



Rosyth School
Second Semestral Examination for 2015
SCIENCE
Primary 3

Name: _____

Class: Pr 3 - _____ Register No. _____ Duration: 1 h 30 min

Date: 2 November 2015

Parent's Signature: _____

Booklet A

Instructions to Pupils:

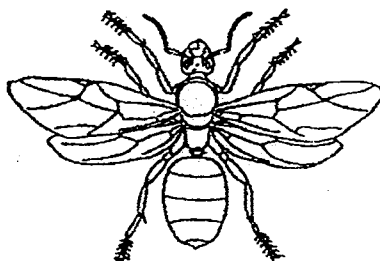
1. Do not open the booklets until you are told to do so.
2. Follow all instructions carefully.
3. This paper consists of 2 booklets, Booklet A and Booklet B.
4. For questions 1 to 24 in Booklet A, shade the correct ovals on the Optical Answer Sheet (OAS) provided using a 2B pencil.

*** This booklet consists of 14 pages.**

Booklet A (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) and shade the correct oval (1, 2, 3 or 4) on the Optical Answer Sheet (OAS).

1. Amy found animal W in her garden.



animal W

Which one of the following observations would help her confirm that animal W is an insect?

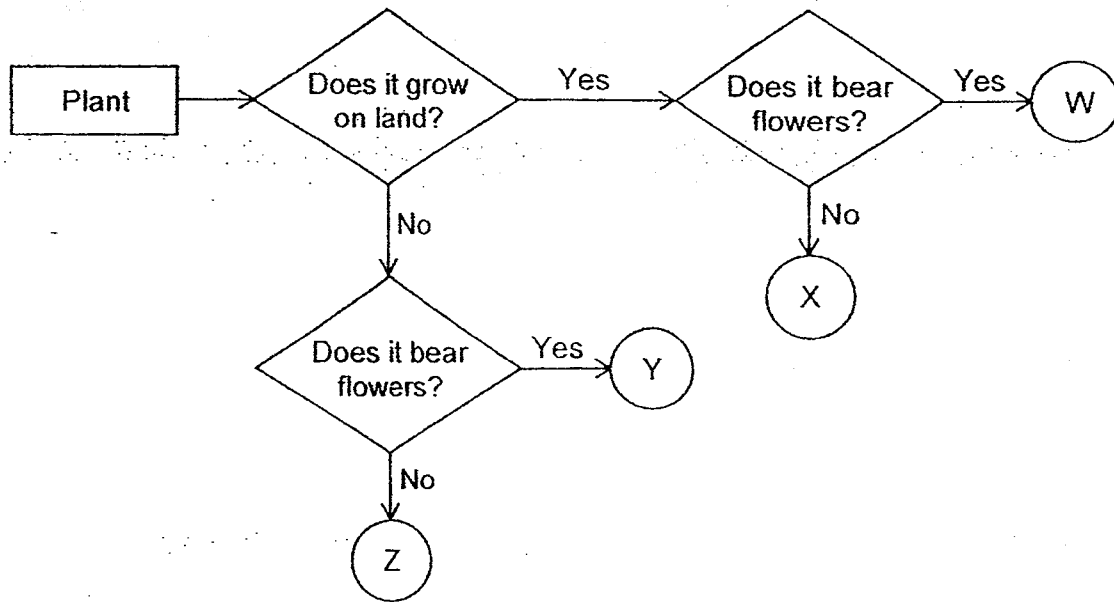
- (1) It has eyes.
 - (2) It has wings.
 - (3) It has 3 body parts.
 - (4) It has hairs on its legs.
2. Which one of the following statements is true about mould and fern?
- (1) Both of them have leaves.
 - (2) Both of them produce flowers.
 - (3) Both of them make their own food.
 - (4) Both of them reproduce from spores.
3. The classification table below shows the characteristics of four things, A, B, C and D.

Things	Does it make its own food?	Does it move on its own?	Does it change in size?
A	No	Yes	Yes
B	No	No	Yes
C	Yes	Yes	Yes
D	No	No	No

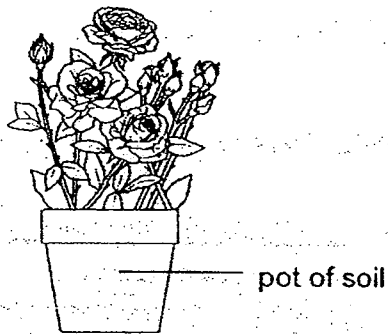
Which of the above things are most likely to be living things?

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

4. Study the flow chart below carefully.



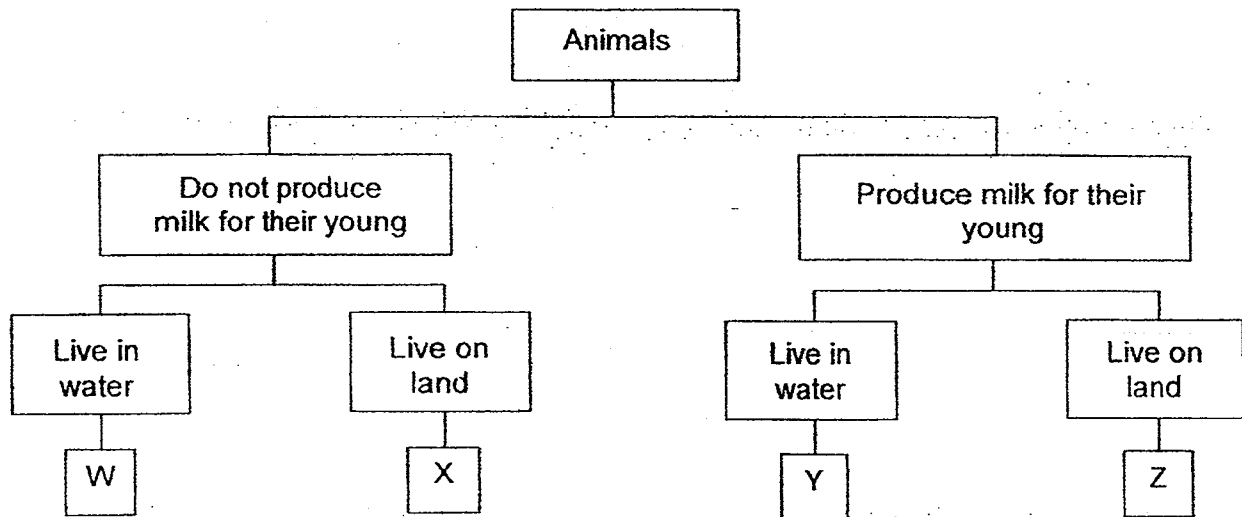
Which letter, W, X, Y or Z, best represents the plant shown below?



