



RAFFLES GIRLS' PRIMARY SCHOOL

SEMESTRAL ASSESSMENT 1 2010

Name : _____ Index No: _____ Class: P3 _____

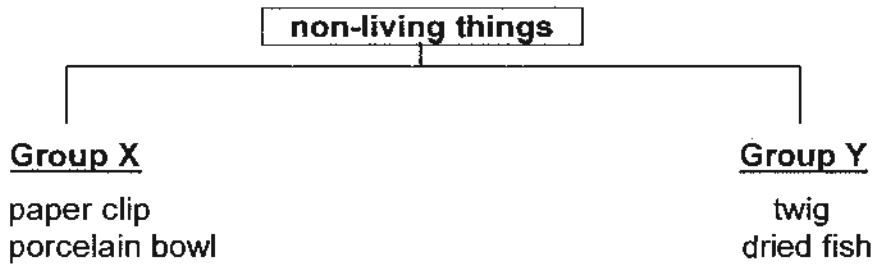
7th May 2010 SCIENCE Att: 1 h

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

SECTION A (18 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 (1, 2, 3 or 4) on the Optical Answer Sheet (OAS) provided.

1. The diagram below shows how some non-living things are classified.



Which one of the following things can be classified under Group Y?

- (1) glass jar
- (2) marble chair
- (3) metal spoon
- (4) Science textbook

2. A toy can bark, walk and wag its tail when you insert a battery in the compartment found on its belly and then press a button on it.

In what way(s) is it similar to a living thing?

- A It can reproduce.
- B It can move by itself.
- C It can respond to its surroundings.

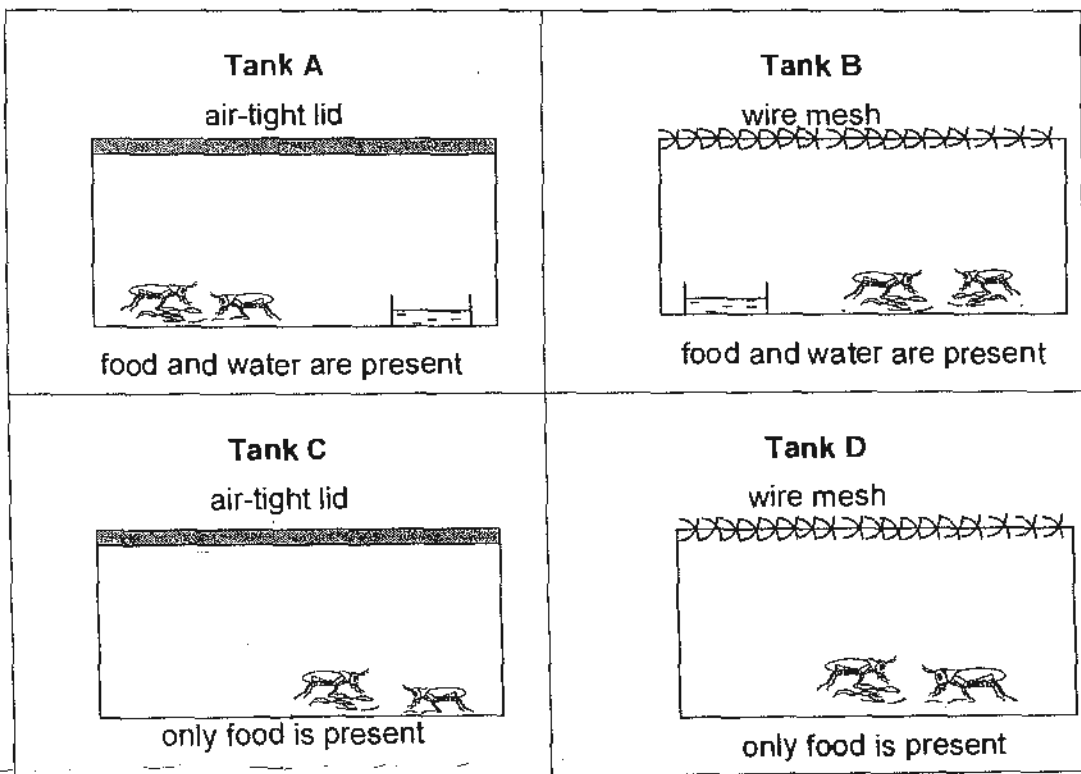
- (1) A only
- (2) B only
- (3) A and C
- (4) B and C

3. Which of the following statements is/are correct?

- A All living things need water.
- B Only animals that swim need water.
- C Non-living things can move by themselves at night.
- D Mammals are the only kind of living things that reproduce.

