



Rosyth School
Second Semestral Examination for 2016
SCIENCE
Primary 3

Name: _____

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

Date: 1 November 2016 Parent's Signature: _____

Booklet A

Instructions to Pupils:

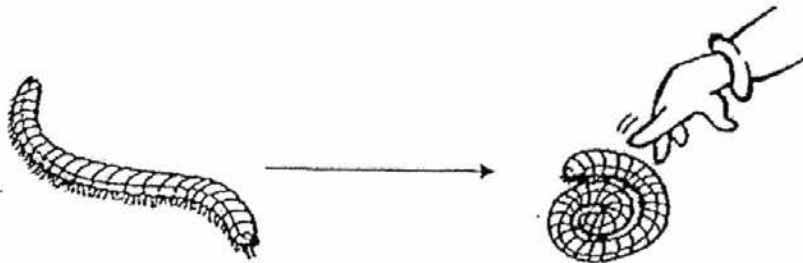
1. Do not open the booklets until you are told to do so.
2. Follow all instructions carefully.
3. This paper consists of 2 booklets, Booklet A and Booklet B.
4. For questions 1 to 23 in Booklet A, shade the correct ovals on the Optical Answer Sheet (OAS) provided using a 2B pencil.

* This booklet consists of 18 printed pages (including cover page).

Booklet A (46 marks)

For each question from 1 to 23, 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. A millipede curls up when it is touched to protect itself.



Which characteristic of living things does it show?

- (1) Living things grow.
- (2) Living things reproduce.
- (3) Living things respond to changes.
- (4) Living things need air, food and water to survive.

2. The table below shows some characteristics of animal P, Q, R and S.

Animal	Characteristics	
P	Has a tail	No legs
Q	Has wings	Two legs
R	Has a beak	Two legs
S	Has antennae	Six legs

David found a picture of an animal as shown below.

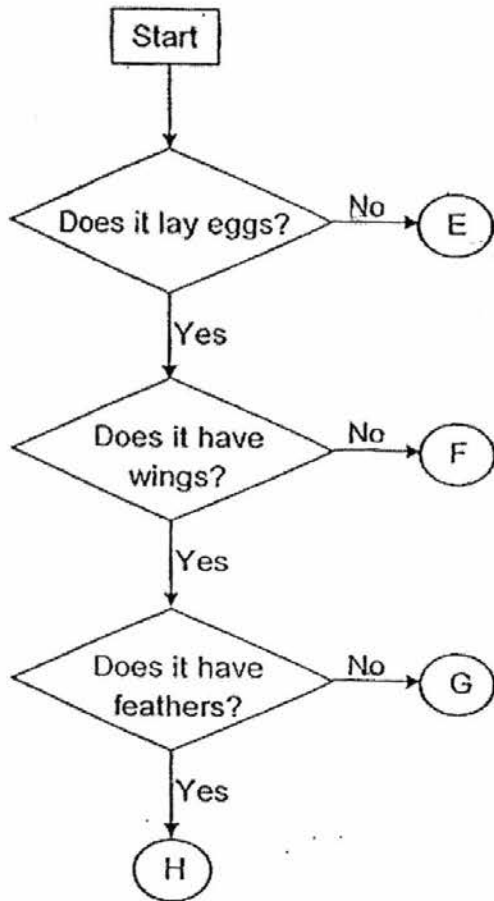


Which animal, P, Q, R or S, has similar characteristics as the above animal?

- (1) P
- (3) R

- (2) Q
- (4) S

3. Study the flow chart below.



Which letter, E, F, G or H, best represents a bird?

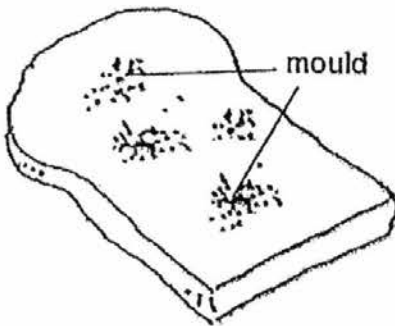
- (1) E
- (3) G

- (2) F
- (4) H

4. Which one of the following statements is true about ferns?

- (1) They are plants.
- (2) They bear fruits.
- (3) They reproduce by seeds.
- (4) They cannot make their own food.

5. Study the diagram below.



bread mould



mushroom

Which of the following statements are true about both of them?

- A: Both are non-living things.
- B: Both reproduce by spores.
- C: Both are non-flowering plants.
- D: Both do not make their own food.

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

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

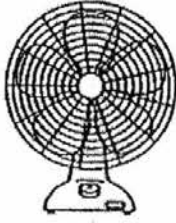




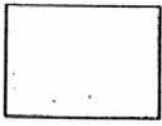


6. Tammy placed a slice of bread in a plastic bag and kept in a dark room. She did the same for three other slices but changed the amount of water dropped on the bread. She observed and recorded the number of days the bread took to turn mouldy as shown in the table below.

