



Rosyth School
Second Semestral Examination for 2014
SCIENCE
Primary 3

Name: _____

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

Date: 29 October 2014 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.

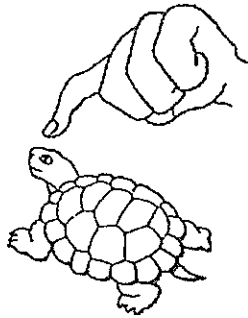
* This booklet consists of 17 pages.

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Booklet A (48 MARKS)

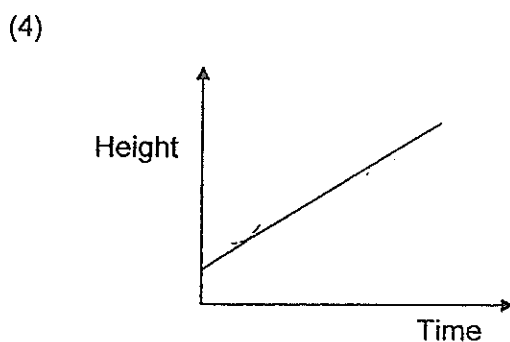
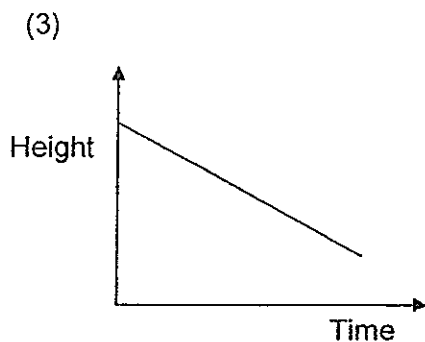
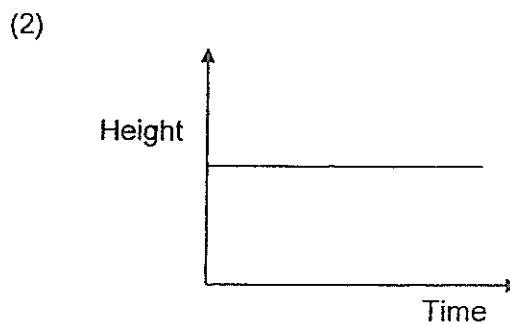
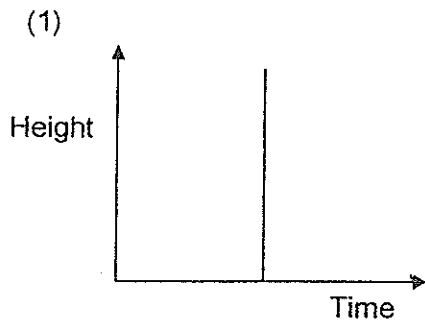
For each question from 1 to 24, four options are given. One of them is the correct answer. Make your choice (1, 2, 3 or 4) and shade the correct oval (1, 2, 3 or 4) on the Optical Answer Sheet (OAS).

1. The terrapin pulled its head inside its shell when Lisa touched it.

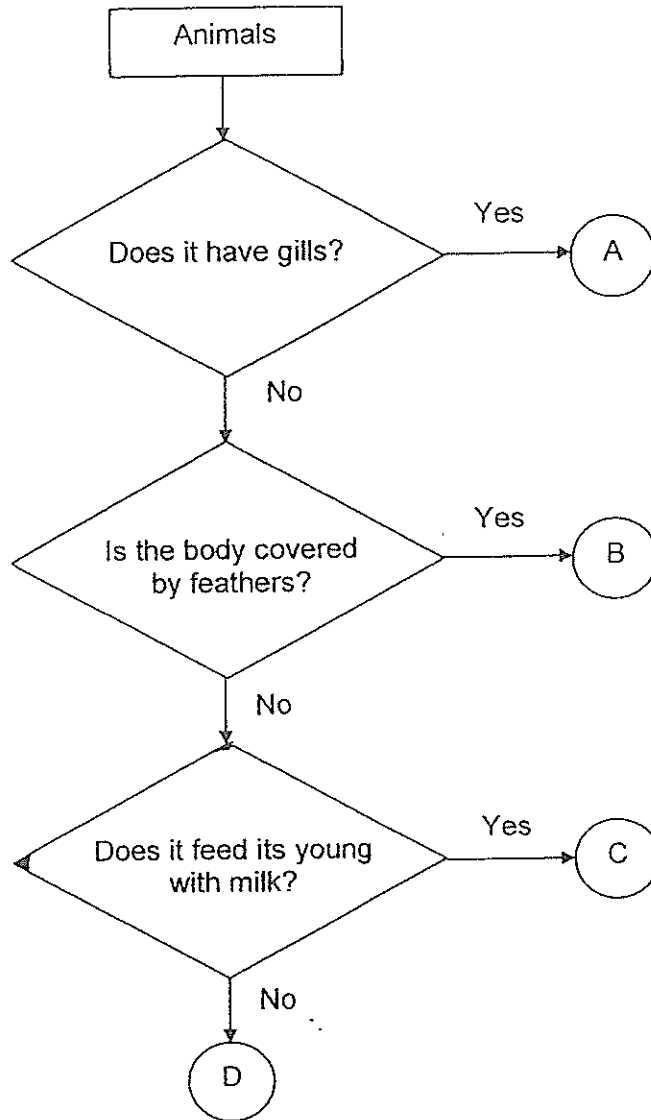


Which characteristic of living things is illustrated by the terrapin?

- (1) Living things can grow.
 - (2) Living things can reproduce.
 - (3) Living things can move from one place to another.
 - (4) Living things can respond to changes around them.
2. Which graph shows the correct height of a toy rabbit over a period of time?



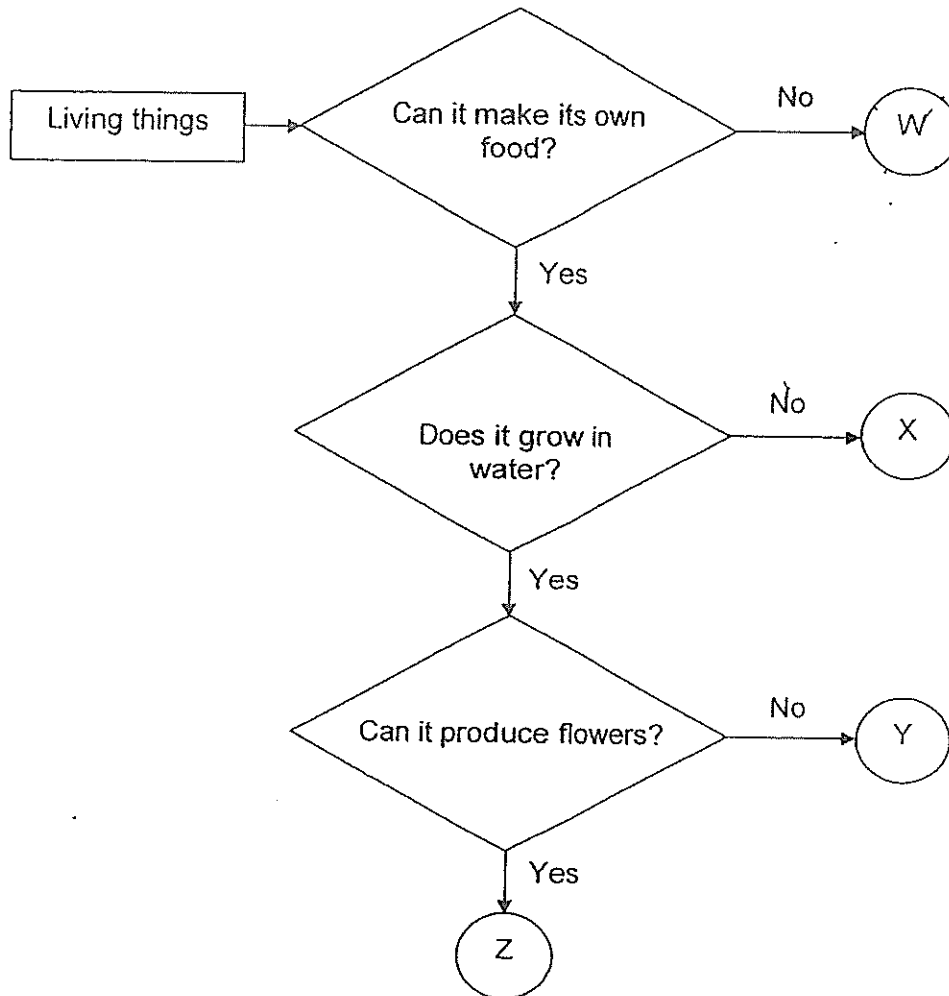
3. Study the flowchart below carefully.



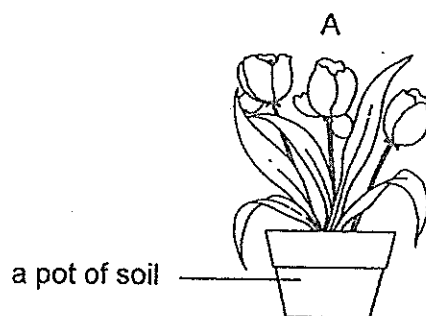
What can animals A, B, C and D be?

	A	B	C	D
(1)	fish	insect	bird	mammal
(2)	fish	bird	mammal	insect
(3)	reptile	bird	insect	mammal
(4)	reptile	fish	mammal	amphibian

4. Study the flowchart below.



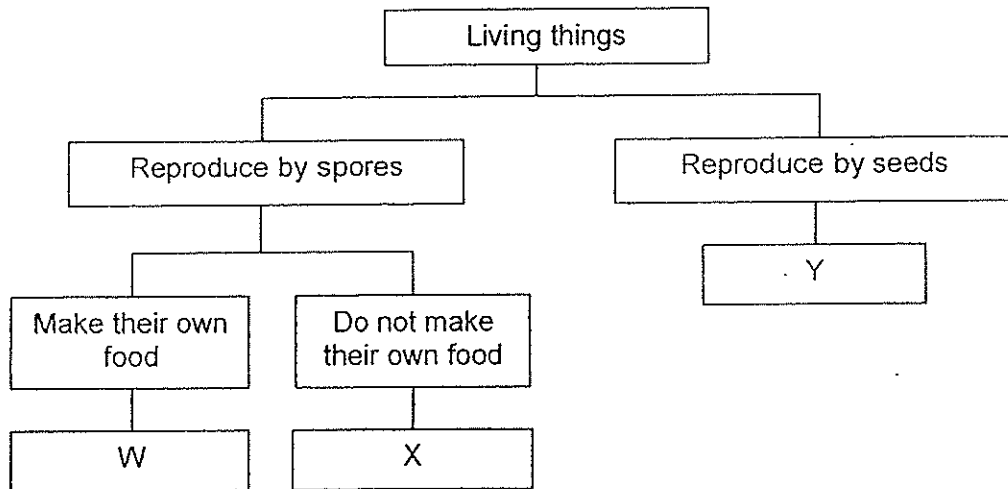
Based on the flowchart, which of the above letter best represents A shown below?



- (1) Group W
- (3) Group Y

- (2) Group X
- (4) Group Z

5. Study the classification diagram below.



Which of the following letters best represent fungi and plants?

	Fungi	Plants
(1)	X	Y
(2)	W	Y
(3)	Y	W
(4)	W	X

6. Kristal carried out an experiment with four similar pieces of wood A, B, C and D. She soaked each piece of wood in 500 ml of water for different number of days and then placed them at the same location. She then observed and recorded the day on which the fungi started growing on the wood in the table as shown below.

Wood	Number of days the wood was soaked in water	The day on which the fungi started to grow on the wood
A	1	Day 30
B	2	Day 20
C	3	Day 15
D	4	Day 10

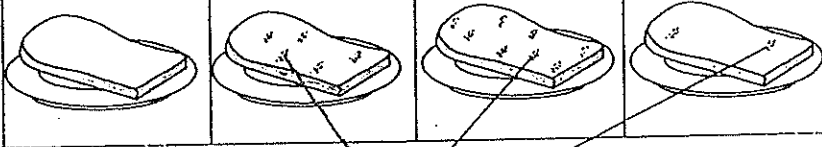
Based on the results collected, Kristal wrote down the following statements. Which statements are correct?

- A: All the pieces of wood had fungi growing on them.
B: Wood C took more days for fungi to grow on it than Wood A.
C: The longer the wood was soaked in water, the faster the fungi started growing on it.

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

7. Cindy conducted an experiment to find out more about bread mould. She took four similar pieces of bread A, B, C and D and added different amount of water on them. She placed all of them on the dining table. She then observed the amount of bread mould growing on the bread after 8 days and recorded her observations in the table below.

	Bread A	Bread B	Bread C	Bread D
Amount of water added to the bread (ml)	0	10	20	5
Amount of bread mould observed after 8 days	none	5 patches	8 patches	2 patches



patches of mould on each slice of bread

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

- W: Bread mould needs water to grow.
- X: Bread mould grows better in the dark.
- Y: Bread mould grows better when there is more water.

- (1) Y only
 - (2) W and X only
 - (3) W and Y only
 - (4) W, X and Y
8. Which of the following statements about system(s) is/are true?

- A: They can be living or non-living things.
- B: They will still function properly if one or more parts are missing.
- C: They are made up of parts which work together to perform a function.

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

9. Which of the following statements best describe the function of our skeletal system?

- A: It supports the body.
 B: It protects the delicate organs.
 C: It gives the body its shape.

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

10. Which of the following parts are matched to the systems correctly?

	Digestive System	Skeletal System	Respiratory System
(1)	mouth	rib cage	blood
(2)	gullet	skull	heart
(3)	nose	rib cage	lungs
(4)	stomach	backbone	windpipe

11. The following shows the description of a body system.

The system works very closely with other systems in the body.
 It transports oxygen from the lungs to the heart and to other parts of the body.

Which one of the following systems is described above?

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

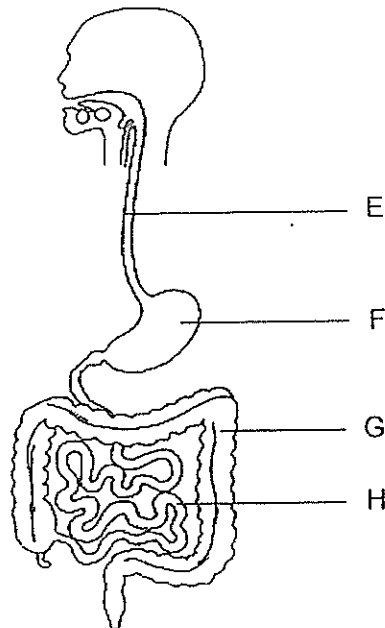
12. Alice, Bernice, Calvin and Deming each made a statement about what they had learnt about the different parts of the human digestive system.

- Alice : Digestion begins in the stomach.
 Bernice : Digestive juices are not found in the stomach
 Calvin : Digestion is completed in the small intestine.
 Deming : Digestive juices are not produced in the large intestine.

Whose statements are correct?

- (1) Alice and Bernice only (2) Alice and Calvin only
 (3) Bernice and Calvin only (4) Calvin and Deming only

Refer to the diagram below (human digestive system) to answer Questions 13 and 14.



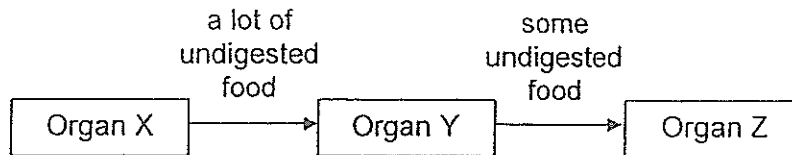
13. In which of the following parts is water removed from the undigested food?

- (1) E
- (2) F
- (3) G
- (4) H

14. Which one of the following best describes what takes place at F and H?

	F	H
(1)	Digestion takes place	Water is being removed
(2)	Digestion takes place	Digested food is absorbed
(3)	Water is being removed	Digestion is completed here
(4)	Digestion is completed here	Digestion takes place

15. The flowchart below shows the state of the food as it travelled through the digestive system.



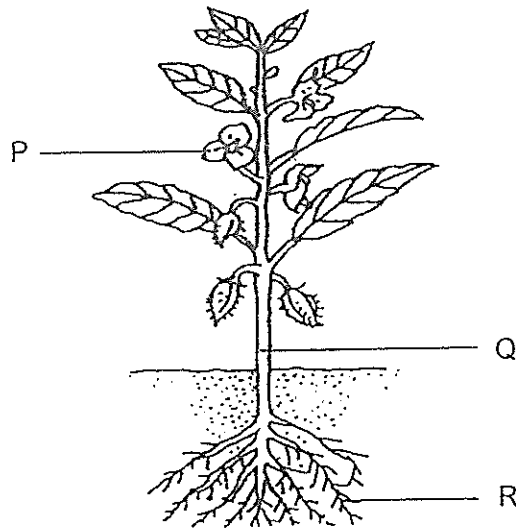
What are the organs X, Y and Z likely to be?

	Organ X	Organ Y	Organ Z
(1)	mouth	gullet	stomach
(2)	gullet	stomach	small intestine
(3)	stomach	large intestine	small intestine
(4)	small intestine	large intestine	anus

16. Peiling was unable to pass motion for several days. When she finally was able to, she found out that her stools were hard and difficult to pass out. Which part of her digestive system could have caused her stools to be hard and difficult to pass out?

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

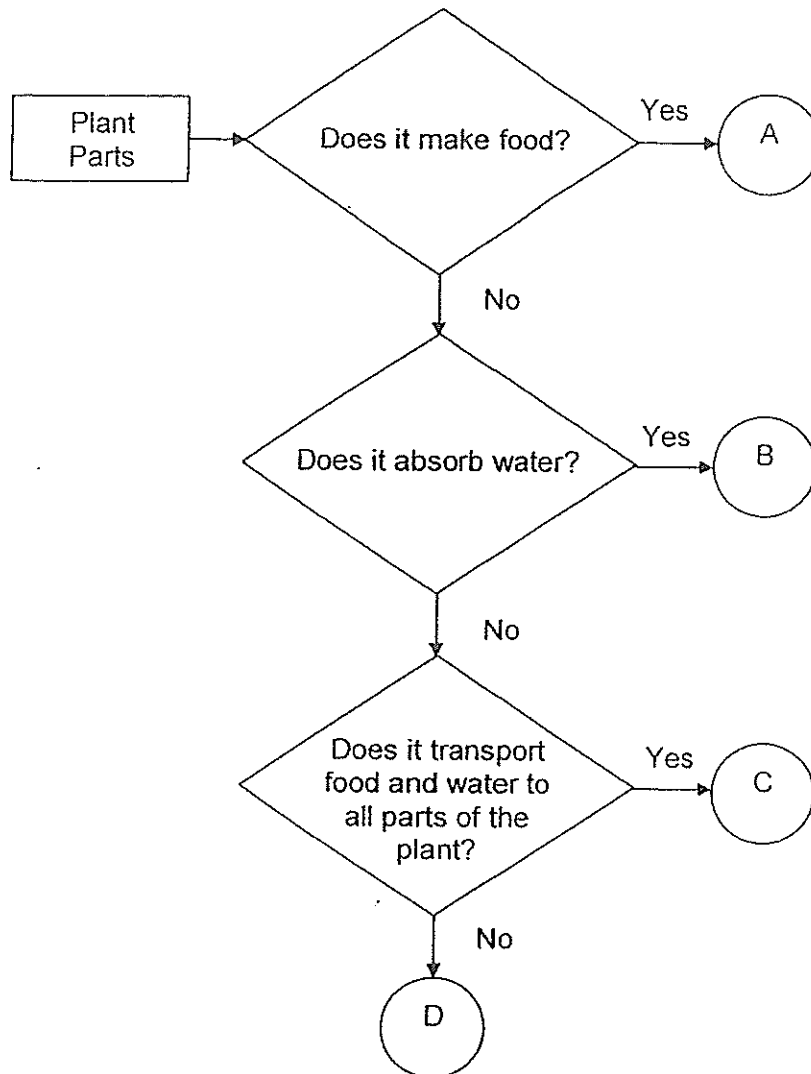
17. The diagram below shows a picture of a plant.



Which of the following correctly represents the parts marked P, Q and R?

	P	Q	R
(1)	fruit	stem	root
(2)	fruit	leaves	stem
(3)	flower	stem	root
(4)	flower	leaves	stem

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

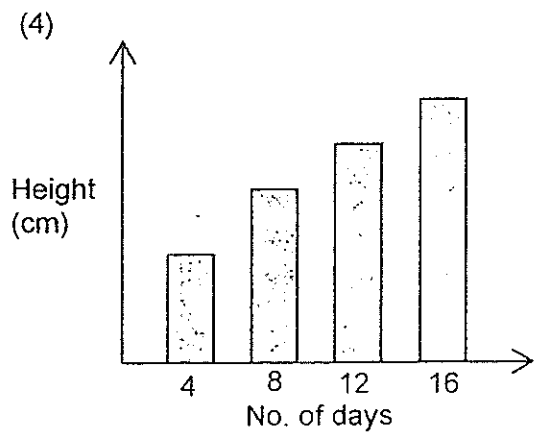
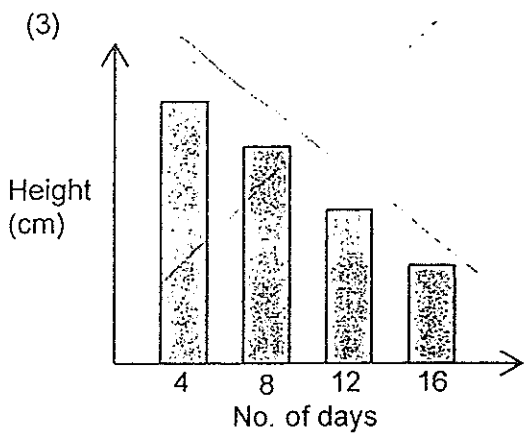
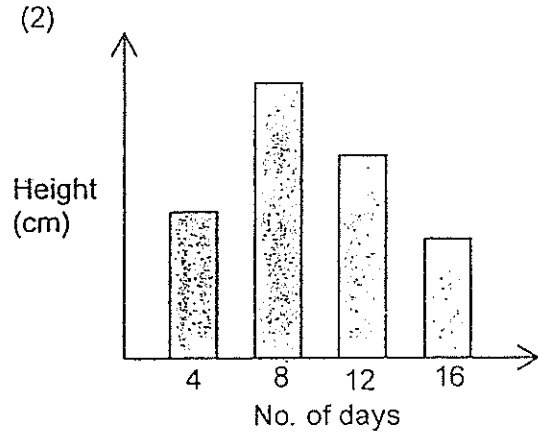
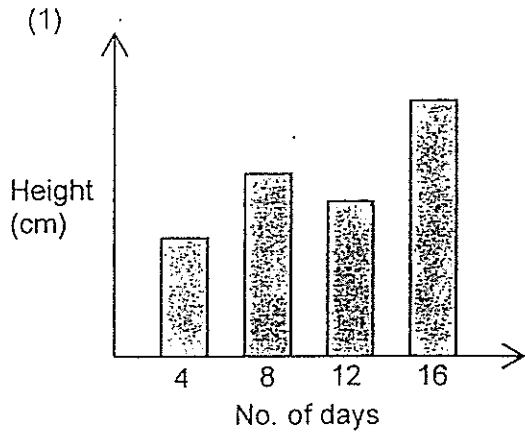


Which one of the following parts (A, B, C or D) best represents the root?

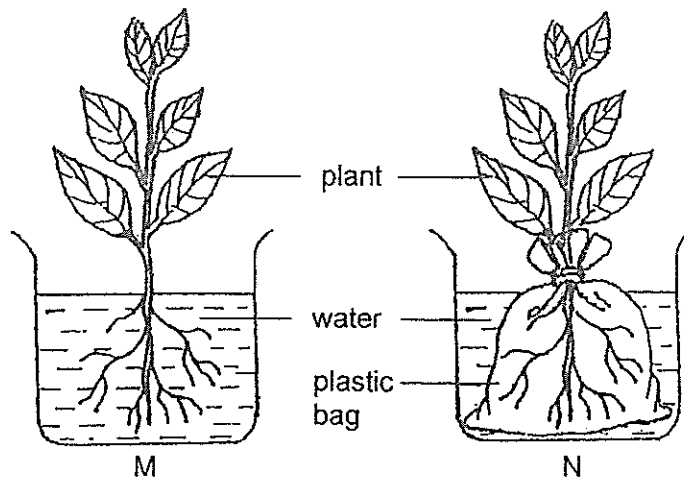
- (1) A
- (3) C

- (2) B
- (4) D

19. Jiayi grew some green beans in a cup and placed it near the window. She then measured the height of the seedlings every four days. Which one of the following graphs best represents the height of the seedlings over 16 days?



20. Faith had two set-ups, M and N, as shown below in a sunny place.



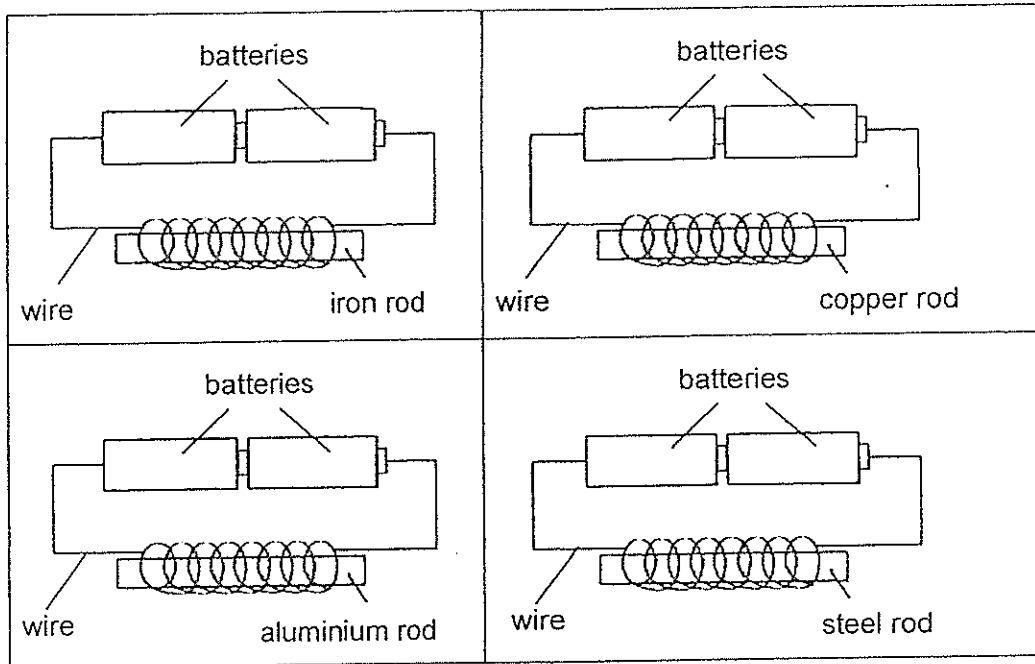
After some time, the plant in set-up N died. What could have caused the plant in set-up N to die?

- A: No water was taken in by the plant.
- B: No food can be made by the leaves.
- C: No oxygen was taken in by the plant.
- D: No sunlight was absorbed by the leaves.

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

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

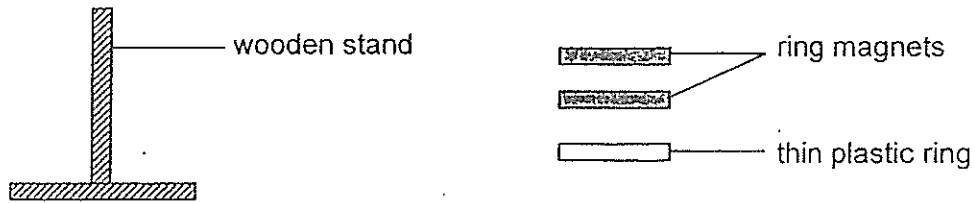
21. Joe carried out an experiment on four different types of rods as shown below.



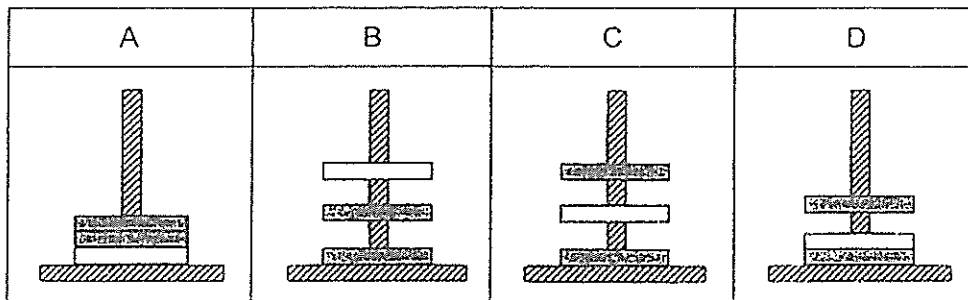
Which of the above rod(s) will become electromagnet(s)?

- (1) iron rod only (2) copper rod only
(3) iron rod and steel rod only (4) aluminium rod and steel rod only

22. Tommy took two ring magnets and a thin plastic ring and slotted them through the wooden stand shown in the diagram below.

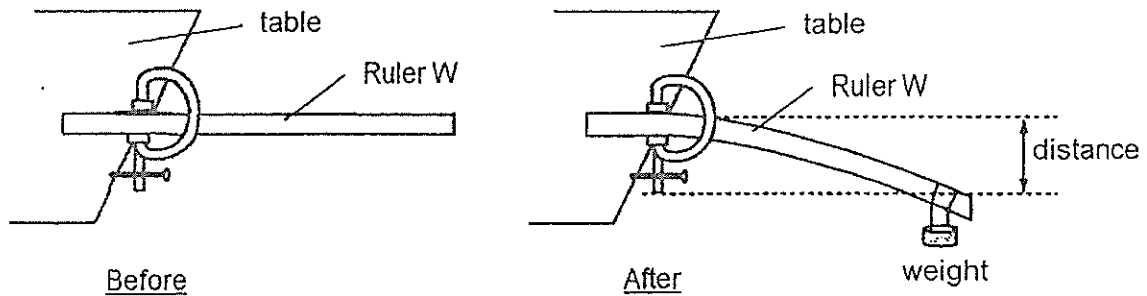


Which of the following observations could Tommy possibly make?



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

23. Celia prepared the following set-up with four 30-cm rulers W, X, Y and Z. She secured one end of the ruler to a table and hung a weight on the other end. She then observed how far the ruler can be bent by measuring the distance as shown in the diagram below.



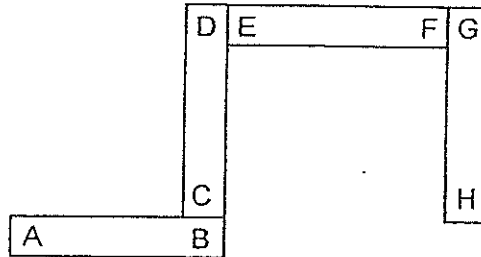
Celia repeated the above experiment for three other different rulers which have the same mass, thickness and length and recorded her results in the table below.

Ruler	Distance the ruler bent (cm)
W	1
X	4
Y	3
Z	5

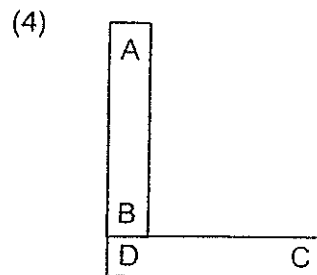
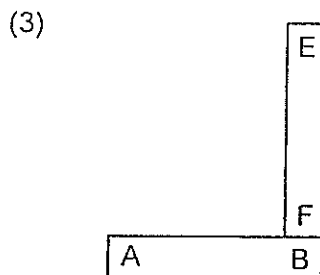
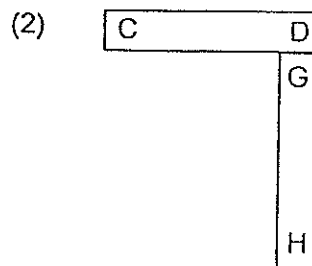
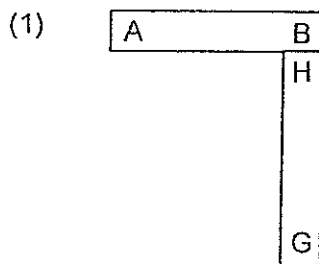
Which property was tested in the above experiment?

- (1) Strength (2) Flexibility
 (3) Waterproof (4) Transparency

24. Francis used 4 bar magnets with their ends marked A to H. They are arranged as shown below.



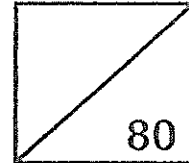
He then used 2 of the bar magnets and rearranged them. Which of the following is a possible arrangement of the 2 bars of magnets?



End of Booklet A



Rosyth School
Semestral Examination for 2014
SCIENCE
Primary 3



Name: _____ Total Marks: _____
Class: Pr 3 - _____ Register No. _____ Duration: 1 h 30 min
Date: 29 October 2014 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	

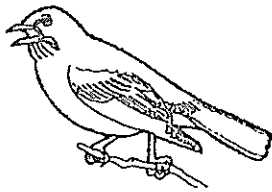
* This booklet consists of 11 pages.

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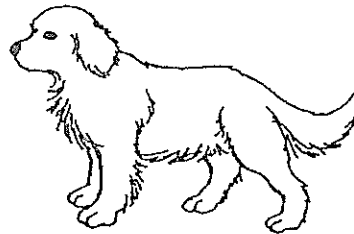
Booklet B (32 MARKS)

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

25. Look at the two animals shown below.



Animal A



Animal B

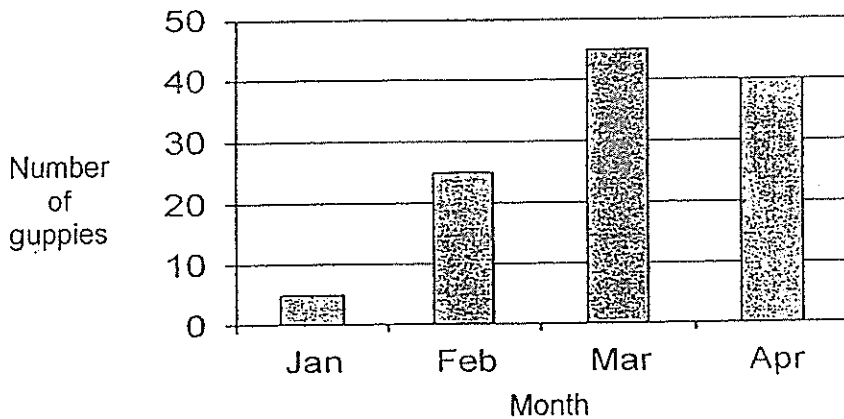
State two differences and one similarity between the two animals based on the following characteristics.

(a) Difference 1 based on their body coverings: [1m]

(b) Difference 2 based on their movement: [1m]

(c) Similarity based on a characteristic of living things: [1m]

26. 5 guppies were placed in a tank. No guppies was added or removed from the tank. The bar graph below showed the number of guppies observed in the tank over 4 months from January to April.

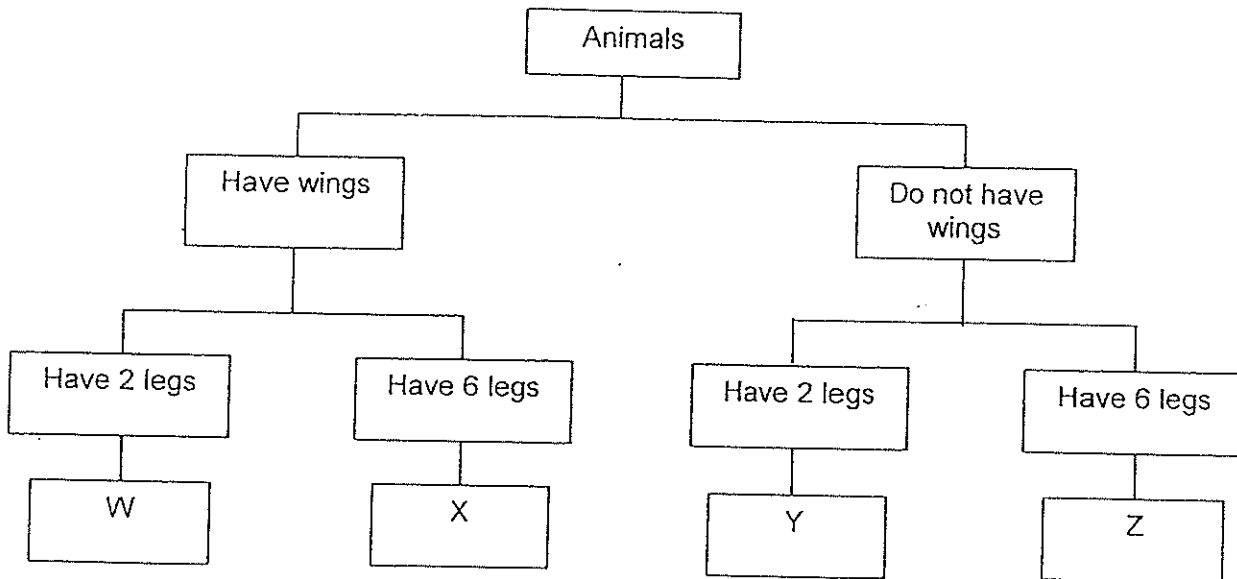


- (a) Based on the graph above, what do you observe about the number of guppies in the tank between January to March? [1m]

- (b) What could be a possible reason for the change in the number of guppies between January to March? [1m]

- (c) What possible characteristic of living things could be observed from March to April? [1m]

27. Study the classification diagram below.



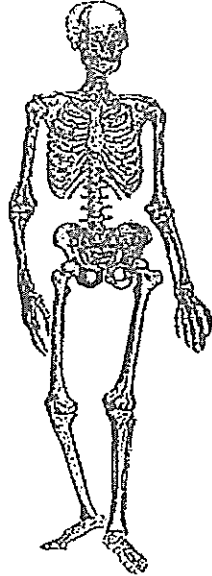
(a) Based on the classification diagram, state the characteristics of Animal W. [1m]

(b) Identify the group of animals for W. [1m]

(c) If you were to put a man in the classification diagram above, which animal group (W, X, Y or Z) would you choose? Explain why. [1m]

(d) A student stated that groups X and Z belong to the same animal group. Do you agree? Explain why. [1m]

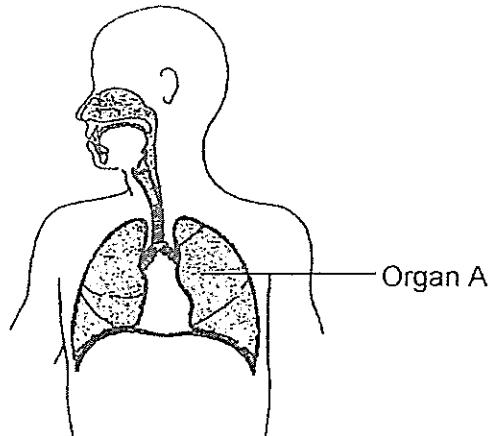
28. The diagram below shows a body system.



(a) Name the above system. [1m]

(b) To enable the body to move, another human body system needs to work together with the above system. Name the other system. [1m]

29. The diagram below shows the respiratory system of a human.

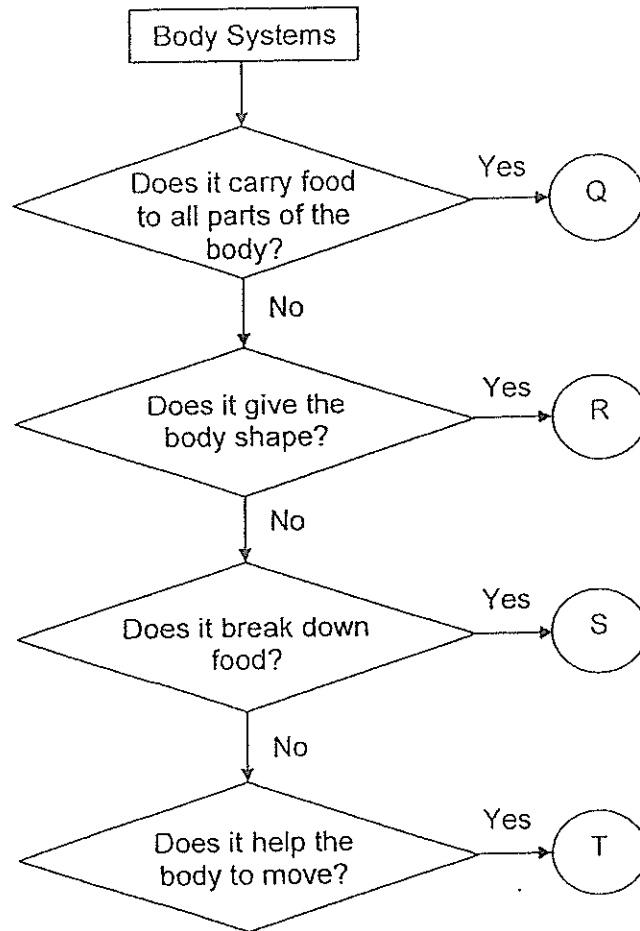


(a) What is the function of the respiratory system? [1m]

(b) Name Organ A. [1m]

(c) Name the part of the skeletal system that protects Organ A. [1m]

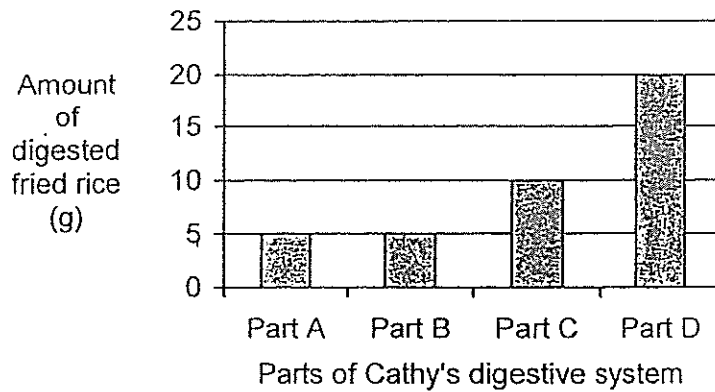
30. Siti drew the flowchart below to show the characteristics of the human systems.



Based on the flowchart, what are likely to be the human systems represented by Q, R, S and T? [4m]

	Human Systems
Q	
R	
S	
T	

31. Cathy ate a plate of fried rice for lunch. The graph below shows the amount of digested fried rice as it moved through the four different parts (A, B, C and D) of her digestive system.



- (a) Which part of Cathy's digestive system is Part C most likely to be? [1m]

- (b) Part D in the digestive system has the most number of blood vessels. Explain why. [2m]

32. Andy wanted to find out the amount of water taken in by a plant. He placed a healthy plant in Jar A and another identical plant in Jar B as shown below.



Jar A



Jar B

Jar A was placed in a sunny place while Jar B in a shady place.

- (a) What will happen to the water level in both jars after a few days? [1m]

- (b) Explain your answer in (a). [1m]

The table below shows the volume of water in the jars at the beginning of the experiment on Day 1 and at the end of the experiment on Day 5.

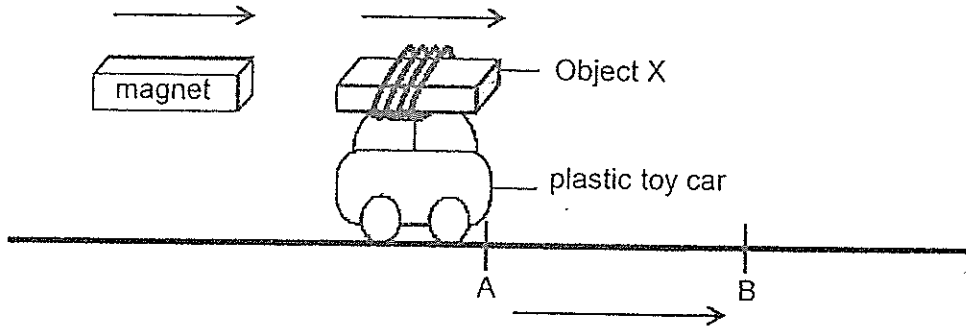
Jar	Volume of water (ml)	
	Day 1	Day 5
A	500	100
B	500	300

- (c) In which jar (A or B) has the plant taken in more water and what is the difference in the amount of water taken in by the plants? [1m]

- (d) Tick (✓) the condition that has caused the difference in the amount of water taken in by the plants in Jar A and B. [1m]

Amount of air	<input type="checkbox"/>
Amount of water	<input type="checkbox"/>
Amount of sunlight	<input type="checkbox"/>

33. Kok Leng placed Object X on top of the plastic toy car as shown below. When he placed a magnet near the plastic toy car, the plastic toy car began to move from position A to position B.

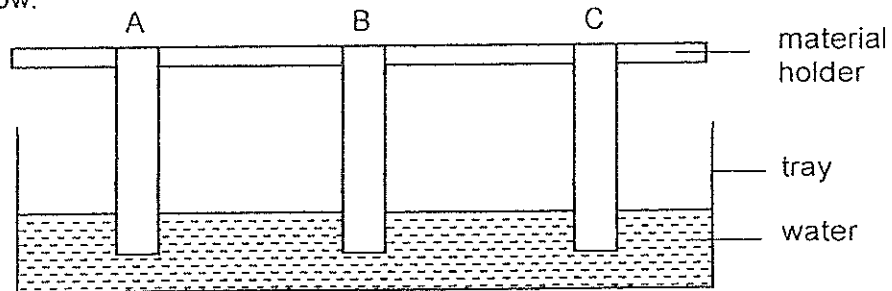


- (a) Based on Kok Leng's observation, what is Object X likely to be? [1m]

- (b) Explain why the toy car moved from position A to position B when Kok Leng placed the magnet near it? [1m]

- (c) Kok Leng said that replacing the magnet with a bigger magnet would definitely increase the magnetic strength and cause the car to move further. Do you agree with him? Explain your answer. [1m]

34. Surin placed three strips of different materials (A, B and C) in a tray of water as shown below.

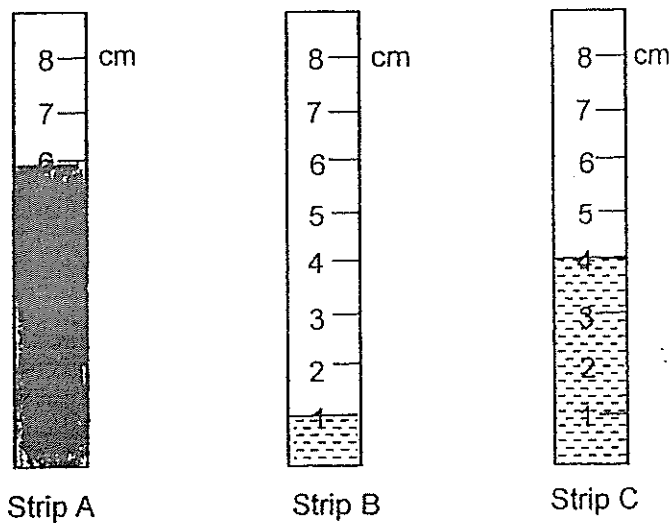


She measured the height of the water level on the strips after 20 minutes and recorded the results as shown below.

Strip of material	Height of water level (cm)	
	At start	20 minutes later
A	0	6
B	0	1
C	0	4

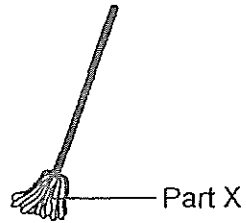
- (a) Which property of material was tested in the above experiment? [1m]

- (b) The water levels for strips B and C were observed and indicated as shown below. Draw the water level on strip A. [1m]



Go to page 11 for Q34(c).

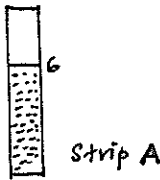
- (c) Based on Surin's findings, which material (A, B or C) would you choose to make Part X of the mop shown below? Explain your answer. [1m]



EXAM PAPER 2014

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

Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9	Q10				
4	2	2	2	1	1	3	3	4	4				
Q11	Q12	Q13	Q14	Q15	Q16	Q17	Q18	Q19	Q20	Q21	Q22	Q23	Q24
3	4	3	2	2	1	3	2	4	1	3	2	2	2

- Q25 (a) Animal A has feathers but Animal B has fur.
(b) Animal A can fly but Animal B cannot fly.
(c) Living things move by themselves.
- Q26 (a) The number of guppies increases.
(b) The guppies reproduce.
(c) Living things die.
- Q27 (a) Animal W has 2 legs and wings.
(b) Birds
(c) Animal Y. Man does not have wings and have 2 legs.
(d) Yes. Both have 6 legs.
- Q28 (a) Skeletal system
(b) Muscular system
- Q29 (a) To take in oxygen and remove carbon dioxide.
(b) Lungs
(c) Rib cage
- Q30 Q : Circulatory
R : Skeletal
S : Digestive
T : Muscular
- Q31 (a) Stomach
(b) Part D absorbed the most amount of digested food into the bloodstream.
- Q32 (a) The water level will decrease.
(b) The plants will take in the water.
(c) Jar A. The difference is 200ml.
(d) ✓ Amount of sunlight
- Q33 (a) A magnet
(b) The magnet repel each other as the like poles are facing each other.
(c) No. The magnet strength does not depend on the size.
- Q34 (a) Absorbent
(b) 
(c) A. It absorbed the most amount of water thus it is the most absorbent.