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

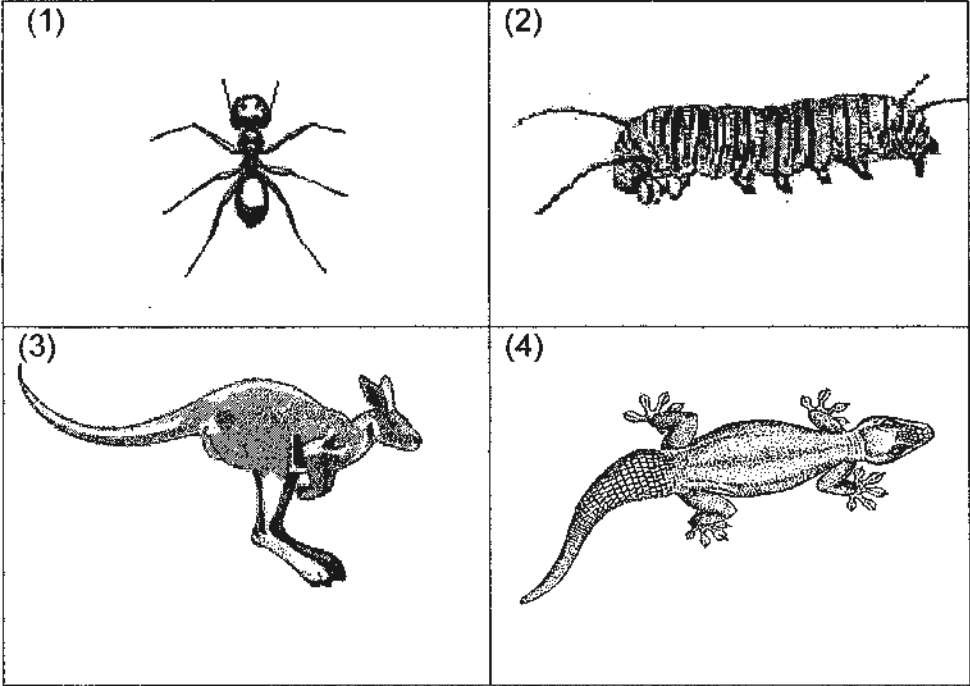
4. Grasshoppers of a similar size were kept in identical glass tanks as shown below.



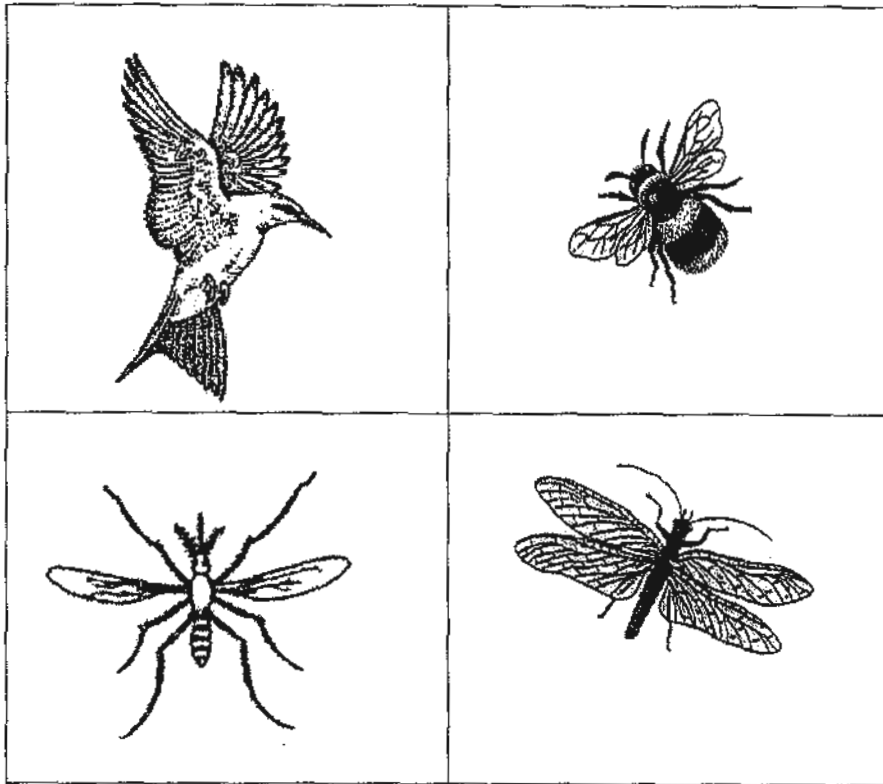
In which one of these tanks would the grasshoppers be most likely to survive for the longest period of time?

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

5. Which one of the following animals does **NOT** move in the same way as the others?




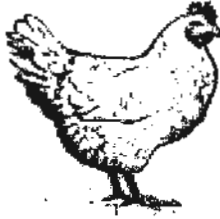
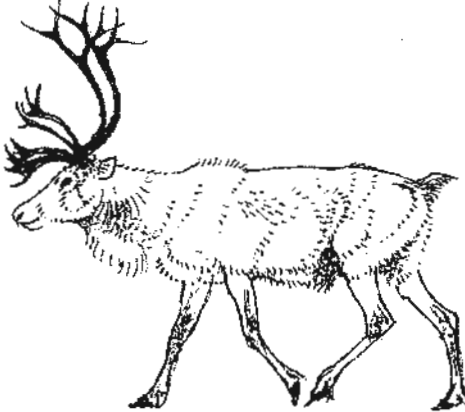
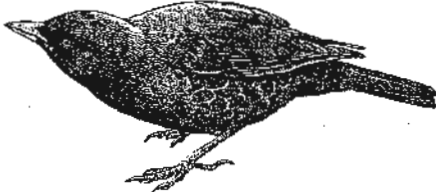
6. The following animals are grouped together according to a common characteristic.



Based on your observations, how are the animals grouped?

- (1) All have wings.
- (2) All have feelers.
- (3) All have six legs.
- (4) All have feathers.

7. The animals are grouped as follows:

animals	
group X	group Y
	
	

How are these animals grouped?

	group X	group Y
A	live on land	live in the water
B	mammals	birds
C	give birth to live young	lay eggs
D	have scales on their bodies	have feathers on their bodies









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

8. Yasmin recorded the physical characteristics of 2 animals in the table below.

A tick (✓) shows the characteristic which the animal possesses.

characteristic	animal X	animal Y
has wings	✓	
has antenna	✓	✓
has a shell		✓

Which one of the following identifies animal X and animal Y correctly?

