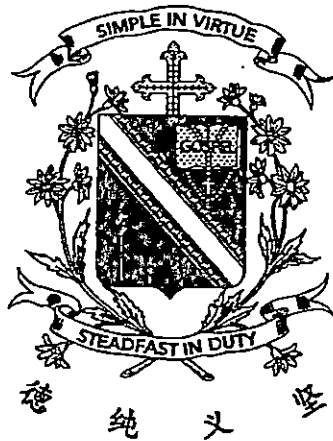


Name: _____ ()

Class: Primary 3 _____

CHIJ ST NICHOLAS GIRLS' SCHOOL



Primary 3 Semestral Assessment 2 – 2015 SCIENCE

BOOKLET A

29 Oct 2015

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

**24 questions
48 marks**

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

This booklet consists of 14 printed pages.

Section A (24 x 2 marks = 48 marks)

For each question from 1 to 24, four options are given. One of them is the correct answer. Make your choice (1, 2, 3 or 4). **Shade the correct oval (1, 2, 3 or 4) on the Optical Answer Sheet provided.**

1. Which of the following shows the characteristics of living things?

- A Water flowing in the rivers.
- B A cat gives birth to its young alive.
- C A seed developing into an adult plant.
- D A rubber band becomes bigger when stretched.

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

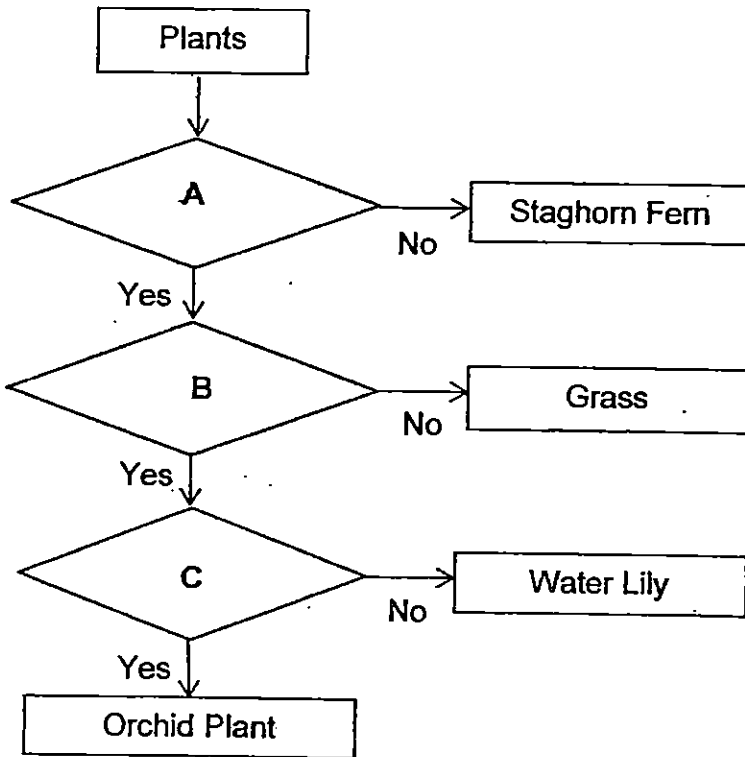
2. The table below shows some items being classified.

Living Things	Non-living Things
snail	stars
mushroom	seed
bread mould	dried leaves

Which one of the above items has been grouped incorrectly?

- (1) Snail
- (2) Stars
- (3) Seed
- (4) Dried leaves

3. Study the flowchart given below carefully.



Which of the following correctly represents questions for A, B and C?

	A	B	C
(1)	Does it reproduce from spores?	Does it live on land?	Does it bear flowers?
(2)	Does it reproduce by seeds?	Does it bear flowers?	Does it live in water?
(3)	Does it reproduce from spores?	Does it bear flowers?	Does it live in water?
(4)	Does it reproduce by seeds?	Does it have a strong stem?	Does it live on land?

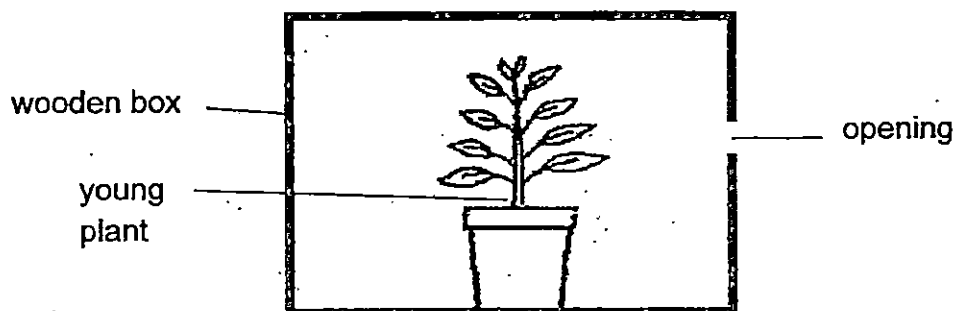
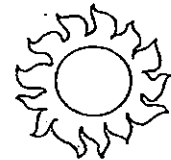
4. Some organisms, A, B, C and D, have common characteristics shown in the table below.

A tick (✓) in the box indicates the presence of a certain characteristics in each organism.

Characteristics	Organisms			
	A	B	C	D
Has leaves	✓		✓	
Reproduce by seeds			✓	
Bears flower				
Has a cap		✓		
Reproduce by spores	✓	✓		✓

Which two of the above organisms, A, B, C and D, are most likely to be fungi?

