

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

Class: Primary 3 \_\_\_\_\_

## CHIJ ST NICHOLAS GIRLS' SCHOOL



Primary 3

Continual Assessment Two

SCIENCE

BOOKLET A

27 August 2012

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.

This booklet consists of 17 printed pages.

**Section A : ( 30 x 2 MARKS )**

For each question from 1 to 30, 4 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. After watching a video on 'Living Things' during Science lesson, four pupils made the following conclusions about living things.

Jess: All living things are able to reproduce.

Lynn: All living things can make their own food.

Tara: Only animals with legs can move by themselves.

Mina: Only animals can respond to changes because they can move.

Which of the above pupils' conclusions are correct?

- (1) Jess only
  - (2) Tara only
  - (3) Tara and Mina only
  - (4) Jess and Lynn only
2. The diagram below shows two objects, a coin and a tyre.



Coin



Tyre

Which one of the following statements about the above objects is false?

- (1) The coin is harder than the tyre.
- (2) Both are of the same shape and size.
- (3) Both cannot move freely on their own.
- (4) Both are made of materials that are waterproof.

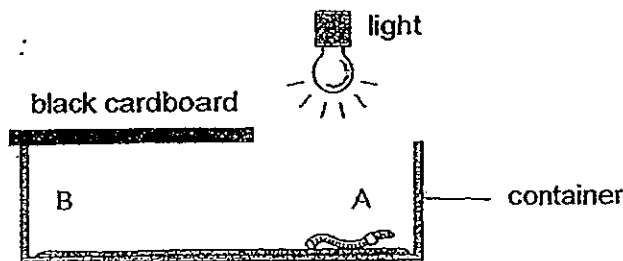
3. The table below shows the characteristics/properties of X, Y and Z.

Characteristics / Properties	X	Y	Z
Able to make food?	Yes	No	No
Can respond to changes?	Yes	Yes	No

Which one of the following correctly represents X, Y and Z?

	X	Y	Z
(1)	Balsam	Crocodile	Table
(2)	Toadstool	Panda	Aeroplane
(3)	Bamboo	Zebra	Cat
(4)	Fern	Aeroplane	Panda

4. Bala carried out an experiment shown below to find out how an earthworm responds to light. He placed an earthworm on side A of the tray and shone a light over it.



Bala observed that the earthworm crawled to side B of the tray after ten minutes. What can Bala conclude from the experiment?

- (1) The earthworm can respond to changes.
- (2) The earthworm prefers moist to dry places.
- (3) The earthworm can move freely on its own.
- (4) The earthworm prefers dark to bright places.

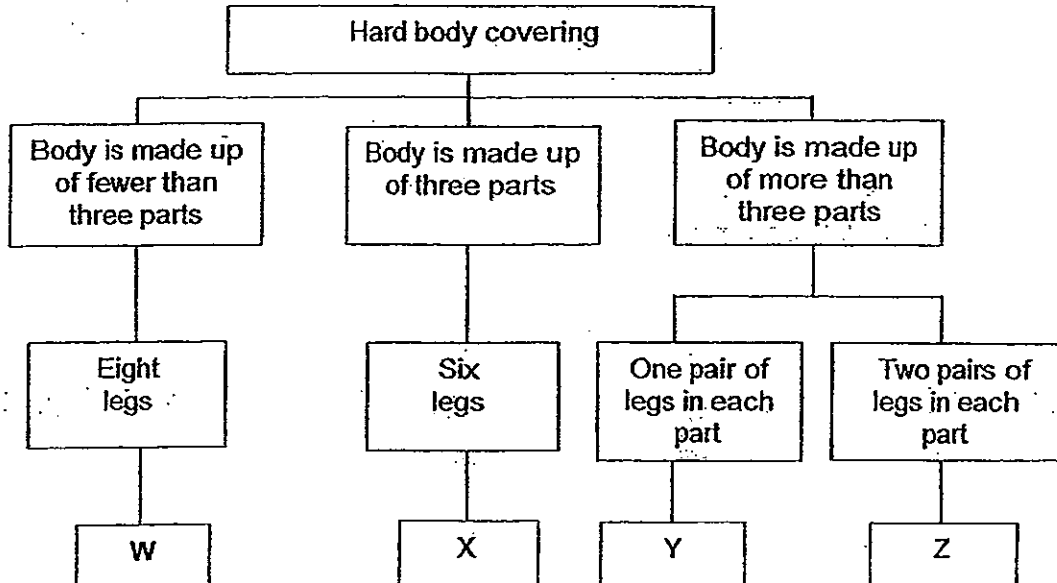
5. Serene planted 4 seeds, A, B, C and D, in different pots and placed them at different parts of the house. She then recorded the height of the 4 seedlings over a period of 10 days as shown in the table below.

Seedlings	Height (cm)				
	Day 2	Day 4	Day 6	Day 8	Day 10
A	1	2	4	5	6
B	0	2	4	5	7
C	2	3	5	6	8
D	1	3	3	4	5

Based on her observation, which seedling is not growing as well as the rest?

- (1) A
  - (2) B
  - (3) C
  - (4) D
6. Which one of the following statements about plants is false?
- (1) Plants need light to make food.
  - (2) All plants can move on their own.
  - (3) Some plants can reproduce from spores.
  - (4) Only plants with green leaves can make their own food.

7. Study the classification chart below.



Devi found an animal as shown below and noticed that it had a hard body covering.



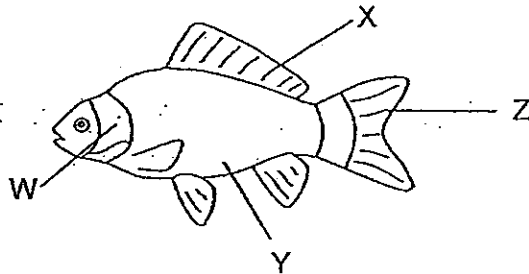
Which group, W, X, Y or Z, in the classification chart above does this animal belong to?

- (1) W
- (2) X
- (3) Y
- (4) Z

8. Which one of the following statements is true of mushrooms?

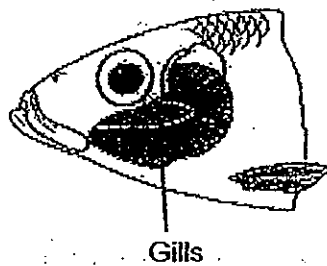
- (1) Mushrooms reproduce by seeds.
- (2) Mushrooms do not produce flowers.
- (3) Mushrooms make food by themselves.
- (4) Mushrooms do not need water to survive.

9. Which part(s) of the fish help(s) it to move in the water?



- (1) X only
- (2) X and Z only
- (3) W, Y and Z only
- (4) W, X, Y and Z

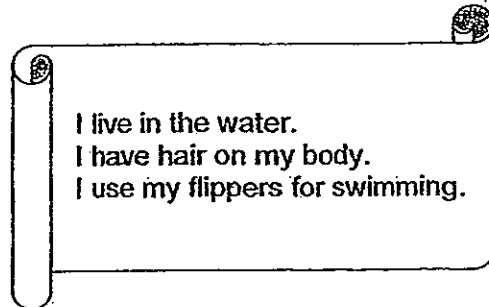
10. The diagram below shows the gills of a fish.



What is the function of the gills?

- (1) To obtain nutrients from the water.
- (2) To protect its body from scratches.
- (3) To help the fish to swim in the water.
- (4) To take in oxygen present in the water.

11. Study the riddle below.



Which one of the following animals fits the riddle above?

- (1) Shark
- (2) Dolphin
- (3) Penguin
- (4) Mudskipper

12. Which of the following functions of the outer covering of a bird is true?

- A It helps it to fly.
- B It keeps its body warm.
- C It protects it from the strong sun.