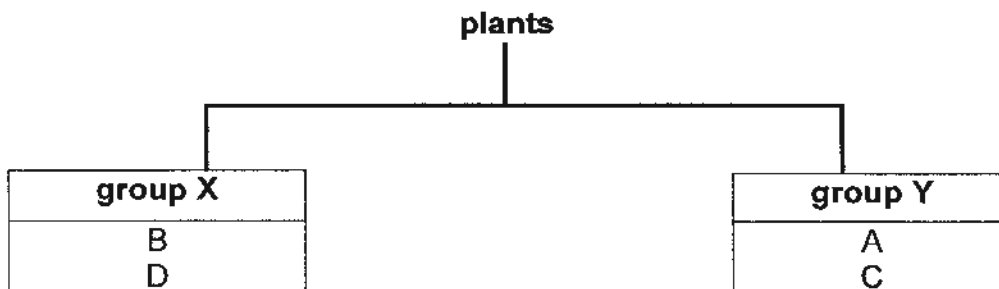
	animal X	animal Y
(1)		
(2)		
(3)		
(4)		

9. Some plants, A, B, C and D, have common characteristics as shown in the table below.

A tick (✓) in the box indicates the presence of such characteristic.

characteristic	plant			
	A	B	C	D
bears flowers	✓		✓	
reproduces by spores		✓		✓
is a land plant	✓	✓		

Using the information above, Salina drew the following diagram to classify them.



What are the suitable sub-headings for group X and group Y?

	group X	group Y
(1)	ferns	fungi
(2)	fungi	flowering plants
(3)	land plants	water plants
(4)	non-flowering plants	flowering plants

10. Three children reported what they had found out about spores.

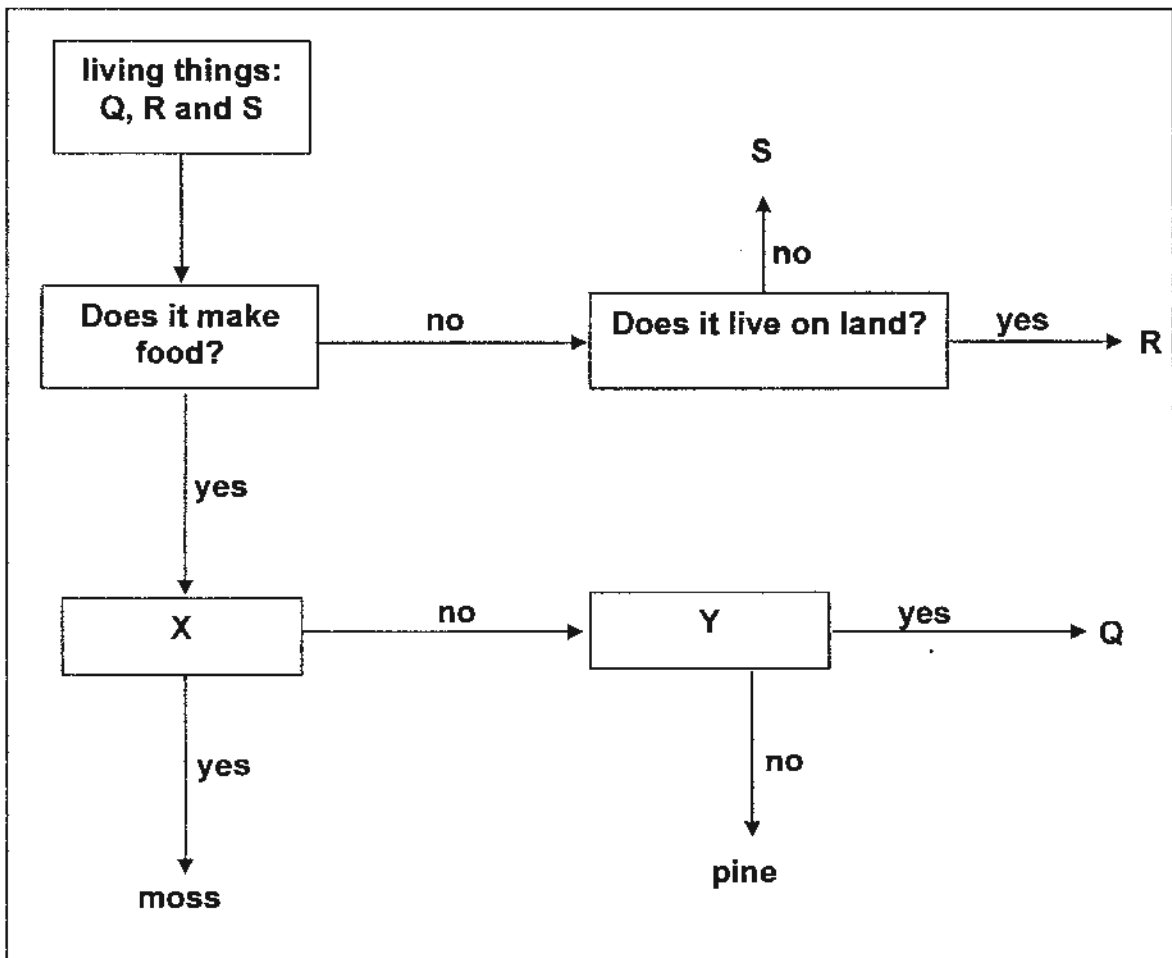
Each of these children made the following statements:

- Ariel : They are light and small.
Beatrice : They are only produced by fungi.
Constance : They are found only in non-flowering plants.

Which of these children made the correct statement(s)?

- (1) Ariel only
- (2) Constance only
- (3) Ariel and Constance only
- (4) Beatrice and Constance only

Living things, Q, R and S, are differentiated as shown below.