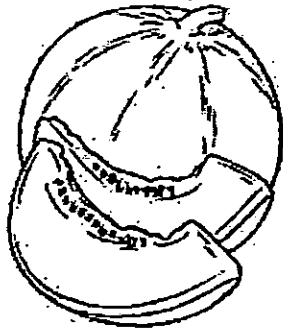
- (1) A and B
 - (2) A and C
 - (3) B and D
 - (4) C and D
5. The diagram below shows a potted young plant placed in a wooden box with an opening. The box is placed near an open window and the potted plant is watered daily,



Which one of the following statements would most likely be observed after one week?

- (1) The plant dies.
- (2) The plant did not grow taller.
- (3) The plant grows towards the opening.
- (4) The plant grows away from the opening.

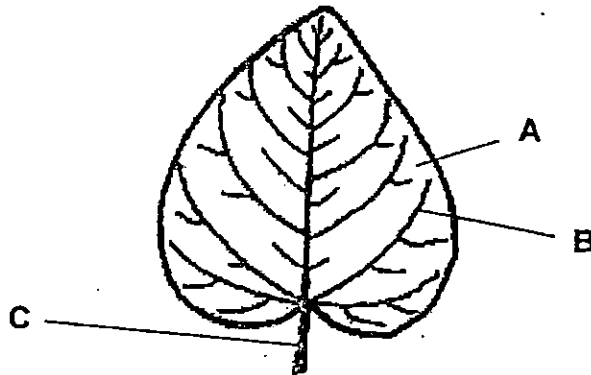
6. The diagram below shows the fruit of a plant.



Based on the above diagram, which one of the following statements below can be inferred about the plant?

- (1) It has a strong stem.
- (2) It is a flowering plant.
- (3) It has poisonous leaves.
- (4) It reproduces from spores.

7. The diagram below shows a leaf.



Which one of the following best represents parts, A, B, and C, of the above leaf?

	A	B	C
(1)	Leaf vein	Leaf stalk	Leaf edge
(2)	Leaf stalk	Leaf blade	Leaf vein
(3)	Leaf edge	Leaf stalk	Leaf blade
(4)	Leaf blade	Leaf vein	Leaf stalk

8. Pauline observed that the fish in a tank were swimming as shown in diagram A. Diagram B showed what happened when she tapped gently on the tank with her finger.

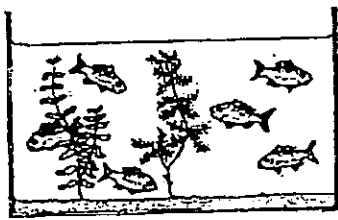


diagram A

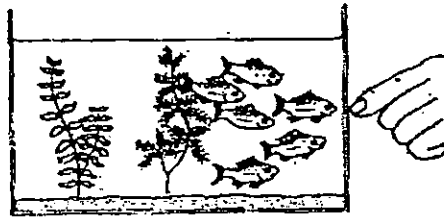


diagram B

Based on the behaviour of the fish, what did she learn about living things?

- A Living things can grow.
- B Living things can reproduce.
- C Living things can move on their own.
- D Living things can respond to changes.

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

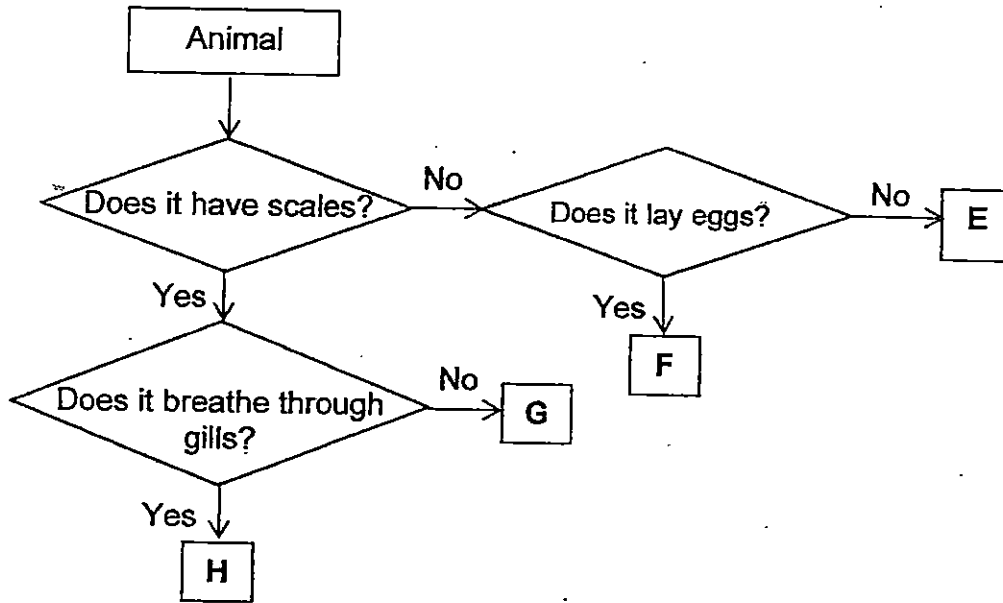
9. Anna grouped the following organisms into two groups, X and Y, as shown in the table below.

X	Y
bat	whale
mosquito	salmon
grasshopper	dolphin

Based on the classification table above, which of the following is the most suitable headings for X and Y?

	X	Y
(1)	Can fly	Cannot fly
(2)	Lay eggs	Give birth to young alive
(3)	3 body parts	2 body parts
(4)	Hard outer covering	Scales

10. Study the flowchart below.



Which of the following is correctly represented by E, F, G and H?