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

13. Which one of the following organisms does not reproduce in the same way as the others?

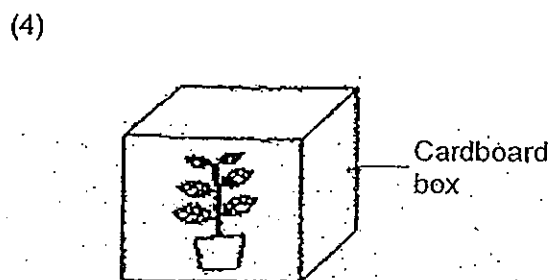
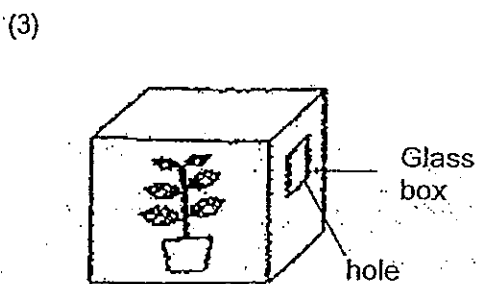
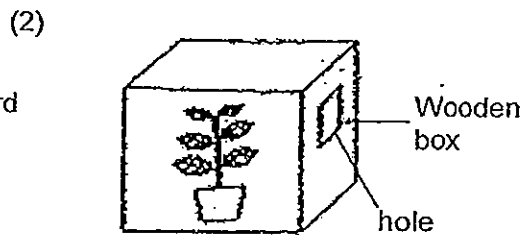
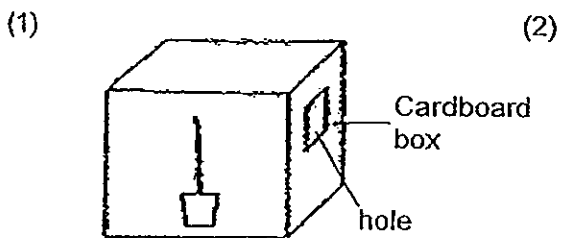
- (1) otter
- (2) spider
- (3) kingfisher
- (4) weaver ants

14. Gabby observed four organisms, A, B, C and D, during an excursion to the zoo and recorded her observations in the table shown below. A tick (✓) shows that the organism has the characteristic.

Organisms	A	B	C	D
Characteristics				
Has four limbs	✓			✓
Covered with hair	✓		✓	

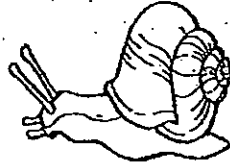
Which one of the above organisms represents a turtle?

- (1) A  
 (2) B  
 (3) C  
 (4) D
15. Plants need sunlight to make food and thus grow well. Which one of the following set-ups can be used to demonstrate that plants respond to sunlight?

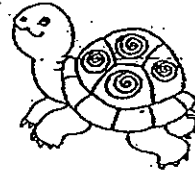




16. The pictures below show a snail and a tortoise.



snail



tortoise

Based on what you can see from the pictures above, which one of the following statements about the two animals is correct?

- (1) The snail has no legs but the tortoise has four legs.
- (2) The snail feeds on plants but the tortoise feeds on small fish.
- (3) The snail lays eggs in water but the tortoise lays eggs on land.
- (4) The snail and the tortoise hide inside their shells when disturbed.

17. The following plant parts are grouped based on a common characteristic.



ginger



potato



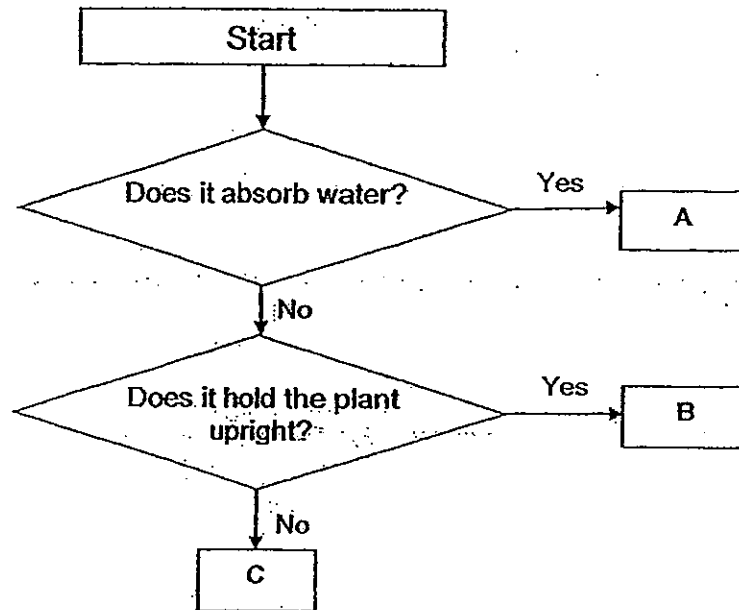
yam

A tomato cannot be placed in the same group above because it is not a

\_\_\_\_\_

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

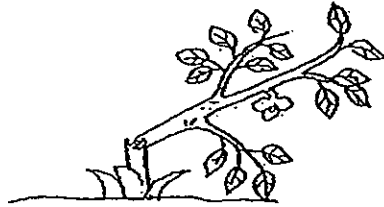
18. The flowchart below describes the functions of different parts of a plant.



Which one of the following correctly represents parts, A, B and C?

	A	B	C
(1)	Roots	Leaves	Stem
(2)	Leaves	Stem	Roots
(3)	Stem	Leaves	Roots
(4)	Roots	Stem	Leaves

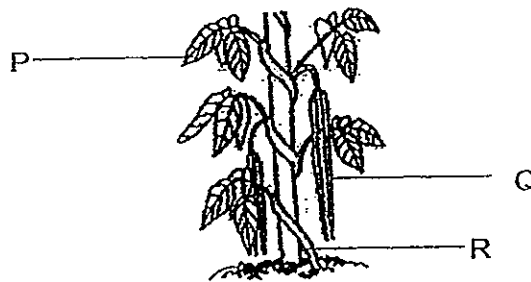
19. The picture below shows a plant.



Which one of the following statements explains why the plant dried up after a few days?

- (1) Water was not absorbed by the roots.
- (2) The plant was not able to stand upright to obtain light.
- (3) The roots did not anchor the plant firmly to the ground.
- (4) The stem was not able to transport water to all parts of the plant.

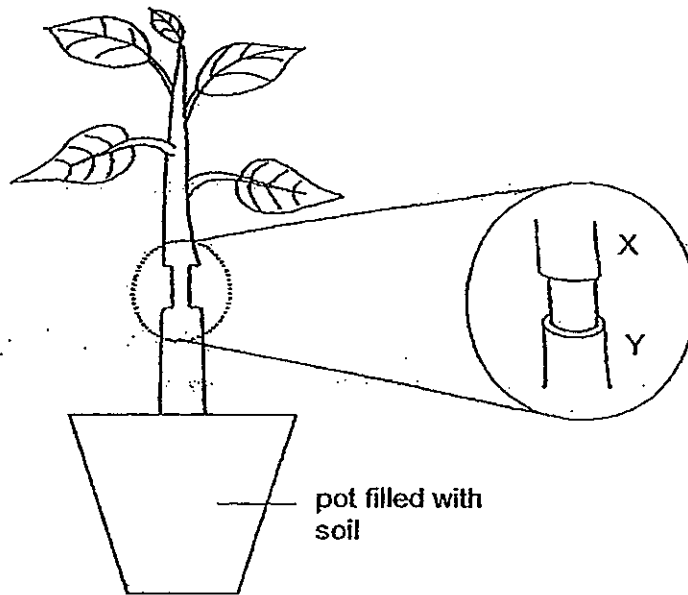
20. The picture below shows a bean plant.



Which one of the following describes the plant parts P, Q and R correctly?

	P	Q	R
(1)	flower	fruit	stem
(2)	leaf	fruit	stem
(3)	fruit	flower	root
(4)	leaf	flower	root

21. The diagram below shows a plant with the outer ring of the stem between part X and Y removed. By doing so, the tubes which carry food between part X and Y are removed while the tubes which carry water remain in the stem.



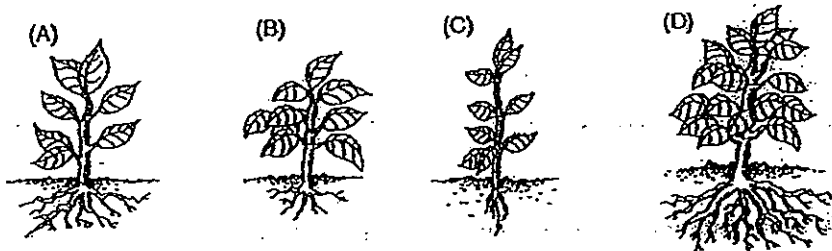
Which one of the following diagrams represents the appearance of the stem after a week?

