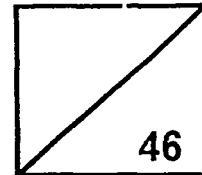




Rosyth School
Second Semestral Examination for 2017
SCIENCE
Primary 3

**Total
Marks:**



Name: _____

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

Date: 1 November 2017 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.

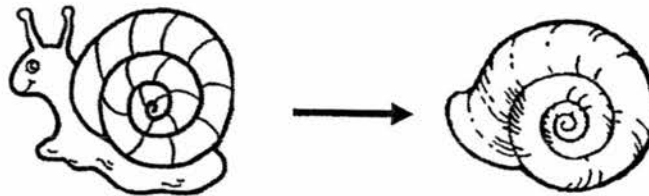
* This booklet consists of 14 printed pages (including cover page).

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Booklet A (46 marks)

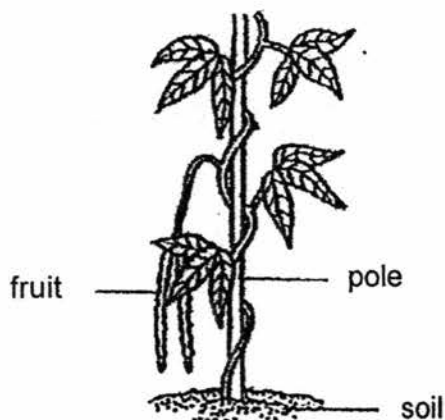
For each question from 1 to 23, four options are given. One of them is the correct answer. Make your choice (1, 2, 3 or 4) and shade the correct oval (1, 2, 3 or 4) on the Optical Answer Sheet (OAS).

1. Sandra saw a snail crawling on the ground. She touched it gently and observed that the snail moved into its shell. What does this tell you about living things?



- (1) Living things can die.
(2) Living things can grow.
(3) Living things can respond to changes.
(4) Living things need air, food and water to survive.
2. An animal can be classified as an insect because it _____.
- (A) can fly
(B) has six legs
(C) lives on land
(D) has three body parts
- (1) A and C only (2) B and C only
(3) A and D only (4) B and D only
3. Animal D lays eggs, has gills and lives in the sea but it does not have wings. Which of the following group of animals could Animal D be?
- (1) fish (2) bird
(3) insect (4) mammal

4. The diagram shows a plant growing in a garden.



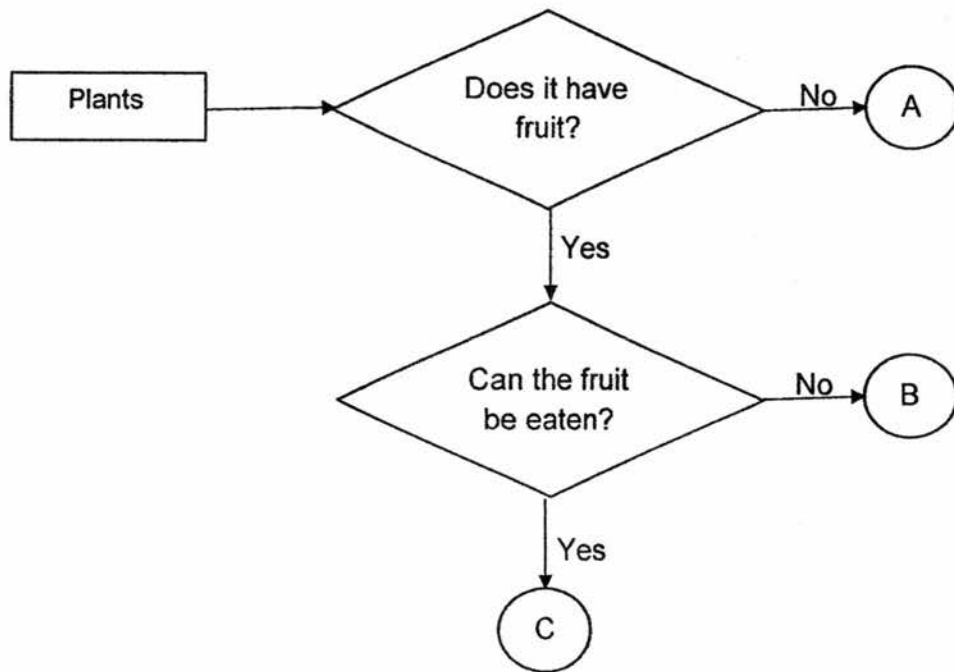
A group of children made the following statements about the plant.

