

Name: _____ ()

Class: Primary 3 _____

CHIJ ST NICHOLAS GIRLS' SCHOOL (Primary)



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Primary 3 2010 First Semestral Assessment SCIENCE

BOOKLET A

12 May 2010

Total Time for Booklets A and B: 1 h 45 min

30 questions
60 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 17 printed pages.

Section A : (30 x 2 marks)

For each question from 1 to 20, 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) in the Optical Answer Sheet.

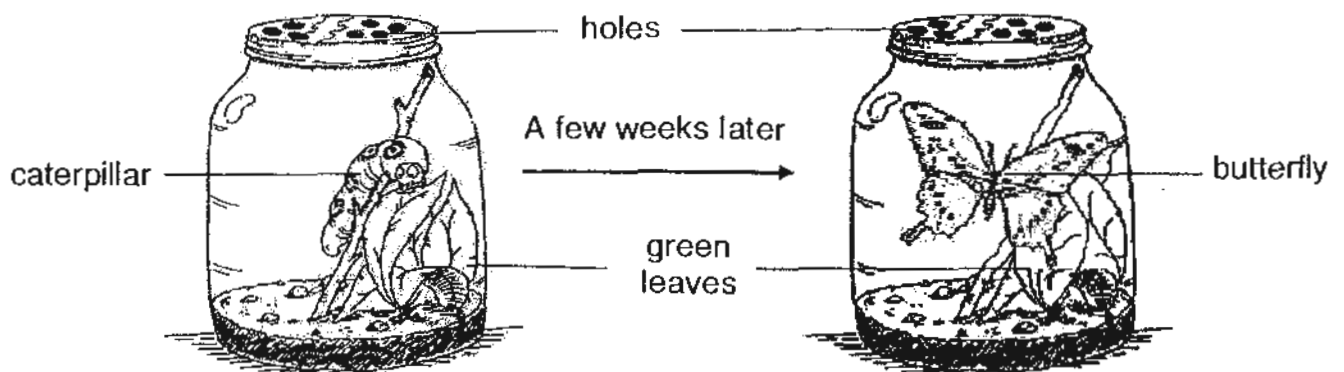
1. Plants, animals and fungi share similar characteristics such as they all can _____.

- A: grow and die
- B: respond to changes
- C: move freely on their own

Which one of the following characteristics are shared by the living things listed above?

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

2. Jane caught a caterpillar. She put it in a container as shown below. After a few weeks, she found a butterfly instead of her caterpillar in the container.

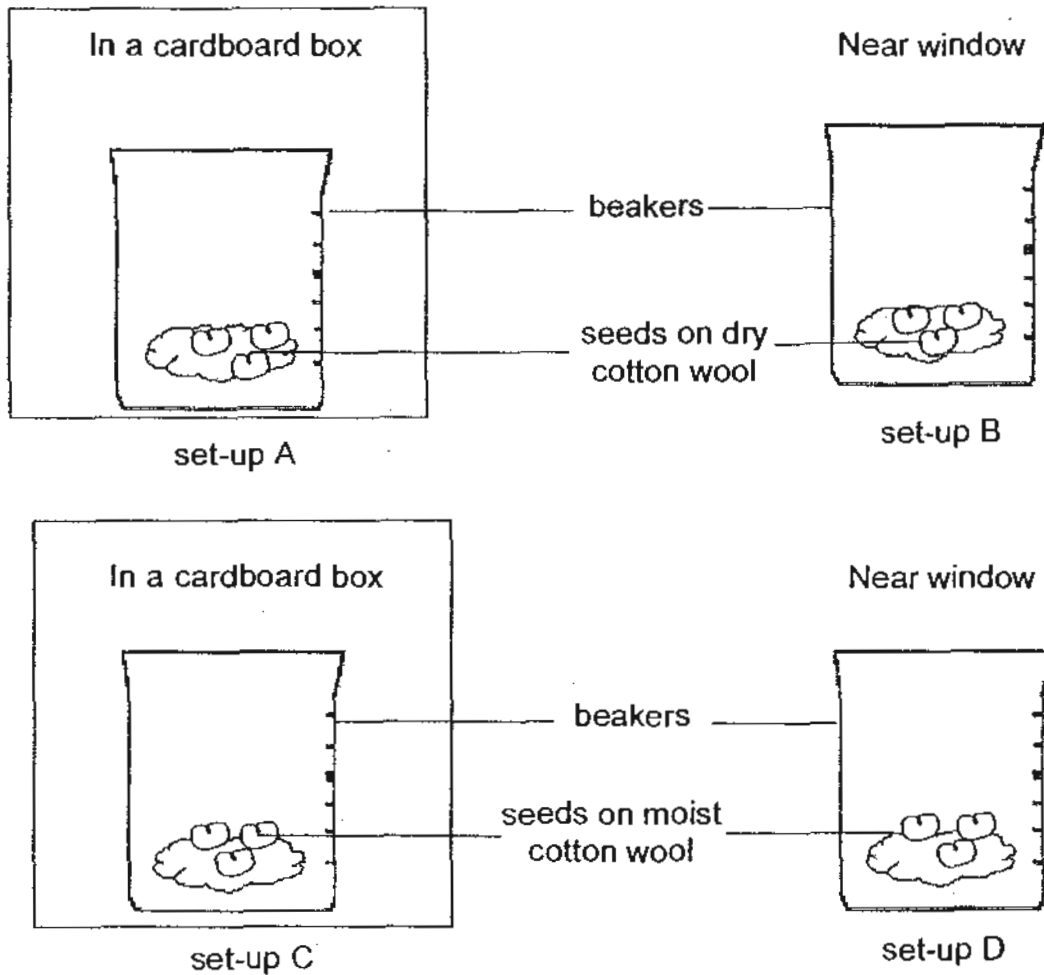


Which one of the following statements ~~explains~~ what had happened to the caterpillar?

- (1) The caterpillar was seen unfolding its wings after a few weeks.
- (2) The caterpillar had grown and transformed itself into a butterfly.
- (3) The caterpillar tried to escape by disguising itself into a butterfly.
- (4) The caterpillar responded to its new environment and turned itself into a butterfly.

3. Sharon has 4 set-ups, A, B, C and D, as shown below.

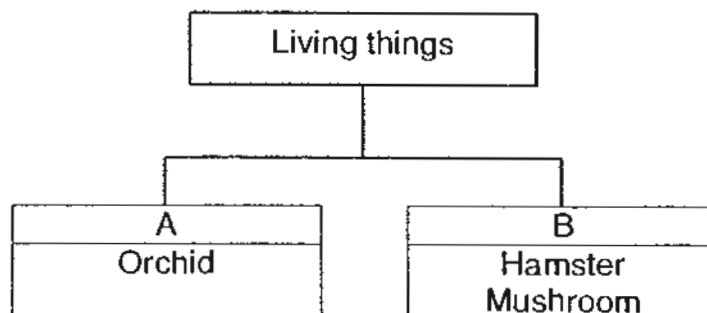
She placed set-ups A and C in a cardboard box and set-ups B and D near the window. The seeds in set-ups A and B are on dry cotton wool and the seeds in set-ups C and D on moist cotton wool.



Which of the set-ups shown above should Sharon use to find out if water is needed for the seeds to grow into seedlings?

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

4. Some living things are grouped according to their characteristics as shown in the classification chart below.



Which of the following represents the above heading A and B correctly?

	A	B
(1)	Cannot move freely	Can move freely
(2)	Cannot respond to changes	Can respond to changes
(3)	Can reproduce	Cannot reproduce
(4)	Can make its own food	Cannot make its own food

5. Which of the following statements about fungi is/are true?

- A Only mushroom reproduces from spores.
- B Only toadstool has gills that can breathe in water.
- C Mushroom and Toadstool can make their own food.
- D Mushroom and Toadstool feed on dead matters and organisms.

