



# RAFFLES GIRLS' PRIMARY SCHOOL

## SEMESTRAL ASSESSMENT (1) 2012

Section A	36	
Section B	24	
Your score out of 60 marks		
Highest score	Class	Level
Average score		
Parent's signature		

Name : \_\_\_\_\_ Index No: \_\_\_\_\_ Class: P 3 \_\_\_\_\_

2 May 2012



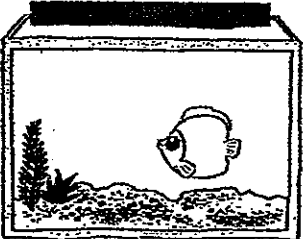

SCIENCE

Attn: 1 h

### SECTION A (25 X 2 marks)

For each question from 1 to 18, four options are given.  
One of them is the correct answer. Make your choice (1, 2, 3 or 4).  
Shade the correct oval on the Optical Answer Sheet provided.

1. The diagrams below show four objects.

			
Stone	Tree	Fish	Bag

Which of the following **CANNOT** respond to changes?

- (1) tree and fish only
- (2) stone and tree only
- (3) stone and bag only
- (4) fish and bag only

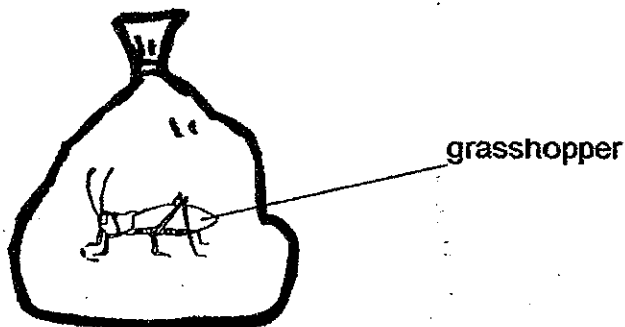
2. Sally placed two things, X and Y, into two jars. She also placed the same type and amount of food in each jar. She then made some observations of X and Y as shown below.

X	Y
Moves slowly	Does not move
Feeds on the food	The food was untouched
Grown bigger after 5 days	No change in size after 5 days

Which one of the following most possibly is X and Y respectively?

	X	Y
(1)	Stone	Brick
(2)	Caterpillar	Rock
(3)	Beetle	Butterfly
(4)	Earthworm	Dragonfly

3. James caught a grasshopper and put it in a plastic bag. Then he tied the bag tightly as shown in the diagram below.

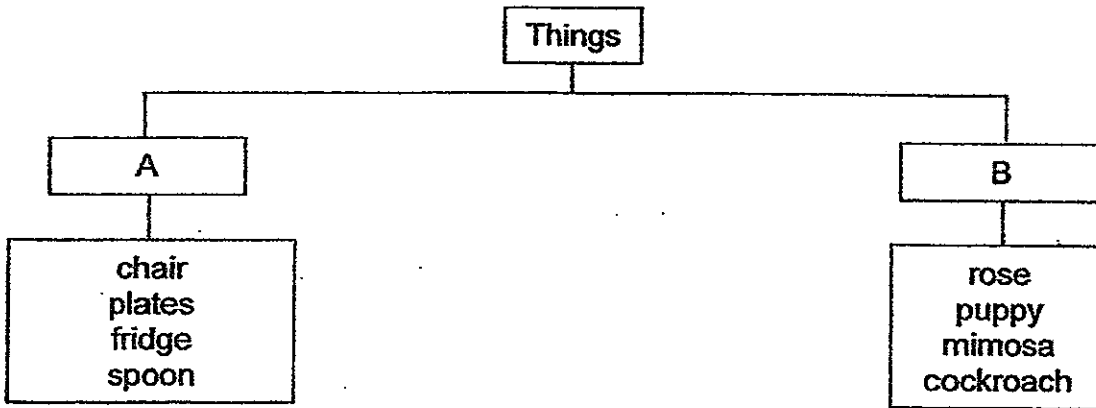


A few hours later, he found that the grasshopper was dead. Which of the following is most likely to be the reason for the death of the grasshopper?

There was not enough \_\_\_\_\_ in the bag.