- (1) (2)
- (3) (4)

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

- (1) It gives the body its shape.
- (2) It enables us to stand upright.
- (3) It absorbs food for the human body.
- (4) It works with the muscular system to enable us to move.

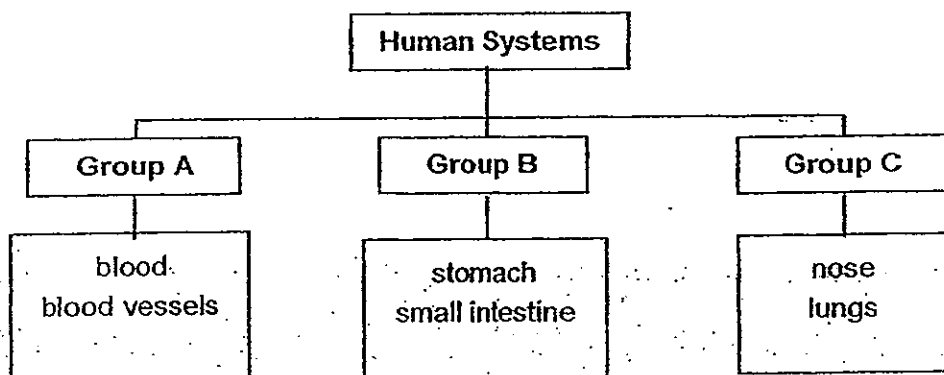
23. Paul planted four balsam plants in his garden as shown in the diagrams below.



Based on the diagrams above, arrange the plants in order starting from the easiest to uproot to the hardest.

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

24. Study the classification chart below.



In which of the above groups, A, B or C, should the windpipe be placed in?

- (1) A
- (2) B
- (3) C
- (4) None of the above

25. Which of the following systems work together to enable Jun Xiong to dance?

- A skeletal
- B muscular
- C circulatory
- D respiratory

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

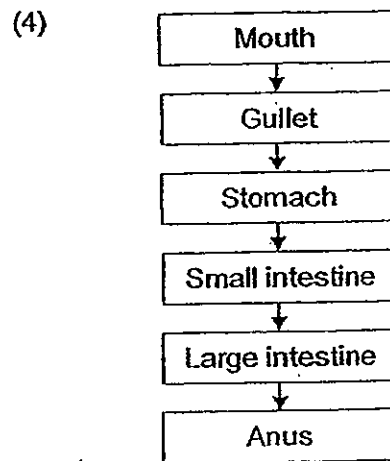
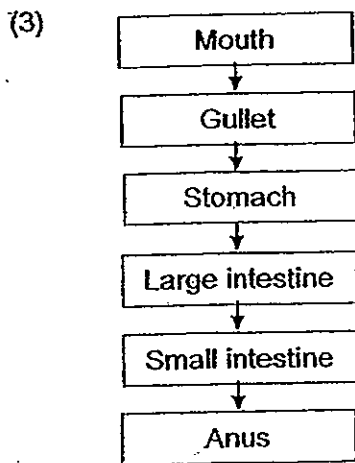
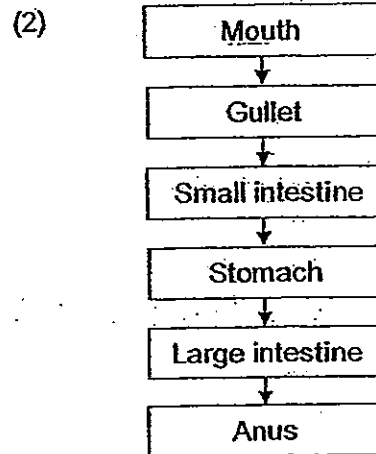
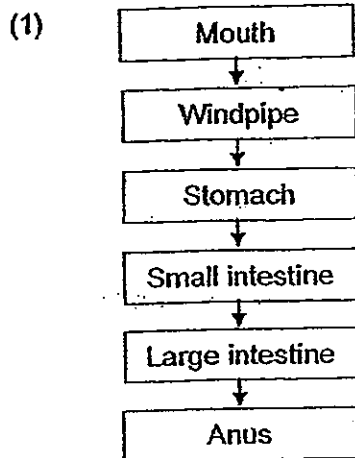
26. Mary placed 100g weights, one at a time, into four bags, A, B, C and D, each made from a different material. She recorded the number of weights the bags could hold before they tore. Her results are shown in the table below.

Material	Number of 100g weights it could hold before it tore
A	7
B	10
C	5
D	4

Based on her results, which one of the following statements about materials A, B, C or D is correct?

- (1) Material B is the hardest.
- (2) Material C is stronger than material A.
- (3) Material D can hold the least amount of water.
- (4) Material B can hold 300g more weights than material A.

27. Which one of the following diagrams correctly represents the human digestive system?



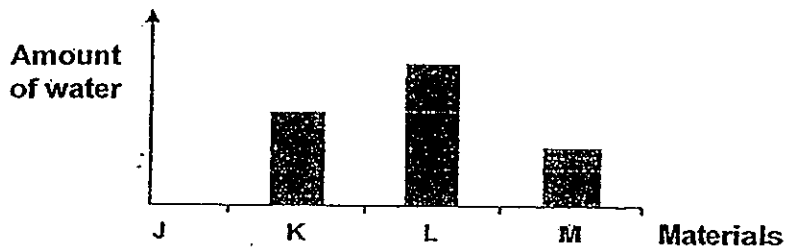
28. Benjamin grouped some objects according to the materials they are made of.

Wood	Fabric	Metal	Plastic
log paper	bottle pillow case	key window grille	straw raincoat

Which one of the above objects has been wrongly classified?

- (1) log
- (2) straw
- (3) bottle
- (4) window grille

29. The bar graph below shows the amount of water that four different materials, J, K, L and M, can absorb.



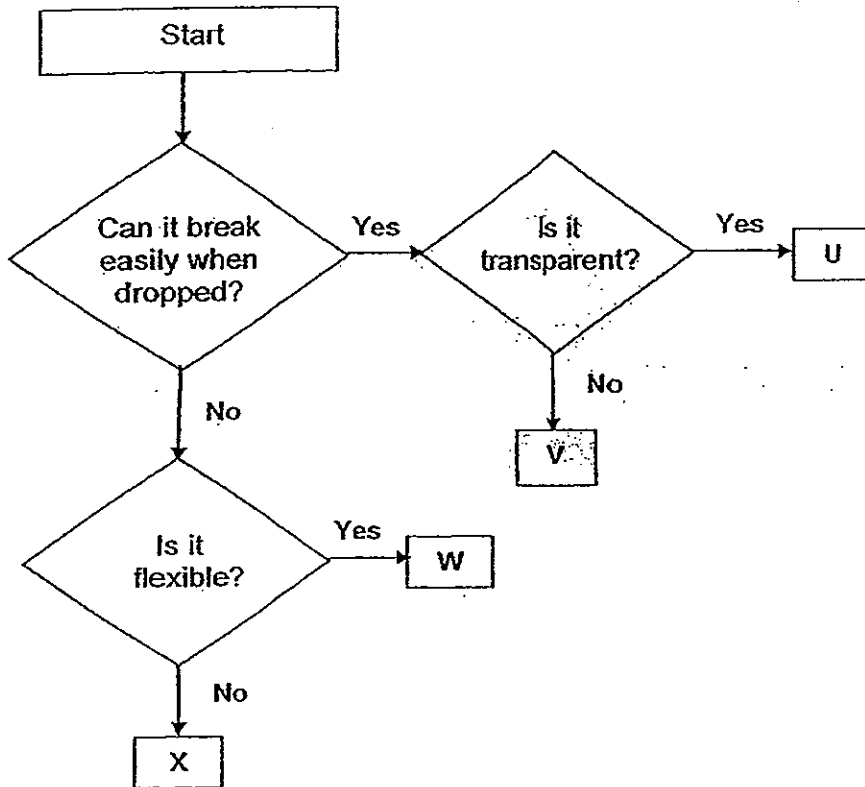
Based on the graph above, which material is most suitable for making part G?



