

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

Class: Primary 4 \_\_\_\_\_

## CHIJ ST NICHOLAS GIRLS' SCHOOL (Primary)



德 純 义 堅

### 2010 First Continual Assessment SCIENCE

BOOKLET A

3 March 2010

Total Time for Booklets A and B: 1 hr 30 min

25 questions  
50 marks

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

---

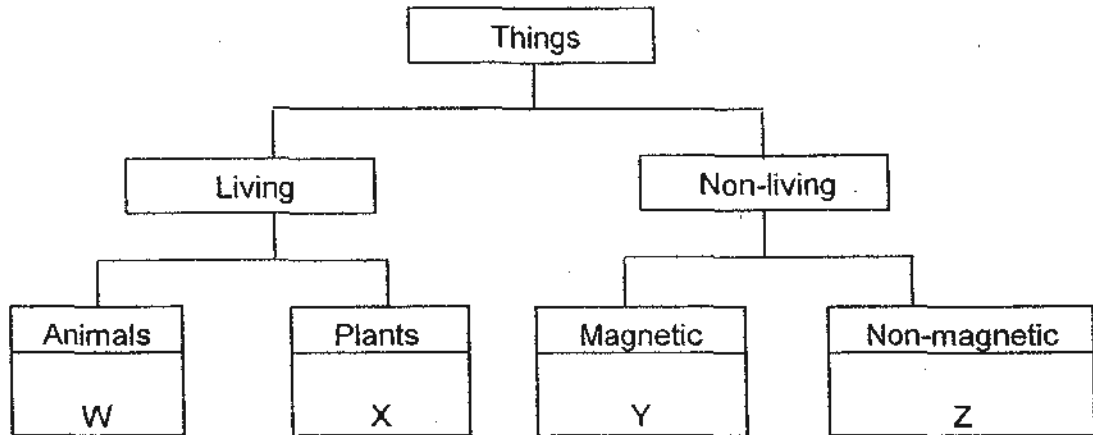
Parent's Signature / Date

This paper consists of 14 printed pages.

**Section A : (25 x 2 marks)**

For each question from 1 to 25, four options are given. One of them is the correct answer. Make your choice (1, 2, 3 or 4). Shade your answer on the Optical Answer Sheet.

1. Study the classification chart below carefully.



Which one of the following has been classified correctly?

	W	X	Y	Z
(1)	Fly	Mould	Iron rod	Plastic bowl
(2)	Bacteria	Cactus	Steel nail	Nickel coin
(3)	Mosquito	Fern	Iron pin	Silver spoon
(4)	Butterfly	Mushroom	Copper wire	Aluminium can

2. Which one of the following does **not** show the characteristic of living things?

- (1) A mother doing household chores.
- (2) Tree branches swaying in the wind.
- (3) A bird hopping away on a tree branch.
- (4) A deer running away from a chasing tiger.

3. Study the two animals shown below.



Flamingo



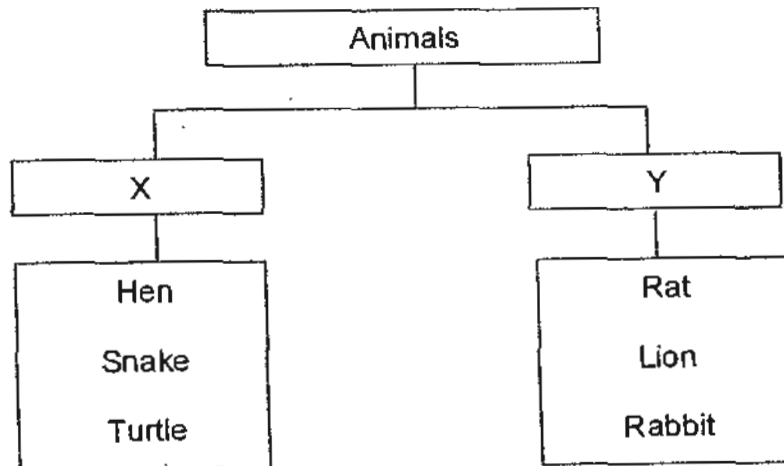
Penguin

They differ from each other in terms of their \_\_\_\_\_.

- A: habitat
- B: outer covering
- C: ways of movement

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

4. Study the classification chart below.



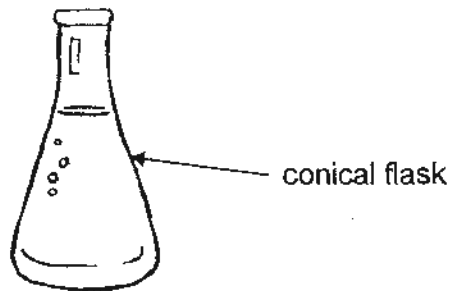
Which one of the following gives the correct headings for X and Y?

	X	Y
(1)	Live on land and in water	Live on land only
(2)	Do not feed on plants	Feed on plants only
(3)	Lay eggs	Give birth to young alive
(4)	Have 3 stages in their life cycles	Have 4 stages in their life cycles

5. Which one of the following is true about mammals?

- (1) All mammals have tails.
- (2) All mammals live on land.
- (3) All mammals give birth to young alive.
- (4) All mammals feed their young with milk.

6. The conical flask shown below is made of glass. The flask is commonly used in science experiments.



Why is glass a suitable material for making the conical flask?

- A: Glass breaks easily.
- B: Glass is waterproof.
- C: Glass is transparent.