- (1) W
- (3) Y

- (2) X
- (4) Z

5. The classification chart below shows how some animals are classified into groups W, X, Y and Z.



Sally saw an animal with the following characteristics :

- Has hair as body covering
- Can only live in water

Based on the information above, in which group should Sally classify the animal that she had seen?

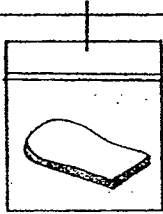
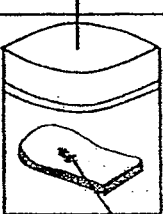
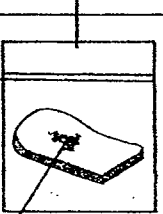
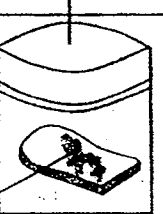
- (1) W
(3) Y

- (2) X
(4) Z

6. Amy, Betty and Cindy conducted an experiment to find out more about bread mould. They used four clear, identical plastic bags and four similar slices of bread.

They toasted two slices of bread in a toaster until they were very dry and left them to cool down.

They then put each slice of bread in a plastic bag as shown below and observed the bread mould growing on the bread after 6 days. They recorded their observations in the table below.

	bread A	bread B	bread C	bread D
	toasted	toasted	not toasted	not toasted
	sealed bag	open bag	sealed bag	open bag
Amount of bread mould observed after 6 days				

bread mould on each slice of bread

Which one of the following statements is correct?

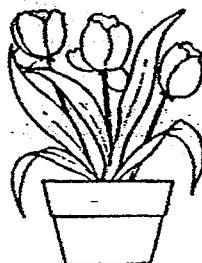
- (1) Bread mould does not grow when the bag is sealed.
- (2) Bread mould does not grow when the bread is toasted.
- (3) Bread mould grows better when the bread is not toasted.
- (4) Bread mould grows best when the bread is toasted and is put into an open bag.

7. Which one of the following is not a system?

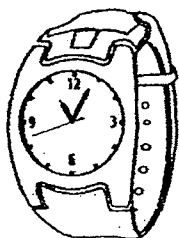
(1)



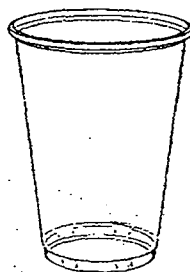
(2)



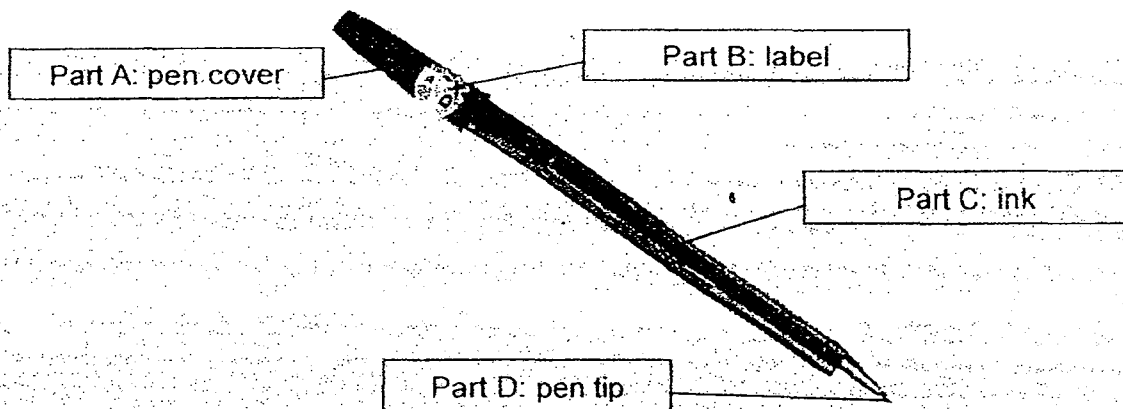
(3)



(4)



8. The diagram below shows a pen.



Which of the following parts, when removed, will not affect its writing function?

- 1) A and B only
- 3) B and C only

- 2) A and D only
- 4) B and D only

9. Which one of the following is not part of the human respiratory system?

- | | |
|-----------|--------------|
| (1) nose | (2) lungs |
| (3) heart | (4) windpipe |

10. Which two systems work together to allow Brian to walk up the stairs?

- A: Skeletal system
- B: Muscular system
- C: Digestive system
- D: Respiratory system

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

11. Which one of the following statements about the human digestive system is true?

- (1) Digested food is absorbed into the bloodstream.
- (2) The large intestine absorbs water from the digested food.
- (3) Solid waste is stored in the small intestine before it is passed out.
- (4) The gullet squeezes the food into smaller pieces as it is pushed down to the stomach.

12. David describes an organ in the digestive system as shown below.

I am the longest organ in the digestive system. Digestive juices are added to the food here. I also absorb most of the nutrients from the digested food.