Based on the diagram above, answer questions 11 and 12.

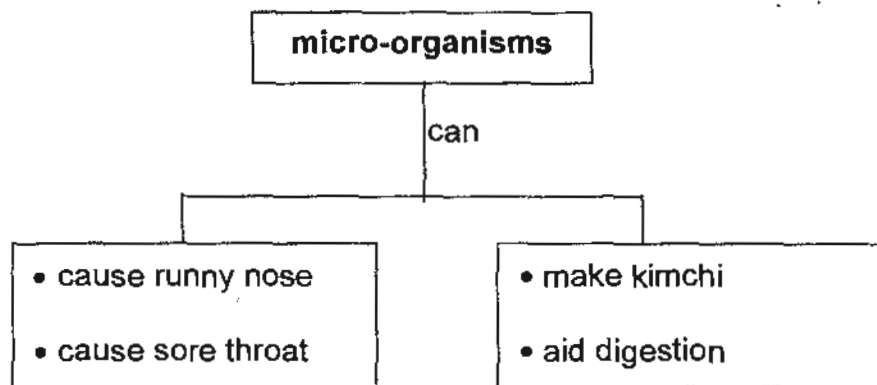
11. Which one of the following pairs of questions is suitable for boxes X and Y?

	X	Y
(1)	Is it a plant?	Is it an animal?
(2)	Does it live on land?	Does it reproduce by seeds?
(3)	Does it bear flowers?	Does it reproduce by spores?
(4)	Does it reproduce by spores?	Does it bear flowers?

12. Which one set of the following is the correct example of each of the living things, Q, R and S?

	Q	R	S
(1)	mushroom	hibiscus	dolphin
(2)	maidenhair fern	mushroom	elephant
(3)	water lily	lion	whale
(4)	toadstool	shark	tiger

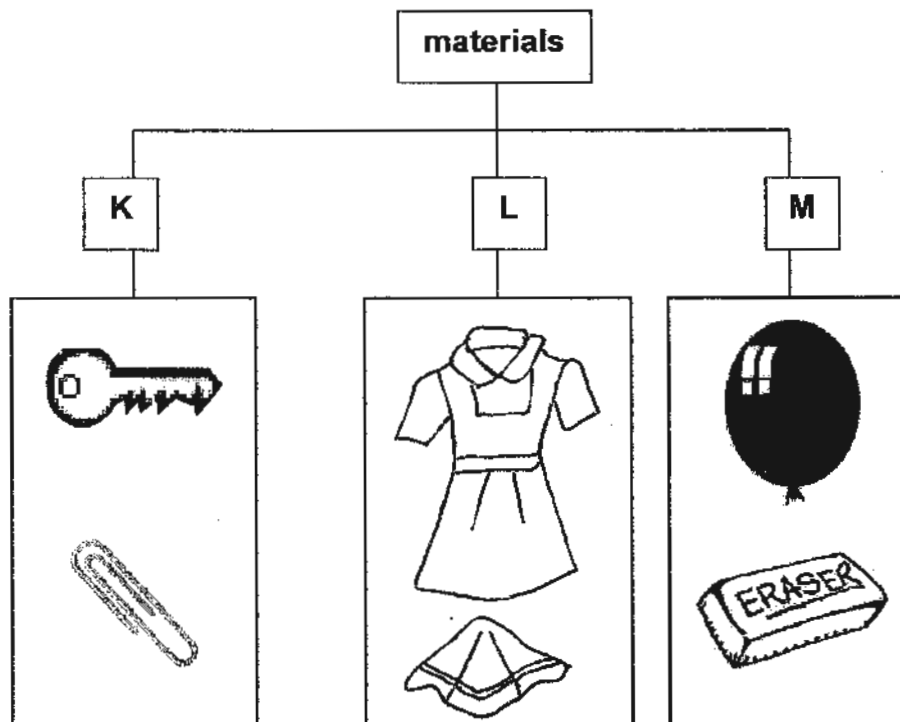
13. The chart below shows how we can group micro-organisms.



Based on the information above, how are the micro-organisms grouped?

- A according to their size
 B whether they are useful to man
 C whether they reproduce from spores
- (1) A only
 (2) B only
 (3) A and C only
 (4) B and C only

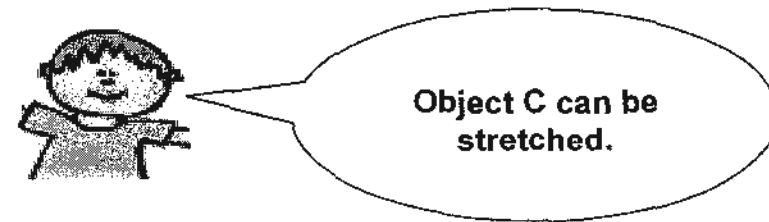
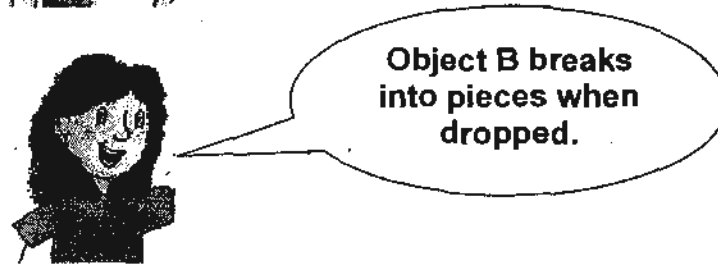
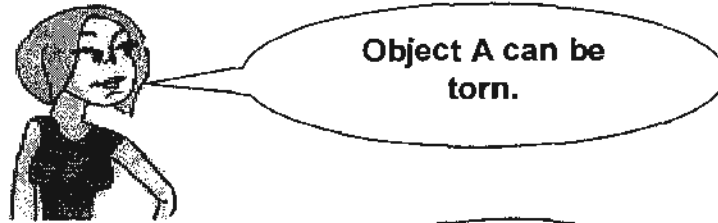
14. The classification chart below shows how some materials which the objects are made of are grouped.