- (1) Material J
- (2) Material K
- (3) Material L
- (4) Material M



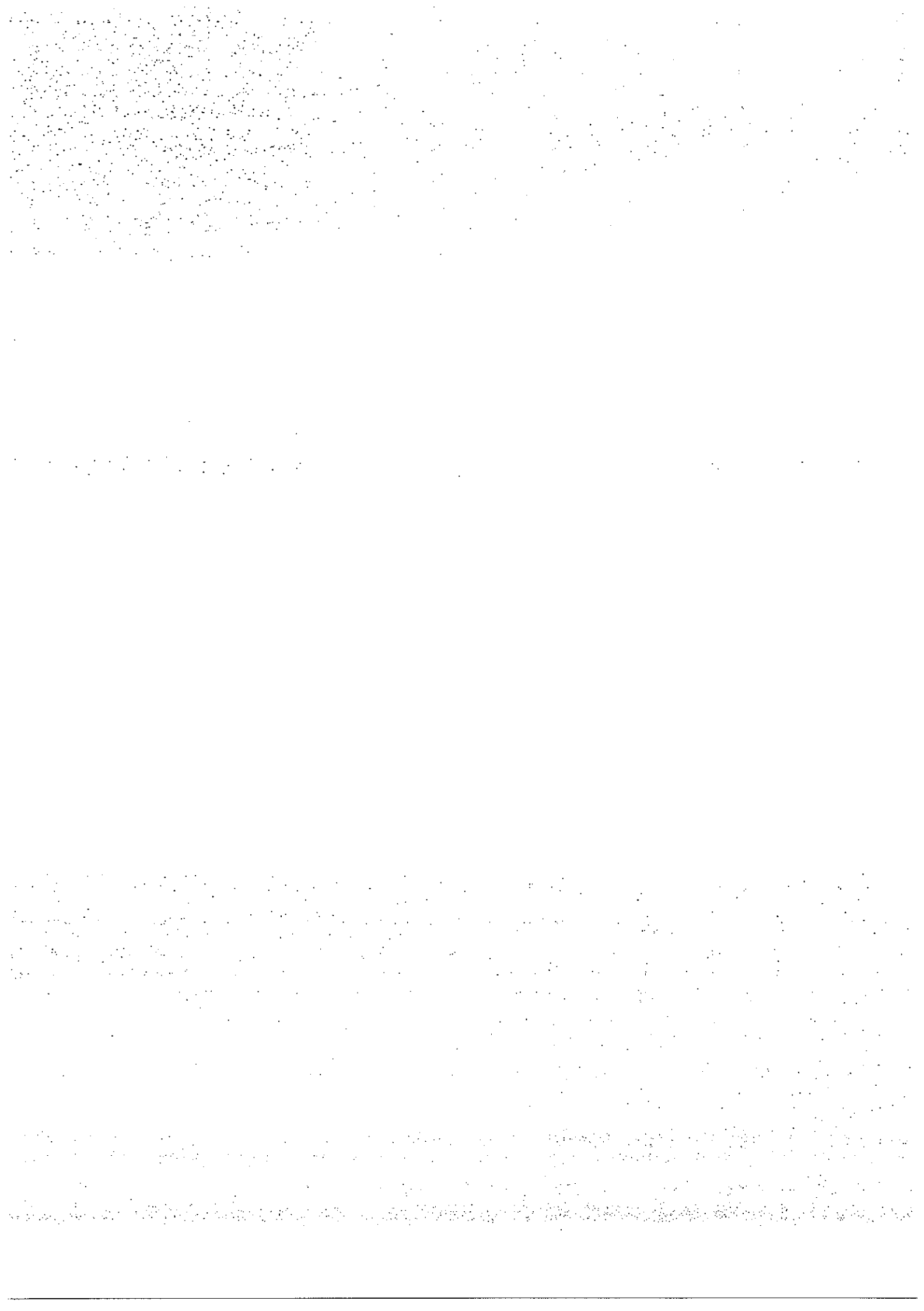
30. Study the flowchart below.



Which one of the following correctly shows what materials, U, V, W and X, could be?

	U	V	W	X
(1)	porcelain	glass	cotton	plastic
(2)	cotton	rubber	metal	wood
(3)	plastic	wood	glass	porcelain
(4)	glass	porcelain	rubber	metal

- End of Section A -



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

Class : Primary 3 \_\_\_\_\_

## CHIJ ST NICHOLAS GIRLS' SCHOOL



Primary 3

Continual Assessment Two

SCIENCE

BOOKLET B

27 August 2012

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.

This booklet consists of 15 printed pages.

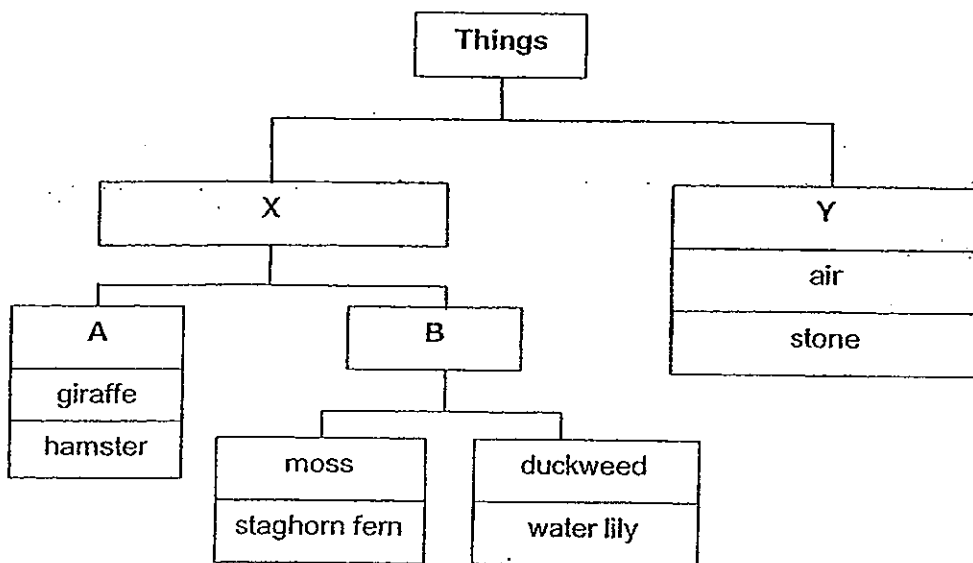
Booklet A	60
Booklet B	40
Total	100

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

**Section B : (40 marks)**

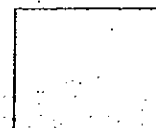
For questions 31 to 44, write your answers in this booklet. The number of marks available is shown in the brackets [ ] at the end of each question or part question.

31. Study the classification chart below.



Based on the classification chart above, give a suitable heading for each of the groups, X, Y, A and B. [2]

Groups	Suitable Headings
X	
Y	
A	
B	

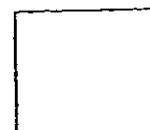
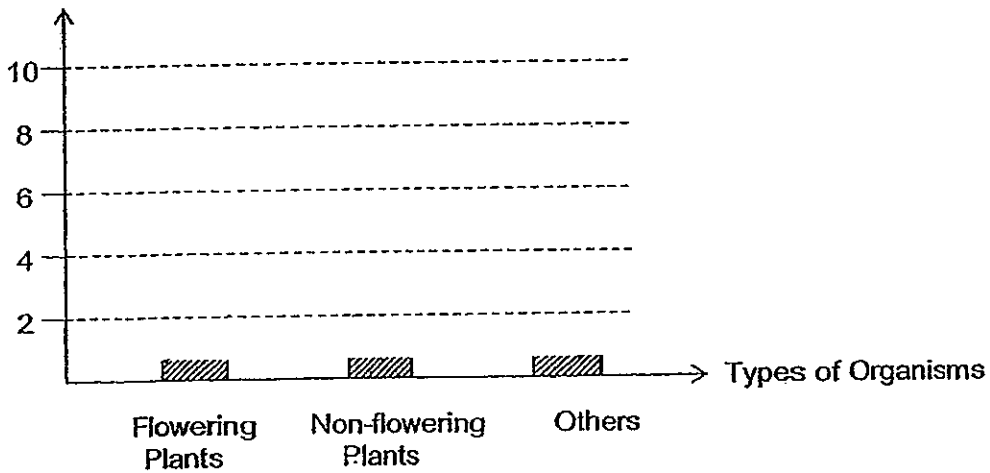