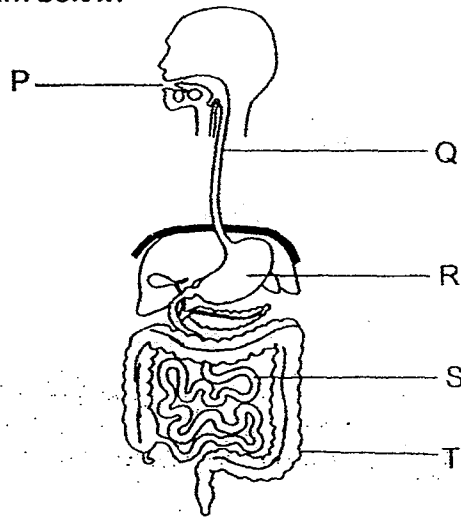
Which organ best represents David's description?

- (1) gullet
- (2) stomach
- (3) small intestine
- (4) large intestine

13. Which organ is not doing its function well when someone is having difficulty in passing out the faeces?

- | | |
|---------------------|---------------------|
| (1) anus | (2) mouth |
| (3) small intestine | (4) large intestine |

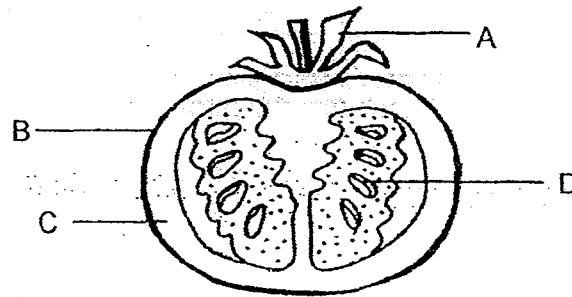
14. Study the diagram below.



In which parts of the diagram, P, Q, R, S or T, do digestion take place?

- | | |
|---------------------|---------------------|
| (1) P and R only | (2) R and S only |
| (3) P, R and S only | (4) R, S and T only |

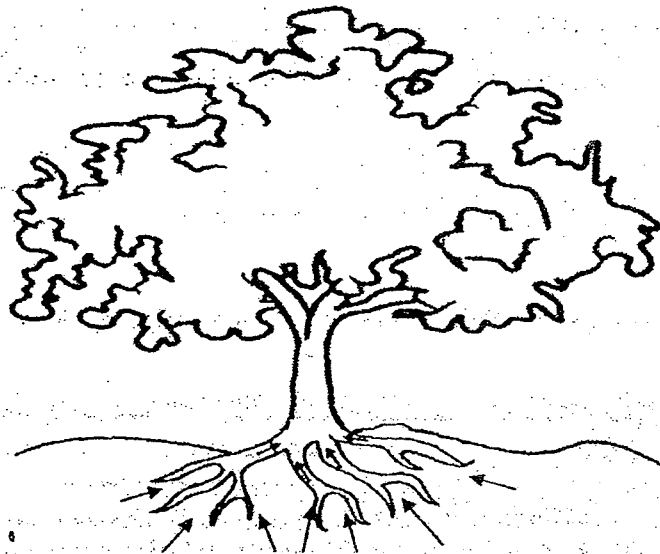
15. The diagram below shows a cut section of a fruit.



Which part of the fruit will grow into a new plant?

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

16. Study the picture below carefully.



What do the arrows above represent?

- A: movement of food
 B: movement of water
 C: movement of oxygen
 D: movement of mineral salts





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

17. Which of the following statements are the correct functions of a stem?

- A: It supports the plant.
 B: It holds the plant firmly to the ground.
 C: It transports food and water to different parts of the plant.

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

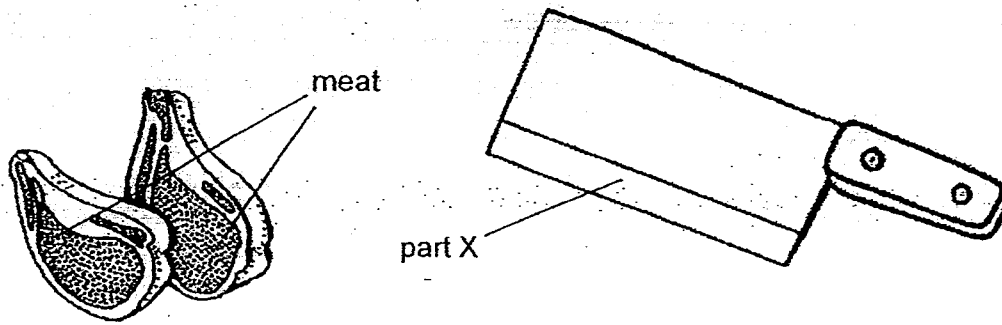
18. Alex conducted an experiment on four similar plants kept under different conditions as shown in the table below.

	plant W	plant X	plant Y	plant Z
				
Where is it kept?	In the open	In a cardboard box	In the open	In a cardboard box
Is it watered daily?	Yes	No	No	Yes

Which plant would most likely wilt first?

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

19. Tim used part X of the knife to cut some meat as shown below.



Part X of the knife is made of metal. Which property of metal makes it suitable to cut the meat?

- (1) strong
 - (2) flexible
 - (3) transparent
 - (4) able to float
20. Meena placed a bar magnet close to a copper coin as shown in the diagram below.



bar magnet

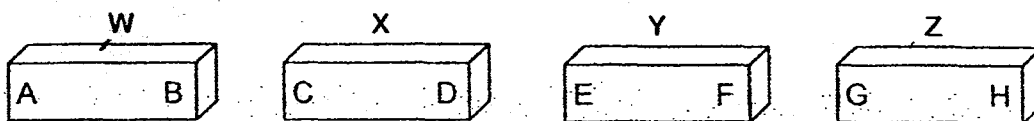


copper coin

Which of the following is likely to happen?