Which are the possible sub-headings for the classification chart above?

	K	L	M
(1)	plastics	rubber	rubber
(2)	metal	cotton	rubber
(3)	metal	cotton	plastics
(4)	rubber	clay	plastics

15. Three people carried out an experiment on 3 objects which can be scratched by a metal ruler. They reported their additional findings as follows:

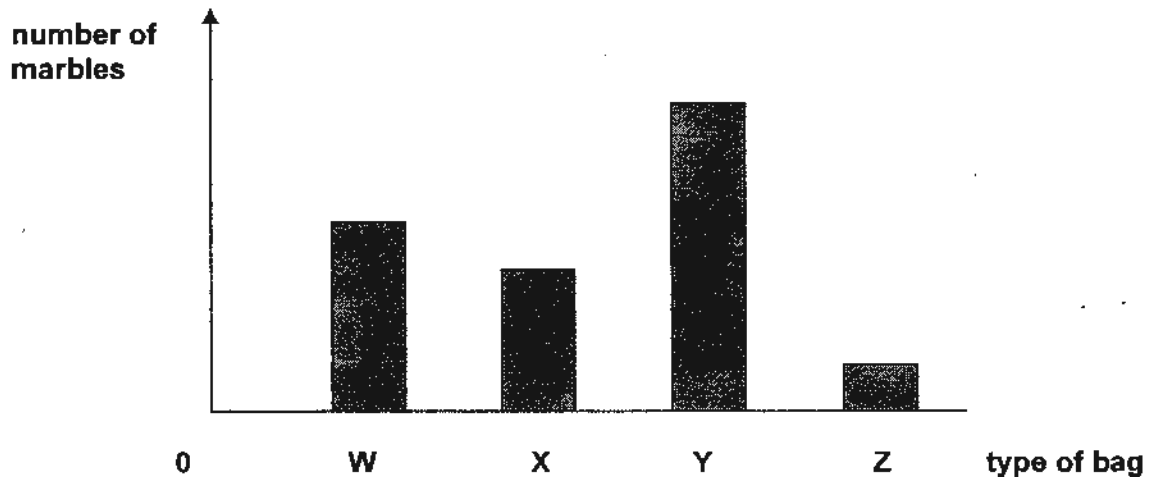


Which one of the following sets can these three objects possibly be?

	Object A	Object B	Object C
(1)	glass mirror	rubber band	plastic cup
(2)	glass mirror	plastic cup	rubber band
(3)	paper cup	glass mirror	rubber band
(4)	plastic cup	rubber band	glass mirror

16. There were four shopping bags of the same size and shape but each was made of a different material.

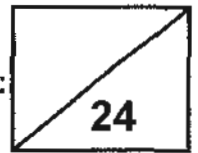
The bar graph below shows the maximum number of marbles that each bag could hold just before it tore.



Which one of the following conclusions can be drawn from the graph above?

- (1) Bag W was made of the strongest material.
- (2) Bag Z was made of the strongest material.
- (3) Material of bag X was stronger than material of bag Y.
- (4) Material of bag W was stronger than material of bag Z.

Name : _____ Index No.: ____ Class: P3____ Marks:



SECTION B (24 marks)

For questions 19 to 29, 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.

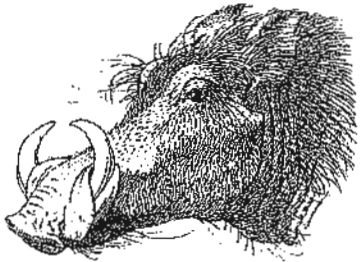
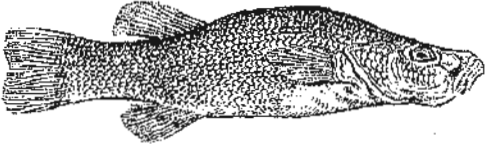

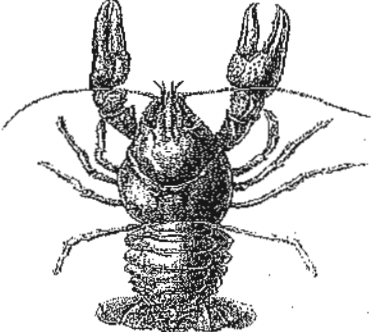
19. Which of the following statements show(s) that a living thing responds to changes in its environment?

Put a tick (✓) in the appropriate box(es).