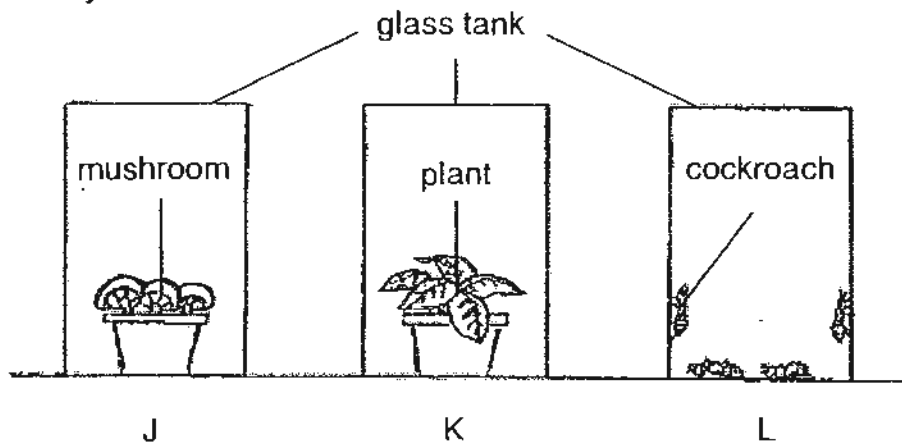
- (1) A only
- (2) D only
- (3) A and B only
- (4) C and D only

6. Victoria ^{touched} ~~the leaves of a~~ ^{mimosa plant.} ~~mimosa plant.~~ Its ~~leaves folded immediately.~~
What characteristic of living things does this show?



mimosa plant

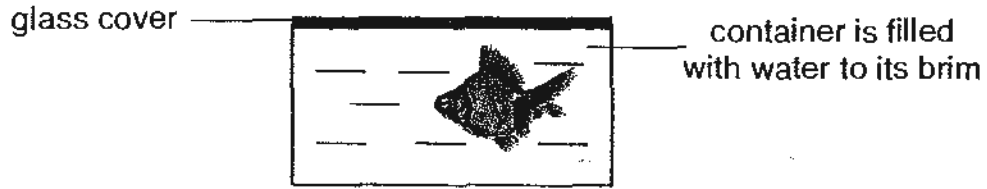
- (1) Living things are able to grow.
 - (2) Living things are able to reproduce.
 - (3) Living things can respond to changes.
 - (4) Living things need air, water and food to survive.
7. The diagram shows three similar glass tanks, J, K and L, each containing different organisms. The glass tanks were sealed and placed near a window for five days.



Which organism(s) will remain alive after five days?

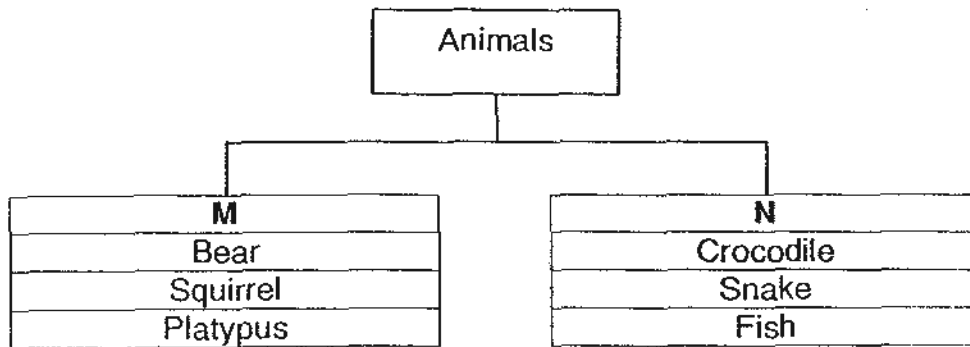
- (1) Plant only
- (2) Mushroom only
- (3) Mushroom and plant only
- (4) Plant and cockroaches only

8. Jenny wanted to wash her fish tank. She put her fish in a small container and filled it with water to its brim as shown below. She sealed the container with a glass cover so that her fish will not jump out and the water will not spill. After a few hours, the fish died. Why did the fish die?



- (1) It has no food.
- (2) It does not have enough air.
- (3) It does not have enough water.
- (4) It does not have enough space.

9. The classification chart below shows 2 groups of animals classified according to their characteristic.



Which of the following headings best represent M and N?

- | | M | N |
|-----|--------------|---------------|
| (1) | Land Animals | Water Animals |
| (2) | Have hair | Have scales |
| (3) | Give birth | Lay eggs |
| (4) | Four legs | Two legs |

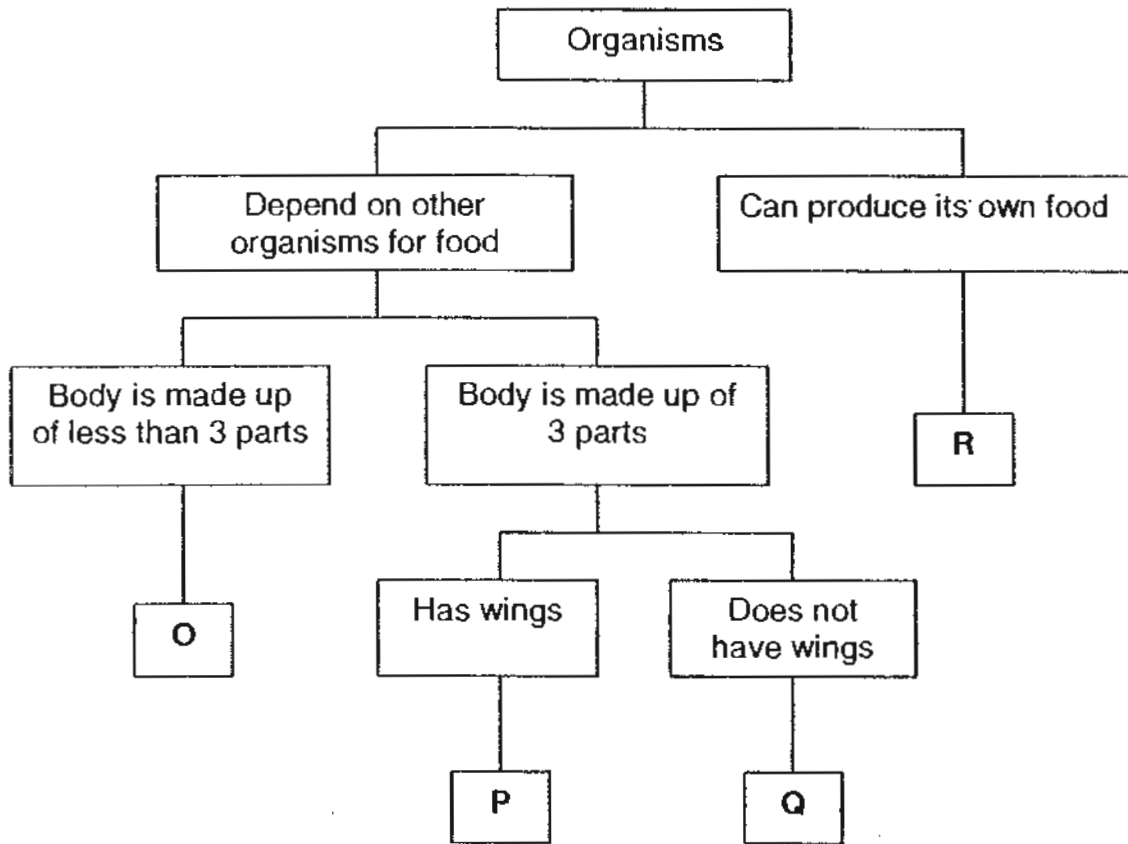
10. Four boys each made a statement comparing mammals and fish as listed below.

- Adrian: All mammals give birth while fish lay eggs.
Bryan: All mammals have lungs while fish have gills.
Charles: All mammals have hair while fish have scales.
Dylan: All mammals have four legs while fish have tails.

Whose statements are correct?

- 1) Adrian and Bryan
- 2) Bryan and Charles
- 3) Charles and Dylan
- 4) Adrian, Bryan, Charles and Dylan

11. The chart below shows the classification of some organisms.



Michelle caught a grasshopper in the garden. Which one of the groups, O, P, Q or R, does the grasshopper belong to?

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

12. The tables below show how Ruby and Kathy classified some organisms into 2 groups.

Ruby's classification:

Group X	Group Y
Bird's Nest Fern	Sunflower
Mushroom	Hibiscus

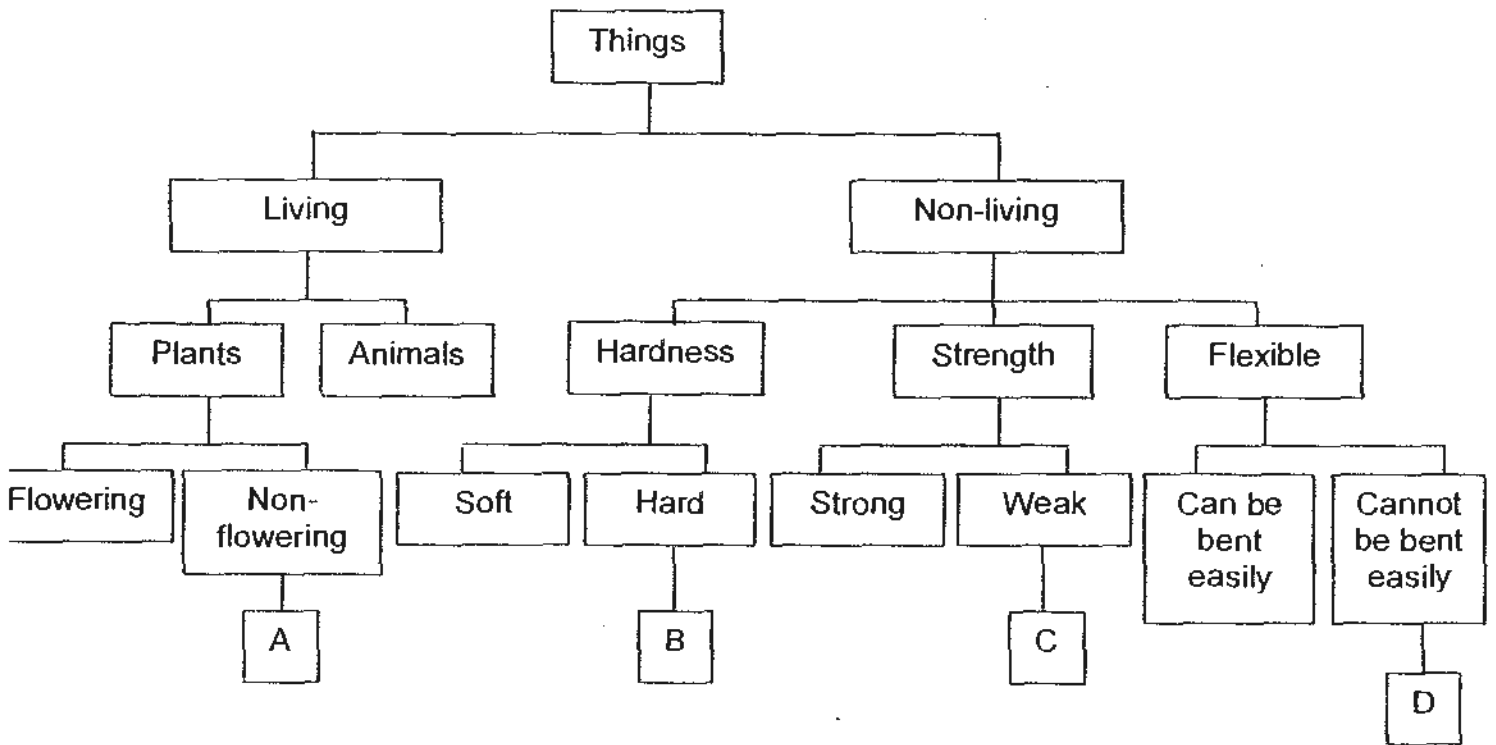
Kathy's classification:

Group X	Group Y
Mushroom	Sunflower
	Hibiscus
	Bird's Nest Fern

Identify how the two girls grouped the organisms.

	Ruby's classification	Kathy's classification
(1)	Flowering and non-flowering plants	Fungi and Plants
(2)	Fungi and Plants	Flowering and non-flowering plants
(3)	Reproduce by seeds and spores	Fungi and Plants
(4)	Fungi and Plants	Reproduce by seeds and spores

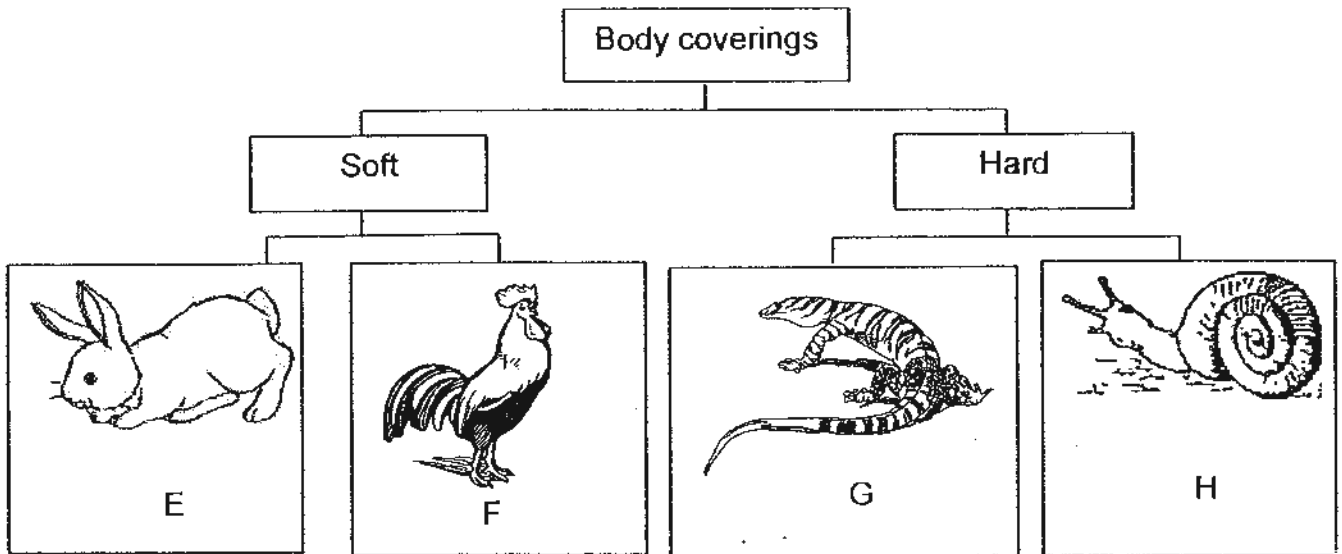
13. Study the classification chart below.



Based on the above chart, what could objects A, B, C and D be?

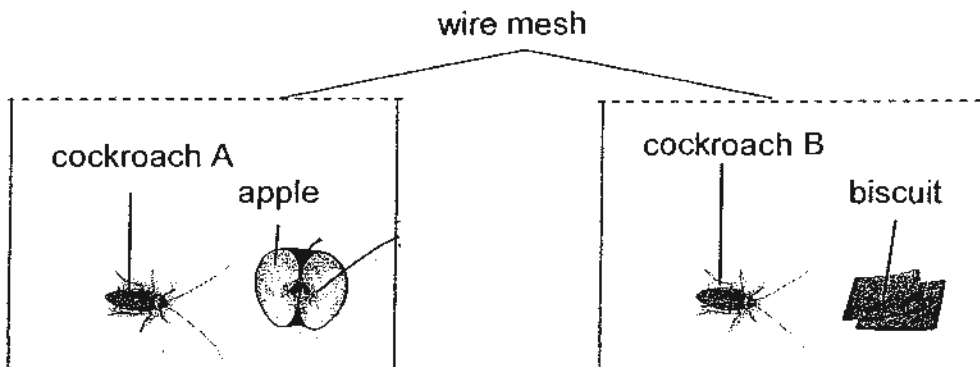
	A	B	C	D
(1)	Ixora	Mirror	Plastic ruler	Tracing paper
(2)	Mushroom	Brick	Ceramic plate	Plastic cling wrap
(3)	Staghorn's fern	Plastic ruler	Key	Cotton wool
(4)	Conifer	Ceramic plate	Food cling wrap	Key

14. The classification chart below shows how some animals can be grouped according to their body coverings.



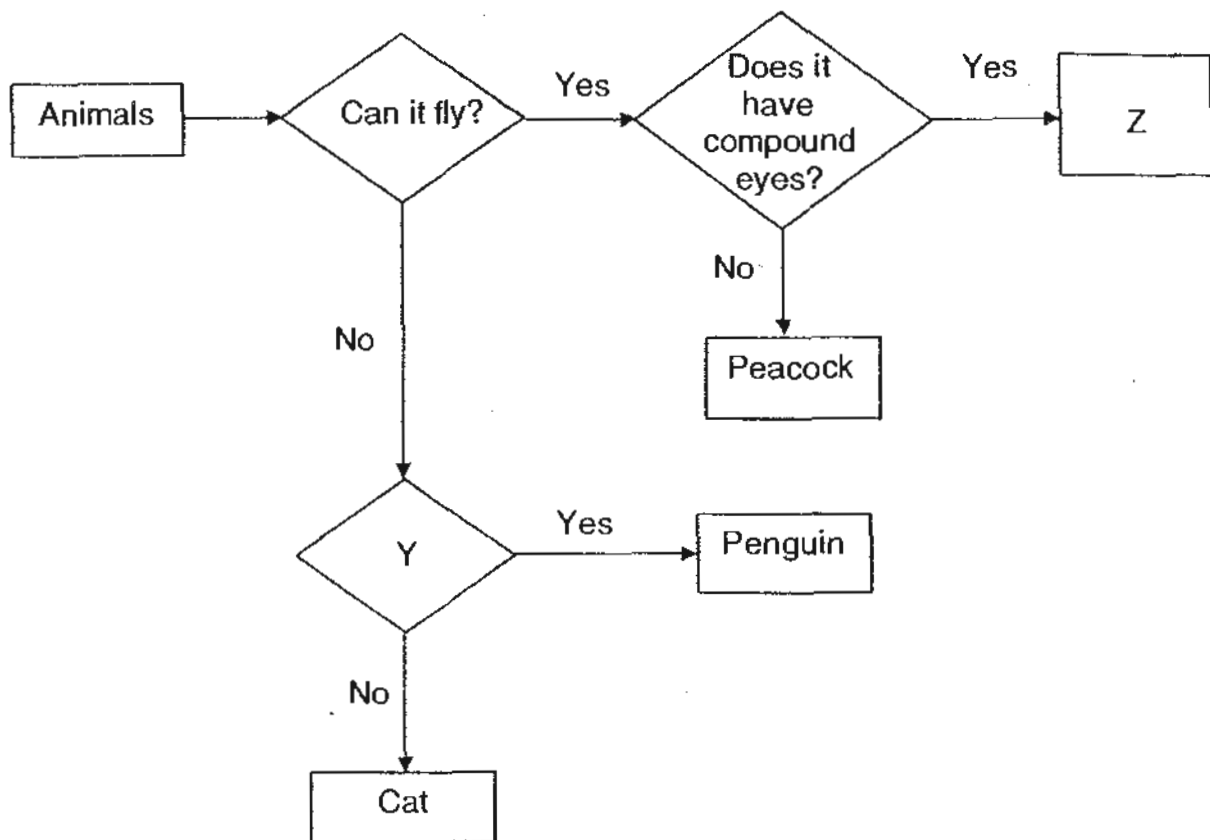
In which group would you put **guppy** in?