- (1) The copper coin does not move at all.
- (2) The bar magnet moves towards the copper coin.
- (3) The copper coin moves towards the bar magnet.
- (4) The copper coin moves away from the bar magnet.

21. Siti was given four metal bars, W, X, Y and Z. The two ends of each bar were labelled accordingly as shown below.



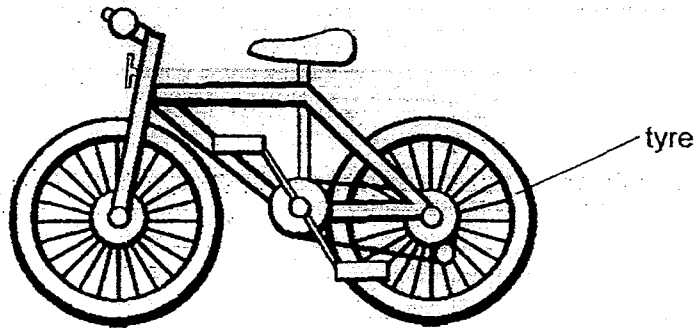
She brought the ends of the metal bars close to each other and noted her observations in the table below.

Ends brought close to each other	Observation
A and G	attract
B and C	repel
B and E	attract
C and F	attract
D and H	repel
G and D	attract

Based on the results above, which metal bar is not a magnet?

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

22. The picture below shows a bicycle.



Four materials, A, B, C and D are being considered to make the tyre of the bicycle. They have different properties as shown in the table below.

Material	Properties			
	Strong	Flexible	Fragile	Waterproof
A	✓		✓	✓
B		✓		
C		✓		✓
D	✓	✓		✓

Which material is the most suitable for making the tyre of the bicycle?

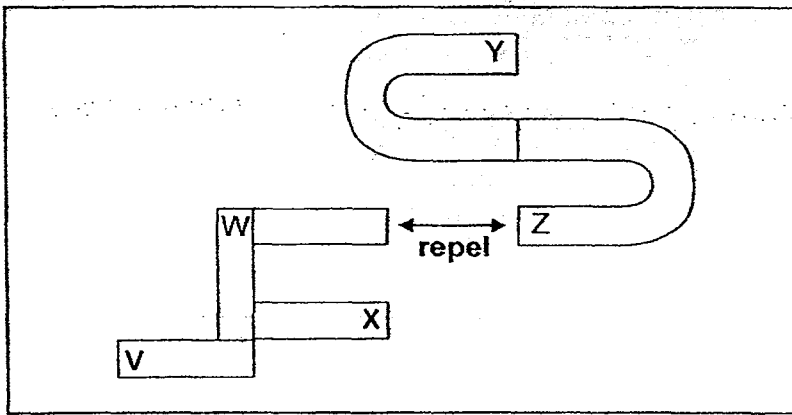
(1) A

(2) B

(3) C

(4) D

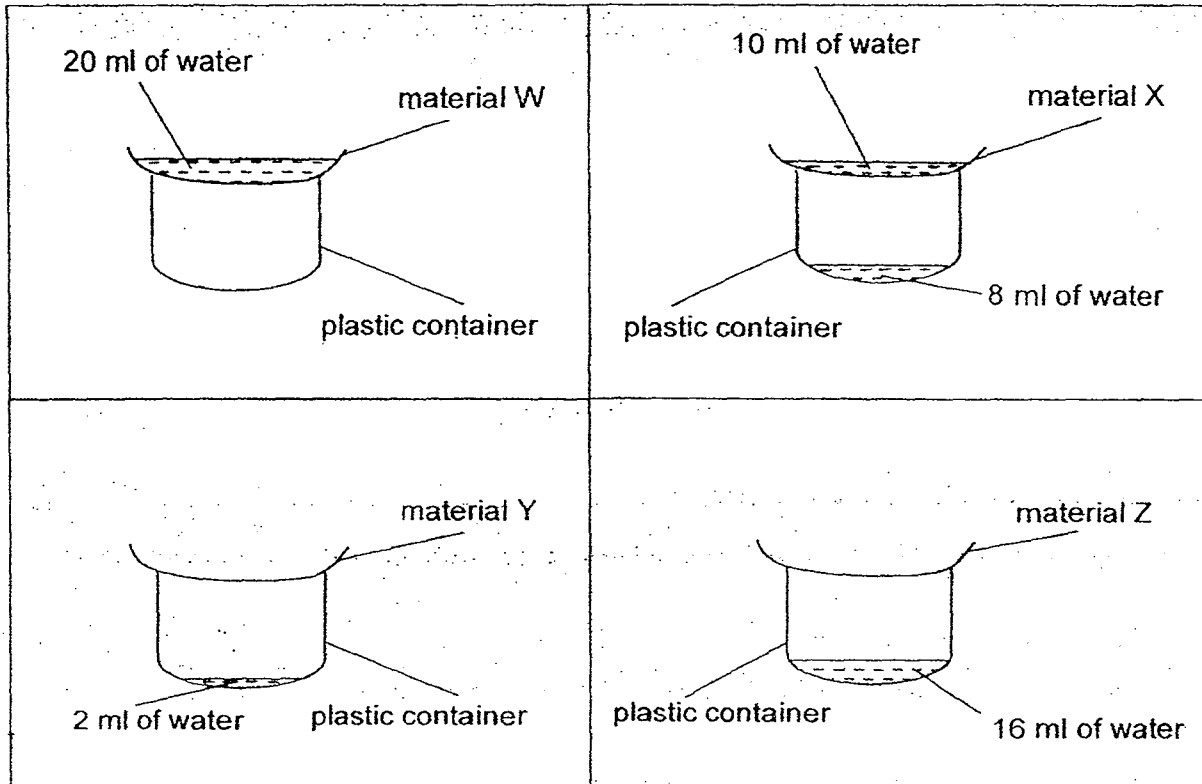
23. Chong Ming arranged four similar bar magnets and two similar U-shaped magnets as shown below.



