



## PRIMARY 3 MID-YEAR EXAMINATION 2014

Name : \_\_\_\_\_ (     ) Date: 19 MAY 2014

Class : Primary 3 (     )

Time: 8.00a.m. to 9.15 a.m.

Parent's Signature : \_\_\_\_\_

Duration: 1 h 15 min

Marks: \_\_\_\_\_ / 50

## **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.

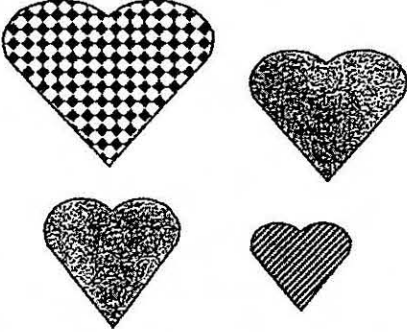
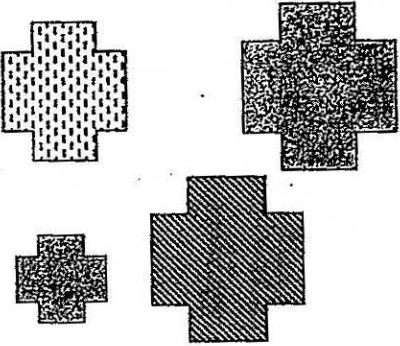
Follow all instructions carefully.

Answer all questions.

**Booklet A (25 x 2 marks = 50 marks)**

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

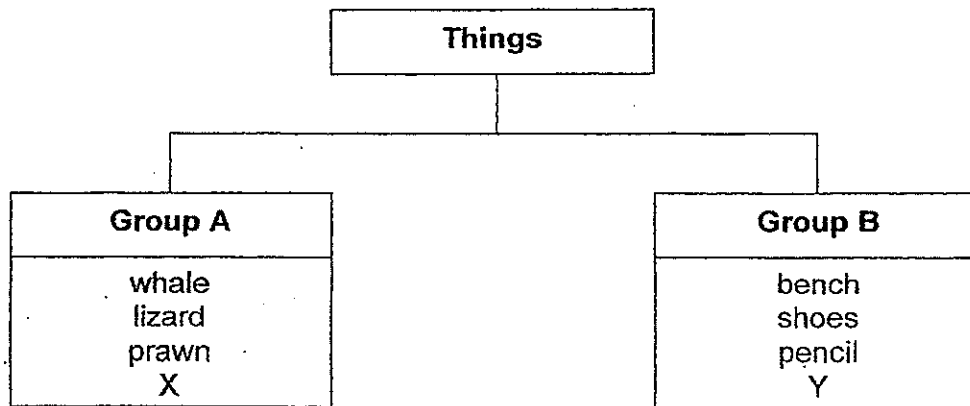
1. Study the classification table below.

Group A	Group B
	

How are the things in Group A and Group B classified?

- (1) Things in Group A and Group B are grouped according to their sizes.
- (2) Things in Group A and Group B are grouped according to their shapes.
- (3) Things in Group A and Group B are grouped according to their colours.
- (4) Things in Group A and Group B are grouped according to their patterns.

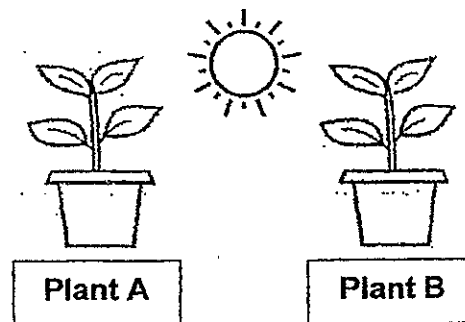
2. Study the classification chart below.



Which of the following represents X and Y correctly?

	X	Y
(1)	frog	tree
(2)	ruler	fish
(3)	yeast	scissors
(4)	button	raincoat

3. Brendan placed two similar pots of plants, Plant A and Plant B, at the same place in his school garden as shown below. He watered Plant B but not Plant A.



After some time, he noticed that Plant B grew taller but Plant A died. He concluded that plants need \_\_\_\_\_ to stay alive.

- (1) air
- (2) food
- (3) water
- (4) sunlight

4. Chloe went camping and sat very close to the fire at the start of the campfire sing-along session. She moved away from it when it got too warm. This shows that living things can \_\_\_\_\_

- (1) grow
- (2) reproduce
- (3) need air, food and water
- (4) respond to changes around them

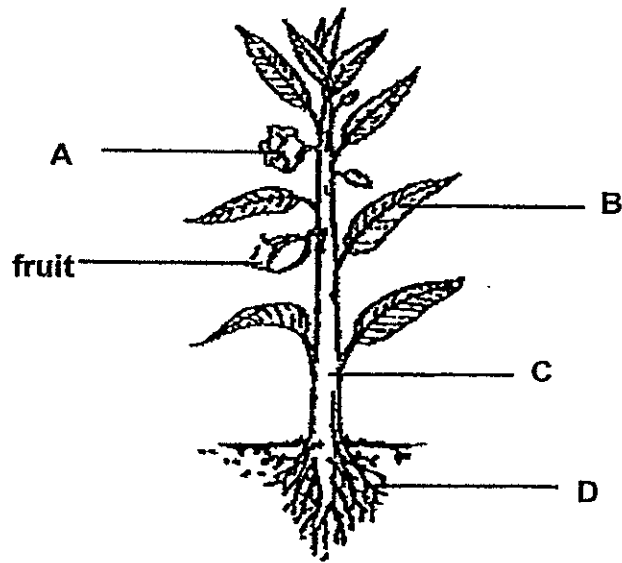
5. Celine placed two things, P and Q, separately into two containers. Both P and Q were given the same amount of air, food and water. She then made some observations of P and Q after a week as shown in the table below.