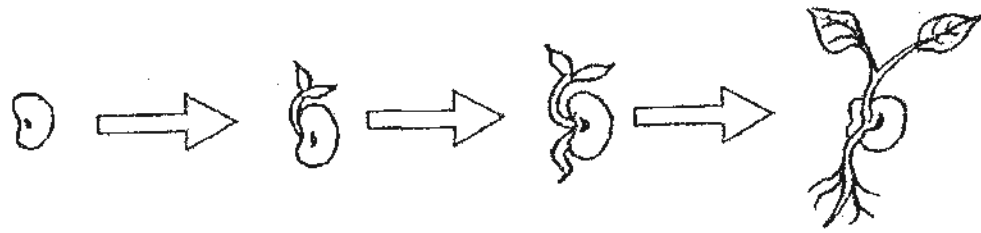
- (1) A only
- (2) B only
- (3) A and C
- (4) B and C

7. Which one of the following is **not** a function of the human skeletal system?

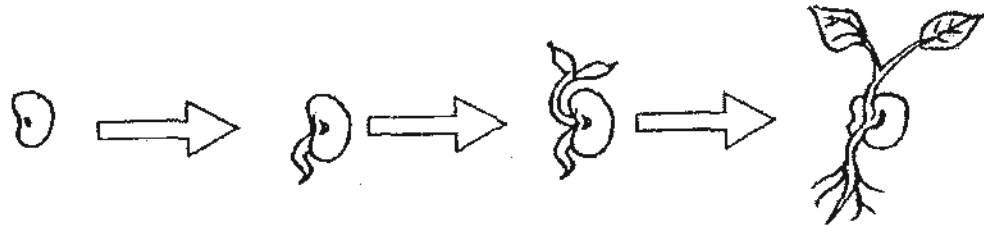
- (1) It supports the body.
- (2) It gives shape to the body.
- (3) It protects delicate organs.
- (4) It enables our body to move.

8. Which one of the following shows the correct order of stages when a seed germinates into a seedling?

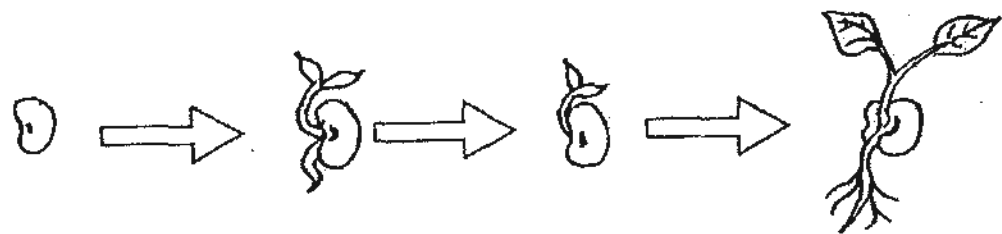
(1)



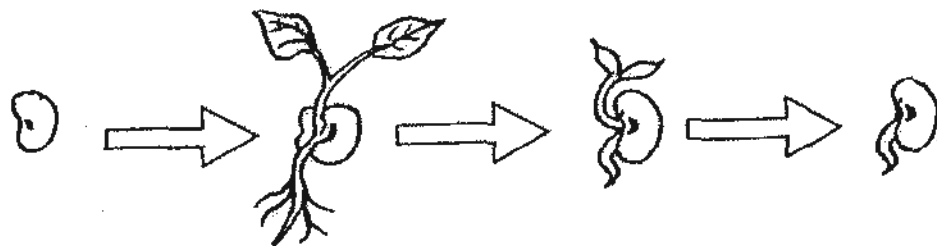
(2)



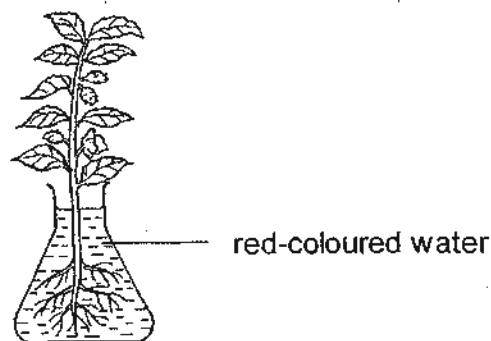
(3)



(4)



9. A balsam plant is placed into a flask of red-coloured water as shown in the diagram below. After a few hours, some parts of the flowers and leaves turned red.



Which of the following statements explain the observation made above?

- A: Water is taken in by the roots.
- B: Water is transported to the leaves.
- C: Water is transported to the flowers.
- D: Water is carried through the stem.