- (1) E
 - (2) F
 - (3) G
 - (4) H
15. Study the set-ups below carefully. Each cockroach was given the same type of food as shown below everyday for one week. Which cockroach will die first?



- (1) Cockroach B, as it has no water.
- (2) Cockroach B, as it has less food.
- (3) Cockroach A, as it has more food.
- (4) Cockroach A, as it does not eat apple.

Study the flow chart below and answer question 16 and 17.



16. Refer to the above flow chart. Which one of the following questions does Y represent?

- (1) Does it have a tail?
- (2) Does it have feathers?
- (3) Does it have 2 feelers?
- (4) Does it have 3 body parts?

17. Refer to the above flow chart. Identify animal Z.

- (1) Cat
- (2) Eagle
- (3) Ostrich
- (4) Housefly

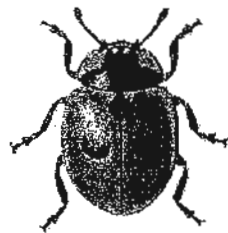
18. Study the picture of the animal below. Based on your observation, which one of the following statements best describes the animal?



- (1) The animal can swim.
 - (2) The animal is a plant eater.
 - (3) The animal is an animal eater.
 - (4) The animal has a long and thick tail.
19. Janice went on a nature trail with her family and encountered a strange animal. She recorded her observations in the table below. Based on Janice's observations as listed below, identify the animal that she had encountered.

Janice's Observations	
a.	two feelers
b.	six legs
c.	2 wings
d.	thin and long body

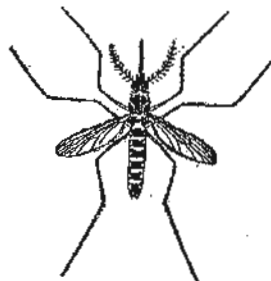
(1)



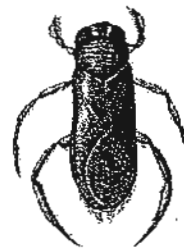
(2)



(3)



(4)



20. The table below provides information about organisms G and H.

Description	Organism G	Organism H
It lays eggs	Yes	No
It has 3 body parts	Yes	No
It can move on its own freely	Yes	No
It depends on other living things for food.	Yes	Yes

Which of the following groups in the table below do organisms G and H belong to?

	Organism G	Organism H
(1)	Fish	Rabbit
(2)	Beetle	Fish
(3)	Toadstool	Rabbit
(4)	Bee	Toadstool

21. Most of our clothes are made of cotton because the material _____.

- A is waterproof
- B floats on water
- C is soft and light
- D absorbs perspiration easily

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

22. Which one of the following objects has a property that is incorrectly stated?

	Object	Material	Floats on water
(1)	Drinking cup	Plastic	Yes
(2)	Eraser	Rubber	Yes
(3)	Jewellery box	Wood	Yes
(4)	Paper clip	Metal	No

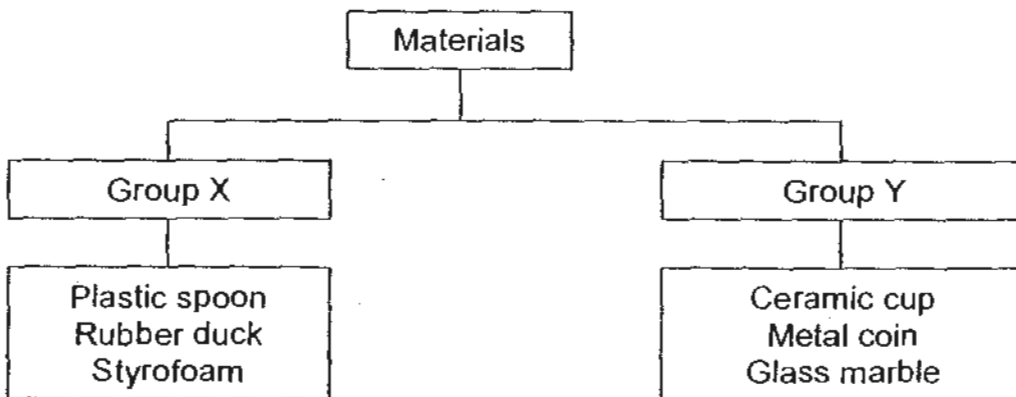
23. The table below shows some objects classified under three different groups, P, Q and R.

Group P	Group Q	Group R
Wax paper	Dress	Window grill
Newspaper	Shirt	Iron nail

The objects in the table above are classified according to _____.

- (1) how heavy they are
- (2) what they are used for
- (3) what they are made of
- (4) whether they absorb water

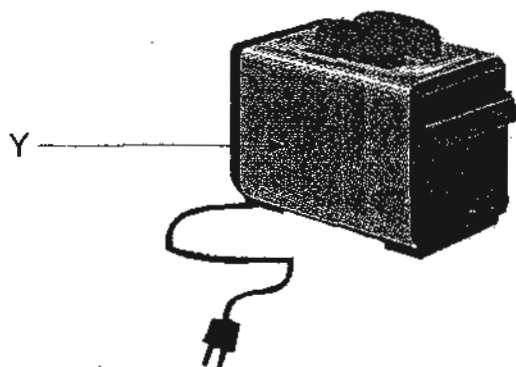
24. Study the classification diagram below.



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

	Group X	Group Y
(1)	Floats on water	Sinks in water
(2)	Opaque	Transparent
(3)	Flexible	Not flexible
(4)	Man-made	Natural

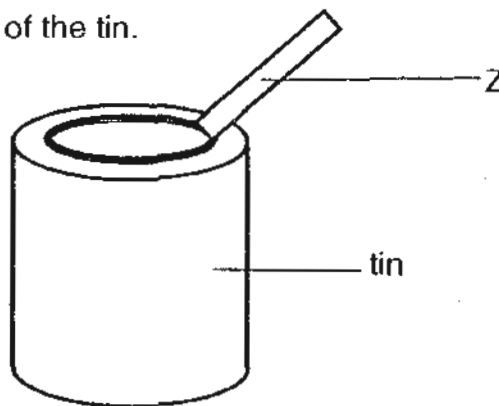
25. The diagram below shows a bread toaster.



What material and its property should be taken into consideration to make part Y of the bread toaster?

	Material	Property
(1)	Wood	It cannot be burnt easily
(2)	Plastics	It can be bent easily
(3)	Glass	It allows us to see what is in the toaster
(4)	Metal	It is hard and strong

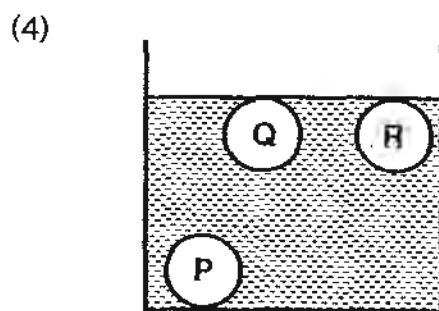
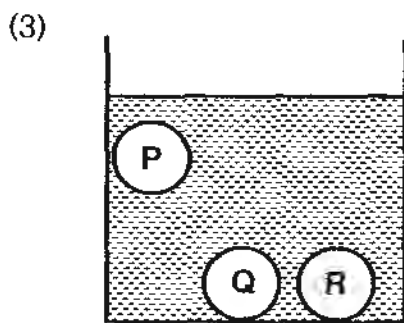
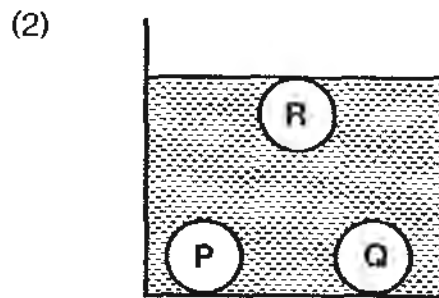
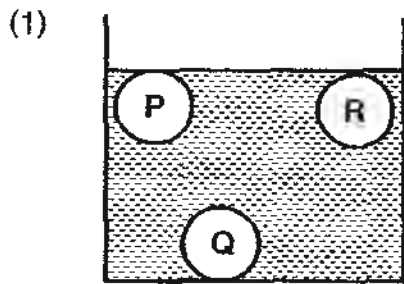
26. Z is used to open the lid of the tin.



Which one of the following materials is the best material to make Z?

