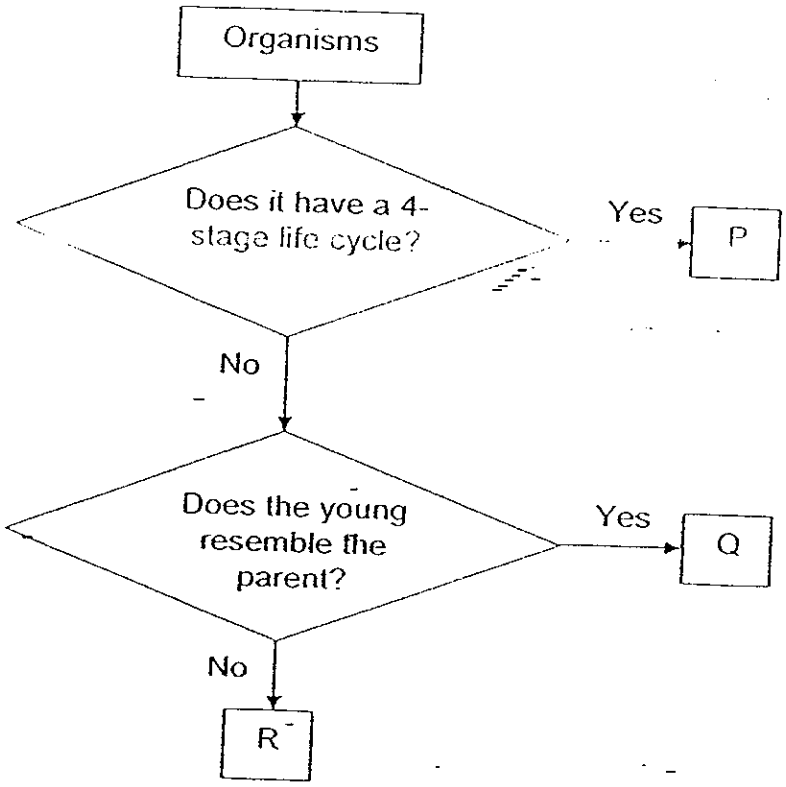
19. The diagram below shows the life cycle of a mosquito.



At which stage of its life cycle is the mosquito harmful to Man?

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

20. Study the flowchart below.



Which one of the following represents P, Q and R correctly?

	P	Q	R
(1)	Ant	Toad	Butterfly
(2)	Moth	Dog	Grasshopper
(3)	Butterfly	Chicken	Frog
(4)	Grasshopper	Frog	Housefly

- End of Section A -

Name: _____ ( )

Class: Primary 4 _____

CHIJ ST NICHOLAS GIRLS' SCHOOL

SIMPLE IN VIRTUE

STEADFAST IN DUTY

德 纯 义 学

Primary 4

First Continual Assessment – 2008

SCIENCE

BOOKLET B

27th February 2008

Booklet A	40
Booklet B	30
Total	70

Total Time for Booklets A and B: 1 hour 30 minutes

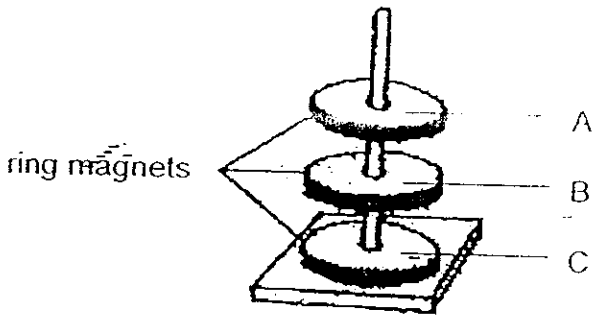
10 questions
30 marks

Do not open this booklet until you are told to do so.
Follow all instructions carefully.

Parent's Signature/Date

Section B : (30 marks)
Answer all questions.

