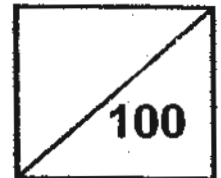




**Rosyth School**  
**Second Semestral Assessment for 2010**  
**SCIENCE**  
**Primary 3**

Name: \_\_\_\_\_

Total  
Marks:



Class: Pr 3-\_\_\_\_\_ Register No. \_\_\_\_\_ Duration: 1 h 45 min

Date: 28<sup>th</sup> October 2010 Parent's Signature: \_\_\_\_\_

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 30 in Booklet A, shade the correct ovals on the Optical Answer Sheet (OAS) provided using a 2B pencil.
5. For questions 31 to 44, write your answers in the spaces given in Booklet B.

	Maximum	Marks Obtained
<b>Booklet A</b>	<b>60 marks</b>	
<b>Booklet B</b>	<b>40 marks</b>	
<b>Total</b>	<b>100 marks</b>	

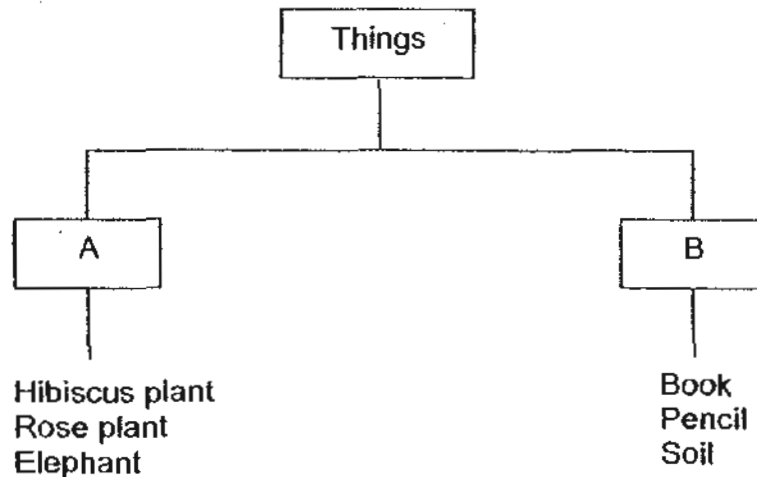
\* This booklet consists of 18 pages.

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**Part I (60 MARKS)**

For each question from 1 to 30, 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.

1. Look at the classification chart below.



What are A and B?

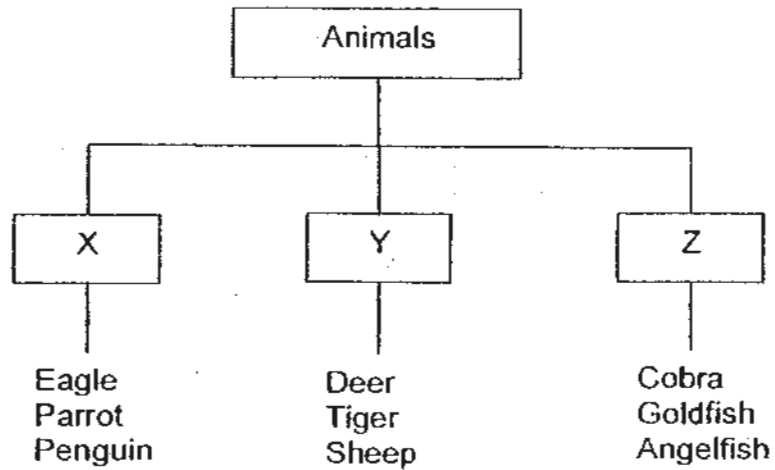
	A	B
(1)	Plant	Non-living
(2)	Living	Non-living
(3)	Natural	Man-made
(4)	Living	Man-made

2. Which of the following statement(s) is/are correct?

- A : All living things can move by itself.
- B : All living things need air, food and water.
- C : Some living things can make their own food.
- D : Some living things can move from one place to another.

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

3. Below is a classification diagram of some animals.



How are the animals above grouped into?

- (1) How they move
- (2) What they feed on
- (3) Where they are found
- (4) What their body coverings are

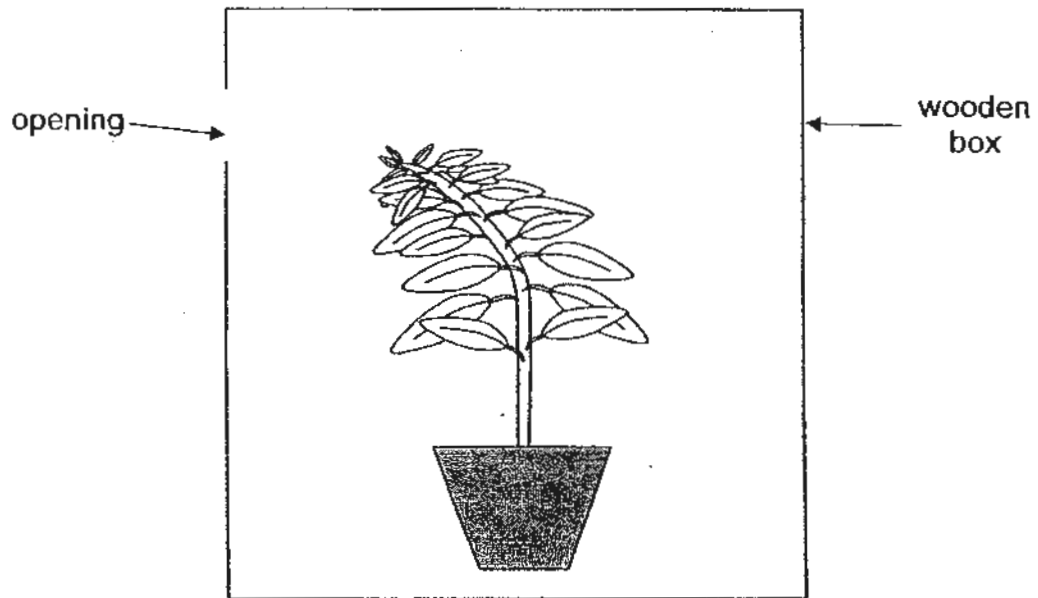
4. The table below shows two characteristics of some animals.

Characteristics	Animal		
	P	Q	R
Does it have hair?	Yes	Yes	No
Does it lay eggs?	No	Yes	Yes

Which animal(s) is/are most likely to be mammals?

