

Primary Three Examination Papers

2016

Science

1	Anglo Chinese School	CA1	SA1	SA2
2	Methodist Girls' School	CA1	SA1	SA2
3	Nan Hua Primary School	CA1	SA1	SA2
4	Pei Chun Public School	CA1	SA1	SA2
5	River Valley Primary School	CA1	SA1	SA2
6	Rosyth School	CA1	SA1	SA2
7	Chij St Nicholas Girls' School		SA1	SA2
8	Maris Stella High School		SA1	SA2
9	Nan Yang Primary School		SA1	SA2
10	Red Swastika School		SA1	SA2
11	Tao Nan School		SA1	SA2
12	Temasek Primary School		SA1	SA2



Anglo-Chinese School (Primary)

PRACTICE PAPER CA1 2016
SCIENCE
PRIMARY THREE
(BOOKLET A and B)

Name: _____ () Class: Primary 3 _____

Date: _____

Duration of paper: 1h 15 min

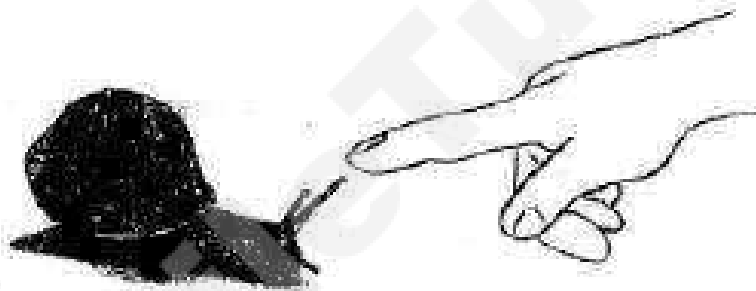
SmileTutor.sg

For each of the following questions from 1 to 15, 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. [30 marks]

1. Jan Ming found an organism which has scales, lays eggs and breathes through its gills. Which group of animals does it most likely belong to?

- (1) fish
- (2) birds
- (3) insect
- (4) mammals

2. David touched a snail as shown in the diagram below.

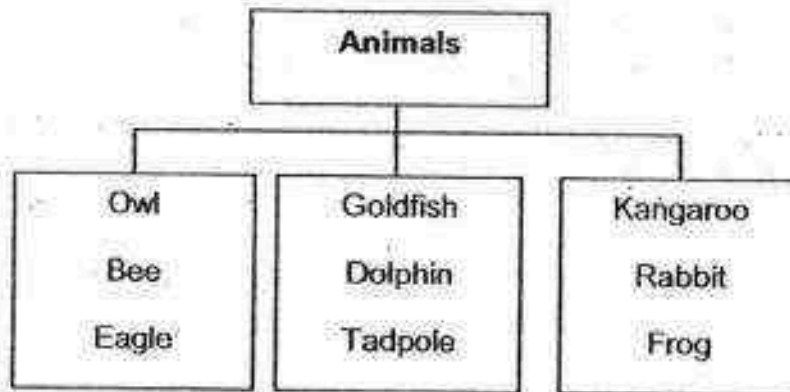


The snail pulled its head into its shell. What could David conclude about living things from his observation?

- (1) Living things grow.
- (2) Living things reproduce.
- (3) Living things need air, food and water.
- (4) Living things respond to their surroundings.

(Go on to the next page)

- 3 Joe classified some animals into three groups as shown below.



He classified the animals according to _____.

- (1) how they move
 - (2) where they live
 - (3) the way they reproduce
 - (4) their outer body covering
- 4 Which one of the following statements about mushrooms and ferns is correct?
- (1) Both organisms produce flowers.
 - (2) Both organisms are plants.
 - (3) Both organisms reproduce by spores.
 - (4) Both organisms make their own food.
- 5 Matthew listed down some characteristics of bacteria and fungi. Which characteristic of bacteria and fungi is correct?

	Bacteria	Fungi
(1)	Do not make its own food	Make its own food
(2)	Can be seen without using a microscope	Can only be seen using a microscope
(3)	Harmful to humans	Useful to humans
(4)	Come in different shapes and sizes	Come in different shapes and sizes

(Go on to the next page)

- 6 Peter, Victor, Calvin and Roger made the following comments.

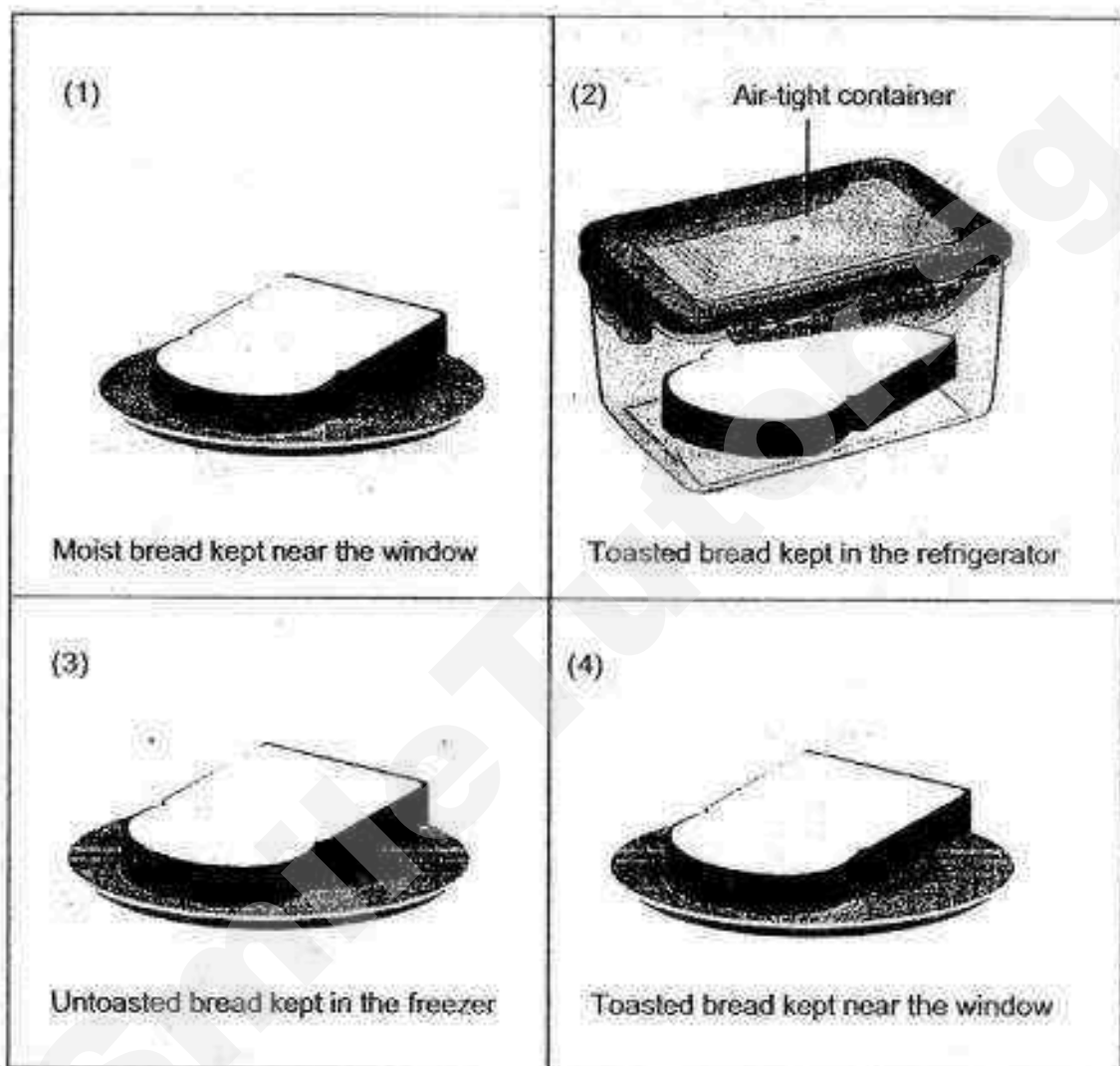
Peter : All bacteria are harmful.
Victor : Bacteria are not living things.
Calvin : Bacteria cannot reproduce.
Roger : Bacteria can respond to changes.

Whose comment is correct?

- (1) Peter
(2) Victor
(3) Calvin
(4) Roger
- 7 Which one of the following animals does not have the same kind of outer covering as the others?

- (1) ant
(2) beetle
(3) snake
(4) grasshopper

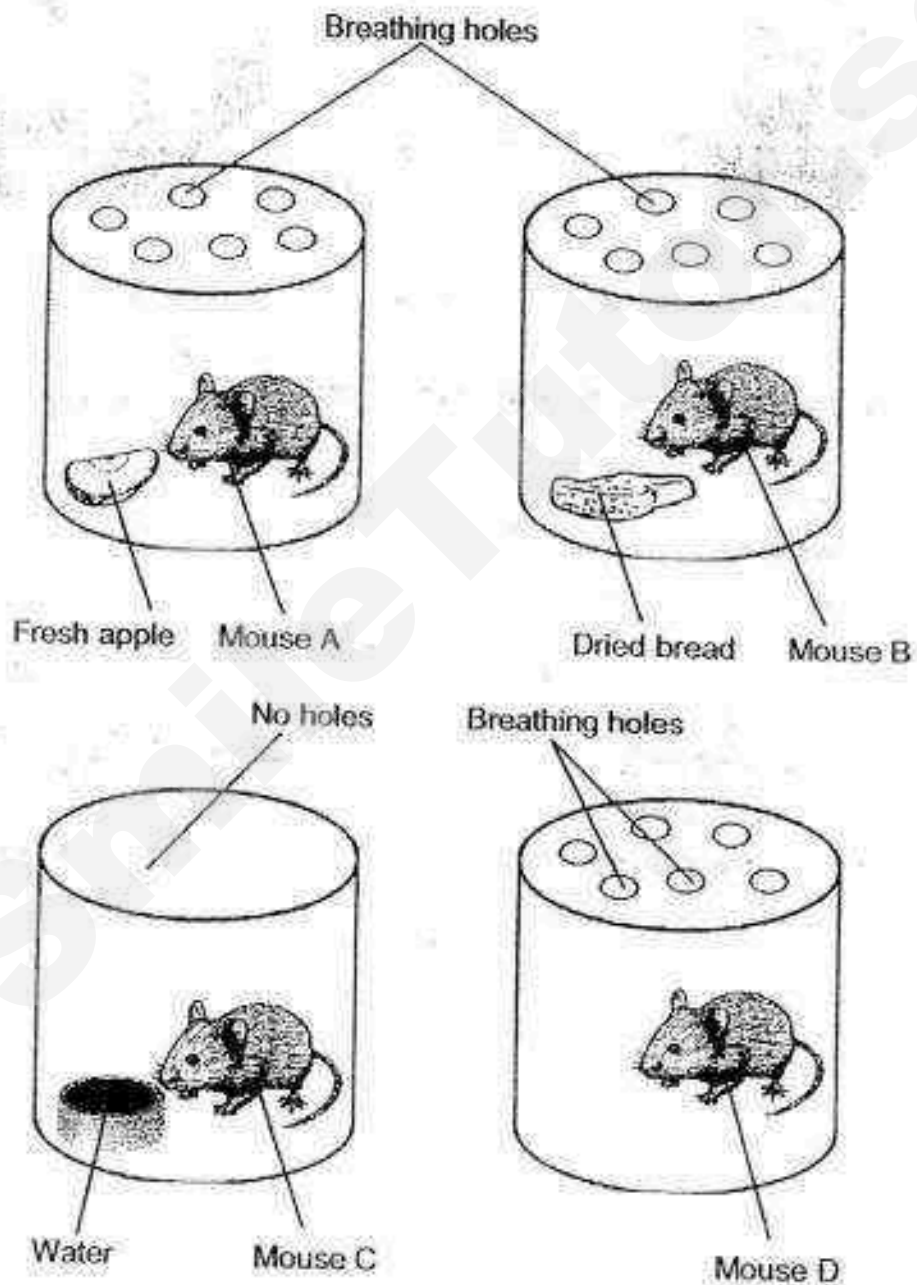
- 8 Four slices of bread were left undisturbed for a week as shown below. In which set-up would bread mould most likely appear first?



(Go on to the next page)

- 9 Study each of the following set-ups. Mouse A and Mouse B are given a fresh supply of food daily, while Mouse C and Mouse D were left undisturbed throughout the experiment. Which mouse would survive the longest?

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



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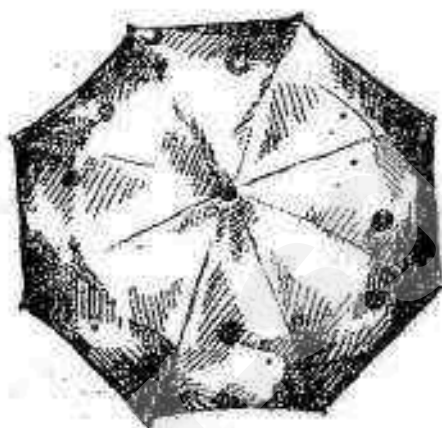
10 Study the following items carefully.



Plastic bag



Raincoat



Umbrella

Materials used to make the items shown above should be _____.

A: flexible

B: waterproof

C: able to sink in water

(1) C only

(2) A and B only

(3) B and C only

(4) A, B and C only

(Go on to the next page)

- 11 The table below shows the properties of materials A, B, C and D.

Material	Properties
A	<ul style="list-style-type: none"> • Flexible • Allows most light to pass through
B	<ul style="list-style-type: none"> • Flexible • Does not allow any light to pass through
C	<ul style="list-style-type: none"> • Not flexible • Allows most light to pass through
D	<ul style="list-style-type: none"> • Not flexible • Does not allow any light to pass through

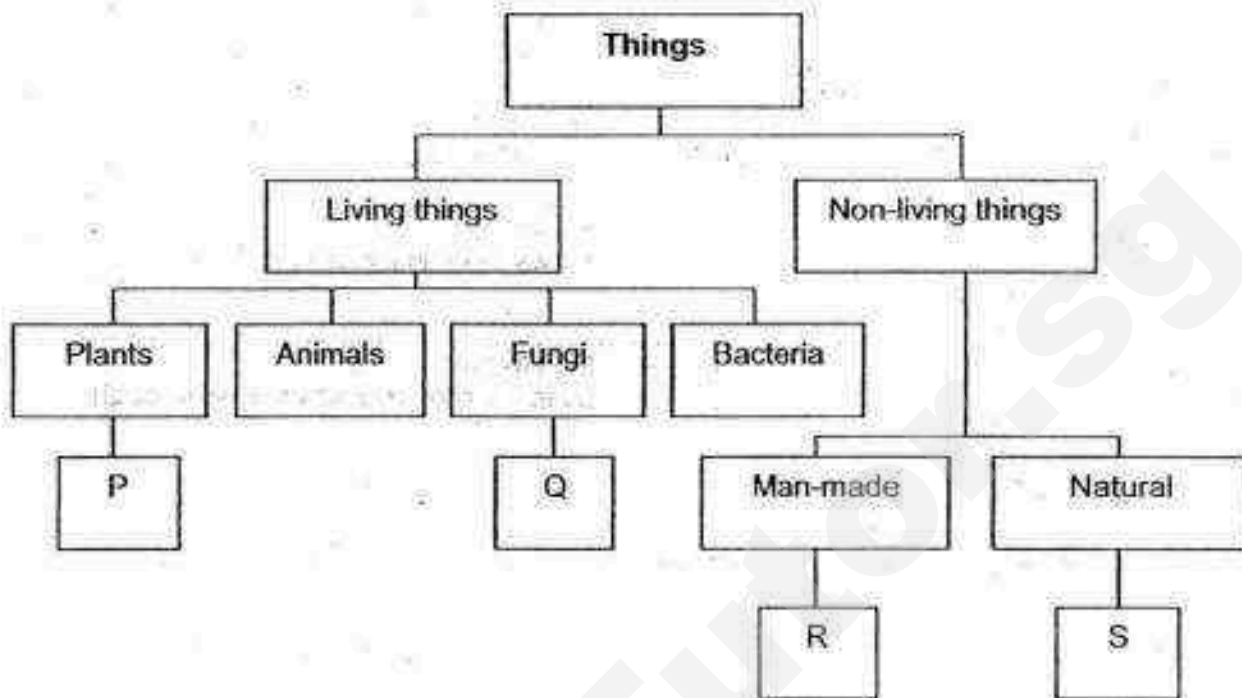
Which material is most suitable for making Part X of a car as shown in the diagram below?



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

(Go on to the next page)

12 Study the classification diagram below carefully.



Which one of the following best represents P, Q, R and S?

	P	Q	R	S
(1)	Fern	Bread mould	Plastic	Wood
(2)	Grass	Moss	Wood	Metal
(3)	Bread mould	Fern	Metal	Glass
(4)	Fern	Bread mould	Glass	Plastic

(Go on to the next page)

- 13 Jerry classified four things A, B, C and D according to three different characteristics. He wanted to find out which of these is/are non-living things.

Things	Needs air, food and water?	Lays eggs?	Responds to changes around it?
A	Yes	Yes	Yes
B	No	No	Yes
C	Yes	No	Yes
D	No	No	No

Which of these is/are definitely non-living things?

- (1) A only
 (2) C only
 (3) A and C only
 (4) B and D only
- 14 Tim conducted several tests on three materials, E, F and G. He recorded his observations in the table below.

	E	F	G
Bends easily?	Yes	No	Yes
Absorbs water?	Yes	No	No
Breaks easily?	No	Yes	No

Which one of the following shows what materials E, F and G are likely to be?

- (1)

E	F	G
Metal	Rubber	Wood
- (2)

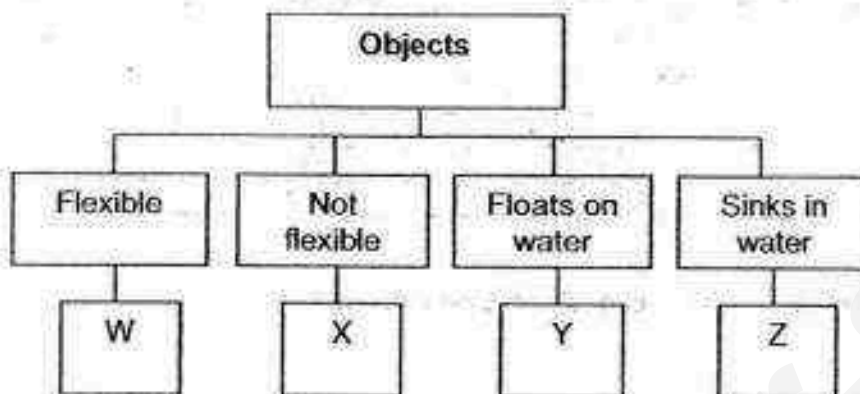
E	F	G
Metal	Glass	Rubber
- (3)

E	F	G
Glass	Rubber	Metal
- (4)

E	F	G
Fabric	Glass	Rubber

(Go on to the next page)

- 15 Study the classification diagram below carefully.



Which one of the following best represents W, X, Y and Z?

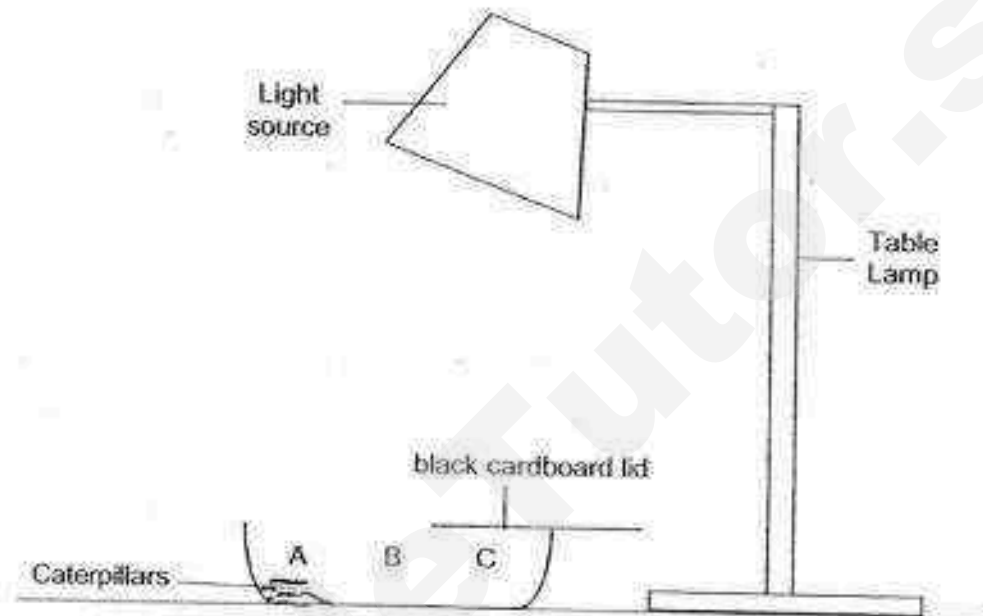
	W	X	Y	Z
(1)	Glass bottle	Rubber band	Plastic bag	Metal key
(2)	Rubber hose	Wooden chopstick	Styrofoam board	Glass marble
(3)	Styrofoam board	Metal key	Iron nail	Eraser
(4)	Eraser	Drinking straw	Cork	Metal coin

End of Booklet A

Please go on to Booklet B

For questions 16 to 22, write your answers in the spaces provided in this booklet. The number of marks available is shown in the brackets [] at the end of each question or part question.
(20 marks)

- 16 Joe carried out an experiment as shown in the set-up below. He wanted to find out if caterpillars prefer a bright or dark environment. He placed some caterpillars at position A in a partially-covered box. Next, he switched on the light source and observed the caterpillars for ten minutes.



After ten minutes, he observed that all the caterpillars had moved over to position C.

- (a) Based on his observation from the above set-up, what can Joe conclude about caterpillars from his experiment? [1]

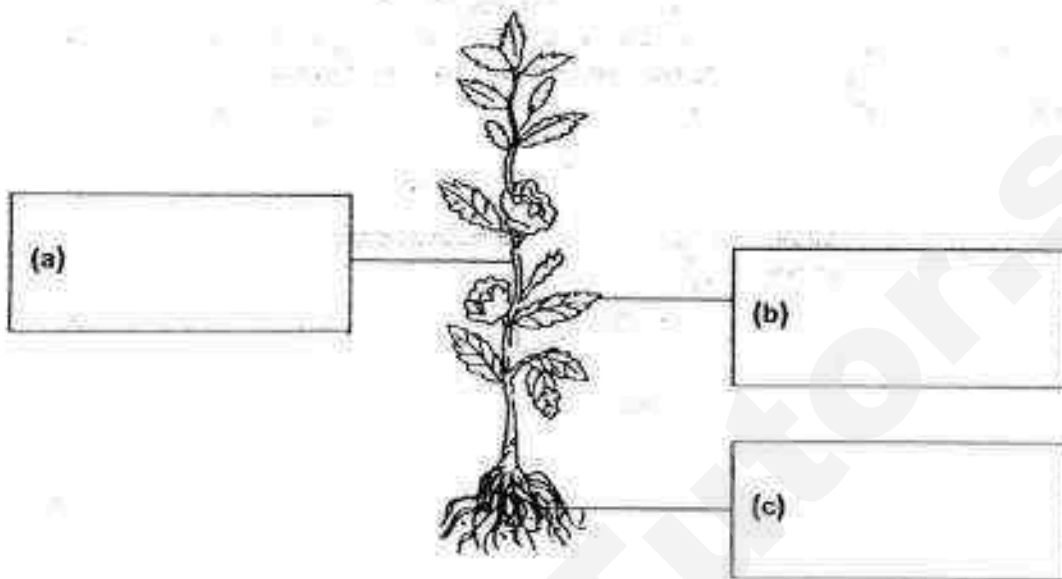
- (b) Write down one characteristic of living things that can be observed in the above experiment [1]

(Go on to the next page)

Score	
	2

17 Label the parts of the plant below.

[3]



18 Study the statements in the table below carefully. Put a tick (✓) in the correct boxes to indicate if the statements are true or false.

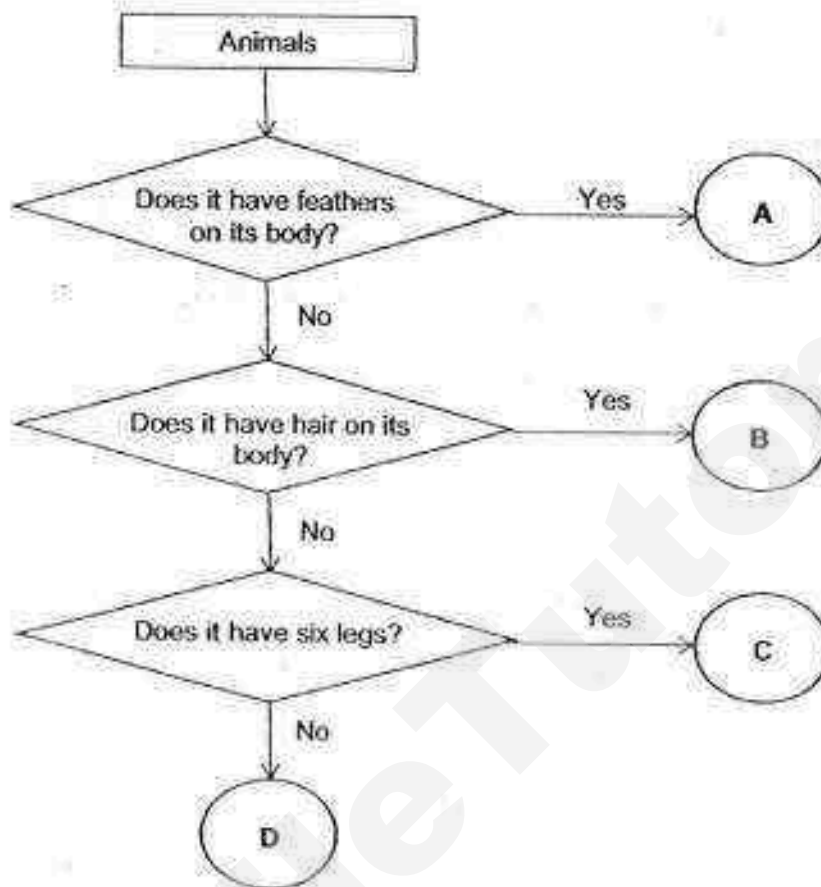
[2]

	Statements	True	False
(a)	Mushrooms grow well in dry places only.		
(b)	The spores of mushrooms can be found on the underside of their caps.		
(c)	Mushrooms are able to make their own food.		
(d)	Some mushrooms can be eaten.		

(Go on to the next page)

SCORE	5
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- 19 Study the flowchart below carefully.



- (a) The letters A, B, C and D in the flowchart represent the animals shown in the table below. Using the information in the flowchart, write the letters A, B, C or D in the correct boxes given below. [2]

Animals	Letters
Butterfly	
Ostrich	
Tiger	
Millipede	

- (b) Write down one characteristic of mammals that is not in the flowchart. [1]

(Question 19 continues on page 5)

SCORE	
	3

- (c) Name one animal that lives on both land and in water and breathes through its lungs when it is an adult.

[1]

- 20 Kenneth classified four different materials P, Q, R and S according to their properties as shown in the table below.

Material Property	P	Q	R	S
Breaks easily ?	No	No	Yes	No
Flexible ?	No	Yes	No	Yes
Absorbs water ?	No	No	No	Yes
Waterproof ?	Yes	Yes	Yes	No

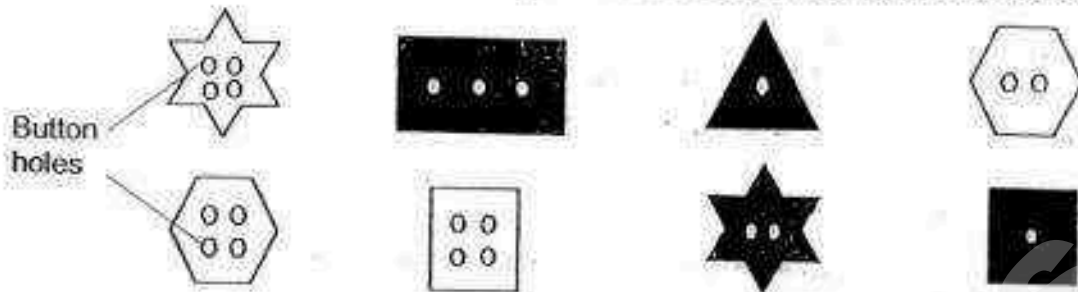
- (a) Based on the table above only, which material is most suitable for making a towel? [1]

- (b) Based on the table above only, state one difference between material P and material Q. [1]

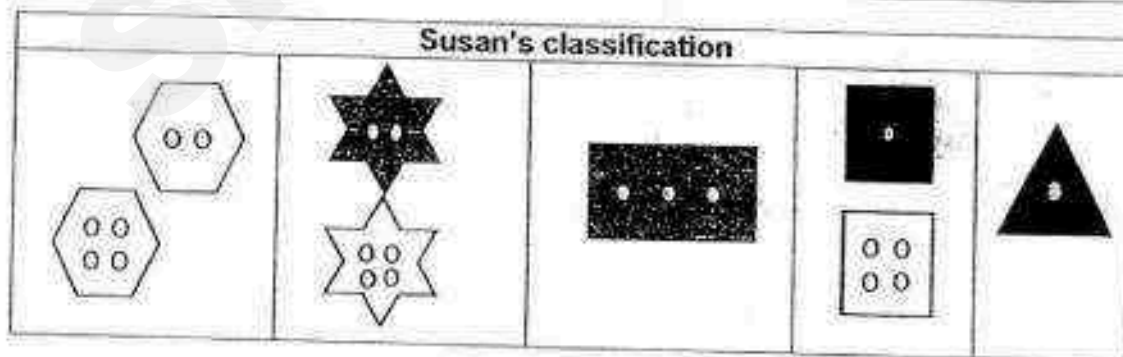
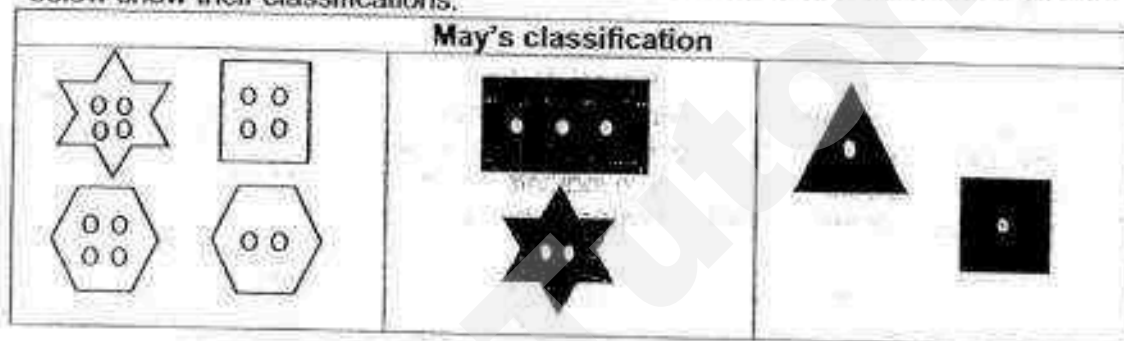
(Go on to the next page)

SCORE	3
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- 21 May, Lily and Susan were each given a set of eight buttons as shown below.



They were then asked to classify the buttons into different groups. The diagrams below show their classifications.



- (a) What characteristic did May use in her classification?

[1]

(Question 21 continues on page 7)

SCORE	
	1

- (b) What characteristic did Lily use in her classification? [1]

- (c) What characteristic did Susan use in her classification? [1]

- (d) Name one other characteristic you can use to classify the buttons into three different groups. [1]

- 22 Richard carried out an experiment to find out whether a Plant X grows better when given 50 ml of water or 100 ml of water daily. He prepared four set-ups for his experiment. The table below shows the conditions in his experiment. Put a (✓) in the correct boxes below to indicate whether the conditions should be changed or kept the same in order for him to carry out a fair test. [2]

Conditions	To be changed	Keep the same
Type of soil used		
Amount of soil used		
Amount of water given		
Where the plants are placed		

Richard measured the height of the plants for a period of 2 weeks. Study the data shown below carefully.

	Height of plants given 50 ml of water (cm)	Height of plants given 100 ml of water (cm)
Day 0	5	8
Day 5	6	9
Day 9	7	10
Day 14	7	15

- (e) Based on the data shown above, why was Richard's experiment not a fair one? [1]

END OF BOOKLET B
Please check all your answers carefully.

Score	
	6

YEAR : 2016
 LEVEL : PRIMARY 3
 SCHOOL : ANGLO-CHINESE
 SUBJECT : SCIENCE
 TERM : CA1

Booklet A & B

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

- Q16
- (a) Caterpillars like the dark better than the light.
 - (b) Living thing respond to changes around them.
 - (c) Because the amount of items in Box A did not change but the amount of items in Box B increased.

- Q17
- (a) Stem
 - (b) Leaves
 - (c) Roots

Q18

	Statements	True	False
(a)	Mushrooms grow well in dry places only.		✓
(b)	The spores of mushrooms can be found on the underside of their caps.	✓	
(c)	Mushrooms are able to make their own food.		✓
(d)	Some mushrooms can be eaten.	✓	

Q19

(a)

Animals	Letters
Butterfly	C
Ostrich	A
Tiger	B
Millipede	D

(b) Give birth to its young.

(c) Frogs

Q20

(a) Material S.

(b) Material Q is flexible but material P is not flexible.

Q21

(a) May classification the buttons by colour.

(b) Lily classification the buttons by number of holes.

(c) Susan classification the buttons by shape.

(d) By number of sides of the shape.