- (1) air
- (2) light
- (3) shelter
- (4) space

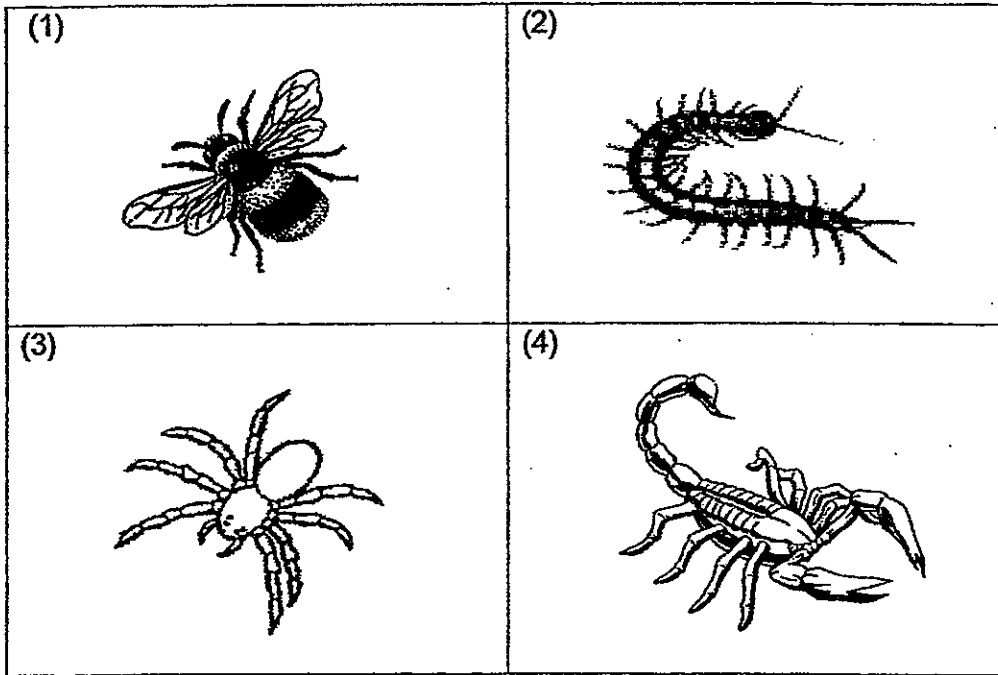
4. Jenny classified some of the things she found in the following classification table.



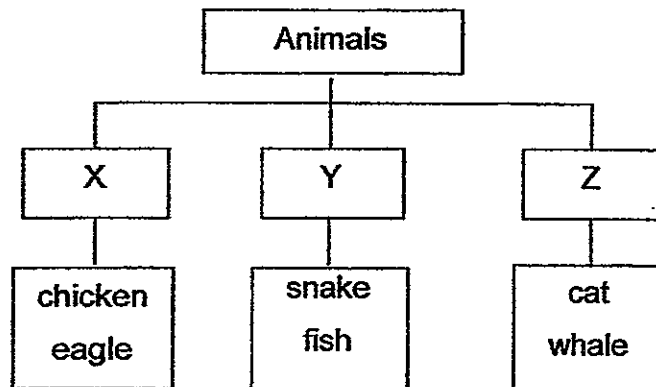
Jenny has grouped the things according to whether they \_\_\_\_\_.

	A	B
(1)	can grow	cannot grow
(2)	cannot reproduce	can reproduce
(3)	cannot make its own food	can make its own food
(4)	can respond to changes	cannot respond to changes

5. Which one of the following animals is an insect?



6. The classification table below shows how some animals are grouped.



Which one of the following correctly describes how the animals in groups X, Y and Z are grouped respectively?

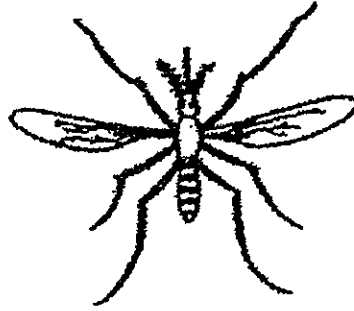
They are grouped according to their\_\_\_\_\_.

- (1) diet
- (2) habitat
- (3) movement
- (4) body outer covering

7. Study the animals X and Y as shown below.



X



Y




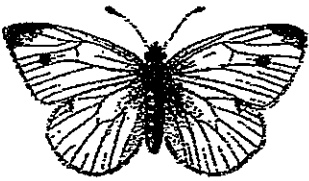

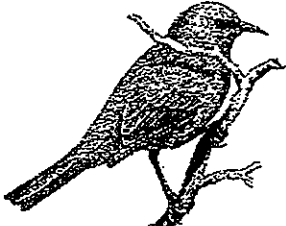
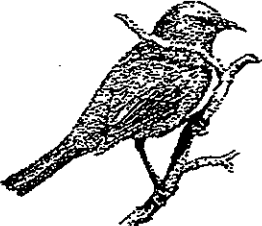
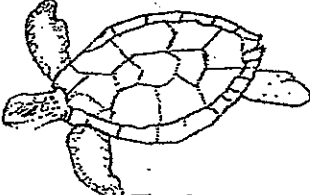

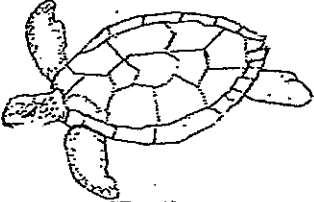

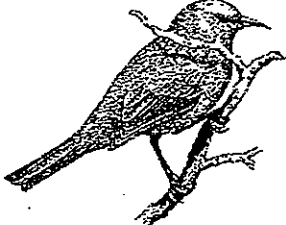
Based on your observation of X and Y above, which of the following statements is correct?

- (1) Both X and Y can fly.
- (2) Both X and Y have six legs.
- (3) X has feelers but Y does not.
- (4) Both X and Y have their legs on the abdomen.

8. Nurul recorded the physical characteristics of 3 animals in the table below. A tick ( ✓ ) shows the characteristic(s) each animal possesses.