- (1) P only
- (2) P and Q only
- (3) Q and R only
- (4) P, Q and R

5. A pot of plant is placed in a wooden box with an opening and is then left in a bright room.

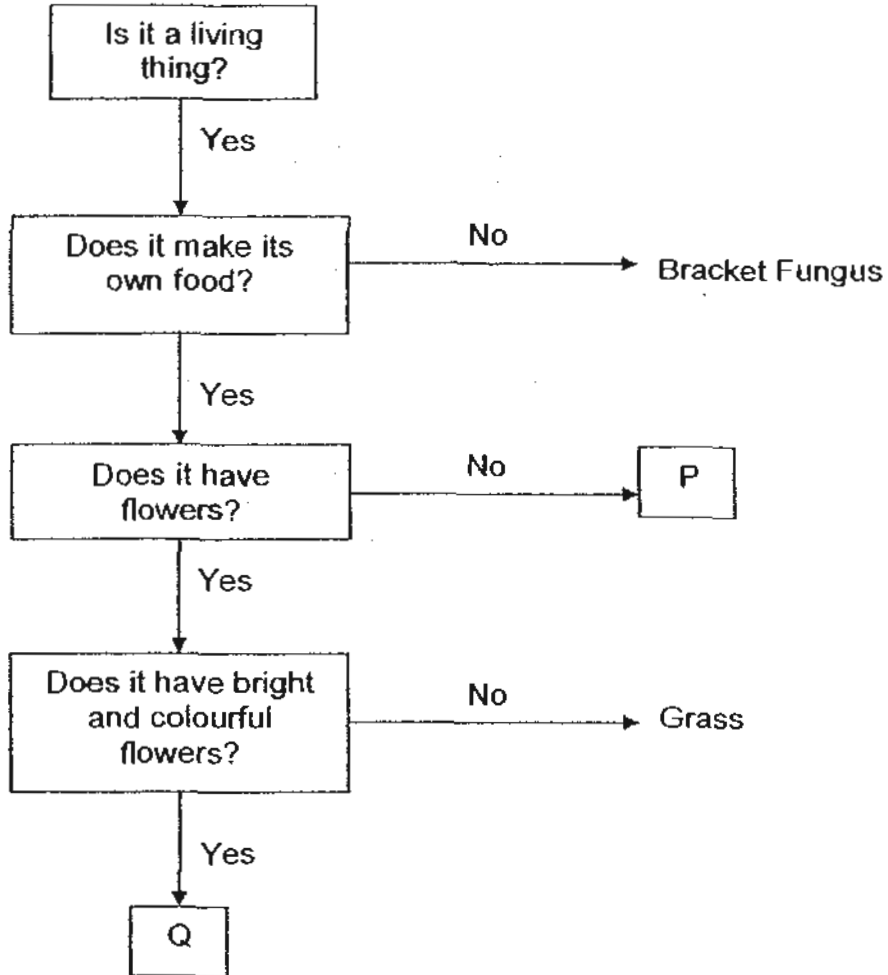


a week after

What can be inferred from the above investigation?

- (1) Plants need food
- (2) Plants need water
- (3) Plants need space
- (4) Plants grow towards light

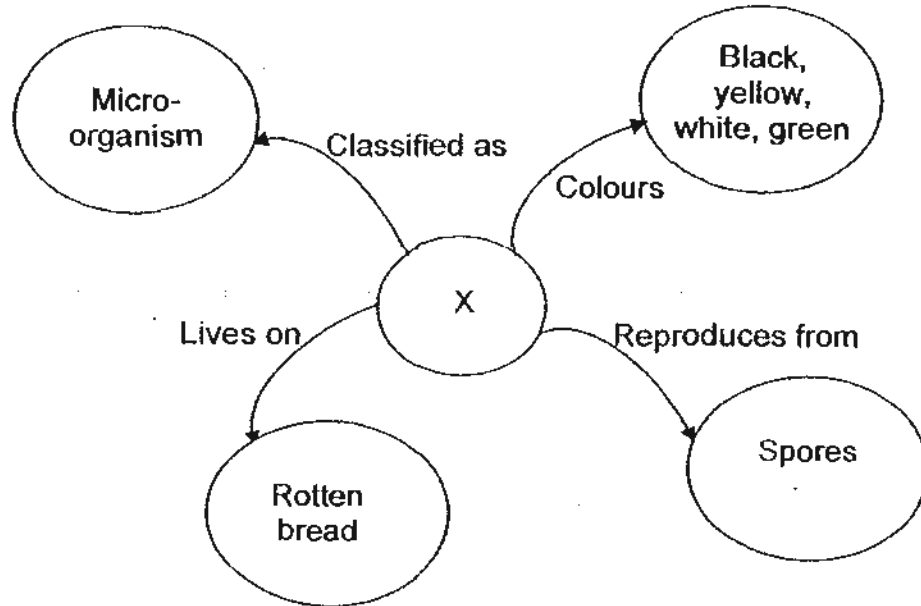
6. Study the flowchart below.



Which of the following statement best describes Plants P and Q?

	P	Q
(1)	P is not a plant.	Q is a plant.
(2)	P does not have leaves.	Q has leaves.
(3)	P does not need sunlight.	Q needs sunlight.
(4)	P is a non-flowering plant.	Q is a flowering plant.

7. Study the concept map below.



Which organism can X be?

- |           |               |
|-----------|---------------|
| (1) Fern  | (2) Bacterium |
| (3) Mould | (4) Mushroom  |

8. Which of the following statement(s) about mushroom is/are true?

- A : All mushrooms are poisonous.
- B : Mushrooms cannot make their own food.
- C : All mushrooms belong to the group of micro-organisms.

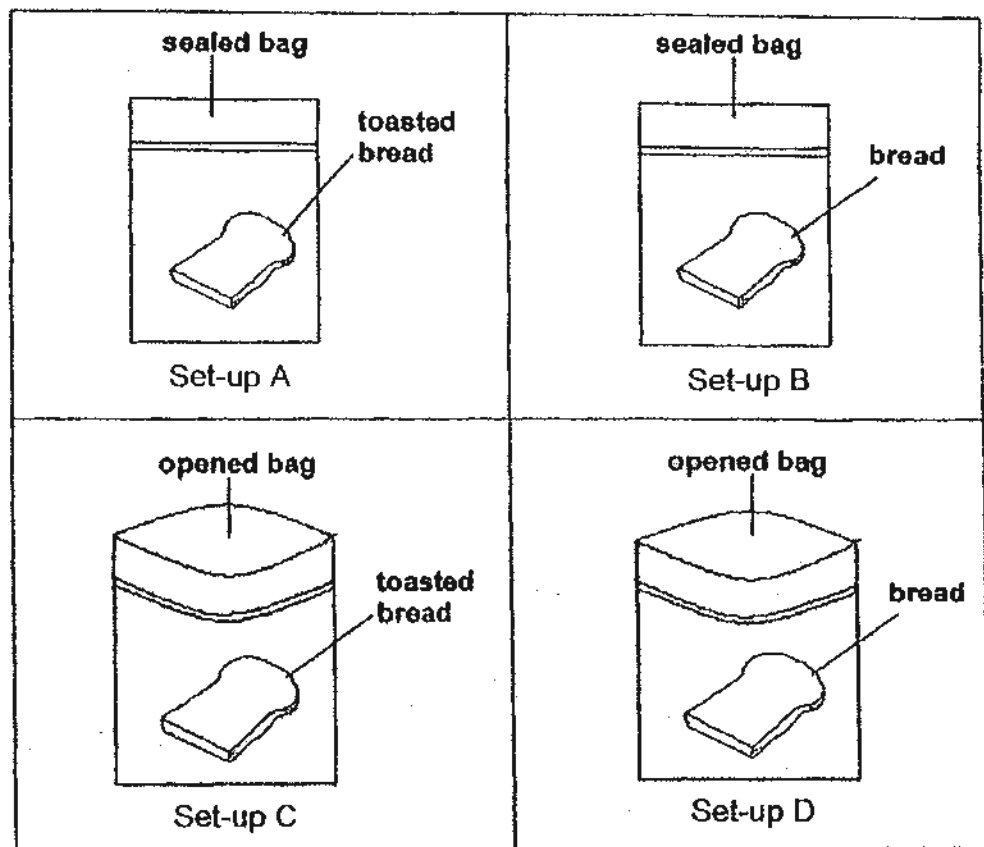
- |                  |                  |
|------------------|------------------|
| (1) A only       | (2) B only       |
| (3) A and B only | (4) B and C only |

9. Raju wanted to find out under what condition(s) would bread mould grow best.

He used four clear, identical plastic bags and four slices of bread from the same loaf.