21. The diagram below shows three ring magnets, A, B and C. They 'floated' on top of one another.



(a) Give a reason why all the magnets did not touch one another. (2 marks)

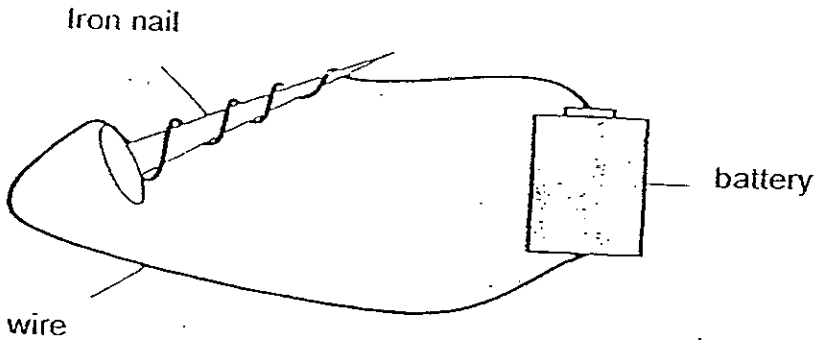
_____

_____

(b) The three ring magnets would touch one another if you flip one of them. Which magnet would you flip? (1 mark)

_____

22. Samantha set up the circuit as shown in the diagram below.



(a) What type of magnet will the nail become? (1 mark)

_____

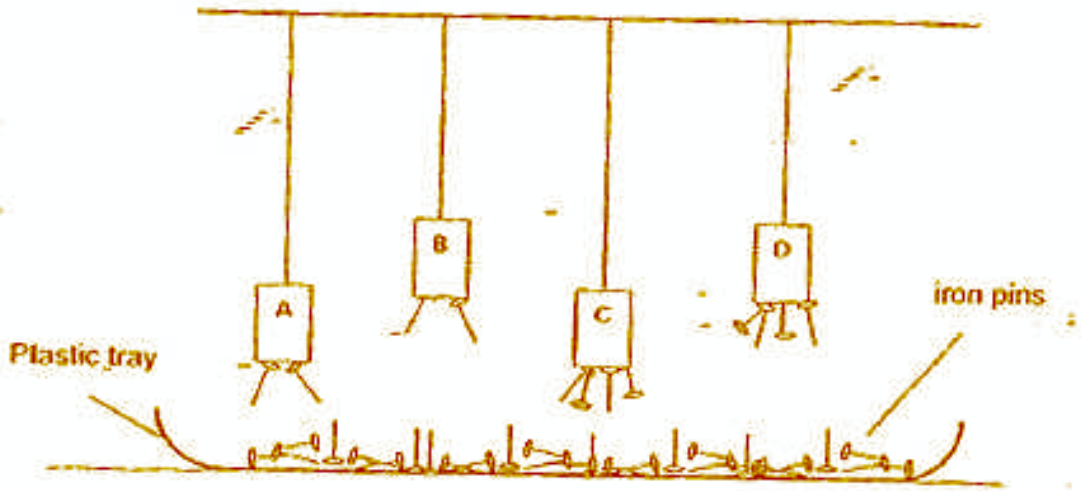
(b) Suggest two ways Samantha could do to increase the magnetic force of the nail. (2 marks)

(i) _____

(ii) _____

23. Rahimah uses four similar magnets A, B, C and D to find out which one can attract more iron pins in the set-up below.

A plastic tray of iron pins is placed below the magnets and different numbers of pins are attracted to the magnets.



(a) Which is the strongest magnet? (1 mark)

_____

(b) Based on the set-up, why is it unfair to compare the strengths of magnet B and magnet C? (1 mark)

_____

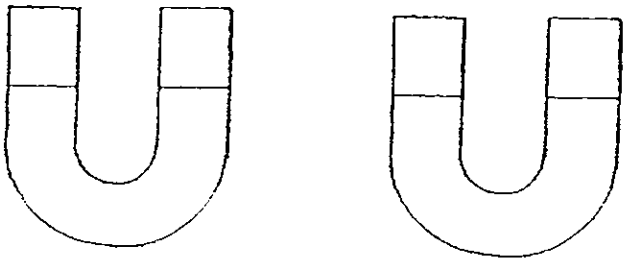
(c) Later on, Rahimah removes the pins from the magnets. Then she places a piece of steel sheet between the magnets and the pins.