Characteristic	Animal X	Animal Y	Animal Z
has antenna	✓	✓	
has wings	✓		✓
has a shell		✓	
has a beak			✓

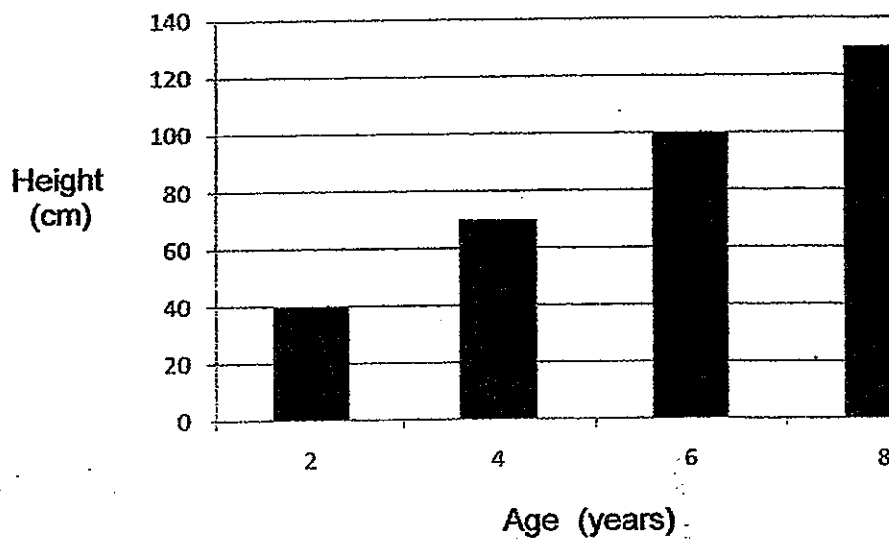
Which one of the following best represent animal X, Y and Z respectively?

	Animal X	Animal Y	Animal Z
(1)	 <p>Crayfish</p>	 <p>Butterfly</p>	 <p>Grasshopper</p>
(2)	 <p>Butterfly</p>	 <p>Crayfish</p>	 <p>Bird</p>
(3)	 <p>Bird</p>	 <p>Turtle</p>	 <p>Butterfly</p>
(4)	 <p>Turtle</p>	 <p>Grasshopper</p>	 <p>Bird</p>

9. Which one of the following is not a characteristic of a plant?

- (1) It needs air.
- (2) It needs water.
- (3) It responds to changes.
- (4) It can move from place to place by itself.

10. The graph below shows information about a girl growing up.

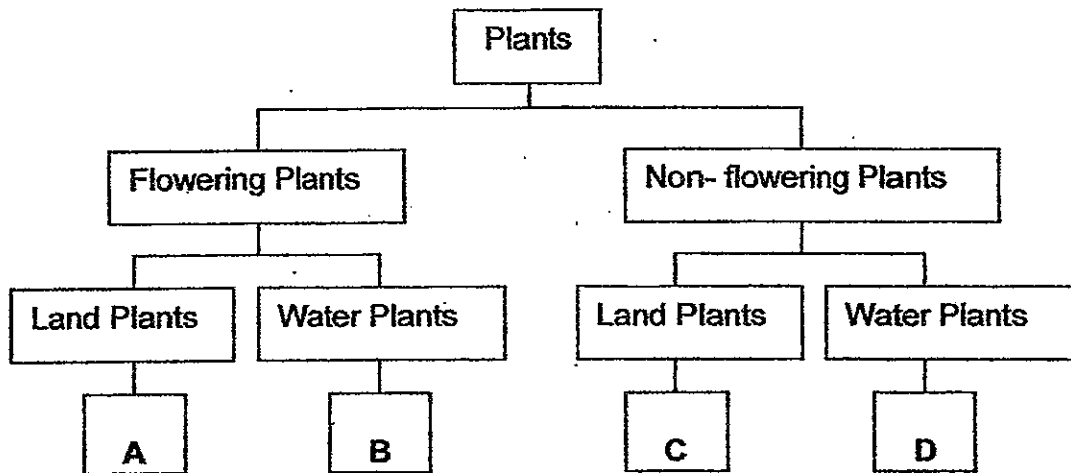


What can you infer from the graph?

- (1) The girl has become taller as she grows older.
- (2) The girl has become heavier as she grows older.
- (3) The girl has become thinner as she grows older.
- (4) The girl has become stronger as she grows older.



11. Study the classification table below.



Under which group would you place the plant shown below?



mimosa plant

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

12. Three pupils made the following statements about bacteria.

Jack : "Bacteria can be found everywhere."

Sally : "All bacteria are bad. They make you sick."

Henry : "Bacteria cannot be seen with our naked eyes."

Which of the following pupils' statement about bacteria is correct?