	E	F	G	H
(1)	Kangaroo	Pigeon	Snake	Goldfish.
(2)	Penguin	Bat	Dolphin	Horse
(3)	Platypus	Emu	Seahorse	Man
(4)	Lizard	Butterfly	Whale	Guppy

11. Jane went to the zoo and observed animal Q on a branch of a tree. She recorded her observations of the animal as shown in the box below.

Organism

Q has 3 body parts.

Q has 3 pairs of legs.

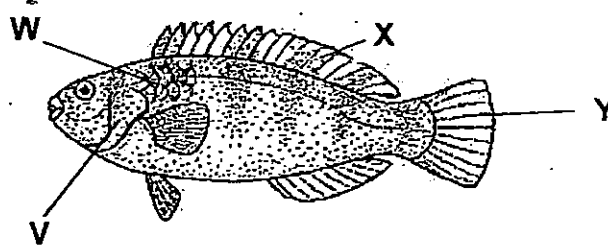
Q has 2 pairs of wings.

Q has a pair of antennae.

Based on the description above, which one of the following best represents animal Q.

- (1) Bat
- (2) Eagle
- (3) Spider
- (4) Grasshopper

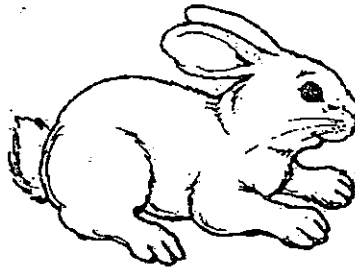
12. The diagram below shows a fish.



Which of the following is correctly represented by V, W, X and Y?

	V	W	X	Y
(1)	Gill	Scales	Tail	Fin
(2)	Gill cover	Scales	Fin	Tail
(3)	Gill	Skin	Fin	Tail
(4)	Gill cover	Skin	Tail	Fin

13. The diagram below shows a rabbit.







Four statements were made about the rabbit.

- A It feeds on plants only.
- B It has strong legs to jump.
- C It feeds its young with milk.
- D It has thick hair to keep itself warm.

Which of the above statements best describe the rabbit as a mammal?

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

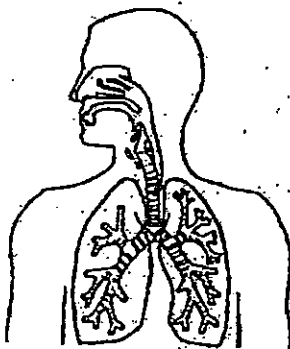
14. Which of the loaves of bread will turn mouldy fastest?

<p>(1)</p>  <p>In a sealed plastic bag</p>	<p>(2)</p>  <p>On a plate</p>	<p>(3)</p>  <p>On a plate</p>	<p>(4)</p>  <p>In a sealed plastic bag</p>
<p>Condition: toasted bread placed in the fridge</p>	<p>Condition: moist bread placed in the garden</p>	<p>Condition: moist bread placed in the fridge</p>	<p>Condition: toasted bread placed in the garden</p>

15. Which one of the following statements about bacteria and fungi is not correct?

- (1) Some fungi can be eaten.
- (2) Some bacteria cause people to be ill.
- (3) All fungi feed on dead or living matter.
- (4) All bacteria and fungi are microorganisms.

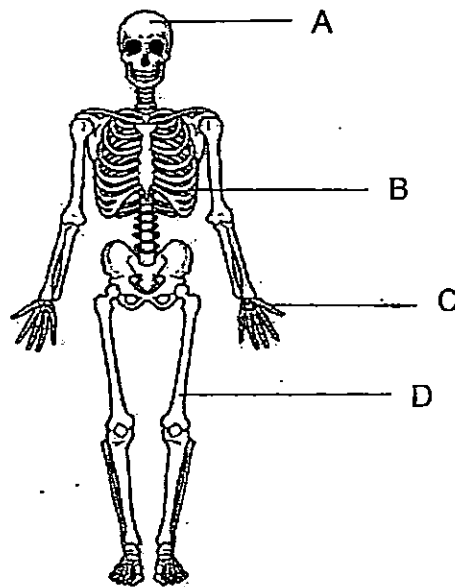
16. The diagram below shows one of the body systems in the human body.



One of the functions of the above body system is to _____.

- (1) give shape to the body
- (2) enable the body to move
- (3) take in air from the surroundings
- (4) transport digested food around the body

17. The diagram below shows the human skeletal system.



Which of the following correctly matches parts, A, B, C and D, to their general functions?

	Protection for the organs	Helps the body to move
(1)	A	B, C and D
(2)	A and B	C and D
(3)	C and D	A and B
(4)	A, B and C	D

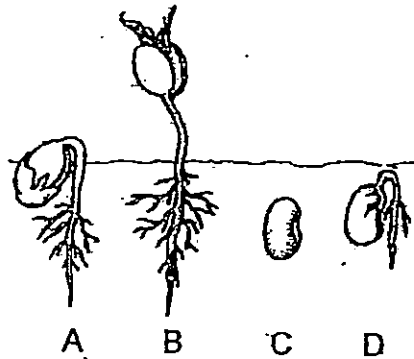
18. The classification table below shows three body systems and their parts.

Circulatory system	Respiratory system	Skeletal system
Blood vessels	Nose	Backbone
A	Windpipe	Ribs
	B	C

Which one of the following is correctly represented by A, B and C?