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

He then put each slice of bread in a plastic bag as shown below.



After six days, which set-up would have the most number of bread mould growing on it?

- (1) Set-up A
- (3) Set-up C

- (2) Set-up B
- (4) Set-up D

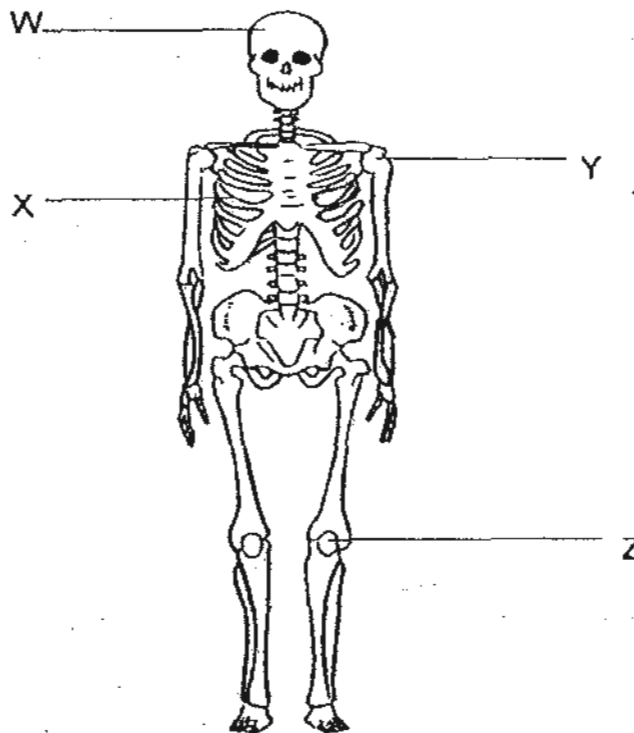
10. Shirley is sleeping but she still needs oxygen to be alive.



Which system helps her to obtain oxygen?

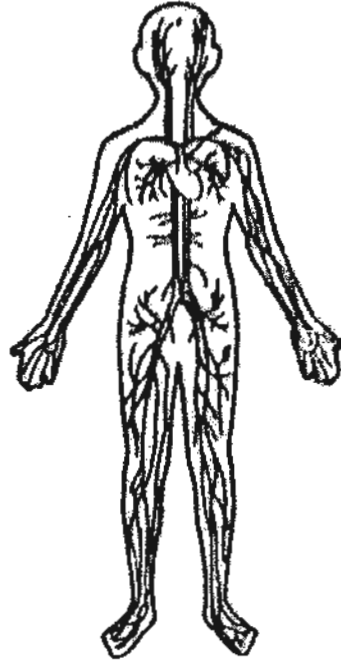
- (1) Skeletal system
- (2) Muscular system
- (3) Digestive system
- (4) Respiratory system

11. The diagram below shows the skeletal system.  
Which parts of the skeletal system protect our delicate organs?



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

12. Study the picture below.



Which one of the body systems does it show?

- (1) Skeletal system
- (2) Muscular system
- (3) Circulatory system
- (4) Respiratory system

13. Three pupils made the following statements about how the saliva helps us to swallow food easily.

Amy : Saliva softens the food.

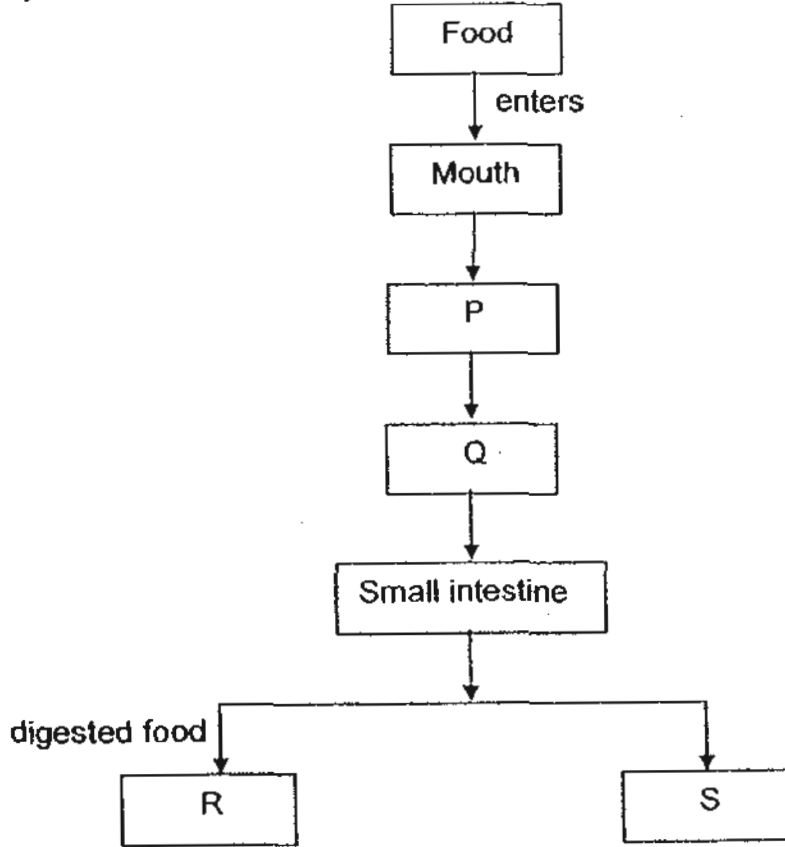
Berry : Saliva digests the food partially.

Charlie : Saliva improves the taste of the food.

Who was/were correct?

- (1) Berry only
- (2) Amy and Berry only
- (3) Amy and Charlie only
- (4) Berry and Charlie only

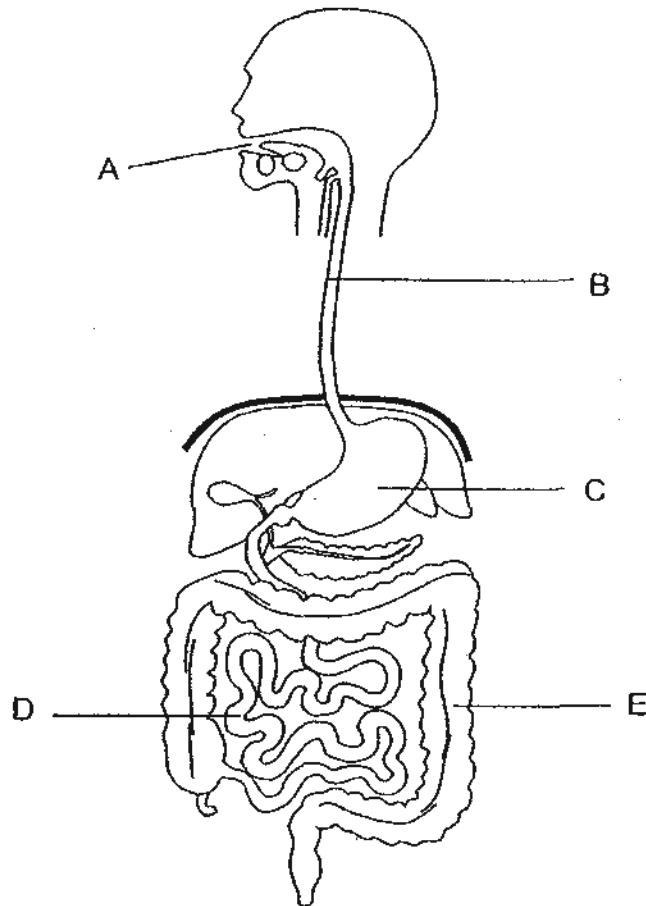
14. The chart below shows the path in which food travels in the digestive system.