What do you think will happen? Explain your answer. (2 mark)

_____

_____

24. The diagram below shows two U-shaped magnets.



(a) Draw a diagram in the box below to show how the two U-shaped magnets should be arranged so that they can stick to each other. Indicate on the diagram the poles of each magnet. (2 marks)

(b) What property of a magnet is shown in (a) above? (1 mark)

25. Priya has three bar magnets. She labelled the ends of the bars as shown in the diagrams below.

She brought the ends of the magnets close to each other to find out how they interact. The results are shown in the table below.

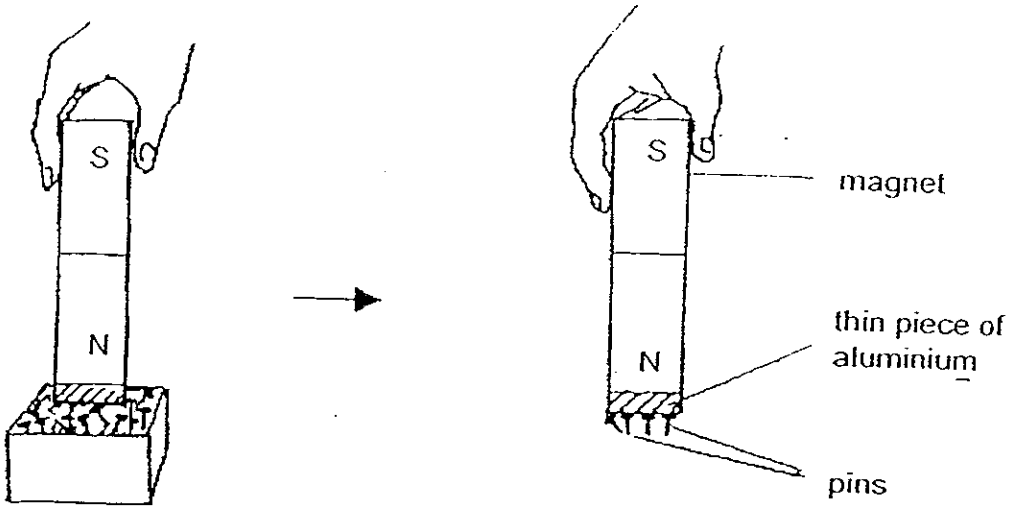
Ends that are brought close to each other	Observations
A and C	Attract
A and E	Repel
C and F	Repel
B and E	Attract

What would happen when the ends of the magnets in the table below are brought close to each other? Write your observations in the table below.

(3 marks)

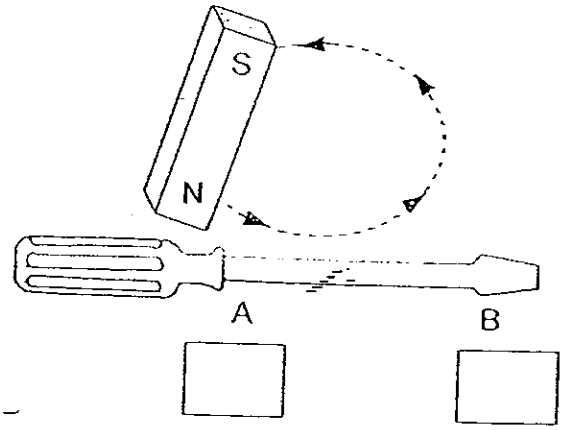
Ends that are brought close to each other	Observations
C and E	(i)
D and F	(ii)
B and C	(iii)

26. The North pole of a bar magnet has been wrapped by a thin piece of aluminium. It was lowered into a box of pins. When the North pole of the magnet was taken out from the box, it was found to attract a few pins as shown in the diagram below.