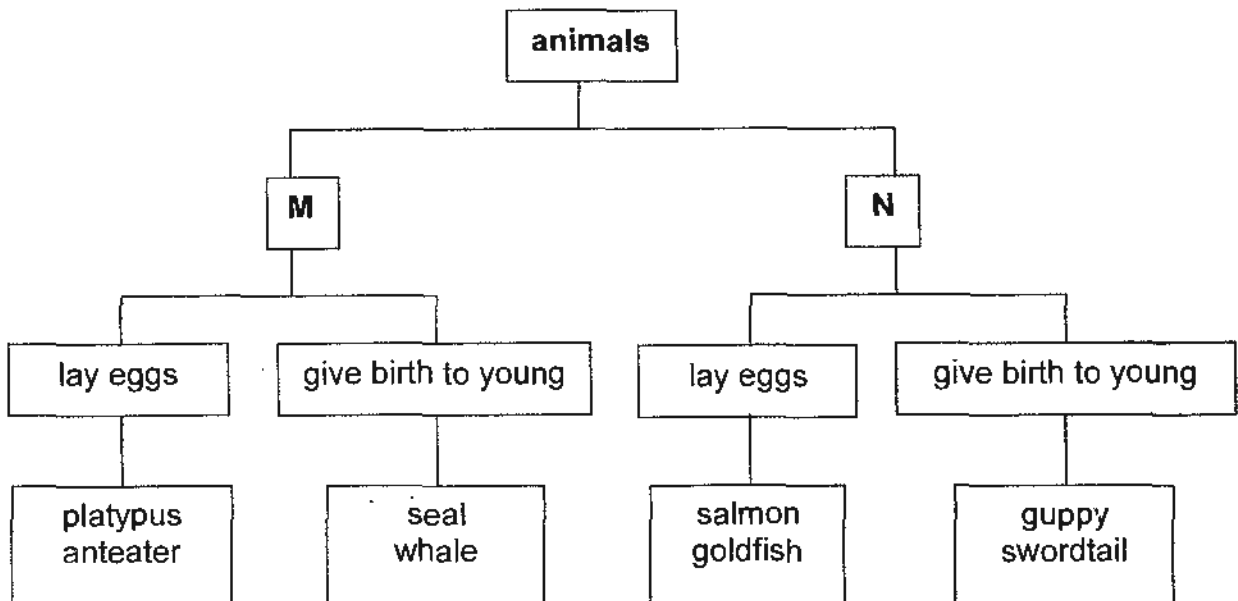
[2]

- | | | |
|-----|--|--------------------------|
| (a) | A mouse runs away from a snake. | <input type="checkbox"/> |
| (b) | The leaves of the rain tree opens during the day. | <input type="checkbox"/> |
| (c) | The sound of traffic gets louder as you walk nearer to the road. | <input type="checkbox"/> |
| (d) | A millipede curls into a ball when touched. | <input type="checkbox"/> |

20. Based on your observations of each of the following animals,
- (i) state its outer covering
 - (ii) **ONE OTHER** physical feature that the animal possesses. [3]
- (Do **NOT** mention the number of eyes and legs of each animal.)
The first has been done for you.

animal	outer - covering	physical feature
<p style="text-align: center;">Example</p> 	hair	It has a pair of tusks.
<p>(a)</p> 		
<p>(b)</p> 		
<p>(c)</p> 		

21. The chart below shows how some animals are grouped.



Based on the information above, answer the following questions:

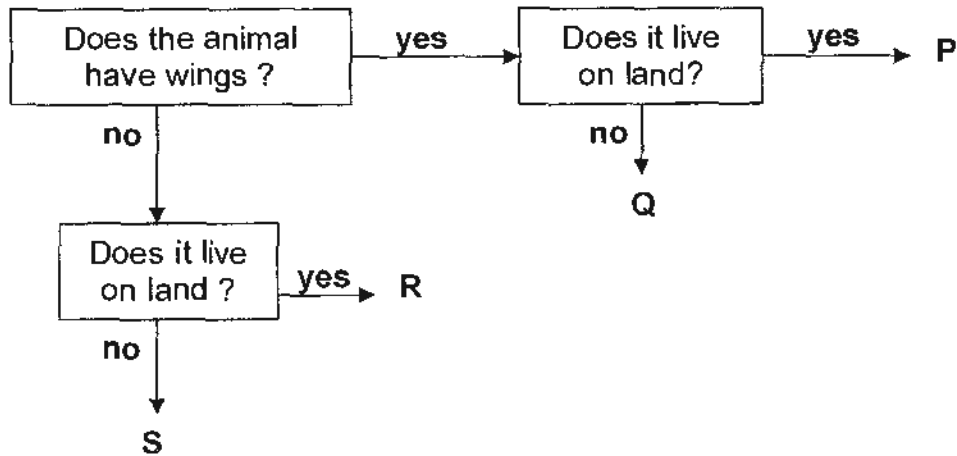
(a) Suggest a suitable sub-heading for each of these groups, M and N: [1]

M _____

N _____

(b) State a similarity between the seal and guppy. [1]

22. Nancy put some animals into groups, P, Q, R and S, 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 animals in groups P and S. [1]

An animal, X, is described as follows:

It is a land animal with a pair of wings.

- (b) Which one of these groups, P, Q, R or S, does animal X belong to? [1]

23. Julia took a walk around the eco-garden in her school. She noticed that there were many plants **WITHOUT** flowers.

Based on her observations, Julia made the following conclusion:

All the plants that do **NOT** have flowers are non-flowering plants.

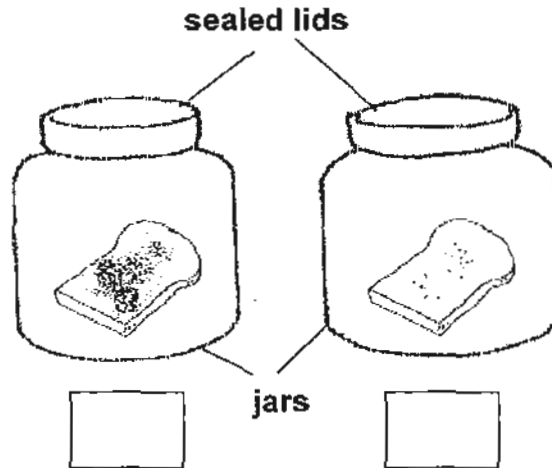
(a) Did Julia make a correct conclusion?