Q22

	Conditions	To be changed	Keep the same
(a)	Type of soil used		✓
(b)	Amount of soil used		✓
(c)	Amount of water given	✓	
(d)	Where the plants are placed		✓

(e) The statistic for the number of days is not constant, hence it is unfair.

End

Methodist Girls' School (Primary)
Science Topical Test 1

Name: _____ () Class: P3. _____ Date: _____ Marks: ____ / 50

Section A [30 marks]

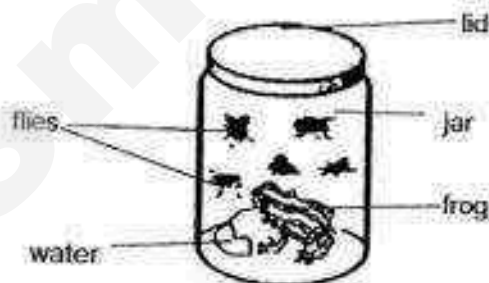
For each question from 1 to 15, four options are given. One of them is the correct answer. Make your choice (1, 2, 3 or 4) and shade the correct bubble in the OAS.

1. Study the characteristics of four things, A, B, C and D.

	Ability to move from place to place	Needs water	Reproduces	Respond to changes
A	No	Yes	No	No
B	Yes	Yes	Yes	Yes
C	Yes	Yes	Yes	No
D	Yes	No	No	No

Which one is most likely to be a living thing?

- (1) A
(2) B
(3) C
(4) D
2. Mindy put a frog into a jar containing some water and put in a few fruit flies. She then replaced the lid of the jar and secured it tightly.

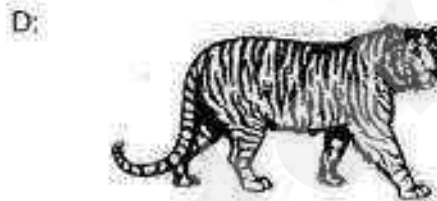
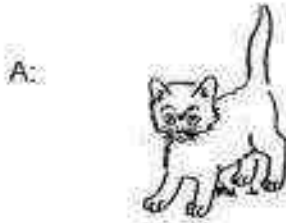


The frog died the next day because there is not enough _____

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

(Go to the next page)

3. Which of the following animals can be grouped together?



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

4. A group of boys were playing in the school field when they came across a patch of mimosa plants. They touched it and the leaves closed. Their observation shows that living things _____

- (1) can grow
- (2) reproduce
- (3) move from place to place
- (4) respond to changes around them

(Go to the next page)

5. During a Science lesson, three pupils made the following statements.

Wen Chai : Animals are the only living things.
 Siti : When I touch an earthworm, it will curl up. Therefore the earthworm is a living thing.
 Rama : When I press a lump of plasticine, it will change shape. It shows that the plasticine responds to my touch.

Which of the pupil(s) has/have made a correct statement?

- (1) Siti only
 (2) Rama only
 (3) Wen Chai only
 (4) Wen Chai and Siti only
6. Some girls while strolling in the garden came across a plant as shown below.



Which of the following characteristics below correctly describe the plant?

- A : Bears flowers
 B : Grows from spores
 C : Makes its own food

- (1) A and B only
 (2) A and C only
 (3) B and C only
 (4) All of the above

(Go to the next page)

7. Study the diagrams below carefully.



X

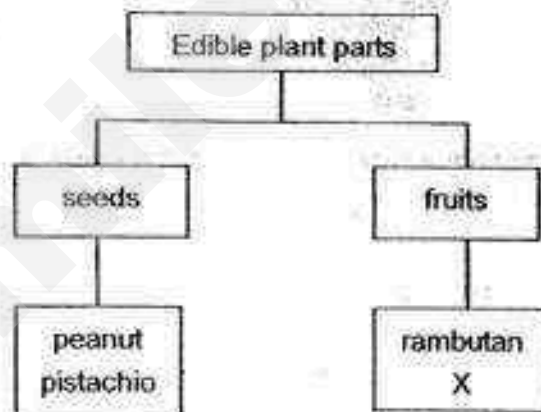


Y

Which one of the following options shows the similarity and difference between the two living things, X and Y?

	Similarity	Difference
(1)	Both X and Y have roots.	X has leaves but Y doesn't.
(2)	Both X and Y reproduce by spores.	X cannot make its own food but Y can.
(3)	Both X and Y reproduce by seeds.	X reproduce by spores but Y reproduce by seeds.
(4)	Both X and Y are living things.	X respond to changes but Y does not.

8. Study the classification chart below.

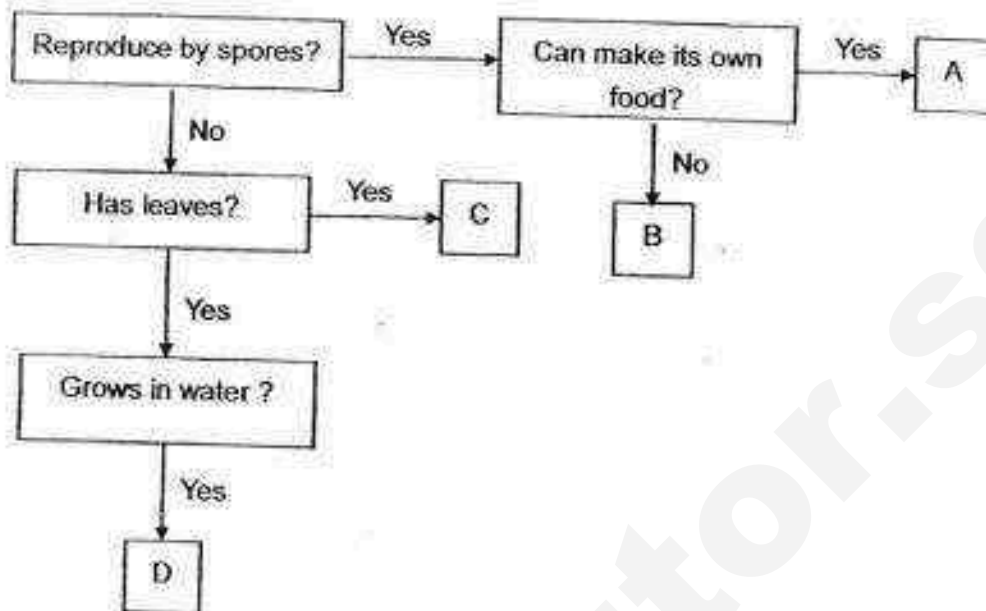


Which one of the following can X be?

- (1) carrot
- (2) potato
- (3) lemon
- (4) cauliflower

(Go to the next page)

9. Study the flowchart below carefully.



Which pupil made a correct statement about the flowchart?

- Yati : B and C are ferns.
 Bobby : A is a non-flowering plant.
 Ali : A, B and C can make their own food.
 Rani : Toadstools can be place at B.

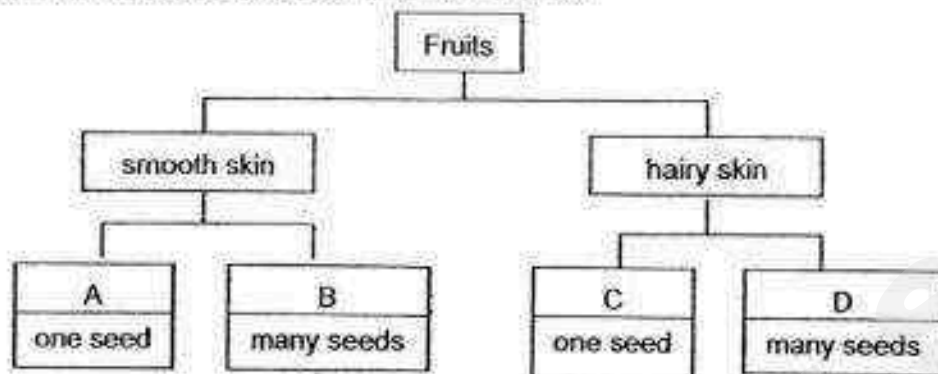
- (1) Ali and Yati only
 (2) Ali and Rani only
 (3) Bobby and Yati only
 (4) Bobby and Rani only

10. Which one of the following statements is correct?

- (1) Flowering plants make food but non-flowering plants do not.
 (2) Flowering plants produce fruits but non-flowering plants do not.
 (3) Flowering plants respond to changes but non-flowering plants do not.
 (4) Flowering plants are living things but non-flowering plants are non-living things.

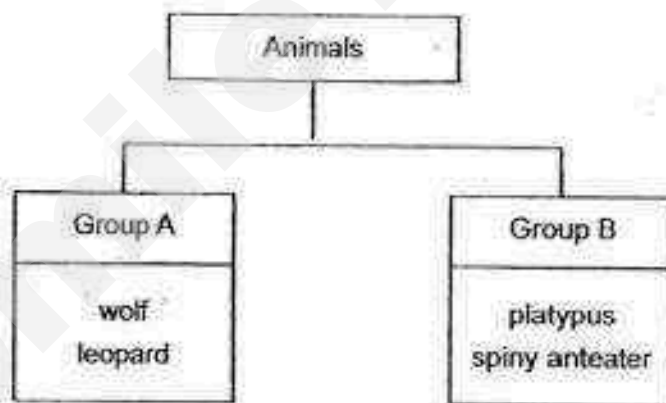
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11. Study the classification diagram below carefully.



In which box would you classify the tomato?

- (1) A
 - (2) B
 - (3) C
 - (4) D
12. Study the classification diagram below carefully.

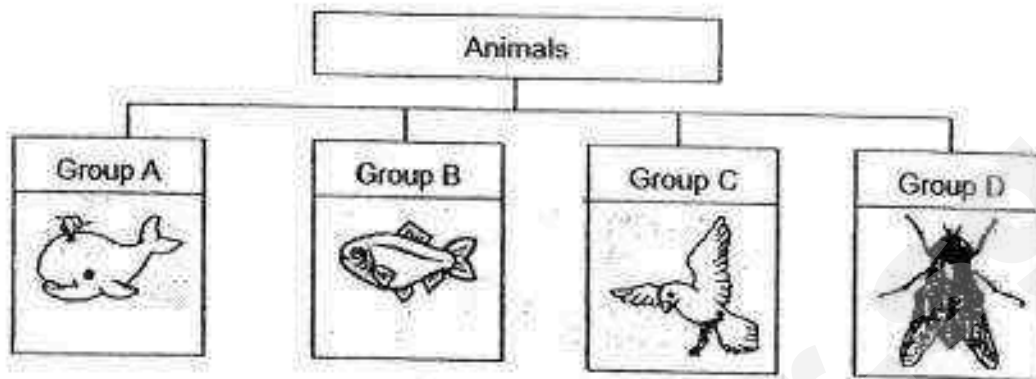


Which one of the following pairs of headings best represents Group A and Group B?

	Group A	Group B
(1)	live on land	live in water
(2)	feed on animals only	feed on plants and animals
(3)	give birth to live young	lay eggs
(4)	have hair on their bodies	have scales on their bodies


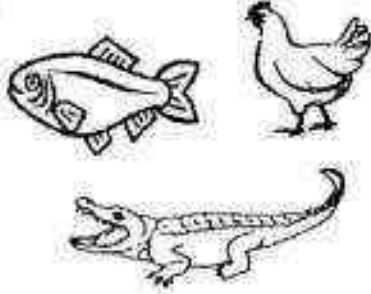
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13. The classification chart below shows four different groups of animals, A, B, C and D.



If Animal Z has hair on its body and can fly, in which group would you classify it?

- (1) Group A
 - (2) Group B
 - (3) Group C
 - (4) Group D
14. Study the table below carefully.

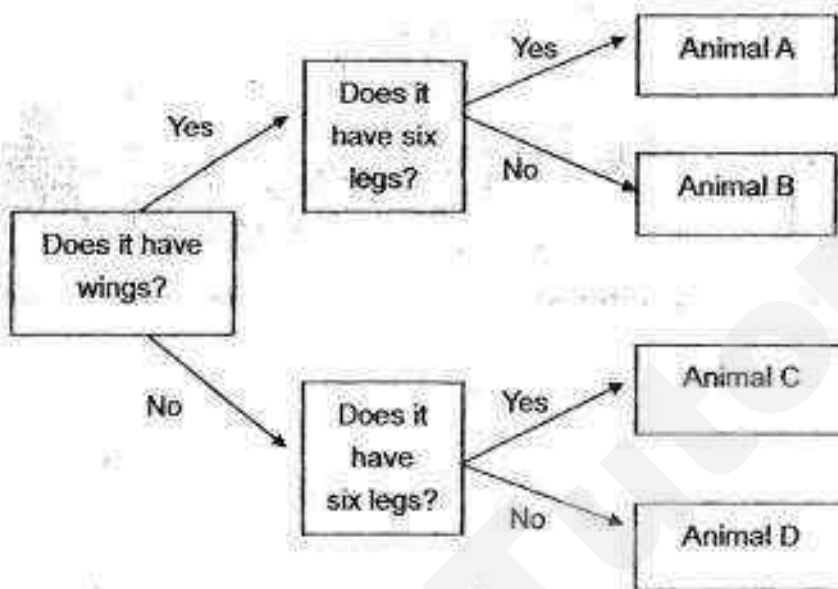
X	Y
	

The animals have been grouped according to _____.

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

(Go to the next page)

15. Study the flow chart below carefully.



Which one of the animals, A, B, C or D, represents the animal shown below?

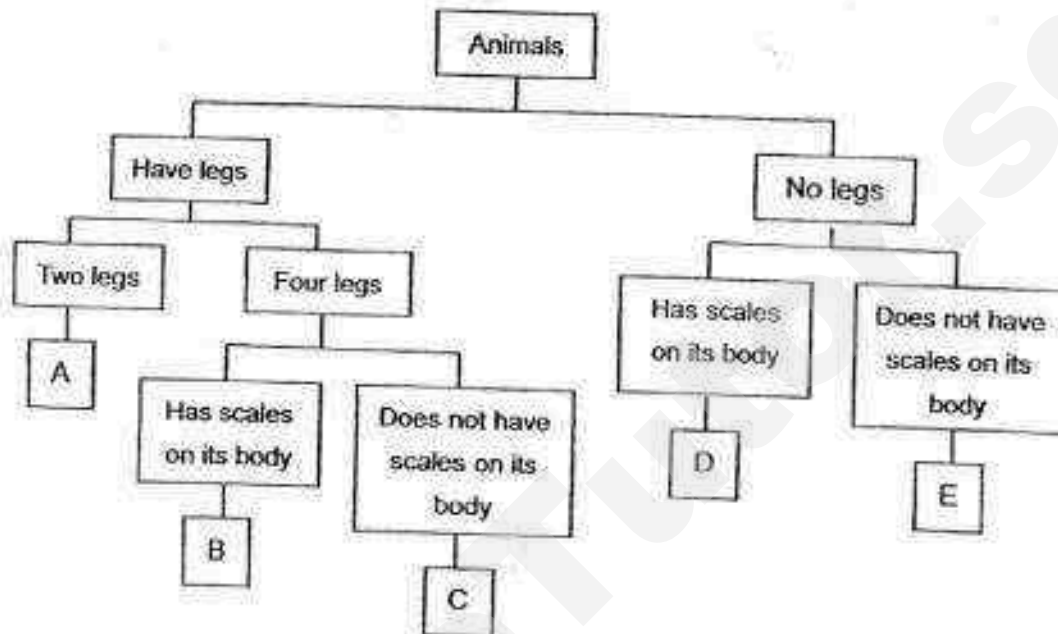


- (1) A
- (2) B
- (3) C
- (4) D

Section B [20 marks]

For questions 16 to 22, write your answers in the spaces provided. The number of marks available is shown in brackets [] at the end of each question or part question.

16. Animals A, B, C and D are classified in the chart below.

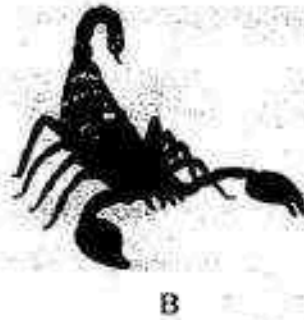
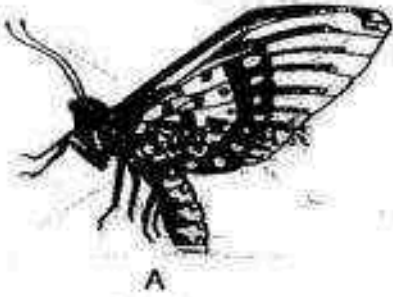


- (a) State a similarity between Animal B and Animal D. [1]
-
- (b) Give a difference between Animal C and Animal E. [1]
-
- (c) Give an example of an animal that has the characteristics of Animal D. [1]
-



(Go to the next page)

17. Study the two organisms, A and B.



- (a) Do organisms A and B belong to the same group of animals? Give two reasons for your answer. [2]

Reason 1 : _____

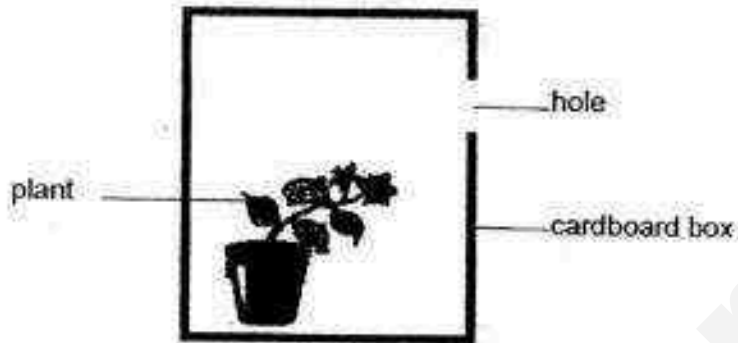
Reason 2 : _____

- (b) How do organisms A and B reproduce? [1]



(Go to the next page)

18. Selina bought a new plant and she placed it in a cardboard box as shown below. Although the plant looks healthy, its stem is slanting towards the right.



- (a) Why is the stem of the plant growing in a slanted way? [1]
- _____
- _____
- (b) What can Selina do to make her plant grow straight again? [1]
- _____
- _____
- (c) Besides sunlight, name two other conditions needed by the plant for healthy growth? [1]
- _____



(Go to the next page)

19. The diagram below shows a fruit cut into half.



- (a) Name the part marked X. [1]

- (b) Why is part X of the fruit important? [1]

- (c) How do plants without part X reproduce? [1]

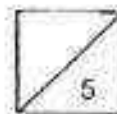
20. A seahorse does not look like a typical fish. It has an armoured body instead of scales. However, it is classified as a fish.



Give two reasons why the seahorse is classified as a fish. [2]

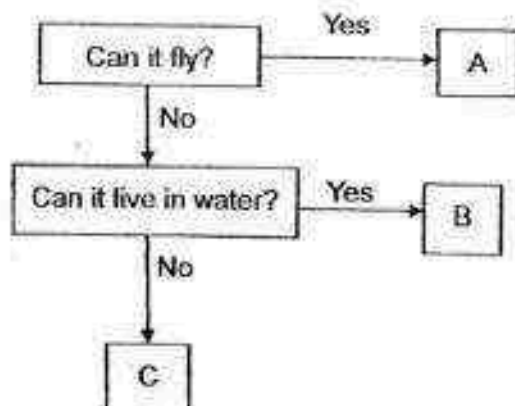
Reason 1 : The seahorse has _____ to help it _____

Reason 2 : The seahorse has _____ to help it _____



(Go to the next page)

21. Study the flowchart below.



- (a) Which letters, A, B or C, best represent the following animals?
Write the answer in the box below each diagram.

[1]





The pictures below show a crocodile and a salamander.

crocodile



salamander



- (b) Do the crocodile and the salamander belong to the same group of animals?
Give a reason for your answer.

[1]

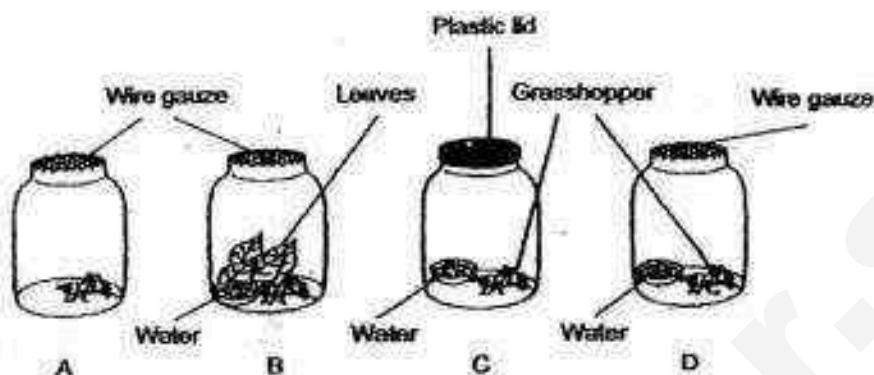
- (c) Why is the salamander able to live on land and in water?

[1]



(Go to the next page)

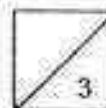
22. Four grasshoppers of similar size were placed into 4 set-ups, A, B, C and D as shown in the diagram below.



- (a) In which set-ups, A, B, C or D would the grasshopper die first? Explain why. [1]

- (b) Which two set-ups could be used to compare and find out if food is needed by the grasshopper? [1]

- (c) What must be done to ensure that the grasshopper in container A survives? [1]



(Go to the next page)

YEAR	:	2016
LEVEL	:	PRIMARY 3
SCHOOL	:	METHODIST GIRLS'
SUBJECT	:	SCIENCE
TERM	:	CA1

Topical Test 1

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

Q16 (a) Animal B and Animal D both have scales on its body.

(b) Animal C has four legs but Animal has no legs.

(c) A snake.

Q17 (a) Reason 1: A has 6 legs, B has 8 legs.

Reason 2: A has feelers, B does not have.

(b) Both organisms A and B lay eggs.

Q18 (a) It is growing towards the light.

(b) Make the hole on the top.

(c) Water and air.

Q19 (a) Seeds

(b) It can reproduce with the help of Part X.

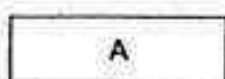
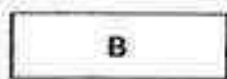
(c) By spores.

Q20 Reason 1 : The seahorse has gills to help it breathe.

Reason 2 : The seahorse has fins to help it swim.

Q21

(a)



(b) No. Crocodile has scales while salamander has moist skin.

(c) It has lungs and moist skin to live both in water and on land.

Q22

(a) It has no air.

(b) Set-up B and set-up D.

(c) It must have food and water.

End

1(a)

NAN HUA PRIMARY SCHOOL

SCIENCE
PRIMARY THREE
Chapter 2: Plants
Chapter 3: Animals
Worksheet (3)

Marks
12

Name : _____ () Date: _____





Class : P3 _____

Parent's Signature _____
Date: _____

Section A (4 X 2 marks = 8 marks)

For each question from 1 to 4, four options are given. One of them is the correct answer. Make your choice (1, 2, 3 or 4). Write the correct answer in the brackets provided.

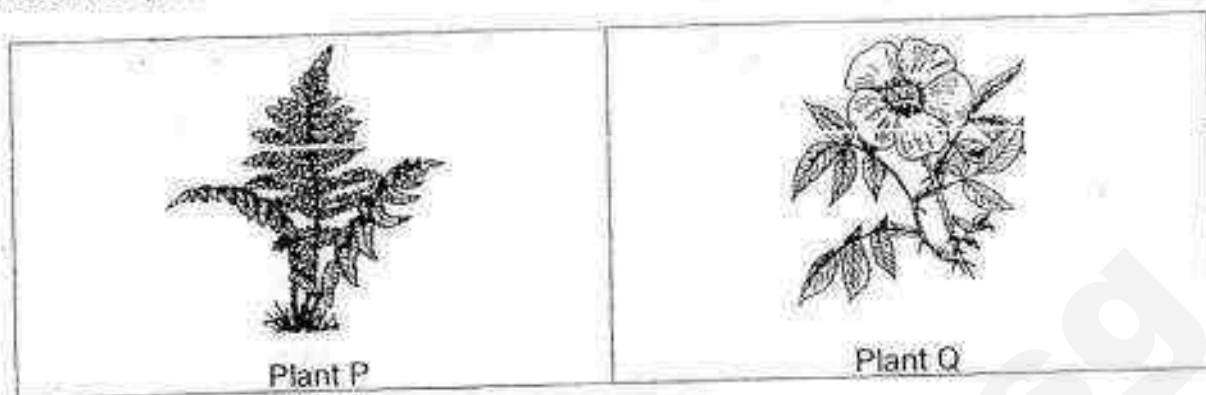
1. Based on your observations, which of the following animals is not a bird?

 Animal A	 Animal B
 Animal C	 Animal D

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

()

2. Look the pictures below.



How are the two plants similar?

- (1) They bear fruits.
- (2) They have stems.
- (3) They produce flowers.
- (4) They do not have leaves.

3. Study the flowchart below.

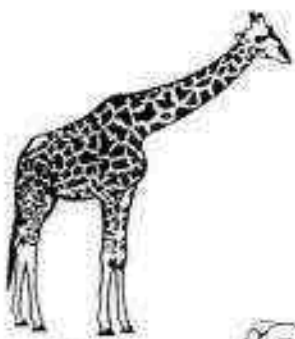

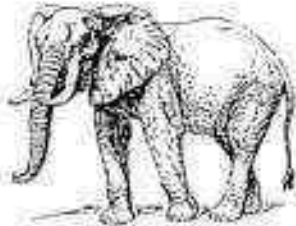


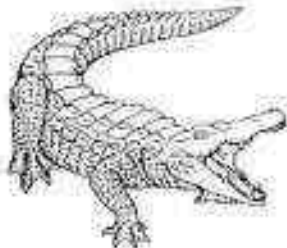


What are the common characteristics Plant X and Plant Y?

- A. They grow.
- B. They produce fruits.
- C. They make their own food.

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

4. Study the pictures shown below.

Group A	Group B
 Giraffe	 Snake
 Elephant	 Goldfish
 Zebra	 Crocodile

Which of the following are suitable headings for Group A and Group B?

	Group A	Group B
(1)	Mammals	Reptiles
(2)	Lives on land only	Lives in water only
(3)	Give birth to its young	Lay eggs
(4)	Covered with feathers	Covered with scales

()

Section B (2 X 2 marks = 4 marks)

Write your answers in the blanks provided.

5. Jane has two plants, Plant P and Plant Q.

- (a) Which of the characteristic(s) below can she use to determine which of the two plants is a flowering plant? [1m]

Tick (✓) the correct answer(s).

Presence of fruits	
Presence of leaves	
Presence of flowers	
Ability to make its own food	

- (b) David said, "Ferns do not produce fruits."

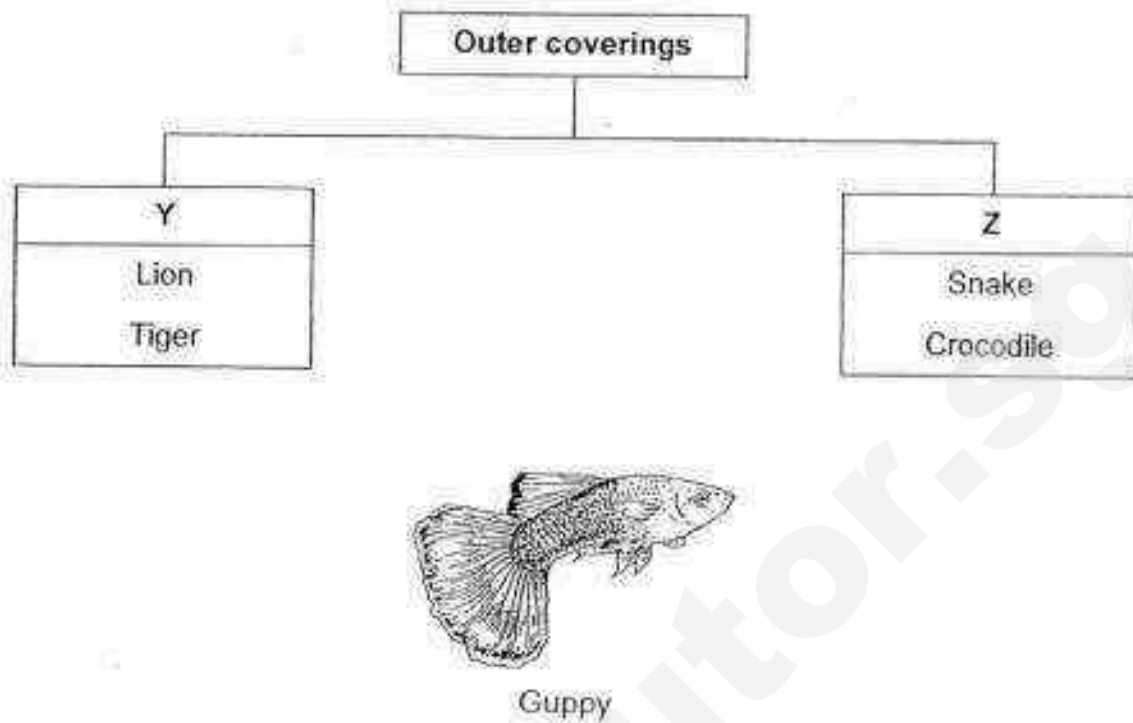
Susan said, "Ferns cannot make its own food."

Maria said, "Ferns do not need water to survive."

Whose statement is correct? Explain your answer.

[1m]

6. The diagram below shows how some animals can be grouped according to their outer coverings.



- (a) Based on the picture above, in which group (Y or Z) would you classify the guppy? Explain your answer. [1m]

- (b) If the above animals were classified according to the way they reproduce, which group (Y or Z) would you classify the guppy? Explain your answer. [1m]

END

NAN HUA PRIMARY SCHOOL

SCIENCE
PRIMARY THREE

Chapter 1: Living Things & Non-living Things
Worksheet (3)

Marks
12

Name : _____ () Date: _____

Class : P3 _____

Parent's Signature _____

Date: _____

Section A (4 X 2 marks = 8 marks)

For each question from 1 to 4, four options are given. One of them is the correct answer. Make your choice (1, 2, 3 or 4). Write the correct answer in the brackets provided.

1. Jack noticed a flag moving in the direction of the wind.



Which of the following statements is correct? The flag is a _____

- (1) non-living thing because it can grow.
- (2) living thing because it can move on its own.
- (3) living thing because it responds to the wind.
- (4) non-living thing because it does not need air, food and water to survive.

()

2. Jane was watching a bird on the road. The bird flew away immediately when a car drove past. Which characteristic of living things does this show?

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

()

3. Study the table below. Which of the following group is classified incorrectly?

	Non-living things	Living things
(1)	bag	snail
(2)	grass	cat
(3)	chair	fern
(4)	pencil case	hibiscus

4. Mary was observing her neighbour's pet dog.



Which of the following observations made by her does not show that the dog is a living thing?

- (1) It drinks water.
- (2) It is covered with fur.
- (3) It barks at strangers walking by.
- (4) It is bigger in size as compared to a month ago.

Section B (2 X 2 marks = 4 marks)

Write your answers in the blanks provided.

5. Ravi observes two things, X and Y, over a period of time. He records the height of the two things as shown in the table below.

Thing X			
No. of weeks	2	4	6
Height (cm)	200	200	200

Thing Y			
No. of weeks	2	4	6
Height (cm)	70	98	120

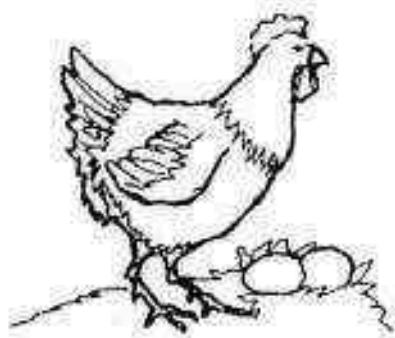
- (a) Study the tables above carefully. State whether the following statements are 'True', 'False' or 'Not possible to tell'. Put a tick (✓) in the correct boxes. [1m]

Statement	True	False	Not possible to tell
i. Thing X is a non-living thing.			
ii. Thing Y is a plant.			

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

END

6. Farmer John observed his chicken laying eggs in his farm.



(a) The above shows that living things can _____ [1m]

(b) Which of the following shows the same characteristic of living things as (a)?

Put a tick (✓) in the correct box.

[1m]

i. A puppy becoming an adult dog.	
ii. A cat giving birth to its young alive.	
iii. A mimosa plant folding its leaves when touched.	