- (1) Metal
- (2) Fabric
- (3) Plastic
- (4) Rubber

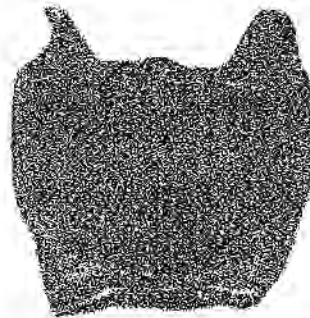
27. Megan placed an iron ball (P), a glass ball (Q) and a wooden ball (R) into a container of water. None of the balls are hollow and they are of the same size. Which one of the following diagrams shows the position of the balls in the water correctly?



28. Mavis is going to the wet market to buy some fish and fresh vegetables. Which bag is the most suitable for bringing the items home?



paper bag



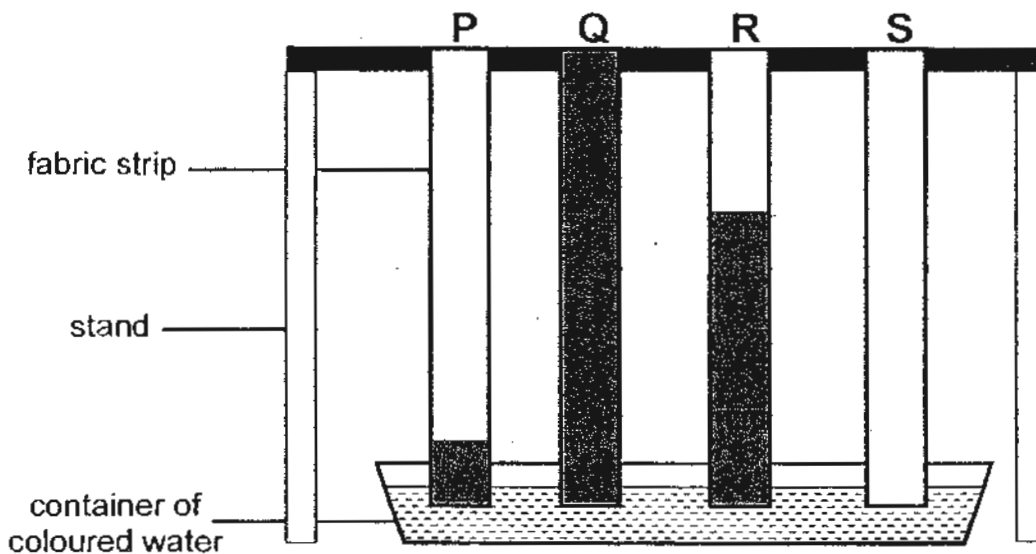
plastic bag

- (1) A plastic bag is more suitable because it is cheaper.
 (2) A paper bag is more suitable because it is more durable.
 (3) A paper bag is more suitable because it can be recycled.
 (4) A plastic bag is more suitable because it is waterproof and durable.

29. If you were to choose a material to make part X of a pair of glasses as shown below, which one of the following characteristics of the material **would** be the most important?



- (1) It is light.
 - (2) It is flexible.
 - (3) It is transparent.
 - (4) It can float in water.
30. Four strips made of different materials, P, Q, R and S, were hung from a stand such that they had their tips dipped into the container of coloured water. Each strip had an equal size. The diagram below shows the results at the end of the experiment. The shaded parts indicate the amount of coloured water absorbed by the four strips of fabric.



Based on the results of the experiment, which one of the four materials is the most suitable to make umbrellas?

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

– End of booklet A –

Name: _____ ()

Class: Primary 3 _____

CHIJ ST NICHOLAS GIRLS' SCHOOL (Primary)



Primary 3
2010 First Semestral Assessment
SCIENCE
BOOKLET B
12 May 2010

Total Time for Booklets A and B: 1 h 45 min

14 questions
40 marks

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

Booklet A	60
Booklet B	40
Total	100

Parent's Signature / Date _____

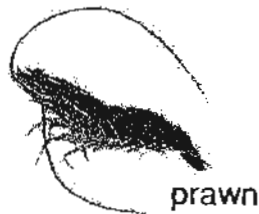
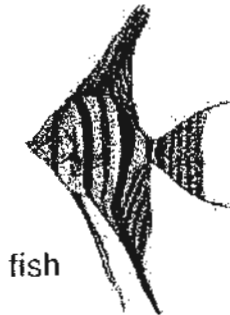
This paper consists of 15 printed pages.

Section B : (40 marks)

For questions 31 to 44, write your answers in this booklet.

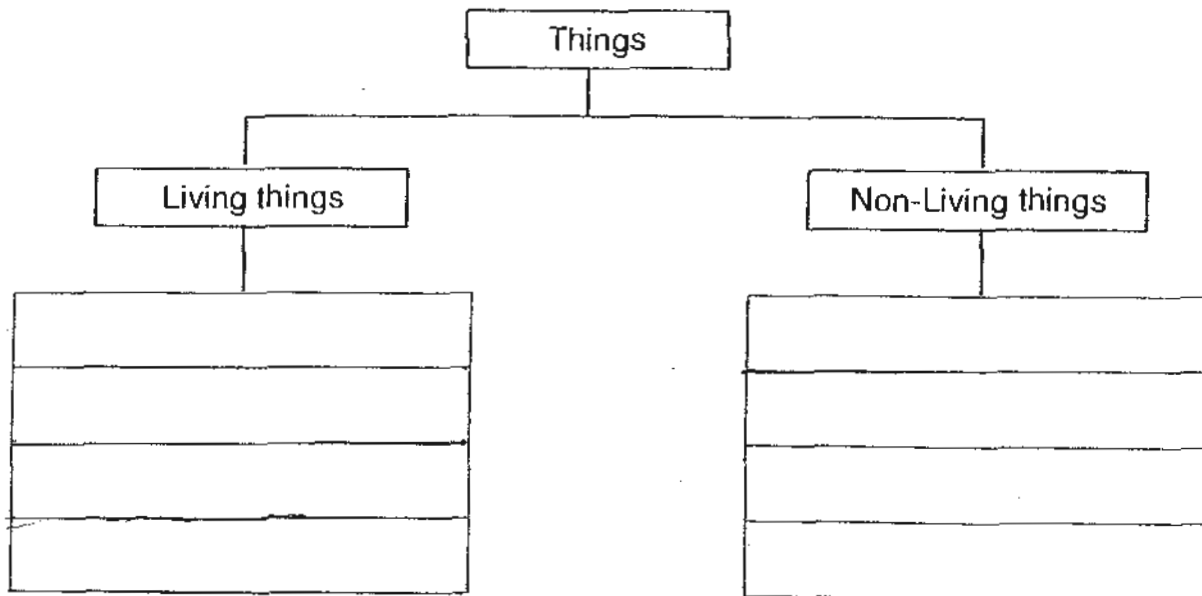
The number of marks available is shown in brackets [] at the end of each question or part question.

31. Look at the things as shown below.

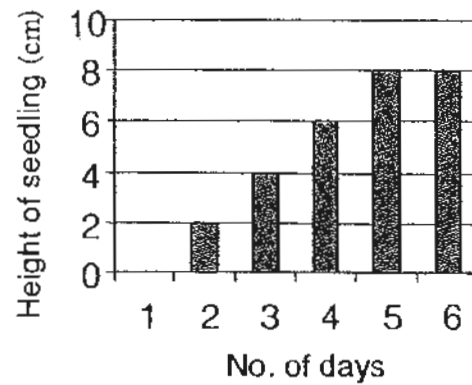


Classify the things above in the classification table below.

[3]



32. Vanessa grew a seed in a container with some wet cotton wool. She measured and recorded the height of the seedlings over 6 days as shown in the graph below.



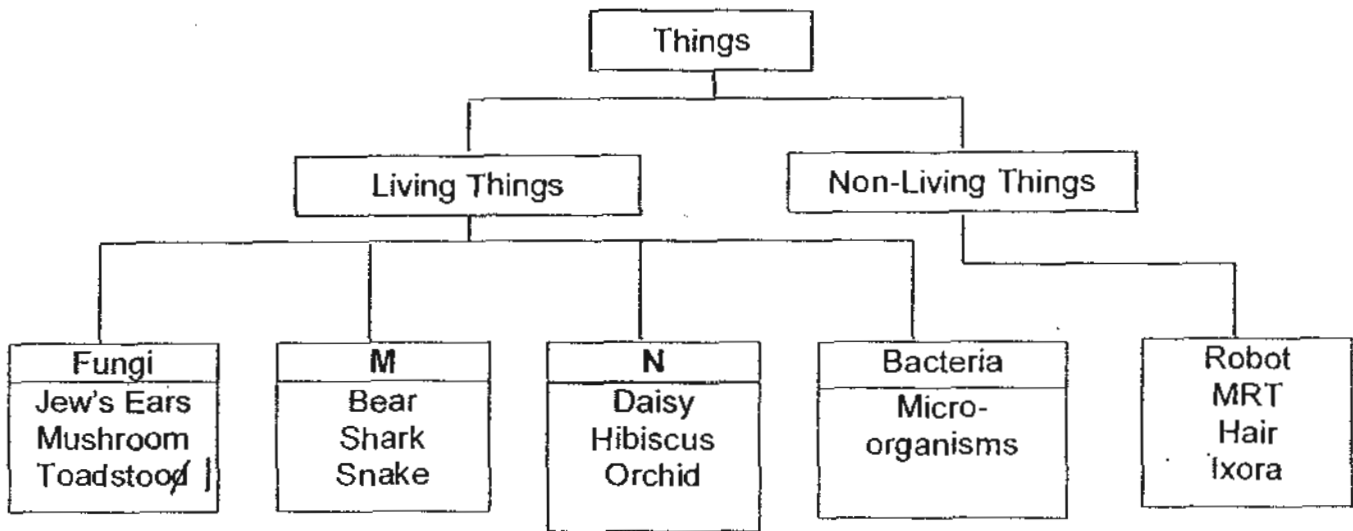
- a) How long does the seedling take to grow to its maximum height?[1]