- Aisha : This plant has a weak stem.
Bala : This plant has a strong stem.
Clara : This plant is a flowering plant.
Dan : This plant is a non-flowering plant.

Who made the correct statements?

- (1) Bala and Dan only
- (2) Aisha and Dan only
- (3) Bala and Clara only
- (4) Aisha and Clara only

5. Study the flow chart below.



Based on the flow chart above, which plant(s) is/are flowering plant(s)?

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

6. Which one of the following statements about fungi is not correct?

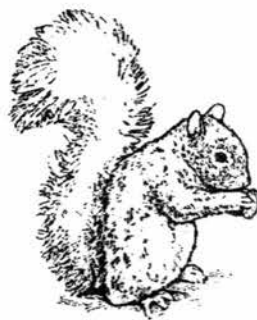
- (1) Fungi reproduce by spores.
- (2) Fungi are non-flowering plants.
- (3) Fungi does not make its own food.
- (4) Fungi needs air, food and water to survive.

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

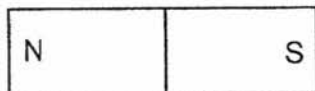
(1)



(2)



(3)



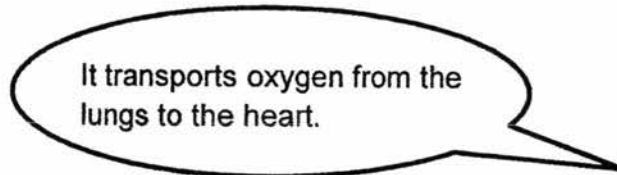
(4)



8. Three students made the following statements about a body system.



It carries digested food to all parts of the body.



It transports oxygen from the lungs to the heart.

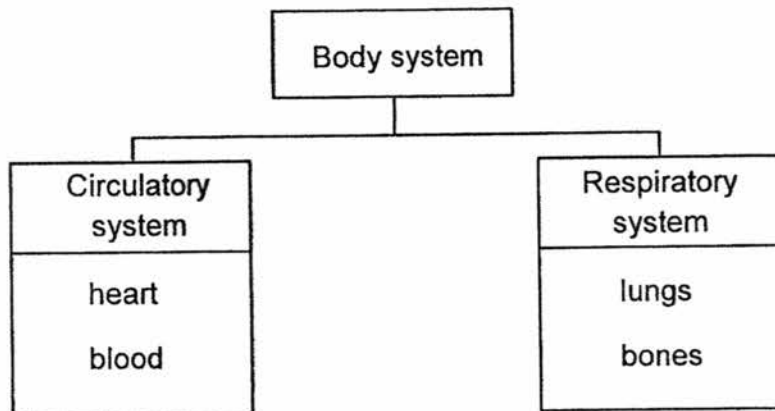


It transports carbon dioxide away from the different parts of the body.

Which body system best represents the students' descriptions?

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

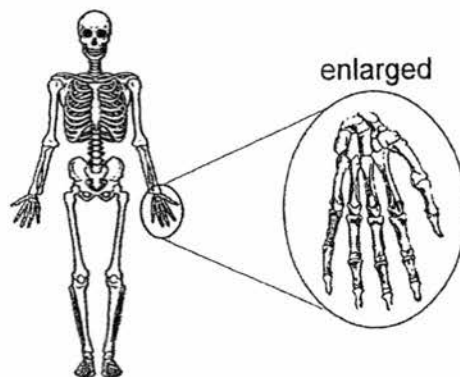
9. Study the classification chart below.



Which of the following parts have been classified wrongly?

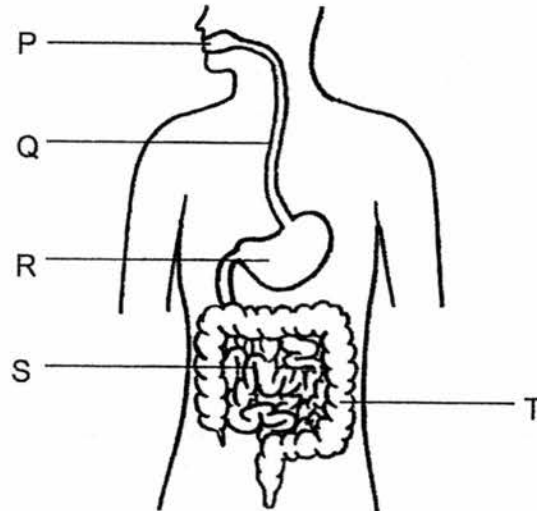
- (1) heart
- (2) blood
- (3) lungs
- (4) bones

10. Which of the following statements is true about the body part of the human body system as shown below?



- (1) It gives the body part shape.
- (2) It removes carbon dioxide from the body.
- (3) It breaks down food into simple substances.
- (4) It protects the delicate organs in the body part.