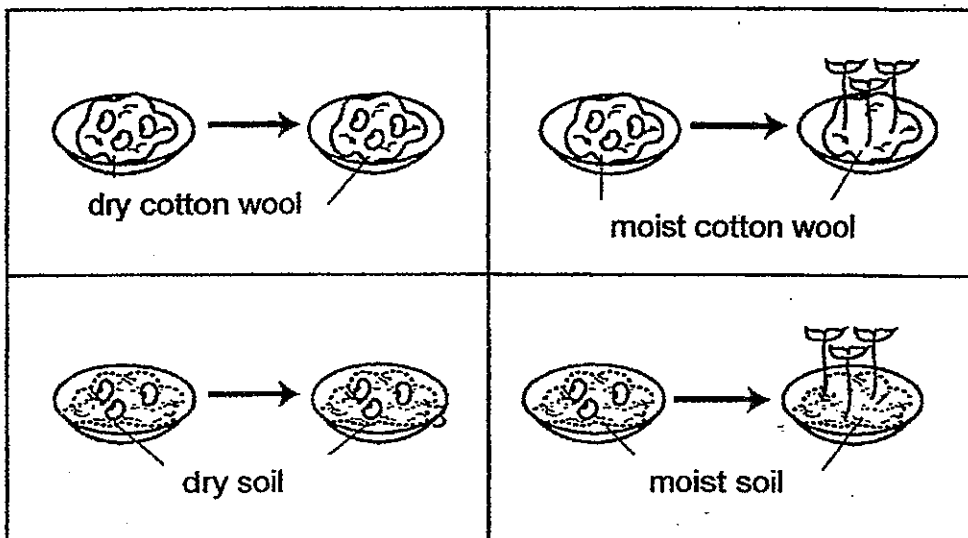
(1) Henry only

(3) Jack and Sally only

(2) Sally and Henry only

(4) Jack and Henry only

13. Sam carried out an experiment with some green beans under different conditions. The diagrams below illustrate his observations after four days.



What does this experiment show?

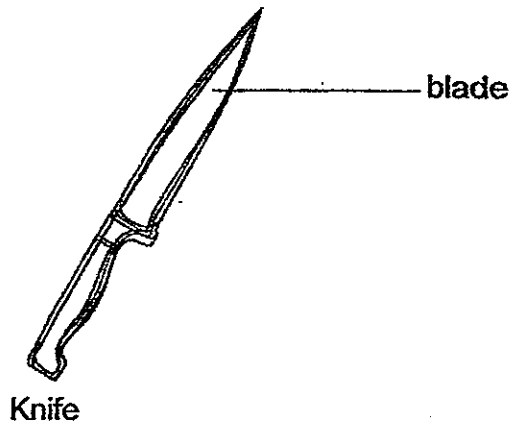
(1) The beans are non-living things.

(2) The beans need water to grow.

(3) The beans can only grow in soil.

(4) The beans can grow without water.

14. Steel is used to make sharp object such as the blade of the knife.

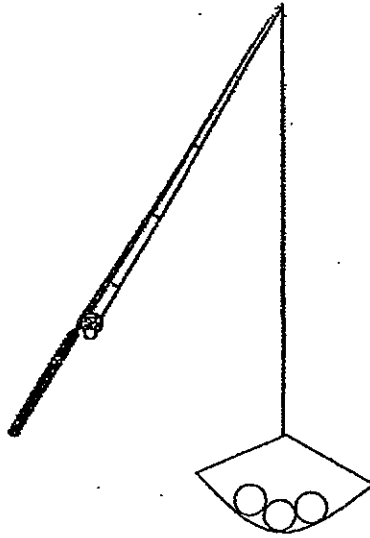


Which of the following property of steel is most important when choosing it for making knives?

It is \_\_\_\_\_.

- (1) shiny and waterproof
- (2) shiny and smooth
- (3) hard and heavy
- (4) hard and strong

15. David wants to select a strong string for his fishing rod. He attached a plate to the end of the fishing rod and counted the number of metal balls it can hold before breaking.



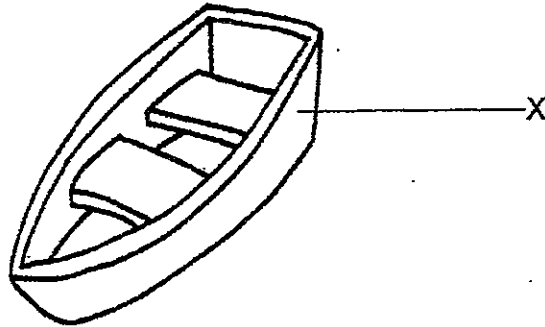
David recorded his findings in a table as shown below.

	String P	String Q	String R	String S
Number of metal balls it can hold before breaking	9	17	29	20

Which of the following strings should David use for his fishing rod when he goes for deep sea fishing?

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

16. Amy is choosing a suitable material to build part X of a boat. She did several tests on materials A, B, C and D and recorded the results in the table below.



Material	Strong	Waterproof	Hard	Flexible
A	✓	✓	✓	
B		✓		✓
C				
D		✓	✓	

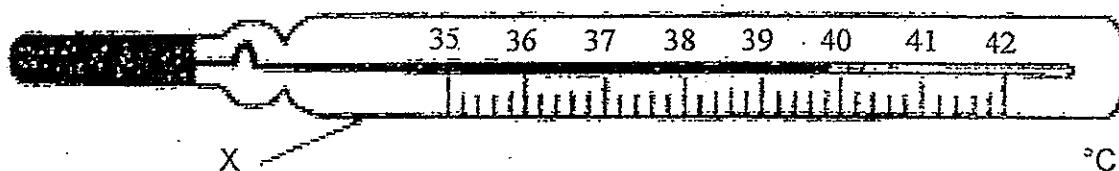
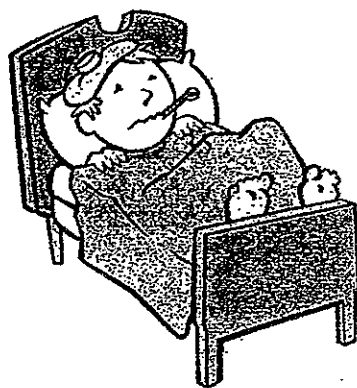
Which of the following materials is best suitable to build part X of the boat?