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

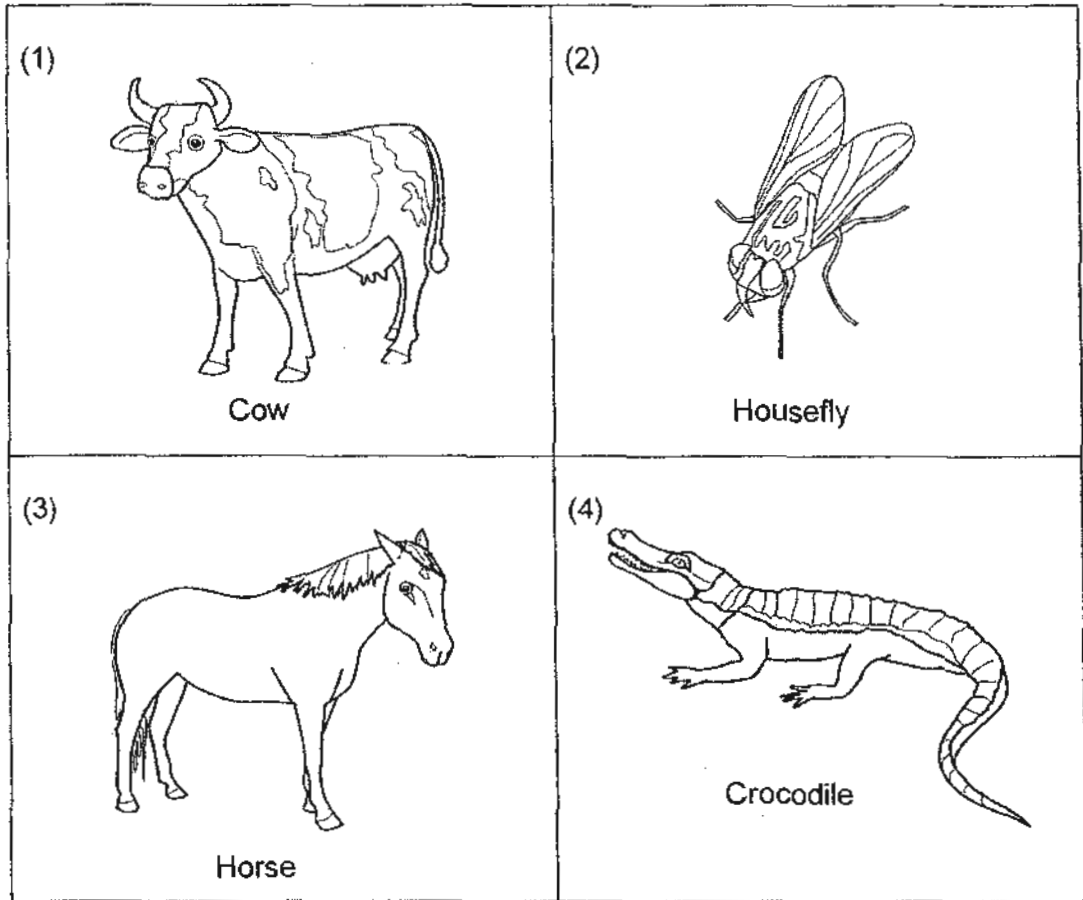
10. Different animals produce different number of young or eggs each time. The table below shows the number of young or eggs produced each time by animal A, B, C, D and E.

Animal	Number of young or eggs produced each time
A	1 young
B	2 eggs
C	5000 eggs
D	200 eggs
E	8 – 10 young

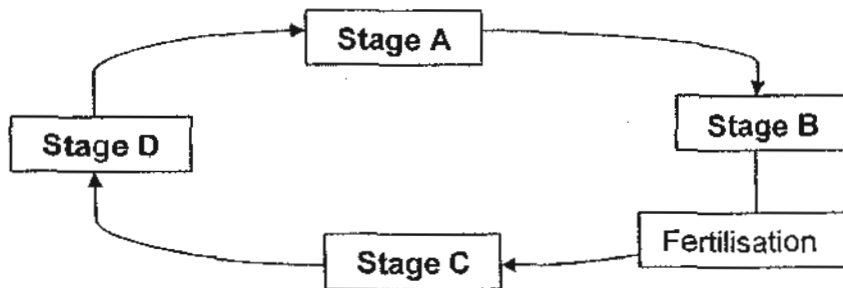
Which animals are most likely to have a higher chance of continuing its kind?

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

11. Which one of the following animals does not have young that looks like the adult?



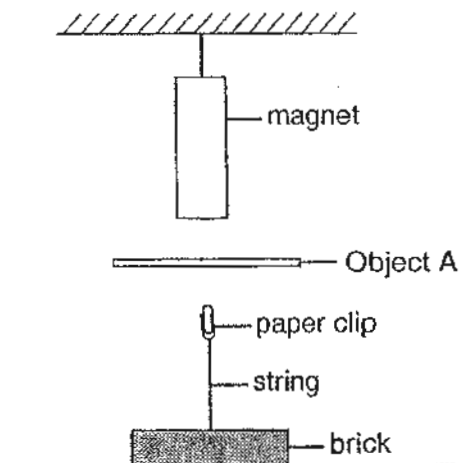
12. The diagram shows the life cycle of a butterfly. The male and female adult butterflies mate to lay fertilised eggs.



Which one of the following shows the correct stages of its life cycle?

	Stage A	Stage B	Stage C	Stage D
(1)	Egg	Larva	Pupa	Adult
(2)	Larva	Pupa	Adult	Egg
(3)	Pupa	Adult	Egg	Larva
(4)	Adult	Egg	Larva	Pupa

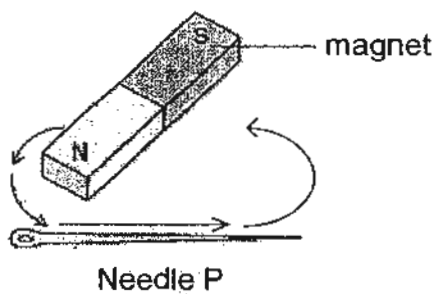
13. Study the diagram below.



Which one of the following materials is object A made of?

- (1) Iron
- (2) Steel
- (3) Nickel
- (4) Aluminium

14. Needle P is made into a temporary magnet by using the stroking method.



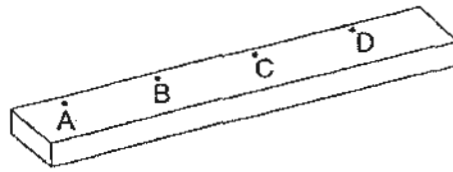
The needle is then placed near a compass. Which one of the diagrams below shows the correct position of the compass needle?