Study the diagram below and answer questions 11 and 12.



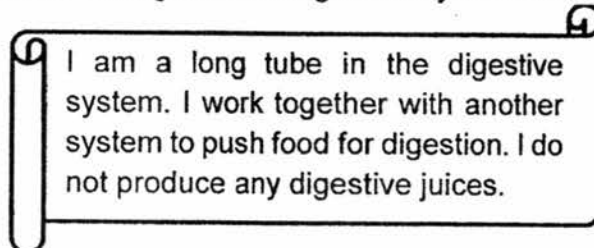
11. In which parts of the diagram, P, Q, R, S or T, do digestion take place?

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

12. In which part of the diagram is water absorbed from the undigested food?

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

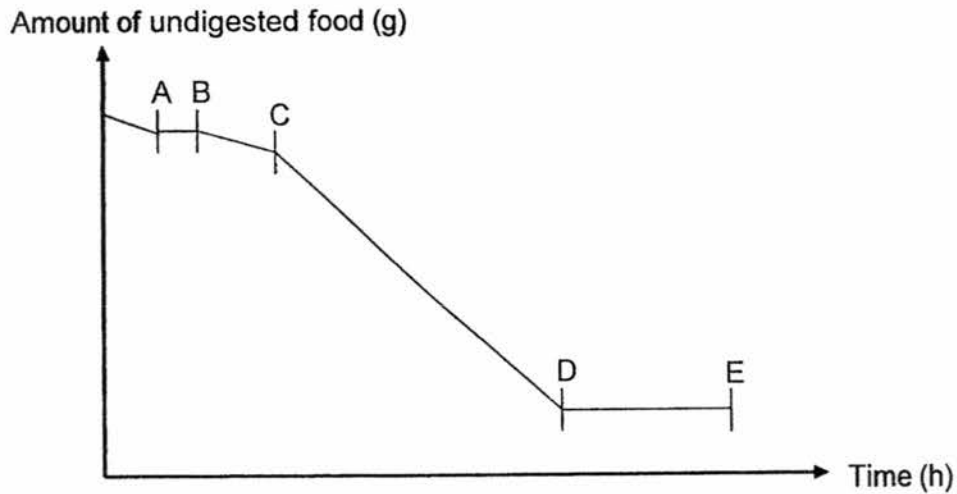
13. Adam describes an organ in the digestive system as shown below.



Which organ best represents Adam's description?

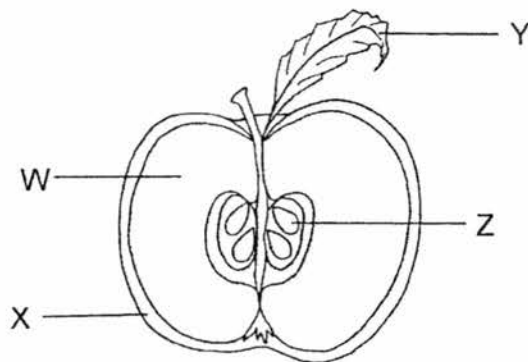
- (1) gullet
- (2) stomach
- (3) small intestine
- (4) large intestine

14. The graph below shows the amount of undigested food as it travelled through the digestive system.



Which part of the graph best represents the small intestine?

- | | |
|--------|--------|
| (1) AB | (2) BC |
| (3) CD | (4) DE |
15. Study the diagram below of a cut fruit.



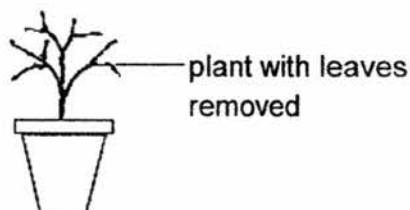
Which part of the diagram, W, X, Y or Z, will develop into a new plant?