32. The table below shows the number of each type of living things found in James' garden.

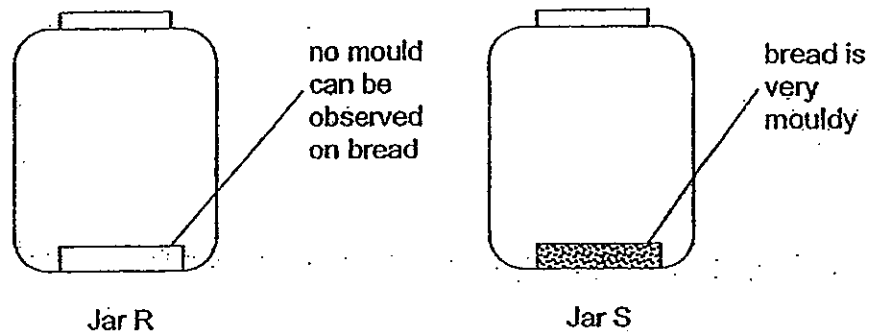
Bird's nest fern	Rose plant	Papaya tree	Toadstool	Conifers
3	4	2	5	2

Based on the information given above, complete the graph below by drawing the bar for each category of organisms stated. [3]

Number of Organisms



33. Heather left two pieces of bread in two identical airtight jars, R and S. She has added a few drops of water to the bread in Jar S and toasted the bread in Jar R. The diagram below shows the results of the experiment after 5 days.



- (a) What is the aim of Heather's experiment?

[1]

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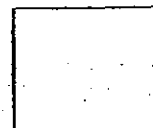
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- (b) Heather placed a third piece of bread in another airtight jar. She observed that it turned slightly mouldy after 5 days although she did not add any water to it. What does this tell us about the bread?

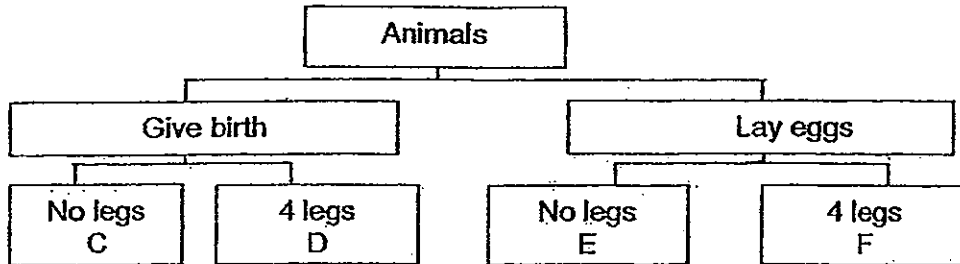
[1]

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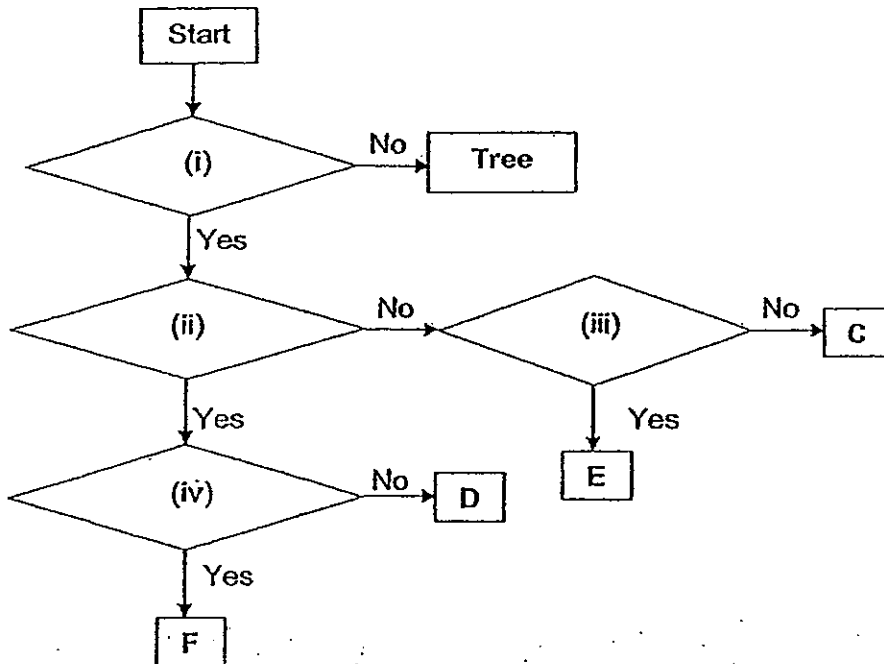
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34. Four animals, G, D, E and F, are classified in the classification chart below.



The animals have been regrouped using the following flowchart. Based on the classification chart above, write down suitable questions for (i) to (iv) below. [4]



- (i) \_\_\_\_\_
- (ii) \_\_\_\_\_
- (iii) \_\_\_\_\_
- (iv) \_\_\_\_\_



35. Study the classification table below.

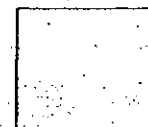
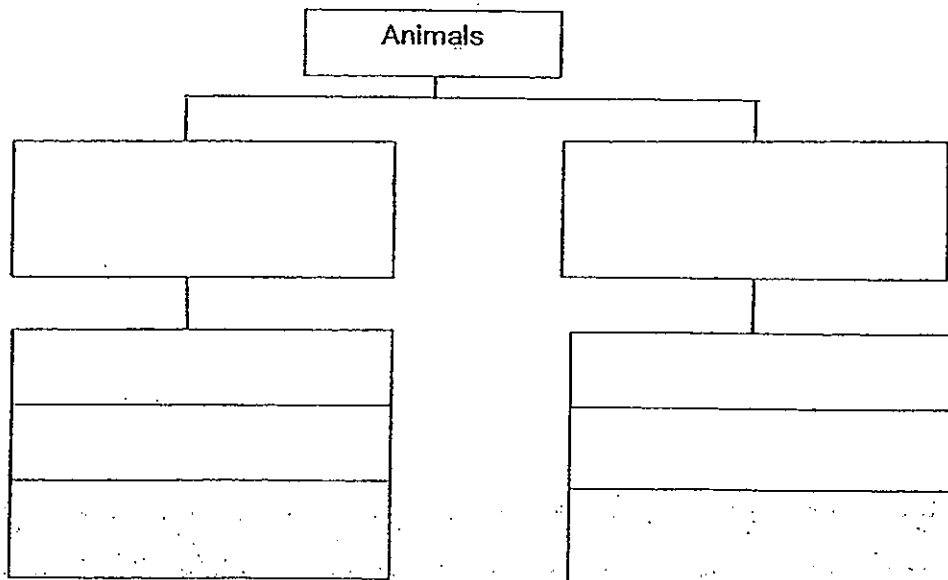
Animals	
Group Y	Group Z
Cow Guppy Platypus	Bat Sparrow Butterfly

(a) Give suitable headings for groups Y and Z. [1]

Group Y: \_\_\_\_\_

Group Z: \_\_\_\_\_

(b) Regroup the animals in Y and Z such that there is equal number of animals in each group. Write down suitable headings for each group. [3]

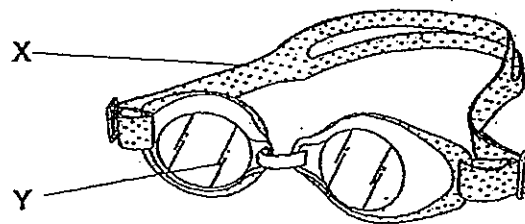




36. Nerisa studied the properties of four materials, A, B, C and D, and recorded them in the table below.

Properties	Materials			
	A	B	C	D
Is it hard?	Yes	No	Yes	Yes
Does it break easily when dropped?	Yes	No	Yes	No
Is it waterproof?	Yes	Yes	No	Yes
Can you see through it?	No	No	Yes	Yes

- (a) Which of the above materials, A, B, C and D, are most suitable to make parts X and Y of the pair of swimming goggles shown below? [1]