Which of the following represents P, Q, R and S?

	P	Q	R	S
(1)	gullet	large intestine	blood	stomach
(2)	gullet	stomach	blood	large intestine
(3)	gullet	stomach	large intestine	blood
(4)	stomach	gullet	small intestine	blood

Refer to the diagram below (human body's digestive system) and answer Questions 15 and 16.



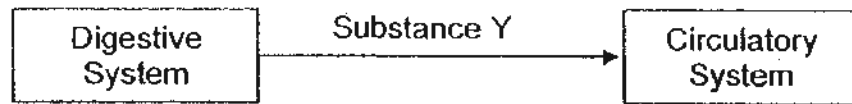
15. In which parts of the above diagram (A, B, C, D or E) does digestion take place?

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

16. When a person was unwell and passed out watery waste, which part of the digestive system was not working well?

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

17. Study the diagram below.



What is substance Y that is passed from the digestive system to the circulatory system?

- (1) Solid waste
- (2) Digested food
- (3) Undigested food
- (4) Partially digested food

18. Look at the following statements below. Which of the statements best describe what happens to food in the stomach, small intestine and large intestine?

	Stomach	Small intestine	Large intestine
(1)	No digestion takes place here	Most of the water is removed from the undigested food	Digested and enters the bloodstream
(2)	Mixes with digestive juices	Most of the water is removed from the undigested food	Digested and enters the bloodstream
(3)	Mixes with digestive juices	Digested and enters the bloodstream	Most of the water is removed from the undigested food
(4)	No digestion takes place here	Digested and enters the bloodstream	Most of the water is removed from the undigested food

19. Four pupils made the following statements about the pictures below.



ginger



potato

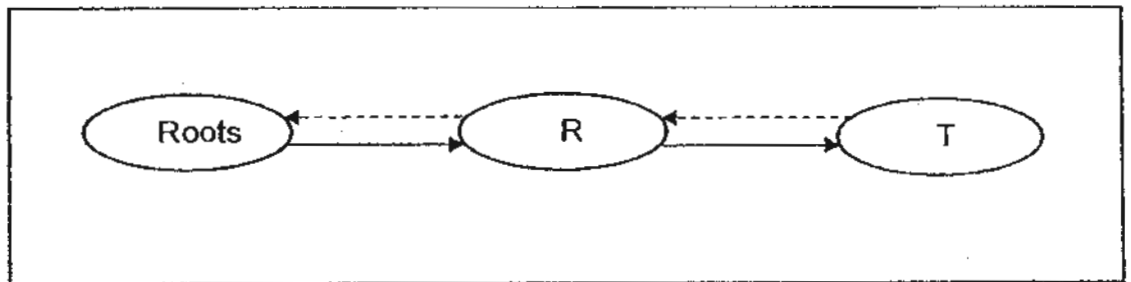
- Alice : They are underground roots.
- Bala : They are underground stems.
- Cheryl : They store food for the plants.
- Darren : They make food for the plants.

Who was/were correct?

- (1) Alice and Cheryl only
- (2) Alice and Darren only
- (3) Bala and Cheryl only
- (4) Bala and Darren only

20. In the diagram below, the arrows (—→) and (---→) in the diagram represent the transportation of water and food from one part of a plant to another.

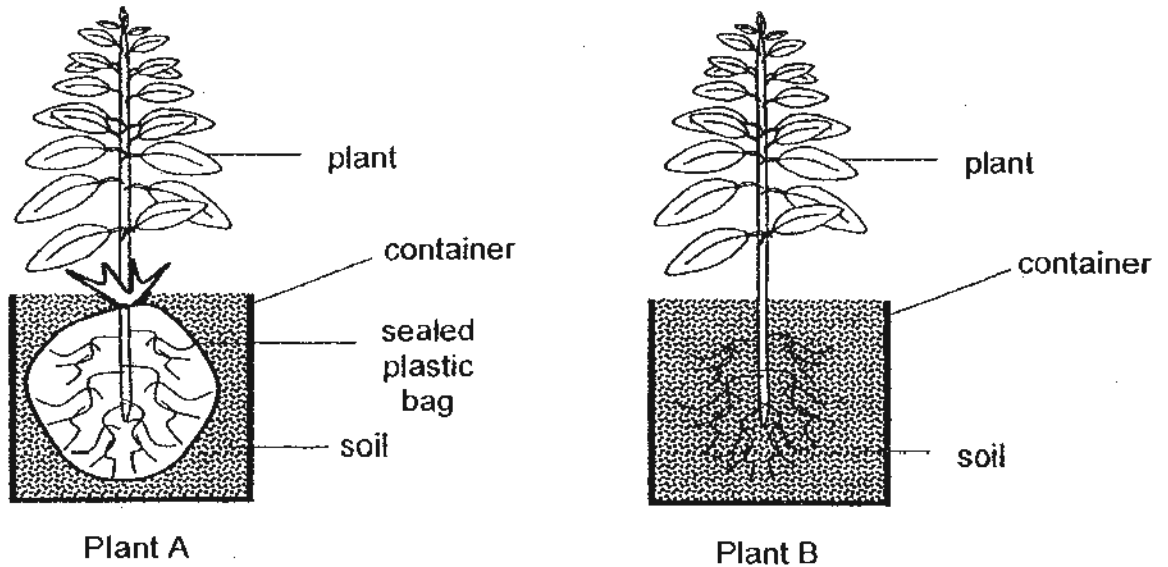
R and T represent different parts of the plant.



Which one of the following correctly represents the arrows (—→) and (---→) and R and T?

	—→	---→	R	T
(1)	Food	Water	Fruit	Leaf
(2)	Food	Water	Stem	Fruit
(3)	Water	Food	Stem	Leaf
(4)	Water	Food	Leaf	Stem

Refer to the diagrams below and answer Questions 21 and 22.



21. Gary potted two identical plants, Plant A and Plant B, in two similar containers as shown in the diagrams above. He wrapped the roots of Plant A in a plastic bag and sealed it up. Then he put the two plants in the garden and watered them every day.









Which of the following is likely to be his observation of the condition of the plants after a week?