	A	B	C
(1)	lungs	heart	muscles
(2)	heart	lungs	skull
(3)	skull	heart	lungs
(4)	heart	skull	muscles

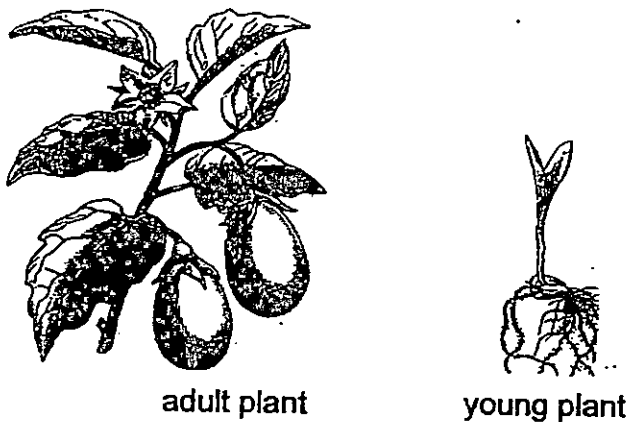
19. The diagrams below show the stages in the growth of a green bean plant.



Which one of the following shows the correct stages in the growth of a green bean plant?

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

20. The diagram below shows part of an adult and a young plant.

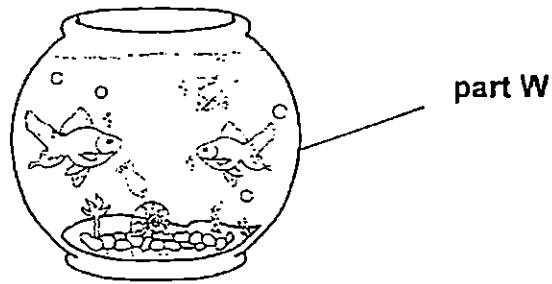


Based on what is observable from the diagram above, which of the following statements are true?

- A Both the young and the adult plant have weak stems.
- B The fruits of the adult plant are colourful, large and juicy.
- C The adult plant has flowers but the young plant does not.
- D Both the young and the adult plant can make its own food.

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

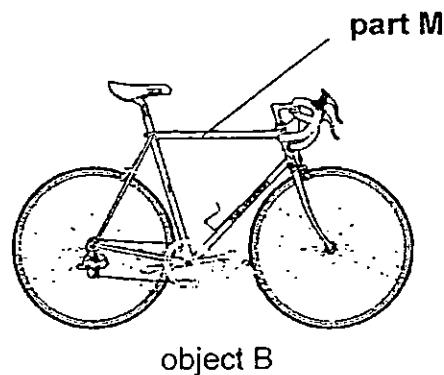
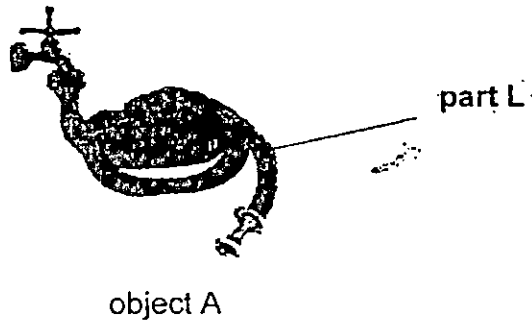
21. The diagram below shows a fish tank containing some fish.



Which one of the following properties should be considered when making part W of a fish tank in order for us to see the fish in the tank clearly?

- (1) It is flexible.
- (2) It sinks in water.
- (3) It is transparent.
- (4) It is waterproof.

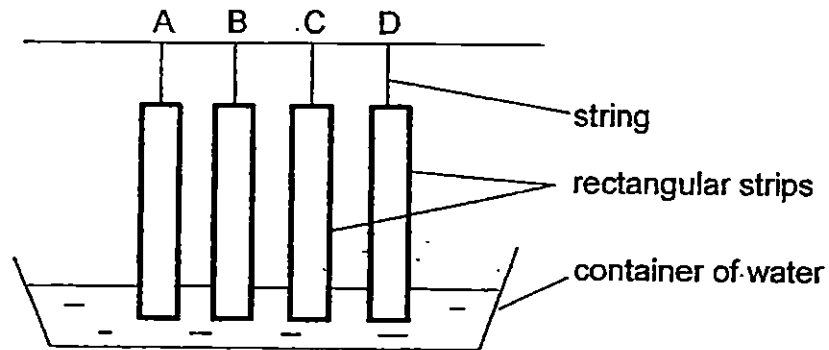
22. The diagram below shows two objects, A and B.



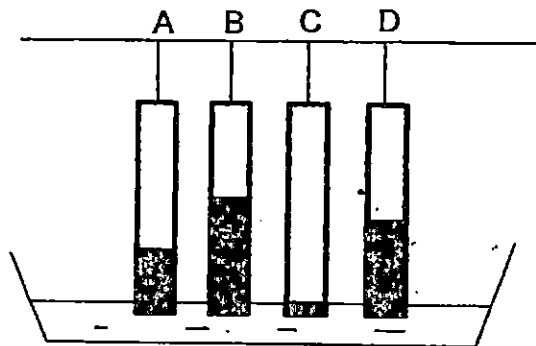
Which one of the following best describes the property of parts L and M?

- (1) Both parts L and M are flexible.
- (2) Both parts L and M float on water.
- (3) Part L is flexible but part M is not flexible.
- (4) Part L is waterproof but part M is not waterproof.