**NAN HUA PRIMARY SCHOOL
SCIENCE
PRIMARY THREE**

**Topic: Diversity of Living Things
Worksheet 3**

Answer Key

Section A (4 X 2 marks)

1. (3)
2. (2)
3. (3)
4. (3)

Section B (2 X 2 marks)

5 (a)	<table border="1"> <tr> <td>Presence of fruits</td> <td>✓ (1/2 m)</td> </tr> <tr> <td>Presence of leaves</td> <td></td> </tr> <tr> <td>Presence of flowers</td> <td>✓ (1/2 m)</td> </tr> <tr> <td>Ability to make its own food</td> <td></td> </tr> </table>	Presence of fruits	✓ (1/2 m)	Presence of leaves		Presence of flowers	✓ (1/2 m)	Ability to make its own food		1m
Presence of fruits	✓ (1/2 m)									
Presence of leaves										
Presence of flowers	✓ (1/2 m)									
Ability to make its own food										
5 (b)	<p>David, Ferns are <u>non-flowering plants and do not produce fruits</u>. Only flowering plants produce fruits.</p> <p><i>Award 0 mark if pupil state 'David' as the answer without giving an explanation</i></p>	1m								
6 (a)	<p>Z, Guppies have <u>scales as outer covering</u> like snakes and crocodiles.</p> <p><i>Award 0 mark if pupil state 'Z' as the answer without giving an explanation.</i></p>	1m								
6 (b)	<p>Y, Guppies <u>give birth to their young alive</u> like lions and tigers.</p>	1m								

**NAN HUA PRIMARY SCHOOL
SCIENCE
PRIMARY THREE**

**Topic: Living Things & Non-living Things
Worksheet 3**

Answer Key

Section A (4 X 2 marks)

1. (4)
2. (3)
3. (2)
4. (2)

Section B (2 X 2 marks)

5 (a)	<table border="1"> <tr> <th>Statement</th> <th>True</th> <th>False</th> <th>Not possible to tell</th> </tr> <tr> <td>i. Object X is a non-living thing.</td> <td>✓ (1/2 m)</td> <td></td> <td></td> </tr> <tr> <td>ii. Object Y is a plant.</td> <td></td> <td></td> <td>✓ (1/2 m)</td> </tr> </table>	Statement	True	False	Not possible to tell	i. Object X is a non-living thing.	✓ (1/2 m)			ii. Object Y is a plant.			✓ (1/2 m)	1m
Statement	True	False	Not possible to tell											
i. Object X is a non-living thing.	✓ (1/2 m)													
ii. Object Y is a plant.			✓ (1/2 m)											
5 (b)	<p>Living things grow (1m) and the table shows that Thing X does not increase in height (1m) therefore it is a non-living thing.</p> <p>OR</p> <p>Non-living things do not grow (1m) and the table shows that the height of Thing X remains the same (1m), therefore it is a non-living thing.</p>	1m												
6 (a)	The above shows that living things can reproduce .	1m												
6 (b)	<table border="1"> <tr> <td>i. A puppy becoming an adult dog.</td> <td></td> </tr> <tr> <td>ii. A cat giving birth to its young alive.</td> <td>✓</td> </tr> <tr> <td>iii. A mimosa plant folding its leaves when touched.</td> <td></td> </tr> </table> <p>If pupil ticks more than one, award zero mark.</p>	i. A puppy becoming an adult dog.		ii. A cat giving birth to its young alive.	✓	iii. A mimosa plant folding its leaves when touched.		1m						
i. A puppy becoming an adult dog.														
ii. A cat giving birth to its young alive.	✓													
iii. A mimosa plant folding its leaves when touched.														

Pei Chun Public School
Holistic Assessment 1 – Review Assessment 2016
Science
Primary 3

Name : _____ ()

Class : Pri. 3 ()

Date: 26 February 2016

Time: 30 min

Science Teacher : _____

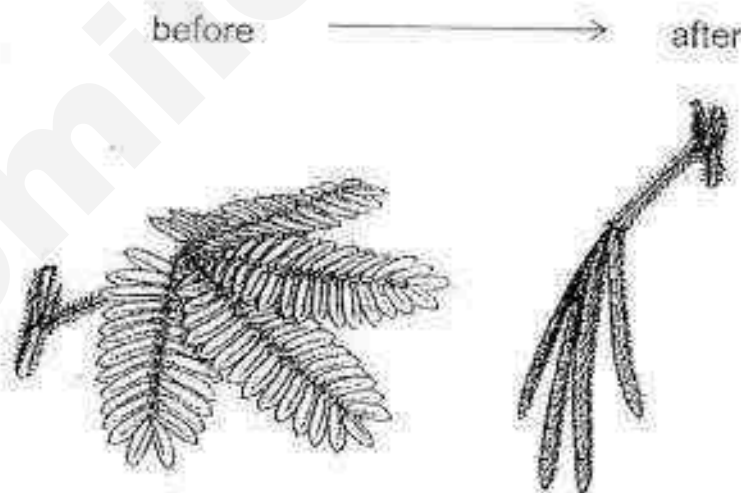
Parent's signature: _____

Section A	10
Section B	10
Total	20

Section A (5 × 2 marks)

For questions 1 to 5, choose the most suitable answer and write its number (1, 2, 3 or 4) in the brackets provided.

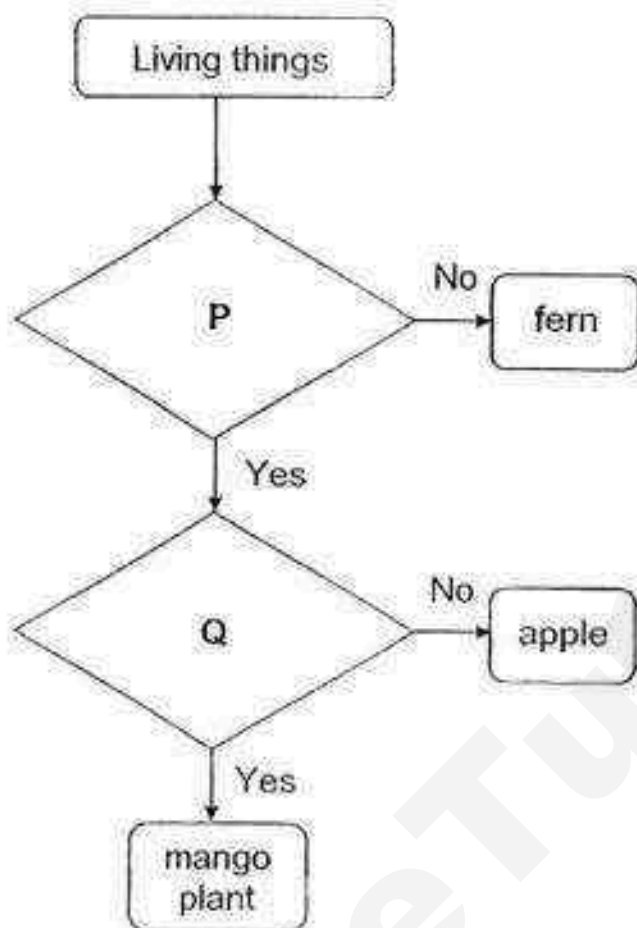
1. Which of the following statements shows the correct characteristics of living things shown in the diagram below?



A mimosa plant closing its leaves after being touched.

- (1) The mimosa plant can grow.
 - (2) The mimosa plant can reproduce.
 - (3) The mimosa plant can respond to changes.
 - (4) The mimosa plant needs air, water and food.
- ()

2. Study the flow chart below.

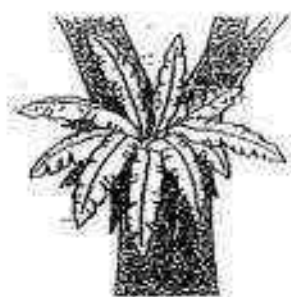


What are questions P and Q?

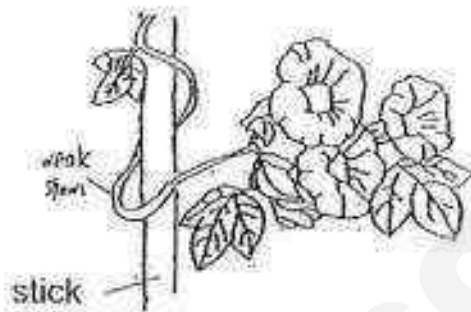
	P	Q
(1)	Does it make its own food?	Does it produce flowers?
(2)	Does it produce flowers?	Does it have seeds?
(3)	Does it make its own food?	Does it have few seeds?
(4)	Does it produce flowers?	Does it have only one seed?

()

3. The diagram below shows two different plants.



fern



morning glory

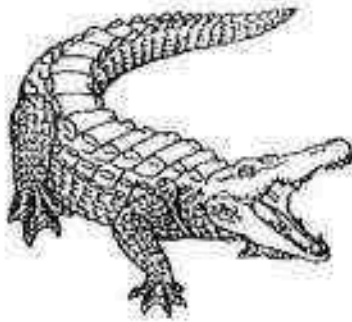
What do the two plants have in common?

- A : They have leaves.
- B : They have strong stems.
- C : They can produce flowers.
- D : They are grown from spores.

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

()

4. The diagram below shows two animals.



crocodile



salamander

Sandy made the statements below.

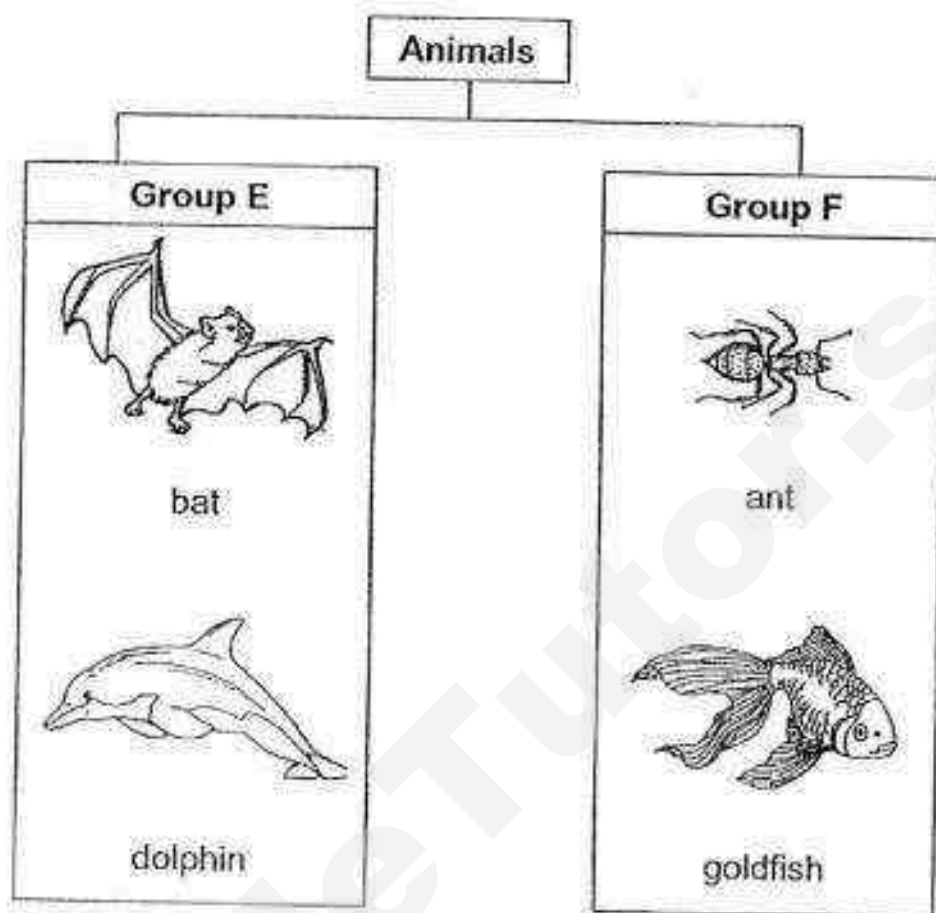
- A: Both have a tail.
- B: Both reproduce by laying eggs.
- C: Both have dry skin covered with scales.

Which of the following statements about the two animals is **not** correct?

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

()

5. Study the table below.



The animals are grouped according to _____.

- (1) how they reproduce
- (2) how they move about
- (3) their outer body coverings
- (4) the number of legs they have


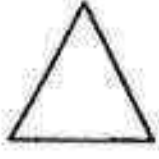




()

End of Section A

Section B (10 marks)

For questions 6 to 9, write your answers in the spaces provided.

6. The diagrams below show the classification of six different figures.

		
A	B	C
		
D	E	F

- a) Claire classified the six figures into two groups as shown in the classification table below.

Group G	Group H
B C D E	A F

What are suitable headings for groups G and H?

[1]

Group G: _____

Group H: _____

- b) State another way in which she can classify the six figures.

[1]

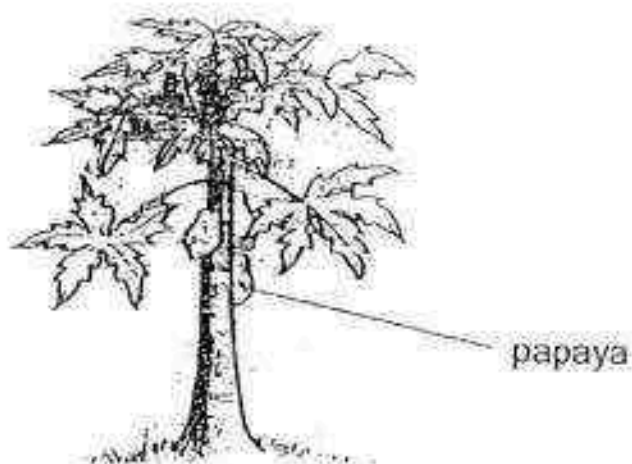
7. The table below shows the characteristics of three plants, plant K, plant L and plant M. A tick (✓) indicates that the characteristic is shown by the plant.

	plant K	plant L	plant M
Plant has flowers.	✓		✓
Plant has fruits that cannot be eaten.			✓
Plant reproduces by spores.		✓	
Plant has large leaves.	✓		✓

- a) Based on the above table, put a tick (✓) in the correct boxes to indicate if the statements below are 'True' or 'False' [2]

Statement	True	False
(i) Both plant K and plant L are flowering plants.		
(ii) Plant M has fruits.		
(iii) Plant L is a moss plant.		
(iv) Plant L does not have leaves		

- b) The diagram below shows the diagram of a plant.


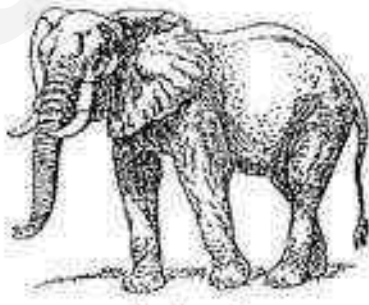


Which of the following plant, K, L or M, is this plant most likely to be? [1]

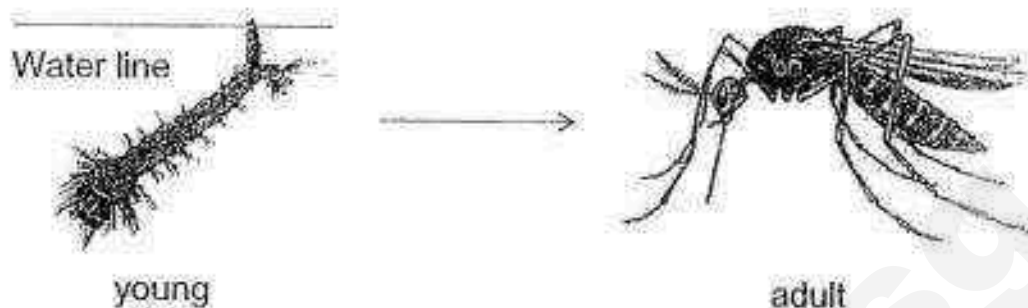
8. Animals W, X, Y and Z are classified as shown.



Fill in the boxes with the letters, W, X, Y or Z to match each of the following animals to the correct letter. [2]

Animal	Letter
<p>a)</p>  <p>ostrich</p>	
<p>b)</p>  <p>elephant</p>	

9. The diagram below shows what happened to the young of animal Z after a few weeks.



- a) Name a characteristic of living things that is shown in the diagram above. [1]

- b) The adult is classified as an insect.

Give two characteristics that show that the adult belongs to this group. [2]

Characteristic 1:

Characteristic 2:

End of Section B

EXAM PAPER 2016 (P3)

SCHOOL : PEI CHUN

SUBJECT : SCIENCE

TERM : CA1

Q1	Q2	Q3	Q4	Q5
3	4	1	1	1

6)a)G: All the objects in Group G is white / unshaded

H: All the objects in Group H is black / shaded

b)By the number of sides/ edges / lines

7)a)i)False ii)True iii)True iv)False

b)I think it is plant K.

8)a)W

b)Z

9)a)Living things can grow.

b)1)It has three body parts.

2)It has three pairs of legs.

RIVER VALLEY PRIMARY SCHOOL
CONTINUAL ASSESSMENT 1 / 2016
PRIMARY 3

SCIENCE

(BOOKLET A)

Name : _____ ()

Date : 7th March 2016

Class : P3 _____

Total Time for Booklet A & Booklet B : 1 hour

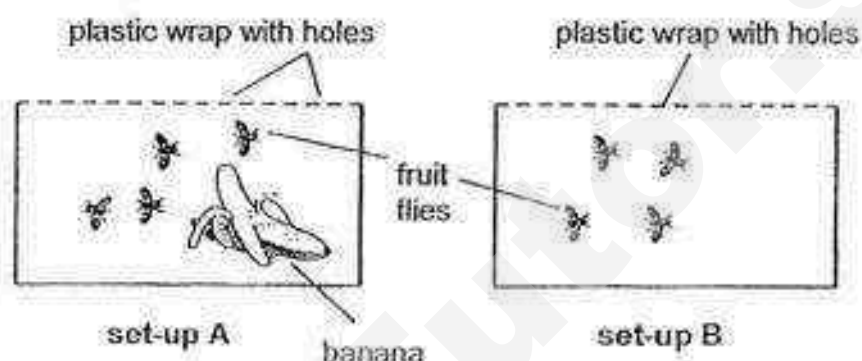
INSTRUCTIONS TO CANDIDATES

1. Write your name, index number and class in the space above.
2. Do not turn over this page until you are told to do so.
3. Follow all instructions carefully.
4. Answer all questions.
5. For Section A, shade your answers for questions 1 to 10 in the Optical Answer Sheet (OAS) provided.
6. For Section B, write your answers for questions 11 to 15 in the space provided in the booklet.
7. The total marks for Booklet A is 20 marks.

Section A (20 marks)

For each question 1 to 10, four options are given. One of them is the correct answer. Make your choice (1, 2, 3 or 4). Shade the oval (1, 2, 3 or 4) on the Optical Answer Sheet.

1. Some fruit flies were put in 2 similar tanks as shown below. Both tanks were covered tightly with plastic wrap.



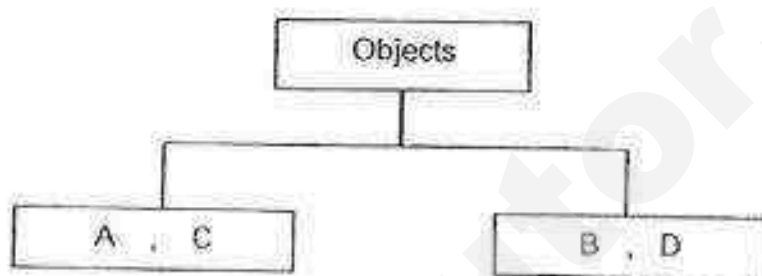
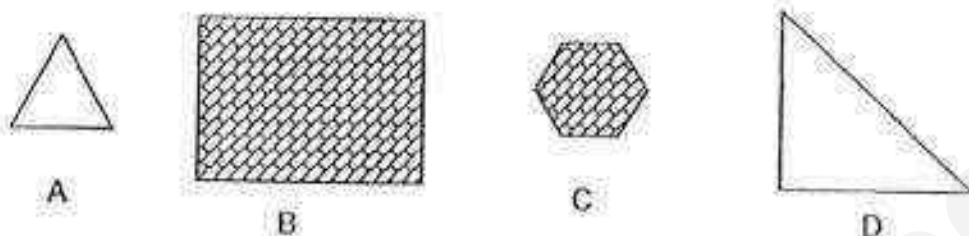
After a few days the fruit flies in set-up B died while those in set-up A were still alive.

From this experiment, we can conclude that living things need _____.

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

()

2. Mei Ling was given 4 objects A, B, C and D. She classified them in a chart as shown below.



Mei Ling classified the objects based on _____.

- (1) size
- (2) shape
- (3) pattern
- (4) number of sides

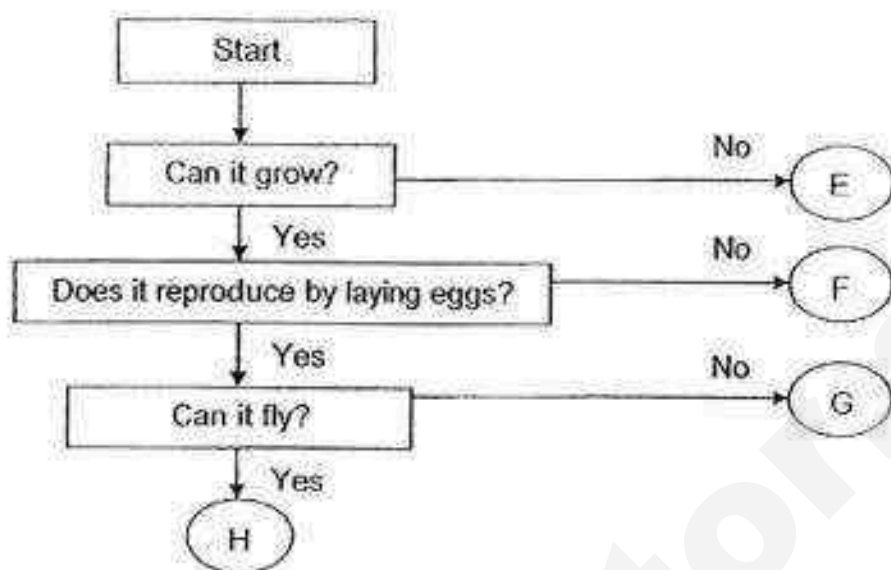
()

3. Daryl saw a snail crawling on the ground. He touched it gently and observed that the snail moved into its shell. What does this tell you about living things?

- (1) Living things can grow.
- (2) Living things can move.
- (3) Living things can respond to changes.
- (4) Living things need air, food and water.

()

4. Refer to the flowchart below.



Which of the following is likely to be a mammal?

- (1) E
- (2) F
- (3) G
- (4) H

()

5. Asmand picked up a dry leaf from the garden. His father said it is a non-living thing. His father made this conclusion because the leaf _____

- A : can move on its own
- B : cannot grow anymore
- C : cannot reproduce anymore

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

()

6. The following information describes Animal D. Look carefully at the table below.

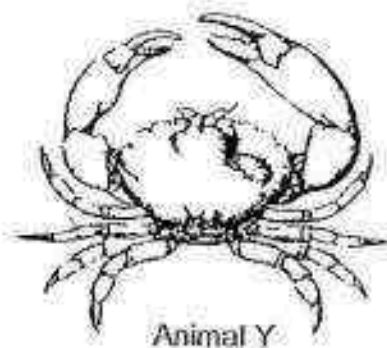
Characteristics of Animal D	Yes / No
Lives on land	No
Reproduce by laying eggs	Yes
Has wings	No
Has gills	Yes

Which of the following could Animal D be?

- (1) Fish
- (2) Birds
- (3) Insects
- (4) Mammals

()

7. Study the animals shown below.



What do Animal X and Animal Y have in common?

- (1) The number of legs
- (2) The way they move
- (3) The type of food they eat
- (4) The type of outer covering

()

8. Study the classification charts below.

Group M Pencil Marker Water Bottle	Group N Basketball Volleyball Badminton racket	Group P Glue Scotch Tape Paper Clip
--	--	---

Which object has been grouped wrongly?

- (1) Glue
- (2) Marker
- (3) Water Bottle
- (4) Basketball

()

9. Study the classification table below.

Group A	Group B	Group C
Sparrow	Giraffe	Alligator
Parrot	Horse	Lizard
Woodpecker	Dog	Seabass

Which of the following give the most suitable heading for each group?

	Group A	Group B	Group C
(1)	Live on land and water	Live on land	Live in water
(2)	Have feathers	Have hairs	Have scales
(3)	Plant eaters	Meat eaters	Eat both meat and plant
(4)	Lay many eggs	Does not lay eggs	Lays one egg

10. What do these things have in common?



Books



Paper Card



Wooden shoes shelf



Wooden Bench

- (A) They came from trees.
- (B) They need air to survive.
- (C) They are non-living things.
- (D) They are made of things that were never alive.

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

()

~ End of Section A ~

RIVER VALLEY PRIMARY SCHOOL
CONTINUAL ASSESSMENT 1 / 2016
PRIMARY 3

SCIENCE

(BOOKLET B)

Name : _____

Date : 7th March 2016

Class : P3 _____

Total Time for Booklet A & Booklet B : 1 hour

INSTRUCTIONS TO CANDIDATES

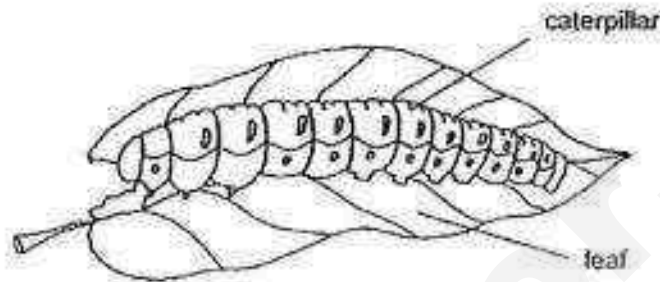
1. Write your name, index number and class in the space above.
2. Do not turn over this page until you are told to do so.
3. Follow all instructions carefully.
4. Answer all questions.
5. For Section A, shade your answers for questions 1 to 10 in the Optical Answer Sheet (OAS) provided.
6. For Section B, write your answers for questions 11 to 15 in the space provided in the booklet.
7. The total marks for Booklet B is 20 marks.

Booklet A		/20
Booklet B		/20
Total		/40
Parent's Signature		

Section B (20 marks)

Write your answers for questions 11 to 15 in this booklet.

11. The diagram below shows a caterpillar eating a leaf. It eats lots of leaves every day. After a few days, it became bigger.



- (a) Which two characteristics of living things does this caterpillar show?

1st Characteristic [1m]

2nd Characteristic [1m]

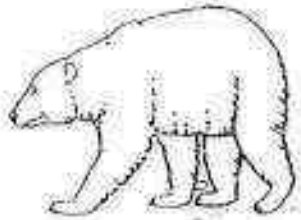
- (b) The butterfly lays many eggs at one time. Give a reason for this characteristic. [2m]

	4
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12(a) Classify the animals shown below in the spaces provided. [2m]



Goat



Bear



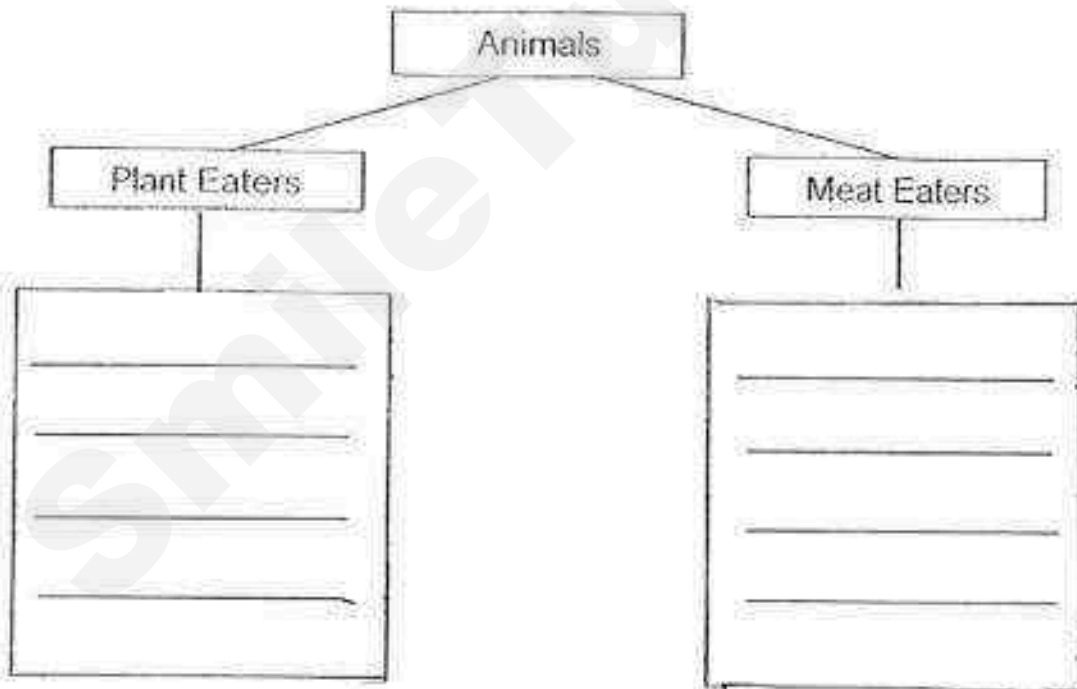
Rabbit



Tiger



Horse



(b) All these animals are mammals. How do mammals reproduce? [1m]

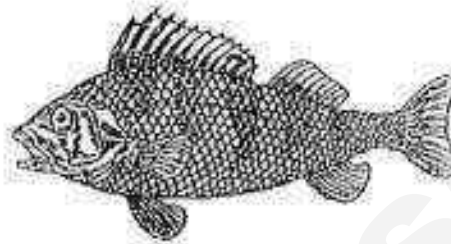
- (c) Name one mammal that does not reproduce the same way as these animals.
[1m]

	1
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13. Study the two animals shown below. [2m]



Animal X



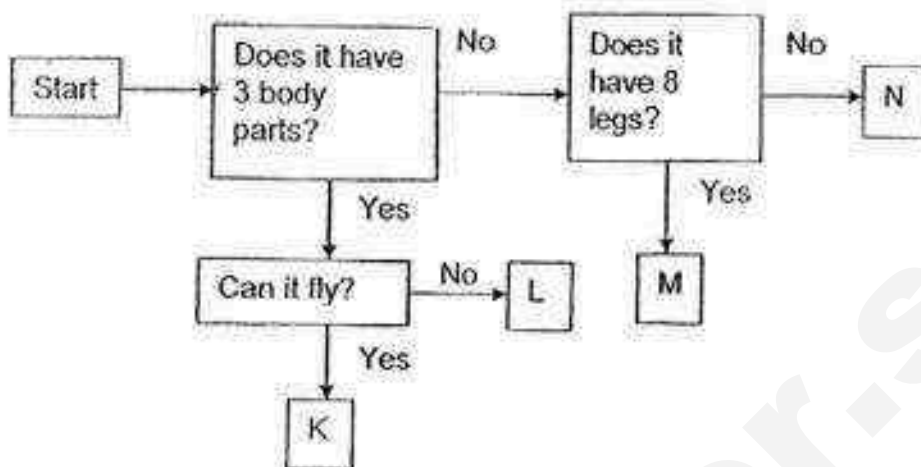
Animal Y

- (a) How are Animals X and Y similar in the way they reproduce? [2m]

- (b) How are Animals X and Y different in their body coverings? [2m]

	4
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14. Study the flowchart below.



- (a) Based on the flow chart above, describe one similarity and one difference between Animal K and Animal L. [2m]



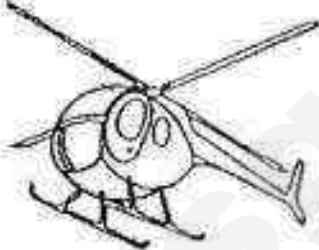
(ii) Difference:

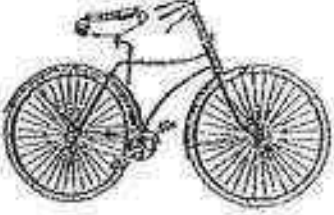


- (b) Write the letters K, M or N that represent the animals in the box below. [2m]

(i)	Spider	
(ii)	Caterpillar	
(iii)	Grasshopper	

	4
--	---

15. Jun Yi classified the following items into two groups as shown below. [2m]

Group 1		
		
Eagle	Hot air balloon	Helicopter

Group 2		
		
Bicycle	Kitten	Shrub

- (a) How are the above items classified? [2m]

Group 1: _____

Group 2: _____

- (b) Suggest another way Jun Yi could classify the items into two different groups. [2m]

	4
--	---

~ End of Paper ~

EXAM PAPER 2016 (P3)

SCHOOL : RIVER VALLEY

SUBJECT : SCIENCE

TERM : CA1

Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9	Q10
2	1	3	2	3	1	4	3	2	2

11)a)1)Living things need air, water and food to survive.

2)It need food to survive.

b)They reproduce to ensure that they would not be extinct.

12)a)Plant Eaters

Meat Eaters

Rabbit

Tiger

Horse

Bear

Goat

b)Mammals reproduce by laying eggs and giving birth to its young.

c)Platypus or spiny an eater.

13)a)Both animal X and animal Y lay eggs.

b)Animal X has feathers but animal Y has scales.

14)a)i)Both animal K and animal L have three body parts.

ii)Animal K can fly but animal L cannot fly.

b)i)M iii)N

15)a)1)They can fly

2)Things that cannot fly.

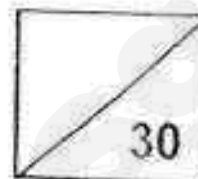
b)Jun Yi could class fly them into living and non-living things.



Rosyth School
Topical Test for 2016
SCIENCE
Primary 3

Name: _____

Total
Marks:



Class: Pr 3 _____

Register No. _____

Duration: 50min

Date: 29 February 2016

Parent's Signature: _____

Instructions to Pupils:

1. Do not open the booklet until you are told to do so.
2. Follow all instructions carefully.
3. This paper consists of 2 sections, Part I and Part II.
4. For questions 1 to 8, write the correct answer in the brackets provided.
5. For questions 9 to 13, give your answers in the spaces provided in Part II.

	Maximum	Marks Obtained
Part I	16 marks	
Part II	14 marks	
Total	30 marks	

* This booklet consists of 10 printed pages. (pg. 1 to 10)

Part I (16 marks)

For each question from 1 to 8, four options are given. One of them is the correct answer. Make your choice (1, 2, 3 or 4). Write the correct answer in the bracket provided.

1. Janet was blindfolded and she had to classify the following objects according to their shapes.



Which one of the following senses would Janet be using?

- (1) Sight
(2) Smell
(3) Touch
(4) Hearing

()

2. Which of the following are true about the characteristics of all living things?

P: All living things grow.

Q: All living things reproduce.

