



PRIMARY 3 MID-YEAR EXAMINATION 2016

Name: _____ ()

Date: 12 May 2016

Class: Primary 3 ()

Time: 1 hour

Parent's Signature: _____

Marks: _____ / 28

**SCIENCE
BOOKLET A**

INSTRUCTIONS TO CANDIDATES

Write your name, class and register number.

Do not turn over this page until you are told to do so.

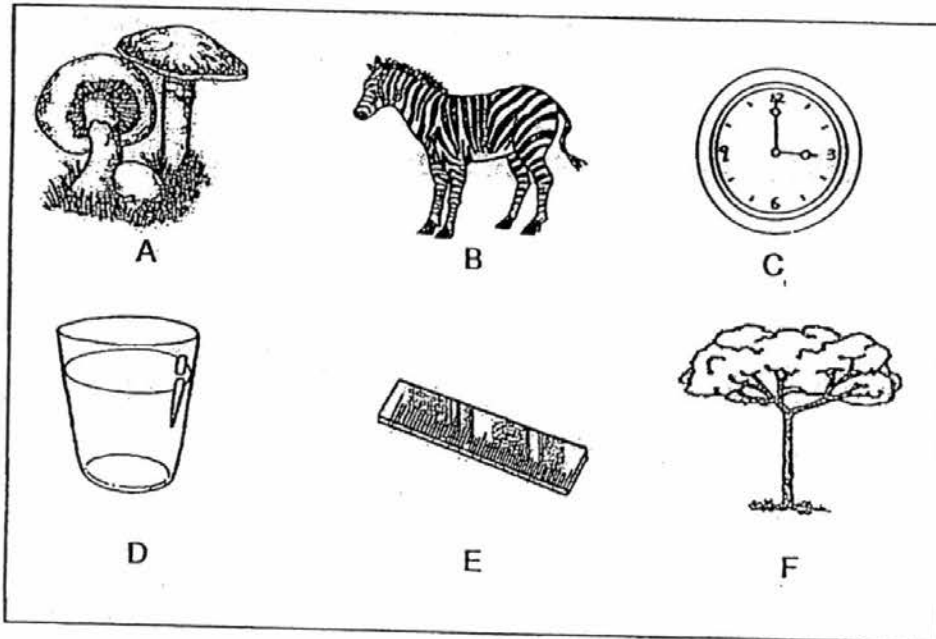
Follow all instructions carefully.

Answer all questions.

Section A (14 × 2 marks= 28 marks)

For each question, 1 to 14, choose the most suitable answer and shade its corresponding oval (1, 2, 3 or 4) in the optical answer sheet.

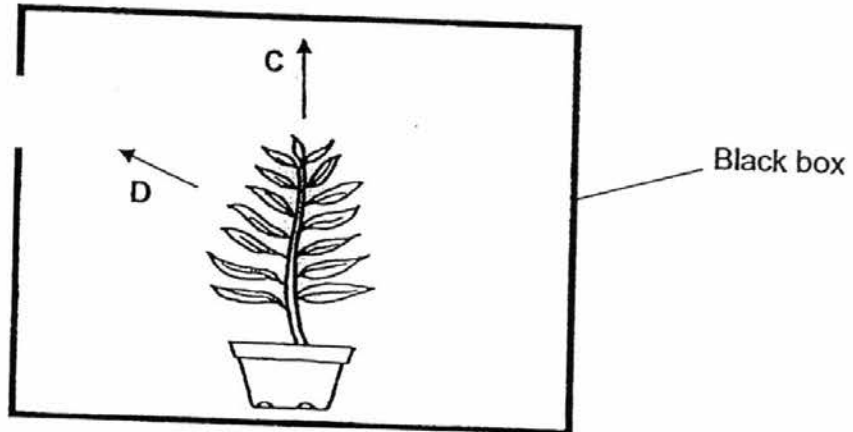
1 Mala wants to classify the items shown below.



Which of the following shows that she has classified all the items correctly under the given headings?

	Living things	Non-living things
(1)	A, D and E	B, C and F
(2)	C, D and E	A, B and F
(3)	B, C and F	A, D and E
(4)	A, B and F	C, D and E

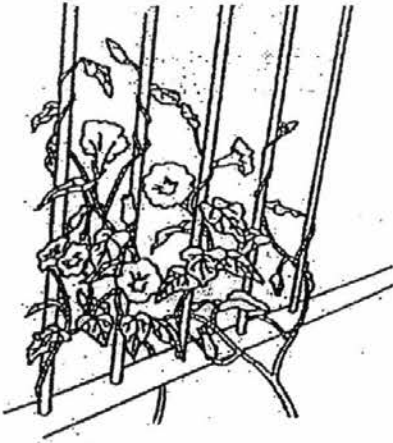
2. A teacher placed a potted plant in a thick black box with a hole on one side as shown below. The box was placed in a sunny spot and the plant was watered daily. Four pupils predicted the direction the plant would grow and provided their explanations.



Which child predicted the direction correctly and gave the correct explanation?

Child	Prediction and Explanation
(1) Bala	Direction C because the plant will grow upwards towards sunlight.
(2) Sam	Direction C because the plant will respond to sunlight.
(3) Ali	Direction D because the plant will grow towards the hole to get sunlight to make food.
(4) Meiling	Direction D because sunlight can pass through the box.

3. Study the plants below.



Plant A

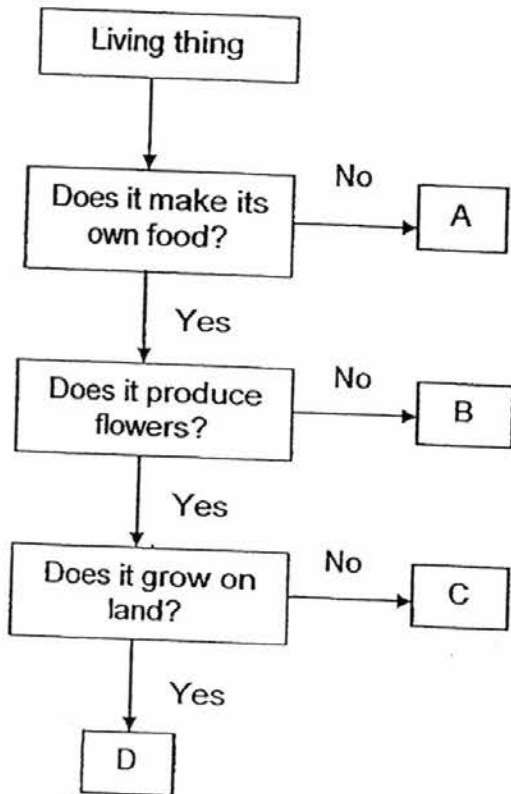


Plant B

Which of the following statements is correct?

- (1) Plant A and Plant B have weak stems.
- (2) Plant A and Plant B reproduce by seeds.
- (3) Plant A reproduces by spores while Plant B reproduces by seeds.
- (4) Plant A depends on others for food while Plant B makes its own food.

4. While walking in the garden, James found a plant which had spores growing on the underside of its leaves. Based on the flowchart below, which of the following groups, A, B, C or D, can James place the plant in?



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

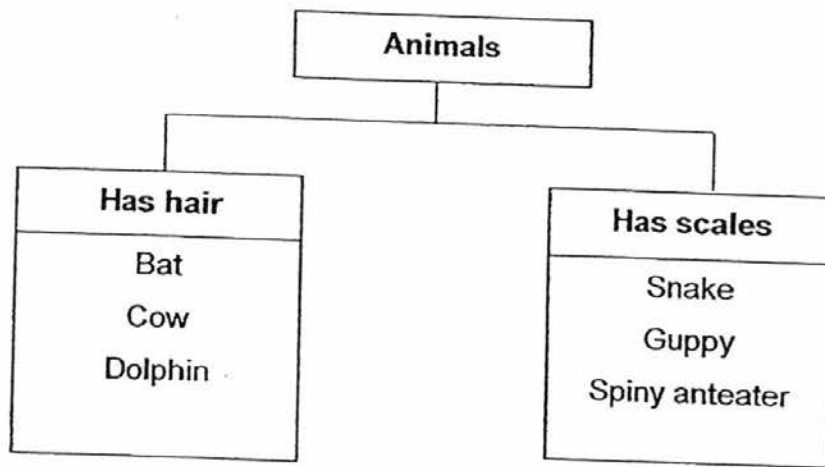
5. Study the table below.

Reproduce by giving birth	Reproduce by laying eggs
Animal Group X	Animal Group Y Animal Group Z

Which of the following is represented by Animal Group X, Animal Group Y and Animal Group Z?

	Animal Group X	Animal Group Y	Animal Group Z
(1)	Mammal	Bird	Insect
(2)	Bird	Insect	Amphibian
(3)	Insect	Fish	Bird
(4)	Amphibian	Mammal	Fish

6. Sharon classified 6 animals into Group A and Group B as shown below.



Which of the following animals is grouped wrongly?

- (1) Bat
- (2) Snake
- (3) Dolphin
- (4) Spiny anteater

7. Which animal group is matched correctly to its method of breathing?

	Animal group	Method of breathing
(1)	Amphibians	Lungs
(2)	Fish	Lungs
(3)	Birds	Gills
(4)	Mammals	Gills

8. Mary saw an organism in the garden. Which of the following characteristics helped Mary to classify it as an insect?

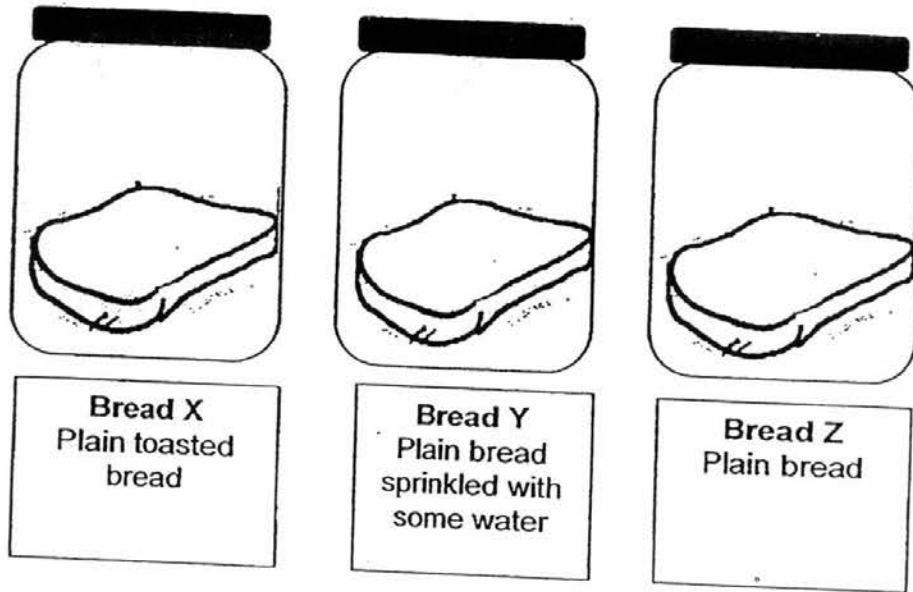
- A. A pair of wings
- B. Three main body parts
- C. Three pairs of legs

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

9. Which of the following statements is correct?

- (1) Bacteria do not reproduce.
- (2) Bacteria make their own food.
- (3) Bacteria can be seen under a microscope.
- (4) Bacteria cannot respond to changes in the surroundings.

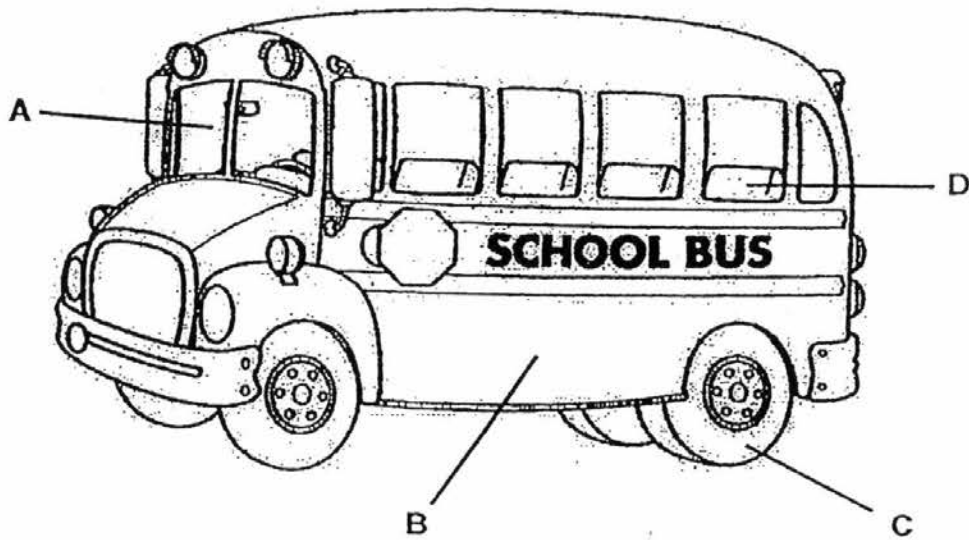
10. James has 3 identical slices of bread, Bread X, Bread Y and Bread Z. He toasted Bread X, sprinkled some water onto Bread Y and nothing was added to Bread Z. Then, he placed the 3 slices of bread into 3 sealed containers as shown below. He left the 3 containers in a warm, dark corner for 10 days.



Based on the experiment above, which of the following correctly describes the observations of the 3 slices of bread on the 10th day?

	Bread X	Bread Y	Bread Z
(1)	Slightly mouldy	Very mouldy	No change
(2)	No change	Very mouldy	Slightly mouldy
(3)	Very mouldy	No change	Slightly mouldy
(4)	No change	Slightly mouldy	Very mouldy

11. The drawing below shows a school bus.



Which of the following identifies the materials used to make the parts labelled A, B, C and D correctly?

	A	B	C	D
(1)	Glass	Rubber	Metal	Fabric
(2)	Metal	Fabric	Rubber	Glass
(3)	Glass	Metal	Rubber	Fabric
(4)	Fabric	Metal	Glass	Rubber

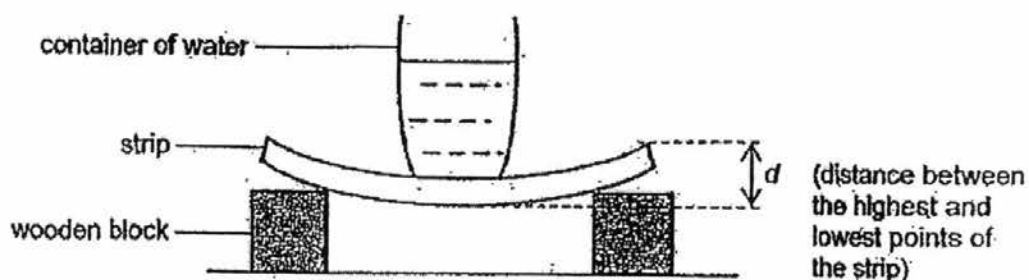
12. Jamie observed and recorded the properties of three objects as shown below.

Objects	Is it strong?	Z	Is it flexible?
Gold bar	Yes	No	No
Car tyre	Yes	No	Yes
Cardboard	No	Yes	Yes

Which of the following is represented by Z?

- (1) Does it sink in water?
- (2) Does it absorb water?
- (3) Does it allow light to pass through?
- (4) Does it break easily when dropped?

13. Mei Ling set up an experiment as shown below to compare the property of four strips, P, Q, R and S, which are made of different materials. She placed a container with 100 ml of water on each strip and measured d , the distance between the highest and lowest points of the strip.



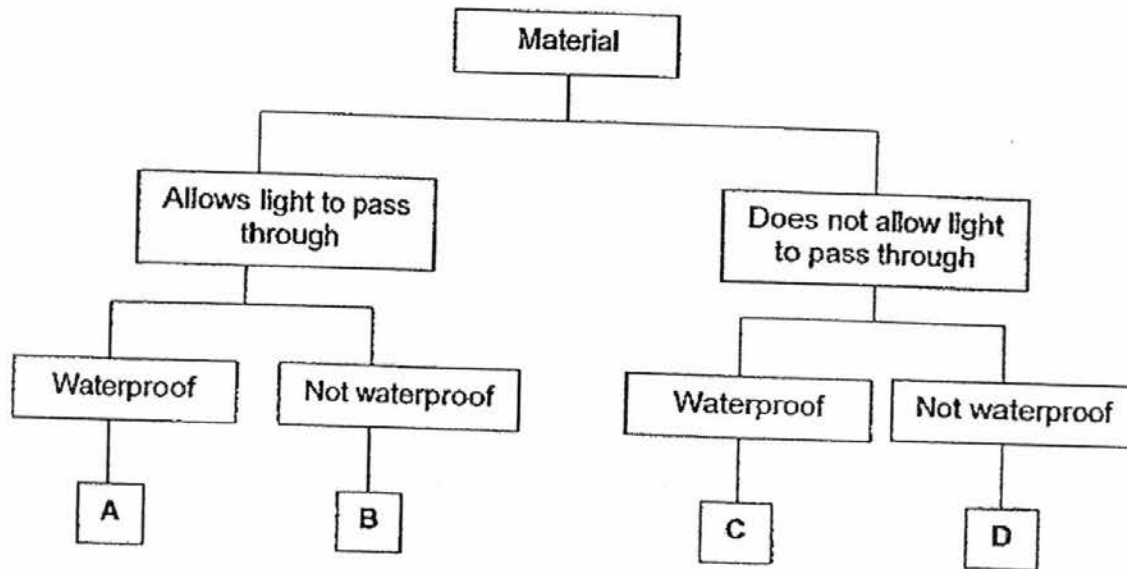
Her results are shown below.

Strip	Distance between the highest and lowest points of the strip, d (cm)
P	3
Q	2
R	1
S	4

Based on the experiment above, which strip, P, Q, R or S, is most suitable for making a food tray?

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

14. Study the classification chart below.



Based on the classification table above only, which is the most suitable material to make a whiteboard?

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

– End of Booklet A –



PRIMARY 3 MID-YEAR EXAMINATION 2016

Name : _____ ()

Date: 12 May 2016

Class : Primary 3 ()

Duration: 1 hour

Parent's Signature : _____

**SCIENCE
BOOKLET B**

INSTRUCTIONS TO CANDIDATES

Write your name, class and register number.

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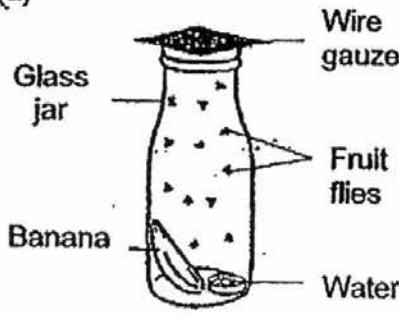

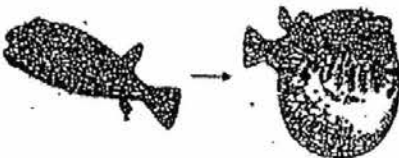

Answer all questions.

Booklet A	28
Booklet B	22
Total	50

Section B (22 marks)

For the questions, 15 to 24, write your answers in the spaces provided.

15. Match the following organisms to the correct characteristics of living things shown by each of them. (2m)

<p>(a)</p>  <p>Labels: Glass jar, Wire gauze, Fruit flies, Banana, Water</p>	•	•	<p>Living things can respond to changes around them.</p>
<p>(b)</p> 	•	•	<p>Living things can reproduce.</p>
<p>(c)</p>  <p>Labels: Before, When in danger</p>	•	•	<p>Living things need air, food and water to stay alive.</p>
<p>(d)</p> 	•	•	<p>Living things can grow.</p>

16. Mark placed 250 g of bread and 150 ml of water in each of the two large jars, A and B. He made holes in the covers of the two jars. He then placed a mouse in one of the jars and recorded the amount of water and bread left in each jar after 1 day.

Jar	Amount of bread at first (g)	Amount of bread after 1 day (g)
A	250	160
B	250	250

Jar	Amount of water at first (ml)	Amount of water after 1 day (ml)
A	150	115
B	150	150

- (a) Why did Mark make holes in the covers of the two jars? (1m)

- (b) Based on the results given in the table above, which jar contains the mouse? Explain your answer. (1m)

17. The pictures below show Plant A and Plant B.



Plant A

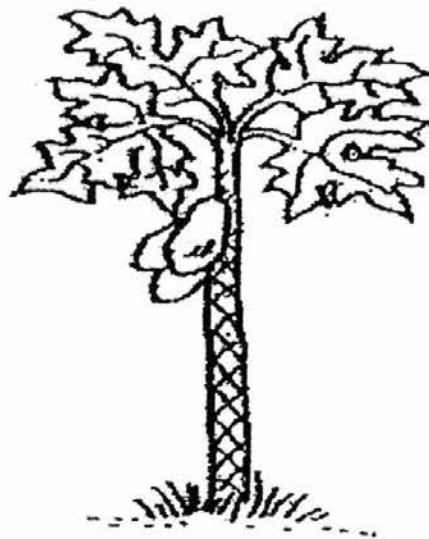


Plant B

(a) Based on the pictures above, state one similarity between Plant A and Plant B. (1m)

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

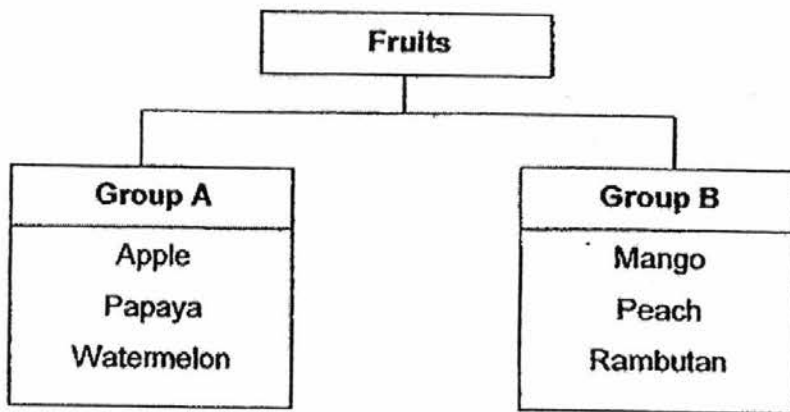
18. Danny saw the papaya plant in the garden as shown in the picture below.



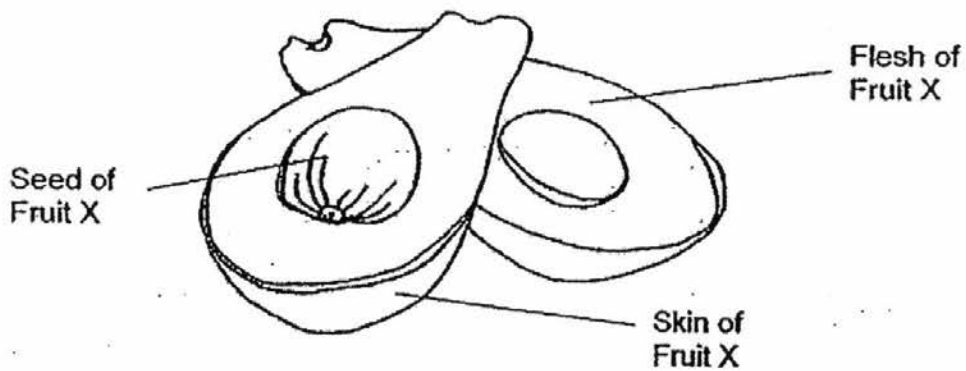
Papaya plant

(a) He concluded that the papaya plant is a flowering plant. Is he correct? Explain your answer. (1m)

(b) Danny saw many other fruits in the garden and classified them as shown in the table below.

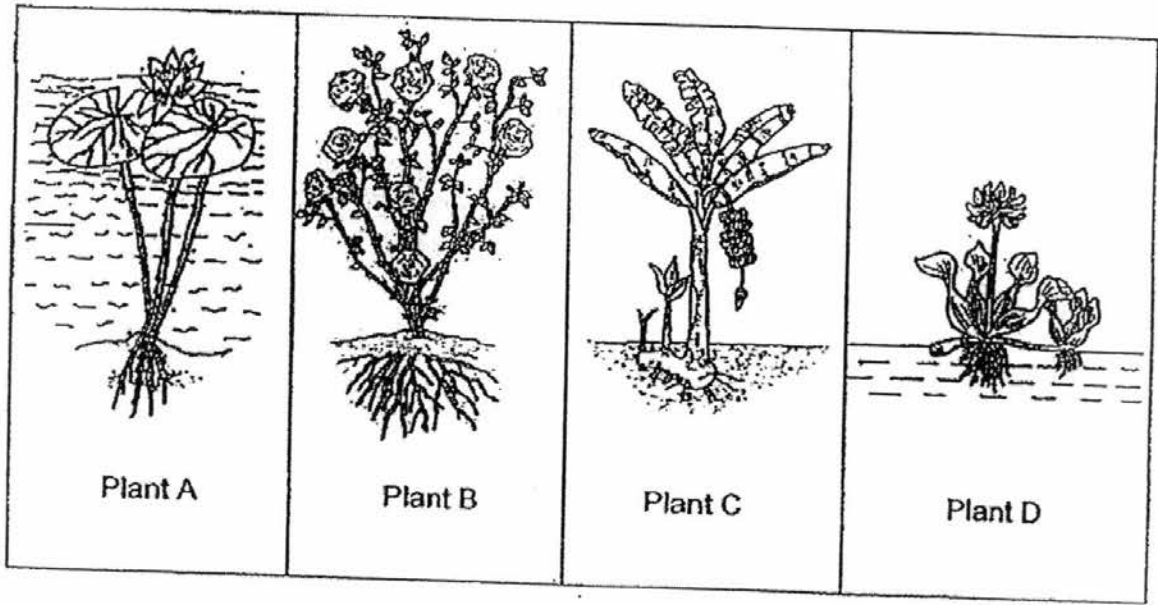


Danny also saw Fruit X in the garden. He cut Fruit X into half as shown below.



In Group A or Group B would Danny place Fruit X in? Explain why. (1m)

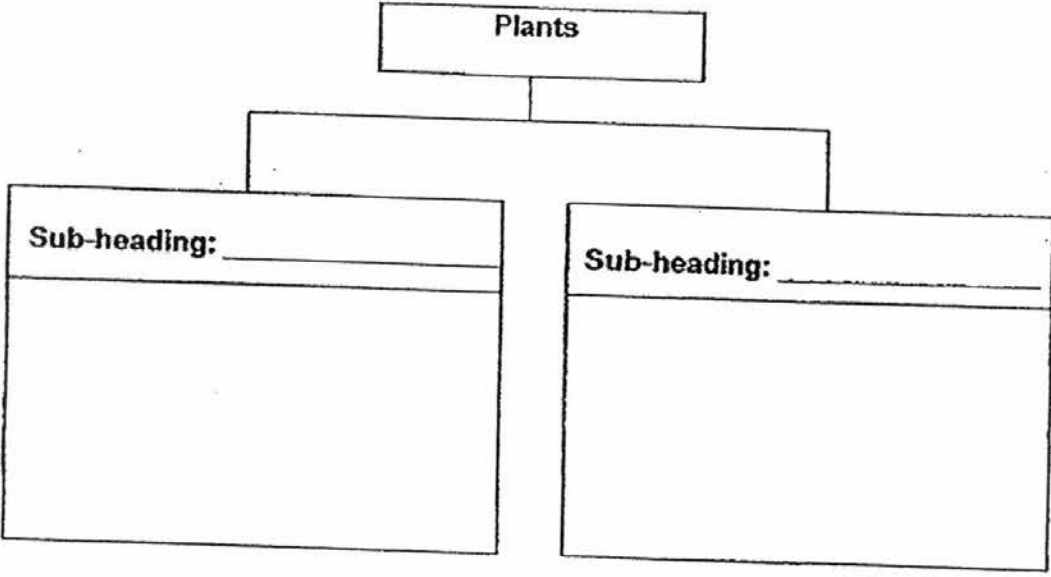
19. The pictures below show 4 plants.



In the classification table below:

- (a) **classify** the four plants correctly into 2 groups using the letter A, B, C and D and
- (b) **write suitable headings** for each group.

(2m)



20. The pictures below show Animal A and Animal B.



Animal A



Animal B

(a) Write down the outer body covering of the animals.

(1m)

Animal A: _____

Animal B: _____

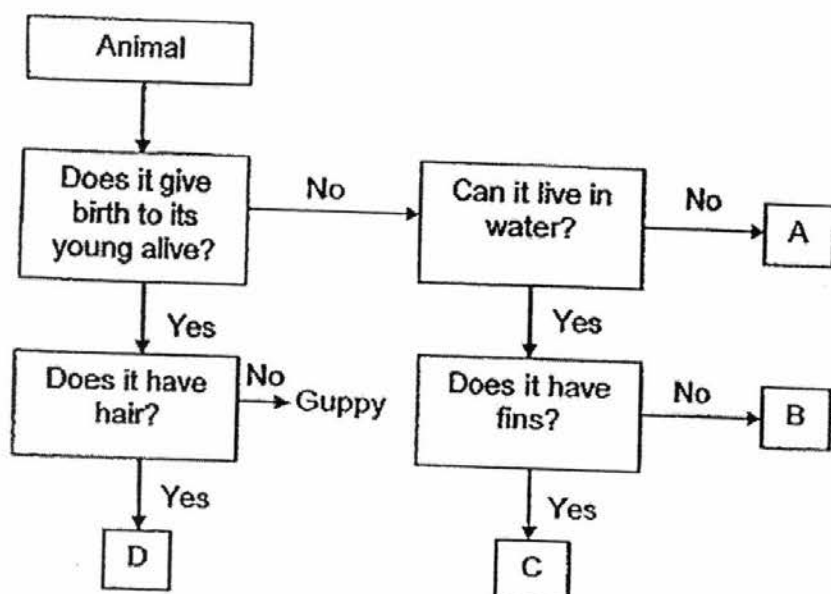
(b) State two functions of Animal A's outer body covering.

(1m)

(i) _____

(ii) _____

21. The flowchart below gives the characteristics of some animals, A, B, C, D and guppy.



- (a) In which animal group does C belong to? (1m)

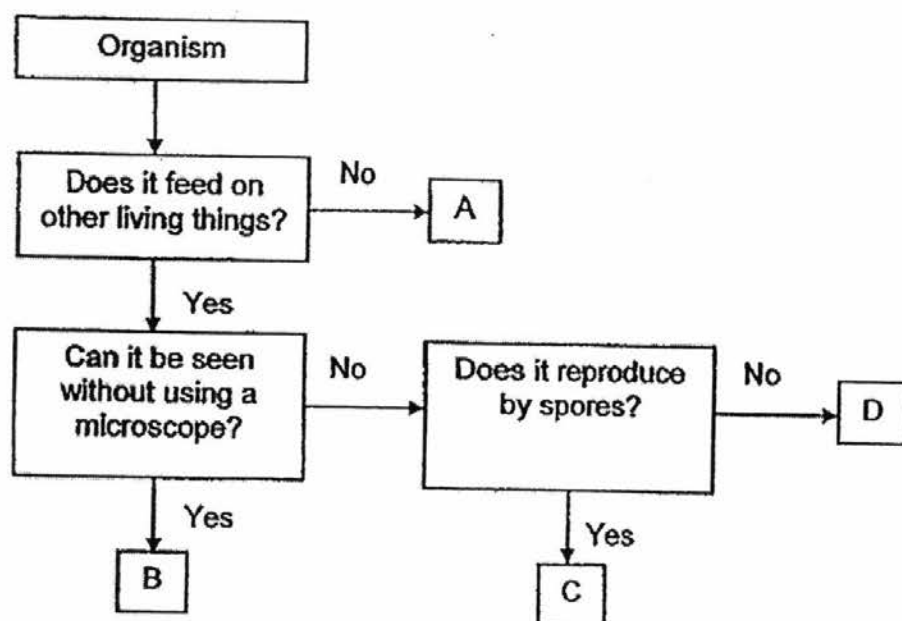
- (b) Based on the flowchart above, can D be a bird? Give a reason for your answer. (1m)

- (c) Based on the flowchart above, write the letter, A, B, C or D, that represents the rabbit and the frog in the spaces provided below. (1m)

Rabbit: _____

Frog: _____

22. Study the flowchart below.



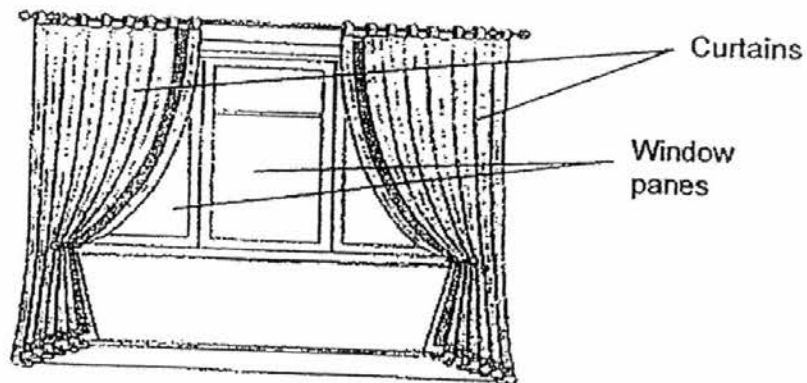
(a) Based on the flowchart above, state all the characteristics of the organism B. (1m)

(b) Based on the flowchart above, state one difference between the organisms, A and C. (1m)

23. The table below shows the properties of 3 materials, A, B and C.

Properties of the materials	Materials		
	A	B	C
Flexible	Yes	No	No
Allow light to pass through	No	No	Yes

Based on the properties of the materials in the table above, Nurul decides to choose a material to make her window panes and another material to make her curtains, as shown below.



- (a) Nurul wants to see the playground through her window. Which material, A or C, is more suitable for making the window panes? Explain your answer. (1m)

- (b) Nurul draws the curtain to block the bright sunlight from the afternoon sun. Which material, A or B, is most suitable for making the curtains? Explain your answer. (1m)

24. Ahmad bought four bags, W, X, Y and Z made of different materials. All the bags were of identical sizes and thickness. He wanted to find out which bag was the strongest. He added identical marbles into each bag until it broke. He recorded his observations in the table below.

Bag	Number of marbles added before the bag broke
W	100
X	130
Y	48
Z	79

- (a) Tick (✓) the variables that must be kept the same in order for his experiment to be a fair test. (2m)

Variable	Variable that must be kept the same
Material of bag	
Size of bag	
Mass of each marble	
Thickness of bag	

- (b) Which bag is the strongest? Explain your answer. (1m)

– End of Paper –

EXAM PAPER 2016 (P3)

SCHOOL : TOA NAN

SUBJECT : SCIENCE

TERM : SA1

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



16)a) To let the mouse have air to survive.

b) Jar A. The amount of food and water decreased.

17)a) Both have flowers.

b) Plant A lives in water but Plant B lives on land.

18)a)Yes. The papaya tree has fruits so it will have flowers also.

b)Group B. The fruits in Group B have only one seed and fruit X only has one seed.

19)a)b)

Sub-heading: Lives on land

Sub-heading: Lives in water

Plant B

Plant A

Plant C

Plant D

20)a)A: Feathers

B: Hair

b)i)Keep it warm

ii)Help it to fly

21)a)Fish.

b)No. A bird does not give birth to its young alive also do not have hair.

c)Rabbit: D Frog : B

22)a)Organism B feed on other living thing and can be seen without using a microscope.

b)Organism C feed on other living thing but organism A does not.

23)a)C. Material C can allow light to pass through so Nurul can see the playground through her window but Material A does not.

b)A. Material A cannot allow light to pass through and it is flexible so Nurul can draw the curtains.

24)a)

✓
✓
✓

b)Bag X. It can hold the most number of marbles before it broke.