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

Plant	Parts that were removed
A	All the roots
B	All the flowers
C	All the leaves and roots
D	All the flowers and leaves

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

- After a few days, he observed that the plant had fallen and died.



A: The plant was not able to make food.
B: The plant was not able to take in water.
C: The plant was not able to absorb sunlight.

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

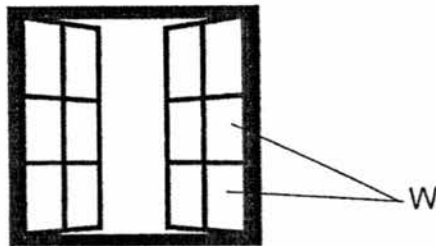
18. Jane was given a ruler made with material X. She wanted to find out if material X was flexible. Which one of the following shows that material X is flexible?

- (1) Bend the ruler.
- (2) Soak the ruler in water.
- (3) Drop the ruler on the floor.
- (4) Shine a torchlight at the ruler.

19. Study the table below.

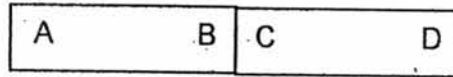
Materials	Transparent	Waterproof	Flexible
A	No	No	No
B	No	No	Yes
C	Yes	Yes	No
D	Yes	Yes	Yes

Which of the following materials A, B, C or D is most suitable to make part W of a window?

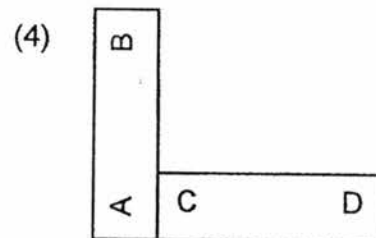
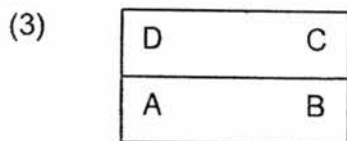
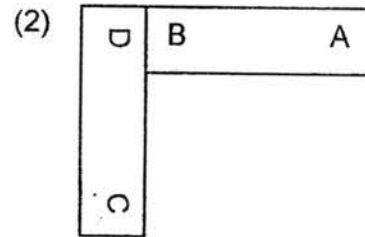
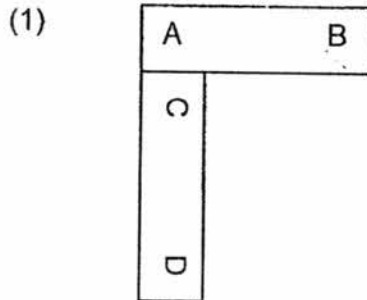


- | | |
|-------|-------|
| (1) A | (2) B |
| (3) C | (4) D |

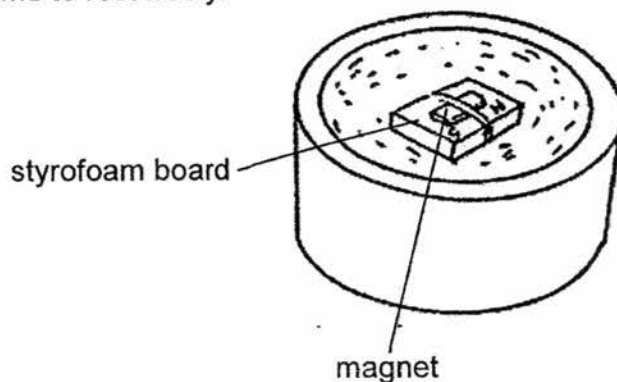
20. Jenny arranged two magnets, AB and CD, attracted to each other as shown below.



Which one of the following arrangement is possible?



21. A magnet was taped to a piece of styrofoam and placed in a basin of water. It is allowed to come to rest freely.



In which direction will the magnet come to rest?