- (1)

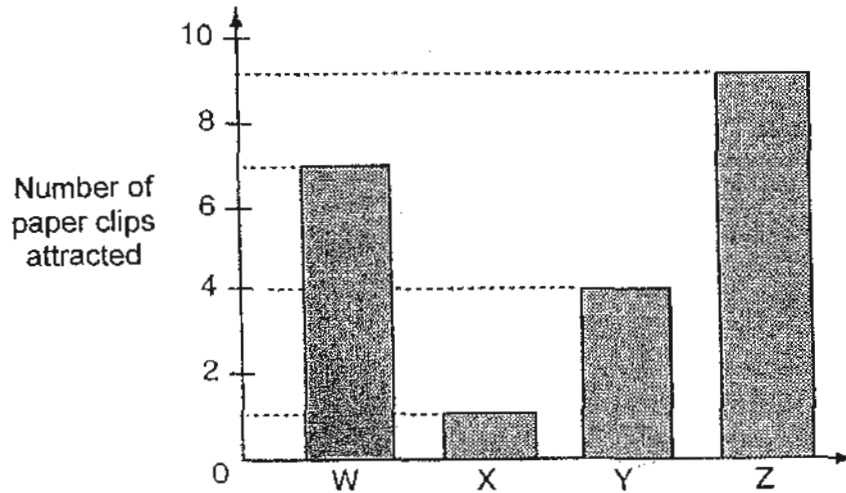
(2)
- (3)

(4)

15. Rajesh carried out an experiment to test the strengths of different parts of a bar magnet. She put some paper clips near part A, B, C and D of the magnet as shown below.



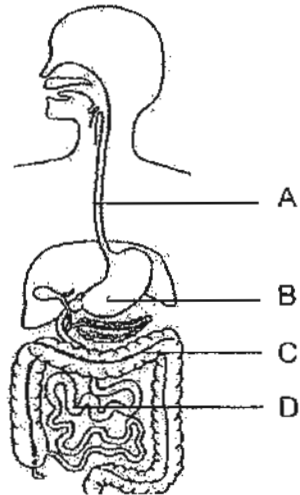
She recorded the number of paper clips attracted to each part of the magnet in the graph below.



Which part of the magnet does Z represent?

- (1) Part A
  - (2) Part B
  - (3) Part C
  - (4) Part D
16. Which one of the following does **not** follow a cycle?
- (1) The change in seasons.
  - (2) The change from day to night.
  - (3) The movement of clouds across the sky.
  - (4) The development of an egg into a cockerel.

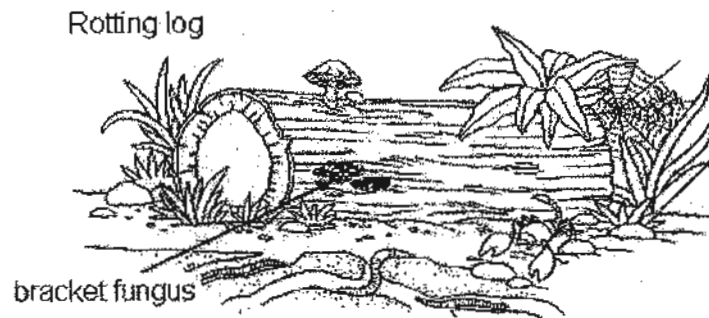
17. The diagram below shows the human digestive system.



In which part, A, B, C or D, is digested food absorbed into the blood vessels?

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

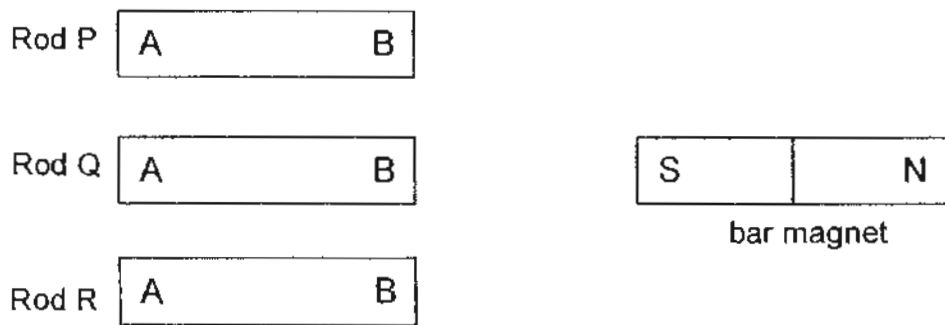
18. The picture below shows some bracket fungi and other organisms on a rotting log.



The bracket fungi obtain its energy directly from \_\_\_\_\_.

- (1) the log
- (2) the sunlight
- (3) the food it makes
- (4) The animals around the log

19. Keith was given 3 rods, P, Q and R, as shown below.



He brought a bar magnet close to each rod and recorded his observations in a table.

Rod	Observations
P	A and B are attracted by the South pole.
Q	Nothing happened at A or B when the magnet is brought close.
R	A is attracted by the South pole but B is repelled.

Which statement is definitely true?

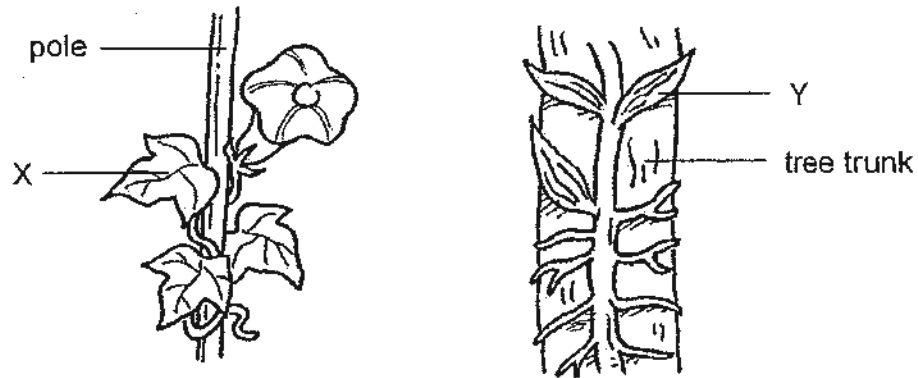
- (1) Rod R is a magnet.
- (2) Rod P is made of silver.
- (3) Rod Q is made of wood.
- (4) Rods P and Q are magnetic materials.