R: All living things move from place to place.

S: All living things need only air and water to survive.

- (1) P and Q only
(2) Q and S only
(3) P, Q and R only
(4) Q, R and S only

()

3. The classification table below shows 2 groups, Group X and Y.

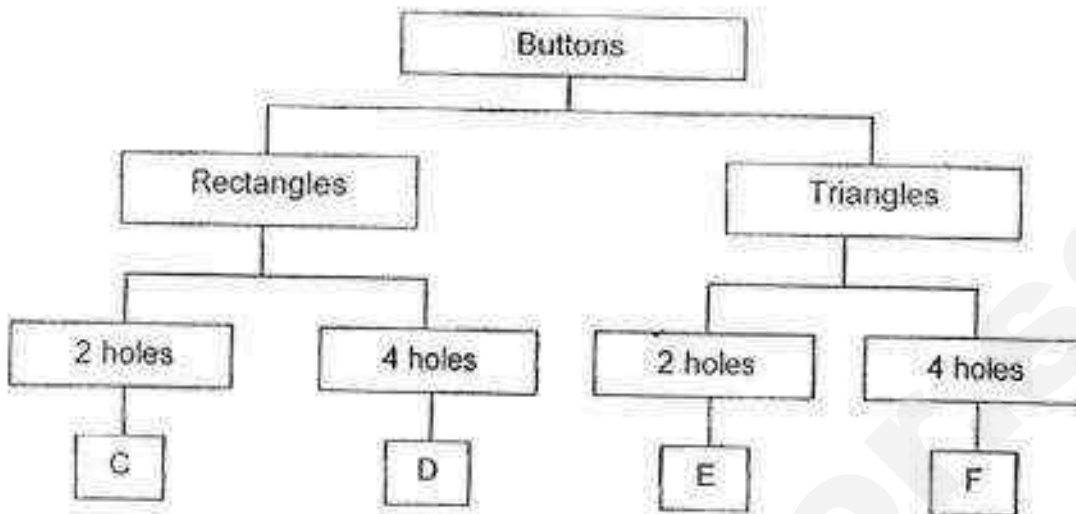
Group X	Group Y
duck	cup
mouldy bread	pencil
water	book
crocodile	toy car

Which one of the following has been grouped wrongly?

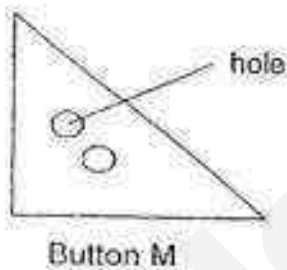
- (1) cup
(2) book
(3) water
(4) mouldy bread

()

4. Study the classification chart as shown below.



Which group in the classification diagram above does Button M belongs to?



- (1) C
- (3) E

- (2) D
- (4) F

5. Jay spotted two animals, Animal P and Q. He wanted to find out which animal is an insect.



Animal P



Animal Q

What should he do to find out which animal is an insect?

- A: Measure the body length
- B: Count the number of legs
- C: Count the number of body parts
- D: Check if the animals have wings

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

()

6. The picture below shows Animal Y.



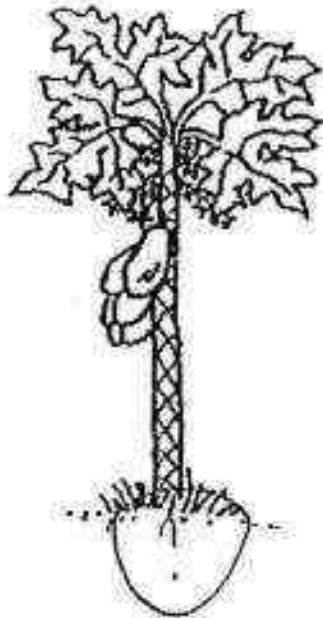
Karen saw Animal Y and said that it has the characteristics of a mammal. Which of the following statements has Karen made in order for her to say so?

- A: It has hair.
- B: It has legs.
- C: It lives on land.
- D: It feeds its young with milk.

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

()

7. Four pupils went to a garden and saw a tree as shown below.



They recorded their observations below.

Ali: The tree has leaves.

Bala: The tree has deep roots.

Claire: The tree has a strong stem.

Dan: The tree has fruits growing on it.

Who made a statement that could not be observed?

(1) Ali

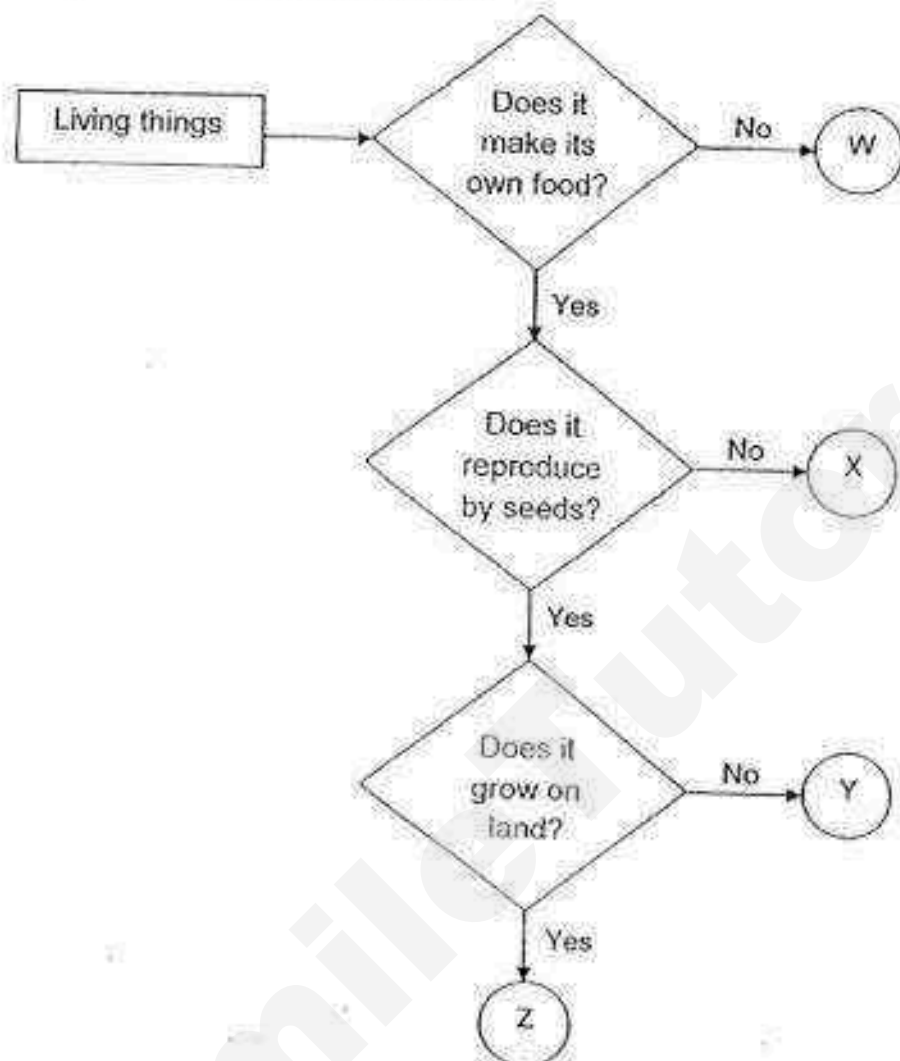
(2) Dan

(3) Claire

(4) Bala

()

8. Study the flowchart below carefully.



Which letter, W, X, Y or Z best represents a non-flowering plant?

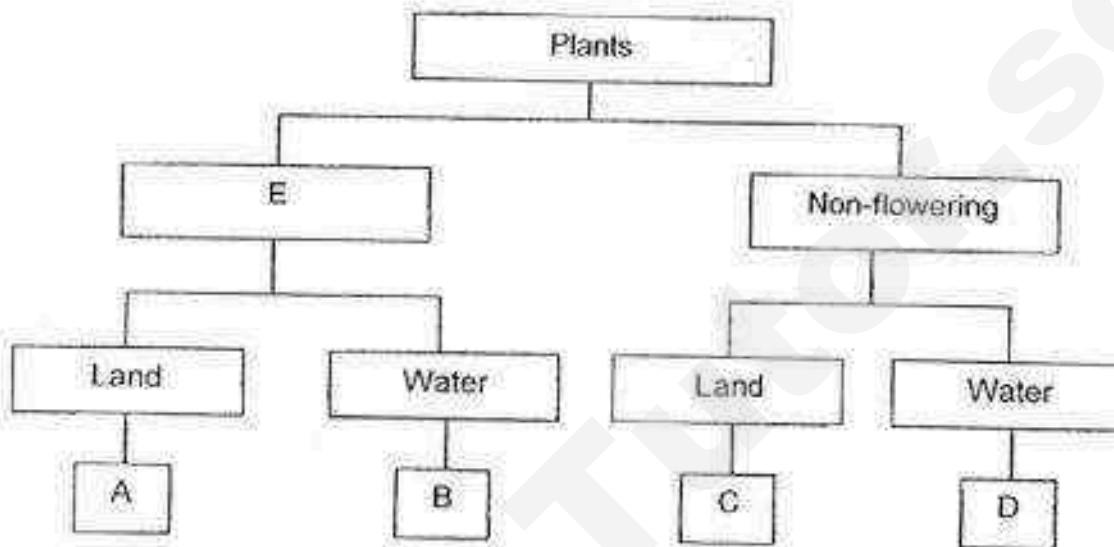
- | | |
|-------|-------|
| (1) W | (2) X |
| (3) Y | (4) Z |

End of Part I

Part II (14 marks)

For questions 9 to 13, write your answers in the blanks provided.

9. Study the classification chart as shown below.

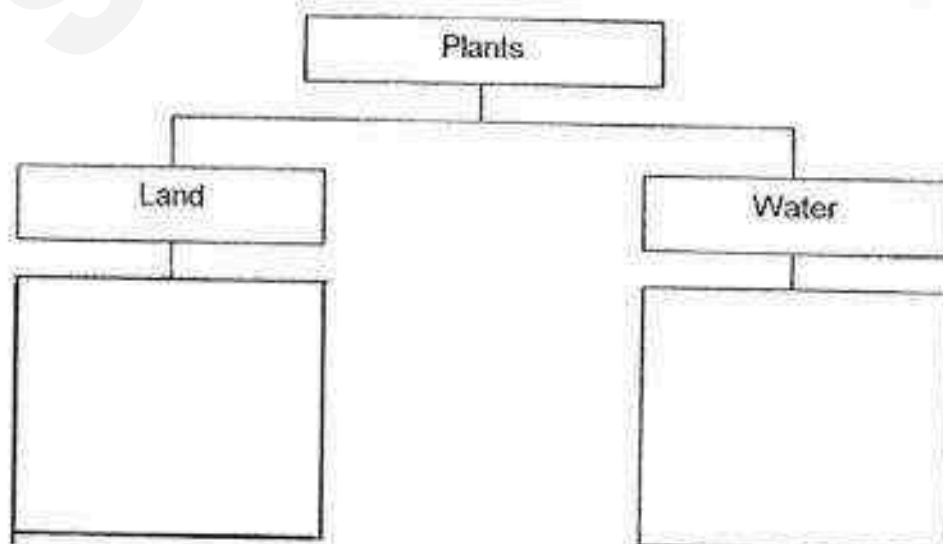


(a) What is a suitable heading for E?

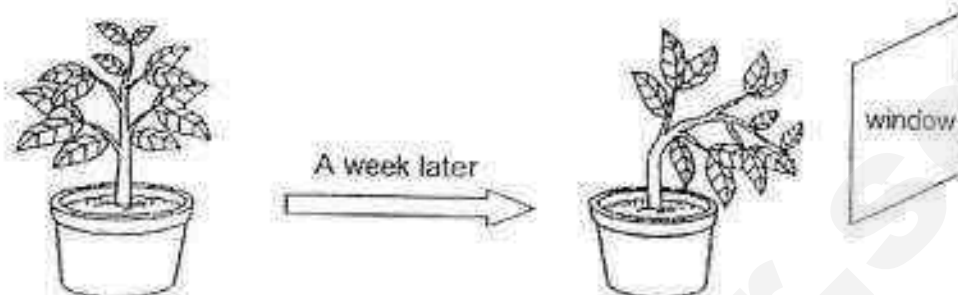
(1m)

(b) The chart below shows another way of classifying plants. Complete the chart by writing A, B, C and D in the boxes below.

(1m)



10. Mr Tan placed his potted plant near the window where there is more sunlight. He also watered it every day. A week later, he observed a change in his plant as shown below.

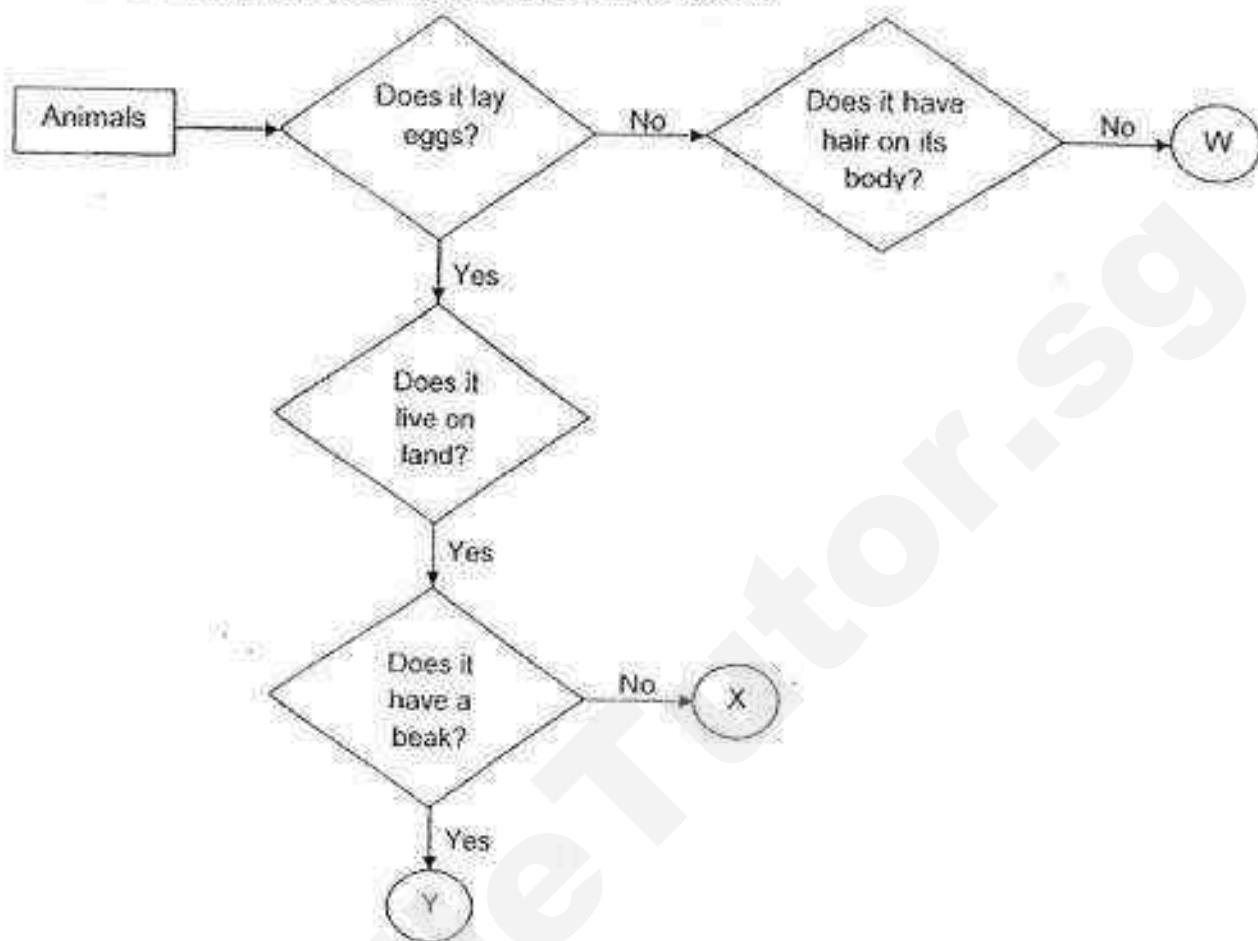


- (a) State Mr Tan's observation of his potted plant after a week. (1m)

- (b) From the observation above, Mr Tan stated that living things can grow and move by themselves. Name another characteristic shown by the above observation. (1m)

- (c) Besides water, what are two other things that the plant needs to stay alive? (1m)

11. Tina's worksheet has a flowchart as shown below.



(a) Based on the flowchart, identify the animals given below by writing the letter, W, X, or Y. (2m)

i. Reptile

ii.

Bird

(b) Can Animal W be a mammal? Explain why.

(1m)

12. Hayley noticed three living things, A, B and C in a park. He observed the living things and stated their characteristics as shown in the table below.

Characteristics	Living Things		
	A	B	C
• Make own food	Yes	No	No
• Reproduce by spores	No	No	Yes
• Can move from place to place	No	Yes	No

- (a) State a similarity between living things, A and C.

(1m)

- (b) State a difference between living things, B and C.

(1m)

- (c) Tina said that living thing C is definitely a flowering plant. Do you agree with her? Explain why.

(1m)

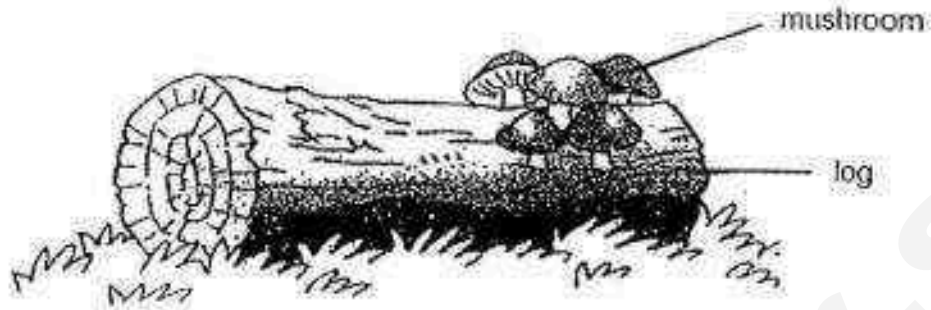
- (d) Which group of living things do A and B belong to? Fill in the boxes with 'Plant' or 'Animal'.

(1m)

i. A:

ii. B:

13. Kok Ming was walking at the Science garden when he saw a log on the ground. He noticed that there were mushrooms growing on it.



- (a) Why are the mushrooms found growing on the log? (1m)

- (b) How do mushrooms reproduce? (1m)

End Of Paper

EXAM PAPER 2016 (P3)

SCHOOL : ROSYTH

SUBJECT : SCIENCE

TERM : CA1

Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8		
3	1	3	3	2	1	4	2		

9)a) Flowering plants.

b) Land : A , C Water : B , D

10)a) Living things can move to the direction of the sun.

b) Plants need air to survive.

c) Plants need sunlight to make food and air to survive.

11)a) i) X ii) Y

b) No. Animal W does not have hair and mammals have hair.

12)a) Both A and B cannot move from place to place.

b) B reproduces by spores but C does not.

c) No. Flowering plants do not reproduce by spores but C does reproduce by spores.

d) i) Plant ii) Animal

13)a)It is because mushrooms need to grow on their food and the log is their food.

b)They reproduce by spores.



Anglo-Chinese School (Primary)

MID-YEAR EXAMINATION 2016
SCIENCE
PRIMARY THREE
(BOOKLET A)

Name: _____ ()

Class: Primary 3 _____

Date: 4 May 2016

Duration of paper: 1 h 15 min

Parent's/Guardian's signature

INSTRUCTION TO CANDIDATES

1. This question paper consists of **11** printed pages including this cover page.
2. Do not turn over this page until you are told to do so.
3. Follow all instructions carefully.
4. Answer all questions.
5. Shade your answer on the Optical Answer Sheet (OAS) provided.

For each of the following questions from 1 to 15, 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. [30 marks]

- 1 The classification table below shows how some things have been grouped.

Group A	Group B	Group C	Group D
Footballs	Flute	Bowls	Chairs
Tennis balls	Piano	Spoons	Desks
Basketballs	Drums	Forks	Stools

In which group can a recorder be placed?

- (1) Group A
(2) Group B
(3) Group C
(4) Group D
- 2 What must living things do to ensure the continuity of their own kind?
- (1) They must find more food.
(2) They must change their diet.
(3) They must continue to reproduce.
(4) They must move to a new place with more space.

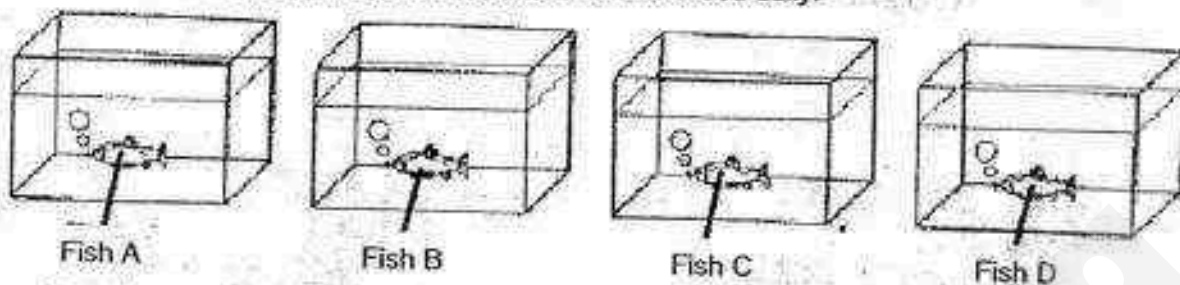
- 3 Rajah classified some objects into Group X and Group Y as shown below.

Group X	Group Y
Wooden chopsticks	Rubber hose
Glass window	Plastic ruler
Brick	Plastic straw

Which one of the following properties is used to classify the objects?

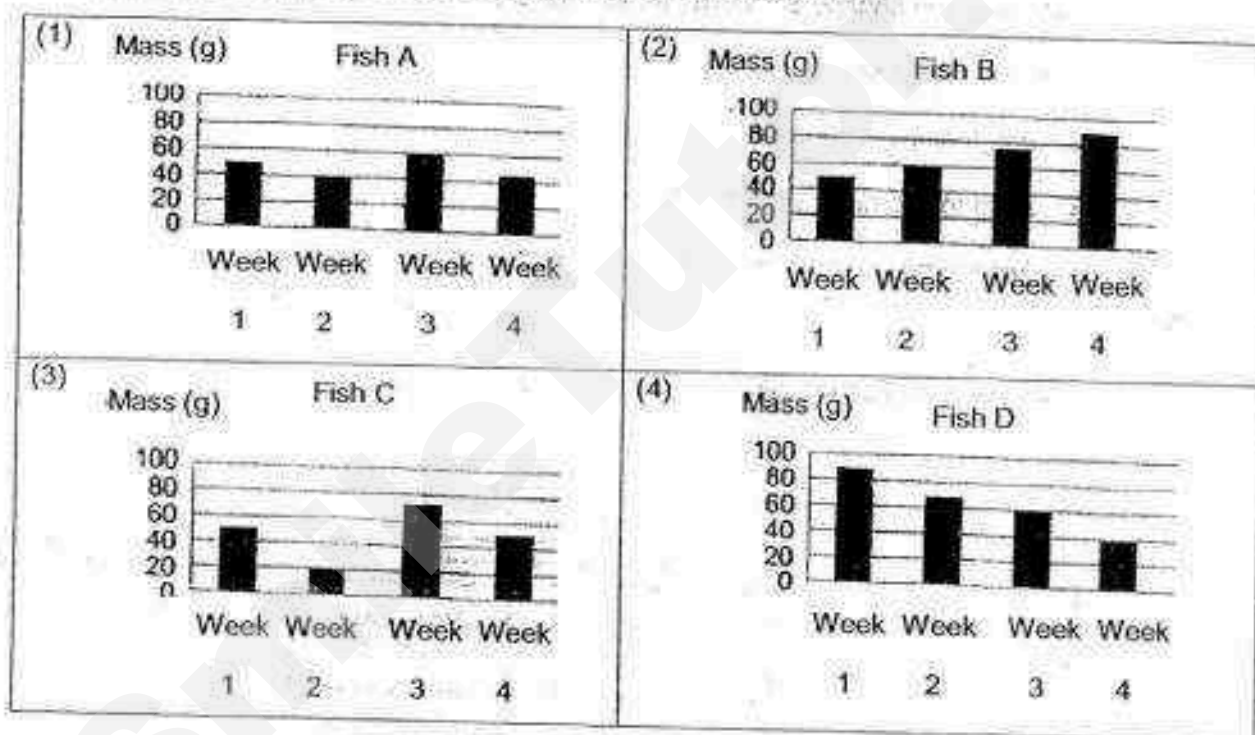
- (1) Flexibility
(2) Transparency
(3) Ability to absorb water
(4) Ability to float on water

- 4 Jolene placed a fish into each tank of water as shown in the diagram below. The fish were of the same size and type, and given the same amount of food daily.



Over the next four weeks, Jolene recorded the mass of the four fish. Using the data collected, she then plotted four different graphs, (1), (2), (3) and (4), for each fish.

Which fish was most likely to have been given the right type of food?



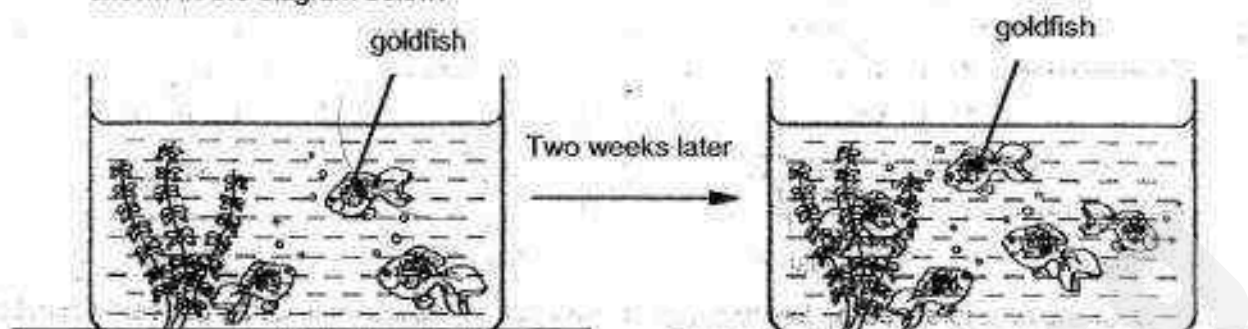
- 5 Samuel made some observations about a living thing. His observations are shown below.

- It reproduces from spores.
- It does not make its own food.
- It needs air, water and food to survive.

Samuel is likely to have observed a/an _____

- (1) Fern
- (2) Tree
- (3) Mushroom
- (4) Hibiscus plant

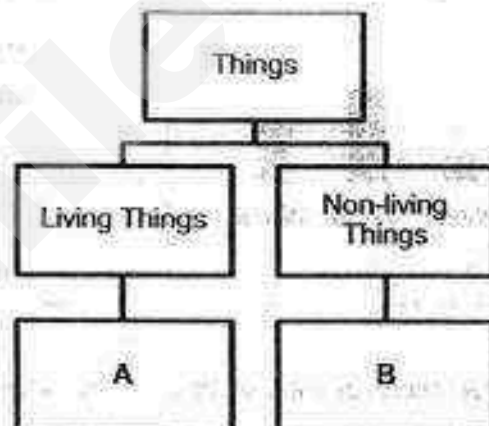
- 6 Some goldfish were placed in a tank. Two weeks later, a change was observed in the tank as shown in the diagram below.



What does the change as shown in the diagram above tell us about living things?

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

- 7 Study the classification diagram below carefully.



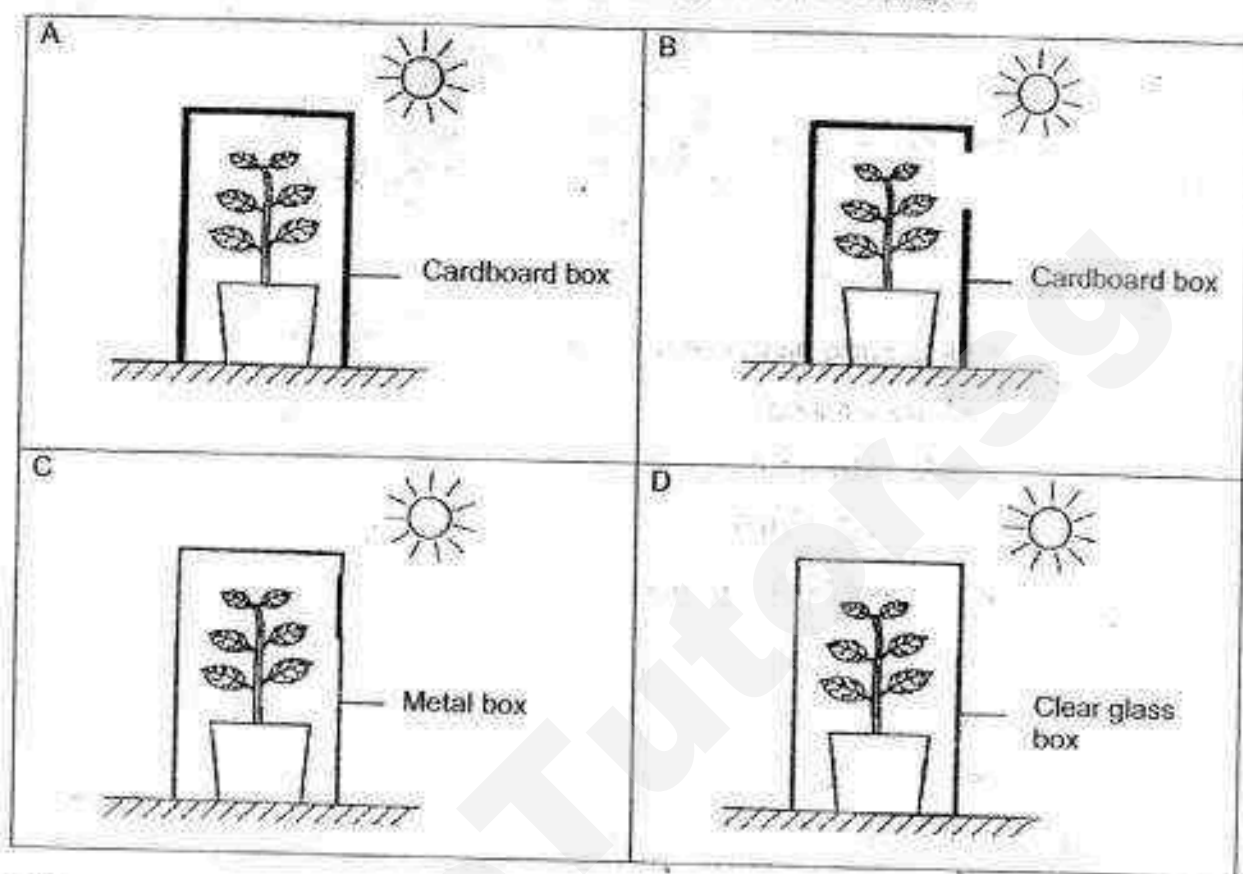
Which one of the following best represents A and B?

	A	B
(1)	Mushroom	Butterfly
(2)	Doll	Mushroom
(3)	Doll	Balloon
(4)	Mushroom	Balloon

(Go on to the next page)

8

Which set-up below can be used to find out if plants grow towards sunlight?



(1) A

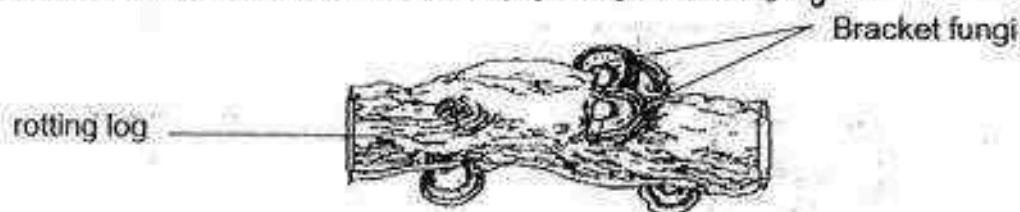
(2) B

(3) C

(4) D

(Go on to the next page)

- 9 The picture below shows some Bracket fungi growing on a rotting log.



Which of the following statements is/are true about the Bracket fungi?

- A It is a non-living thing.
- B It reproduces by spores.
- C It needs sunlight to make food.
- D It gets its food from the rotting log.

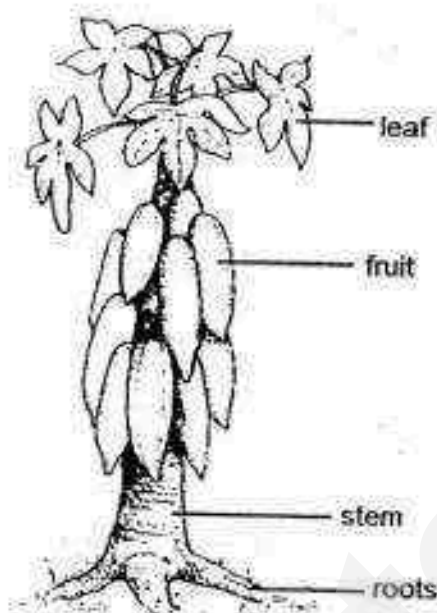
- (1) A only
- (2) C only
- (3) B and C only
- (4) B and D only

- 10 Which of the following statement(s) is/are true for all insects?

- A They have six legs.
- B They have three body parts.
- C They have hair on their body.
- D They reproduce by giving birth to their young.

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

The diagram below shows a plant and its parts.