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

17. The table below shows the characteristics of materials A, B, C and D respectively.

Material	Flexible	Waterproof	Can see through
A	✓		
B	✓	✓	
C		✓	✓
D			✓

John is having a fever. He used a clinical thermometer to measure his body temperature.



Based on the information in the table above, which of the following materials is most likely to be used to make Part X of a clinical thermometer?

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

18. Lily conducted an experiment to compare the hardness of four materials, A, B, C and D, by scratching each one of them with a ruler made of plastic, wood and metal respectively.

She recorded her observations in the table below.

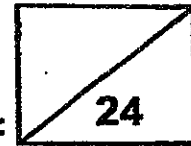
A tick (✓) in the box shows that the material was scratched.

Material	Did the plastic ruler scratch the material?	Did the wooden ruler scratch the material?	Did the metal ruler scratch the material?
A	✓	✓	✓
B			✓
C			
D		✓	✓

Which one of the following shows the correct arrangement of these materials according to their hardness?

	<b>hardest</b>			
(1)	A	B	C	D
(2)	D	B	A	C
(3)	A	D	B	C
(4)	C	B	D	A

Name : \_\_\_\_\_ Index No.: \_\_\_\_\_ Class: P3 \_\_\_\_\_ Marks:



**SECTION B (24 marks)**

For questions 19 to 30, write your answers clearly in the spaces provided.

The number of marks available is shown in brackets [ ] at the end of each question or part question.

19. Write 'True' or 'False' in the space provided for each of the following statements below. [2]

- |     |   |
|-----|---|
| (a) | All living things can make their own food.                                    |
| (b) | All living things can respond to changes around them.                         |
| (c) | Non-living things can be made from things that are once alive or never alive. |
| (d) | Some non-living things can grow and reproduce.                                |

20. Megan kept some rabbits in a metal cage. She fed them with food and water daily. At the end of every three months, she recorded the number of rabbits she had as shown in the table below. No rabbits were added or removed from the cage.

Month	Number of rabbits
January	5
April	7
July	9
October	5

- (a) From the table above, what could be the possible reason for the change in the number of rabbits between January to July? [1]

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- (b) Suggest a possible reason for the decrease in number of rabbits from July to October. [1]

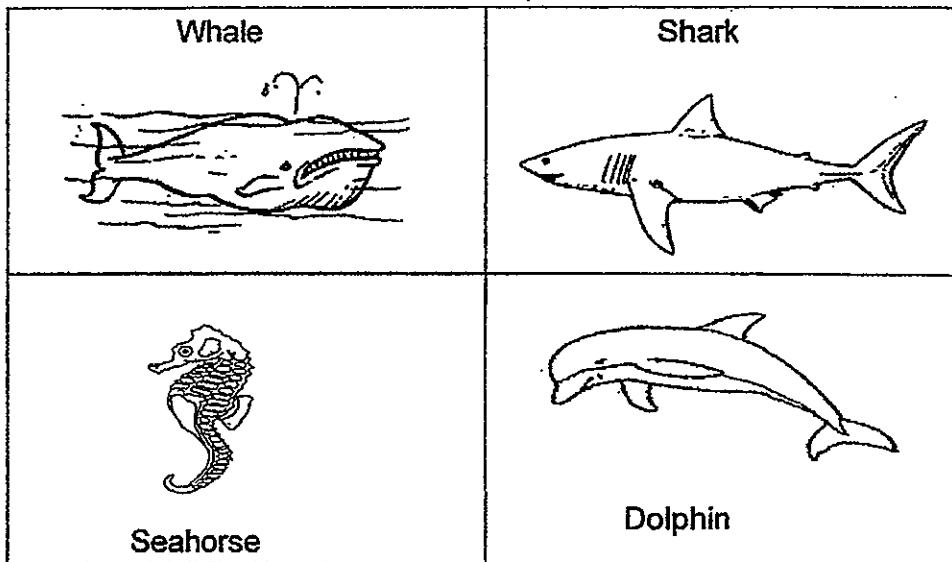
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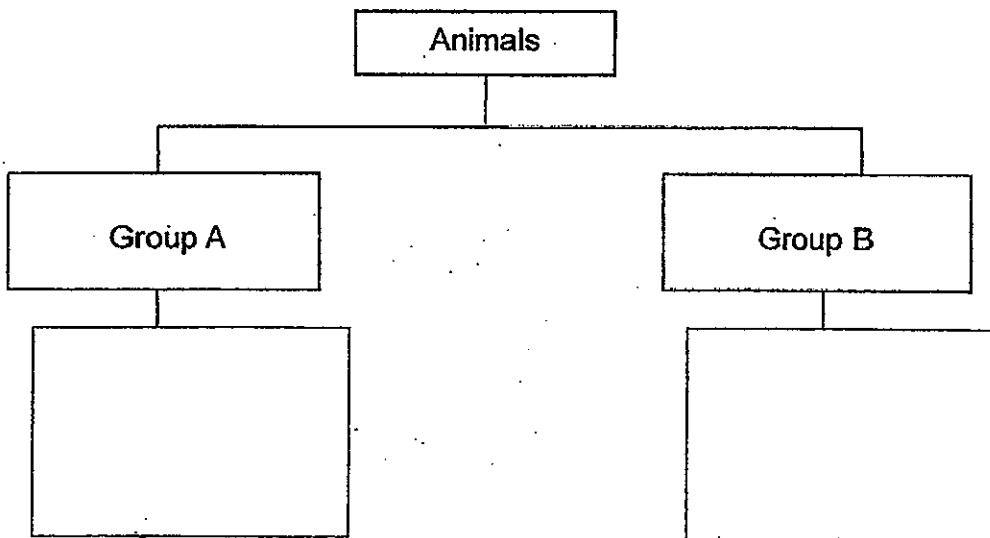
Score	
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21. Study the animals (NOT drawn to scale) in the diagrams below.