20. Which of the following make use of magnets?

- A: Compass
- B: Watch
- C: Loudspeaker
- D: Doorbell

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

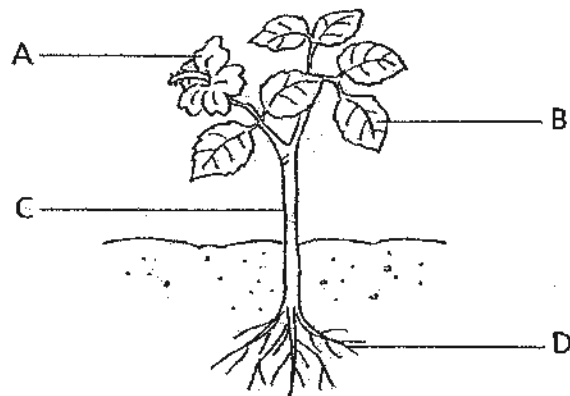
21. The diagram below shows two green plants, X and Y, growing in a garden.



Which one of the following statements about both plants, X and Y, is **not** correct?

- (1) They have roots.
- (2) They reproduce by spores.
- (3) They make their own food.
- (4) They need support to grow.

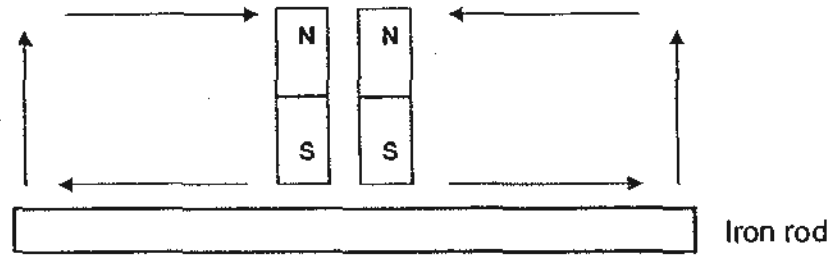
22. The diagram below shows a plant.



Gaseous exchange between the plant and the surrounding air takes place mainly in part \_\_\_\_\_ of the plant.

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

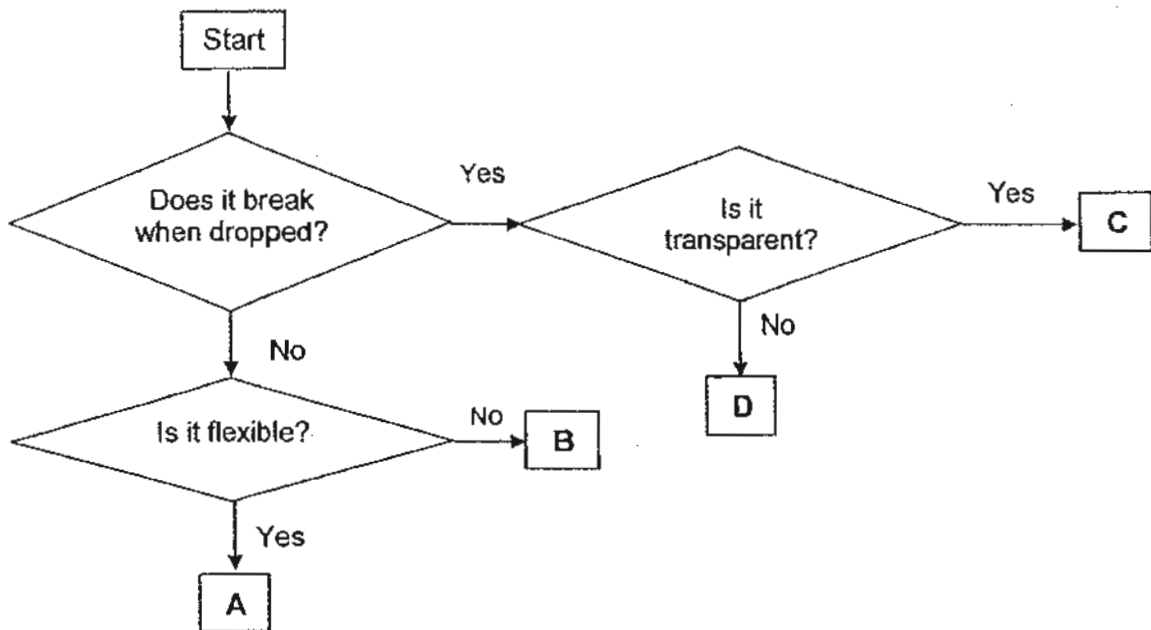
23. Study the diagram below.



What will happen to the iron rod if it is stroked thirty times by each of the two magnets in the directions shown above?

- (1) It will not become a magnet.
  - (2) It will become a magnet with two different poles.
  - (3) It will become a magnet with two north-seeking poles.
  - (4) It will become a magnet with two south-seeking poles.
24. Which one of the following statement does **not** take place in the mouth during the first stage of digestion?
- (1) Saliva changes all the food into liquid.
  - (2) The tongue helps us to swallow the food.
  - (3) Saliva wets the food and helps in swallowing.
  - (4) Our teeth chew and grind the food into smaller pieces.