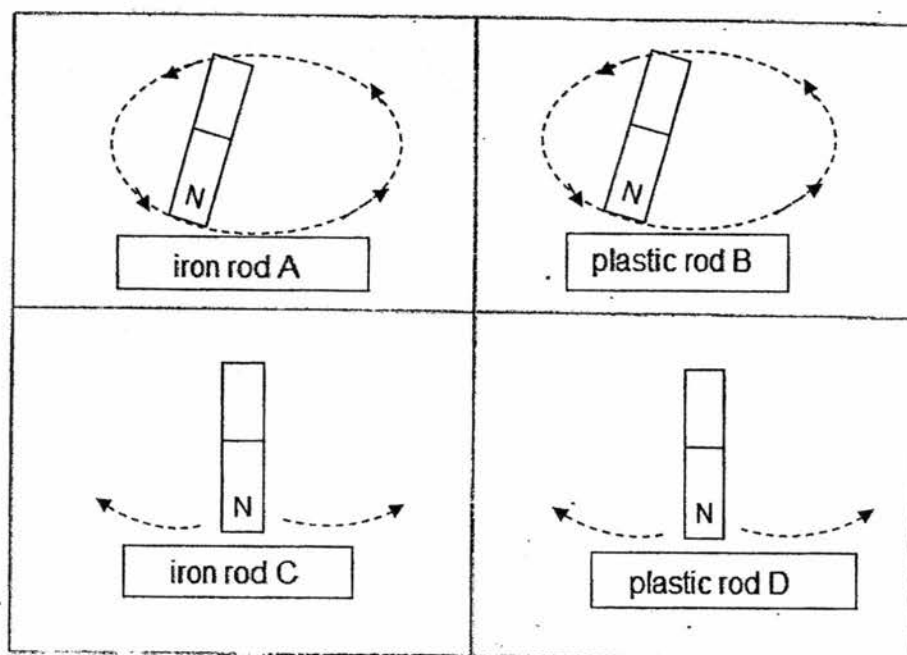
- (1) East-West
 - (2) South-East
 - (3) North-West
 - (4) North-South
22. Irene magnetised four iron nails W, X, Y and Z into electromagnets. Then she placed the iron nails in a box filled with paper clips to test the strength of the magnetised iron nails. The results are as shown below.

Iron Nail	Number of coils of wire around the nail	Number of paper clips attracted
W	4	1
X	8	2
Y	16	4
Z	28	8

What can Irene conclude from the experiment?

- (1) Iron nail W has the strongest magnetism.
- (2) The strength of the four iron nails are the same.
- (3) The more coils around the iron nail, the weaker the electromagnet.
- (4) The more coils around the iron nail, the stronger the electromagnet.

23. Sarah tried to magnetise four iron rods A, B, C and D, using the stroking method shown below.



Which rod(s) will become temporary magnet(s)?

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

End of Booklet A



Rosyth School
Second Semestral Examination for 2017
SCIENCE
Primary 3

Name: _____

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

Date: 1 November 2017 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).

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Booklet B (34 Marks)

For questions 24 to 34, write your answers in this booklet.

24. The table below shows the height of two things, A and B, over four months.

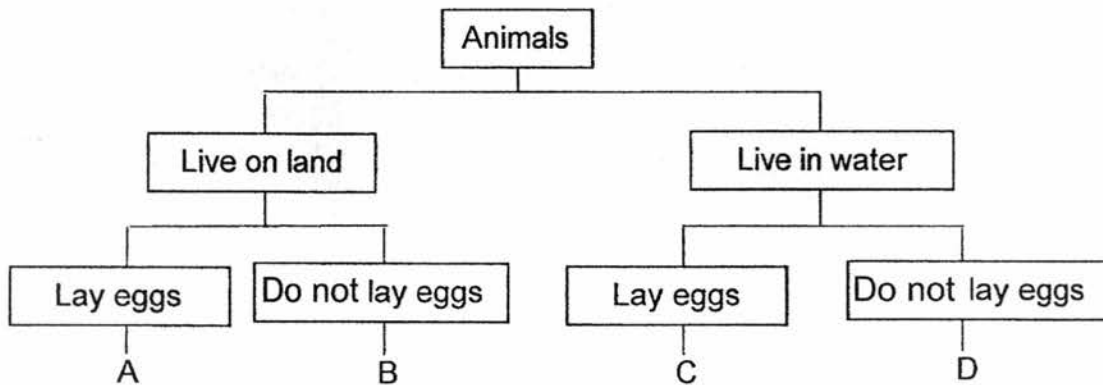
Month	Height (cm)	
	A	B
1	20	20
2	20	23
3	20	27
4	20	30

- (a) Based on the information above, which one is most likely a non-living thing?
(1m)

- (b) Read the statement below about the common characteristics of all living things.
Write 'T' for true and 'F' for false. (2m)

Statements	True / False.
They can reproduce.	
They need sunlight to make food.	
They can move from place to place.	
They need air, food and water to survive.	