Bread	Volume of water (ml)	Number of days the bread took to turn mouldy
A	0	7
B	2	5
C	4	4
D	6	3

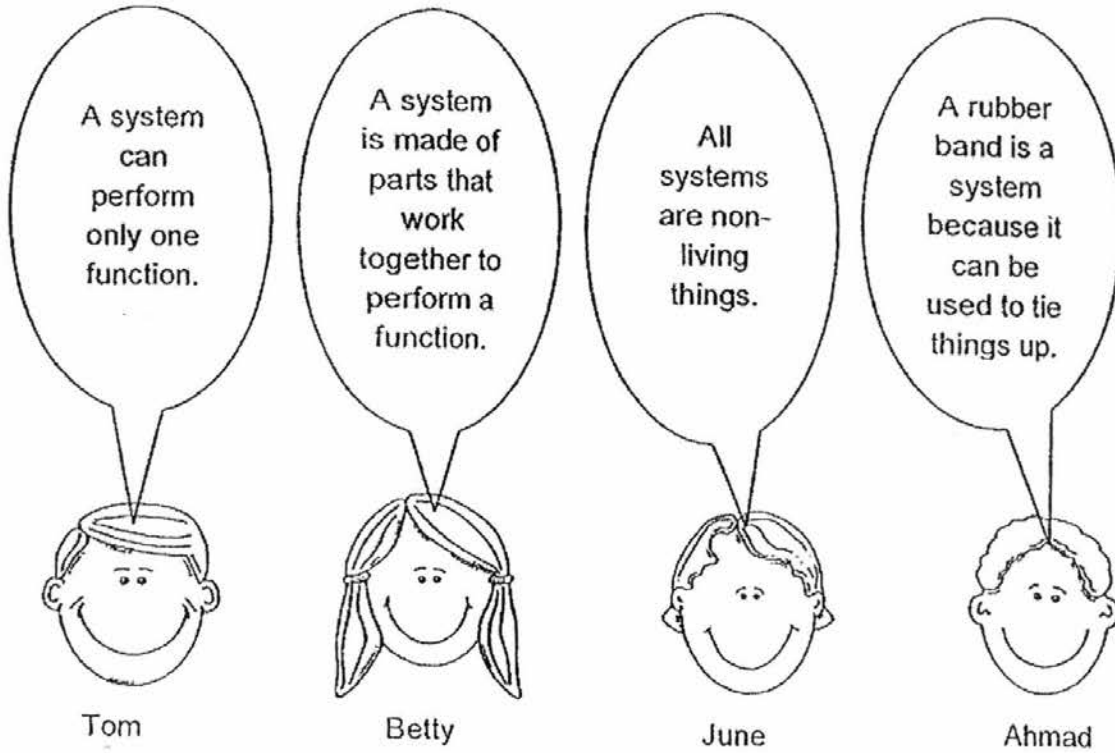
Which one of the following is a correct statement?

- (1) Mould does not need water to grow.
- (2) Bread A was the last to turn mouldy.
- (3) Mould grows best in dry and dark conditions.
- (4) The smaller the volume of water was added, the faster the bread turned mouldy.

7. Look at the pictures below. Which of the following correctly shows a system and a non-system?

	System	Non-system
(1)	 fan	 pencil
(2)	 paper clip	 chair
(3)	 pen	 a piece of plastic
(4)	 ruler	 sharpener

8. Four students made the following statements about a system.

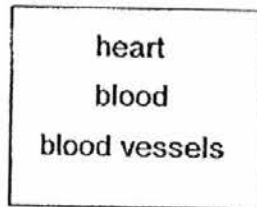


Who made the correct statement?

- (1) Tom
- (3) June

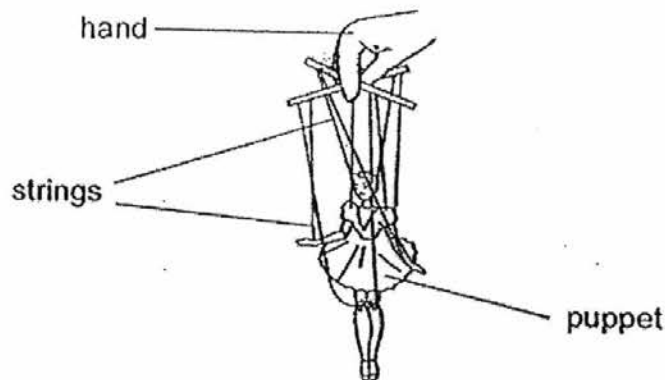
- (2) Betty
- (4) Ahmad

9. The box below shows the parts of a human body system.



Which of the following best describes the function of the above body system?

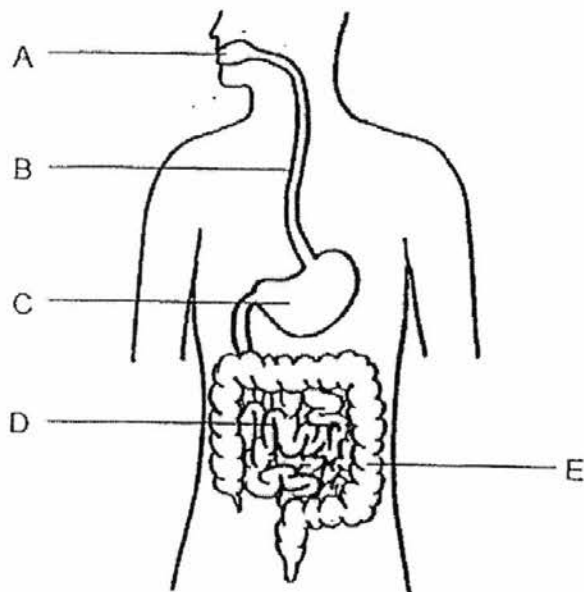
- (1) It takes in oxygen for the body.
 - (2) It protects the organs in the body.
 - (3) It enables the different parts of the body to move.
 - (4) It carries digested food, oxygen and water to all parts of the body.
10. Jean held a string puppet as shown below. She moved the strings attached to the hands and legs of the puppet up and down to make it move.