P	Q
Fed on food and water	Did not feed on food and water
Grew bigger after a week	No change in size after a week

Which of the following could P and Q be?

	P	Q
(1)	snail	rabbit
(2)	stone	pencil
(3)	marble	terrapin
(4)	hamster	storybook

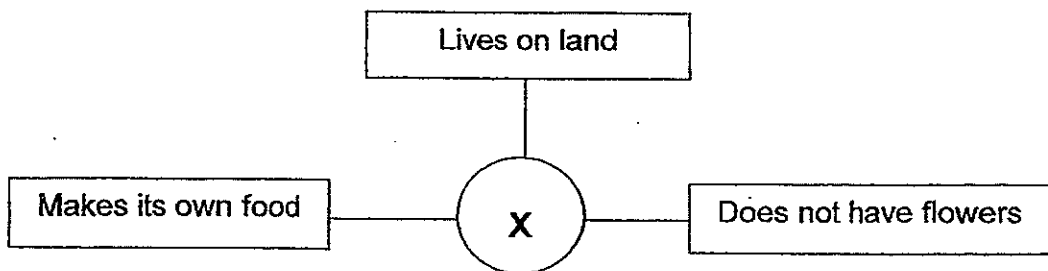
6. Study the plant below.



Which of the following represents the plant parts correctly?

	Roots	Stem	Leaf	Flower
(1)	C	A	D	B
(2)	B	D	A	C
(3)	A	B	C	D
(4)	D	C	B	A

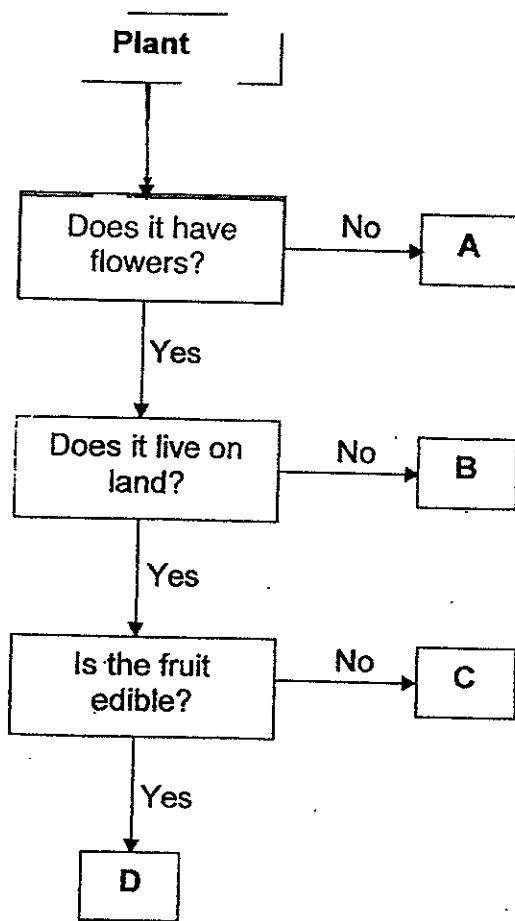
7. Study the diagram below.



Which one of the following best represents X?

- (1) hydrilla
- (2) mushroom
- (3) rose plant
- (4) bird's nest fern

part be



Which of the following represents A, B, C and D correctly?

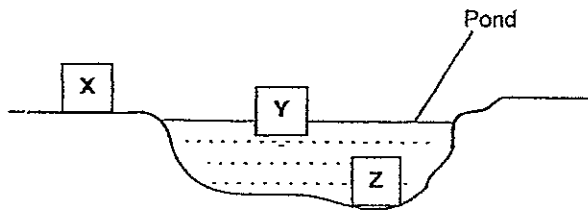
	A	B	C	D
(1)	mango tree	water lily	rubber tree	moss
(2)	mango tree	rubber tree	moss	water lily
(3)	moss	water lily	rubber tree	mango tree
(4)	moss	rubber tree	water lily	mango tree

9. The following table shows some information on 3 plants, X, Y and Z.  
A tick (✓) shows that the living thing has the characteristic(s).

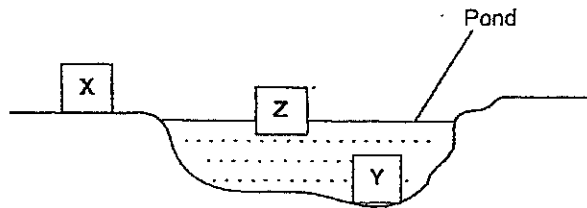
Characteristics	Plants		
	X	Y	Z
It is a land plant.	✓		
It floats in water.		✓	

Which one of the following shows the possible places where these plants can be found?

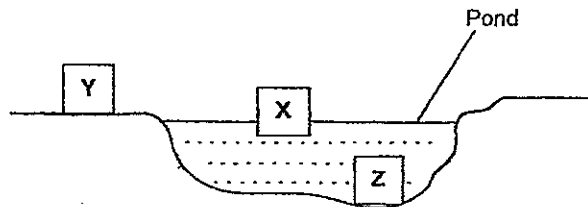
(1)



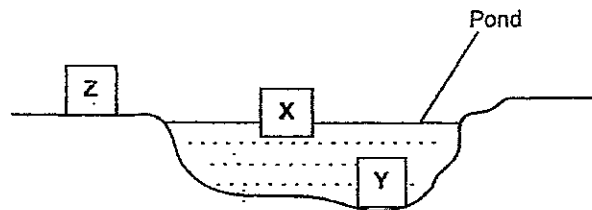
(2)



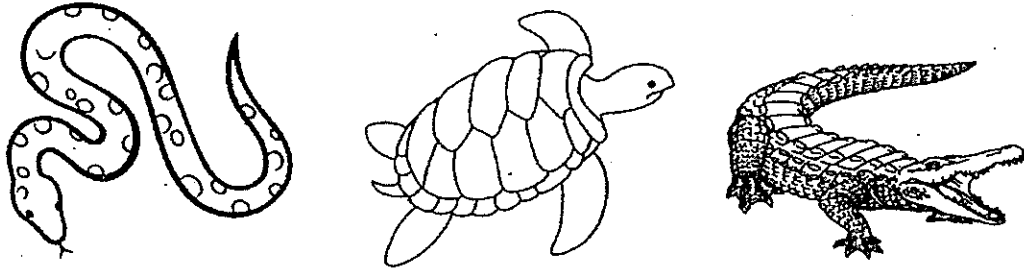
(3)



(4)



10. Study the pictures below.



The animals above are placed under the same group. Based on their body covering, how are these animals being grouped?