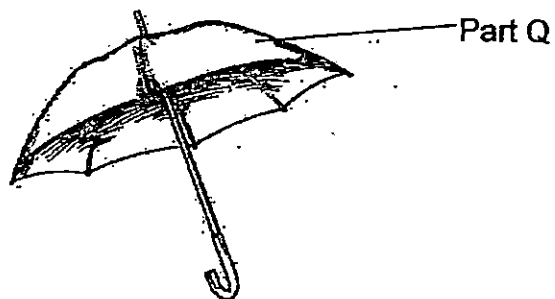
23. Amy had 4 rectangular strips, A, B, C and D, of equal size. The strips were made of different materials. She dipped all the strips in water as shown in the diagram below.



After 5 minutes, she noticed that water has risen to different levels along the 4 rectangular strips as shown in the diagram below.

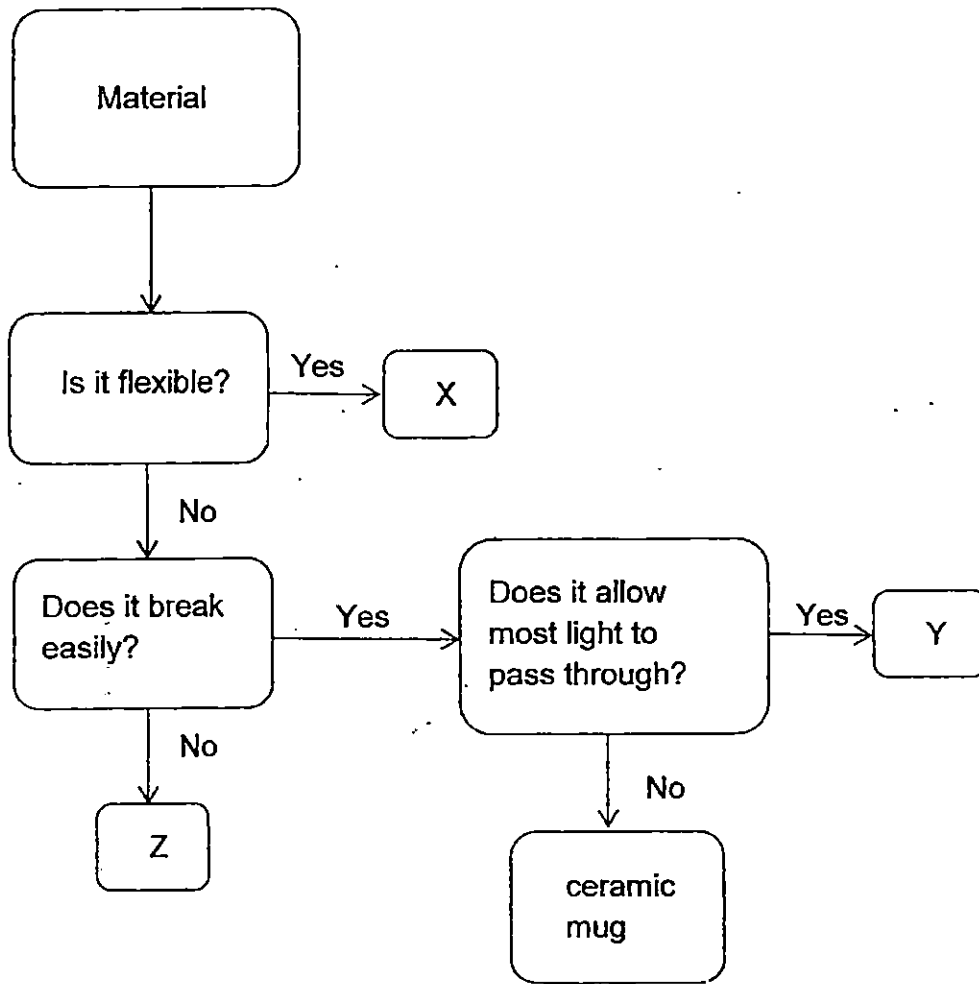


Based only on the results shown above, which material is most suitable for making part Q of the object shown below.



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

24. Study the flowchart below.



Which of the letters, X, Y and Z, in the flowchart correctly represents a glass tank, a hand towel and a metal ruler?

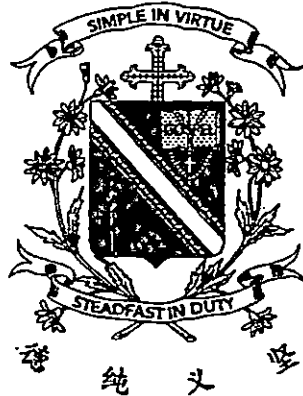
	glass tank	hand towel	metal ruler
(1)	Y	X	Z
(2)	Y	Z	X
(3)	Z	X	Y
(4)	Z	Y	X

End of paper

Name : _____ ()

Class : Primary 3 _____

CHIJ ST NICHOLAS GIRLS' SCHOOL



Primary 3
Semestral Assessment 2 – 2015
SCIENCE
BOOKLET B
29 Oct 2015

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

10 questions
32 marks

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

This paper consists of 12 printed pages.

Booklet A	48
Booklet B	32
Total	80

Parent's Signature/Date

Section B (32 marks)

For questions 25 to 34, 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.

25. The diagram below shows two plants, A and B.



Plant A



Plant B

- (a) Based only on what is observable in the diagram above, state a difference between plant A and plant B. [1]

- (b) Fill in the blanks with the correct plant parts which perform the function stated in the table below. [3]

Plant parts	Function
(i) _____	Absorb water and nutrients for the plant from the soil.
(ii) _____	Make food for the plant
(iii) _____	Holds the plant upright and supports the branches and leaves



26. The diagram below shows two organisms, E and F.



organism E



organism F

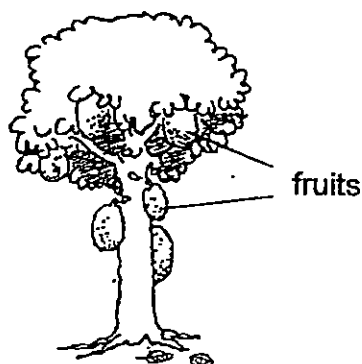
(a) Based only on what is observable, which organism, E or F, can be classified as a plant? Give a reason for your answer.