25. The flow chart below shows the properties of four different materials, A, B, C and D.



Which materials, A, B, C and D, are suitable for making the objects shown in the table below respectively?

	A	B	C	D
(1)	Nylon socks	Wine glass	Clay figurine	Plastic spoon
(2)	Plastic spoon	Clay figurine	Nylon socks	Wine glass
(3)	Nylon socks	Plastic spoon	Wine Glass	Clay figurine
(4)	Clay figurine	Wine glass	Plastic spoon	Nylon socks

\*\*\*\*\*End of Paper\*\*\*\*\*

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

Class: Primary 4 \_\_\_\_\_

## CHIJ ST NICHOLAS GIRLS' SCHOOL (Primary)



### 2010 First Continual Assessment SCIENCE

#### BOOKLET B

3 March 2010

Total Time for Booklets A and B: 1 hr 30 min

10 questions  
30 marks

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

Booklet A	50
Booklet B	30
Total	80

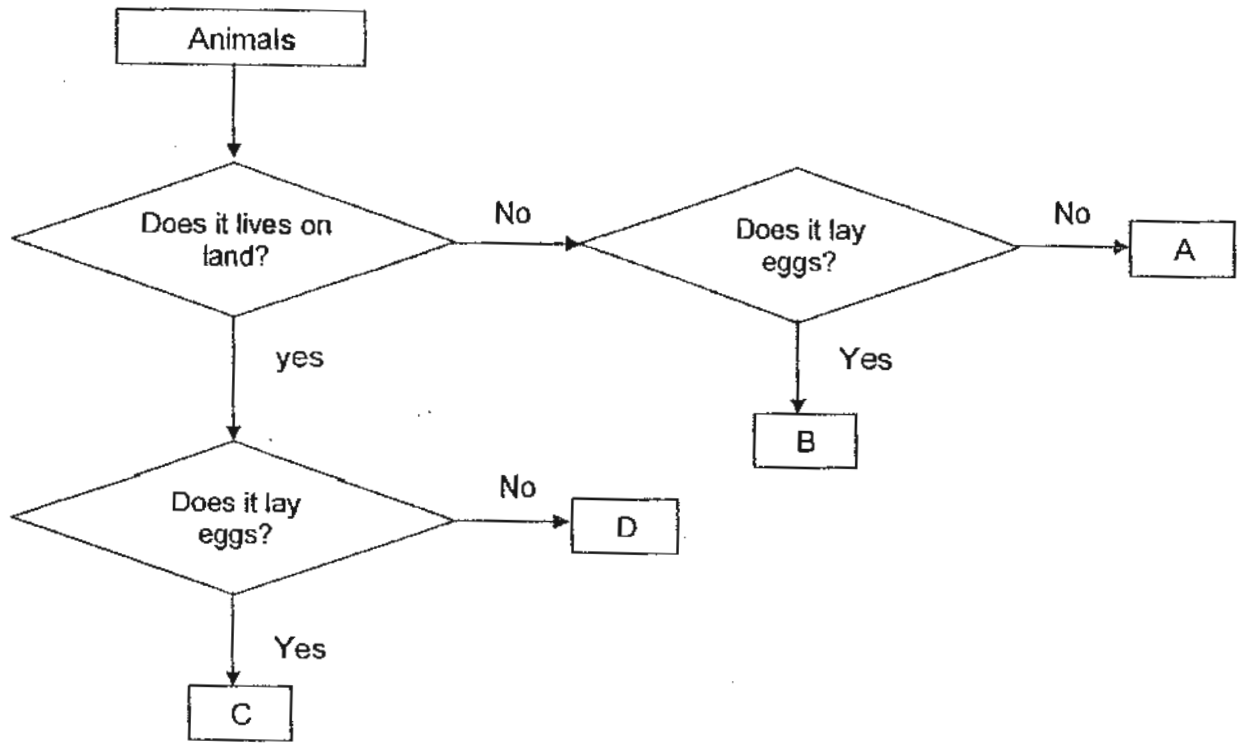
\_\_\_\_\_  
Parent's Signature / Date

This paper consists of 9 printed pages.

**Section B : (30 marks)**

Answer the following questions in the spaces provided.

26. Study the flow chart below.



(a) Give an example of an animal for A, B, C and D. [2]

A - \_\_\_\_\_

B - \_\_\_\_\_

C - \_\_\_\_\_

D - \_\_\_\_\_

(b) Based on the flow chart above, state one similarity between animal C and D. [1]

\_\_\_\_\_

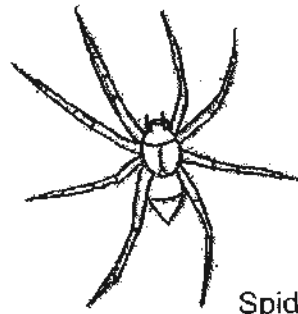
\_\_\_\_\_



27. The diagrams below show a housefly, and a spider.



Housefly



Spider

(a) Based on the diagrams given, give three differences between the physical characteristics of the housefly and the spider. (Do not compare size, shape and colour.) [3]

Difference 1: \_\_\_\_\_

\_\_\_\_\_

Difference 2: \_\_\_\_\_

\_\_\_\_\_

Difference 3: \_\_\_\_\_

\_\_\_\_\_

28. Read the following statements and put a tick (✓) in the true or false column. [2]

		True	False
(a)	Plants need sunlight, water and oxygen to make food.		
(b)	Sunlight is not a necessary condition for the germination of seeds.		
(c)	A flower must wither first before it can become a fruit.		
(d)	Root hairs increase the surface area of absorption of water and dissolved mineral salts.		