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

- (1) The plant has a weak stem.
- (2) The plant is a flowering plant.
- (3) The plant is a non-flowering plant.
- (4) The plant reproduces through spores.

- 12 The table below shows the characteristics of two groups of animals, P and Q.

A tick (✓) indicates that the animals have the described characteristics shown in the table.

Characteristics	Group P	Group Q
Have moist skin		✓
Have hair on its body	✓	
Live on land and in water		✓
Produce milk to feed their young	✓	

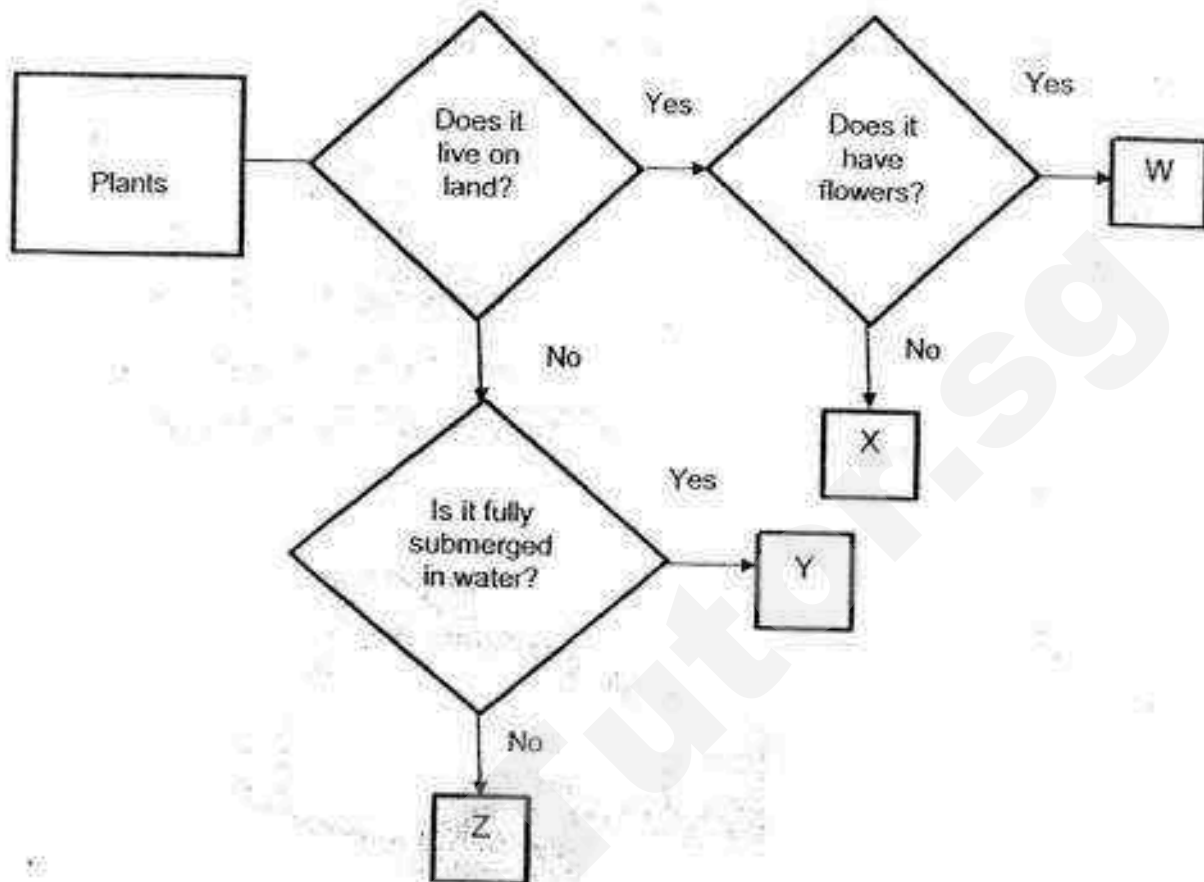
Which one of the following best represents Groups P and Q?

	Group P	Group Q
(1)	Mammals	Reptiles
(2)	Birds	Amphibians
(3)	Mammals	Amphibians
(4)	Amphibians	Fish

(Go on to the next page)

13

Study the flowchart below carefully.



Cattail is a plant that grows in water. A part of the plant is in water while the rest of the plant is out of the water.

Based on the flowchart above, which one of the following best represents the cattail plant?

- (1) W
- (2) X
- (3) Y
- (4) Z

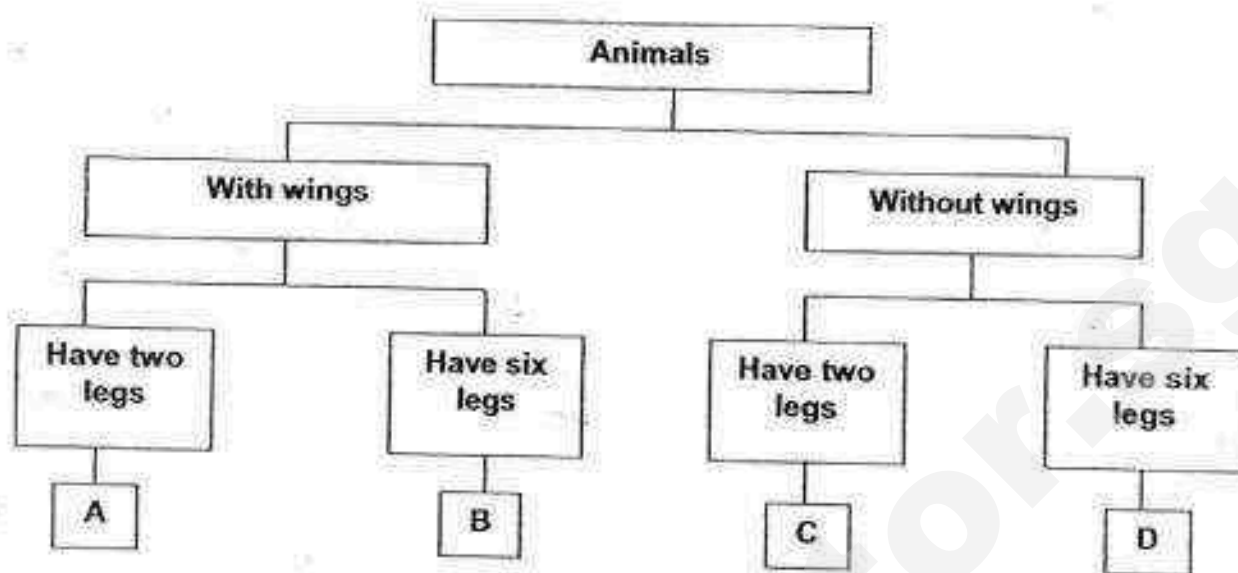
- 14 Based on the properties provided in the table below, which material is most suitable for making part X of the swimming goggles shown below?

Material	Properties
A	Breaks easily
B	Not waterproof
C	Allows light to pass through
D	Does not allow light to pass through



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

- 15 Sam classified four animals using a classification diagram as shown below.



In which group in the classification diagram does Animal P belong to?



Animal P

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

12. Write the following numbers in words.

13.

14.

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Anglo-Chinese School (Primary)

MID-YEAR EXAMINATION 2016
SCIENCE
PRIMARY THREE
BOOKLET B

Name: _____ ()

Class: Primary 3 _____

Date : 4 May 2016

Duration of paper: 1 h 15 min

Parent's/Guardian's signature _____

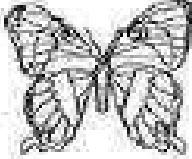

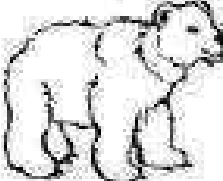
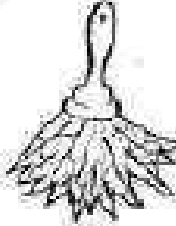
INSTRUCTION TO CANDIDATES

1. This question paper consists of **9** printed pages including this cover page.
2. Do not turn over this page until you are told to do so.
3. Follow all instructions carefully.
4. Answer all questions.
5. Write your answers in this booklet.

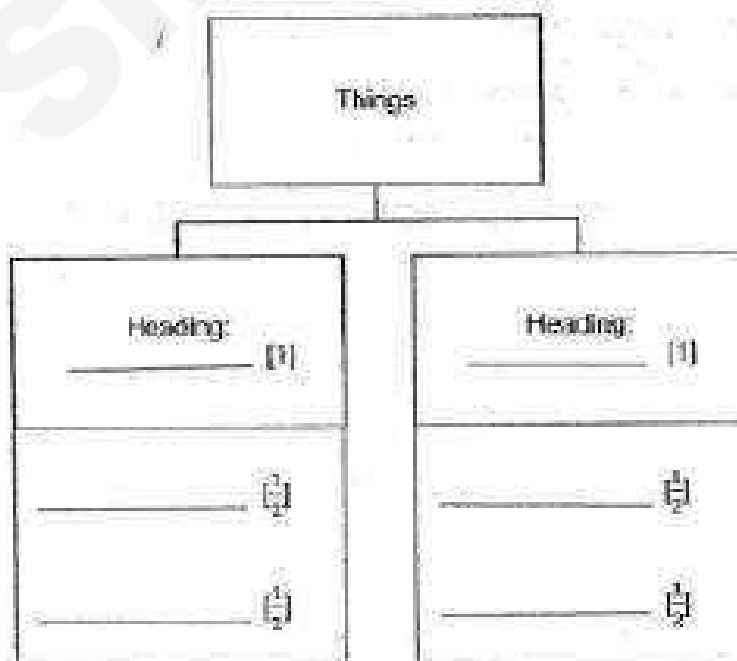
Booklet	Maximum marks	Marks obtained
A	30	
B	20	
Total	50	

For questions 16 to 22, write your answers in the spaces provided in this booklet. The number of marks available is shown in the brackets [] at the end of each question or part question.
(20 marks)

- 16 Some things have been classified into two groups as shown in the classification table below.

Things	
Living Things	Non-living Things
 Butterfly	 Aeroplane
 Bear	 Duster

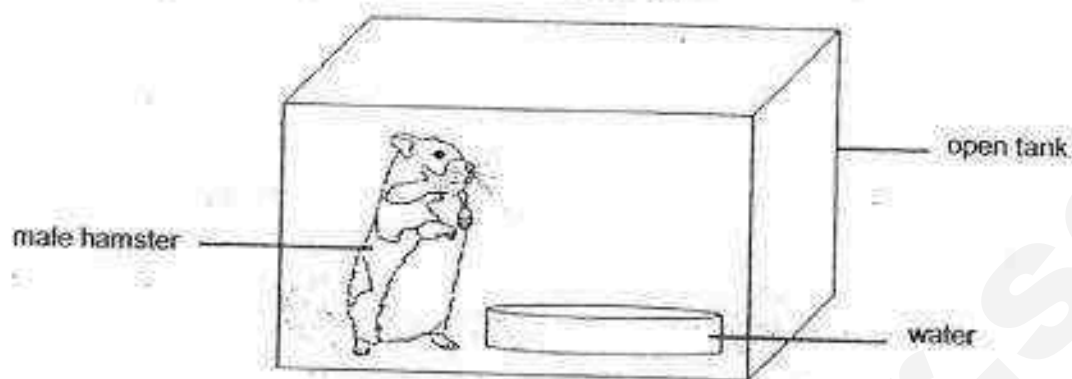
Classify the same things in a different way using the classification diagram provided below. Provide suitable headings for your classification diagram.
(4)



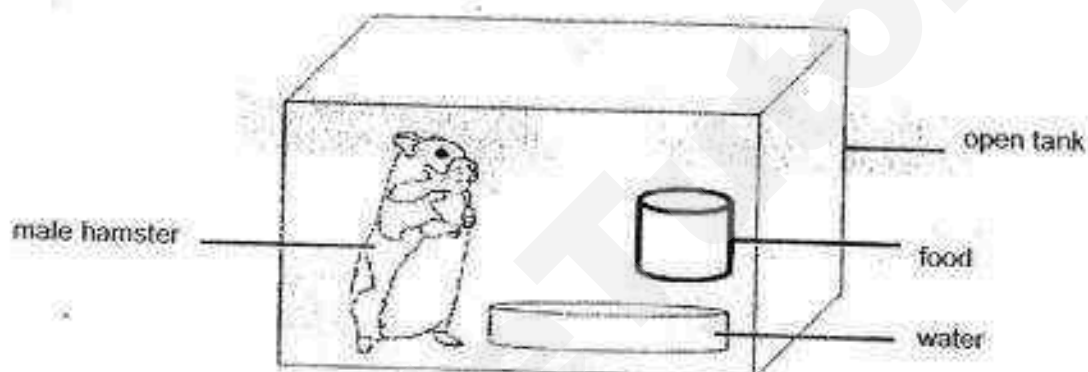
(Go on to the next page)

SCORE	4
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- 17 (a) The following diagram shows two set-ups.



Set-up A



Set-up B

During a rainy day, it was observed that the male hamster in set-up B shivered.

- (i) State the characteristic of living things that was observed in the situation above. [1]

A female hamster was added to set-up B. After some time, the female hamster gave birth to some pups (baby hamsters).

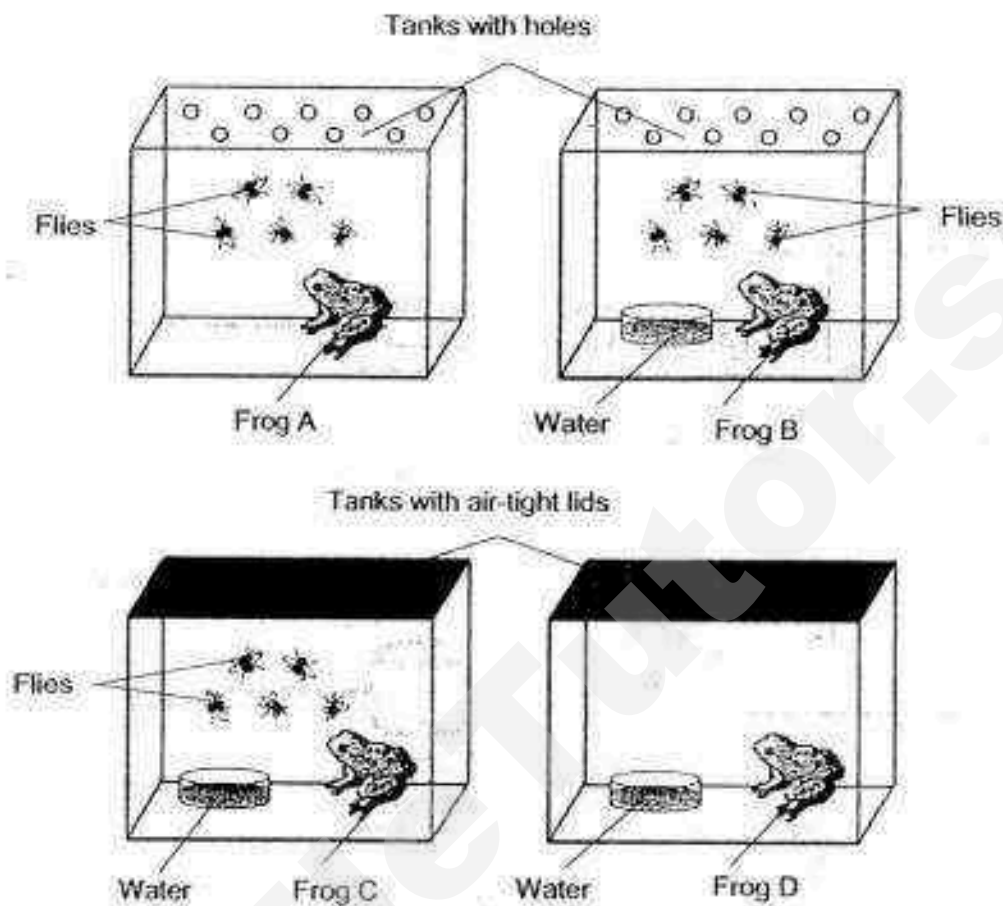
- (ii) State the characteristic of living things that was described in the situation above. [1]

(Go on to the next page)

SCORE	
	2

Question 17 continues on page 4.

- 17 (b) Freddy conducted an experiment using four set-ups as shown below.



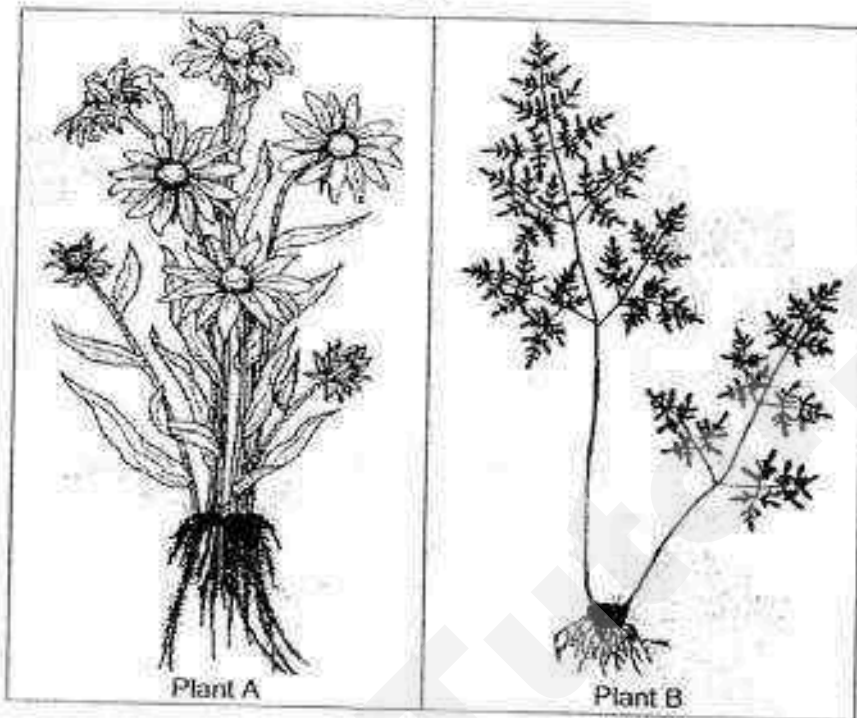
Based on the set-ups shown above, which frog will live the longest? Explain your answer.

[1]

(Go on to the next page)

SCORE	1
-------	---

- 18 Study the diagram given below carefully.



- (a) Based on the diagram, state two similarities between Plants A and B. [2]

(i)

(ii)

- (b) Based on the diagram, state two differences between Plants A and B. [2]

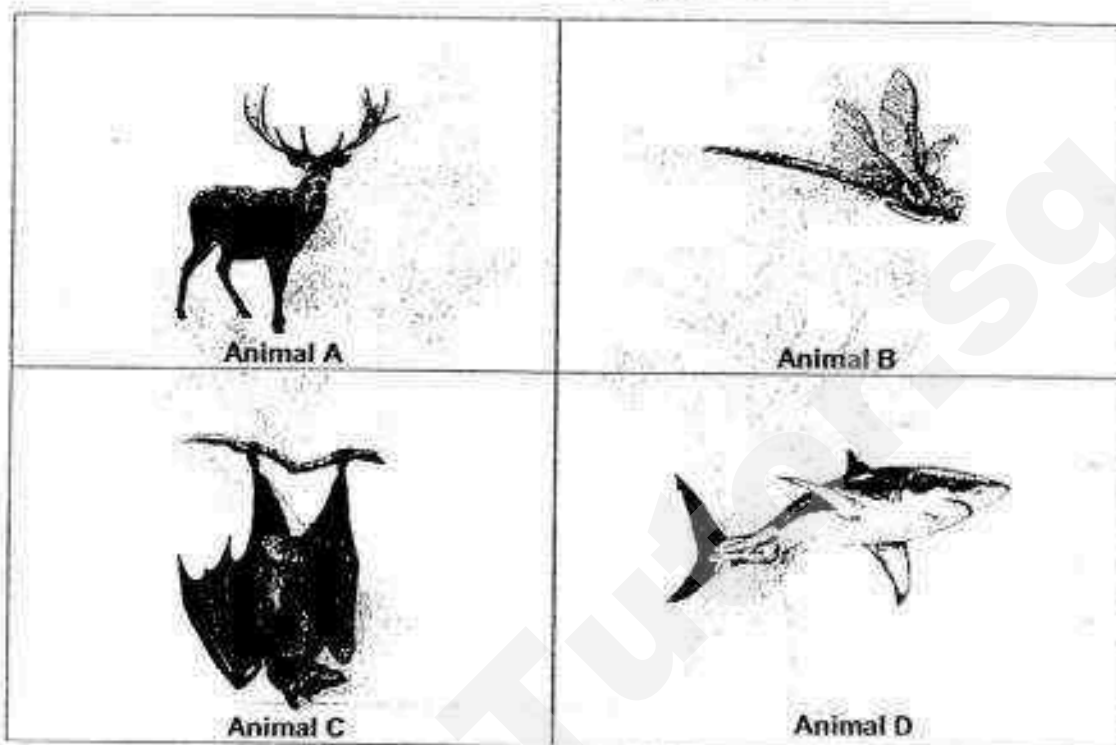
(iii)

(iv)

(Go on to the next page)

SCORE	
	4

- 19 The diagrams below show four different animals, A, B, C and D.



- (a) Based on diagrams above, write "A, B, C and D" under the correct headings below.

[1]

Can fly	Cannot fly

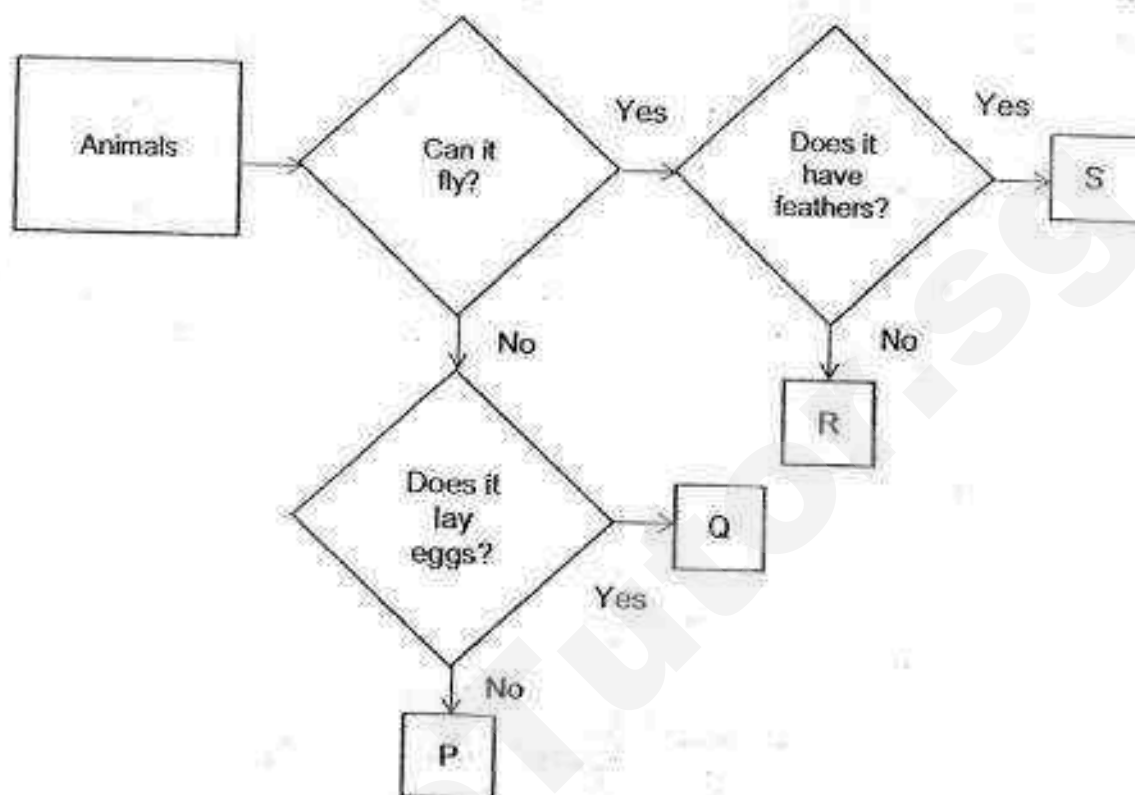
- (b) Which part of their bodies helps these animals to fly?

[1]

(Go on to the next page)

SCORE	
	2

- 20 Study the flowchart below carefully.



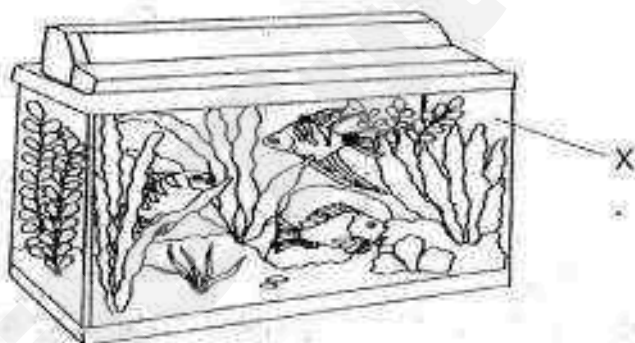
- (a) Based on the flowchart above, state two characteristics of Animal S. [1]
-
- (b) Based on the flowchart above, state two characteristics of Animal Q. [1]
-

(Go on to the next page)

SCORE	
	2

- 21 Si Min conducted an experiment using materials A, B and C. She recorded her results in the table shown below.

Material \ Property	A	B	C
Is it strong?	Yes	Yes	No
Is it waterproof?	Yes	Yes	Yes
Does it allow light to pass through it?	No	Yes	Yes



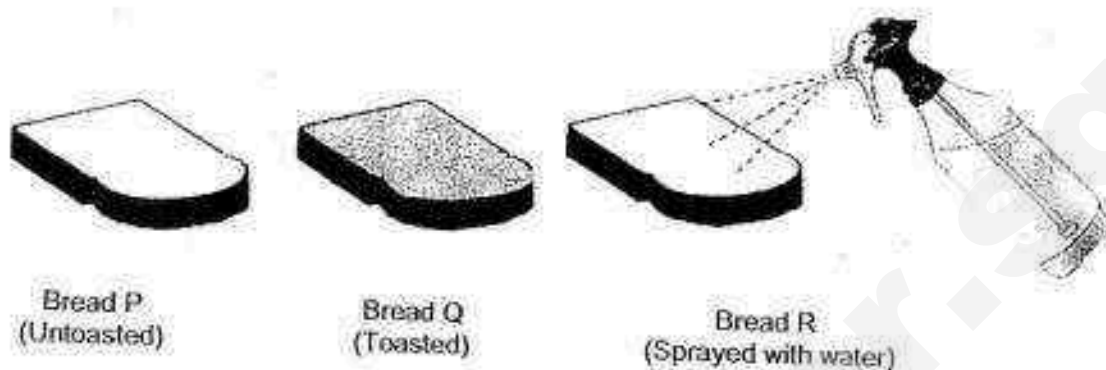
- (a) Which material A, B or C is most suitable to make part X of the fish tank? [1]
- _____
- (b) Explain your answer to part (a). [1]
- _____
- _____
- (c) Based on the table above, state one difference between materials A and C. [1]
- _____
- _____

(Go on to the next page)

SCORE	3
-------	---

22

Yani carried out an experiment using three identical slices of bread, P, Q and R as shown in the diagram below.



She recorded her observations over seven days in the table below.

Day	Bread P	Bread Q	Bread R
1	No change	No change	No change
3	No change	No change	No change
5	No change	No change	No change
7	A few dark spots	No change	Many dark spots

(a) What were the dark spots which Yani observed in the experiment?

[1]

(b) Explain why dark spots were not observed on Bread Q at the end of the experiment.

[1]

END OF BOOKLET B/ End of Paper
Please check all your answers carefully.

SCORE	
	2



NAME: _____

DATE: _____

CLASS: _____

TEACHER: _____

SUBJECT: _____

TOPIC: _____

DATE: _____

CLASS: _____

TEACHER: _____

SUBJECT: _____

TOPIC: _____

DATE: _____

CLASS: _____

TEACHER: _____

SUBJECT: _____

TOPIC: _____

DATE: _____

CLASS: _____

YEAR : 2016
 LEVEL : PRIMARY 3
 SCHOOL : ANGLO-CHINESE
 SUBJECT : SCIENCE
 TERM : SA1

Booklet A

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

Booklet B

Q16

Heading: Can fly [1]	Heading: Cannot fly [1]
Butterfly [$\frac{1}{2}$]	Bear [$\frac{1}{2}$]
Aeroplane [$\frac{1}{2}$]	Duster [$\frac{1}{2}$]

Q17

- (a) (i) Living thing respond to changes.
- (ii) Living thing reproduce.
- (b) Frog B, all living thing need food, air and water.

Q18

- (a) (i) Both plants have roots.
- (ii) Both plants have stem.
- (b) (iii) Plant A is a flowering plant but plant B is not a flowering plant.
- (iv) Plant B only have two stem but plant A has more than two stem.

SmileTutor.sg

Q19

(a)

Can fly	Cannot fly
Animal B Animal C	Animal A Animal D

(b)

Their wings.

Q20

(a)

Animal S can fly and have feathers.

(b)

Animal Q cannot fly but can lay eggs.

Q21

(a)

Material B is most suitable to make part X.

(b)

Material B is strong, waterproof and it allow light to pass through it.

(c)

Material A is strong but material C is not.

Q22

(a)

Mould

(b)

Bread Q is dry and mould need water to grow.

End

SmileTutor.sg

Name: _____ ()

Class: Primary 3 _____

CHIJ ST NICHOLAS GIRLS' SCHOOL



Primary 3

Semestral Assessment 1 – 2016

SCIENCE

BOOKLET A

12 May 2016

Total Time for Booklets A and B: 1 hour 15 minutes

15 questions
30 marks

Do not open this booklet until you are told to do so.
Follow all instructions carefully.
Answer all questions.





This booklet consists of 12 printed pages.

SmileTutor.sg

Section A (15 x 2 marks = 30 marks)

For each question from 1 to 15, 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 provided.

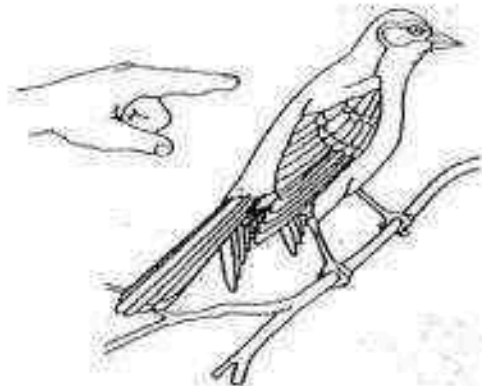
1. Study the classification table below.

Group A	Group B
 Eagle	 Chair
 Tree	 Toy Cat

Which one of the following headings best represents Group A and Group B?

	Group A	Group B
(1)	Can fly	Cannot fly
(2)	Has 2 legs	Has 4 legs
(3)	Can reproduce	Cannot reproduce
(4)	Does not need air, water and food	Needs air, water and food

2. Sanjay saw a bird perched on a tree branch. He tried to touch the bird with his finger as shown below. The bird flew away.



Which characteristic of living things best explains the above reaction?

- (1) Living things can grow.
- (2) Living things can have young.
- (3) Living things can move around on their own.
- (4) Living things can respond to changes around them.

3. Look at the pictures below.



Picture A



Picture B

Based on the pictures above, what can we conclude about the plants?

- (1) They have weak stems.
- (2) They are found on land.
- (3) Their fruits can be eaten.
- (4) They are found in different places.

4. Anna has classified some plants in groups X and Y.

X	Y
Moss	Chilli plant
Bird's nest fern	Pong Pong Tree

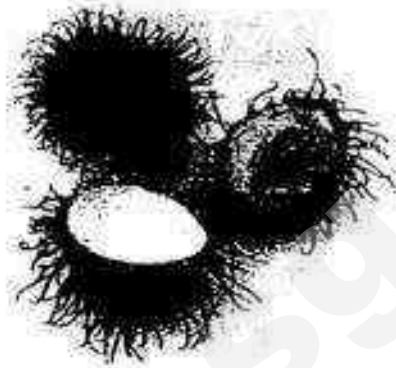
Based on the classification table above, which of the following is the most suitable headings for X and Y?

	X	Y
(1)	Flowering	Non-flowering
(2)	Non-flowering	Flowering
(3)	Fruits can be eaten	Fruits cannot be eaten
(4)	Fruits cannot be eaten	Fruits can be eaten

5. Look at the pictures below.



Starfruit



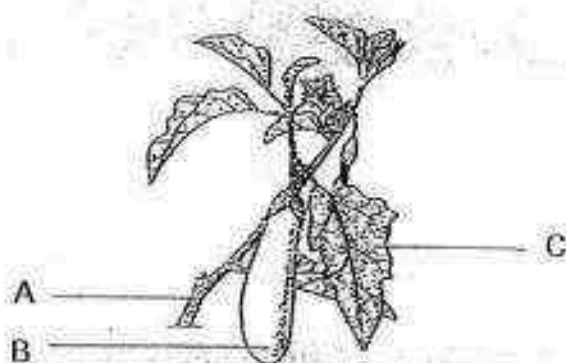
Rambutan

Based on the pictures shown, which of the following is/are difference(s) between the two fruits?

- A Shape
- B Texture of skin
- C Number of seed(s)

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

6. The drawing below shows a plant.



Which one of the following correctly matches parts A, B and C to the plant parts?

	A	B	C
(1)	leaf	stem	flower
(2)	stem	fruit	leaf
(3)	flower	stem	leaf
(4)	stem	leaf	fruit

7. Look at the pictures below.



Animal P



Animal Q

How are the two animals similar?