[1]

(b) State one similarity between organisms E and F.

[1]

Mary classified the plant shown below as a flowering plant.

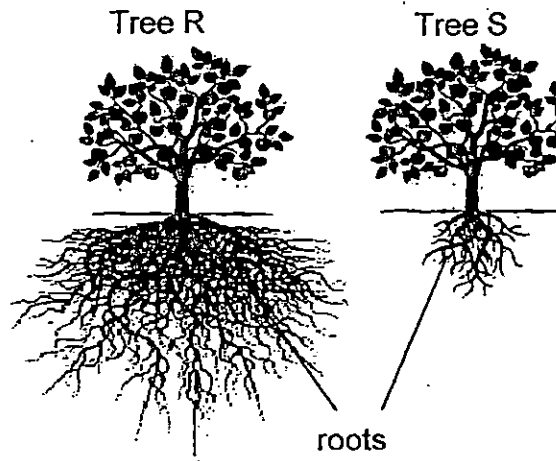


(c) Do you agree with Mary? Explain why.

[1]

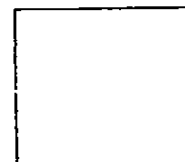


27. Study trees, R and S, as shown below carefully.



(a) Which tree, R or S, would not be uprooted easily during a thunderstorm? [1]

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



28. The diagram below shows a stage that a seed goes through during germination.



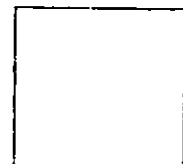
- (a) Write number **1, 2 and 3** next to the parts of the seed stated below to show the order of its growth during seed germination. (1 being the first to grow and 3 being the last to grow) [1]

Shoots: _____

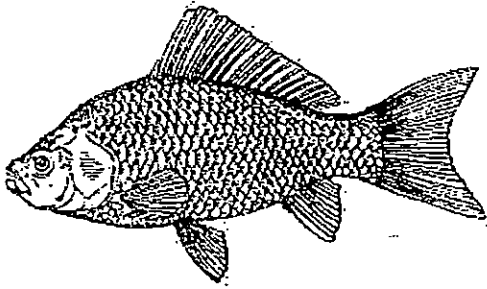
Leaves: _____

Roots: _____

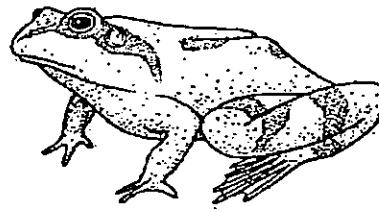
- (b) Is the seed able to make its own food at the stage shown in the diagram above? Give a reason for your answer. [1]



29. The diagram below shows two organisms.



Animal X



Animal Y

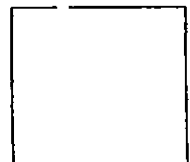
- (a) Based on your observation of the above diagram, state one difference between the two animals in terms of their body covering. [1]

- (b) State the difference between the breathing methods for animal X and animal Y. [2]

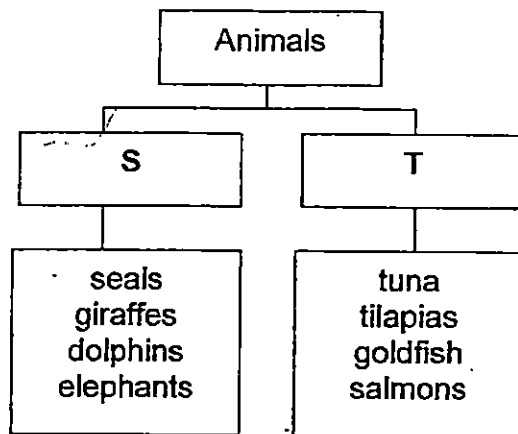
- (c) Which animal group do animal X and animal Y belong to? [1]

Animal X: _____

Animal Y: _____



30. Study the classification chart below.

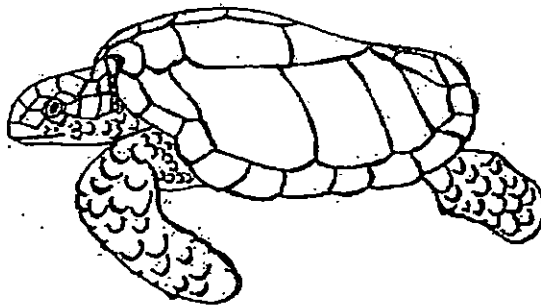


(a) Based on the classification chart above, suggest suitable headings based on the animal groupings for S and T. [1]

S: _____

T: _____

(b) The diagram below shows a turtle.