If V is the S-pole, which of the following correctly shows the poles of W, X, Y and Z?

	W	X	Y	Z
(1)	N-pole	S-pole	S-pole	N-pole
(2)	N-pole	N-pole	N-pole	S-pole
(3)	S-pole	N-pole	N-pole	S-pole
(4)	S-pole	S-pole	N-pole	S-pole

24. Alex carried out an experiment with four sheets of different materials, W, X, Y and Z. The materials are of the same size. He put each sheet of material over a plastic container as shown below and poured 20 ml of water onto it. Five minutes later, he observed the following.



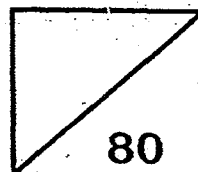
Based on the results of his experiment, which material is most suitable for making a towel?

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

End of Booklet A



Rosyth School
Semestral Examination for 2015
SCIENCE
Primary 3



Name: _____

Marks: _____

Class: Pr 3 - _____ Register No. _____ Duration: 1 h 30 min

Date: 2 November 2015

Parent's Signature: _____

Booklet B

Instructions to Pupils:

1. For questions 25 to 34, write your answers in the spaces given in this booklet.

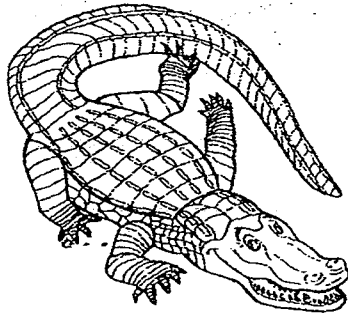
	Maximum	Marks Obtained
Booklet A	48 marks	
Booklet B	32 marks	
Total	80 marks	

* This booklet consists of 11 pages.

Booklet B (32 MARKS)

For questions 25 to 34, write your answers in this booklet.

25. Look at the two animals shown below.



animal A



animal B

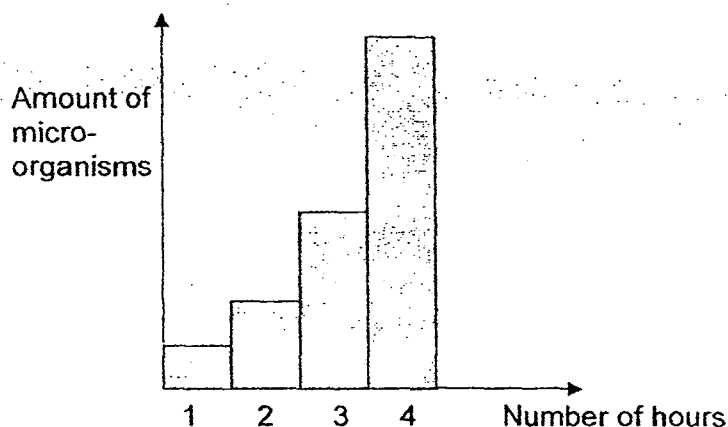
State two similarities and one difference between the two animals based on the following characteristics.

(i) Similarity 1 based on the number of legs: (1m)

(ii) Similarity 2 based on a characteristic of living things: (1m)

(iii) Difference based on their body coverings: (1m)

26. Ahmad used a microscope to examine his dead fish. He found some micro-organisms on it. He observed that the micro-organisms multiplied very quickly. The graph below shows his findings.

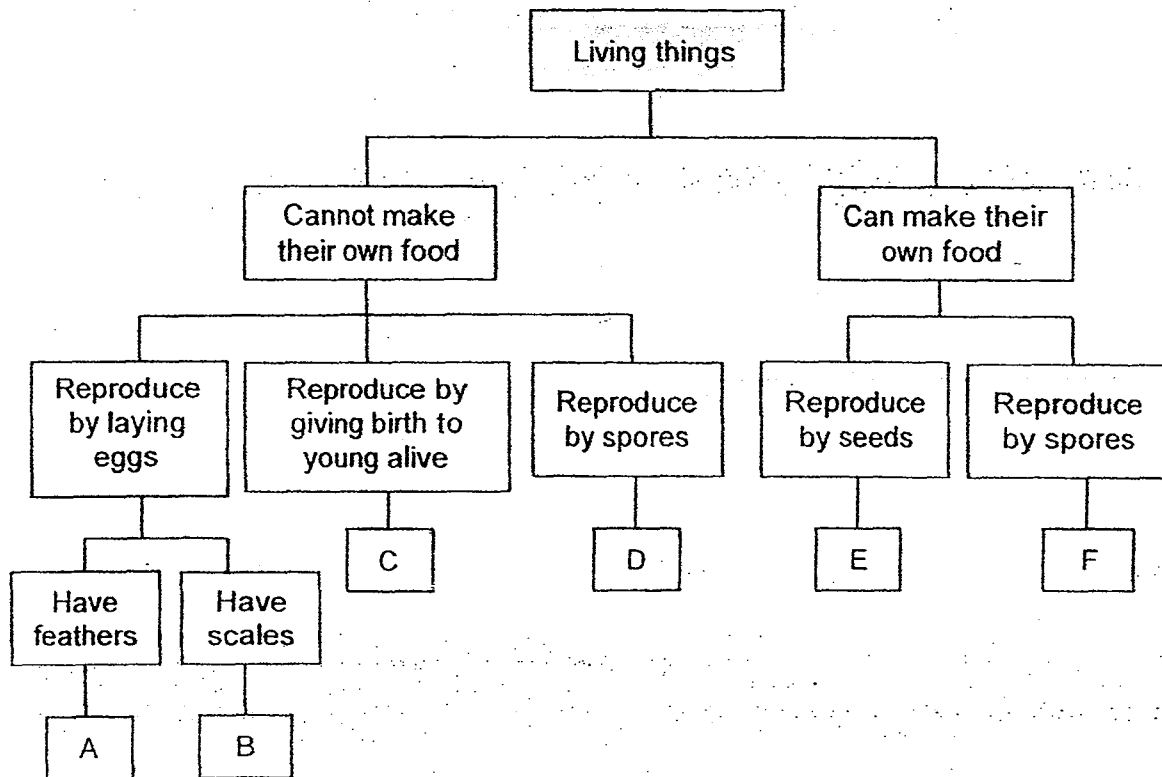


- (a) From the graph above, describe the change in the amount of micro-organisms from the Hour 1 to Hour 4. (1m)