	Plant A	Plant B
(1)	Withered	Withered
(2)	Withered	Green healthy leaves
(3)	Green healthy leaves	Withered
(4)	Green healthy leaves	Green healthy leaves

22. What can be inferred from the above investigation?

- (1) Leaves are needed to make food.
- (2) Roots are needed to absorb water.
- (3) Stems are needed to support the plant.
- (4) Roots are needed to hold the plant firmly.

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

	Systems	Non-systems
(1)		
(2)		
(3)		
(4)		

24. The traffic lights at road junctions are important parts of the traffic system. Which of the statements below correctly explain what may happen if some of the lights fail to work properly?



traffic lights

- P : Accidents may occur.  
Q : The traffic can still move as usual.  
R : The motorist will not know when to stop or move.  
S : The pedestrians will find it difficult to cross the road safely.
- (1) P, Q and R only                      (2) P, R and S only  
(3) P, Q and S only                      (4) Q, R and S only

25. Mrs Chong would like to purchase a foldable chair with the following properties:

- It must be strong.
- It must be waterproof.
- It must not break easily.

What type of foldable chair should Mrs Chong buy?

- (1) Glass                                      (2) Plastic  
(3) Cloth                                      (4) Cardboard

26. The properties of three different objects were observed and recorded as follows.

Objects	Properties		
	Flexible	Natural material	Z
Eraser	Yes	Yes	Yes
Plastic ruler	Yes	No	Yes
Iron nail	No	Yes	Yes

Z is another property of material. What is Z?

- (1) Strong
  - (2) Hardness
  - (3) Waterproof
  - (4) Able to float on water
27. Arjun says, "Material P can scratch Material Q but Material Q cannot scratch Material P".

What can you deduce from the statement?

- (1) P is harder than Q.
- (2) Q is harder than P.
- (3) P is stronger than Q.
- (4) Q is stronger than P.

28. David had four objects which were of the same size and shape but were made of different materials.

He put each object in a beaker of water for five minutes.

Then he removed each object to observe the amount of water left in each beaker.

Objects	Initial volume of water	Final volume of water
P	500 ml	380 ml
Q	500 ml	740 ml
R	500 ml	350 ml
S	500 ml	410 ml

Which object absorbs the most amount of water?

- (1) P (2) Q  
(3) R (4) S
29. Mary tested the hardness of four materials, A, B, C and D.

She used an iron rod to scratch the four materials. For every material, she scratched ten times.

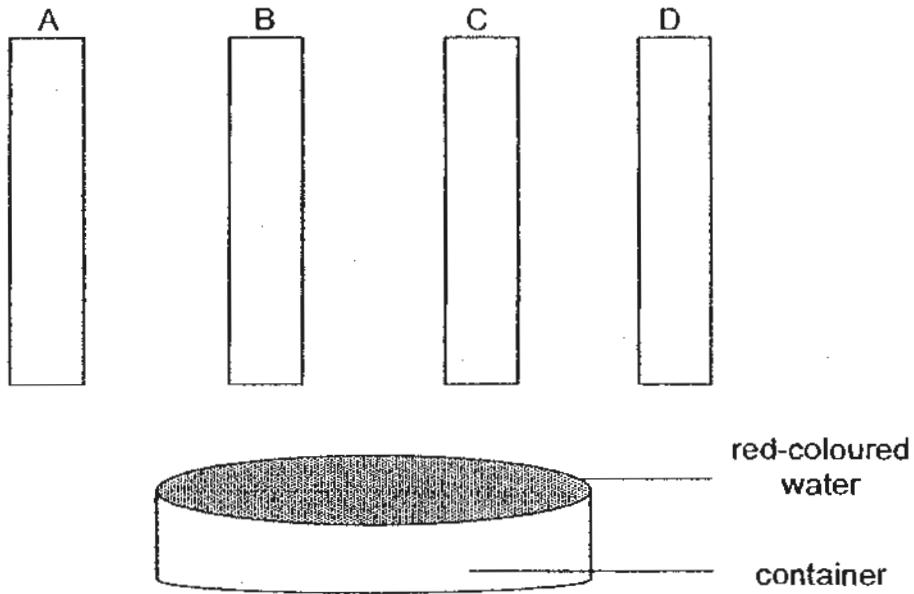
She recorded her data as follows:

Materials	What she observed
A	No scratches
B	Very deep scratches
C	Deep scratches
D	Light scratches

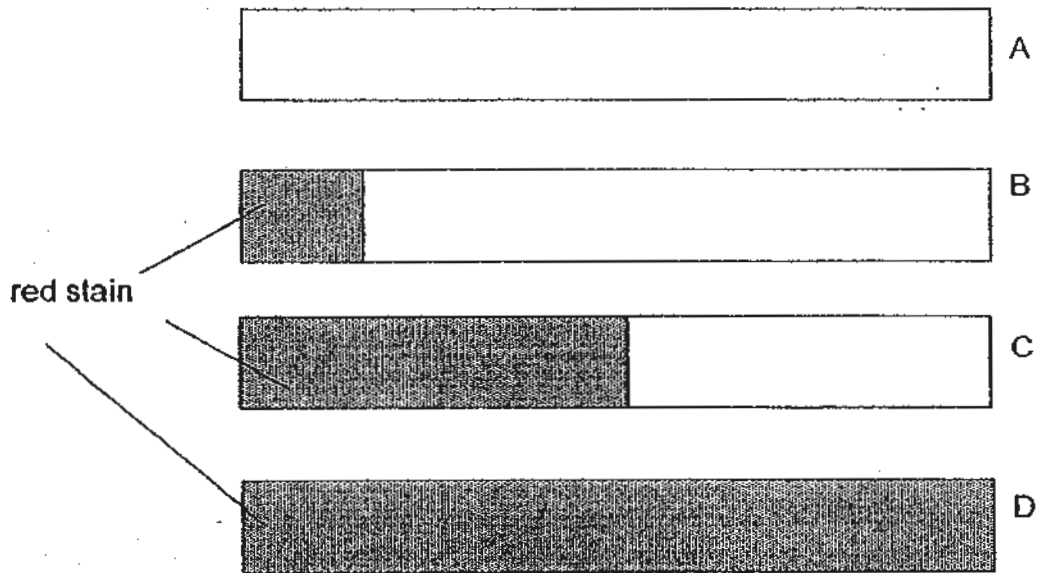
Arrange the four materials from hard to hardest.

	Hard	→			Hardest
(1)	A	B	C	D	
(2)	A	D	C	B	
(3)	B	C	D	A	
(4)	B	D	A	C	

30. Ah Beng dipped four strips of different materials (A, B, C and D) into a container with red-coloured water.



After five minutes, he took out the four strips and displayed them as follows:



Which of the above material is the most suitable for making raincoat?