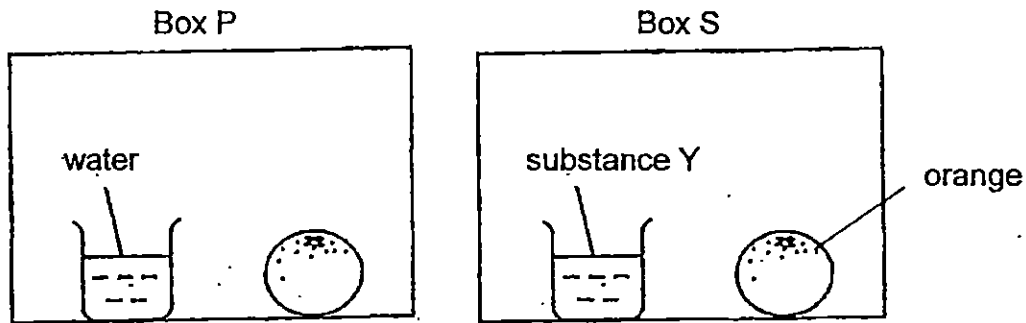


(i) State which group, S or T, you would place a turtle in. [1]

(ii) Give a reason for your answer based on the similar characteristic that a turtle would have with the animals you have grouped it with in (a) above. [1]



31. Amy placed two similar oranges in two identical boxes. She placed both boxes in a room. Substance Y in box S absorbs moisture from the surrounding.



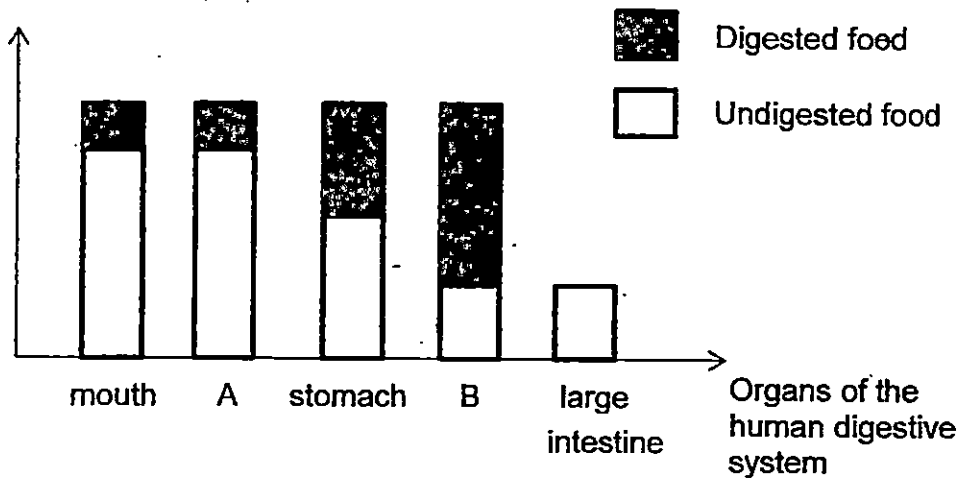
- (a) In which box, P or S, would moulds first appear on the orange? Give a reason for your answer. [2]

- (b) State one other condition that is required for moulds to grow. [1]



32. The bar graph below shows the amount of digested and undigested food in the different parts of the digestive system after a meal is eaten.

Amount of food



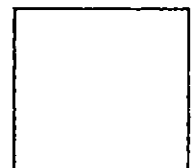
- (a) Based on the graph above, state the organs A and B. [1]

A : _____

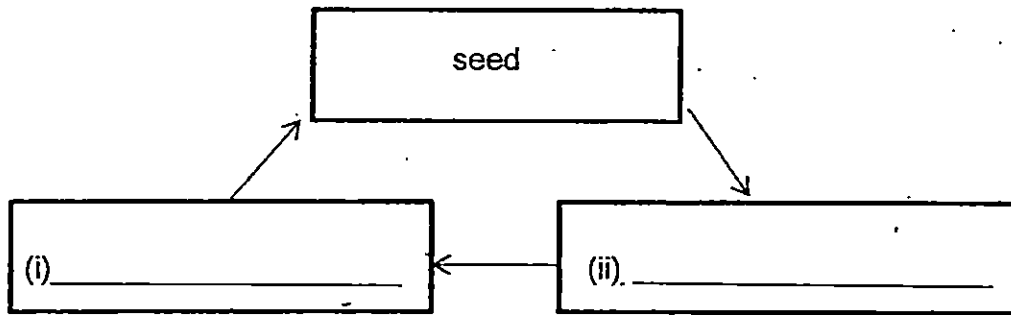
B : _____

- (b) What happens to the food in B after it has been completely digested? [1]

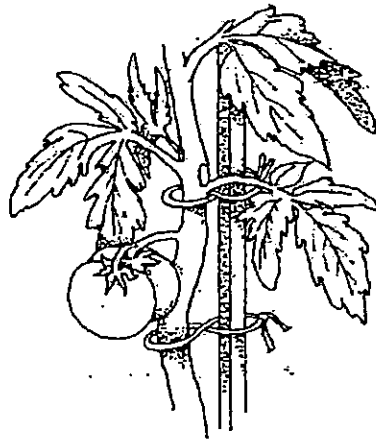
- (c) What is the function of organ A of the digestive system? [1]



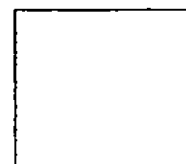
33 (a) Complete the diagram below to show the life cycle of a tomato plant. [2]