- (1) They have hair as their body covering.
- (2) They have scales as their body covering.
- (3) They have feathers as their body covering.
- (4) They have moist skin as their body covering.

11. Serene grouped the animals as shown in the table below.

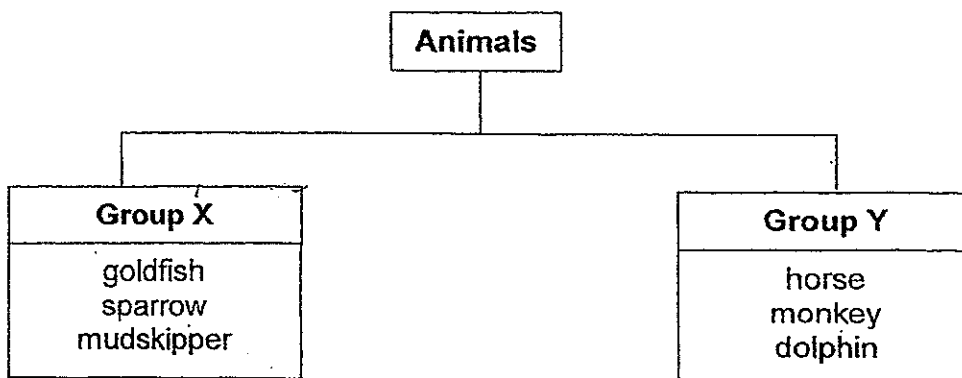
Group X	Group Y
owl	man
eagle	dog
platypus	whale

The animals are grouped according to \_\_\_\_\_.

- (1) the way they move
- (2) their body covering
- (3) the way they reproduce
- (4) the type of food they eat



12. Study the diagram below.



Which of the following animals belongs to Group Y?

- (1) parrot
- (2) snake
- (3) giraffe
- (4) grasshopper

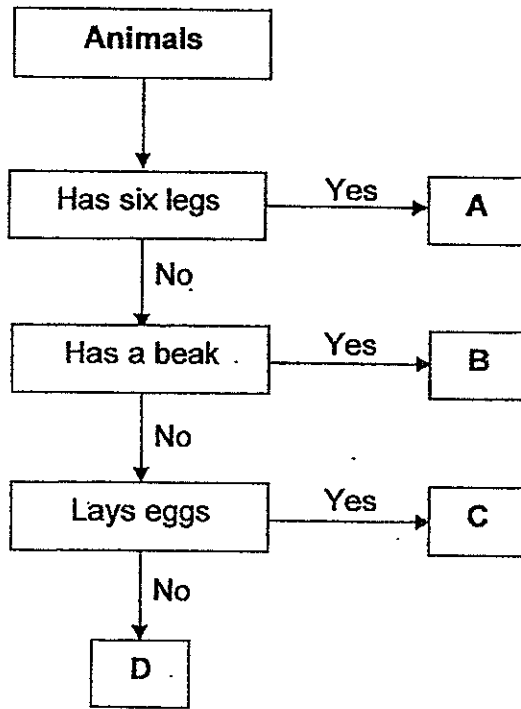
13. The table below shows the characteristics of four animals, A, B, C and D. A tick (✓) shows that the animal has the characteristic.

Animals	Number of legs			Has wings	Has feelers
	2	4	6		
A	✓			✓	
B		✓			
C			✓	✓	✓
D			✓		✓

Which animals, A, B, C or D could the ladybird and ostrich be?

	Ladybird	Ostrich
(1)	C	A
(2)	B	A
(3)	D	C
(4)	B	D

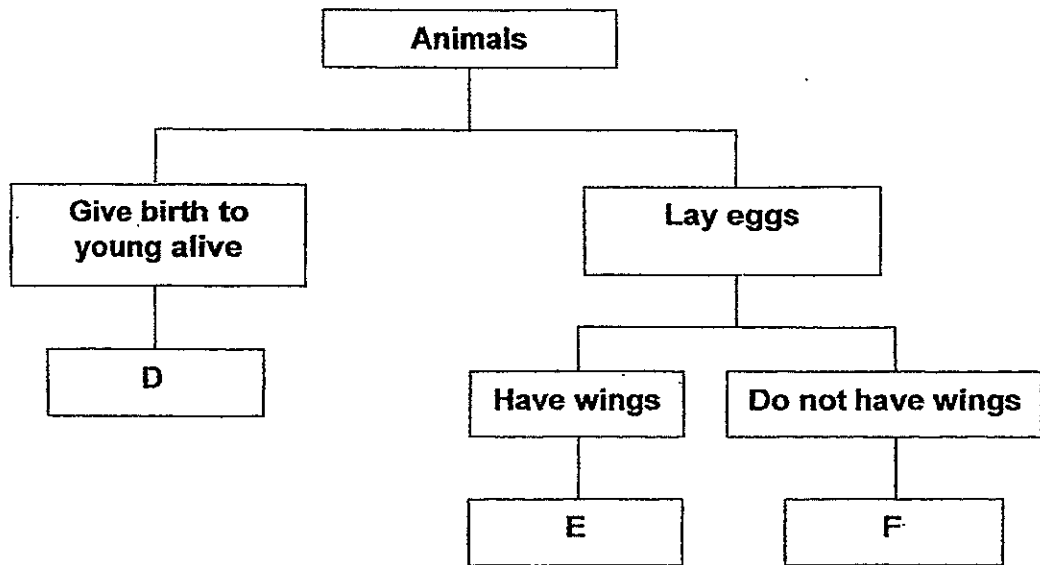
14. Study the flowchart below.



Which of the following correctly identifies the animals A, B, C and D?

	A	B	C	D
(1)	elephant	kingfisher	frog	housefly
(2)	housefly	kingfisher	elephant	frog
(3)	housefly	kingfisher	frog	elephant
(4)	housefly	elephant	frog	kingfisher

15. Study the classification table below.



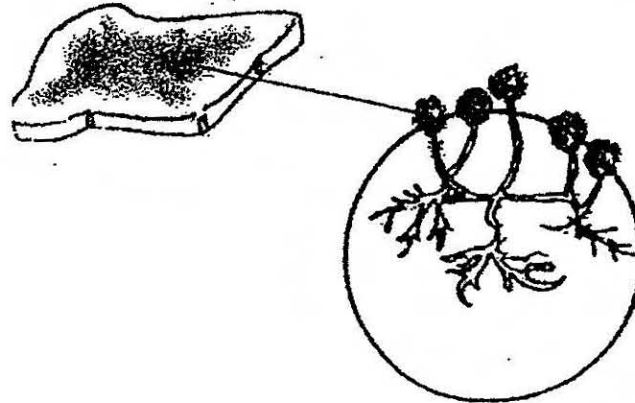
Which of the following represents D, E and F?

	D	E	F
(1)	penguin	seahorse	giraffe
(2)	zebra	penguin	seahorse
(3)	giraffe	zebra	penguin
(4)	seahorse	giraffe	zebra

16. Which one of the following statements about bacteria is true?

- (1) Bacteria reproduce by spores.
- (2) Bacteria can make its own food.
- (3) Bacteria respond to changes around them.
- (4) Bacteria can be seen with our naked eyes.

17. Isaac left a piece of bread in a plastic bag for a week. When he opened the bag, he saw some spots on the bread. His mother told him that it was bread mould.



**Magnified view**

Which of the following is/are the characteristics of the bread mould?

- A. It is a flowering plant.
- B. It reproduces by spores.
- C. It gets food from the bread it grows on.

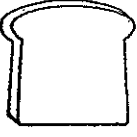


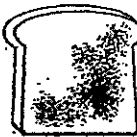
- (1) A only
  - (2) C only
  - (3) B and C only
  - (4) A and B only
18. Eugene placed some bacteria under a microscope and observed them for 30 minutes.

Time	0 minute	10 minutes	20 minutes	30 minutes
Amount of bacteria reproduced	2	4	8	16

What does the observation tells us about the bacteria?

- (1) Bacteria can reproduce.
- (2) Bacteria need time to grow bigger.
- (3) Bacteria will continue to grow in size.
- (4) Bacteria need air, food and water to grow.

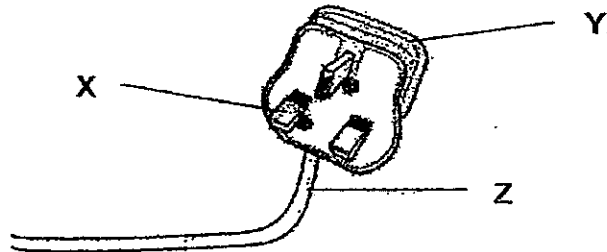
19. Joelle wanted to find out if the different amount of water affects the growth of the bread mould on 4 similar slices of bread. The diagrams below show the result of the growth of the bread mould after the bread slices were left on the kitchen table for a week.

			
<b>Bread Slice V</b>	<b>Bread Slice X</b>	<b>Bread Slice Y</b>	<b>Bread Slice Z</b>
<b>10 ml of water</b>	<b>20 ml of water</b>	<b>30 ml of water</b>	<b>40 ml of water</b>

Which of the following statements about the experiment is true?

- (1) The amount of water does not affect the growth of the bread mould.
- (2) The higher the temperature of the water, the larger the amount of bread mould growing on the bread.
- (3) The greater the amount of water sprinkled on the bread, the larger the amount of bread mould growing on bread.
- (4) The greater the amount of water sprinkled on the bread, the smaller the amount of bread mould growing on bread.

20. The diagram below shows an electrical plug.

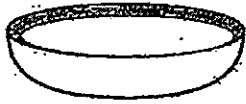


Which of the following correctly shows the materials used for part X, Y and Z?

	<b>X</b>	<b>Y</b>	<b>Z</b>
(1)	metal	rubber	plastic
(2)	plastic	metal	rubber
(3)	metal	plastic	rubber
(4)	rubber	metal	plastic



21. Study the objects below.



ceramic plate



ceramic bowl



glass cup

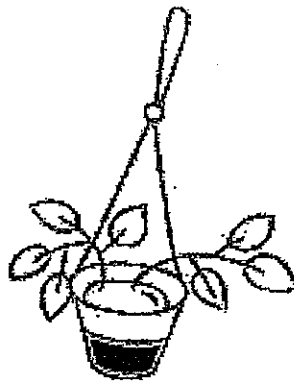


glass jar

Which of the following physical properties best describe all the objects?

- (1) They are flexible.
- (2) They are transparent.
- (3) They can float in water.
- (4) They can break easily when dropped.

22. Dylan wants to hang some flower pots in the school garden. The flower pots must not break easily when dropped to the ground.



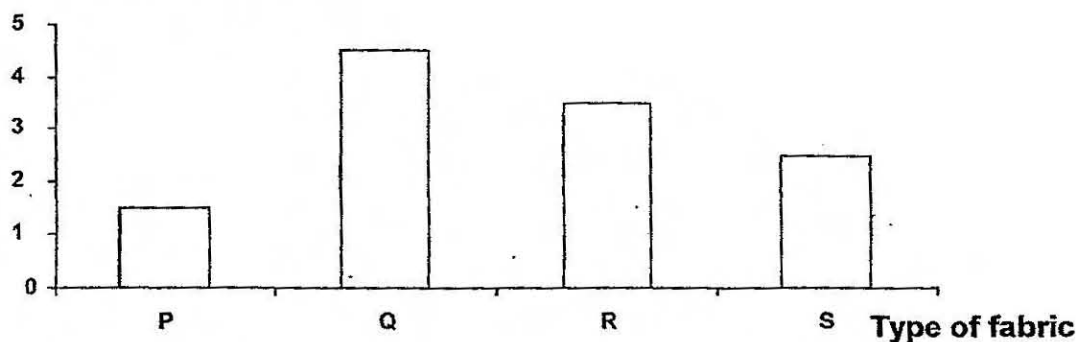
Hanging flower pot

Which of the following material is most suitable for making the flower pot?

- (1) glass
- (2) paper
- (3) cotton
- (4) plastic

23. Four different types of fabric, P, Q, R and S of the same size and thickness were placed in four containers for two minutes. Each container contains 50 ml of water. The bar graph below shows the amount of water left in the four containers after the fabrics were taken out of the water.

**Amount of water left in the container (ml)**



Which fabric absorbs the most amount of water?

- (1) P  
 (2) Q  
 (3) R  
 (4) S
24. The objects below are classified into 2 groups, A and B. The objects in each group are made of materials with a similar property.

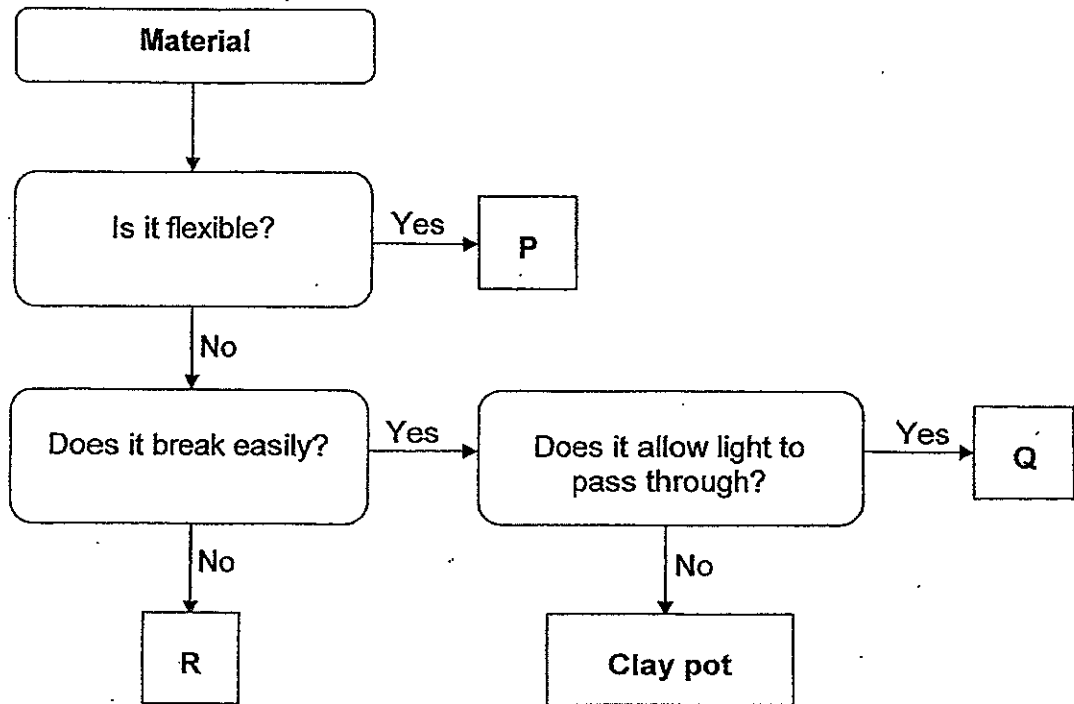
Group A	Group B
cork ping pong ball polystyrene ball	eraser metal key glass marble

What can be used to describe the properties of Groups A and B?

	Group A	Group B
(1)	flexible	stiff
(2)	strong	weak
(3)	float in water	sink in water
(4)	waterproof	not waterproof



25. Study the flowchart below.



Which of the letters in the flowchart correctly represents a wine glass, a bath towel and a metal ruler?

	Wine Glass	Bath Towel	Metal Ruler
(1)	R	P	Q
(2)	R	Q	P
(3)	Q	P	R
(4)	Q	R	P



## PRIMARY 3 MID-YEAR EXAMINATION 2014

Name : \_\_\_\_\_ (     ) Date: 19 MAY 2014

Class : Primary 3 (     )

Time: 8.00a.m. to 9.15 a.m.

Parent's Signature : \_\_\_\_\_

Duration: 1h 15min

Marks: \_\_\_\_\_ / 30

## **SCIENCE BOOKLET B**

### 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.

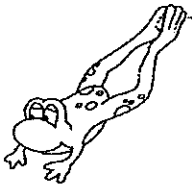

**Booklet B (30 marks)**

Write your answers in the spaces provided.

26. Kelly observed some animals in the eco-garden and recorded her observations in the table below.

Animal	Legs	Wings	Antennae	Tail
A	4	0	0	✓
B	6	4	2	✓
C	6	2	2	
D	0	0	0	✓
E	4	0	0	
F	2	2	0	✓

(a) Based on the table above, use letters A, B, C, D, E, or F to identify the following animals. (1m)

Picture of Animal	Animal
	
	

(b) Based on the table above, state one difference between Animal B and Animal C. (1m)

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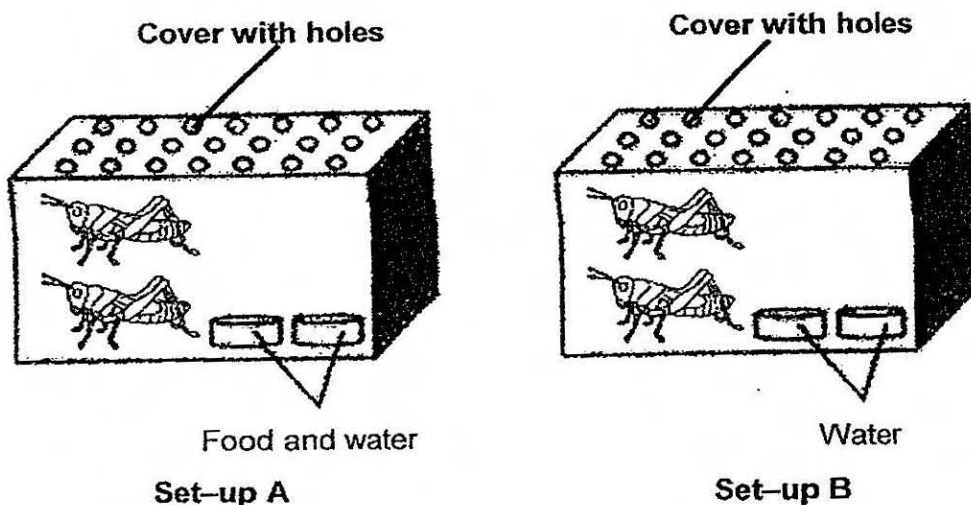
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(c) Based on the table above, can Animal D be classified as a fish? Give a reason for your choice of answer. (1m)

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27. Isabelle placed two similar grasshoppers in each of the two separate glass containers as shown below.



(a) What was the aim of Isabelle's experiment? Place a tick (✓) in the table given below. (1m)

Aim of the experiment	Tick (✓)
The aim of the experiment is to find out if the presence of air affects the survival of the grasshoppers.	
The aim of the experiment is to find out if the presence of food affects the survival of the grasshoppers.	
The aim of the experiment is to find out if the presence of water affects the survival of the grasshoppers.	

(b) After two weeks, Isabelle observed that the grasshoppers in one of the set-ups were dead. In which set-up would the grasshoppers still be alive? Explain your answer. (1m)

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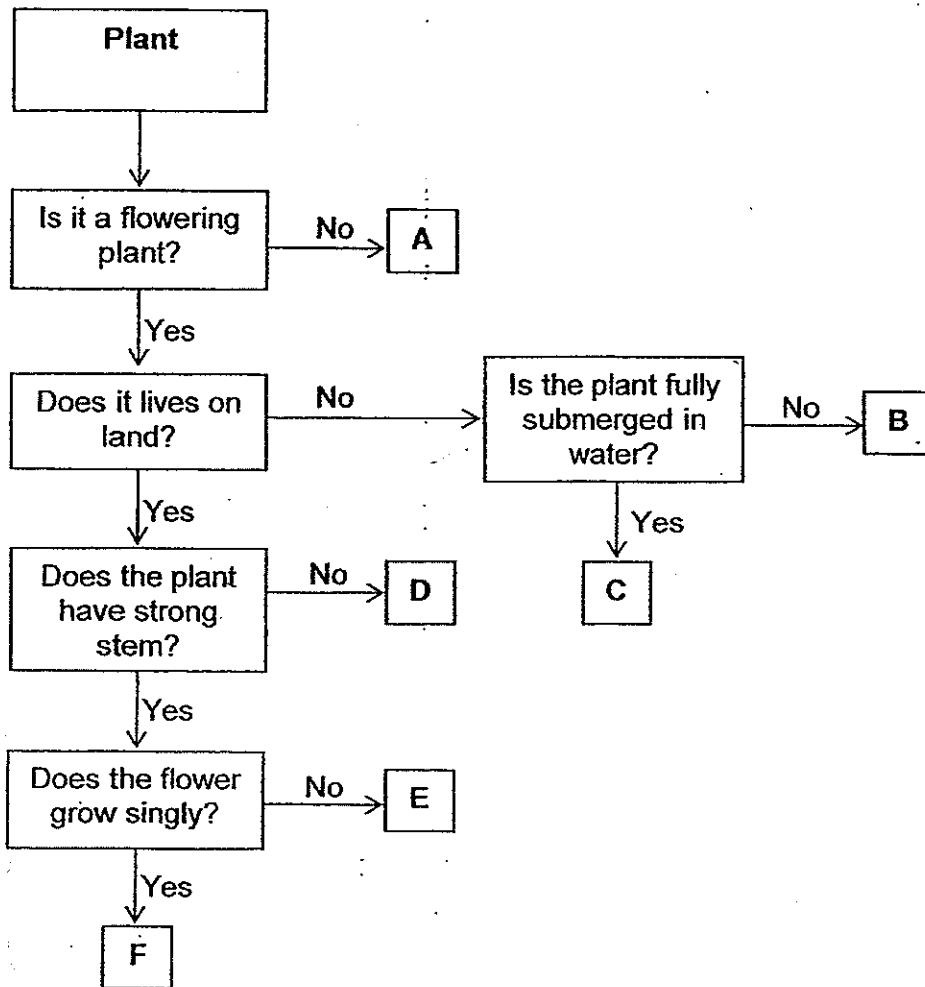
(c) Isabelle observed that the number of grasshoppers in Set-up A increased after two weeks. State the characteristic of living things which the grasshoppers were showing. (1m)

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28. Look at the classification chart below.



Identify objects A to F and write the letter that represents each object in the box provided. (3m)

Hibiscus:

Moss:

Coconut Palm:

Elodea:

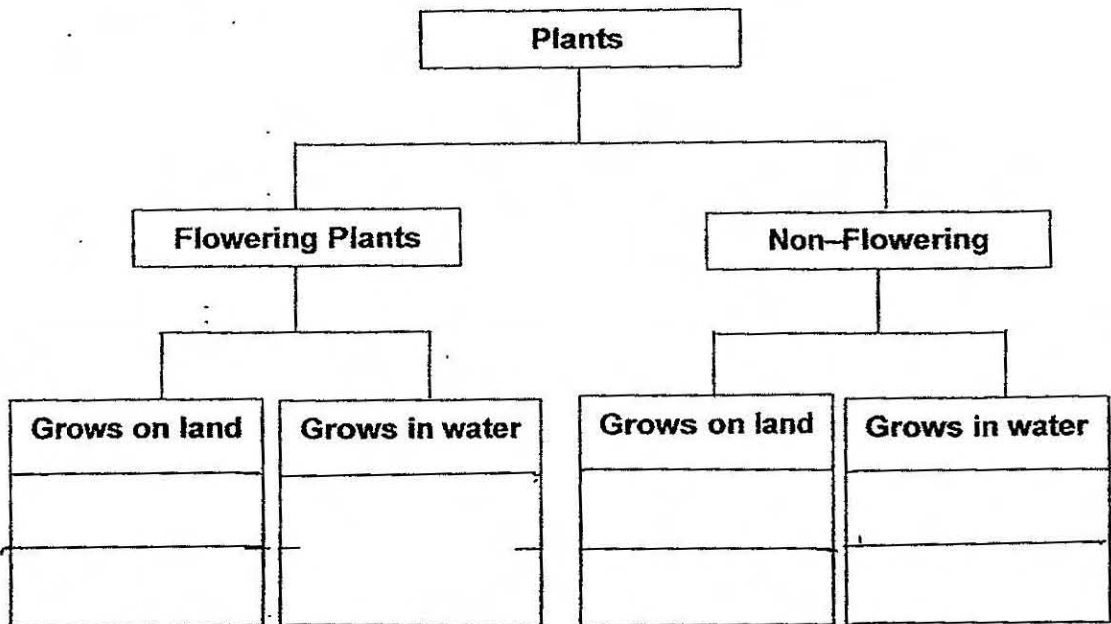
Morning Glory:

Duckweed:

29. The characteristics of the Plant A, B, C and D are listed in the table below.

Characteristics	Plant			
	A	B	C	D
Has flowers	✓	×	×	✓
Has fruits	✓	×	×	✓
Reproduces by seeds	✓	×	×	✓
Grows on land	✓	×	✓	×

(a) Use the information above to complete the classification chart below. (2m)



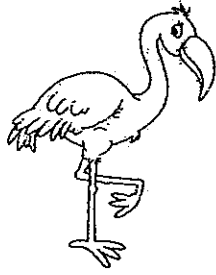
(b) Based on the table above, state one difference between Plant C and Plant D (1m)

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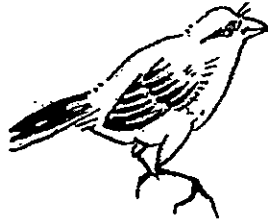


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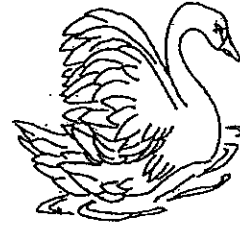
30. Study the animals shown below.



**Flamingo**



**Sparrow**



**Swan**

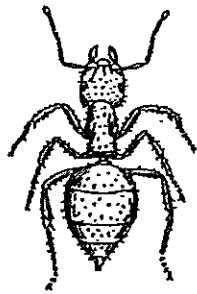
(a) Based on the pictures above, state two characteristics which all the three animals above have. (2m)

- (i) \_\_\_\_\_  
\_\_\_\_\_
- (ii) \_\_\_\_\_  
\_\_\_\_\_

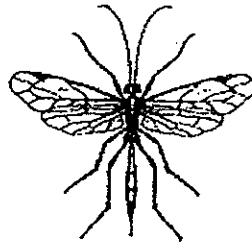
(b) Study the list of animals below. Circle the animal that can be grouped with the animals above. (1m)

Kangaroo	Penguin	Bat	Seahorse
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31. Observe the two animals as shown in the diagrams below.



**Animal X**



**Animal Y**

- (a) Based on your observations, which group of animals do Animal X and Animal Y belong to? (1m)

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

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- (c) State one difference between Animal X and Animal Y. (1m)

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32. Joshua placed a bowl of cooked rice beside a window. Three days later, he noticed that the rice started to give out a sour smell. Joshua's mother explained to him that bacteria had caused the rice to turn bad.