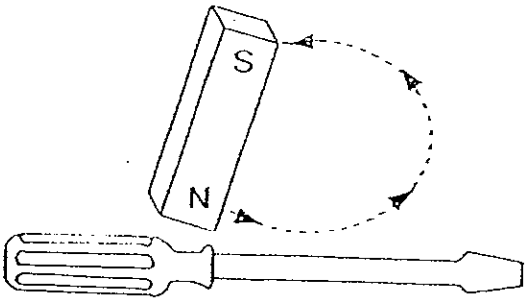


What can you conclude from this experiment? (2 marks)

27. Jason used two similar screwdrivers and stroked them with a magnet as shown in the diagram.



Screwdriver X
(20 strokes)



Screwdriver Y
(50 strokes)

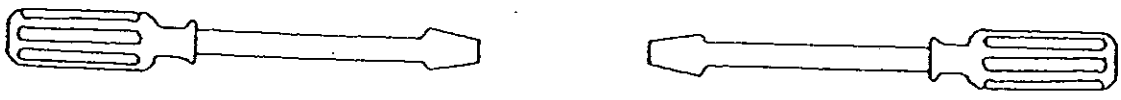
(a) When screwdriver X is magnetized, Point A and Point B will become the poles of the temporary magnet.
Write '**N**' for the N-pole and '**S**' for the S-pole in the boxes provided.
(1 mark)

(b) What was the difference between screwdriver X and screwdriver Y after they had been stroked by a magnet as shown in the diagram above? Explain your answer.
(2 marks)

_____

_____

(c) Jason held screwdriver X next to screwdriver Y as shown below.



Screwdriver X

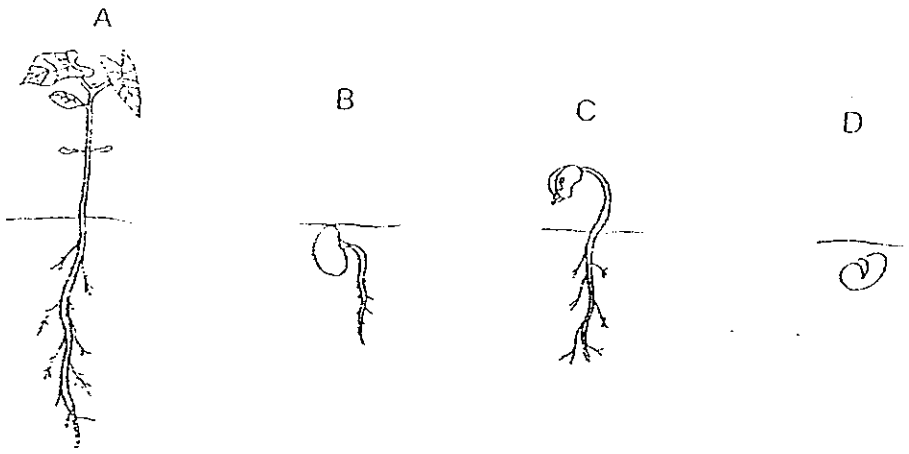
Screwdriver Y

He observed that screwdriver X repelled screwdriver Y. Why is this so?
(1 mark)