29. Study the table below.

Material	Can be scratched by fingernail	Can be scratched by 5-cent coin	Can be scratched by iron nail
P	Yes	Yes	Yes
Q	No	No	Yes
R	No	No	No
S	No	Yes	Yes

(a) Which material, P, Q, R and S, is the hardest? [1]

\_\_\_\_\_

(b) Based on the observations given in the table above, explain your answer in (a). [1]

\_\_\_\_\_

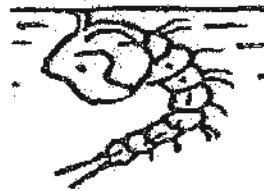
\_\_\_\_\_

(c) Based on the observations given in the table above, arrange the materials in the order of their hardness, starting with the hardest material. [1]

\_\_\_\_\_

Hardest ← → Softest

30. The diagram below shows the young of a mosquito.



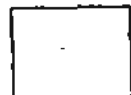
(a) What stage of the life cycle of a mosquito is shown above? [1]

\_\_\_\_\_

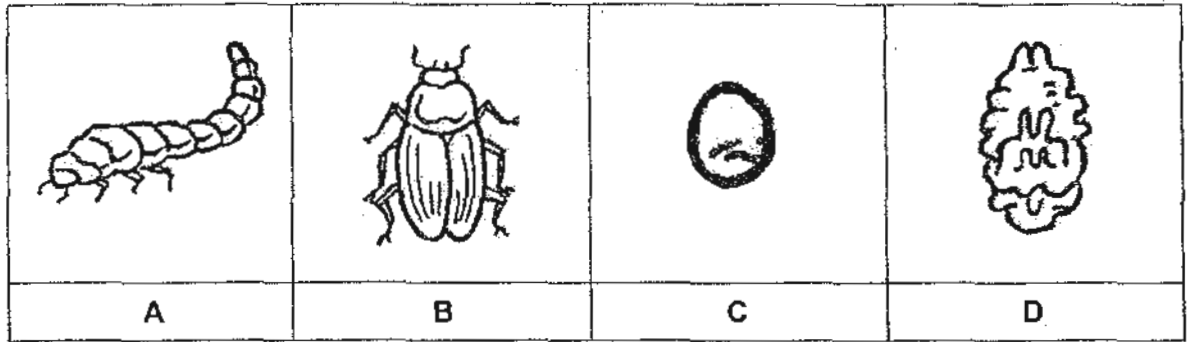
(b) Suggest one way to prevent it from developing into the next stage of its life cycle. [1]

\_\_\_\_\_

\_\_\_\_\_



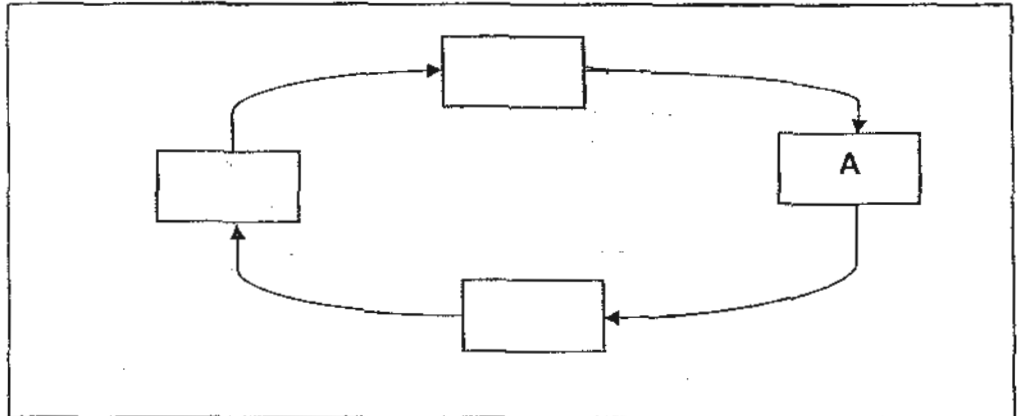
31. The pictures below show different stages of the life cycle of a beetle.



(a) At which stage, A, B, C or D, does moulting occur? [1]

---

(b) Complete the life cycle of the beetle by filling in the letters A, B, C and D in the boxes below. [1]



(c) Give a reason why all living things reproduce. [1]

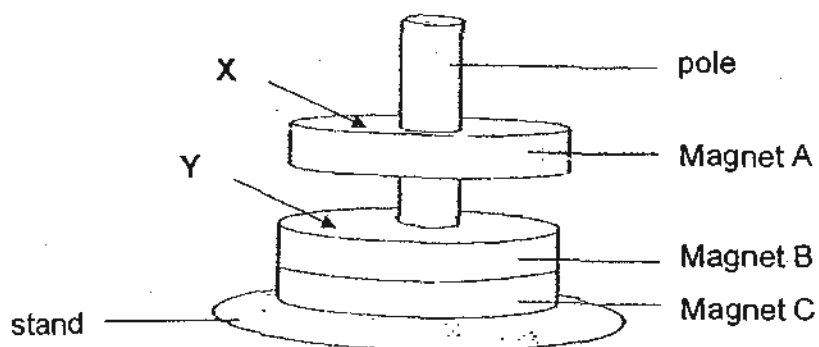
---



---



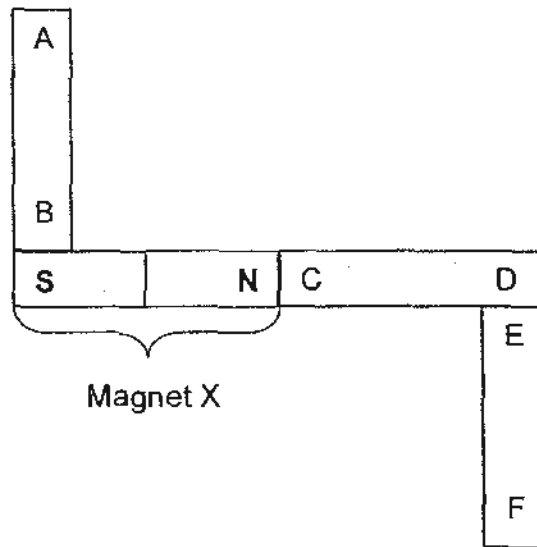
32. The diagram below shows three magnets, A, B and C. Magnet A appears to be floating above Magnet B.