25. Kerry classified some animals based on their common characteristics as shown in the flow chart below.



- (a) State one difference between the animals in group A and D. (1m)

- (b) State one similarity between the animals in group C and D. (1m)

- (c) Animal F is a land animal which lay eggs.
Which group, A, B, C or D, does animal F belong to in the above flow chart? (1m)

26. The diagram below shows two living things, mushroom and fern.



Mushroom



Fern

- (a) How do they reproduce? (1m)



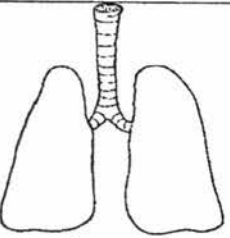
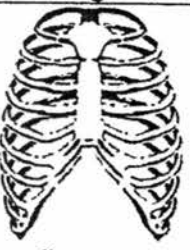
- (b) Which group of living things do the living things above belong to? (1m)

Mushroom: _____

Fern: _____

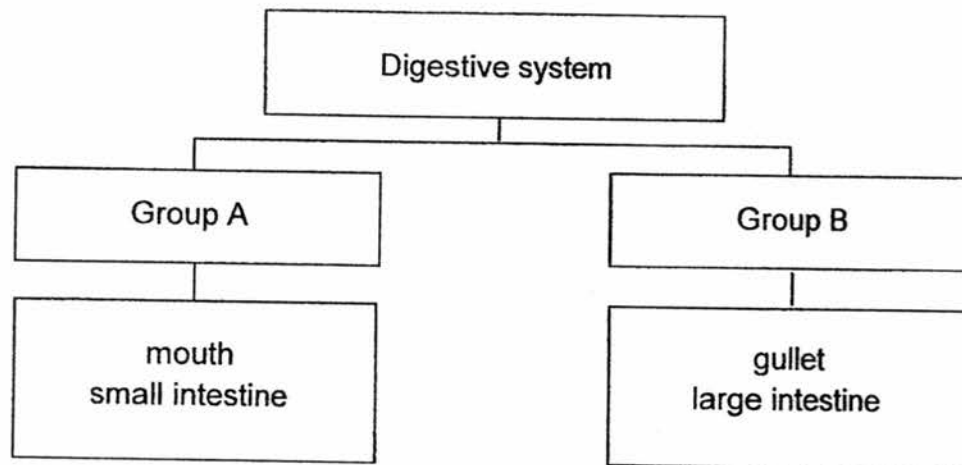
27. Match the body parts to the correct body system.

(2m)

Body part
 nose
 Skull
 lungs
 ribcage

Body System
skeletal system
respiratory system

28. Ahmad classified the parts of the human body system as shown below.



(a) Provide a suitable heading for the following:

Group A: _____

Group B: _____

(b) Based on your headings in (a), in which group, A or B, should Ahmad place the stomach? (1m)

Group

(c) Ahmad wanted to include lungs in Group B. Do you agree with him? Explain why. (1m)

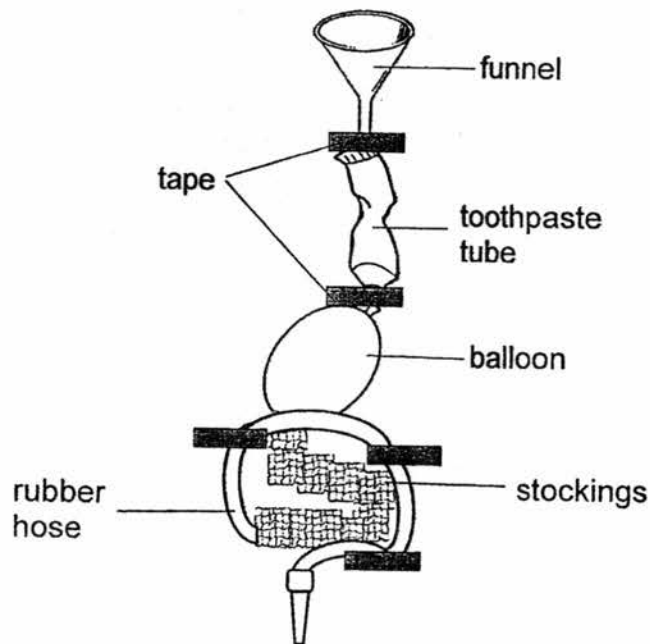
- 29(a) Read the statements below about the human digestive system.
Write 'T' for true and 'F' for false.