X: \_\_\_\_\_

Y: \_\_\_\_\_

- (b) Based on your answer above, identify one of the properties of your choice of material for Part Y and explain how this property helps the swimmers while swimming. [2]

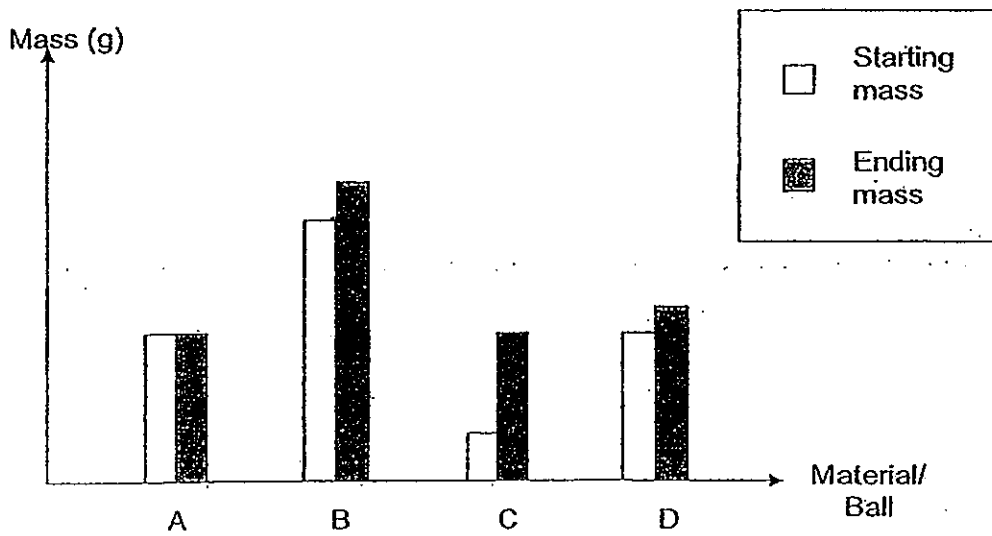
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37. Four balls A, B, C and D of the same size but made of different materials were weighed and then left to soak in a basin of water for five minutes. The balls were then removed and weighed again. The graph below shows the masses of the balls at the start and end of the experiment.



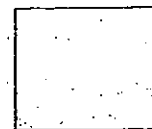
- (a) Based on the graph above, which material (A, B, C and D) is the most absorbent? [1]

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- (b) Explain your answer in (a) above. [2]

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38. The pictures below show some edible plant parts. Identify the parts of the plants where most of the food is stored. [3]

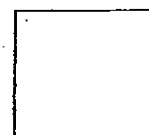
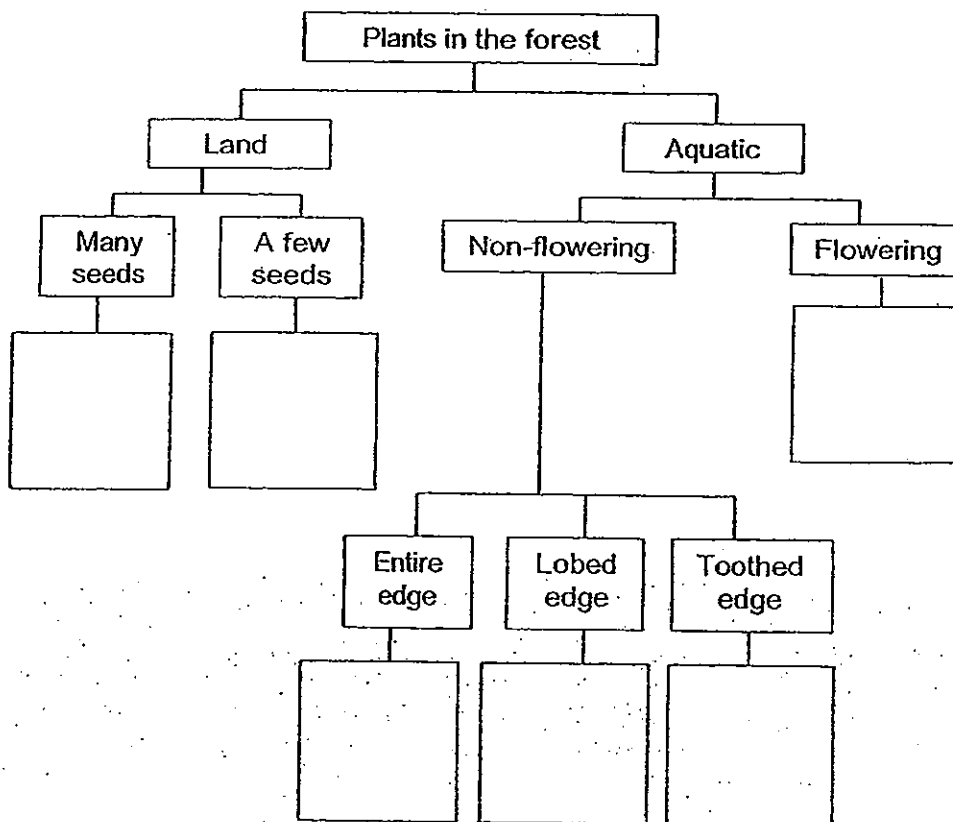
	Plant part
 Carrot	
 Water Chestnut	
 Lettuce	



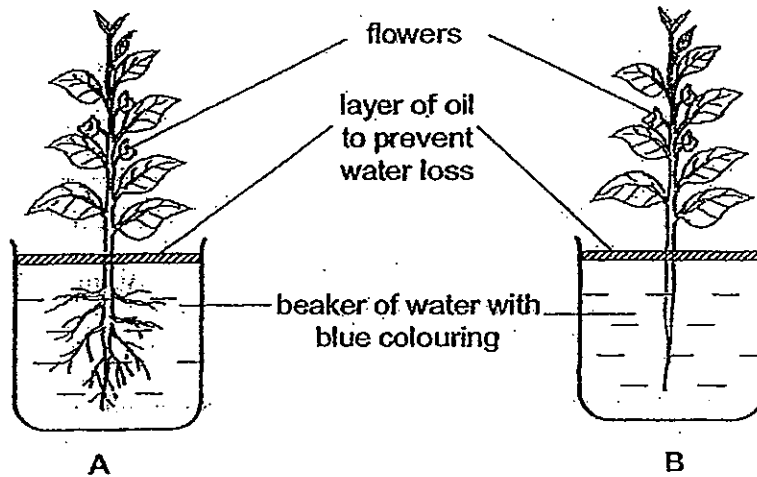
39. Ali was trekking in the forest and chanced upon some unusual plants. He observed them carefully and made the following notes about them.

Plant	Type of plant	Number of seeds	Type of leaf edge	Where is the plant found?
A	Non-flowering	-	Entire	Water
B	Flowering	Many	Lobed	Land
C	Non-flowering	-	Toothed	Water
D	Flowering	Many	Lobed	Land
E	Flowering	A few	Toothed	Water
F	Flowering	A few	Entire	Land

Based on the observations given in the table above, classify all the plants by placing the letters (A to F) in the boxes provided below. You may write more than one letter in a box or leave any boxes blank. [3]



40. Matthew set up an experiment as shown below. He added a few drops of blue colouring into each of the beakers. The two set-ups were placed in a sunny spot for one week. (Note: The blue colouring is not harmful to the plants.)