- (b) Based on Ahmad's observation, which group of living things should the micro-organisms be classified under? (1m)

- (c) Based on the graph, what is the characteristic of living things observed in this experiment? (1m)

27. Study the classification chart below.



- (a) Besides being able to reproduce by laying eggs and having feathers, state another characteristic special to the living things in group A. (1m)

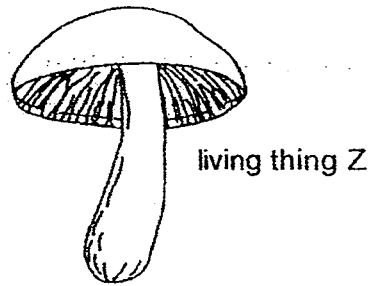
- (b) Based on the chart, which of the following living things in the table below can be best represented by groups C and E? (Write C and E in the table below once only.) (2m)

Living Things			
Flowering plants	Non-Flowering plants	Mammals	Fish

Question 27 continues on page 4

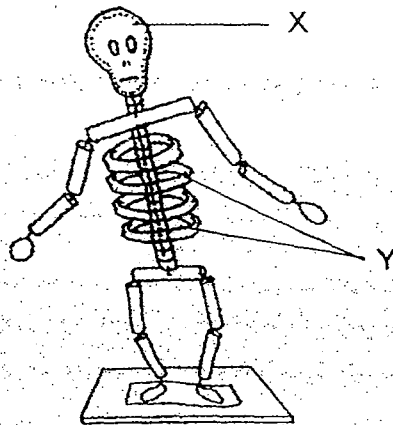
Question 27 continues from page 3

Simon studied about living thing Z shown below.



- (c) He said that living thing Z should be placed in group D. Do you agree with him? Explain why. (1m)

28. Charlie made a straw model of the skeletal system as shown below.

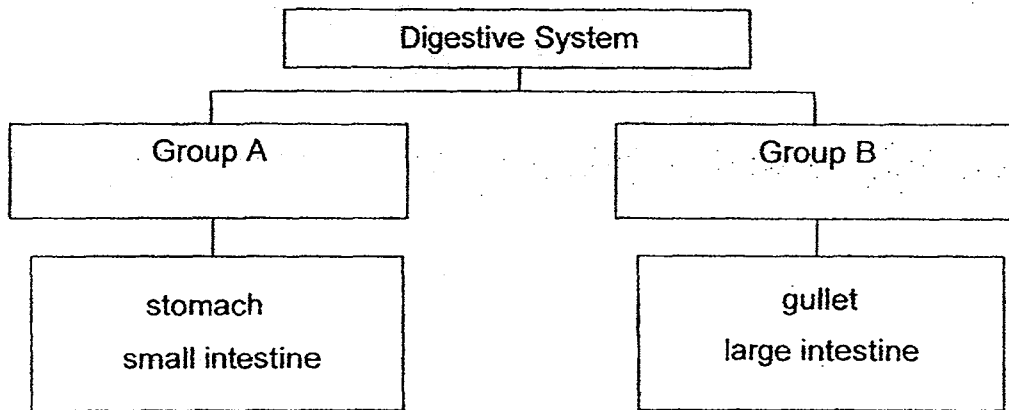


Identify the parts labelled X and Y and state which organ they protect in a human.

Part	Identification of labelled part	Which organ it protects
X		
Y		

(2m)

29. Jane classified the parts of the human digestive system as shown below.



(a) Provide a suitable heading for the following:

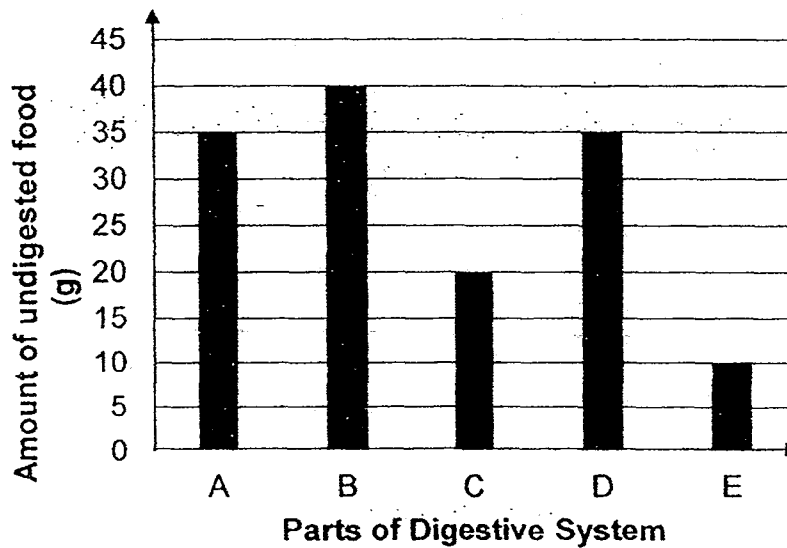
Group A:

Group B:

(2m)