Which two human body systems work the same way as the string puppet to enable it to move?

- (1) digestive system and skeletal system
- (2) muscular system and skeletal system
- (3) circulatory system and muscular system
- (4) respiratory system and muscular system

Refer to the diagram below (human body's digestive system) and answer Questions 11 and 12.



11. Which parts of the above diagram, A, B, C, D or E, do not produce digestive juices?

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

12. Which of the following sets best describes what takes place at B, C and D?

	B	C	D
(1)	Allows food to flow through	Digested food is absorbed into blood stream	Digestion takes place
(2)	Digestion takes place	Allows food to flow through	Digested food is absorbed into blood stream
(3)	Digested food is absorbed into blood stream	Digestion takes place	Allows food to flow through
(4)	Allows food to flow through	Digestion takes place	Digested food is absorbed into blood stream

13. Which of the following statement(s) correctly describe(s) the functions of the saliva in the mouth?

X : It softens the food.
 Y : It helps to digest the food.
 Z : It removes the water from food.

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

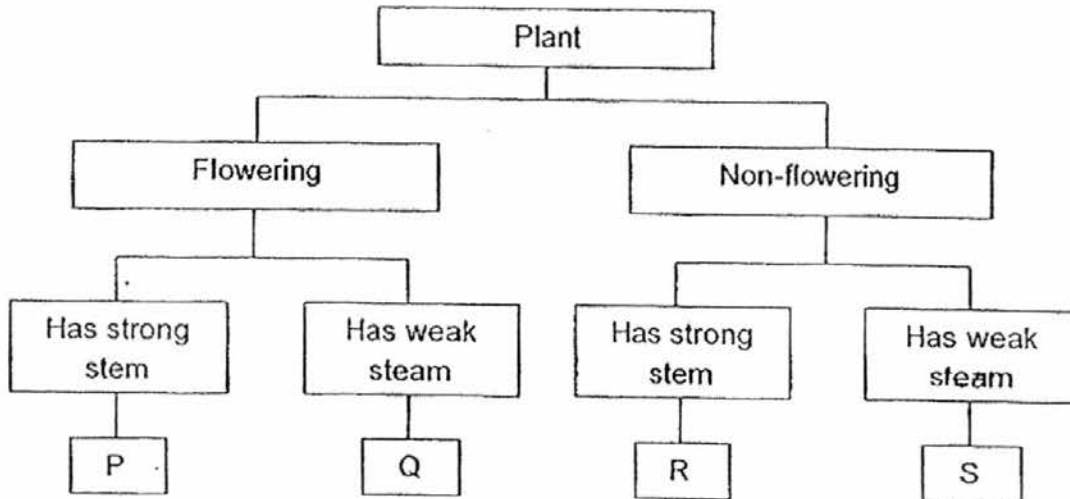
14. The table below shows what happens in the small intestine and the large intestine when food passes through the digestive system.

	small intestine	large intestine
W	Food is being digested	Food is completely digested
X	Food is completely digested	Water from the undigested food is removed
Y	It passes digested food to the large intestine for further digestion	Undigested food is absorbed into the blood stream

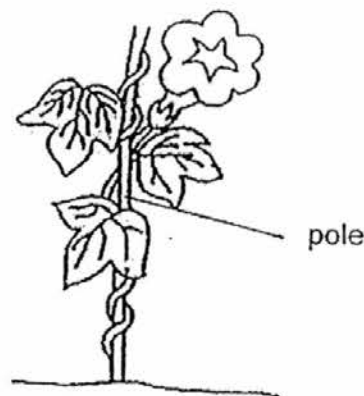
Which of the following is/are correct?