- b) What is the maximum height can the seedling grow? [1]

- c) What is the other condition that the seedling need for its growth from day 5 onwards? [1]



33. Megan grouped the following organisms in the classification chart below.



a) Refer to the classification chart above, write down suitable headings for ~~L and O~~ respectively. [2]

M & N

M: _____

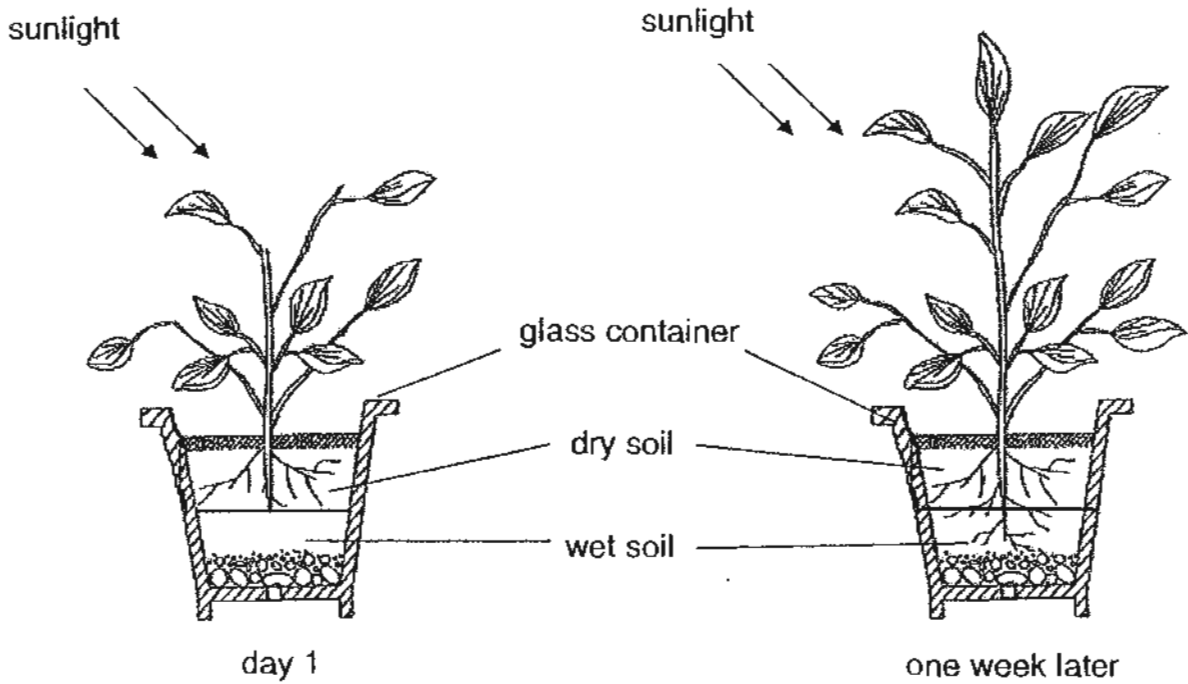
N: _____

b) From the classification chart above, which thing was classified incorrectly? [1]

c) Which group, M or N, should the thing named in part (b) belong to? [1]



34. Marlyn planted a plant in a glass container filled with dry soil on the top and wet soil at the bottom. The plant was placed near a window. After a week, she observed that the stem and leaves grow upwards but the roots grow downwards as shown in the diagram below.

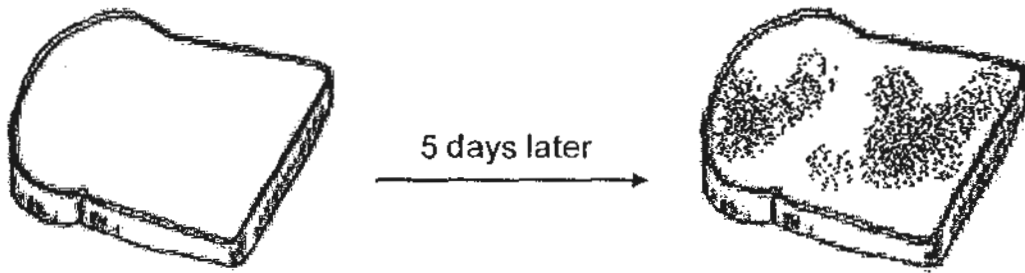


- (a) Explain why the stem and leaves grow upwards. [1]

- (b) How do plants obtain their food? [1]

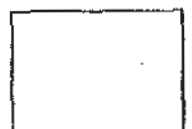


35. Bernice placed a piece of bread on a table near a window as shown below.

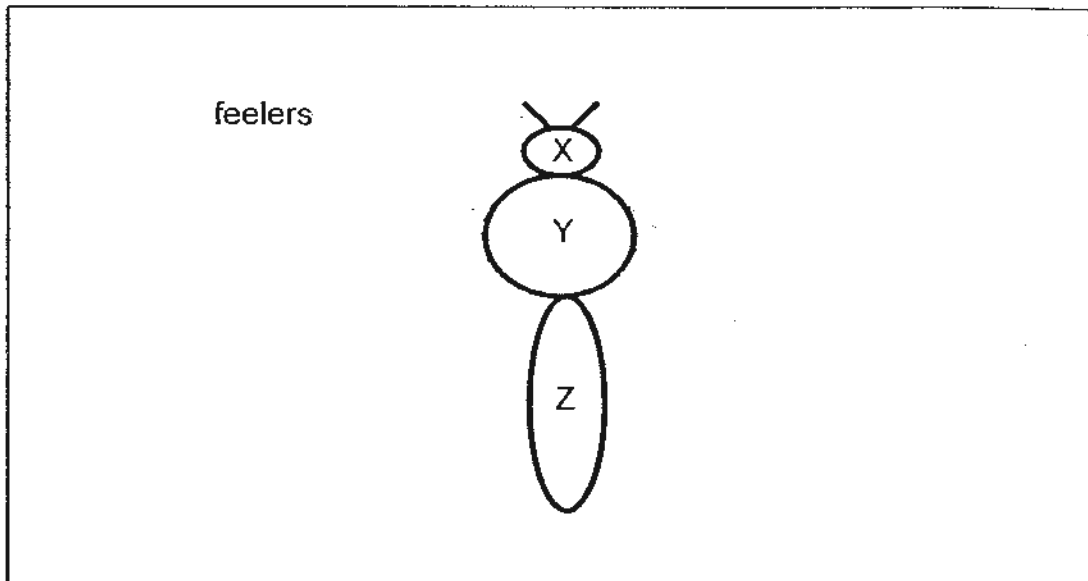


- (a) What can be observed on the piece of bread after 5 days? [1]

- (b) What were the two conditions present in the bread that allowed your description in part (a) to happen? [2]



36. Agnes found an insect in her room. She drew the main body parts of the insect in the box below.



- (a) Draw the legs of the insect on the body parts in the box above. [½]
- (b) Write the names of the body parts, X, Y and Z, of the insect as shown in the above. [1½]

X: _____

Y: _____

Z: _____

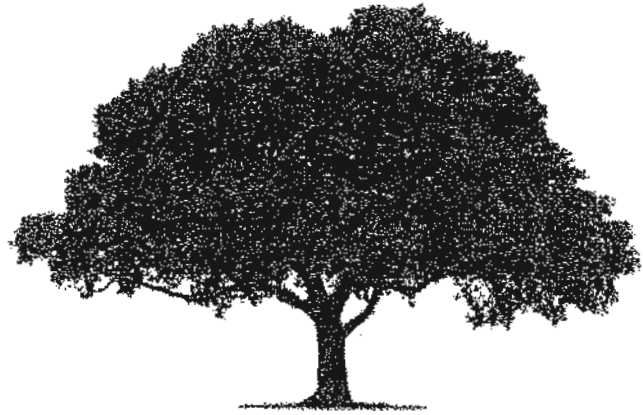
- (c) Write one other characteristic of an insect. [1]



37. The picture below shows two plants, M and N. Observe and compare the plants below.



plant M



plant N

Based on what you can see in the picture above, state a similarity and a difference between the appearance of plants, M and N. (Do not compare colour and the size of the tree.)