(b) Jane wanted to include windpipe in Group A. Do you agree with her? Explain why. (1m)

30. The graph below shows the amount of undigested food as it enters each part of the human digestive system. (The parts of the digestive system are not arranged in any order)

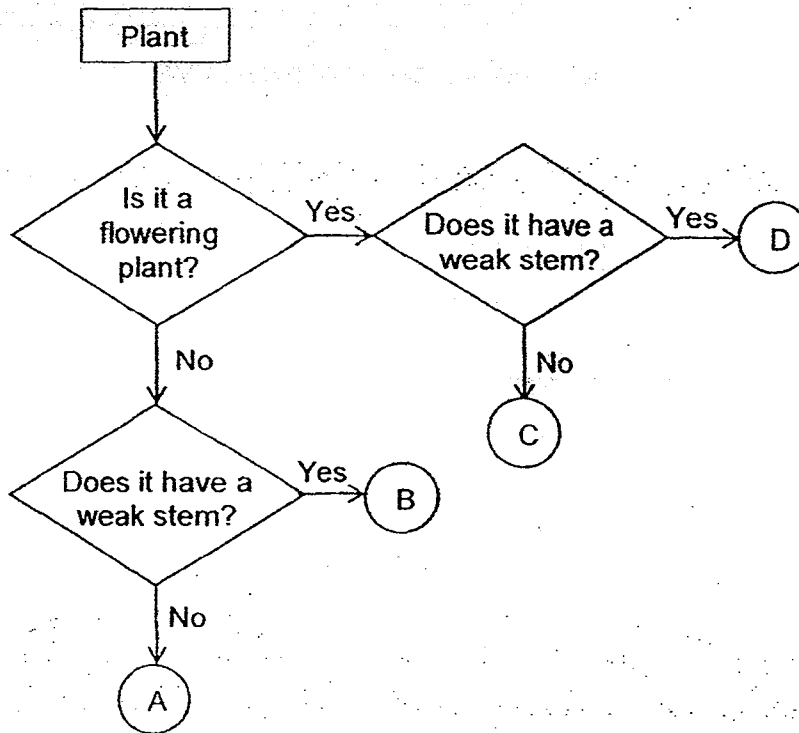


- (a) Based on the graph, name the parts of the digestive system. (3m)

Parts	Parts of the digestive system
A	
B	
C	
D	gullet
E	

- (b) What would happen to the undigested food after part E? (1m)

31. Study the flowchart below.



(a) State the characteristics of plant A.

(1m)

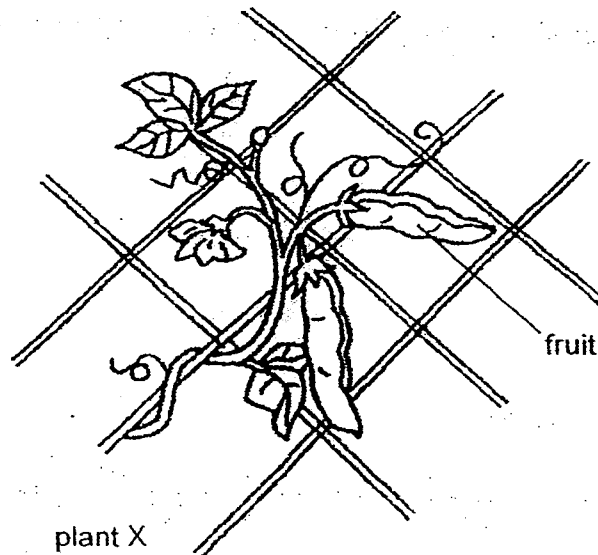
(b) State the difference between plant B and plant D.

(1m)

Question 31 continues on page 8

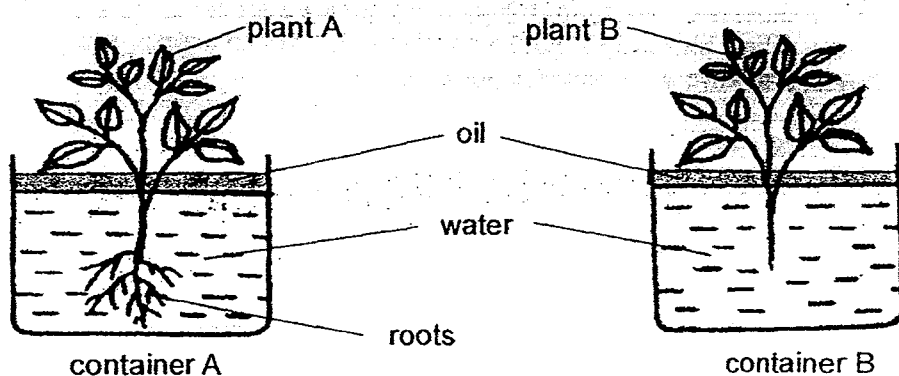
Question 31 continues from page 7

(c) Mrs Lim bought plant X and it grew in her garden as shown below.



Based on the flowchart, which letter, A, B, C or D, would best represent plant X? Explain why. (1m)

32. Charlie set up an experiment as shown below.



He recorded the volume of water in containers A and B on Day 1 and Day 5. The results were recorded in the table as shown below.