- (1) A
- (3) C

- (2) B
- (4) D

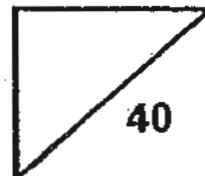
**End of Part I**



**Rosyth School**  
**Second Semestral Assessment for 2010**  
**SCIENCE**  
**Primary 3**

Name: \_\_\_\_\_

Total  
Marks:



Class: Pr 3-\_\_\_\_\_ Register No. \_\_\_\_\_ Duration: 1 h 45 min

Date: 28<sup>th</sup> October 2010 Parent's Signature: \_\_\_\_\_

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## **Booklet B**

### Instructions to Pupils:

1. For questions 31 to 44, write your answers in the spaces given in this booklet.

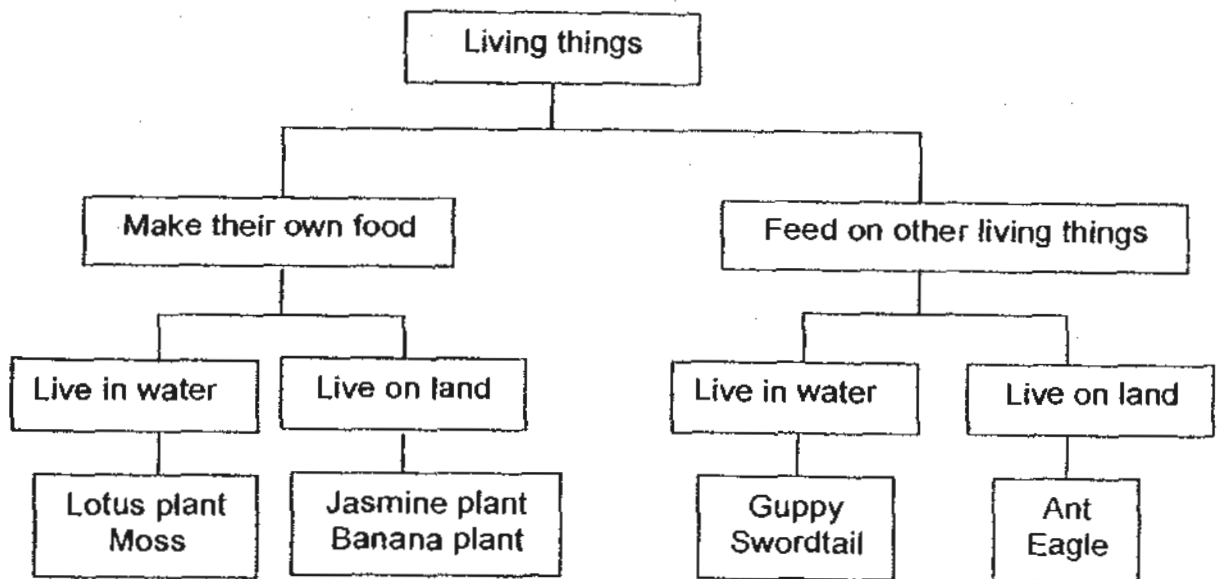
\* This booklet consists of 12 pages.

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**Part II (40 MARKS)**

For questions 31 to 44, write your answers in this booklet.

31.



(a) Based on the classification chart above, how is the <sup>lotus plant</sup> ~~lotus plant~~ different from the ~~lotus plant~~ swordtail? (1m)

---

---

(b) Based on the classification chart above, how is the banana plant similar to the eagle? (1m)

---

---

32. Mr. Tan saw the following animal crawling in his house.

He was not sure if it is an insect.



What must Mr. Tan do in order to determine if the above animal is most likely an insect?

(a) Put ticks on the correct boxes. (2m)

- Check if it has six legs.
- Check if it is more than 3 cm long.
- Check if it is brown in colour.
- Check if it has three body parts.

(b) Give reasons for your choices in (a). (2m)

---

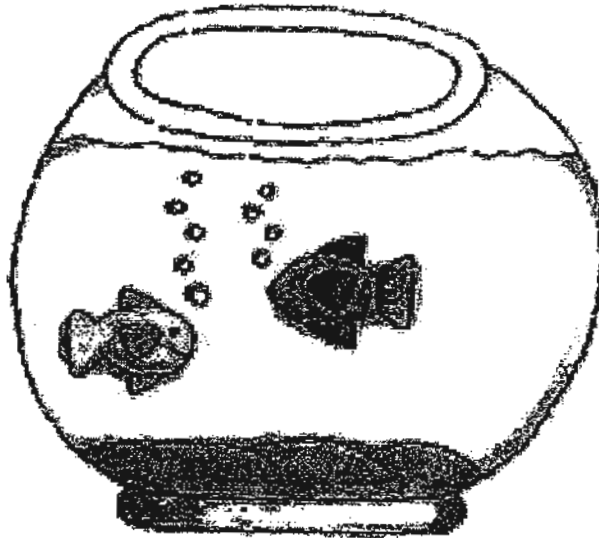
---

33. David kept two things, Y and Z in two separate cages. He put fresh food and water in the cages everyday. He measured Y's and Z's masses once a week.

	Mass of Y	Mass of Z
Week 1	300 g	200 g
Week 2	320 g	200 g
Week 3	350 g	200 g
Week 4	?	?
Week 5	390 g	200 g

- (a) Which one (Y or Z) is more likely to be a non-living thing? (1m)
- \_\_\_\_\_
- (b) What are the possible masses of Y and Z in Week 4? (2m)
- (i) Y: \_\_\_\_\_
- (ii) Z: \_\_\_\_\_
- (c) Why is it important to put food and water in the cages? (1m)
- \_\_\_\_\_
- \_\_\_\_\_

34. May put two fish into a fish bowl.



(a) If May wanted to put three more fish into the bowl, what are the two things May should put into the fish bowl to ensure the goldfish stay alive? (2m)

---

(b) When May tries to touch the goldfish, it swims away. Which two characteristics of living things is the goldfish displaying? (2m)