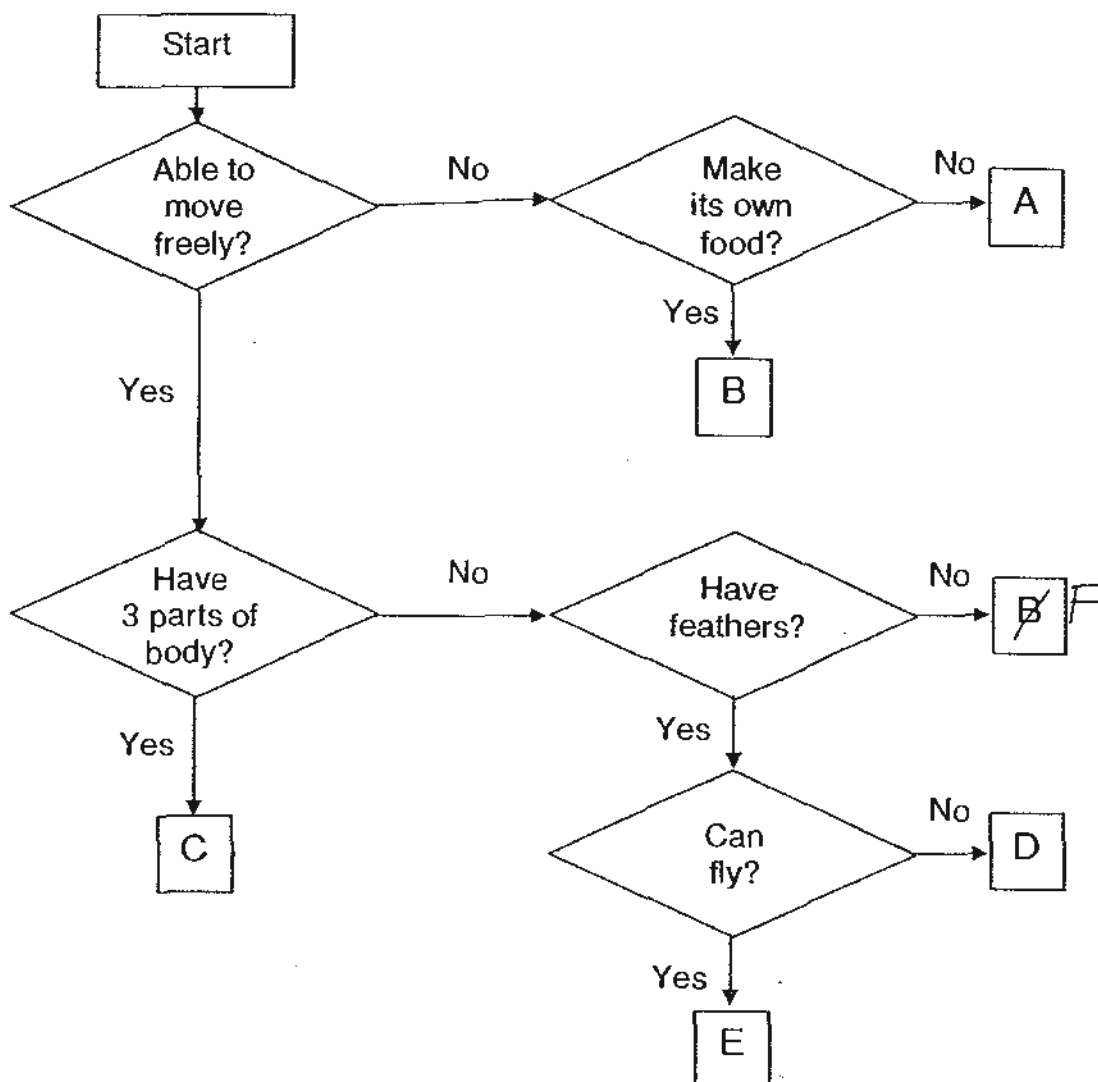
- (a) Similarity: [1]

- (b) Difference: [1]

- (c) Which plant, M or N, will you suggest to plant so that there will be more shade? [1]



38. Study the flow chart below.

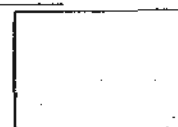


(a) Write the letter (A, B, C, D or ^{E F}~~E~~) that represents the following groups of living organisms: [2]

(i) Plants: _____

(ii) Fungi: _____

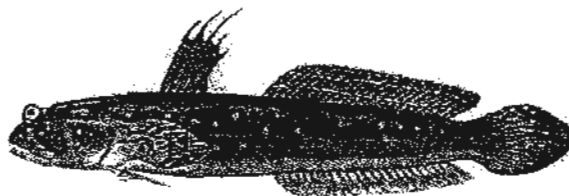
(b) Refer to the flow chart above and state the common characteristic shared between the organisms represented by letter C and E. [1]



39. Study the pictures of two living organisms below.



tadpole



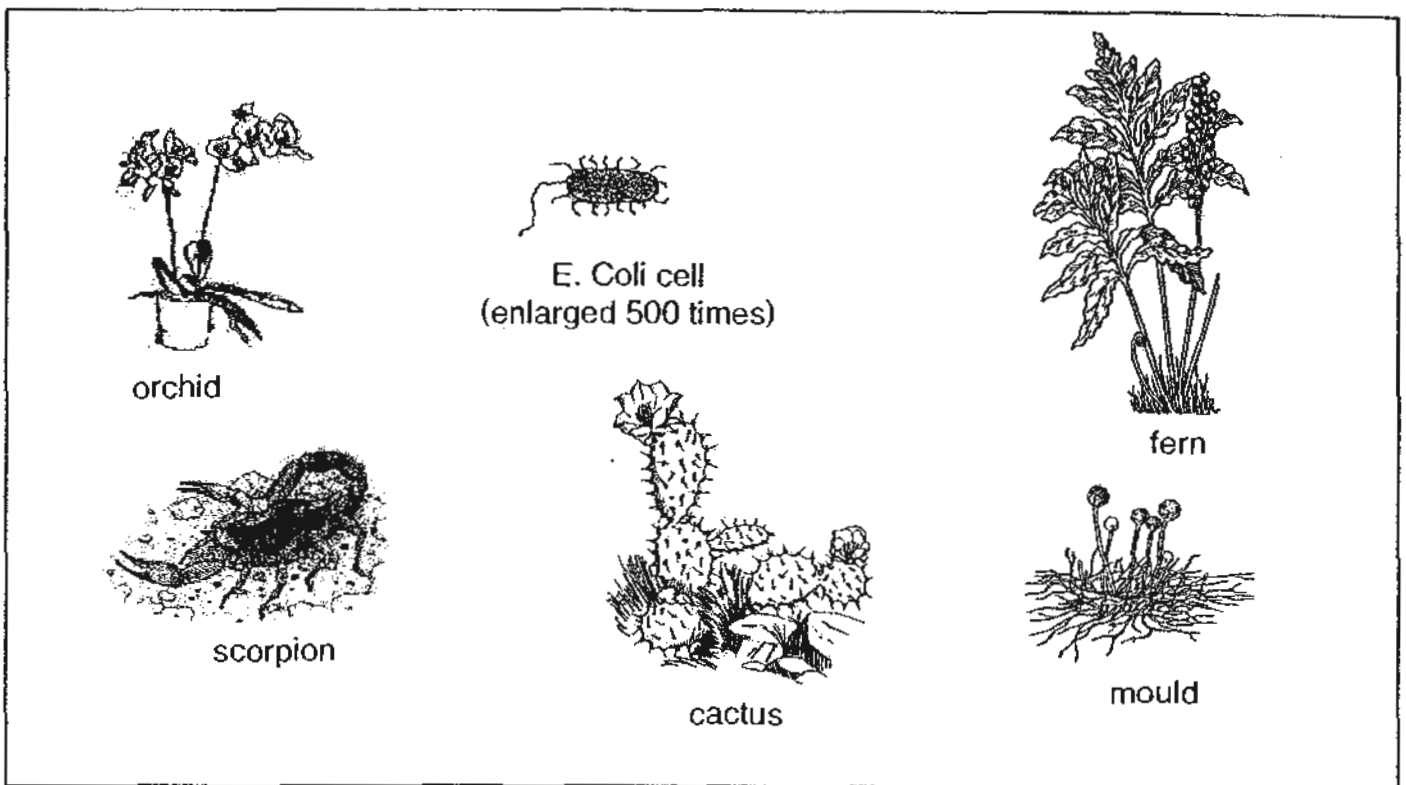
fish

- a) State the common characteristic that helps them to move in water. (Do not compare their colour and size.) [1]

- b) Is tadpole a fish? Give a reason for your answer. [1]



40. Sheena was given some pictures of living things. Her teacher wanted her to group the living things into four main groups.