	Volume of water on Day 1 (ml)	Volume of water on Day 5 (ml)
Container A	30 ml	20 ml
Container B	30 ml	30 ml

(a) Why was there no change in the volume of water in container B? (1m)

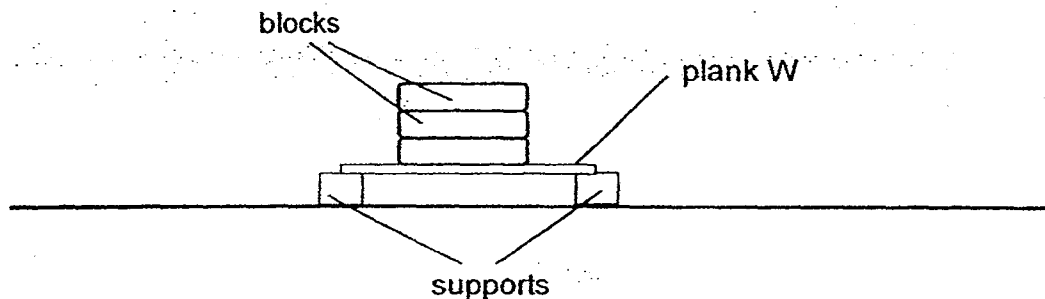
(b) From the experimental results above, what could Charlie infer about the function of the roots in a plant? (1m)

(c) What would Charlie observe about the two plants after one week. (2m)

Plant A:

Plant B:

33. Mike set up an experiment to find out the properties of three planks W, X and Y which are made of different materials. He placed plank W on supports as shown in the diagram below. Then he placed blocks on plank W, one at a time, until it broke. He repeated the experiment with plank X and plank Y.



The table below shows the number of blocks that each plank could hold without breaking.

Plank	Number of blocks it could hold without breaking
W	2
X	7
Y	4

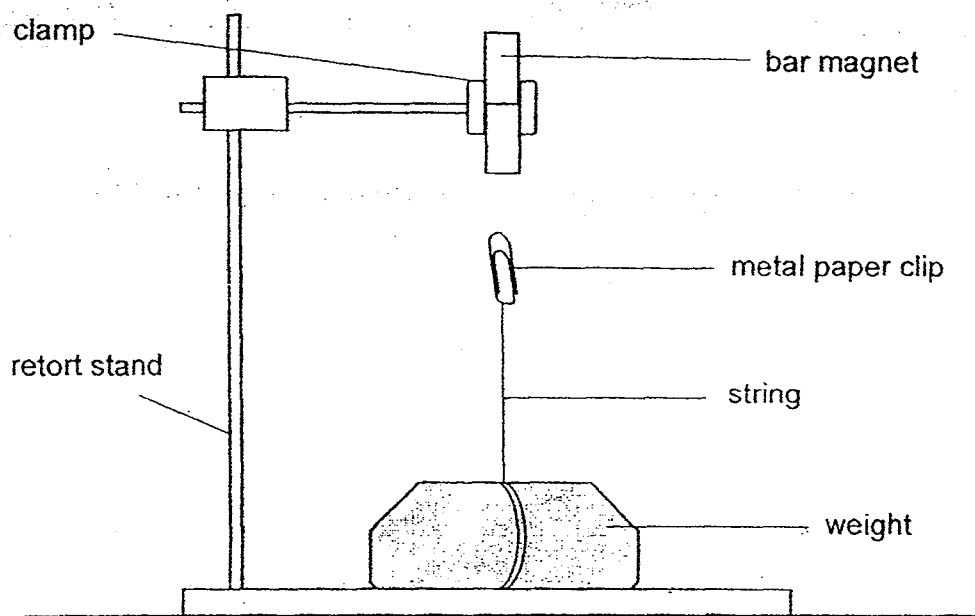
- (a) Name the property of material tested in the experiment. (1m)

- (b) Arrange the planks W, X and Y according to their ability to hold the blocks without breaking. (1m)

, ,
 weakest

- (c) Which plank W, X or Y is the most suitable for making a bookshelf? Explain your choice. (1m)

34. Weilin set up an experiment as shown in the diagram below.



- (a) Explain why the paper clip could float in the air as shown in the diagram above. (1m)

Weilin removed the magnet and dropped it onto the floor several times. When she placed the magnet back on the clamp, she noticed that the paper clip was no longer able to float in the air.

- (b) Based on Weilin's observation, what has happened to the magnet after being dropped on the floor? (1m)

- (c) Without changing the magnet or adding anything to the set-up, what can Weilin do to make the paper clip float in the air again? (1m)

End of Paper

EXAM PAPER 2015**LEVEL : PRIMARY 3****SCHOOL : ROSYTH 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
3	4	2	1	3	3	4	1	3	1
Q 11	Q 12	Q 13	Q 14	Q 15	Q 16	Q 17	Q 18	Q 19	Q 20
1	3	4	3	4	2	2	2	1	1
Q 21	Q 22	Q 23	Q 24						
3	4	1	3						

Q25. (i) Both animal A and B have four legs. Q25. (ii) Both of them move by themselves.

Q25. (iii) Animal A has scales while animal B has skin.

Q26a. The amount of micro-organisms increased from Hour 1 to Hour 4.

Q26b. Bacteria. Q26c. Living things reproduce. Q27a. They have a beak.

Q27b. E, F, C, B

Q27c. Yes. Because it reproduces by spores and cannot make its own food.

Q28. X: Skull / Brain Y: Rib cage / Heart, lungs

Q29a. Group A : involved in digestion Group B: not involved in digestion

Q29b. No. Because windpipe is not in the digestive system.

Q30a. A: stomach B: mouth C: small intestine E: large intestine

Q30b. It will be passed out through the anus.

Q31a. Plant A is not a flowering plant and does not have a weak stem.

Q31b. Plant B is a non – flowering plant while plant D is a flowering plant.

Q31c. D. Because it has a weak stem and bears flowers.

Q32a. Plant B has no roots so no water can be absorbed. Q32b. The roots absorb water

Q32c. Plant A: It will grow. Plant B: It will wilt and die. Q33a. Strength

Q33b. W (weakest), Y, X

Q33c. X. Because it is the strongest material since it could hold the most number of blocks without breaking.

Q34a. Because the bar magnet is attracting the metal paper clips.

Q34b. The magnet lost its magnetism Q34c. Put the magnet closer to the metal paper clips.