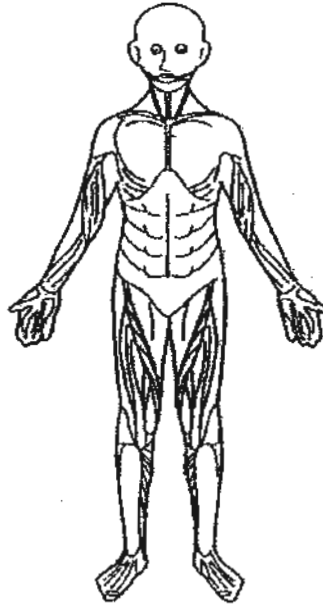
(i) \_\_\_\_\_

---

(ii) \_\_\_\_\_

---

35. The picture below shows one of the human body systems.



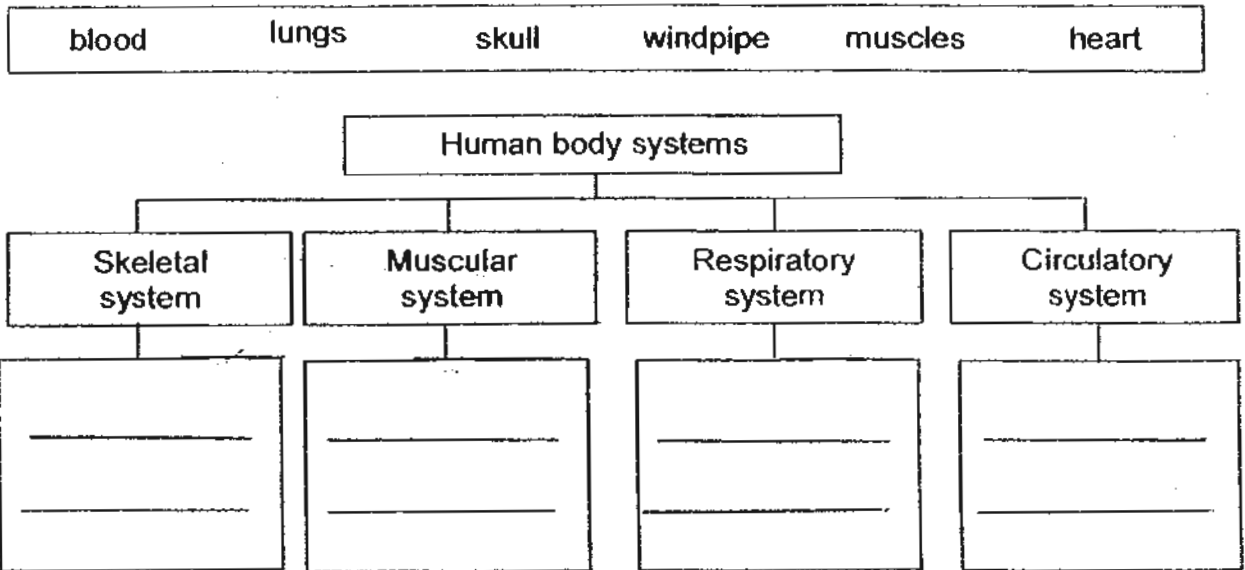
(a) Which one of the human body systems does it show? (1m)

---

(b) How does the above system help us? (1m)

---

36. Classify the following body parts into the different human body systems below. (3m)



37. The table below shows the four human body systems, A, B, C and D and their functions.

Human Body Systems			
A	B	C	D
Carries food, water and oxygen to all parts of the body.	Breaks down food into simple substances.	Gives the body its shape.	Allows exchange of gases with the surroundings.

Name the four human body systems. (4m)

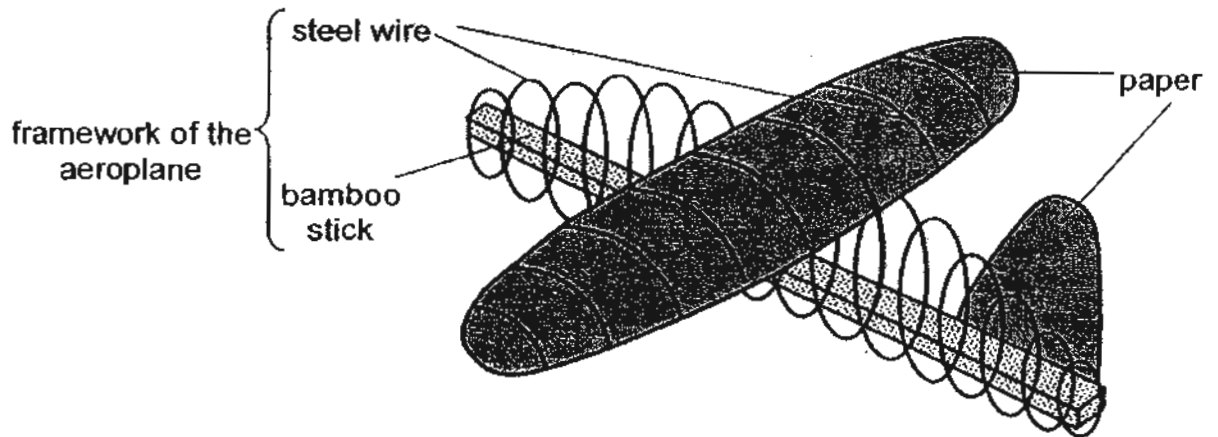
A : \_\_\_\_\_

B : \_\_\_\_\_

C : \_\_\_\_\_

D : \_\_\_\_\_

38. Eddy builds an aeroplane with his father using bamboo stick, steel wire and paper as shown below. His father tells him that the framework of the aeroplane is the bamboo stick and steel wire.



- (a) Name the human body system that serves the same function as the framework of the aeroplane. (1m)

---

- (b) State two similarities between the functions of the framework in human and the aeroplane. (2m)

---

---

39. Ahmad did not pass motion for a few days. When he finally cleared his bowels, he found that his stools were hard and difficult to pass out.

(a) Which part of the ~~digestion system~~ has caused his stools to be hard and difficult to pass out? *digestive* (1m)

---

(b) Explain what could have happened in the part of the digestive system mentioned in (a). (1m)

---

---

40. Weiwei used a knife to cut a piece of carrot into smaller pieces.

(a) Which part of the digestive system does a similar action take place? (1m)

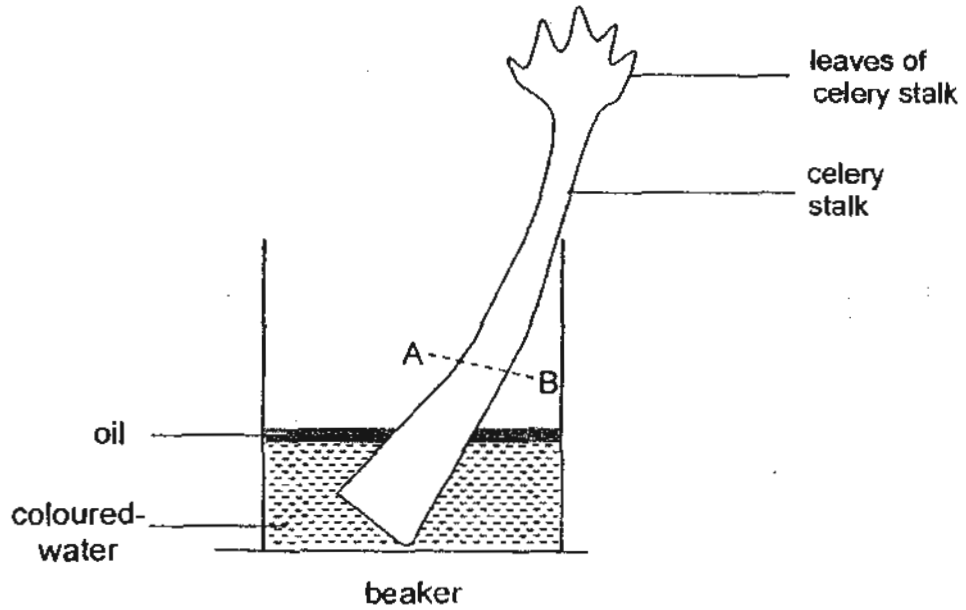
---

(b) Explain how is the knife similar to that part of the digestive system mentioned in (a) work. (1m)

---

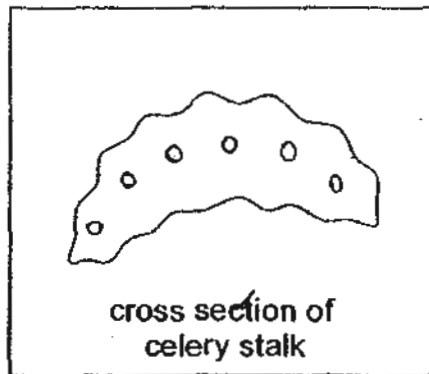
---

41. Meiling took a stalk of celery and put it into a beaker with some coloured water as shown below.



After one day, she took the stalk of celery out of the beaker and used a knife to cut it at AB.