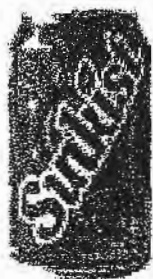


Classify the above organisms by filling in the table below in their respective headings. [3]

Animals	Fungi	Plants	Bacteria



41. The diagram below shows four different objects.



aluminium
drink can



paper cup



porcelain mug



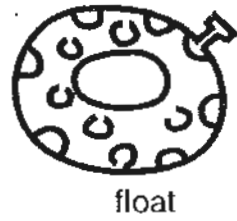
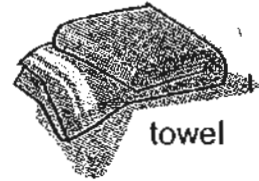
wine glass

Each object was hit hard with a hammer. Record the correct observation by placing a tick (✓) in the correct column for each object after it has been hit by the hammer. [2]

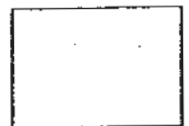
Object	Observation made after hitting object with a hammer	
	Becomes flattened	Breaks into tiny pieces
Paper cup		
Porcelain mug		
Wine glass		
Aluminium drink can		



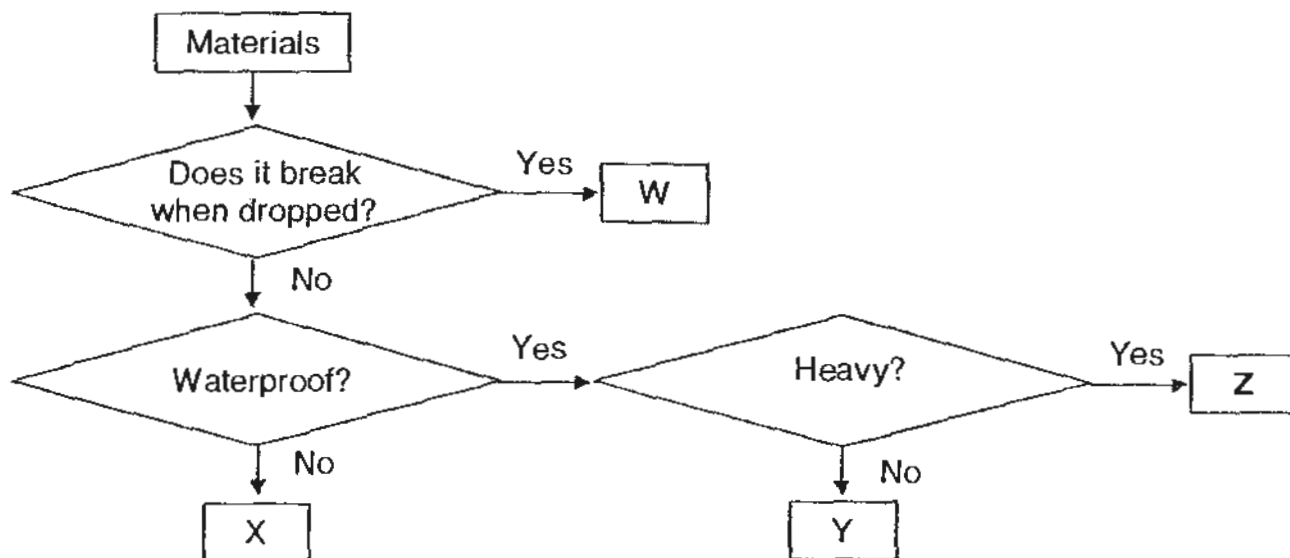
42. Leslie found some items in his store room. Classify the items in the classification table below. [4]



Plastic	Metal	Fabric	Paper



43. The flow chart below is used to identify four materials W, X, Y and Z.



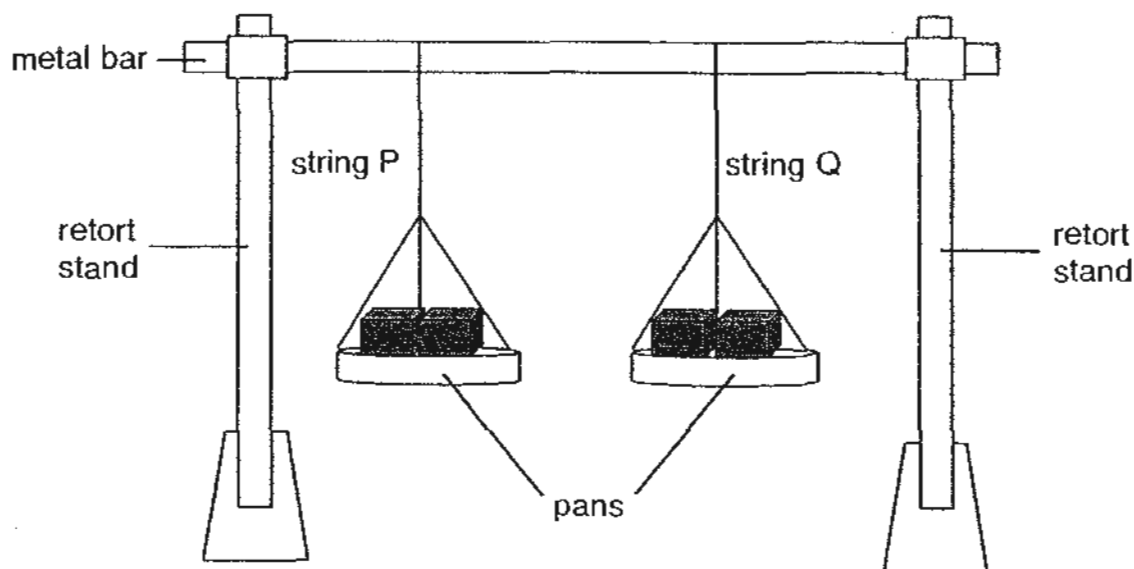
(a) State one similarity between material X and material Z. [1]

(b) Which material W, X, Y or Z is most suitable for making a T-shirt? [1]

(c) Which material W, X, Y or Z could be used to make a raincoat? [1]



44. Rayhan set up an experiment to test the strength of two strings, P and Q, as shown in the diagram below.



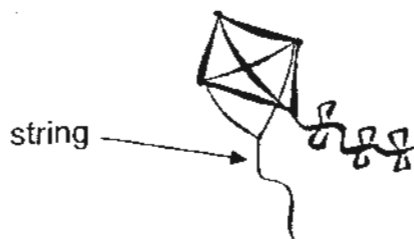
The strings used were of the same thickness. One string is made of cotton and the other is made of nylon. When Rayhan put two bricks on each pan, string P broke.

- (a) Identify the material, cotton or nylon, of each string. [1]

(i) String P : _____

(ii) String Q : _____

- (b) Based on the experiment above, which string should Rayhan choose to make the string of a kite like the one shown below? Give a reason to your answer. [1]



- End of booklet B -

ANSWER SHEET

EXAM PAPER 2010

SCHOOL : CHIJ ST NICHOLAS GIRLS' PRIMARY
SUBJECT : PRIMARY 3 SCIENCE

TERM : SA1

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

Q18	Q19	Q20	Q21	Q22	Q23	Q24	Q25	Q26	Q27	Q28	Q29	Q30
4	3	4	3	2	3	1	4	1	3	4	3	4

31) Living things: Fish
Prawn
Worm
Water plant

Non-living things: rock
Sand

32a) 5 days

32b) 8cm

32c) It needs sunlight.

33a) M: animals
N: plants

33b) Ixora

33c) N

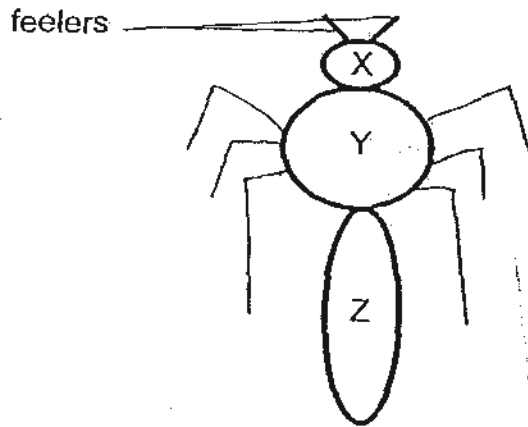
34a) Sunlight is shining on the leaves of the plants.

34b) Plants obtain their food through photosynthesis, with the help of chlorophyll found in the leaves.

35a) Mould will be growing on it.

35b) Moisture and warmth.

36a)



36b) X: head
Y: thorax
Z: abdomen

36c) It has a pair of feelers.

37a) Both have trunks.

37b) Plant N has small leaves while Plant M has broad leaves.

37c) Plant N

38ai) B

38aii) Fungi: A

38b) C and E are able to move freely.

39a) Their tails help them move in the water.

39b) No. Tadpoles grow into frogs which are amphibians.

40)

Animals	Fungi	Plants	Bacteria
Scorpion	Mould	Fern Orchid	Coli cell

41) Paper cup: Becomes flattened

Porcelain mug: Breaks into tiny pieces

Wine glass: Breaks into tiny pieces

Aluminium drink can: becomes flattened

42)

Plastic	Metal	Fabric	Paper
Float Raincoat	Keys Nails	T-shirt	Story books Newspapers

43a) They do not break when dropped.

43b) X

43c) Y

44ai) cotton

44aii) nylon

44b) He should use string Q, which is nylon. String Q is much durable compared to string P and will not break so easily when flying the kite.