(a) Classify the above animals by writing 'whale', 'shark', 'seahorse' and 'dolphin' in the correct box in the classification table below. [2]



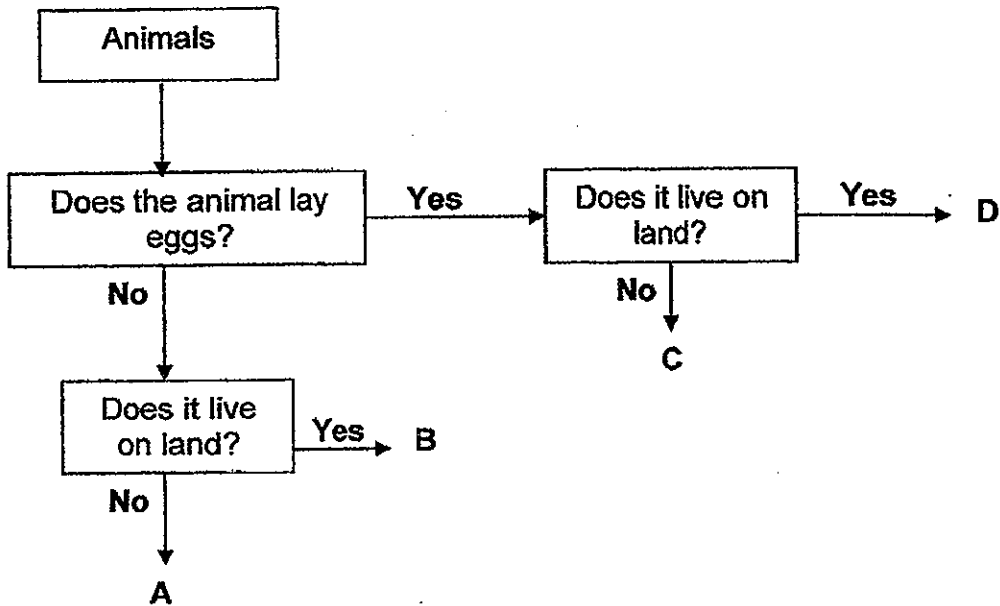
(b) Write a suitable heading to represent Group A and B respectively. [1]

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

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

Score	3
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22. Siti classified some animals into Group A, B, C and D based on their common characteristics as shown in the flow chart below.



Based on the information above, answer the following questions:

- (a) State **ONE DIFFERENCE** between the animals in groups B and D. [1]

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An animal, Z, is described as follows:

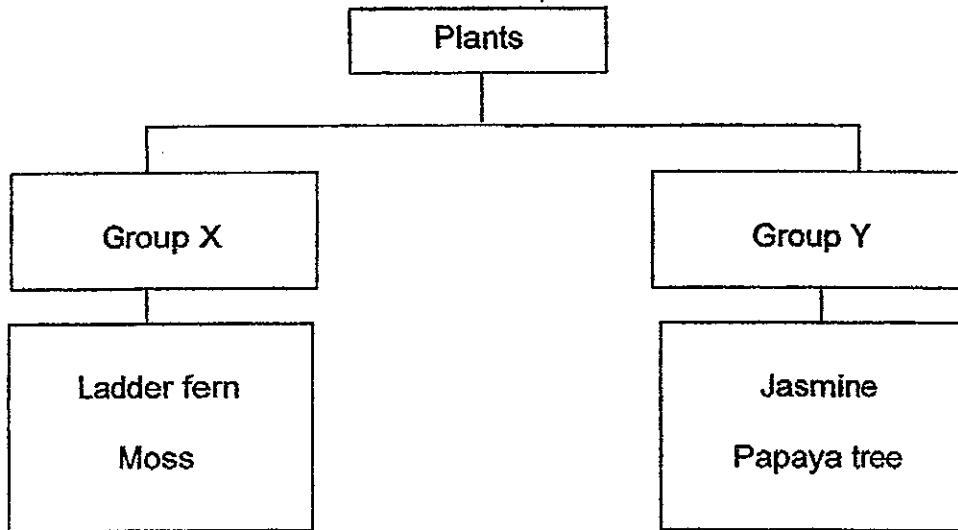
It is a land animal which lay eggs.

- (b) Which group (A, B, C or D) does animal Z belong to in the above classification flow chart? [1]

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Score	2
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23. Study the classification chart below.