_____

_____

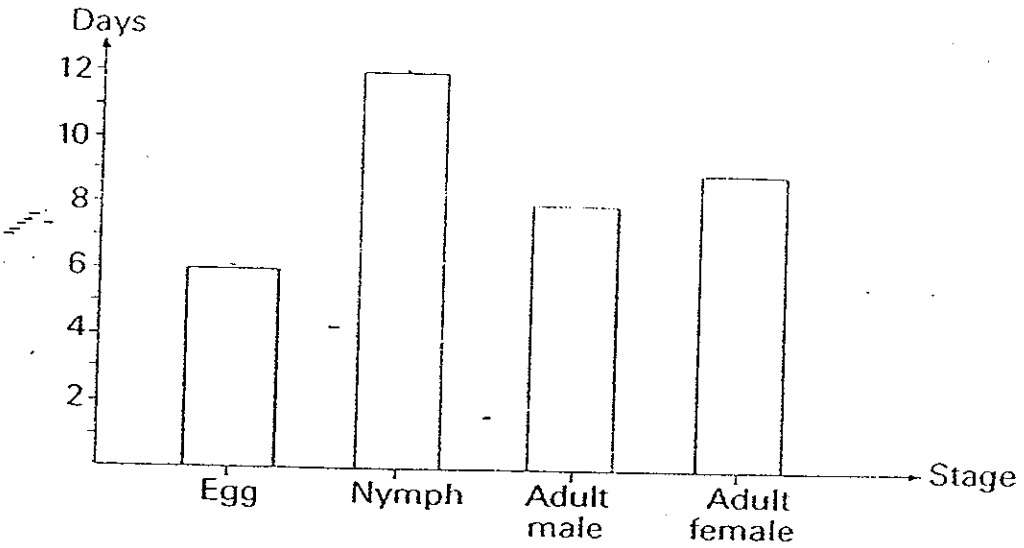
28. The diagram below shows a green bean at various stages of germination.



(a) At stage C, where does the seedling get its food from? (1 mark)

(b) At which stage does the seedling need to be placed under sunlight? Explain your answer. (2 marks)

29. The graph below shows the number of days each stage in the life cycle of an insect lasts.



(a) How many stages are there in the life cycle of this insect? (1 mark)

_____

(b) How many days would the insect take to become an adult after the egg is laid? (1 mark)

_____

30. Study the table below.

Characteristics	Animal A	Animal B
Reproduce by laying eggs.	Yes	Yes
Warm-blooded.	No	Yes
Young lives in water.	Yes	No
Eggs with hard outer covering.	No	Yes

(a) Based on the characteristics given above, name the groups of animals in which animal A and animal B can be classified under. (1 mark)

Animal	Group
A	(i)
B	(ii)

(b) Hafizah concluded that Animal B is a crocodile. Do you agree with her? Give a reason for your answer. (2 marks)

_____

_____

— End of Paper —

ANSWER SHEET

EXAM PAPER 2008

SCHOOL : CHIJ PRIMARY SCHOOL
SUBJECT : PRIMARY 4 SCIENCE

TERM : CA 1

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

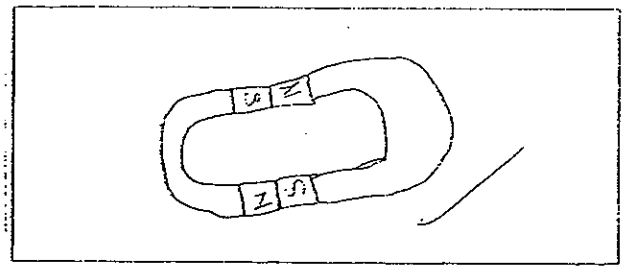
Q18	Q19	Q20
4	2	3

21)a)The poles facing each other is alike therefore they repel.
b)Ring magnet B will flip.

22)b)i)Turn its more time.
ii)Increase the number of battery.

23)a)D is the strongest magnet.
b)Because the length is different.
c)The magnet will not attract the pins. Magnetic force cannot pass through.

24)a)



b)Unlike poles attract.

25)i)attract ii)attract iii)repel

26)The magnetic force can pass through the thin piece of aluminium.

27)a)N, S

b)The magnetic in screwdriver Y will be stronger than screwdriver X because more stroke were given to screwdriver Y.

c)The two end of the screwdriver have the same pole.

28)a)It gets its food from the sea d leaf.

b)Stage A. The leaves need sunlight to make food survive.

29)a)There are 3 stage life cycle.

b)18 days.

30)a)A: Amphibian B: Bird

b)No. crocodile is cold blooded.