- (a) After one day, what change would Matthew notice about the flowers and leaves of the plant in set-up A? [1]
- 
- (b) Explain your answer in (a) above. [2]
- 
- 
- (c) It was observed that the plant in set-up B began to wilt after one day. Why is this so? [1]
- 



41. Match the following body systems to their correct functions by joining the dots. [2]

**Systems**

**Functions**

Circulatory system •

• Carries nutrients, water and oxygen to all parts of the body

Respiratory system •

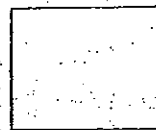
• Protects the important organs in the body

Muscular system •

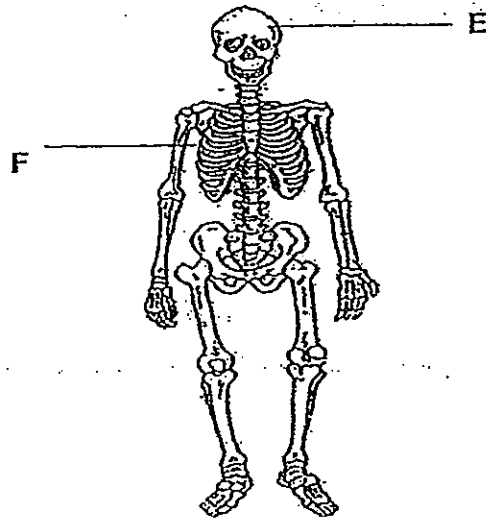
• Takes in oxygen and gives out carbon dioxide

Skeletal system •

• Helps different parts of the body move



42. The picture below shows the human skeletal system.

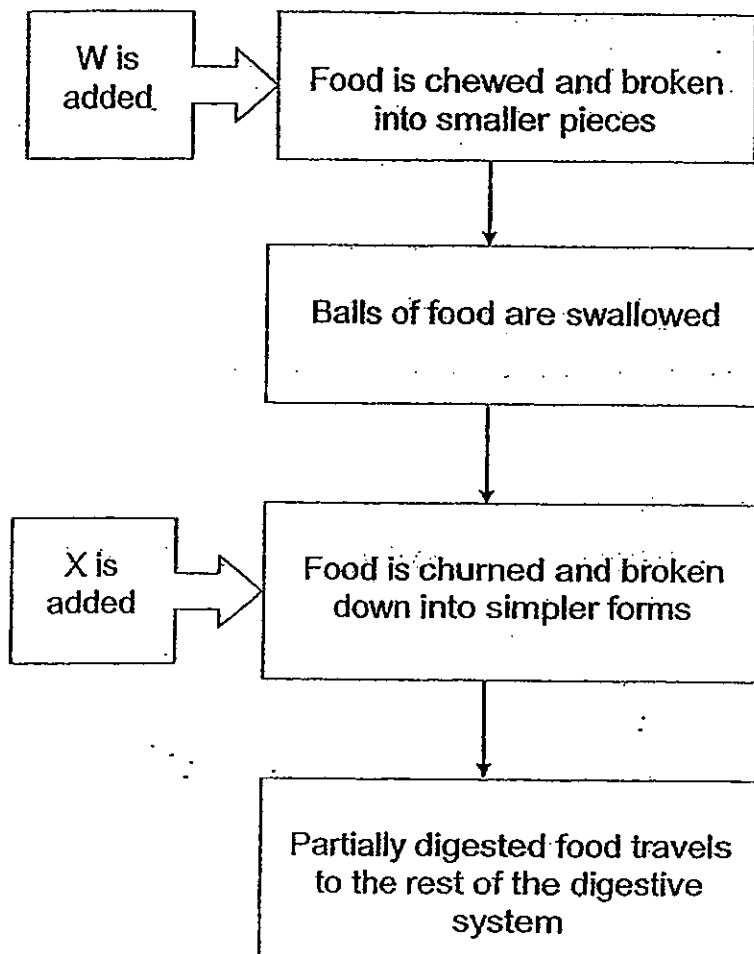


Name parts E and F and state the main organs that each part protects. [2]

Part	Name	Protected organs
E		
F		



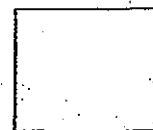
43. Study the flowchart of a body system below.



W and X are substances that are present in the body system shown above. Identify W and X. [2]

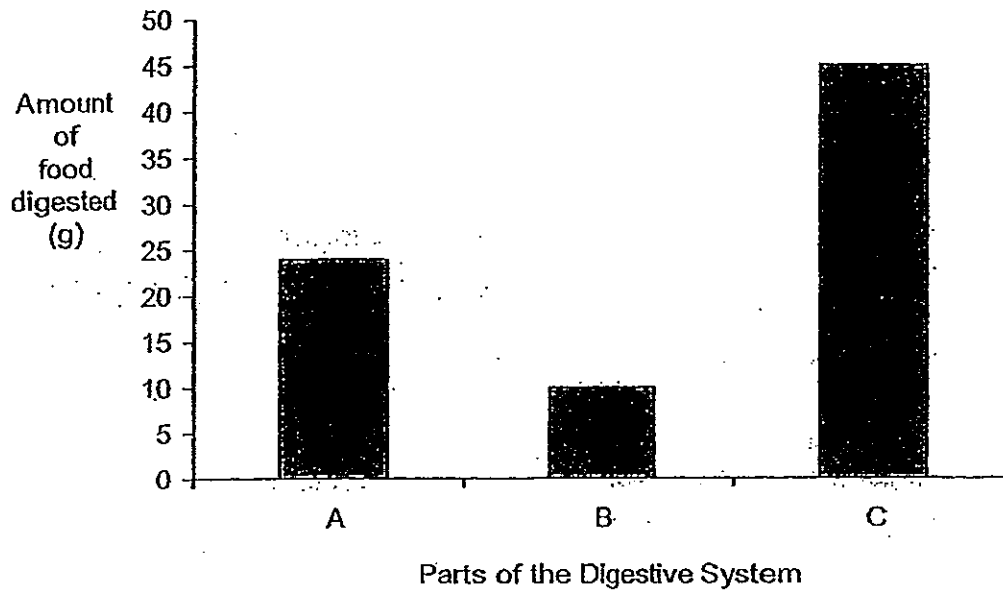
W: \_\_\_\_\_

X: \_\_\_\_\_



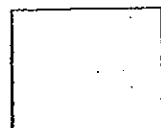


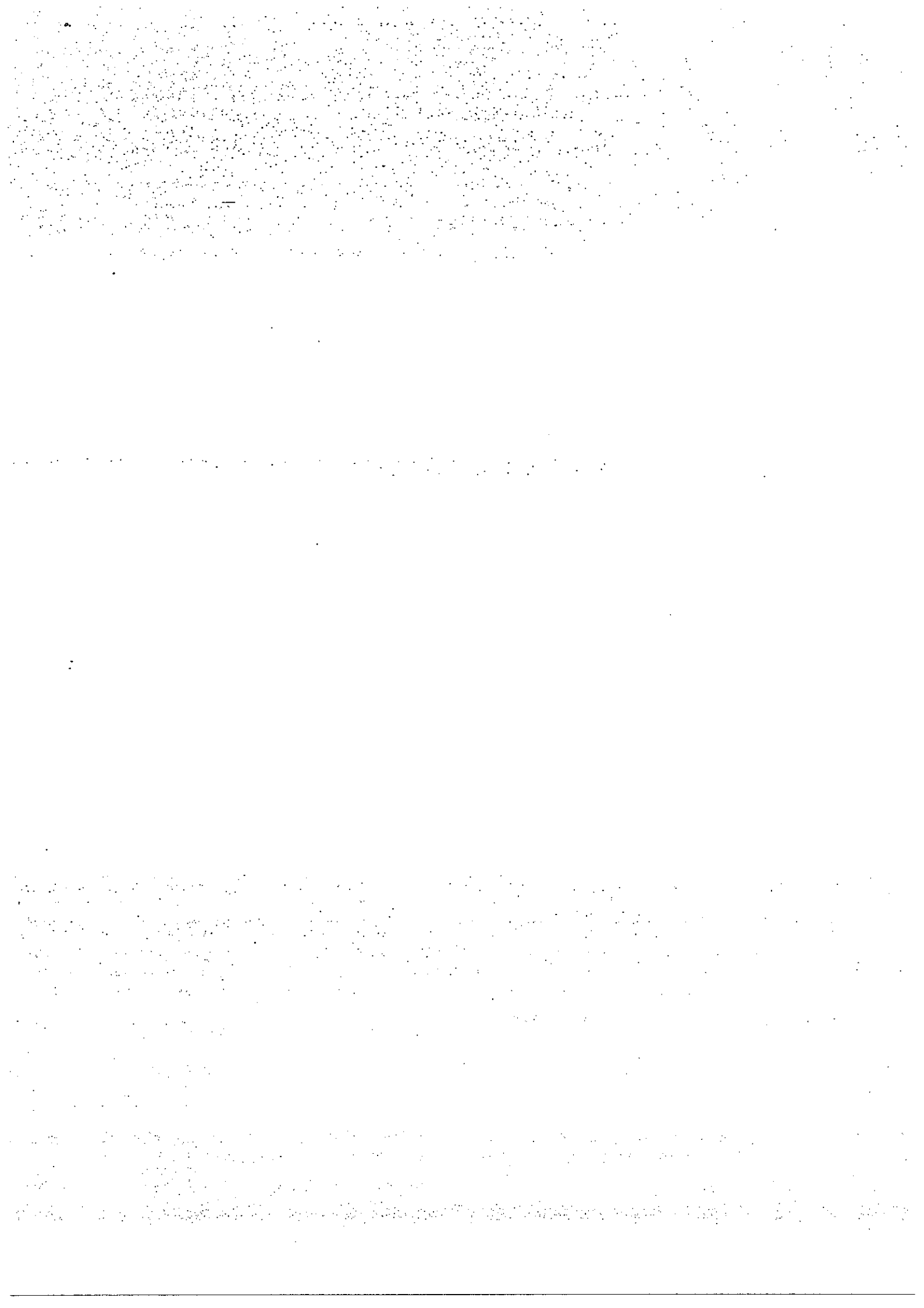
44. Nelson ate 90 g of food during his recess. The bar graph below shows the amount of food digested by 3 different parts, A, B and C, of the digestive system.