Give suitable headings for Group X and Group Y respectively. [1]

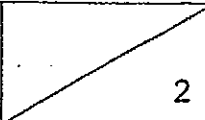
(a) Group X: \_\_\_\_\_

(b) Group Y: \_\_\_\_\_

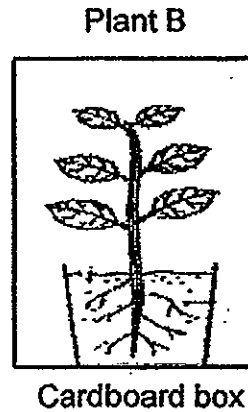
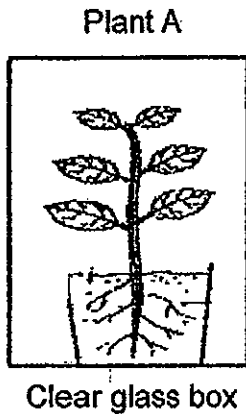
(c) State another example which can be placed under Group X. [1]

\_\_\_\_\_

\_\_\_\_\_

Score	
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24. Ravi put 2 identical plants, A and B, in boxes made of clear glass and cardboard respectively as shown in the diagrams below. Each box has an opening on one of its sides. The boxes were placed side by side near an open window. He watered both plants daily.



- (a) Which plant, A or B, would grow towards the opening in the boxes after five days? [1]

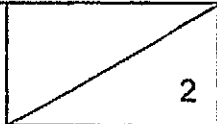
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- (b) Based your answer in (a), what characteristic of living things does it show? [1]

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Score	
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25. The diagrams below show a bird's nest fern and hibiscus plant. Study them carefully and answer the following questions.



Bird's nest fern



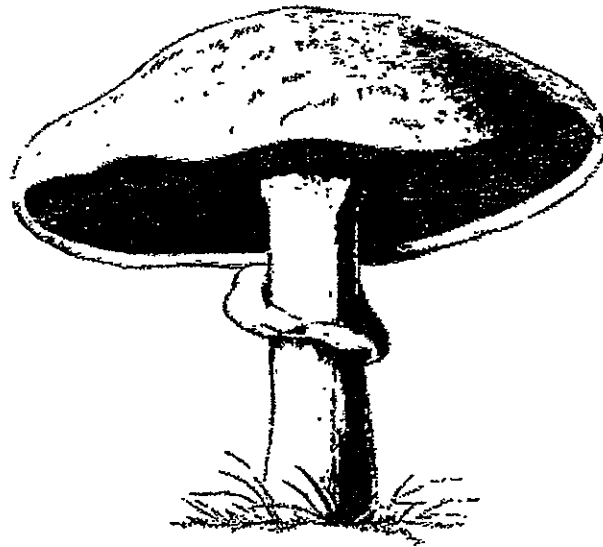
Hibiscus

Based on your observation of the two organisms above, state one similarity and one difference between them [2]

Similarity	
Difference	

Score	2
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26. The picture below shows a mushroom.



(a) How do mushrooms reproduce? [1]

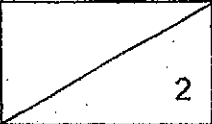
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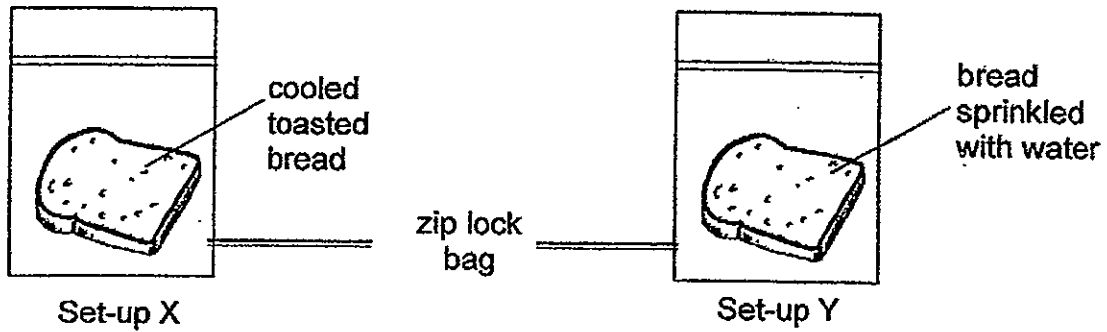
(b) Can mushrooms be classified as plants? Give a reason for your answer. [1]

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Score	
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27. Jennifer prepared 2 set-ups, X and Y, as shown in the diagrams below. In set-up X, she placed toasted bread, which has been cooled, into a zip lock bag. In set-up Y, she placed fresh bread sprinkled with some water. The two set-ups were placed at the kitchen counter and observed after 1 week.