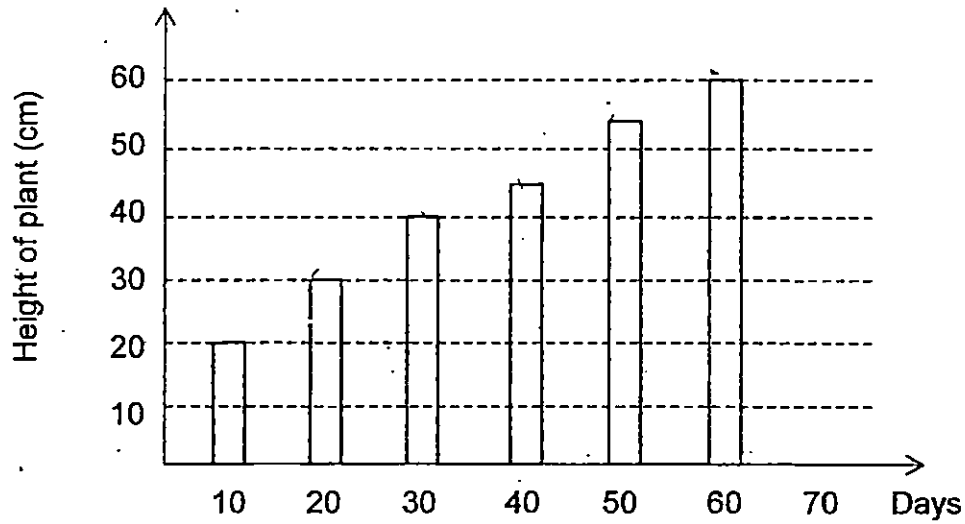
(b) The diagram below shows a tomato plant.



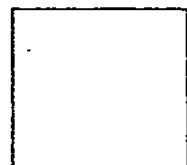
At which stage of the tomato plant's life cycle would the above be observed? Give one reason for your answer. [1]



- (c) Sue planted a tomato seed. She measured the height of the tomato plant for 60 days and represented her results in the form of a bar graph below.



Using only the information given in the graph, state one characteristic of living things the graph shows. [1]

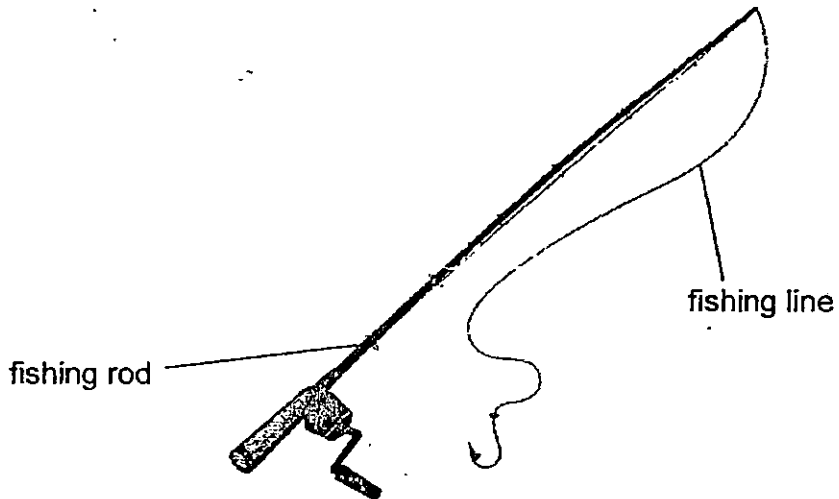


34. Jenny had three similar bags made of materials R, S and T. She added metal balls, one at a time, to each bag until the bag tore. She recorded the number of metal balls needed to make each bag tear in the table below.

Material	Number of metal balls
R	78
S	60
T	90

- (a) Name the property of the materials that Jenny is testing. [1]

- (b) The diagram below shows a fishing rod with a fishing line attached.



Based on the results recorded in the table above, which material is most suitable for making the fishing line? Give a reason for your answer. [2]

End of paper





LEVEL : PRIMARY 3
SCHOOL : CHIJ ST NICHOLAS PRIMARY SCHOOL
SUBJECT : SCIENCE
TERM : SA2

Q 1	Q 2	Q 3	Q 4	Q 5	Q 6	Q 7	Q 8	Q 9	Q 10
2	3	4	4	3	2	4	2	1	1
Q 11	Q 12	Q 13	Q 14	Q 15	Q 16	Q 17	Q 18	Q 19	Q 20
4	2	4	2	4	3	2	2	1	2
Q 21	Q 22	Q 23	Q 24						
3	3	3	1						

Q25a. Plant A has a weak stem whereas Plant B has a strong stem.

Q25b. (i) Roots Q26 (ii) Leaves Q26(iii) Stem

Q26a. Organism E. It has leaves and roots whereas Organism F does not have these.

Q26b. Both reproduce by spores. Q26c. Fertilised flowers will develop into fruits.

Q27a. Tree R.

Q27b. The roots of tree R are deeper and more roots so it can anchor the tree firmly to the ground better than tree S.

Q28a. Shoots : 2 Leaves : 3 Roots: 1 Q28b. No. The true leaves have not opened up yet.

Q29a. Animal X has scales whereas Animal Y has moist skin.

Q29b. Animal Y breathe through lungs and skin.

Q29c. Animal X breathes through gills whereas Animal Y breathe through lungs and skin.

Q30a. S: Mammals T: Fish Q30b. (i) T (ii) A turtle has scales

Q31a. Box P. Mould need moisture to grow. There is no substance Y so moisture remains in Box P therefore mould can grow.

Q31b. Air Q32a. A: gullet B: small intestine

Q32b. It will absorb the digested food into the bloodstream and transported to all parts of the body through the circulatory system .

Q32c. The gullet transports the food from the mouth to the stomach.

Q33a. (i) adult plant (ii) young plant

Q33b. Adult plant . Once it is an adult plant, it will produce fruits.

Q33c. Living things grow. Q34a. The strength of the materials .

Q34b. Material T, as it is the strongest and could hold the most number of metal balls before it broke..