- (a) Which part of the digestive system does A most likely represent? [1]
- 
- (b) State one difference in the function of C in the digestive system as compared to A and B. [1]
- 
- (c) Can the large intestine be represented by parts B or C in the bar graph above? Give a reason for your answer. [1]
- 

- End of Paper -





# ANSWER SHEET

EXAM PAPER 2012

SCHOOL : CHIJ ST NICHOLAS GIRLS' SCHOOL

SUBJECT : PRIMARY 3 - SCIENCE

TERM : CA2

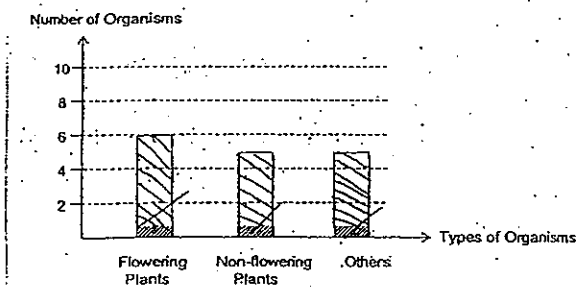
## Booklet A

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

31)

Groups	Suitable Headings
X	Living things
Y	Non-living things
A	Animals
B	Plants

32)

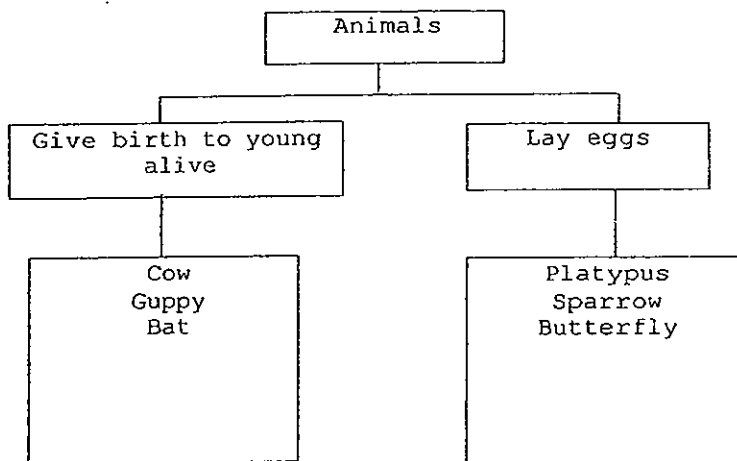


- 33a) To find out if moisture is needed for mould to grow well.  
 33b) The bread is moist but not as moist as the bread in Jar S.

- 34i) Is it an animal?  
 34ii) Does it have four legs?  
 34iii) Does it lay eggs?  
 34iv) Does it lay eggs?

- 35a) Group Y: Animals that cannot fly  
 Group Z: Animals that can fly

35b)



36a) X: B Y: D

36b) It is transparent. Swimmers would be able to see through it while swimming so that they would not bang into things or other swimmers.

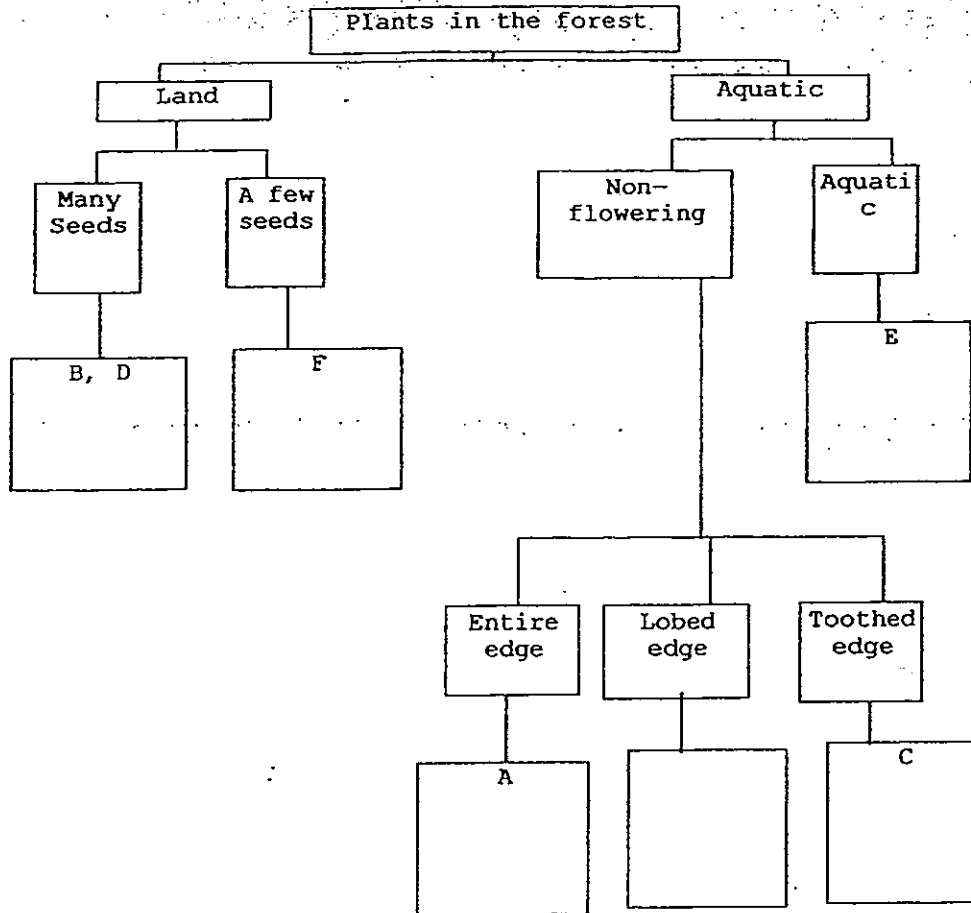
37a) Material C

37b) Its weight increased the most which means that it absorbed the most water so it is the most absorbent.

38)

	Plant part
Carrot	Root
Water Chestnut	Stem
Lettuce	Leaf

39)

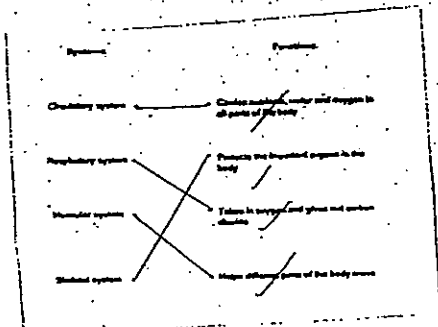


40a) The flowers and leaves would have turned blue.

40b) It has roots to absorb water and the stem to transport water to the leaves and the flowers.

40c) It does not have any roots to absorb water for the plant to survive and make food.

41)



42)

Part	Name	Protected Organs
E	Skull	Brains
F	Ribcage	Lungs, Heart

43) W: Saliva  
X: Digestive Juices

44a) Stomach

44b) Digested food is absorbed into the bloodstream at C but not in A and B.

44c) No. The large intestine does not digest food.