- (a) What causes Magnet A to appear floating? [1]
- 
- (b) If the arrow X is pointing to the South-seeking pole of Magnet A, which pole would arrow Y be pointing to? [1]
- 
- (c) What will happen when Magnet A is turned upside down? [1]
- 
- (d) Explain your answer to (c). [2]
- 
- 



33. Four bar magnets are placed together and their ends are marked as shown in the diagram. Only the poles of magnet X have been identified.

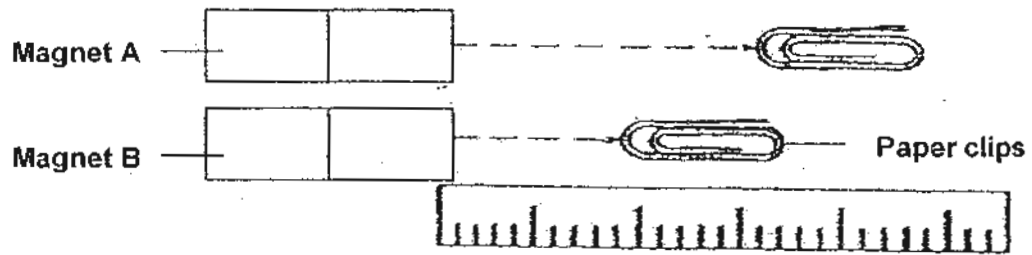


What would happen when the ends of the magnets stated in the table below are brought close to each other?  
Put a tick (✓) in the correct column. [2]

Ends that are brought close together	Attract	Repel
A and D		
A and F		
B and C		
C and E		



34. Mrs Ong set up an experiment as shown below.



She pushes the paper clip towards the magnet along the ruler. She then measured the distance at which the paper clips are attracted to the magnets A and B respectively.

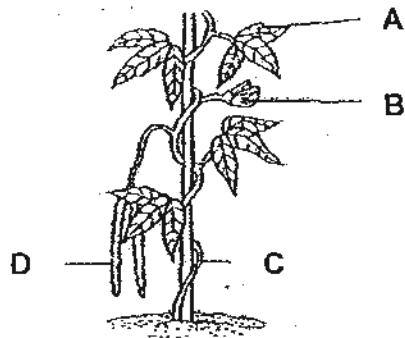
Magnet	Distance at which the paper clip is attracted to magnet
A	3 cm
B	2 cm

(a) Which magnet, A or B, is weaker? [1]

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



35. The diagram below shows parts of a flowering plant.



Match the correct part of the plant to its function.

[2]

A	•
B	•
C	•
D	•

•	protects its seeds
•	grows into a fruit
•	traps sunlight
•	twirls around for support

36. Rachel accidentally drop some metal paper clips into her fish bowl. She wanted to remove these clips without removing her fishes.



(a) What can Rachel do to remove the metal paper clips? [1]

---

(b) Will Rachel be able to use the same method as described in (a) if she dropped some glass marbles instead? Explain your reason. [2]

---



---

\*\*\*\*End of Paper\*\*\*\*



# ANSWER SHEET

## EXAM PAPER 2010

SCHOOL : CHIJ ST NICHOLAS GIRLS' SCHOOL  
SUBJECT : PRIMARY 4 SCIENCE

TERM : CONTINUAL ASSESSMENT 1

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

Q18	Q19	Q20	Q21	Q22	Q23	Q24	Q25
1	1	4	2	2	1	2	3

- Q26a) A-guppy  
B-goldfish  
C-hen  
D-dog

b) Both animal C and animal D live on land.

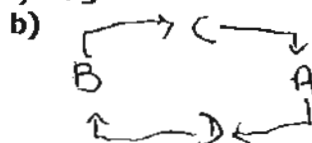
- Q27) House fly has 3 body parts but the spider has 2 body parts.  
The spider has no wings but the housefly has wings.  
The housefly has six legs but the spider has eight legs.

- Q28a) False  
b) True  
c) True  
d) True

- Q29a) Material R is the hardest.  
b) Material R cannot be scratched by fingernail, 5-cent coin and iron nail so it is the hardest.  
c) Material R(hardest), Material Q, Material S, Material P(softest)

- Q30a) The pupa stage of a mosquito is shown above.  
b) Pour a layer of oil on the water.

- Q31a) Stage A



c) So that the living thing won't be extinct.

Q32a) Repulsion causes Magnet A to float.

b) The North-seeking pole.

c) Magnet A will attract Magnet B.

d) When magnet A is turned upside down, both magnets A and B have unlike poles facing each other so they will be attracted.

Q33)

Ends that are brought close together	Attract	Repel
A and D	✓	/
A and F	✓	/
B and C	✓	/
C and E		✓

Q34a) Magnet B is weaker.

b) The paper clip needs to be nearer to magnet B before it can be attracted.

Q35) A—traps sunlight

B—grows into a fruit

C—twirls around for support

D—protects its seeds

Q36a) Use a magnet and drag the paper clips out.

b) No. Glass is a non-magnetic object.