- (1) The way they move.
- (2) Their outer covering.
- (3) The way they reproduce.
- (4) The number of legs they have.

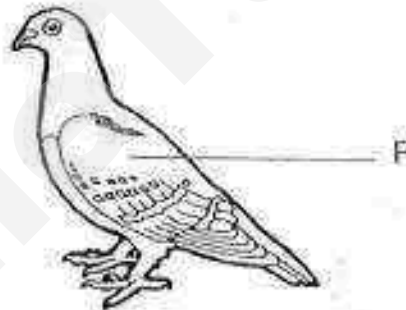
8. Some animals are classified based on their animal groupings as shown below.

Group S	Group T	Group U
Dogs	Pigeons	Sharks
Cats	Owls	Salmon

In which groups would chickens, bats and goldfish be placed?

	Chickens	Bats	Goldfish
(1)	Group T	Group S	Group U
(2)	Group S	Group U	Group T
(3)	Group T	Group U	Group S
(4)	Group S	Group T	Group U

9. Look at the picture shown below.

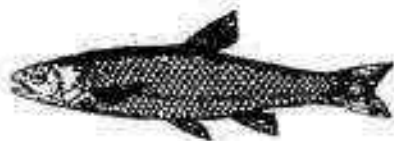


What is the function of the part labelled F?

- A To fly
- B To reproduce
- C To keep warm

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

10. The diagram below shows two animals.



Fish



Snake

Which of the following statements about the two animals are true?





- A Both lay eggs.
- B Both have gills.
- C Both have scales.
- D Both live in water.

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

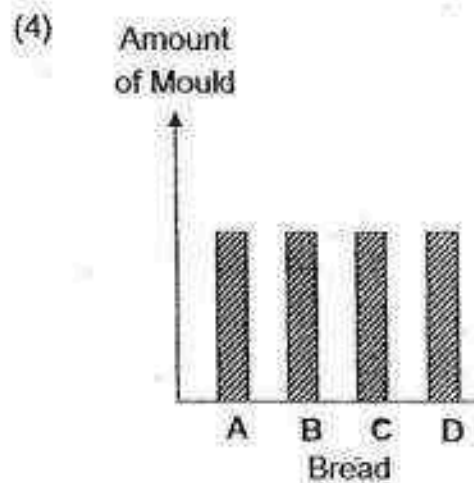
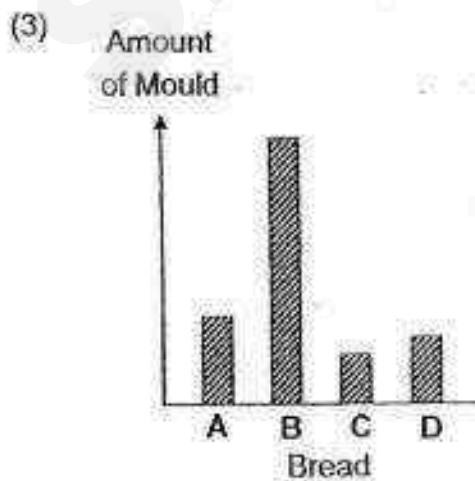
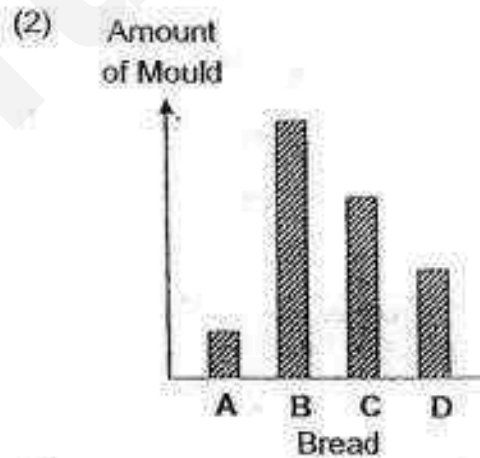
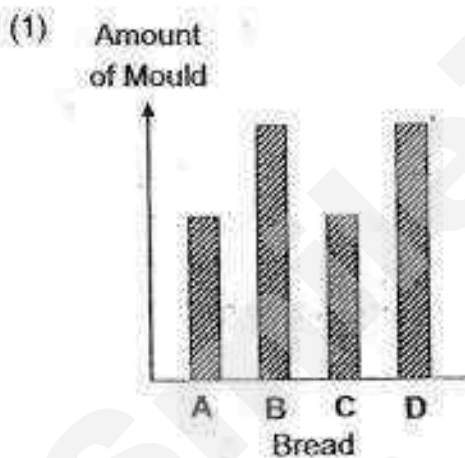
11. Which one of the following is true for both fungi and bacteria?

	Fungi	Bacteria
(1)	Harmful	Useful
(2)	Can make their own food	Cannot make their own food
(3)	Can only be found on bread	Can be found everywhere
(4)	Some can be seen without a microscope	Can only be seen with a microscope

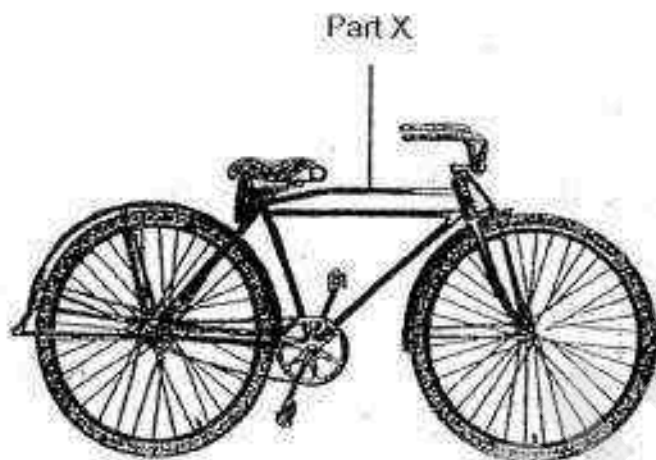
12. The diagram below shows 4 similar slices of bread. Two slices have been toasted and placed inside Ziploc bags while the other two were sprinkled with water and placed on plates. They were then placed in different locations.

A	B	C	D
Plates		Ziploc bags	
			
Moist Bread	Moist Bread	Toasted Bread	Toasted Bread
Placed in the Refrigerator	Placed in the Garden	Placed in the Refrigerator	Placed in the Garden

Which one of the following graphs best represents the amount of mould on each bread after 2 weeks?



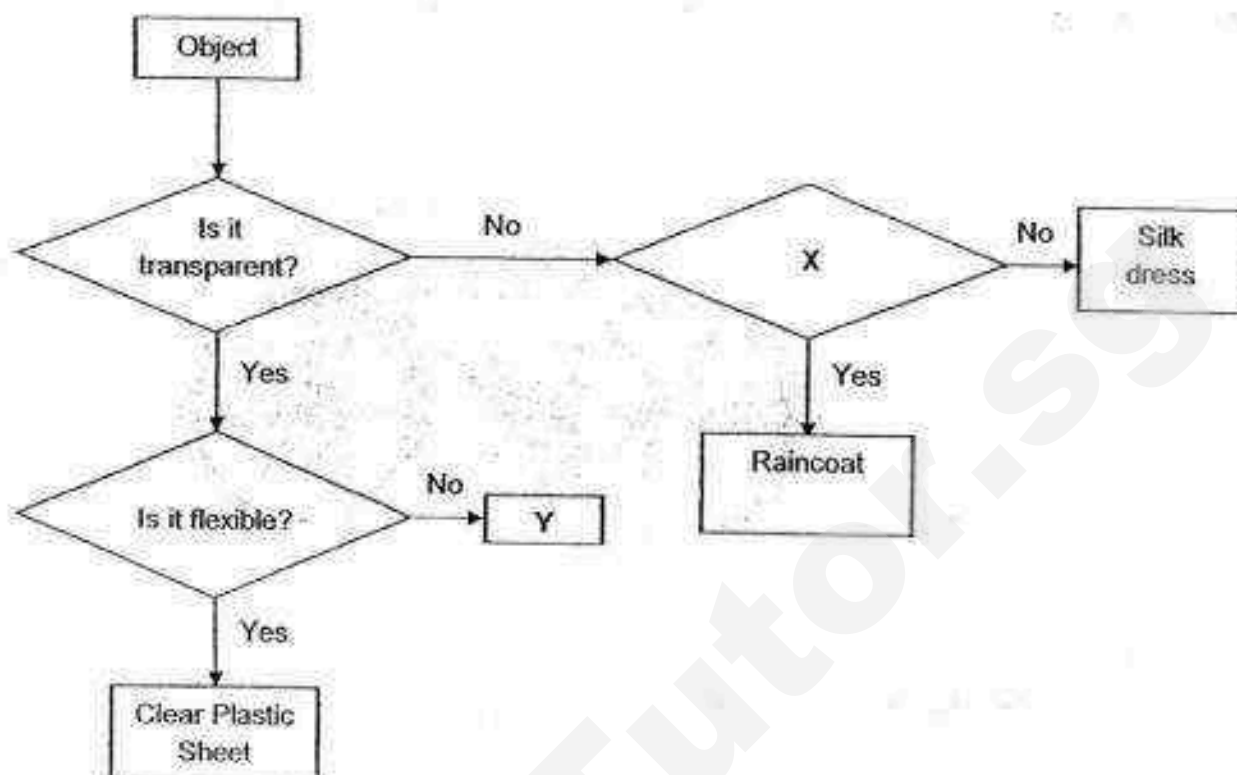
13. Hamid wanted to make a bicycle frame, Part X, as shown below.



Why should part X be made of metal?

- A Metal is strong.
 - B Metal is waterproof.
 - C Metal does not float on water.
 - D Metal breaks easily when bent.
-
- (1) A and B only
 - (2) C and D only
 - (3) A, B and D only
 - (4) B, C and D only

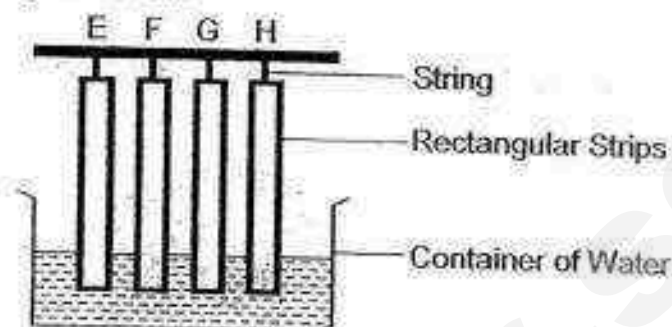
14. Study the flowchart given below.



Which one of the following best represents X and Y?

	X	Y
(1)	Is it waterproof?	Cotton Towel
(2)	Is it waterproof?	Glass Cup
(3)	Does it float on water?	Metal Rubber Glass Bottle
(4)	Does it float on water?	Black Trash Bag

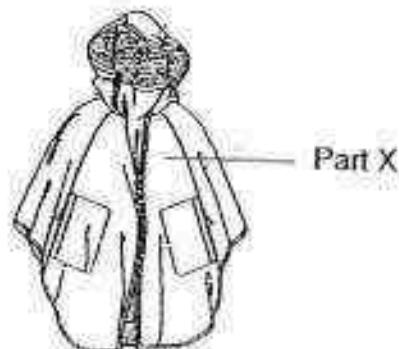
15. Jack conducted an experiment to measure the amount of water absorbed by 4 different materials, E, F, G and H. He took 4 rectangular strips of materials, each of equal length, size and thickness, and dipped all of them into the water as shown in the diagram below.



After 10 minutes, he noticed that some water has risen to different levels along the 4 rectangular strips as shown in the diagram below.



Based only on the results shown above, which material is most suitable for making part X of the raincoat shown below?



- (1) E
- (2) F
- (3) G
- (4) H

END OF BOOKLET A

Name : _____ ()

Class : Primary 3 _____

CHIJ ST NICHOLAS GIRLS' SCHOOL



Primary 3

Semestral Assessment 1 – 2016

SCIENCE

BOOKLET B

12 May 2016

Total Time for Booklets A and B: 1 hour 15 minutes

7 questions
20 marks

Do not open this booklet until you are told to do so.
Follow all instructions carefully.
Answer all questions.

This paper consists of 9 printed pages.

Booklet A	30
Booklet B	20
Total	50

Parent's Signature/Date _____

Section B (20 marks)

For questions 16 to 22, write your answers in this booklet. The number of marks available is shown in the brackets [] at the end of each question or part question.

16. Study the things given below.



Airplane



Bee



Box



Sparrow



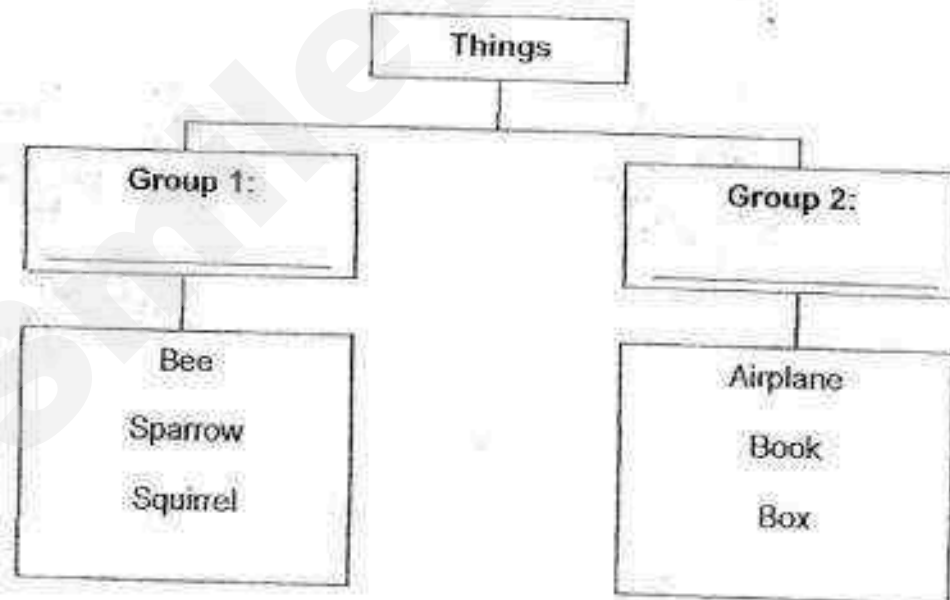
Book



Squirrel

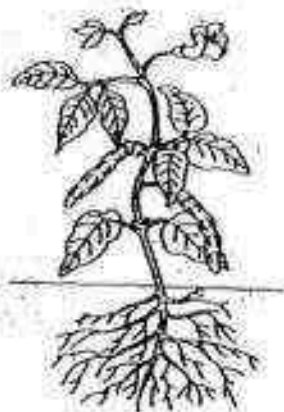
- (a) In the spaces provided below, give suitable headings based on how the above things are classified as shown below.

[2]



- (b) Henry is given a robot dog which can dance when he claps his hand. Based your answer in (a), in which group should he place the robot dog? [1]

17. (a) Look at the organism shown below.



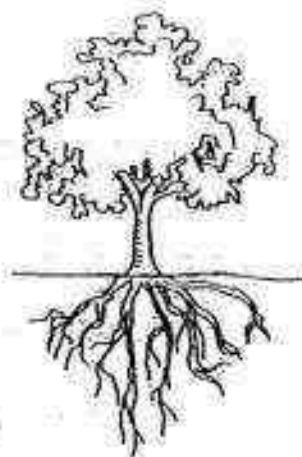
Is the above organism a plant? Explain your answer.

[1]

- (b) The diagram below shows two plants, C and D.



Plant C

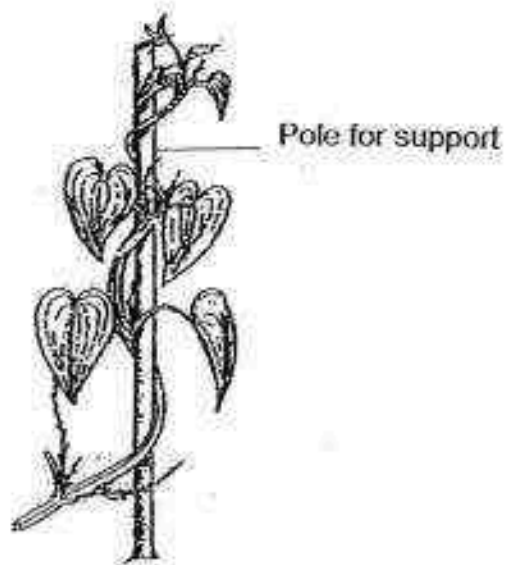


Plant D

State one difference between the roots of plant C and plant D?

[1]

(c) The diagram below shows two plants, E and F.



Plant E



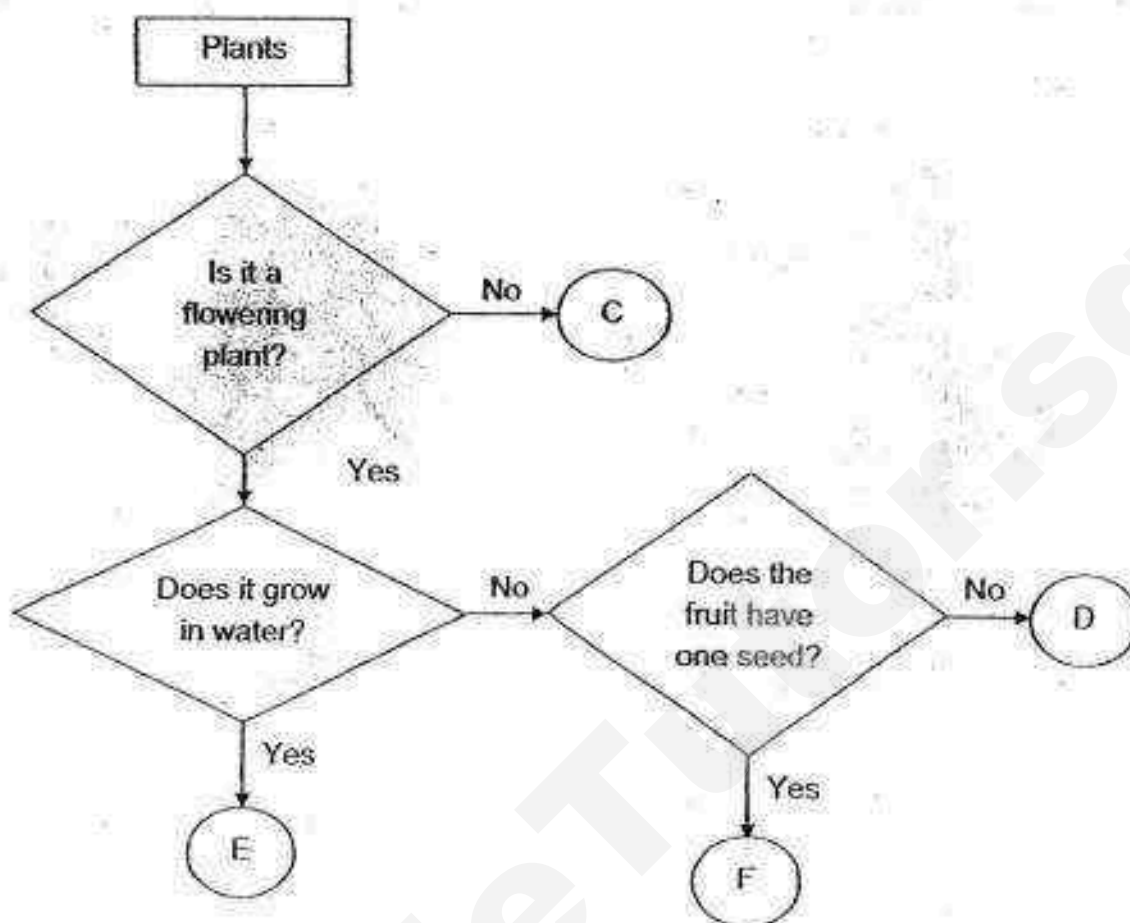
Plant F

State one **difference** between the stems of plant E and plant F.

[1]



18. Study the flowchart below.



(a) Based on the above flowchart, state one difference between plant C and E. [1]

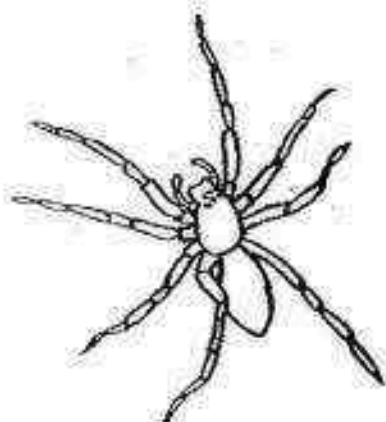
(b) Based on the above flowchart, state one similarity between plant D and F. [1]

(c) Based on the above flowchart, where would you put the following plant?
Write the letter only. [1]

Tomato: _____



19. The diagram below shows two organisms, T and S.



T



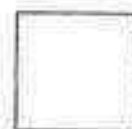
S

(a) Is organism T an insect? Give 2 reasons for your answer.

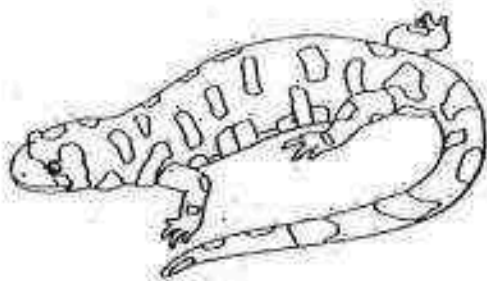
[1]

(b) State the reproduction method for organism S.

[1]



20. The diagram below shows a salamander and a dolphin.



Salamander



Dolphin

- (a) State the differences in, (i) the reproduction methods and, (ii) the outer covering of the salamander and the dolphin.

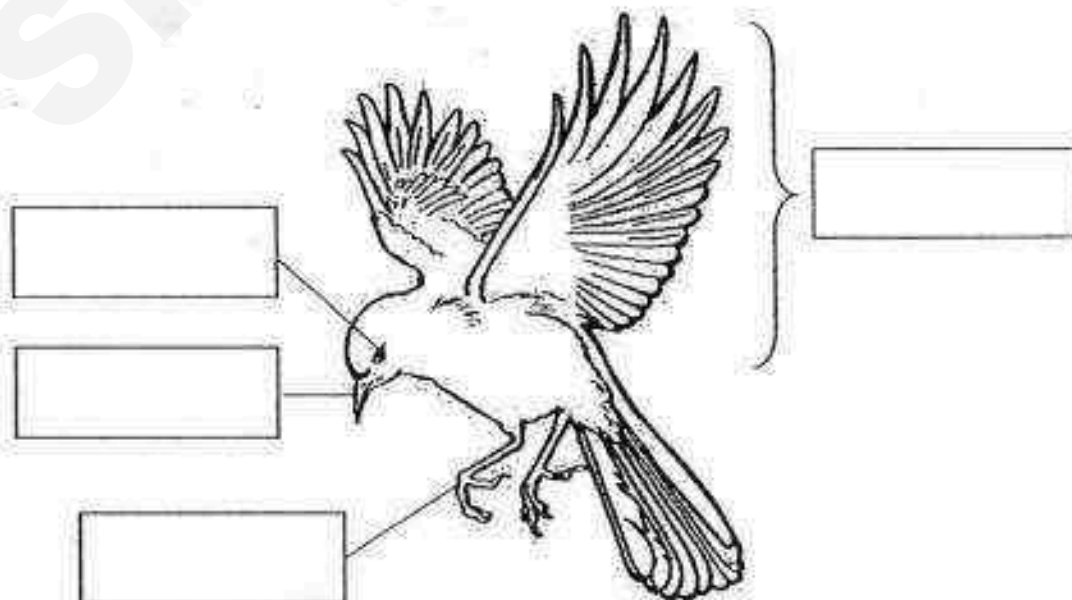
[2]

(i) _____

(ii) _____

- (b) The picture below shows an organism. Label the four parts of the organism by writing in the boxes provided.

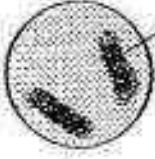



[2]



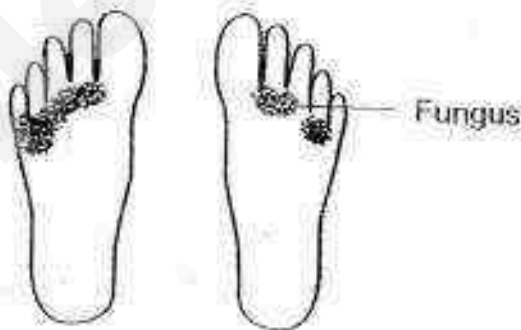
21. Sam sprinkled different amounts of water on a few similar pieces of biscuits and observed the mould growth. He recorded his findings in the table below by shading the amount of mould found on each biscuit after 1 week.

- (a) Predict the amount of mould found in biscuit D by shading in the circle given below.

[1]

Biscuit	A	B	C	D
Amount of water on the Biscuit (units)	5	10	15	20
Amount of Mould found on the Biscuit				

- (b) Sam has a medical condition in which fungus grow on his feet.



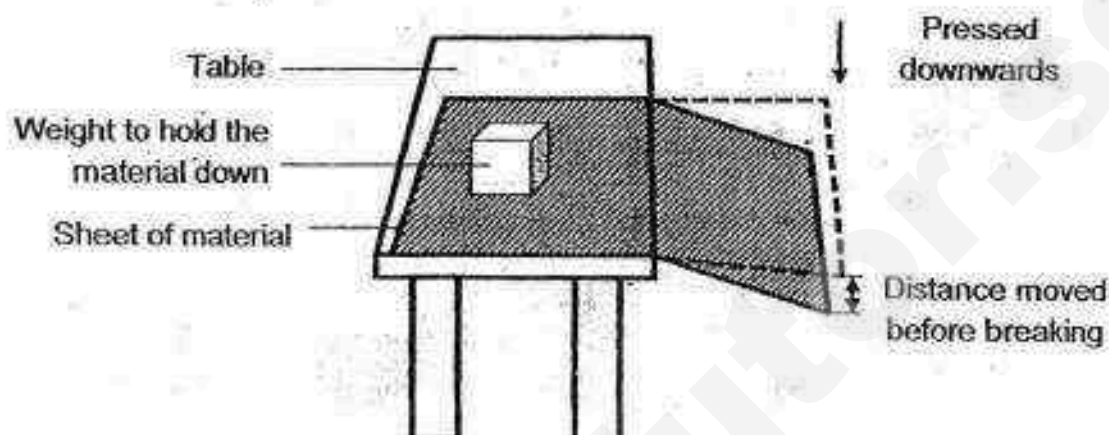
The doctor advised him to dry his feet thoroughly with a clean towel each time his feet get wet.

Explain how drying his feet helps reduce the growth of fungus on his feet.

[1]



22. James carried out an experiment to compare the flexibility of 3 different materials, A, B and C, each of the same shape, size and thickness. Each sheet of material was placed over the edge of a table with one end of the sheet pressed downwards as shown below. He measured the distance each sheet of material can be pressed downwards before it breaks.



James recorded his results in the table below.

Material	A	B	C
Distance moved by material before breaking (cm)	10	0	30

- (a) Based on the results shown above, which material, A, B or C, is most suitable for making a swimming jump board? [1]

- (b) Explain your answer in (a). [1]

- (c) Suggest what material B is made of. [1]

END OF BOOKLET B

YEAR : 2016
 LEVEL : PRIMARY 3
 SCHOOL : CHIJ ST NICHOLAS GIRLS'
 SUBJECT : SCIENCE
 TERM : SA1

Booklet A

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

Booklet B

Q16

(a)

Group 1:
Living things

Group 2:
Non-living things

(b)

Group 2.

Q17

(a)

Yes, it has a stem, leaves, flowers and roots.

(b)

Roots of plant C are above the ground but roots of plant D are below the ground.

(c)

Plant E has a weak stem while plant F has a strong stem.

Q18

(a)

Plant C is not a flowering plant while plant E is a flowering plant.

(b)

Plant D and F are flowering plants.

(c)

Tomato : D

Q19

- (a) Organism T is not an insect.
It has two body part while an insect have three body parts.
It has eight legs while an insect has six legs.
- (b) It lay eggs.

Q20

- (a) (i) The salamander lay eggs while the dolphin give birth to its young alive.
- (ii) The salamander has moist skin but the dolphin have hair.
- (b)



Q21

(a)



- (b) Fungus needs moisture to grow. If Sam feet is dry, fungus cannot grow on his feet thus, Sam's feet would stop growing fungus.

Q22

- (a) Material C.
- (b) Material C is the most flexible as it can be pressed down to the greatest distance without breaking.
- (c) Wood.

End



MARIS STELLA HIGH SCHOOL (PRIMARY)

SEMESTRAL ASSESSMENT 1

SCIENCE

12 MAY 2016

BOOKLET A

NAME: _____ ()

CLASS: Primary 3 ()

20 questions

30 marks

Total Time for Booklets A & B: 1 h

DO NOT OPEN THIS BOOKLET UNTIL YOU ARE TOLD TO DO SO.

FOLLOW ALL INSTRUCTIONS CAREFULLY.

For each question from 1 to 20, four options are given. One of them is the correct answer. Make your choice (1, 2, 3 or 4) and shade the correct oval (1, 2, 3 or 4) on the Optical Answer Sheet (OAS). Questions 1 to 10 carry 1 mark each. Questions 11 to 20 carry 2 marks each. **(30 marks)**

1 Which one of the following characteristics is correct for all living things?

- (1) They increase in size.
- (2) They give birth to their young alive
- (3) They can move from place to place
- (4) They only need air and water to survive.

2 Which of the following statements are correct for all mammals?

- A They lay eggs.
- B They have hair.
- C They live on land.
- D They suckle their young.

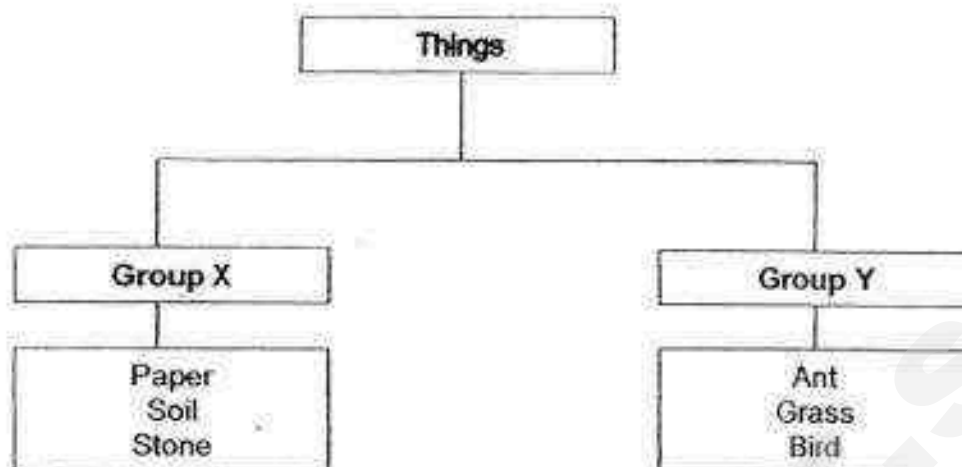
- (1) A and B only
- (2) B and C only
- (3) A and D only
- (4) B and D only

3 Which of the following statements show that living things respond to changes around them?

- A An earthworm moving away from light
- B A girl putting on a jacket in a cold room
- C The leaves of a plant closing when touched

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

4. Study the classification chart below.



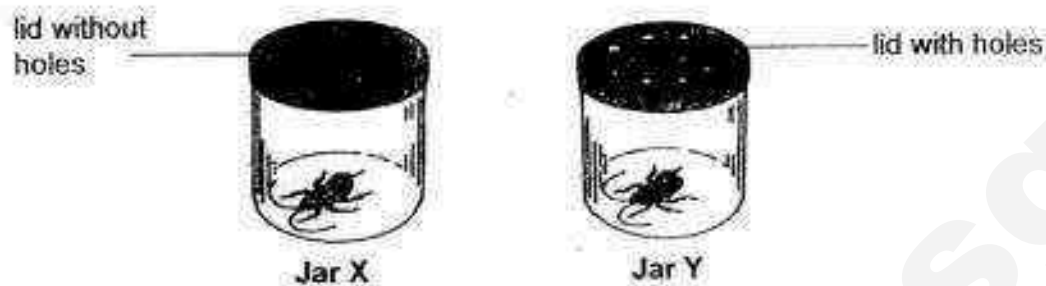
Which of the following can be grouped correctly into Group X and Group Y?

	Group X	Group Y
(1)	marble	water
(2)	hibiscus plant	marble
(3)	toy car	mushroom
(4)	toadstool	sparrow

5. Which animal is wrongly matched to its group?

	Group	Animal
(1)	birds	chicken
(2)	insects	grasshopper
(3)	reptiles	frog
(4)	mammals	whale

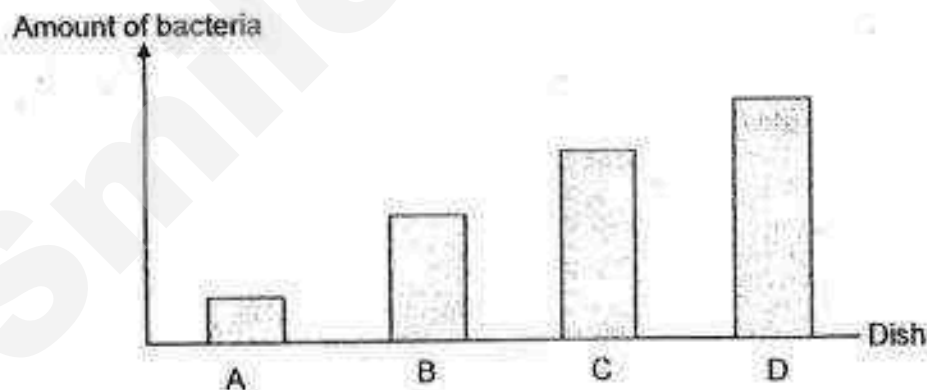
- 6 Carol placed one cockroach each in two jars, X and Y, as shown below. A few weeks later, she observed that the cockroach in Jar X had died.