- (a) Where do you think the bacteria came from? (1m)

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- (b) Where should Joshua place the bowl of rice to prevent it from turning bad? Explain your choice. (1m)

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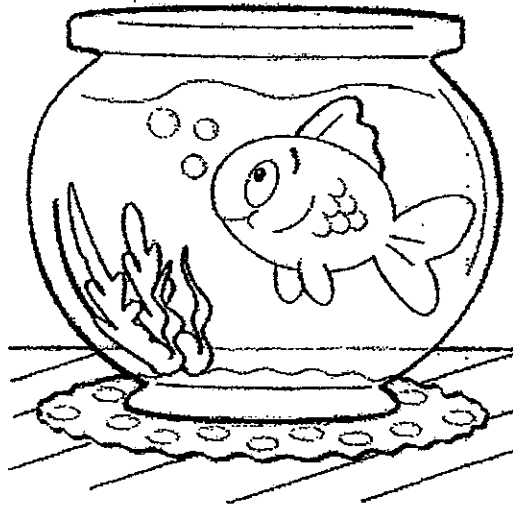
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- (c) Some bacteria are useful. Name one useful function of such bacteria in our daily lives. (1m)

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33. Winston kept a fish in a fish bowl as shown in the picture below. He was able to see the fish from any part of the bowl.



- (a) Name one material that can be used to make a fish bowl. (1m)

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- (b) State two properties that the material in (a) have which makes it suitable for making the fish bowl. (2m)

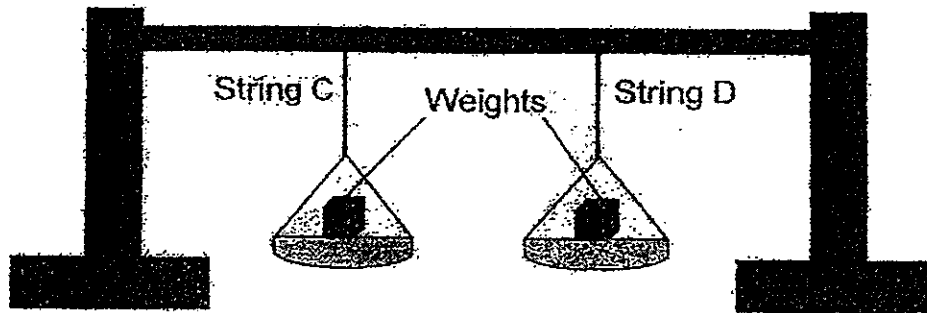
(i) \_\_\_\_\_

\_\_\_\_\_

(ii) \_\_\_\_\_

\_\_\_\_\_

34. Wendy set up an experiment to test the strength of two strings which was made of different materials, C and D.



She added weights until the string broke. The table below shows the mass of the weights that each string could hold before it broke.

String	Mass of Weights (g)
C	80
D	30

- (a) Which string, C or D, is stronger? Explain your answer. (1m)

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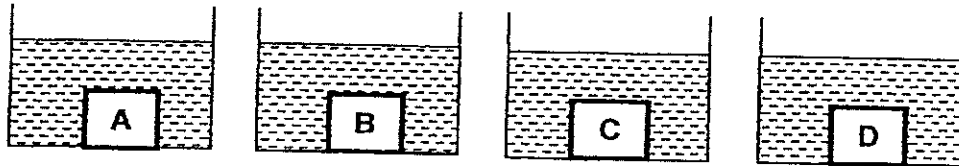


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- (b) Tick (✓) the variables that must be kept the same in order for this experiment to be a fair test. (2m)

Variable	Variable that must be kept the same
Material of pan	
Length of string	
Mass of weights	
Material of string	

35. Irene carried out an experiment to find out how much water each material can absorb. She placed four different materials, A, B, C and D, into each separate container as shown in the diagram below. Each container was filled with 60 ml of water. She removed the materials and recorded the amount of water left in each container after 20 minutes as shown in the table below.



Materials	Amount of water left in the container (ml)
A	50
B	25
C	45
D	60

- (a) Which of the materials, A, B, C or D, is most suitable to make into a raincoat and a mop? Give your reason for choosing the material for each object. (3m)

Object	Material	Reason
Mop		
Raincoat		

– End of Paper –

**EXAM PAPER 2014**

**SCHOOL : TAO NAN PRIMARY SCHOOL**

**SUBJECT : PRIMARY 3 SCIENCE**

**TERM : SA1**

**BOOKLET A**

Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9	Q10	Q11	Q12	Q13	Q14	Q15
2	3	3	4	4	4	4	3	1	2	3	3	1	3	2
Q16	Q17	Q18	Q19	Q20	Q21	Q22	Q23	Q24	Q25					
3	3	1	3	3	4	4	1	3	3					

**BOOKLET B**

Q26

a) E, F

b) Animal B have a tail but animal C does not have a tail.

c) Animal D can be classified as a fish because it have a tail and have no legs, wings or antenna.

Q27

a) The aim of the experiment is to find out if the presence of food affects the survival of the grasshoppers.

b) The grasshoppers in set-up A would still be alive because it has air, food and water.

c) Living things reproduce.

Q28

Hibiscus: F

Moss: A

Coconut Palm: E

Elodea: C

Morning Glory: D

Duckweed: B

Q29

a) Flowering Plants - Grows on land: Plant A. Grows in water: Plant D.

Non-flowering - Grows on land: Plant C. Grows in water: Plant B.

b) Plant D is a flowering plant but Plant C is a non-flowering plant.

Q30

a) (i) They have wings.

(ii) They have feathers as their outer covering.

b) Penguin

Q31

a) Insects

b) Both Animal X and Animal Y have 3 pairs of legs and have feelers.

c) Animal Y has wings but Animal X does not have wings.



Q32

- a) The bacteria came from the air.
- b) Joshua should place it in the fridge because the fridge has cold air and less bacteria.
- c) Bacteria can make cheese.

Q33

- a) Glass
- b)(i) Glass is transparent so that Winston is able to see the fish from any part of the bowl.
- (ii) Glass is waterproof so that it can hold water.

Q34

- a) String C is stronger because it can hold more mass of the weights than string D.
- b) Material of pan, Length of string

Q35

- a) Mop:                      Material - B  
Reason - Material B absorb the most amount of water.
- Raincoat :                Material - D  
Reason - It is waterproof so that when wearing the raincoat will not get wet.