- (a) In the diagram below, shade to show how the coloured water would be seen in the cross section of the stalk of celery. (1m)

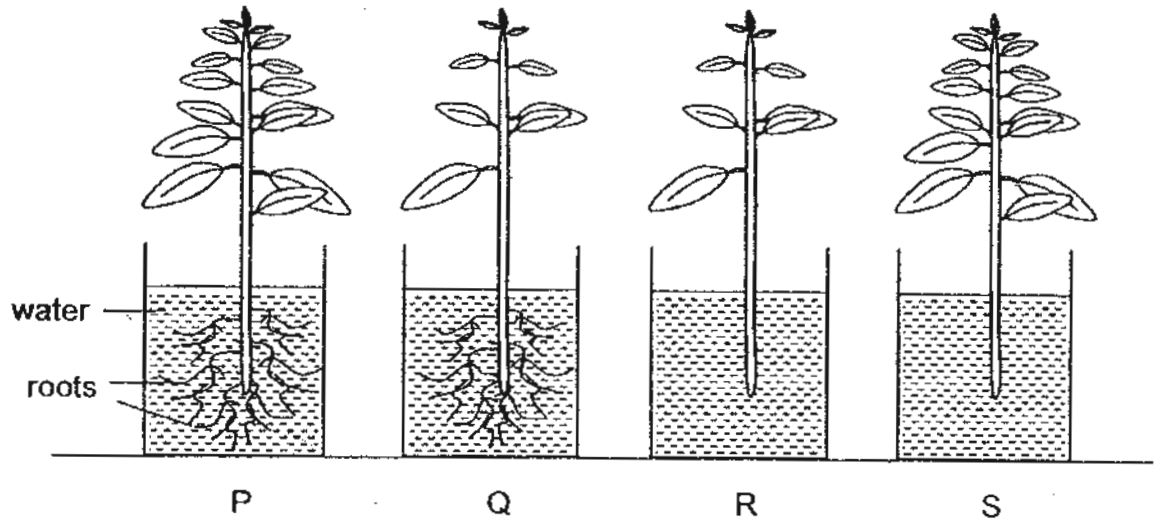


- (b) Explain what could have caused the observation for (a). (1m)

---

---

42. There are four set-ups as shown below.



- (a) Which two set-ups can be used to show that the number of leaves can affect the amount of water taken in by the plant? (1m)

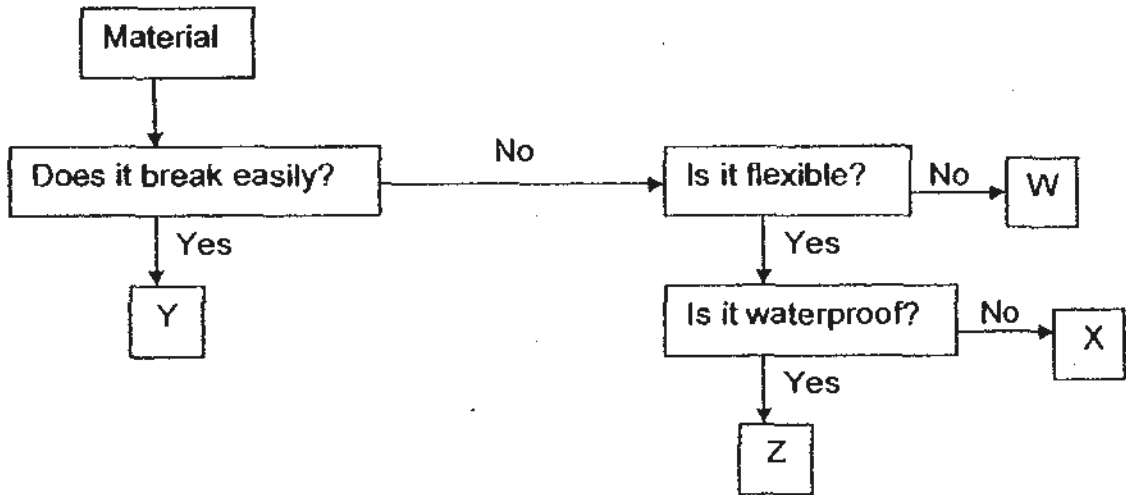
---

- (b) In which set-up do you think the least amount of water will be taken in by the plant? Explain why? (1m)

---

---

43. The flowchart below shows the properties of some materials.



Based on the information given in the flowchart, which of the following objects are made of materials W, X, Y or Z?

Fill in the boxes below with one letter (W, X, Y or Z) each.

(3m)

	Objects	Material
(a)	Window pane	
(b)	Water hose	
(c)	Ten-cent coin	

44. Ali tested the properties of four materials and recorded the results as follows:

Properties	Material A	Material B	Material C	Material D
Can bend	No	Yes	No	Yes
Is waterproof	Yes	Yes	Yes	No
Can be stretched	No	Yes	No	Yes
Will break if dropped	Yes	No	No	No

(a) Which material should Ali use to make a towel? Give a reason for your choice. (1m)

---

(b) State two differences between Materials B and C. (1m)

---

(c) Should Ali give a toy made of Material A to a baby? Why? (1m)

---

**End of Paper**

# ANSWER SHEET

## EXAM PAPER 2010

SCHOOL : ROSYTH PRIMARY  
SUBJECT : PRIMARY 3 SCIENCE

TERM : SA2

Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9	Q10	Q11	Q12	Q13	Q14	Q15	Q16	Q17
2	4	4	2	4	4	3	2	4	4	1	3	2	2	3	4	2

Q18	Q19	Q20	Q21	Q22	Q23	Q24	Q25	Q26	Q27	Q28	Q29	Q30
3	3	3	2	2	4	2	2	3	1	3	3	1

31)a)The lotus plant can make its own food while the sword tail feed on other living things.

b)They both live on land.

32)a)Check if it has six legs. Check if it has three body parts.

b)All insects have six legs and it has 3 body parts.

33)a)Z.

b)i)370g ii)200g

c)Living things need food and water to live.

34)a)Food and air.

b)i)Living things respond to changes around them.

ii)Living things move around by itself.

35)a)It shows the muscular system.

b)The above system help up the carry things and move around.

36)Skull                    muscles                    lungs                    heart  
Windpipe                    blood

37)A: Circulatory system                    B: Digestive system  
C: Skeletal system                    D: Respiratory system

38)a)Skeletal system. b)It supports the body and give the body its shape protection.

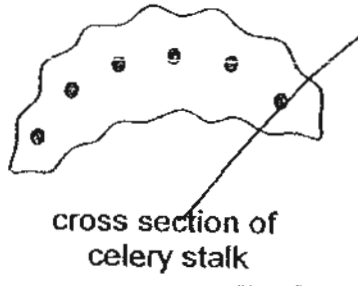
39)a)Large intestine.

b)The large intestine has absorbed too much water from the digested food.

40)a)Mouth.

b)The teeth in the mouth help to chew up food into smaller pieces.

41)a)



b)The celery have absorb some coloured water and cared the water to the leaves.

42)a)R and S.

b)R, It has fewer leaves and no roots.

43)a)Y b)Z c)W

44)a)Material D. It is not waterproof.

b)Material B can be bent but Material C cannot be bent.

c)No. When the body drop the toy, the toy will break.