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

15. Study the classification chart carefully.



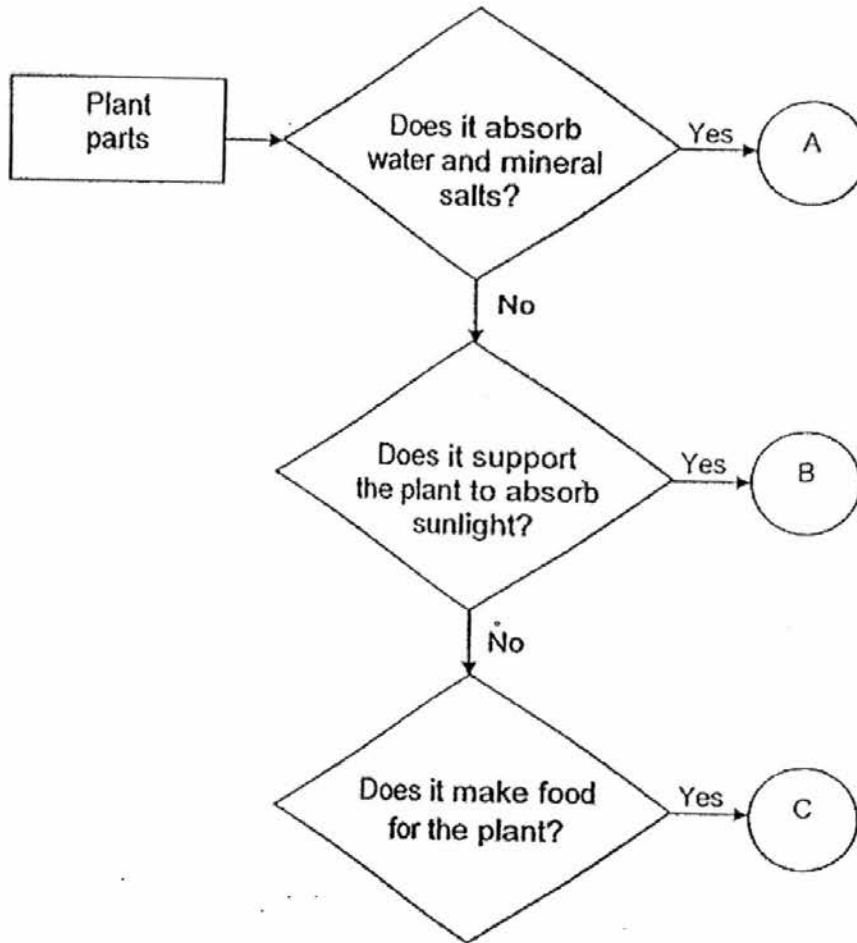
Which group does the plant shown below belong to?



- (1) P
- (3) R

- (2) Q
- (4) S

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



Which of the following best represents plant parts A, B and C?

	A	B	C
(1)	stem	root	leaf
(2)	stem	leaf	root
(3)	root	leaf	stem
(4)	root	stem	leaf

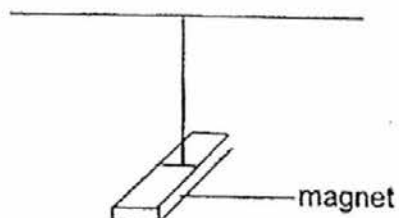
17. Siti carried out an experiment on four potted plants, P, Q, R and S, by changing the conditions as shown in the table below.

A tick (✓) shows the presence of the condition and a cross (✕) shows an absence of the condition.

Plant	Air	Water	Sunlight
P	✓	✕	✓
Q	✕	✓	✓
R	✓	✓	✕
S	✓	✓	✓

Which plant is most likely to survive the longest?

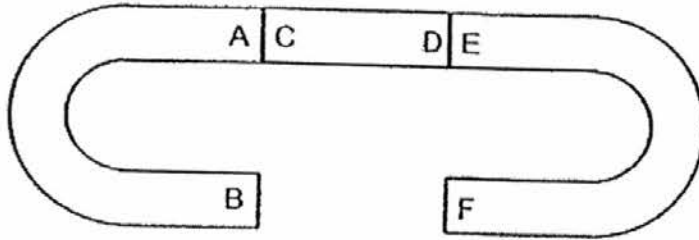
- (1) P
(2) Q
(3) R
(4) S
18. Samuel tied a string to a bar magnet. He suspended it freely as shown below.



In which direction would the bar magnet point when at rest?

- (1) east-west
(2) north-west
(3) south-east
(4) north-south

19. Study the arrangement of the three magnets below. They are attracted to each other.



Cindy made the following statements based on the arrangement above. Which of the statement(s) below is/are correct?

P: C will repel E.

Q: A will be attracted to F

R: F will be attracted to C

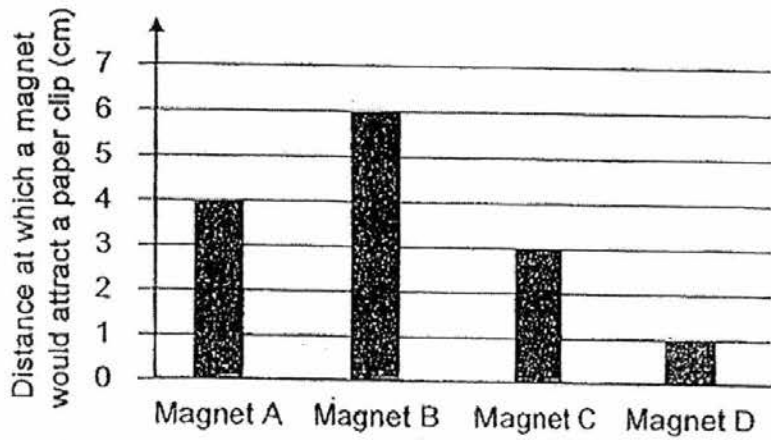
(1) P only

(2) Q only

(3) P and R only

(4) Q and R only

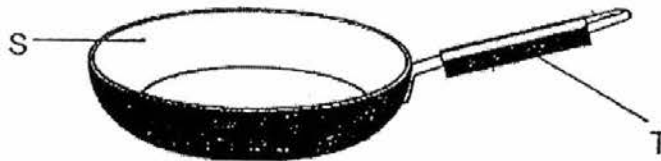
20. Linda conducted an experiment to record the greatest distance at which 4 different magnets, A, B, C and D, would attract a paper clip. She recorded the results in a graph as shown below.



Based on the bar graph above, which is the strongest magnet?

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

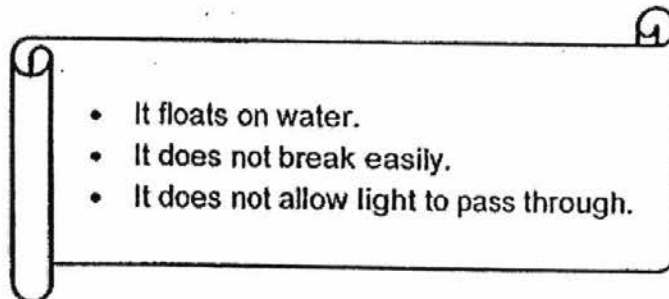
21. The diagram below shows a frying pan.



What materials are part S and T most likely made of?

	S	T
(1)	wood	glass
(2)	metal	plastic
(3)	plastic	wood
(4)	rubber	metal

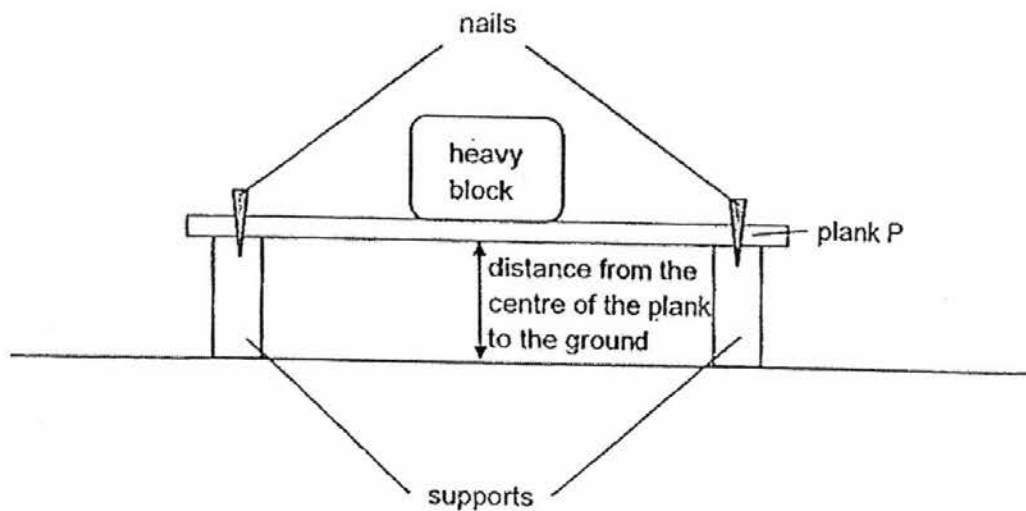
22. Michael described the properties of a material as shown below.



Based on the description above, which of the following is most likely to be the material he has described?

- | | |
|------------|-----------|
| (1) metal | (2) glass |
| (3) fabric | (4) wood |

23. Kelly set up an experiment to test the flexibility of the four planks, P, Q, R and S, which are made of different materials. She placed plank P on supports and nailed their ends firmly as shown below. Then, she placed a heavy block on the plank and measured the distance from the centre of the plank to the ground. She repeated the experiment with the other three planks.



Kelly recorded her results in the table below.

Plank	Distance from the centre of plank to the ground (cm)
P	1
Q	3
R	5
S	7

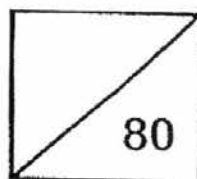
Based on the above results, which plank is the most flexible?

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

End of Booklet A



Rosyth School
Second Semestral Examination for 2016
SCIENCE
Primary 3



Name: _____

Total
Marks:

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

Date: 1 November 2016 Parent's Signature: _____

Booklet B

Instructions to Pupils:

1. For questions 24 to 34, write your answers in the spaces given in this booklet.

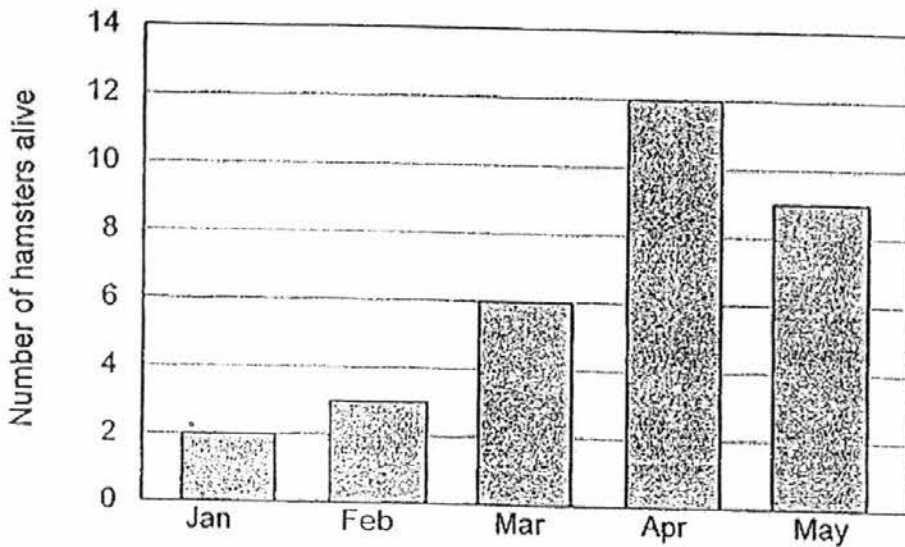
	Maximum	Marks Obtained
Booklet A	46 marks	
Booklet B	34 marks	
Total	80 marks	

* This booklet consists of 12 printed pages (including cover page).

Booklet B (34 marks)

24. Ahmad kept two hamsters in a cage over a period of time. He fed them with the same amount of food and water every day. The bar graph below shows the number of hamsters in the cage during the five months:

(No hamsters were added or removed from the cage.)

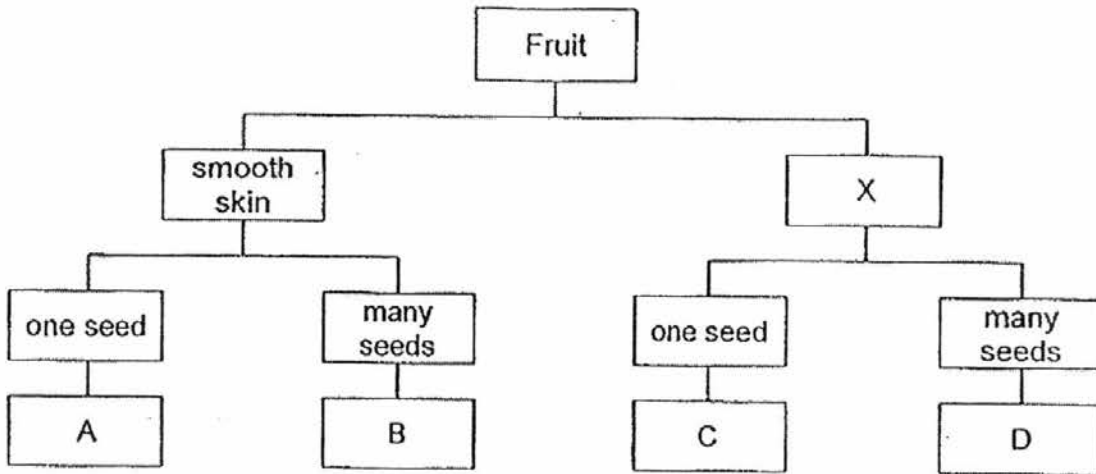


- (a) Based on the graph above, what do you notice about the number of hamsters from January to April? (1m)

- (b) What is the characteristic of living things observed in part (a)? (1m)

- (c) Based on the characteristics of living things, why is there a change in the number of hamsters from April to May? (1m)

25. The classification chart below shows how some fruits have been grouped.



(a) Give a suitable heading for X. (1m)

(b) Based on the classification chart above, state the characteristics of fruit A. (1m)

(c) Based on the classification chart above, state one similarity between fruit B and fruit D. (1m)

26. Martin carried out an experiment to find out which toothpaste was able to reduce the growth of bacteria. The results were recorded as shown below.

Toothpaste	Amount of bacterial growth (mm ²)
A	15
B	10
C	5

- (a) Which toothpaste should Martin use? Explain why. (1m)

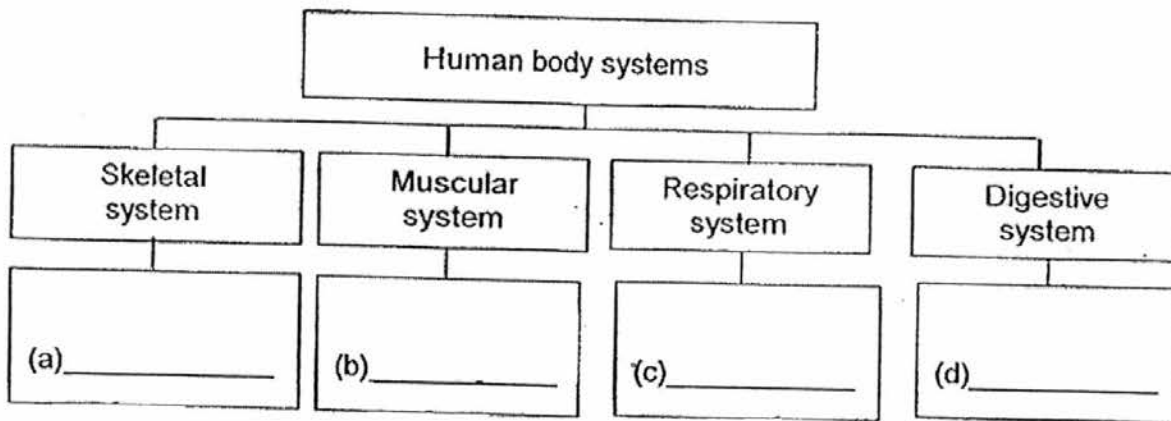
- (b) State two conditions that allow the bacteria to grow well inside the mouth. (2m)

Condition 1: _____

Condition 2: _____

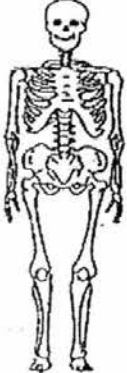
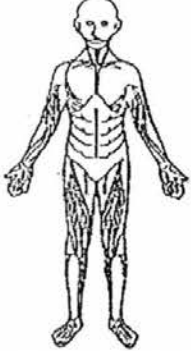
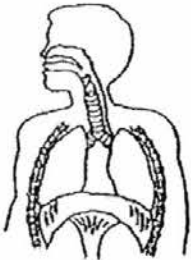
27. Classify the following body parts into the different human body systems below. (2m)

windpipe skull muscles gullet

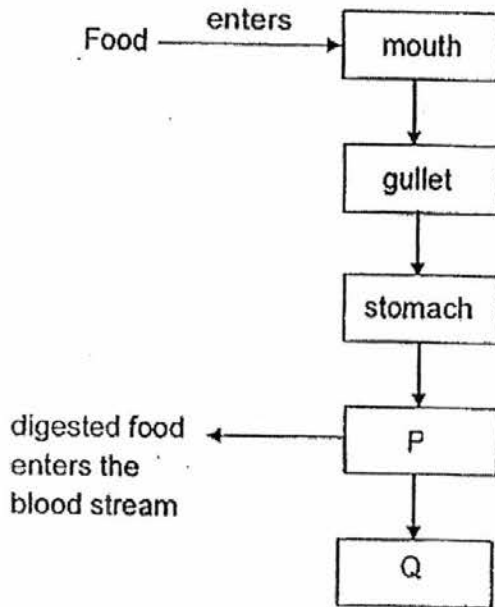


28. Match the body systems to the correct descriptions given in the table below.

(3m)

Body System	Description
	<p>It contracts and relaxes to make movement possible.</p>
	<p>It allows exchange of gases with the surroundings.</p>
	<p>It gives the body its shape.</p>

29. The diagram below shows the path in which food travels in the human body.



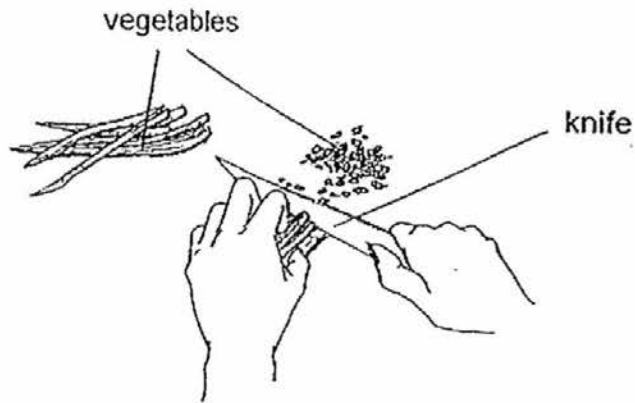
(a) What do P and Q in the above diagram represent? (2m)

(i) P: _____

(ii) Q: _____

(b) What substance is passed from P to Q? (1m)

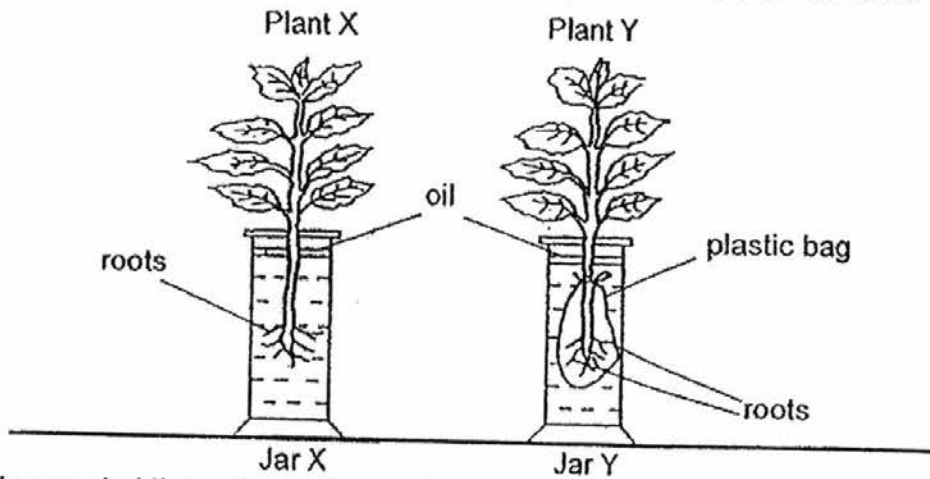
30. Mrs Lee used a knife to cut some vegetables.



(a) Which part in the mouth has a function similar to the knife? (1m)

(b) Explain how the part in (a) is similar to Mrs Lee using the knife to cut the vegetables. (1m)

31. Jim carried out an experiment on two plants, X and Y as shown below.



He recorded the volume of water in jars X and Y on Day 1 and Day 2. The results were recorded in the table as shown below.

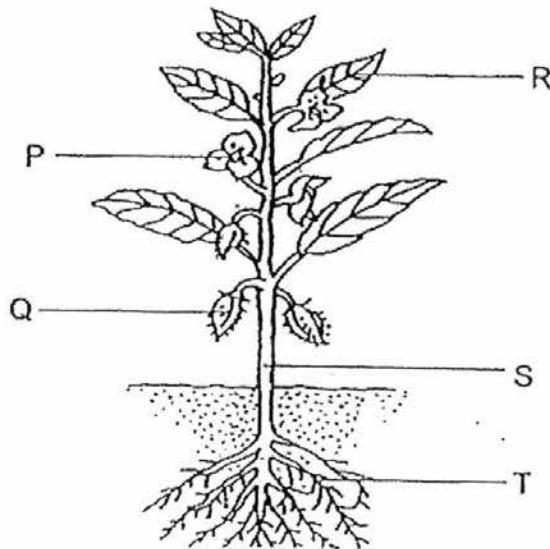
	Volume of water on Day 1 (ml)	Volume of water on Day 2 (ml)
Jar X	100 ml	90 ml
Jar Y	100 ml	100 ml

- (a) From the table above, what do you observe about the volume of water in jar X from Day 1 to Day 2? (1m)

- (b) Sam said that plant Y will wither and die after a week. Do you agree with him? Explain why. (1m)

- (c) From the results above, what can Jim infer about the function of roots? (1m)

32. The diagram below shows a plant with parts labelled P to T.



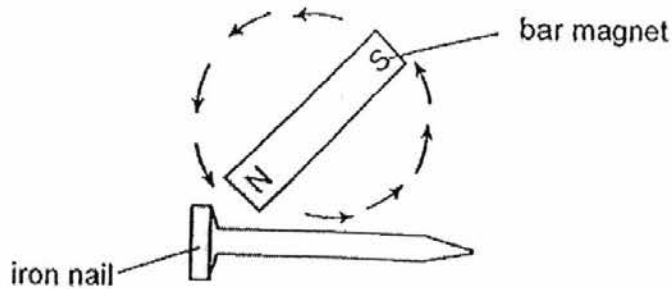
(a) Which part, P, Q, R, S or T, is the flower? (1m)

(b) Complete the table below by writing the letters, P, Q, R, S or T, to match the parts of the plant to their functions. (2m)

	Function	Part of plant
(i)	It holds the plant firmly to the ground.	
(ii)	It contains and protects the seeds.	

(c) Jean said that the plant would eventually die if all the leaves are removed from it. Do you agree with her? Explain why. (1m)

33. Jane made a temporary magnet using an iron nail and a bar magnet as shown below.



When Jane brought some paper clips near her temporary magnet, the temporary magnet did not attract the paper clips.

- (a) What should Jane do to her temporary magnet to attract paper clips? (1m)

Jane then used a bar magnet to find out what would happen when one end of objects, A, B and C, was brought close to it. She recorded her observations in the table below.

Object	Observation when one end of object was brought close to magnet
A	Did not attract or repel
B	Attracted
C	Repelled

Based on the above observations, put a tick (✓) in the correct box to indicate whether her statements were 'true', 'false' or 'not possible to tell'. (3m)

	Statement	True	False	Not possible to tell
(b)	Object A is a not made of a metal.			
(c)	Object B is made of copper.			
(d)	Object C is a magnet.			

34. Berry wanted to find out about the property of three different materials, X, Y and Z. He placed each material over the mouth of a beaker and slowly added 100 ml of water. After 10 minutes, he recorded his observations as shown below.

Recording after 10 min			
Set-up	X	Y	Z
Amount of water collected on material (ml)	100	0	0
Amount of water collected in beaker (ml)	0	100	30

- (a) State the property of material which Berry was trying to find out. (1m)

- (b) Berry noticed that only 30 ml of water was collected in Set-up Z after 10 min. Explain why. (1m)

- (c) Based on the results above, which material, X, Y or Z, should she choose to make a raincoat? Explain why. (2m)

End of Booklet B

EXAM PAPER 2016 (P3)

SCHOOL : ROSYTH

SUBJECT : SCIENCE

TERM : SA2

Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9	Q10
3	4	4	1	3	2	3	2	4	2
Q11	Q12	Q13	Q14	Q15	Q16	Q17	Q18	Q19	Q20
1	4	3	2	2	4	4	4	3	2
Q21	Q22	Q23							
2	4	1							

24)a)The number of hamsters increased from January to April.

b)Living thing reproduce.

c)Some hamsters could have died.

25)a)Rough skin.

b)Fruit A has smooth skin and one seed.

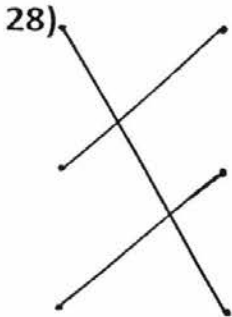
c)Both have many seeds.

26)a)C, because it has the least bacteria growth when used.

b)1: Food

2: water

27) a) skull b) muscles c) windpipe d) gullet



29) a) i) small intestine ii) large intestine

b) Undigested food

30) a) Teeth

b) It cuts the food in to smaller pieces to be swallowed

31) a) The volume of water decreased from Day 1 to Day 2.

b) Yes, The roots were rapped in a plastic bag, so it could not absorb water. Without water the plant would die.

c) Roots absorb water.

32) a) P

b) i) T ii) Q

c) Yes. The leaves will food for the plant so it will die when there is no food for the plant to survive.

33) a) She should stroke it more to increase its magnetism.

b) Not c) False

d) True

34) a) Absorbency.

b) It is because material Z absorbed 70ml of water.

c) Material X, because it is the most waterproof material. Raincoats have to be waterproof too.