(2m)

Statements	True / False
Saliva breaks the food down into smaller pieces.	
Digestion is completed in the large intestine.	
The gullet pushes the food from the mouth to the stomach.	
Digestive juices are produced in the small intestine.	

- (b) Mary told her classmate that digestive juices are produced in all parts of the digestive organs. Do you agree with her? Explain your answer. (1m)

30. A model of the human digestive system was built by a few students during their Science lesson.



- (a) What does each part of the model represent? (2m)

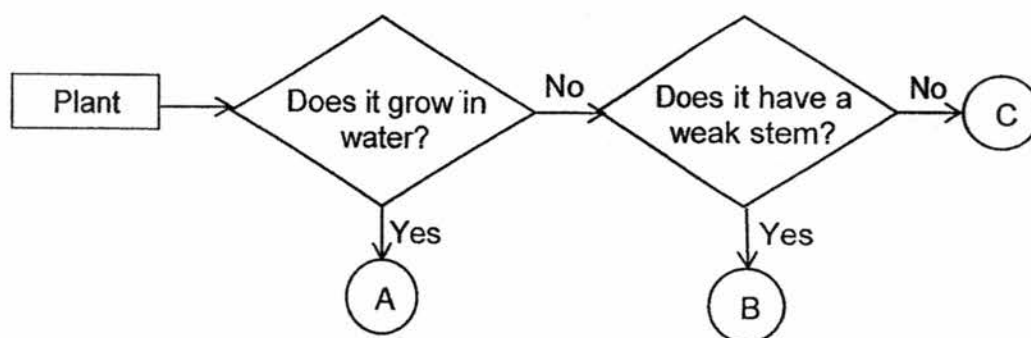
Parts of the model	Parts of the digestive system
stockings	
balloon	
funnel	
rubber hose	large intestine
toothpaste tube	

- (b) A pupil stated that the rubber hose does not perform some of the functions of the large intestine.

Do you agree? Explain your answer.

(2m)

31. Study the flowchart below.



(a) State the two characteristics of plant B. (1m)

Characteristic 1: _____

Characteristic 2: _____

(b) State the difference between plant A and plant C. (1m)

(c) State the similarity between plant B and plant C. (1m)

32. Liam placed a bean plant in a covered cardboard box as shown below.

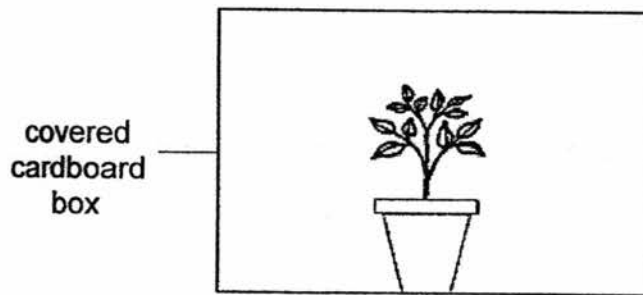


Diagram P

Liam then cut a hole in the box and left it near the window. He watered the plant daily for a few weeks and recorded the growth of the plant in his journal.

- (a) **Draw** a circle in diagram R to show the hole made in the cardboard box. (1m)

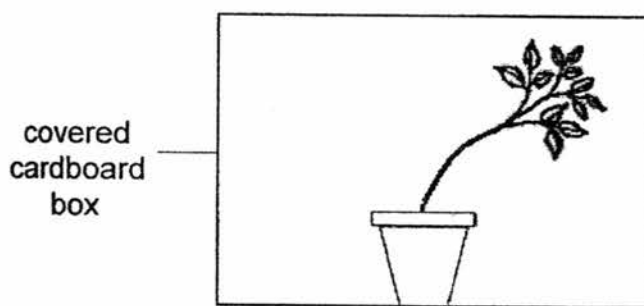


Diagram R

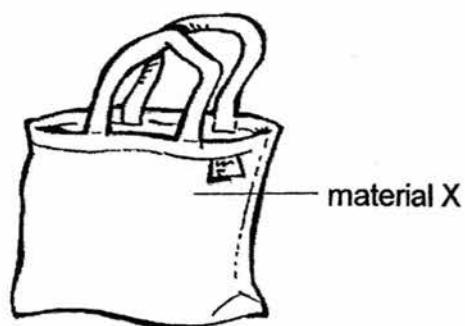
- (b) State two characteristics of plants that Liam observed in diagram R? (2m)