Which characteristics of living things does this experiment show?

- (1) Living things grow.
- (2) Living things reproduce.
- (3) Living things need air to survive.
- (4) Living things can move by themselves.

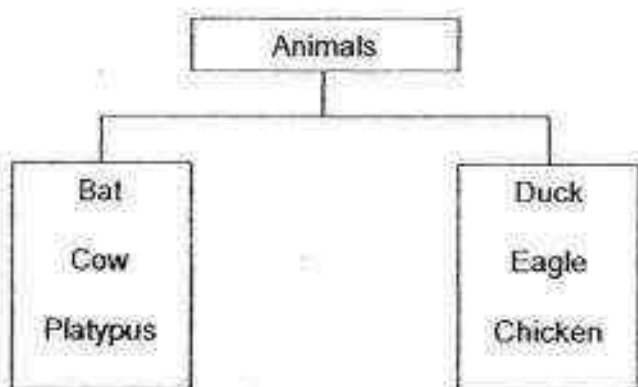
- 7 The same amount of Bacteria X was grown in four dishes containing different types of food. The bar graph shows the amount of bacteria on the dishes after some time.



In which dish did bacteria X grow best?

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

- 8 Study the classification chart below.



These animals are classified according to _____

- (1) how they move
 - (2) their body covering
 - (3) how they reproduce
 - (4) their number of legs
- 9 Which one of the following is correct about bacteria?
- (1) Bacteria are all harmful.
 - (2) Bacteria do not reproduce.
 - (3) Bacteria do not make their own food.
 - (4) Bacteria do not respond to changes around them.
- 10 Four boys each made a statement about fungi.

Alex : All fungi are edible.
Ben : All fungi are harmful.
Charles : All fungi can be seen with our naked eye.
David : Fungi feed on both dead and living things for food.

Which boy made the correct statement?

- (1) Alex
- (2) Ben
- (3) Charles
- (4) David

- 11 James put 6 tadpoles in an aquarium and recorded the number of tadpoles that were alive in the aquarium for a week in the table below.

On day 7, James found 6 frogs in the aquarium and no tadpole.

Time	Number of tadpoles
Day 1	6
Day 4	6
Day 7	0

Based on the information given in the table, which one of the following statements is correct about the tadpoles?

- (1) They will die.
- (2) They will grow.
- (3) They can reproduce.
- (4) They need air, food and water to survive.

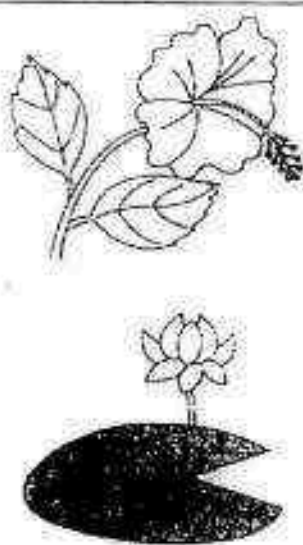

- 12 Study the table below.

Group A	Group B
bird's nest fern	chilli
staghorn fern	watermelon

Which one of the following is correct?

	Group A	Group B
(1)	produce flowers	do not produce flowers
(2)	reproduce by spores	reproduce by seeds
(3)	cannot make their own food	can make their own food
(4)	cannot be seen with the naked eye	can be seen with the naked eye

- 13 John classified some flowers into two groups, A and B, as shown below.

Group A	Group B
	

Which of the following flowers can be classified in Group A?



Flower W



Flower X



Flower Y



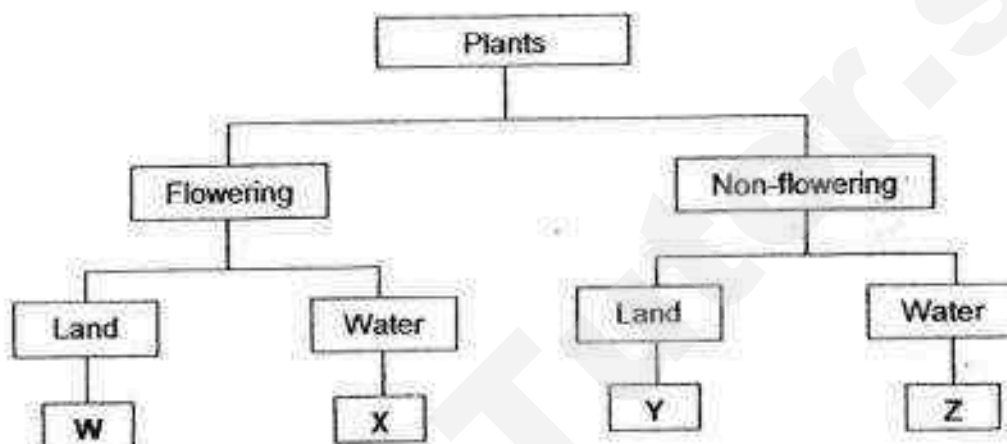
Flower Z

- (1) W and Y only
- (2) X and Z only
- (3) X, Y and Z only
- (4) W, X and Z only

- 14 Samuel observed 2 plants, A and B, in the Science garden and recorded his observations in the table below:

Plant A	Plant B
Bears fruits	Does not bear fruits
Grows on land	Grows in water

He later classified the plants into the classification chart below.

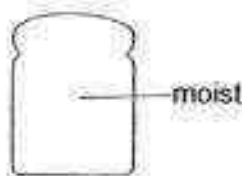


Where should Samuel classify Plant A and Plant B?

	Plant A	Plant B
(1)	W	X
(2)	X	Y
(3)	Y	Z
(4)	W	Z

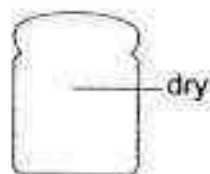
- 15 James placed a loaf of bread each on four plates. He then placed them in different places as shown below.

Set-up A



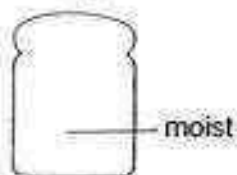
In a refrigerator

Set-up B



In a refrigerator

Set-up C



In the classroom

Set-up D



In the classroom

In which set-up will the bread become mouldy the fastest?

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

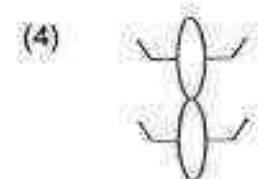
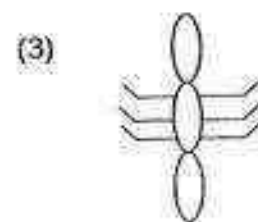
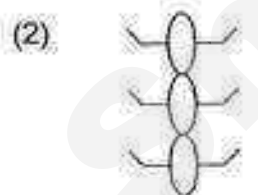
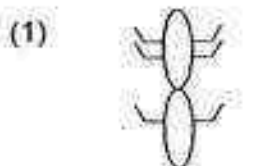
- 16 The table below shows the characteristics of two animals E and F.

Animal	Number of legs				Method of reproduction	
	0	2	4	6	Lays eggs	Gives birth to young alive
E			✓			✓
F	✓				✓	

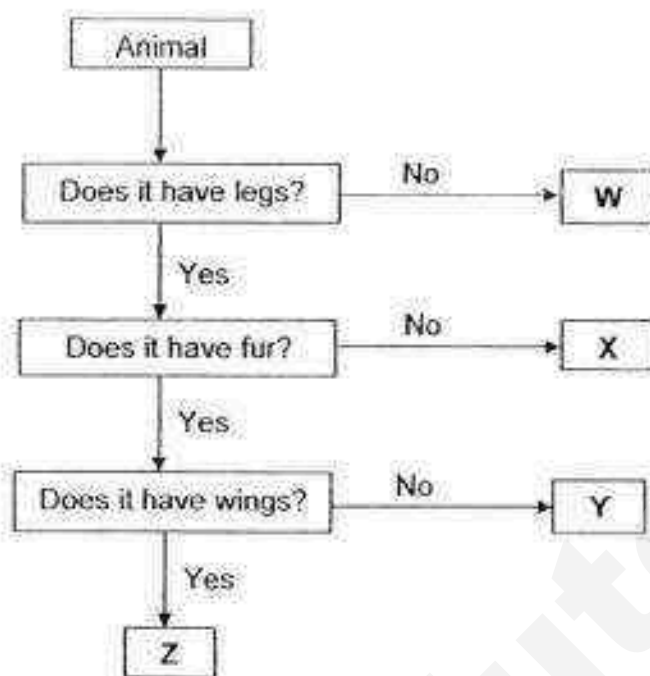
What outer body coverings will animals E and F most likely have?

	Animal E	Animal F
(1)	hair	scales
(2)	feathers	hair
(3)	moist skin	hair
(4)	hair	feathers

- 17 Which of the following correctly represents an insect?



18 Study the flow chart below.



Which letter best represents a bear?



- (1) W
- (2) X
- (3) Y
- (4) Z

- 19 Eric had to classify the ~~four~~^{three} animals shown below.



eagle

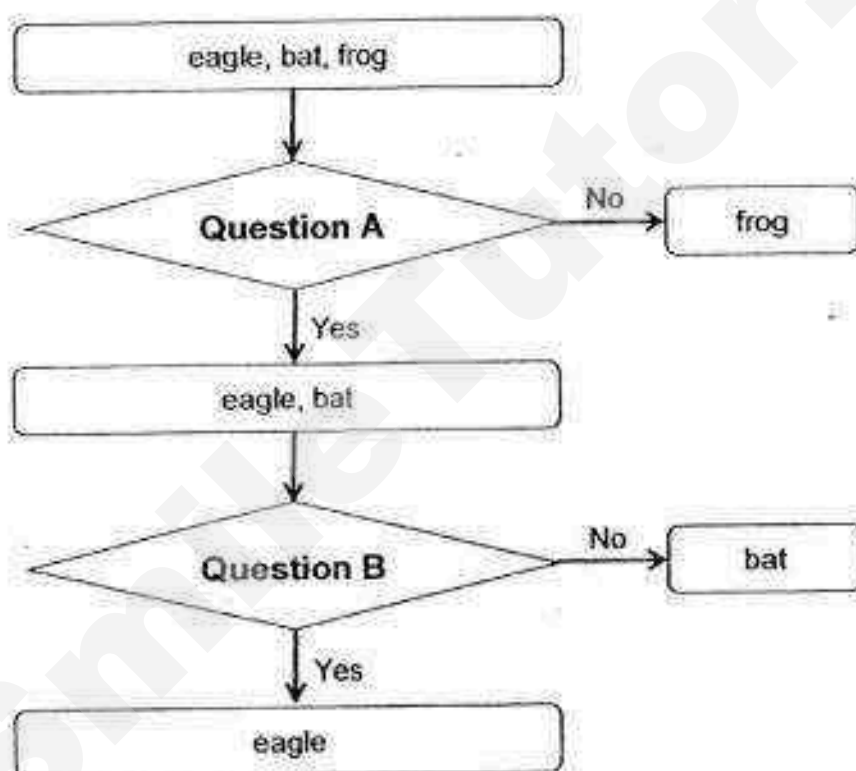


bat



frog

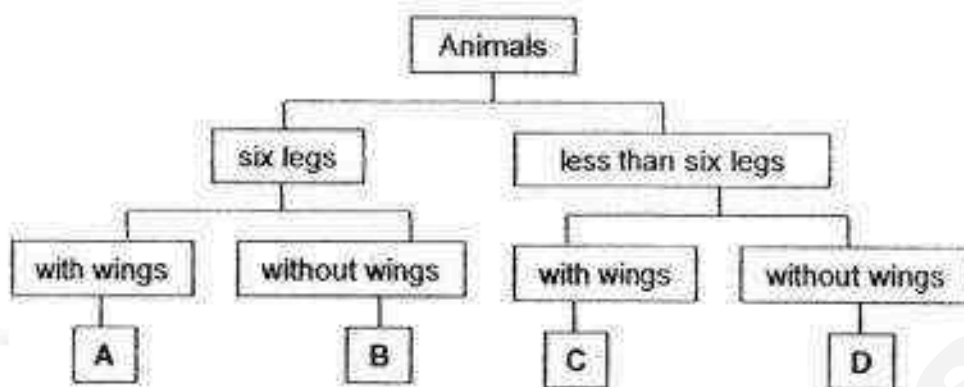
He classified them with the help of the chart below.



What were the questions, A and B?

	Question A	Question B
(1)	Does it lay eggs?	Does it have wings?
(2)	Does it have wings?	Does it live in water?
(3)	Does it live on land only?	Does it lay eggs?
(4)	Does it have two legs?	Does it live in water?

20 Study the chart below.



Which letter represents Animal X?



Animal X

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

End of Booklet A



MARIS STELLA HIGH SCHOOL (PRIMARY)

SEMESTRAL ASSESSMENT 1

SCIENCE

12 MAY 2016

BOOKLET B

NAME: _____ ()

CLASS: Primary 3 ()

8 questions

20 marks

Total Time for Booklets A & B: 1 h

DO NOT OPEN THIS BOOKLET UNTIL YOU ARE TOLD TO DO SO.
FOLLOW ALL INSTRUCTIONS CAREFULLY.

BOOKLET A: _____ / 30

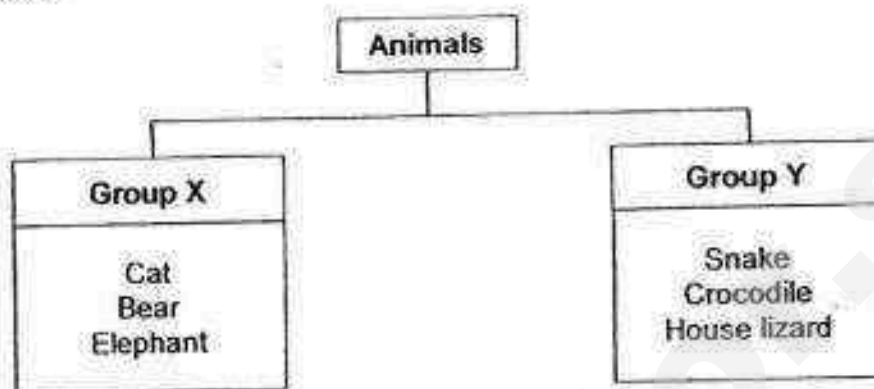
BOOKLET B: _____ / 20

TOTAL: _____ / 50

PARENT'S SIGNATURE: _____

For questions 21 to 28, write your answers in this booklet. The number of marks available is shown in brackets [] at the end of each question or part question. **(20 marks)**

- 21 The classification table below classifies six animals according to their method of reproduction.



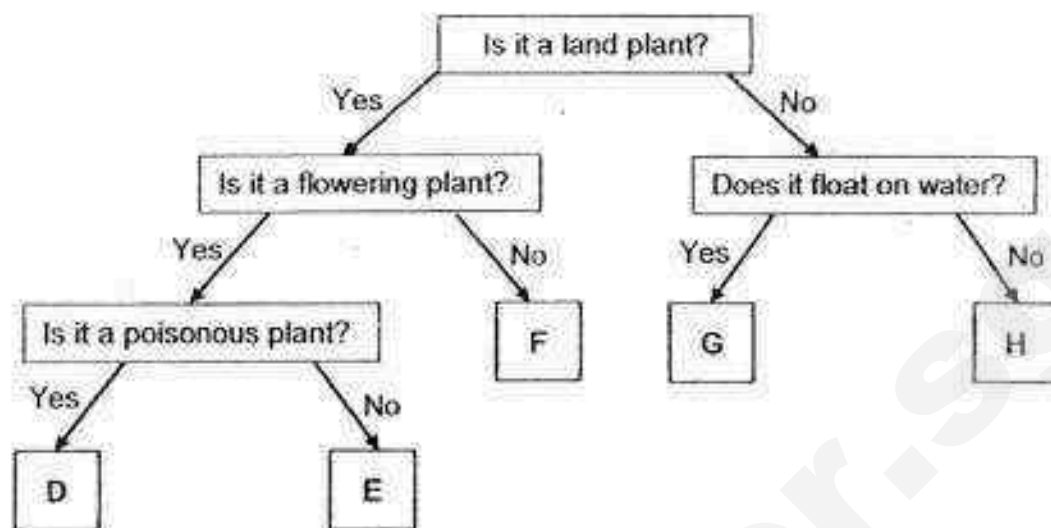
- (a) Give a suitable heading for [1]

Group X: _____

Group Y: _____

- (b) In which group (X or Y) should a turtle be classified under? [1]

22 Study the flowchart below.



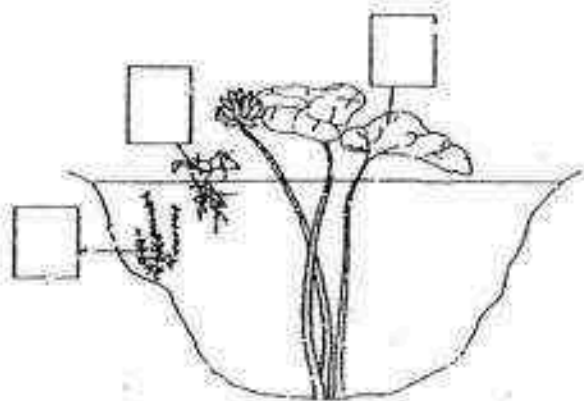
(a) Based on the flowchart, state two similarities between Plant D and Plant E. [1]

(i) _____

(ii) _____

(b) Based on the flowchart, state one difference between Plant F and Plant G. [1]

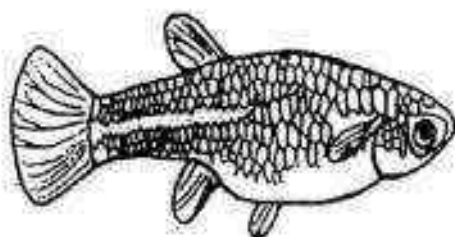
(c) Which of the following can possibly be Plant H? [1]
Place a tick (✓) in the correct boxes provided.



	3
--	---

(Go on to the next page)

23 Study Animal X below.



Animal X

(a) In which animal group will Animal X be classified in? [1]

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

Compare Animal Y below.



Animal Y

(c) State one similarity and one difference between Animal X and Animal Y. [2]

Similarity: _____

Difference: _____

24 Julia observed some organisms and classified them in the table below.

Group X	Group Y
rose	yeast
sunflower	mould

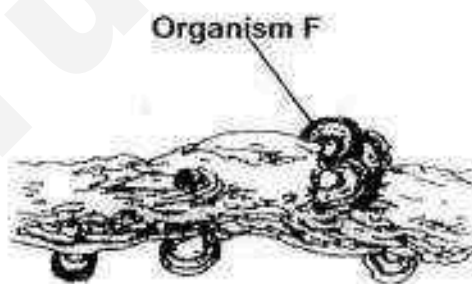
(a) Give suitable headings for Group X and Group Y.

[1]

Group X : _____

Group Y : _____

Compare organisms E and F as shown below.



(b) State one similarity between Organism E and Organism F.

[1]

- 25 Ali observed different organisms and classified them into 3 groups, A, B and C. He recorded the characteristics of each group in the table shown below. A tick (✓) means that the characteristic is present and a cross (x) means that the characteristic is absent.

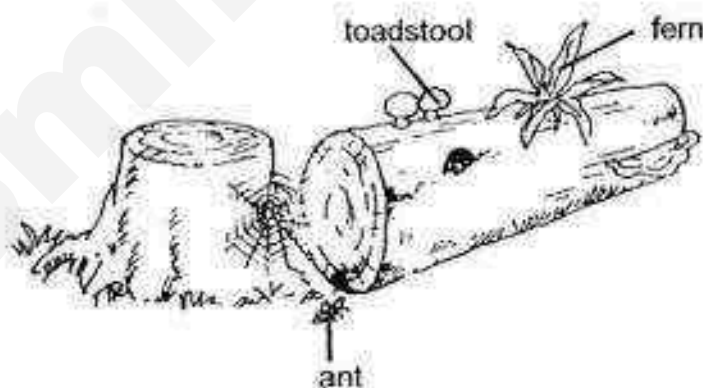
Group	Change in size	Make its own food	Reproduce	Move from place to place on its own
A	✓	✓	✓	x
B	✓	x	✓	x
C	✓	x	✓	✓

- (a) Which of the above groups is the Fungi group?
Give reasons for your choice.

[2]

- (b) Based on Ali's table, classify the 3 organisms (ant, toadstool and fern) below into groups A, B and C.

[1]



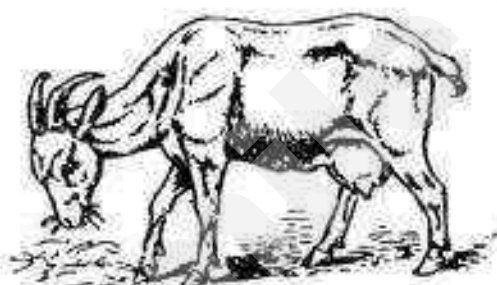
Group A	Group B	Group C

- 26 The table below shows the characteristics of animals X, Y and Z.

Characteristics	Animal		
	X	Y	Z
Has hair as outer covering	Yes	No	Yes
Has dry scaly skin	No	Yes	No
Lays eggs	Yes	Yes	No

- (a) Based on the information above, state one similarity between animals X and Y. [1]

- (b) Which of the following can be an example of animal Z?
Place a tick (✓) in the box provided. [1]



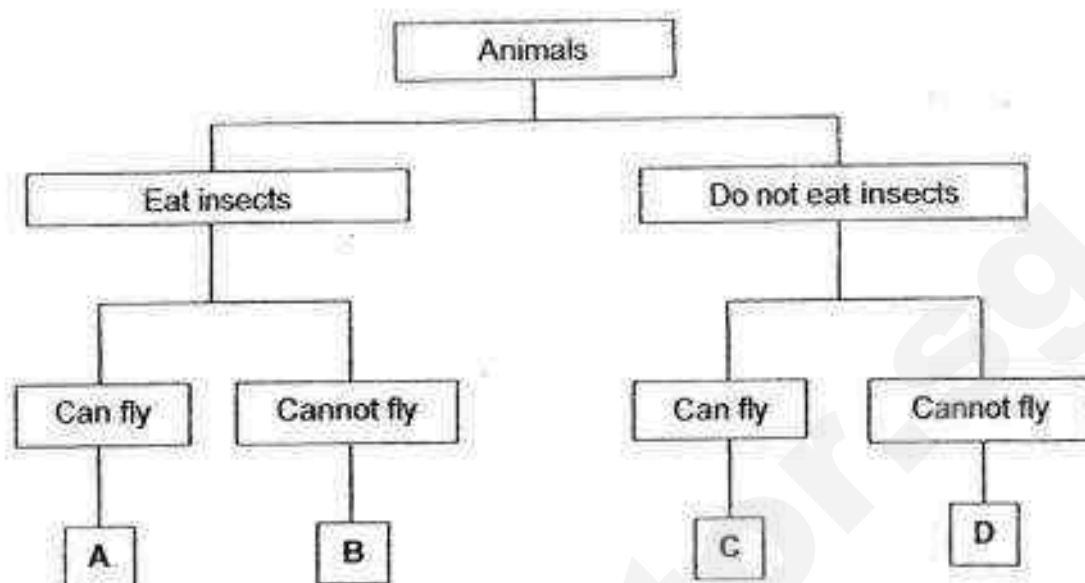
P

☐

Q

☐

27 Study the classification chart below.



(a) Describe Animal A based on the classification chart above. [1]

(b) State one difference between Animal B and Animal C. [1]

- 28 Joseph planted some sunflower seeds and recorded the height of the seedlings in the table below.

Day	Height of seedling (cm)
1	0
3	4
7	8

- (a) From the table above, what was observed about the height of the seedlings from Day 1 to Day 7? [1]

- (b) What characteristic of living things does Joseph's observation show? [1]

End of Booklet B

	2
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YEAR : 2016
 LEVEL : PRIMARY 3
 SCHOOL : MARIS STELLA HIGH
 SUBJECT : SCIENCE
 TERM : SA1

Booklet A

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

Booklet B

Q21 (a) Group X : Give birth to young alive.

Group Y : Lay eggs.

(b) Group Y.

Q22 (a) (i) Both are flowering plant.

(ii) Both are land plant.

(b) F is a land plant but G is not a land plant.

(c)



Q23 (a) Animal X can be classified in the group fish.

(b) Animal X have fins so it can be classified in the group fish.

(c) Similarity : Both have eyes.

Difference : Animal X have fins but animal Y does not.

- Q24 (a) Group X : Reproduce by seeds / plant.
Group Y : Reproduce by spores / fungi.
- (b) They both grow on dead or living organisms.

- Q25 (a) B. Because it does not make its own food and cannot move from place to place by itself.

(b)

Group A	Group B	Group C
Fern	Toadstool	Ant

- Q26 (a) Both lay eggs.

- (b) P
- | |
|---|
| ✓ |
|---|

- Q27 (a) Animal A eat insects and can fly.
- (b) Animal B eat insects but animal C do not eat insects.

- Q28 (a) The height increased from day 1 to day 7.
- (b) Living things can grow.

End

METHODIST GIRLS' SCHOOL

Founded in 1887



MID- YEAR EXAMINATION 2016

PRIMARY 3

SCIENCE

BOOKLET A

Total Time for Booklets A and B: 1 hour 10 minutes

INSTRUCTIONS TO CANDIDATES

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

Follow all instructions carefully.

Answer all questions.

Shade your answers in the Optical Answer Sheet (OAS) provided.

Name: _____ ()

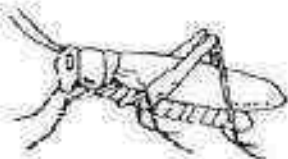



Class: Primary 3, _____

Date : 12 May 2016

This booklet consists of 12 printed pages including this page.

For each question from 1 to 20, 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 (OAS). [40 marks]

1. Study the classification table.

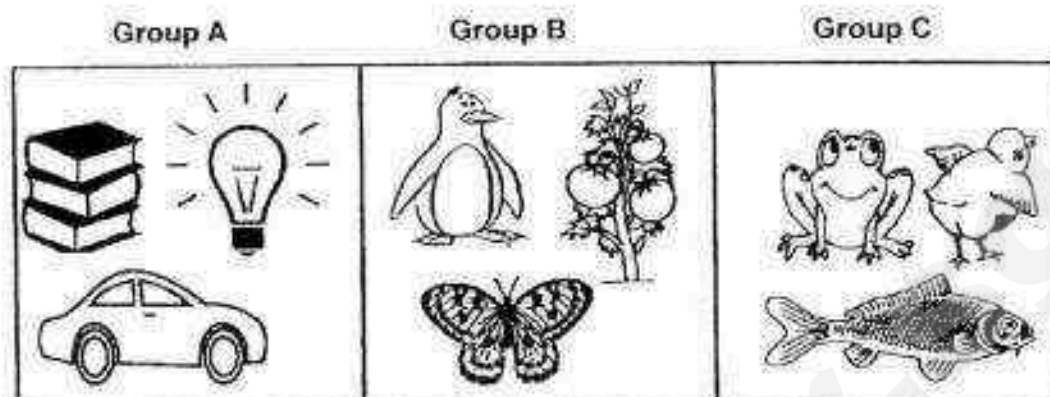
Group A	Group B
 grasshopper	 guitar
 plant	 chair

Which one of the following statements is true?

- (1) Group A needs air to survive.
- (2) Group A does not need food to stay alive.
- (3) Group B can respond to changes around it.
- (4) Group B can move by itself from place to place.

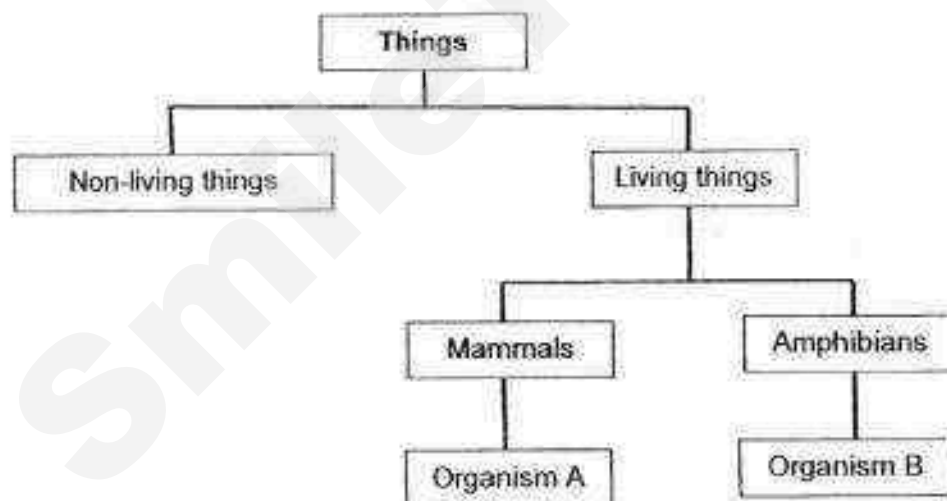
(Go on to the next page)

2. Study the groups of things below.



Which of the following is true?

- (1) Groups A and C can reproduce.
 - (2) Groups B and C need food to stay alive.
 - (3) Groups B and C cannot move on their own.
 - (4) Groups A and B cannot respond to changes.
3. Study the classification diagram below.

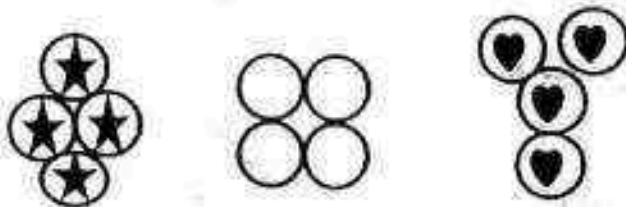


Which one of the following options best represents Organisms A and B?

	Organism A	Organism B
(1)	bat	salamander
(2)	whale	snake
(3)	anteater	lizard
(4)	platypus	crocodile

(Go on to the next page)

4. Raju had a container of plastic balls. He classified them into three groups.

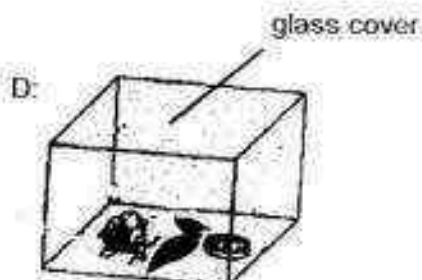
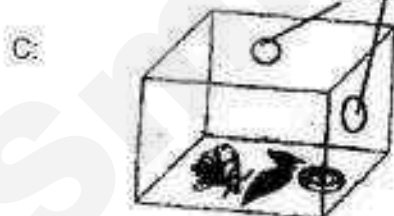
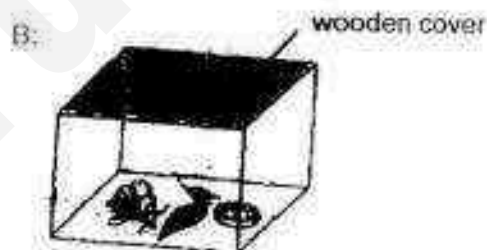
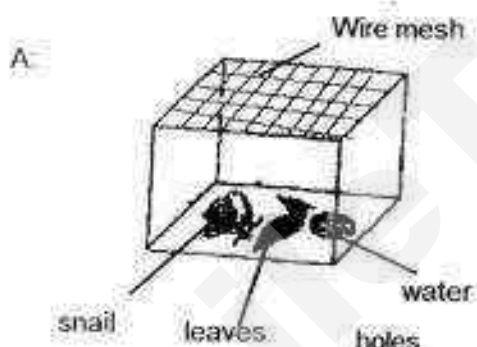


Raju has classified the balls according to their _____

- (1) size
(2) shape
(3) design
(4) arrangement
5. A snail, a dish of water and two leaves were placed inside each of the glass boxes.

Glass box without holes

Glass box with wooden cover



Glass box with holes

Coloured glass box

In which two set-ups will the snail stay alive after a week?

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

(Go on to the next page)

6. The pictures below show parts of a water melon plant and a chilli plant.



Water melon plant



chillies

Chilli plant

Which of the following statements best describe them correctly.

- A : They have fruits.
- B : They can make food.
- C : They have strong stems.
- D : They are flowering plants.

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

7. Which one of the following organism is not a plant?

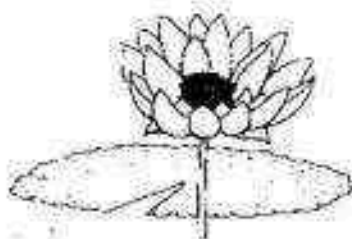
(1) (2)



(3)

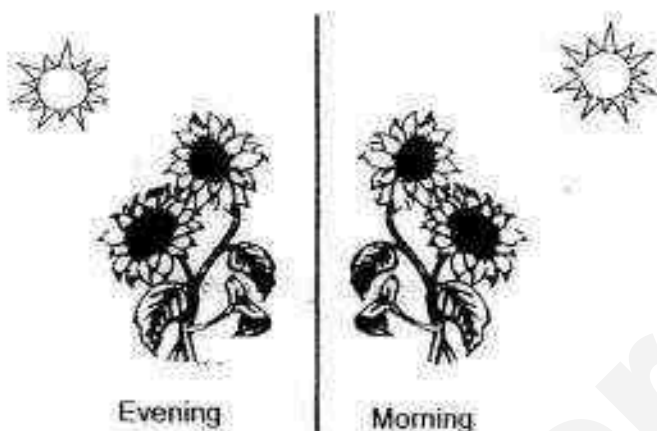


(4)



(Go on to the next page)

8. Nancy noticed that her sunflower plant always turns to face the direction of the sun.



Which of the following characteristics of living things must the sunflower have so that it can turn to face the sun?

- A : It can reproduce.
- B : It can respond to changes.
- C : It can move by itself from place to place.

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

9. The pictures below show some animals.

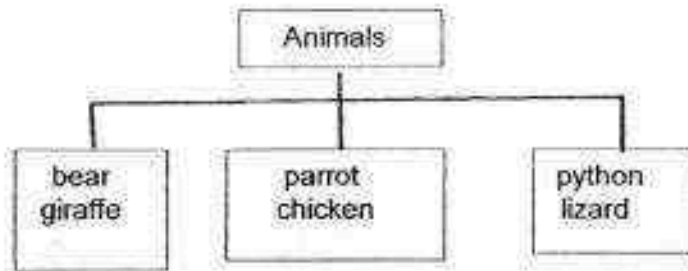


The animals are similar because they all have _____.

- (1) fins
- (2) hair
- (3) wings
- (4) feathers

(Go on to the next page)

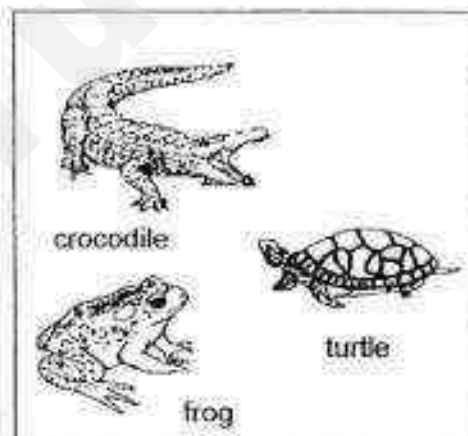
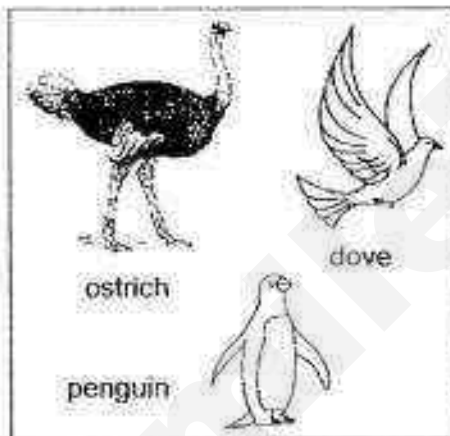
10. Study the classification chart below.



Which one of the characteristics is used to classify the animals?

- (1) The food they eat.
- (2) The way they move.
- (3) The place they live in.
- (4) Their outer body covering.

11. The animals below are classified into two groups as shown below.

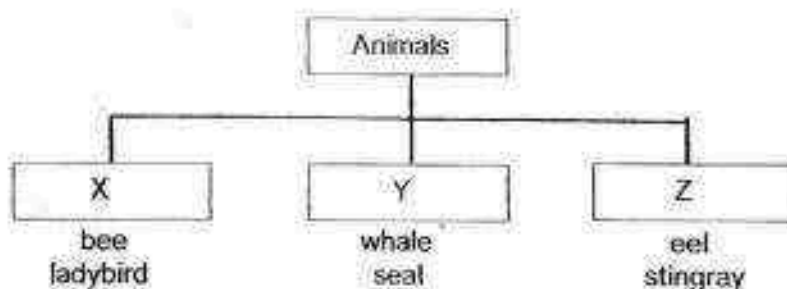


Which one of the animal is placed in the wrong group of animals?

- (1) dove
- (2) frog
- (3) turtle
- (4) ostrich

(Go on to the next page)

12. Study the classification chart below.



Which one of the following options show what X, Y and Z represent?

	X	Y	Z
(1)	bird	fish	amphibian
(2)	insect	mammal	fish
(3)	bird	amphibian	mammal
(4)	reptile	mammal	fish

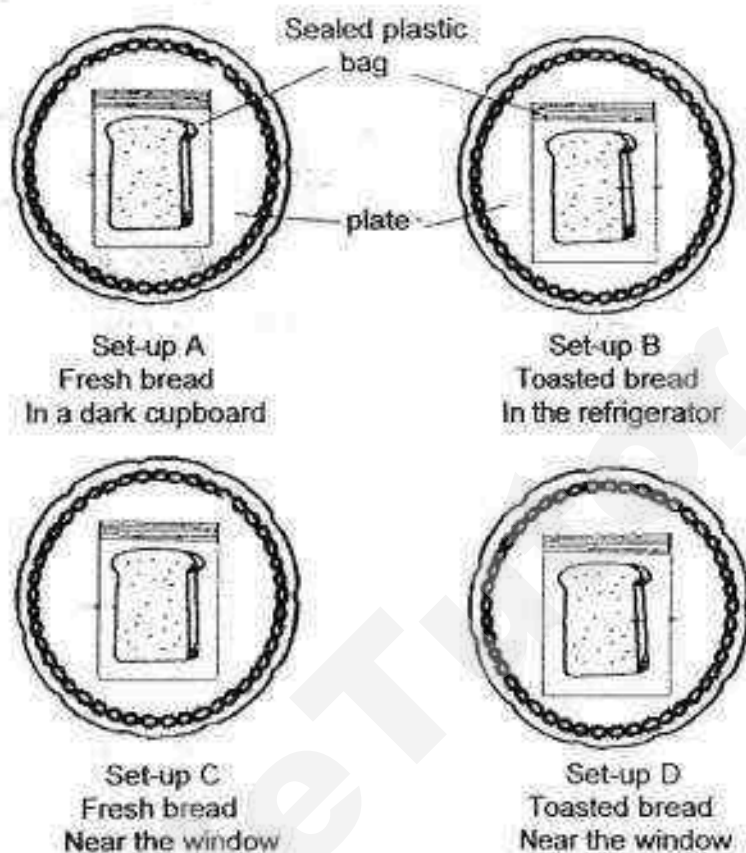
13. Which of the following statements are true about fungi?

- A : They are non-green plants
- B : They reproduce by spores.
- C : They cannot make their own food.
- D : They feed on other living or dead organisms.

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

(Go on to the next page)

14. Willy conducted an experiment to find out if mould grew faster with light. He prepared four set-ups, A, B, C and D as shown below.



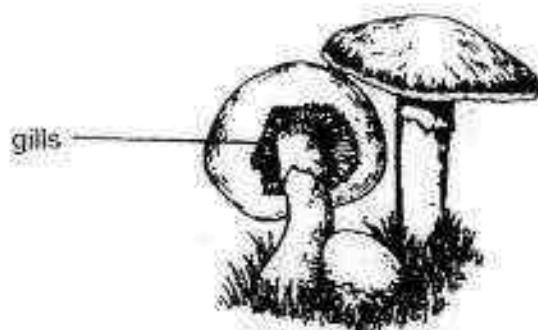
Which two set-ups should Willy use to compare the results?

- (1) A and B only
 - (2) C and D only
 - (3) A and C only
 - (4) B and D only
15. What are the similar characteristics between yeasts and bacteria?
- A : They are both fungi.
 B : They can reproduce.
 C : They respond to changes.
 D : They are both micro-organisms.

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

(Go on to the next page)

16. The gills of the mushroom produce _____.



- (1) food
- (2) spores
- (3) mould
- (4) bacteria

17. Look at the house below carefully.

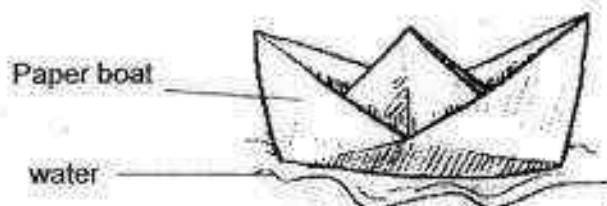


Which one of the following options shows the correct materials used for Parts X, Y and Z?

	X	Y	Z
(1)	metal	glass	wood
(2)	ceramic	metal	rubber
(3)	ceramic	glass	wood
(4)	wood	metal	rubber

(Go on to the next page)

18. Ali made a paper boat out of newspaper. He put the boat into a basin of water and it floated for a while. After five minutes, the boat began to sink into the water.



Why did the paper boat sink into the water after five minutes?

- (1) Paper is flexible.
- (2) Paper is not strong.
- (3) Paper is waterproof.
- (4) Paper absorbs water.

19. The following table shows the properties of four materials

Materials	Is it strong?	Is it flexible?	Is it light?
A	Yes	Yes	No
B	Yes	No	Yes
C	No	No	Yes
D	No	Yes	No

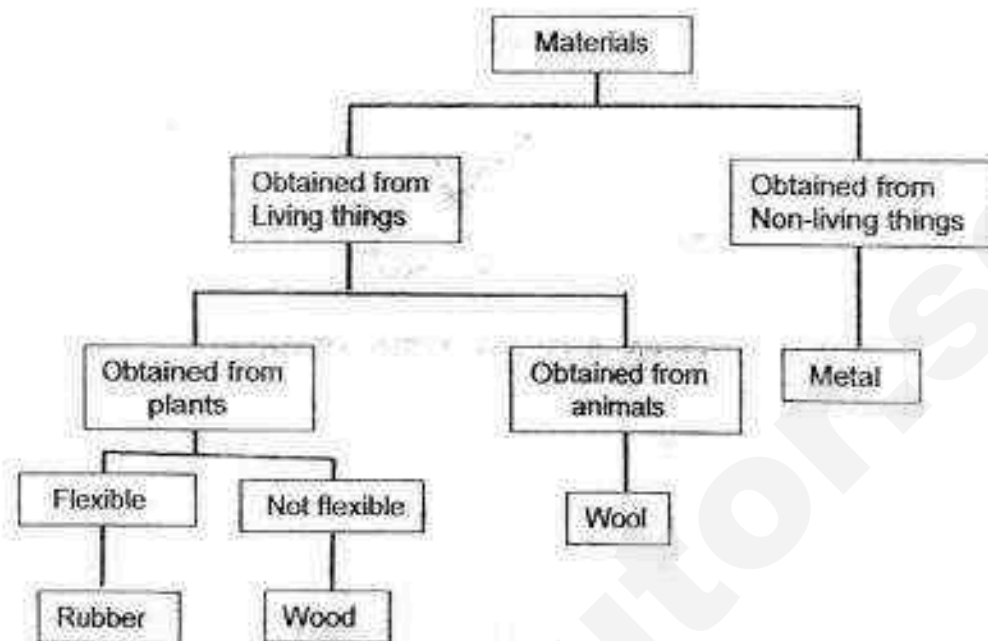
Which one of the following materials would you use to make Part X of the remote control as shown below?



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

(Go on to the next page)

20. Study the classification chart below.



What is the difference between metal and wood?

- (1) Metal is strong but wood is not.
- (2) Metal is flexible but wood is not.
- (3) Metal and wood are obtained from living things.
- (4) Metal is obtained from non-living things but wood is obtained from living things.

End of Booklet A

METHODIST GIRLS' SCHOOL

Founded in 1887



MID-YEAR EXAMINATION 2016 PRIMARY 3 SCIENCE

BOOKLET B

Total Time for Booklets A and B: 1 hour 10 minutes

INSTRUCTIONS TO CANDIDATES

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

Follow all instructions carefully.

Answer all questions.

Name: _____ ()

Class: Primary 3. _____

Date : 12 May 2016







Booklet A	40
Booklet B	20
Total	60
Parent's Signature	

This booklet consists of 8 printed pages including this page.

(Go on to the next page)

For questions 21 to 28, write your answers in the spaces provided. The number of marks available is shown in brackets [] at the end of each question or part question. [20 marks]

21. Study the classification table below.

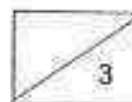
Group X	Group Y
 cat  mouse  alarm clock	 Sail boat  kite  aeroplane

(a) What is classified wrongly in the table above? [1]

(b) Write down two different characteristics between Group X and Group Y. [2]

Characteristic 1: _____

Characteristic 2: _____





(Go on to the next page)

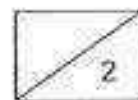
22. The flow chart below shows how some animals are classified.



Which letter, W, X, Y or Z best represents the animals below?

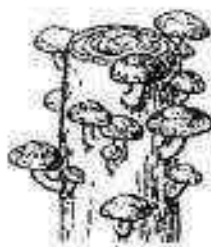
[2]

(a)		
(b)		



(Go on to the next page)

23. Jessie was taking a stroll in her garden when she came across some organisms, A and B, growing on a rotting log. She took pictures of the two organisms and labelled them as non-flowering plants. Her teacher told her that she had labelled them wrongly.



Organism A



Organism B

- (a) Why did her teacher say that her labelling was wrong? Give a reason for your answer. [1]

- (b) Based on the pictures above, where do the organisms get their food from? [1]

The picture below shows a French bean plant.



Organism C

- (c) What is the difference between Organism A and the Organism C with regard to their method of reproduction? [1]



(Go on to the next page)

24. Sue grew some seedlings in a pot and placed it near a window as shown in Diagram 1. Two days later, she observed that the seedlings were growing as shown in Diagram 2.



Diagram 1



Diagram 2

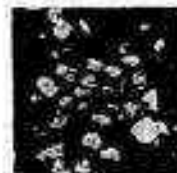
- (a) What difference do you see between the seedlings in Diagrams 1 and 2? [1]

- (b) Explain what caused the difference.

25. The pictures below show two organisms, the mould on the orange and the Dragon's Scale fern.



Mould growing on an orange



Dragon's Scale fern

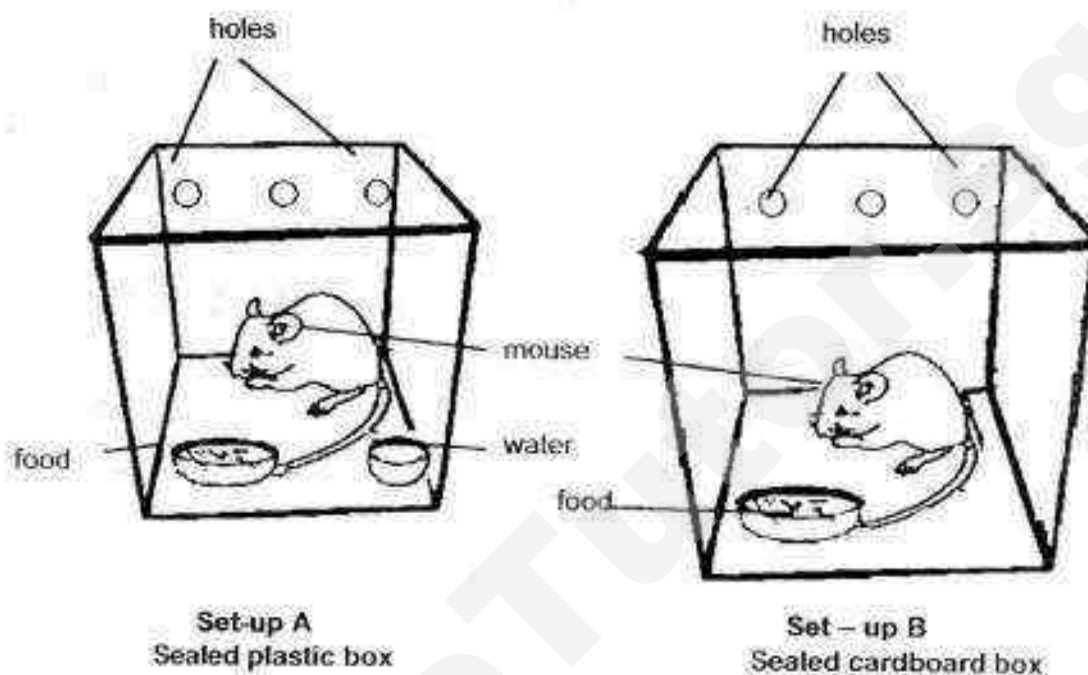
- (a) Explain why there was mould growing on the orange? [2]

- (b) Based on the pictures above, how do the mould and the Dragon's Scale fern differ in the way they obtain nutrition for their growth? [1]



(Go on to the next page)

26. Ali conducted an experiment to find out if mice need water to survive. He placed a mouse into a plastic container and another into a cardboard box. He then put the same amount of food into the two boxes. He placed a bowl of water in Set-up A and no water in Set-up B. Next, he placed the ^{boxes} containers in different parts of the house.



Ali's mother told him that his experiment was not fair.

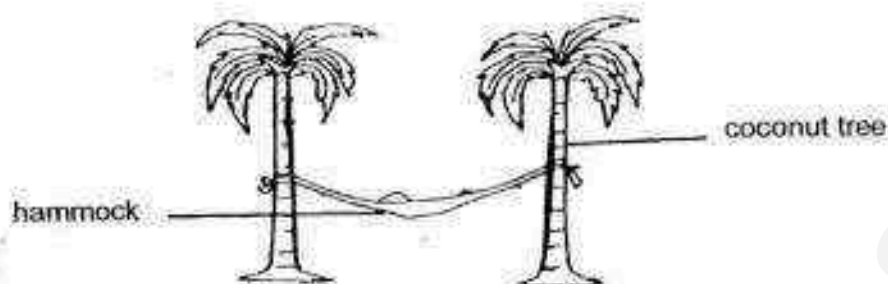
What are two ways the boxes should be kept the same for the experiment to be fair?

[2]



(Go on to the next page)

27. Peter went to the beach and tied his hammock in the shade as shown in the diagram below. He wanted to lie on his hammock to rest when he was tired.



- (a) List 2 properties of the material that Peter must consider to make his hammock with and state the reasons why. [2]

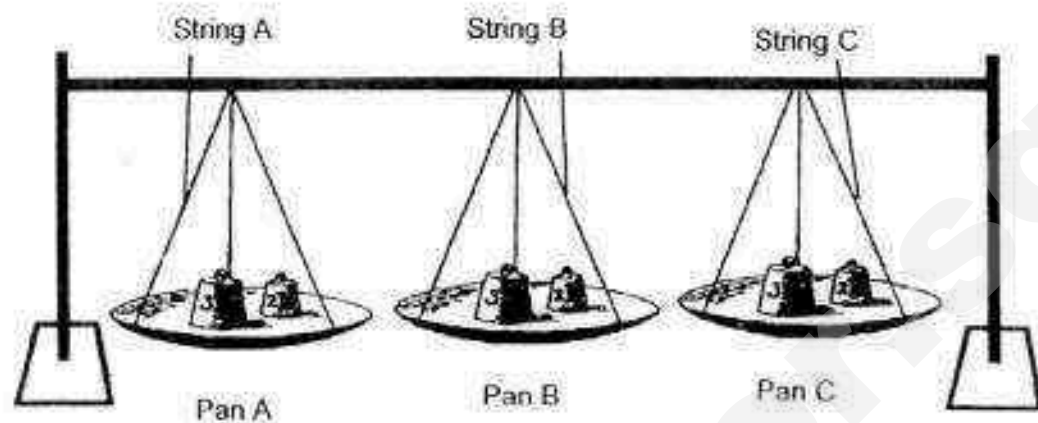
Property 1 : _____

Property 2 : _____



(Go on to the next page)

28. Samy set up the experiment to test the strength of three different strings, A, B and C. The strings are of the same thickness and length.



When Samy put two pieces of weights on each pan, String A broke, but string B and C did not break.

He then added another piece of weight on Pan B and Pan C and observed that String C broke.

- (a) What property of the string is Samy trying to test? [1]

- (b) Samy wanted to use one of the strings to make a fishing net. Which string, A, B or C, should he choose? Give a reason why he should choose that string. [2]



End of Booklet B

YEAR : 2016
 LEVEL : PRIMARY 3
 SCHOOL : METHODIST GIRLS'
 SUBJECT : SCIENCE
 TERM : SA1

Booklet A

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

Booklet B

- Q21
- (a) The alarm clock is classified wrongly.
 - (b) Characteristic 1 : Group X reproduce but Group Y does not.
 Characteristic 2 : Group X needs air, food and water but Group Y does not.
- Q22
- (a) Y
 - (b) X
- Q23
- (a) The two organisms A and B are a type of fungi not plants.
 - (b) The organisms get their food from the rotting log that they grow on.
 - (c) Organism A reproduce by spores but organism C reproduce by seeds.
- Q24
- (a) In diagram 1, the seedlings were straight but in diagram 2 the seedlings were slanted.
 - (b) The seedlings respond towards light because they need light to make food.

Q25 (a) Spores landed on the orange and grew because there is air, moisture and warmth.

(b) The Dragon's Scale fern makes their own food but the mould get their nutrition on the dead or living thing they grow on.

Q26 The boxes need to be kept in the same part of the house and the boxes needed to be the same material.

Q27 Property 1 : Material must be strong so that it can withstand his weight.

Property 2 : Material must be flexible so that Peter can lie down comfortably.

Q28 (a) Strength

(b) String B is the strongest and it is able to take with stand the load of fish.

End



NAN HUA PRIMARY SCHOOL
SEMESTRAL ASSESSMENT 1 – 2016
PRIMARY 3

SCIENCE

BOOKLET A

24 Multiple Choice Questions (48 marks)

Total Time for Booklets A and B : 1 hour 30 minutes

INSTRUCTIONS TO CANDIDATES

1. Write your name and index number in the space provided.
2. Do not turn over the page until you are told to do so.
3. Follow all instructions carefully.
4. Answer all questions.
5. Shade your answers in the Optical Answer Sheet (OAS) provided.

Marks Obtained

Booklet A		/ 48
Booklet B		/ 32
Total		/ 80

Name: _____ () Class: P 3 _____

Date: 10 May 2016 Parent's Signature: _____

Section A: (24 x 2 marks = 48 marks)

For each question from 1 to 24, 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.

1. Study the following statements.

- A A millipede coils itself after being touched.
- B A baby cries after hearing the loud thunder.
- C A butterfly flies away from a hungry bird chasing it.

These statements show that living things can _____.

- (1) die
- (2) grow
- (3) respond
- (4) reproduce

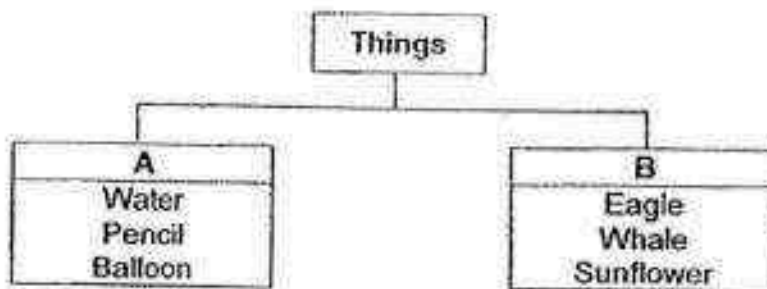
2. Study the three set-ups below.



All the three grasshoppers in the above three set-ups died after some time. Which of the following correctly explains why each grasshopper in Set-ups 1, 2 and 3 died?

	Set-up 1	Set-up 2	Set-up 3
(1)	No food	No air	No water
(2)	No air	No food	No water
(3)	No air	No water	No food
(4)	No water	No air	No food

3. Study the classification table below.



Which of the following are the correct headings for A and B?

	A	B
(1)	Living things	Non-living things
(2)	Non-living things	Living things
(3)	Things that can grow	Things that cannot grow
(4)	Things that can move	Things that cannot move

4. Which of the following statements are true of the Bird's Nest Fern?

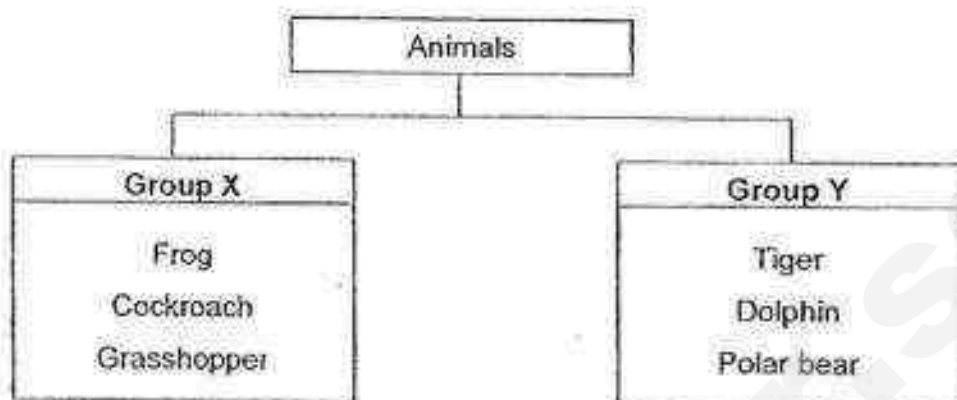


Bird's Nest Fern

- A It reproduces by seeds.
- B It does not bear flowers.
- C It reproduces by spores.
- D It cannot make their own food.

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

5. Study the two groups of animals below carefully.



Which of the following correctly describe the animals in groups X and Y respectively?

	Group X	Group Y
(1)	Have six legs	Have four legs
(2)	Have wings	Have no wings
(3)	Have feelers	Have no feelers
(4)	Lay eggs	Give birth to young alive

6. Study the two pictures below.



Toadstool



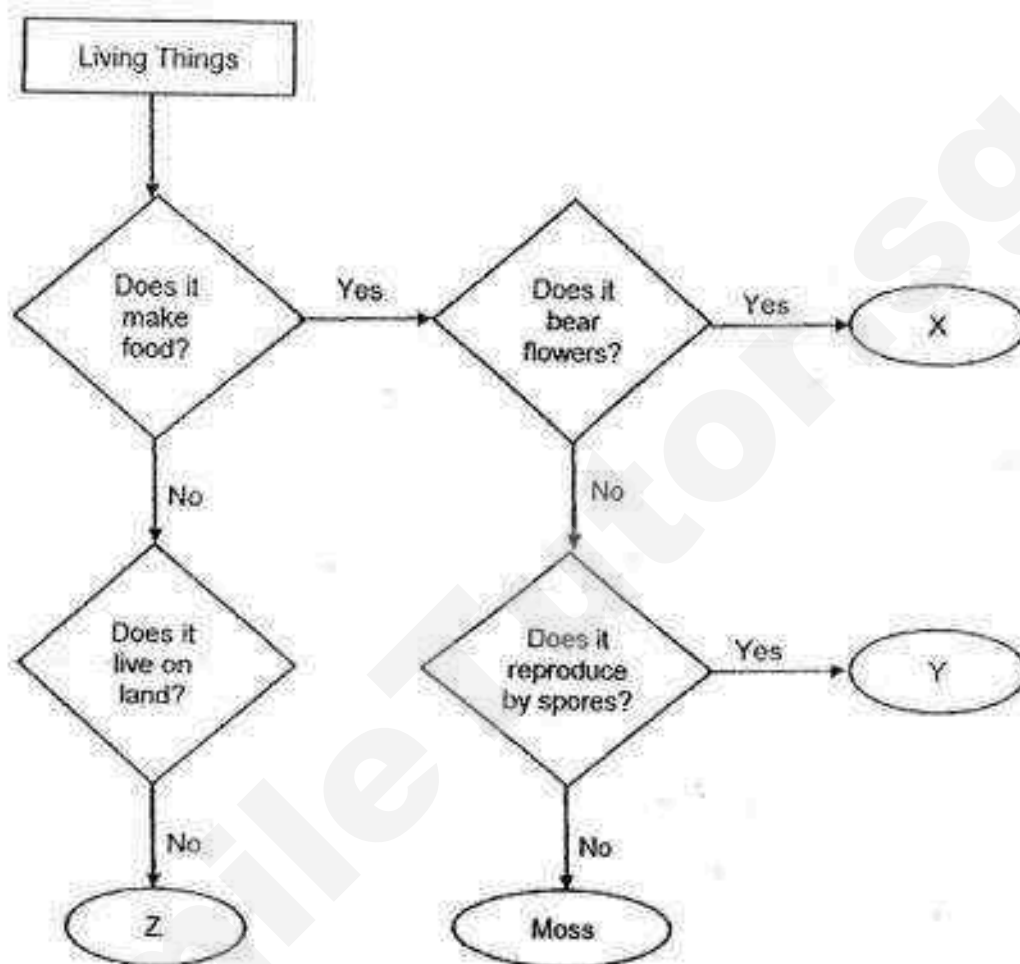
Bracket fungus

How are the toadstool and bracket fungus similar?

- A They reproduce by spores.
- B They are non-flowering plants.
- C They can make their own food.
- D They need air, food and water to survive.

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

7. Study the flow chart below. It shows the characteristics of living things X, Y and Z.



Which one of the following sets is the correct example of each of the living things, X, Y and Z?

	X	Y	Z
(1)	Rose plant	Mushroom	Dolphin
(2)	Fern	Rose plant	Mushroom
(3)	Mushroom	Fern	Rose plant
(4)	Rose plant	Fern	Dolphin

8. Which of the following objects is made of a light and flexible material?

(1)



Scissors

(2)



Screwdriver

(3)



T-shirt

(4)



Chopsticks

9. Study the table below.

Group K	Group L
<div data-bbox="373 1152 507 1392"></div> <p data-bbox="360 1415 520 1451">Glass vase</p> <div data-bbox="619 1233 762 1378"></div> <p data-bbox="612 1419 782 1456">Ceramic Pot</p>	<div data-bbox="868 1233 1034 1301"></div> <p data-bbox="893 1378 1024 1415">Metal key</p> <div data-bbox="1091 1197 1267 1378"></div> <p data-bbox="1145 1383 1244 1419">Silk tie</p>

What would be the most suitable headings for Group K and Group L?

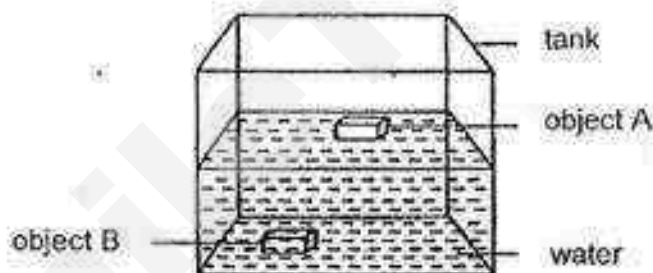
	Group K	Group L
(1)	Stiff	Flexible
(2)	Sink in water	Float on water
(3)	Waterproof	Not waterproof
(4)	Breaks easily	Does not break easily

10. Study the table below.

Material	W	X	Y	Z
Flexible	No	No	No	Yes
Waterproof	Yes	Yes	No	No
Transparent	No	Yes	Yes	No

Which of the materials is most suitable for making a tablecloth?

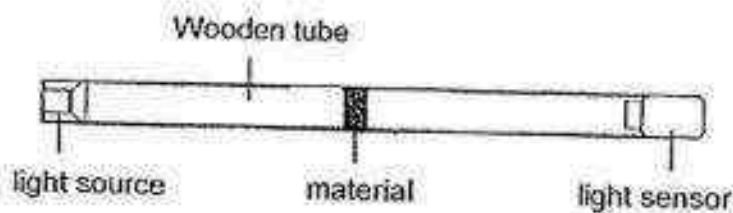
- (1) Material W
 - (2) Material X
 - (3) Material Y
 - (4) Material Z
11. Study the diagram below carefully. Both objects A and B are of similar shape and size.



What are the most likely materials used to make objects A and B?

	Object A	Object B
(1)	Metal	Plastic
(2)	Rubber	Wood
(3)	Metal	Rubber
(4)	Wood	Metal

12. Kenny set up the following experiment to measure the amount of light passing through three materials, A, B and C, using a light sensor fixed at one end of a wooden tube. A light source was attached at the other end of the tube.



He recorded the results in the table below.

Material	Amount of light (units) measured by light sensor
A	155
B	273
C	90

Which one of the following correctly shows the arrangement of materials according to the amount of light passing through it?

	allows least light to pass through	→	allows most light to pass through
(1)	B	A	C
(2)	B	C	A
(3)	C	A	B
(4)	C	B	A

13. Jason recorded his brother's age and height in the table as shown below.

Age (months)	Height (cm)
1	51
3	54
5	57
7	62

Based on the table above, what can you conclude about living things?

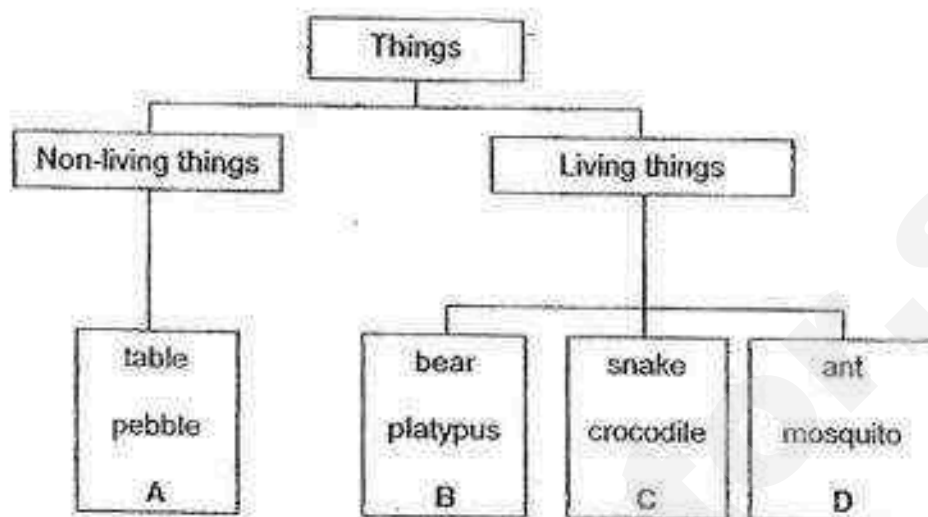
- (1) