

SCIENCE
2016 SEMESTRAL EXAMINATION 1
PRIMARY 3

Name : _____ ()

Class : Primary 3/ _____

Date : 10 May 2016

BOOKLET A

Total time for Booklets A & B: 1h 30 min

Booklet A: 18 questions (36 marks)

Note:

1. Do not open the booklet until you are told to do so.
2. Read carefully the instructions given at the beginning of each part of the booklet.
3. Do not waste time. If the question is too difficult for you, go on to the next question.
4. Check your answers thoroughly and make sure you attempt every question.
5. In this booklet, you should have the following:
 - a. Page 1 to Page 9
 - b. Questions 1 to 18

Section A: Multiple Choice Questions

For Questions 1 to 18, choose the most suitable answer and shade its number in the OAS provided.

- 1 Chef Lim cut the onion and his eyes became teary. What characteristic of living things does this show?



Living things can _____.

- (1) grow
 - (2) move
 - (3) reproduce
 - (4) respond to changes
- 2 What type of outer body covering does this animal have?



bat

- (1) hair
- (2) shell
- (3) scales
- (4) feathers

3 Four students made the following statements about insects.

- Ashton : The females produce milk for their young.
Bella : They have three body parts.
Cai Ting : They have three pairs of legs.
David : They have feelers.

Which student(s) has/have made the correct statement(s)?

- (1) David only
- (2) Ashton and Bella only
- (3) Bella and Cai Ting only
- (4) Bella, Cai Ting and David only

4 Which one of the following is a fungus?

- (1) fern
- (2) mould
- (3) orchid
- (4) bacteria

5 Which one of the following statements about bacteria is false?



- (1) They are tiny living things.
- (2) They cannot be found in our bodies.
- (3) They can be harmful or useful to us.
- (4) They can be seen clearly under a microscope.

6 Miki made the following comparisons between amphibians and birds.

A: Both can fly.

B: Amphibians have moist skin but birds have feathers.

C: Amphibians only feed on animals but birds feed on plants.

Which of her comparisons is/are correct?

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

7 Observe the pictures below.



doll



baby

Which of the following statements is/are true?

A: Both can move on their own.

B: Both need air, food and water to survive.

C: The baby can grow but the doll cannot.

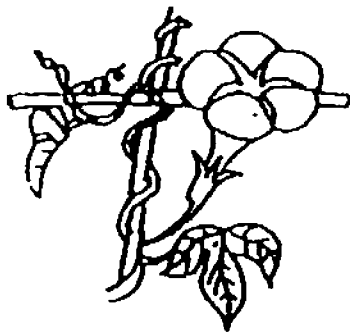
D: The doll can respond to changes but the baby cannot.

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

- 8 The table below shows the characteristics of four animals (A, B, C and D).
A tick (✓) means it has the characteristic and a cross (X) means it does not have.
Which animal represents the snake which is a reptile?

	Animal	Has 2 legs	Has scales	Has dry skin
(1)	A	X	X	X
(2)	B	✓	X	✓
(3)	C	X	✓	✓
(4)	D	X	✓	X

- 9 Study the diagram of a plant below.



Which one of the following correctly shows the characteristic of the plant?

- A: It reproduces by seeds.
B: It is a flowering plant.
C: It has a toothed edge leaf.

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

- 10 A teacher placed a football in the middle of a field and asked a boy to kick it. Four students were asked to observe what had happened to the football and state their observation.

Eric : A football is a living thing as it can move from one position to another.

Gill : A football is a living thing as it responds to the boy's kick.

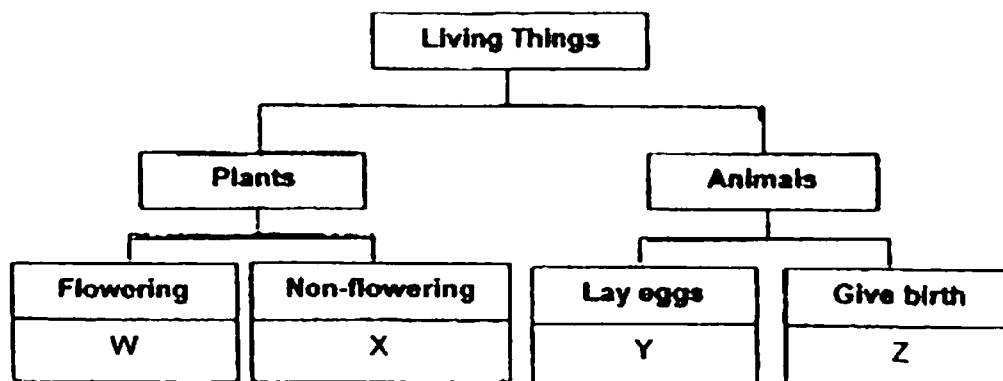
Ivy : A football is a non-living thing as it cannot reproduce

Tam : A football is a non-living thing as it will not die.

Which of the above students is/are correct?

- (1) Ivy only
- (2) Gill only
- (3) Eric and Gill only
- (4) Ivy and Tam only

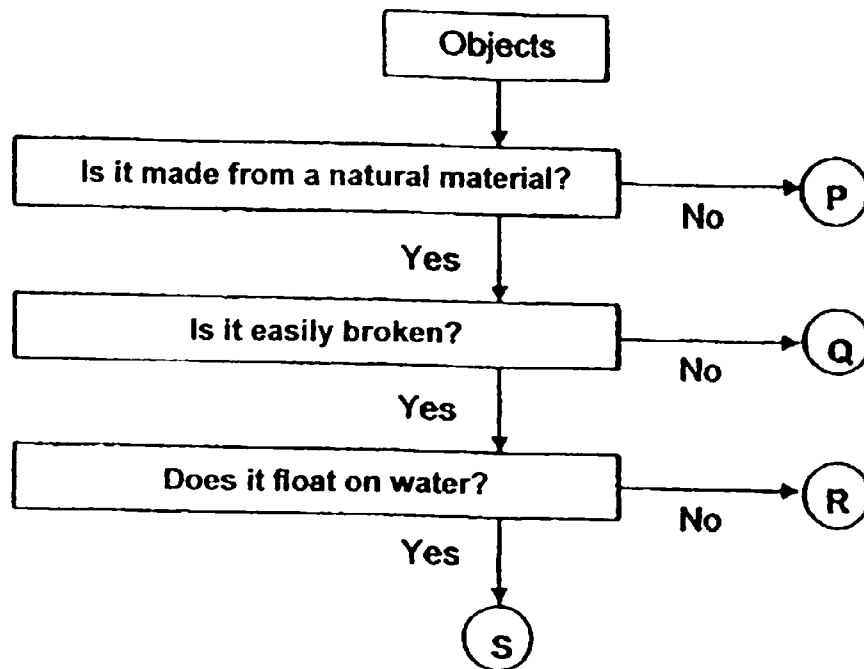
- 11 Study the classification chart below.



Which of the statements describes the organisms, W, X, Y and Z?

- (1) W and X can bear fruits.
- (2) Y and Z can only be land animals.
- (3) W and X can make their own food.
- (4) Only Y and Z need air, food and water to survive.

Study the flowchart below and answer questions 12 and 13.



12 Based on the flowchart, what can object P be?

- (1) cotton
- (2) plastic
- (3) wood
- (4) rubber

13 Which of the following objects is made of glass?

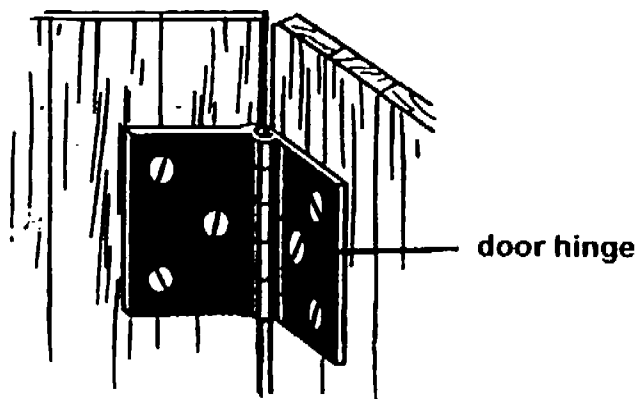
- (1) Object P
- (2) Object Q
- (3) Object R
- (4) Object S

- 14 The picture below shows a pair of spectacles. What are the most important properties that the materials must have in order to make parts X and Y ?



	Property of material used to make X	Property of material used to make Y
(1)	transparent	strong
(2)	strong	break easily
(3)	transparent	stretchable
(4)	strong	flexible

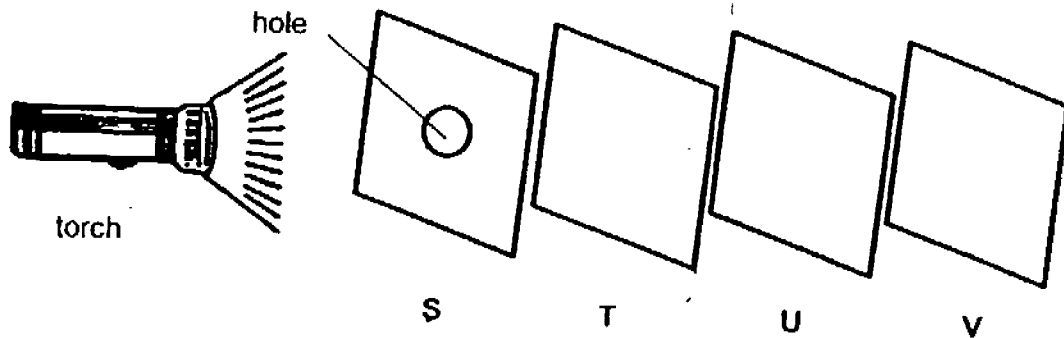
- 15 The diagram below shows a door hinge.



Iron is used to make door hinges because iron is _____.

- (1) heavy
- (2) strong
- (3) flexible
- (4) waterproof

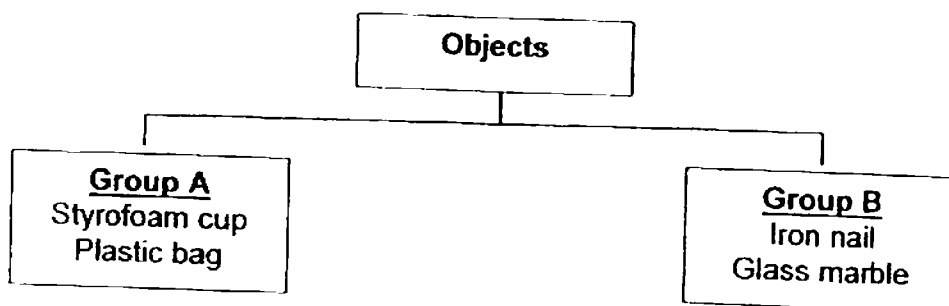
- 16 Jaymond conducted an experiment shown below in a dark room. He arranged the sheets, S, T, U and V in a straight line. When the torch was switched on, he could see a bright spot of light on sheet U only.



Which of the following correctly describes the properties of the sheets, S, T, U and V?

	Allow(s) light to pass through	Do/Does not allow light to pass through
(1)	S and T	V
(2)	S and T	U
(3)	S	U and V
(4)	T	S and U

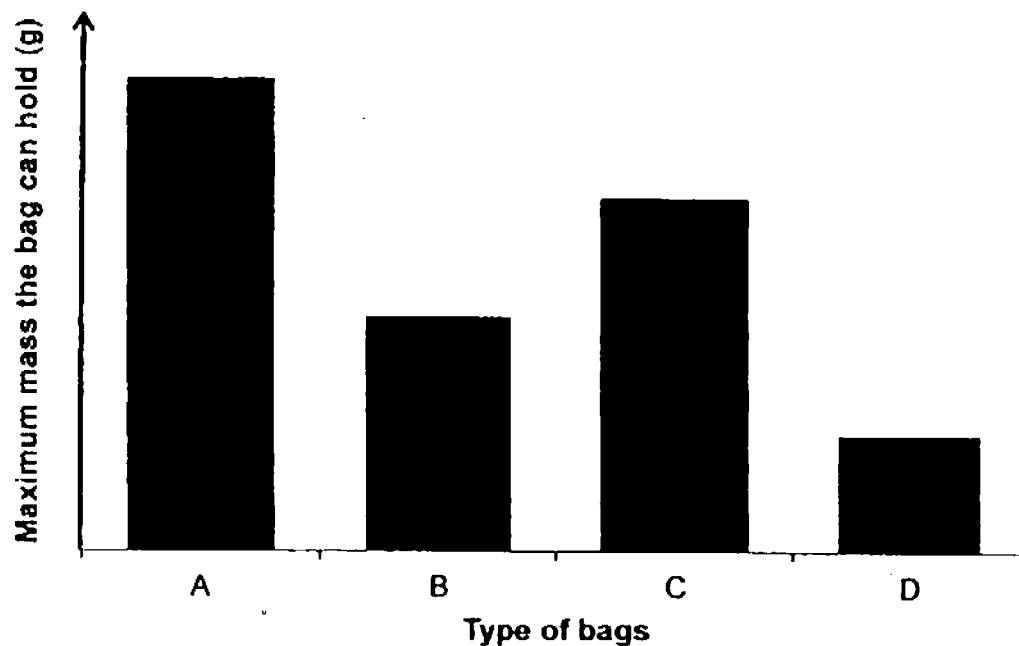
- 17 Study the chart.



The objects shown in the chart above are grouped according to their ability to _____.

- (1) stretch
- (2) absorb water
- (3) float on water
- (4) allow light to pass through

- 18 The bar graph below shows the maximum mass four different types of bags, A, B, C and D, can hold before tearing.



Based on the graph above, which one of the following statements is correct?

- (1) Bag A has the least strength.
- (2) Bag B is stronger than Bag D.
- (3) Bag C is weaker than Bag B.
- (4) Bag D is the strongest.

End of Section A

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BOOKLET B

8 Questions
24 Marks

In this booklet, you should have the following:

- a. Page 10 to Page 17
- b. Questions 19 to 26

MARKS

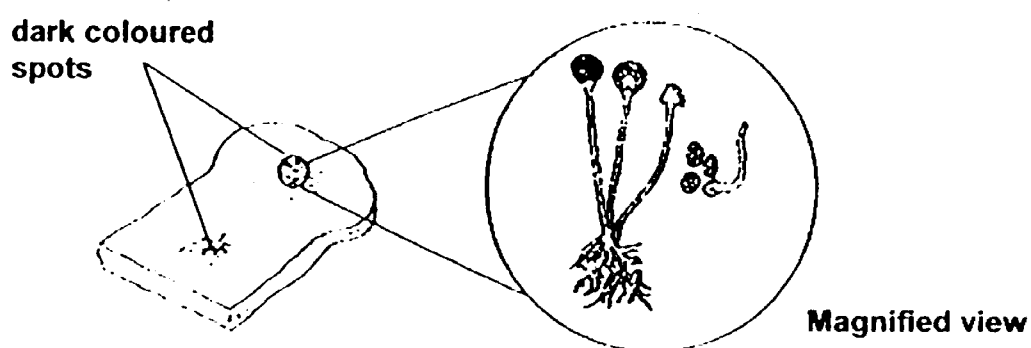
	OBTAINED	POSSIBLE
BOOKLET A		36
BOOKLET B		24
TOTAL		60

Parent's Signature : _____

Section B: Open-ended Questions

Answer all questions in the space provided.

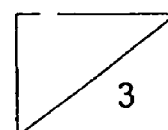
- 19 James left a piece of bread on the table untouched. After a week, he observed that some dark coloured spots had formed on the bread.



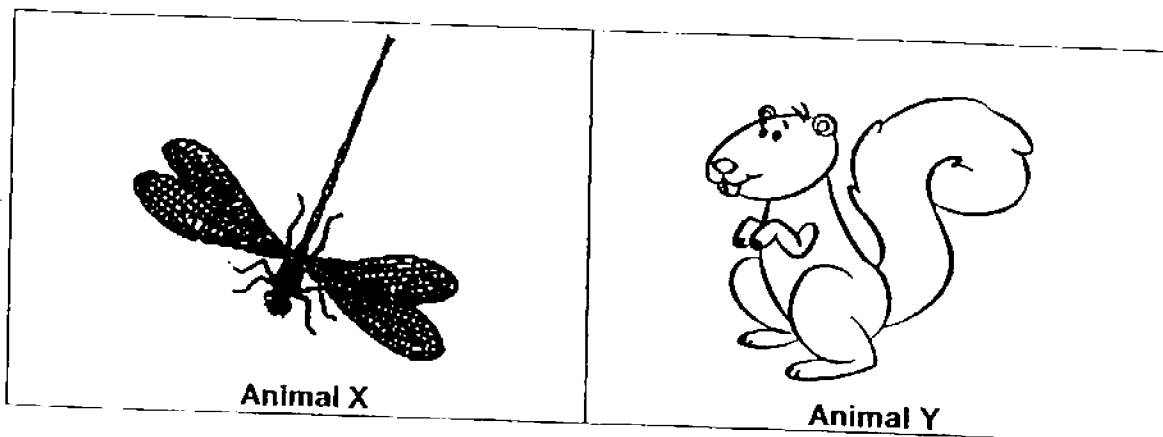
- a) What are these dark coloured spots? (1m)

- b) How do these dark coloured spots reproduce? (1m)

- c) James said, "The dark coloured spots are plants." Do you agree with him? Give a reason for your answer. (1m)



- 20 Zion took a walk in the park with her family and saw two animals among the bushes.



Based on the pictures above, state one similarity and one difference between Animal X and Animal Y. (Do not compare their size and shape.) (2m)

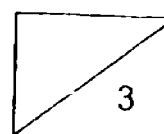
a) Similarity: _____

b) Difference: _____

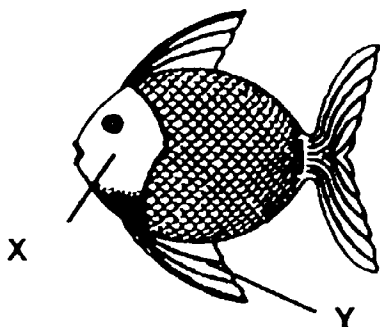
c) Zion's mother told her that both animals are living things. List two characteristics of living things. (1m)

i) _____

ii) _____



21 The picture below shows a fish.



a) Identify the parts labelled X and Y. (1m)

X: _____

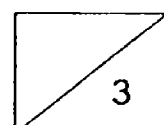
Y: _____

b) State the function of Y. (1m)

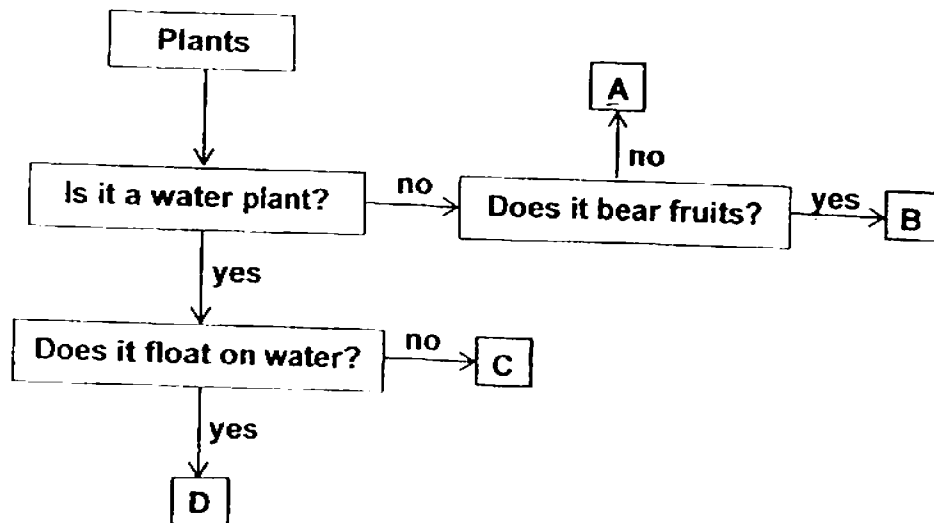
c) A dolphin lives in water and can swim like a fish but it is a mammal.
Compare two characteristics to show that the dolphin is a mammal but the fish is not. (1m)

i) _____

ii) _____



22 Study the flowchart below.



a) Based on the flowchart above, describe C. (1m)

b) Based on the flowchart, state one difference between Plant A and Plant B. (1m)

c) Which letter in the flowchart represents the following plants? (1m)

i) Bird's nest fern - _____

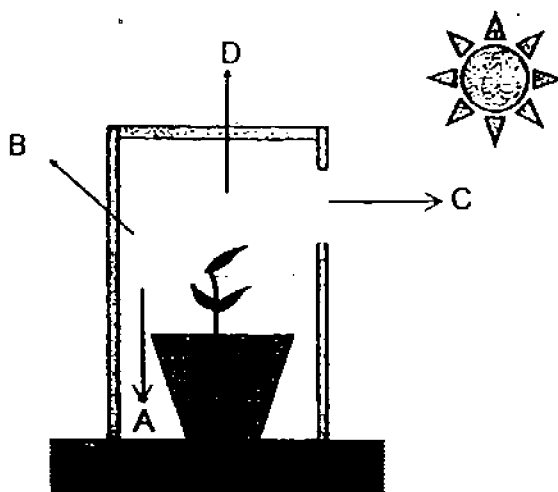
ii) Hydrilla - _____

23 Raymond conducted an experiment to find out if plants need water to survive.

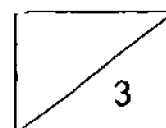
- a) In the table below, tick (✓) the variables that Raymond should keep the same. (1m)

Variables	Tick (✓) to keep variable to be the same.
Type of plants	
Type of soil	
Amount of water	
Amount of sunlight	

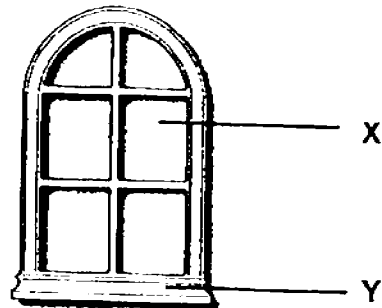
Raymond placed a pot of young plant in a black box with an opening as shown in the diagram below. The box was placed in a sunny place. He watered the plant daily. After a few days, he observed that the young plant grew in a certain direction.



- b) Which direction (A, B, C or D) would the young plant grow towards after a few days? Explain your answer. (2m)



- 24 The diagram below shows a window.



- a) State one possible material used for parts X and Y. (1m)

X - _____

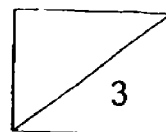
Y - _____

- b) The diagram below shows a pair of slippers.



- i) Can part S of the slippers be made of paper? Why? (1m)

- ii) Name a suitable material to make part T of the slippers. Give a reason to explain your answer. (1m)



- 25 The diagrams below show the observation made before and after a heavy stone was hung onto Strip A and Strip B. Both strips were made of different materials but were of the same thickness and size.

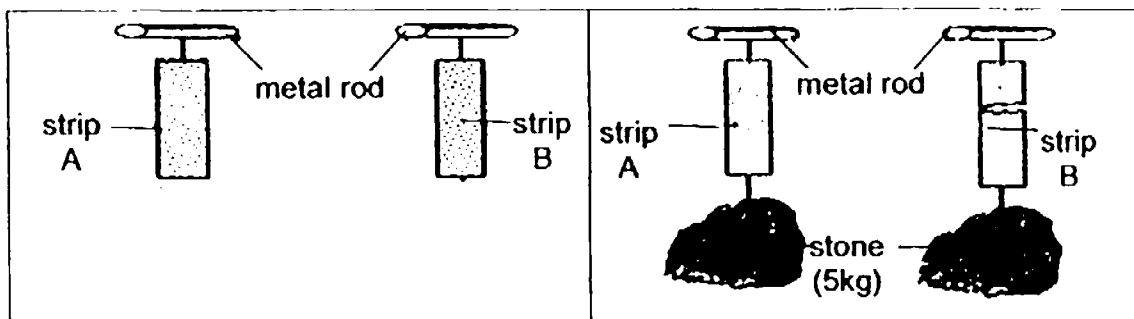
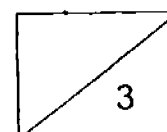


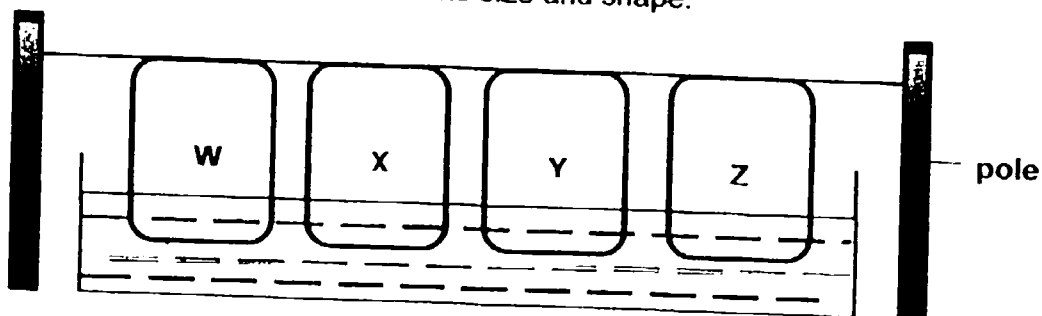
Diagram A (before)

Diagram B (after)

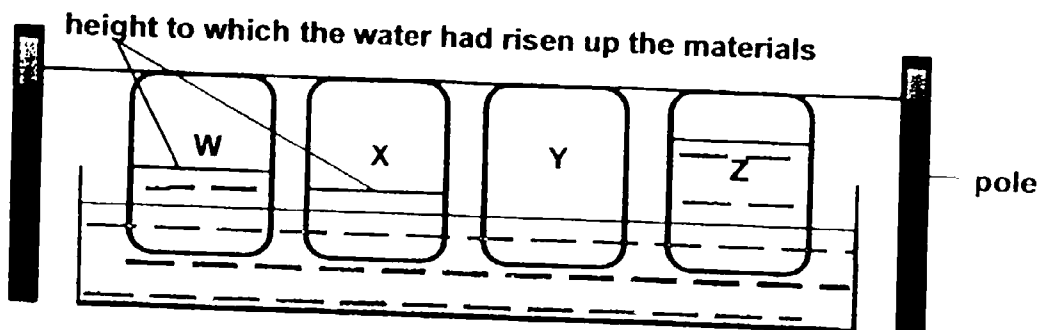
- a) Which physical property of the strips was tested? (1m)
- _____
- b) Based on the results shown in diagram B, what can be concluded about Strip B as compared to Strip A? (1m)
- _____
- _____
- c) A student conducts an experiment to test whether Strip A is flexible. What will the student observe to confirm that Strip A is flexible ? (1m)
- _____
- _____



- 26 En Xi conducted an experiment by placing the ends of four pieces of different materials, W, X, Y and Z, into a container of water as shown in the diagram below. The materials were of the same size and shape.



After 15 minutes, En Xi observed the height to which the water had risen up the materials as shown in the diagram below.



- a) Based on the results shown above, which material, W, X, Y or Z, is most suitable for making a shower cap? (1m)
- b) Explain your answer in part (a). (1m)
- c) Based on the results shown above, arrange the materials from the most absorbent to the least absorbent. (1m)

Most absorbent Least absorbent

End of Section B
Please check your answers.

EXAM PAPER 2016

LEVEL : PRIMARY 3

SCHOOL : RED SWASTIKA SCHOOL

SUBJECT : SCIENCE

TERM : SA1

Q 1	Q 2	Q 3	Q 4	Q 5	Q 6	Q 7	Q 8	Q 9	Q 10
4	1	4	2	2	1	1	3	1	4
Q 11	Q 12	Q 13	Q 14	Q 15	Q 16	Q 17	Q 18		
3	2	3	1	2	4	3	2		

Q19a) Mould b) By spores

Q19c) No, the dark spots do not make their own food.

Q20a) Both have eyes. b) Animal X has wings but animal Y does not have wings.

Q20ci) Living things need air, food and water. ii) Living things grow.

Q21a) X: Gill-cover Y: Fins

Q21b) Y helps the fish to swim.

Q21ci) Mammals have hair as their outer covering but fishes have scales as their outer covering.

Q21cii) Mammals give birth to their young alive but fishes lay eggs.

Q22a) C is a water plant but it does not float on water.

Q22b) Plant B bears fruits but Plant A does not bear fruits.

Q22ci) A b) C

Q23a) Type of plants, type of soil, amount of sunlight.

Q23b) C. The young plant grows towards the sunlight as it needs to make food.

Q24a) X – Glass Y – Wood

Q24bi) No. If it is made of paper, it will break easily as it is not strong.

Q24bii. Rubber. It is flexible and strong.

Q25a) Strength

Q25b) Strip B is weaker than strip A.

Q25c) Strip A can bend without breaking.

Q26a) Material Y

Q26b) It Is waterproof.

Q26c) Z, W, X, Y