Characteristic 1: _____

Characteristic 2: _____

- (c) If Liam covered the hole with cardboard, would the plant continue to grow? Explain your answer. (1m)

33. Alice used a plastic bag to carry some heavy books instead of a paper bag.



- (a) Explain why she used a plastic bag instead of a paper bag to carry heavy books. (2m)

- (b) Alice dropped her bag into a puddle of water. However, the bag remained dry. State one property of the bag that allowed it to stay dry. (1m)

Property: _____

- 34(a) Which of the following is a possible arrangement of the two magnets?
Put a tick (✓) to make your choice. (1m)

	North	North	
--	-------	-------	--

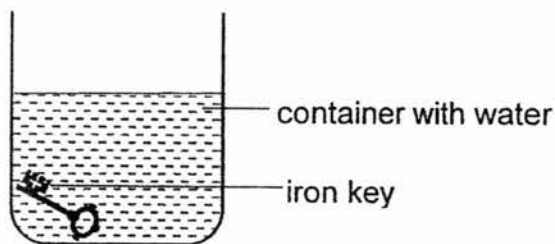
 ()

	North	South	
--	-------	-------	--

 ()

- (b) Explain your choice in (a). (1m)

Siti wants to remove an iron key from a container of water as shown below.



- (c) Study the statements below and number the steps, 1, 2, 3 and 4, taken by Siti to remove the iron key from the container. (2m)

Statements	Step number
Move the magnet to the top of the container.	
Place the magnet on the glass container near the iron key.	
Remove the key.	
The iron key will be attracted to the magnet.	

End of paper

ANSWER KEY

YEAR : 2017
 LEVEL : PRIMARY 3
 SCHOOL : ROSYTH
 SUBJECT : SCIENCE
 TERM : SA2

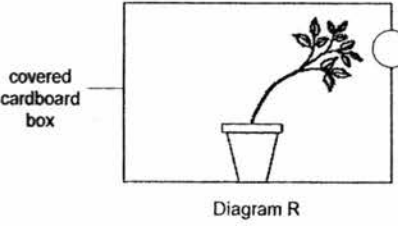
Booklet A

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

Booklet B

24	(a)	A
	(b)	True False False True
25	(a)	Animal A lays eggs while animal D does not.
	(b)	They live in water.
	(c)	Group A.
26	(a)	They reproduce by spores.
	(b)	Mushroom: <u>Fungi</u> Fern: <u>Plant</u>

27	<div> <div> Nose Skull Lungs Ribcage </div> <div> • • • • </div> <div> skeletal system respiratory system </div> </div>
28	<p>(a) <u>Group A: Digests food.</u> <u>Group B: Does not digest food.</u></p> <p>(b) <u>Group A. (A)</u></p> <p>(c) <u>No, lungs are not in the digestive system.</u></p>
29	<p>(a) <u>False</u> <u>False</u> <u>True</u> <u>True</u></p> <p>(b) <u>No, digestive juices are only produced in the small intestine, mouth and stomach.</u></p>
30	<p>(a) <u>stockings - small intestine</u> <u>balloon - stomach</u> <u>funnel - mouth</u> <u>toothpaste tube - gullet</u> (gullet)</p> <p>(b) <u>Yes, it does not remove the water from the undigested food as rubber is waterproof.</u></p>

31	(a)	<p>Characteristic 1: <u>It has a weak stem.</u></p> <p>Characteristic 2: <u>It does not grow in water.</u></p>
	(b)	Plant A grows in water while plant C does not.
	(c)	They do not grow in water.
32	(a)	 <p>Diagram R</p>
	(b)	<p>Characteristic 1: <u>Plants respond to changes.</u></p> <p>Characteristic 2: <u>Plants grow towards sun.</u></p>
	(c)	No, sunlight can pass through hence the plant will die as it cannot make food.
33	(a)	Plastics bags are stronger then paper bags and does not break easily.
	(b)	Property: <u>Waterproof</u>
34	(a)	North South (✓)
	(b)	Like poles repel.
	(c)	Step number:
		<p>3</p> <p>1</p> <p>4</p> <p>2</p>

End