- (a) Which bread, X or Y, is most likely to have moulds growing on it after one week? [1]

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- (b) State a reason for your answer in (a). [1]

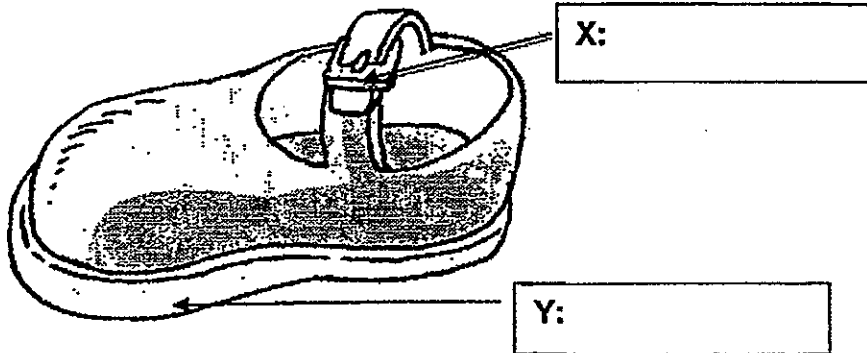
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Score	2
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28. Observe the diagram of a shoe below.

Write in the box the material most suitable to make parts X and Y. [1]



29. Mary recorded the properties of materials P, Q, R and S in the table below.

Properties Materials	Can be stretched	Breaks easily when dropped	Is waterproof
P		√	√
Q	√		√
R			√
S	√		

Which material, P, Q, R or S, is most suitable to be used to make a swimming cap?  
Give reasons for your answer. [2]

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Score	3
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30. Mr Lim is looking for an absorbent towel to replace the existing towel used by his competitive swim team. The existing towel is not effective in drying the swimmers after a whole day of events. He has a choice between two towels, X and Y. Before he decides on the towel and place an order for his team, he conducted an experiment to find out the absorbency of the towels as follows:

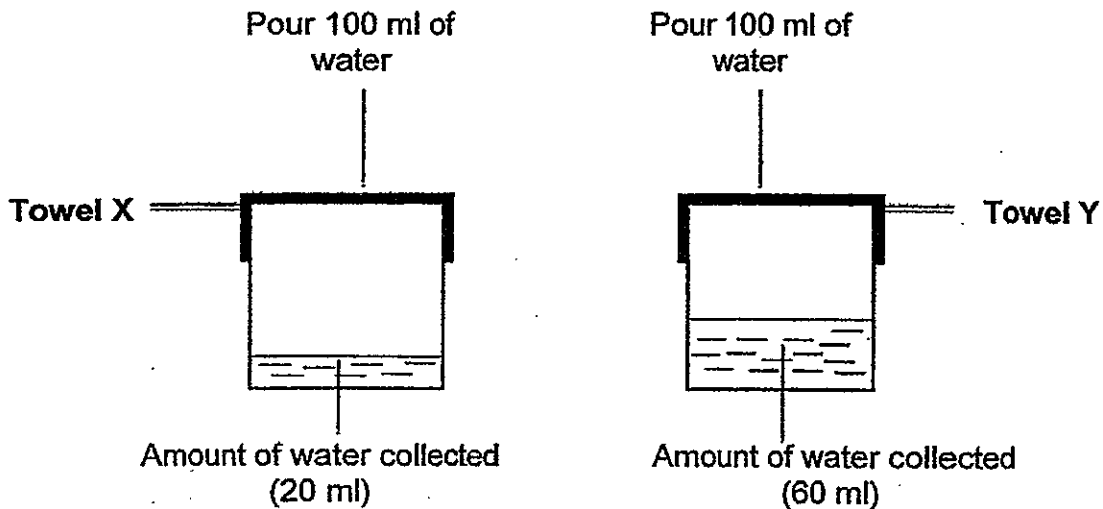
Step 1 : Place the towel X and Y over the mouth of two identical beaker respectively.

Step 2 : Tie a rubber band around the mouth of each beaker to secure the towels.

Step 3 : Pour 100 ml of water over the towels X and Y respectively.

Step 4 : Record the amount of water in the two beakers.

The result of the experiment is shown in the diagrams below.



- (a) Which towel, X or Y, is more likely to meet the need for Mr Lim's swim team? [1]

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- (b) Give a reason for your answer in (a). [1]

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- END OF PAPER -

Score	2
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# ANSWER SHEET

**EXAM PAPER 2012**

**SCHOOL : RAFFLES GIRLS'  
SUBJECT : PRIMARY 3 SCIENCE**

**TERM : SA1**

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

Q18
3

19)a)F b)T c)T d)F

20)a)The rabbits have reproduced.  
b)Some rabbits could have died.

21)a)Group A: Dolphin, Whale      Group B: Shark, Seahorse  
b)Group A: Mammals                  Group B: Fish

22)a)Animals in Group D lay eggs but animals in Group B does not lay eggs.  
b)Group D.

23)a)Group X: Non-Flowering Plants  
b)Group Y: Flowering Plants  
c)Pine trees

24)a)Plant B.  
b)Living things respond to changes around them.

**25) Similarity: Both have many leaves.**

**Difference: Flowers grew on the Hibiscus but did not grow on the Bird's nest fern.**

**26)a) Mushrooms reproduce by spores.**

**b) Mushrooms cannot make its own food like all plants.**

**27)a) Bread Y.**

**b) Bread in set-up Y contains water which is needed by the mould while the bread in Set-up X has no water.**

**28) X: Metal      Y: Rubber**

**29) Material Q. It is waterproof so it can keep her hair dry and it can be stretched so that she can wear the swimming cap over her head.**

**30)a) Towel X.**

**b) Towel X absorbed more water than Towel Y.**