Explain your answer. [1]

(b) Why are mushrooms considered as fungi and **NOT** as non-flowering plants? [1]

24. Carina took two identical pieces of bread from a loaf of bread. She toasted one piece and then left both pieces in identical sealed glass jars in a warm place.

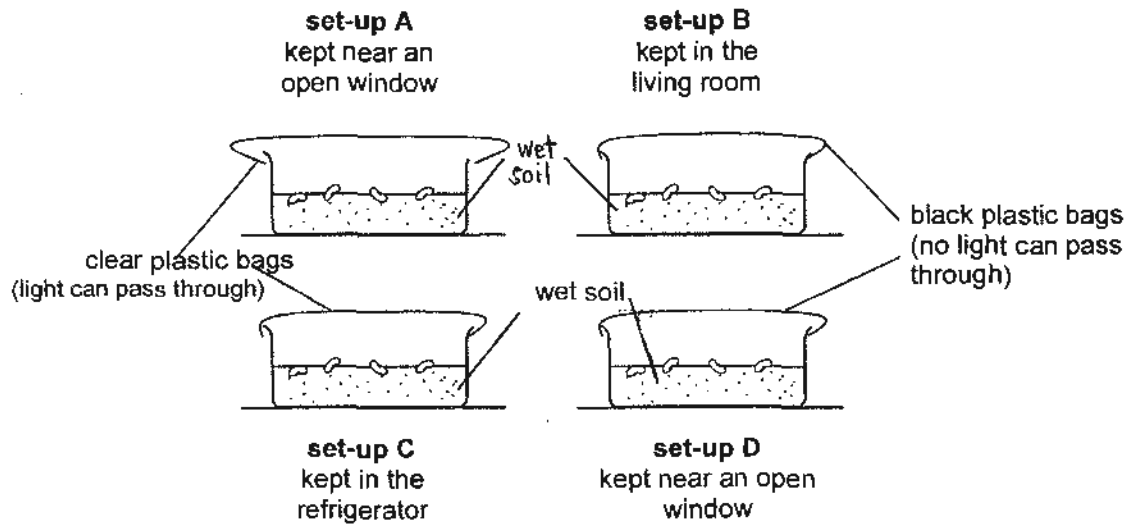
After a week, she found more mould growing on one piece of bread than the other.



- (a) Based on the information above, identify the toasted bread.
Put a tick (✓) in the correct box above. [1]
- (b) How does bread mould reproduce? [1]
-
- (c) Carina said that the mould on the bread was a plant.
Was she correct?
Give a reason for your answer. [1]
-
-

25. Tom wanted to find out if light is necessary for seeds to develop into seedlings.

Using four identical containers, Tom put four seeds into each of the following set-ups as shown in the diagrams below.



Based on the information above, answer the following questions:

- (a) To conduct a fair test for his experiment, which two of these set-ups, A, B, C and/ or D, should Tom use? [1]
-

Three of Tom's classmates suggested the following to conduct a fair test for his experiment mentioned above:

Alvin : One of the set-ups must contain a different type of seeds from the rest.

Ben : Give each set-up the same amount of water.

Clara : The type and amount of soil used in each container must be the same.

- (b) Which of these Tom's classmates gave the wrong suggestion(s)? [1]
-

26. In an experiment, June grew some seeds of types X and Y in identical pots with the same amount of garden soil.

An equal number of seeds of types X and Y were put in each pot. June watered the seeds with an equal amount of water everyday and recorded what she had done in the table below.

pot	type of seed	fertiliser added	place where the pot was placed
P	X	yes	near an open window
Q	X	no	in the shade
R	Y	yes	near an open window
S	Y	no	in the shade

June used pots P and S to find out which type of seeds grow into seedlings more quickly.

Her father commented that she had **NOT** conducted a fair test.

Give two suggestions that June could do to conduct a fair test for her experiment. [2]

SUGGESTION 1	
SUGGESTION 2	

27. Material K is described as follows:


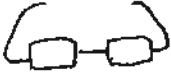
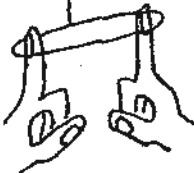

- | |
|----------------------|
| It is |
| • flexible |
| • waterproof |
| • lightweight |
| • can float on water |

Based on the information above, answer the following questions:

(a) Which one of the following objects can possibly be made from material K ?

Put a tick (✓) in the correct box below.

[1]

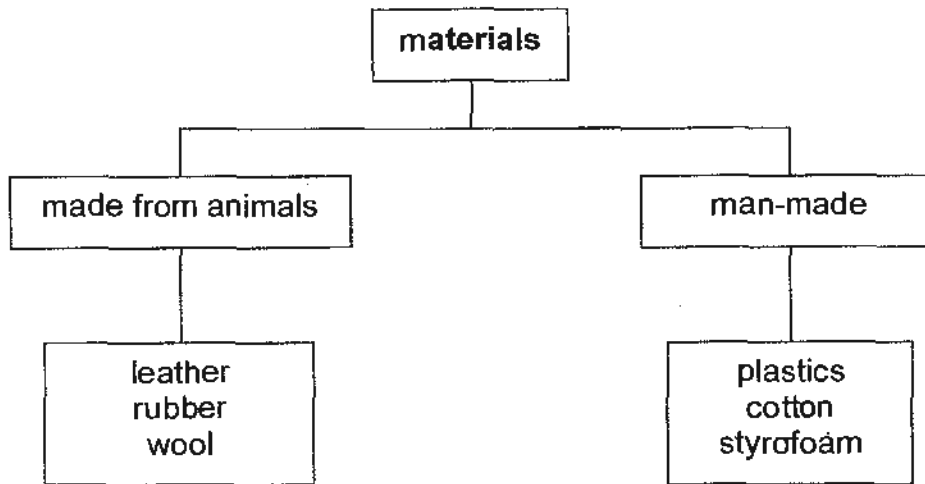
		<p>rubber band</p> 	

(b) Which one of the above objects breaks into pieces when it is hit repeatedly with a hammer ?

Put a cross (X) in the correct box above.

[1]

28. Some materials are classified according to their properties as shown below.

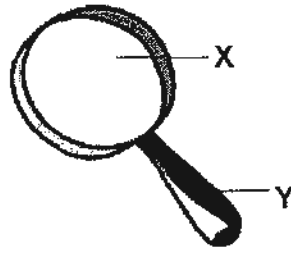


Based on the information above, answer the following questions:

List the material(s) which has / have been **WRONGLY** classified. [2]

Explain your answer.

29. The object as shown below is made up of two different parts. Each part is made of a different material.



Name the material used to make each of these parts of the object and give a reason why such a material is used to make the part. [2]

part	material used	reason
X		
Y		

- END OF PAPER -

Setters: H. H. & Y. M.



RAFFLES GIRLS' PRIMARY SCHOOL

2010 Primary 3 SCIENCE SEMESTRAL ASSESSMENT 1 ANSWER KEY

SECTION A (18 X 2 marks)

1.	4
2.	2
3.	1

4.	2
5.	3
6.	1

7.	4
8.	2
9.	4

10.	1
11.	4
12.	3

13.	2
14.	2
15.	3

16.	4
17.	4
18.	4

SECTION B (24 marks)

No.	Marks	suggested answers	Remarks						
19	2	(a) (b) (d)	[½] for each correct answer						
20	3	<table border="1"> <tr> <td>scales</td> <td>It has fins/ a tail/head/gill cover/mouth.</td> </tr> <tr> <td>feathers</td> <td>It has wings/ a beak/a head/feet.</td> </tr> <tr> <td>hard outer covering/ shell</td> <td>It has claws/a head/pincers/a tail. Do not accept have hands.</td> </tr> </table>	scales	It has fins/ a tail/head/gill cover/mouth.	feathers	It has wings/ a beak/a head/feet.	hard outer covering/ shell	It has claws/a head/pincers/a tail. Do not accept have hands.	-[½] for wrong spelling NO marks for wrong spelling Do not accept: gills/pair of fins
scales	It has fins/ a tail/head/gill cover/mouth.								
feathers	It has wings/ a beak/a head/feet.								
hard outer covering/ shell	It has claws/a head/pincers/a tail. Do not accept have hands.								
21	a 1	M : mammal/has hair or fur N : fish/has scales	NO marks for wrong/ NO units						
	b 1	Both give birth to (live) young.	Do not accept: Both do not lay eggs as not shown in diagram. If they do not lay eggs, how do they reproduce? Answer directly.						
22	a 1	P lives on land while S does not live on land. P has wings while S does not have wings.	No comparison 0m						
	b 1	P							

No.	Marks	Suggested answers	Remarks	
23	a	1	<p>Answer: No [0m]</p> <p>Explanation: Some flower at different times of the year/seasonal.</p> <p>Plants which have not reached adult stage do not flower.</p>	<p>Accept:</p> <ul style="list-style-type: none"> • have not bear flowers yet • flowers dropped
	b	1	<p>Mushrooms feed on</p> <ul style="list-style-type: none"> • dead matter • organic matter • dead / living plants and animals.[1m] <p>Mushrooms do not have leaves to make food/ no chlorophyll/cannot make food. [1m]</p>	
24	a	1	[√] box with the less mould/ on your right	
	b	1	by spores	
	c	1	<p>Answer: No</p> <p>Reason:</p> <ul style="list-style-type: none"> • It does not make its own food.[1m] • It feeds on dead matter. • It feeds on organic matter. • It feeds on dead / living plants and animals. 	<p>A comparison must be made between mould and plants when answer is negative.</p> <p>Accept: Mould has no roots/stem/leaves but plants have these.</p> <ul style="list-style-type: none"> • She is not able to see roots and leaves (under microscope) [½m] • It is a fungi. [½m]
25	a	1	A and D	No half marks.
	b	1	Alvin	

26		1	She can add an equal amount of fertilizer to Pot S OR She should not add fertilizer to Pot P.	
		1	She can place <ul style="list-style-type: none"> • both pots P and S in the same place. • pot P in the shade • pot S near an open window • OR She could use pot P and R OR She could use pot Q and S.	(about fertilizer – location of pots)
27	a	1	[√] rubber band OR raincoat/coat	If more than one tick/cross, 0 m for that qn
	b	1	[X] glasses	
28		2	<u>Answer:</u> cotton and rubber	NO marks for wrong identification of materials
			<u>Reason:</u> Cotton and rubber come from plants. Cotton comes from cotton plant while rubber from rubber trees.	-[½] for wrong spelling of words Reason must be based on the correct answers given
29	a	1	X : glass/plastic(s) <u>Reason:</u> <ul style="list-style-type: none"> • able to see through • is clear and allows light to pass through • transparent 	Marks given separately for materials and reasons Do not deduct marks for spelling in reasons given. To check for concept. No marks for to see small things (magnifying effect)
	b	1	Y : steel/ metal/ wood/ plastic(s)/rubber <u>Reason:</u> <ul style="list-style-type: none"> • is hard • is strong • can support the weight of the lens • wood/plastic/rubber – light weight 	No marks for easy to grip or hold/ good conductor of heat/ waterproof/rusty.

- END OF PAPER -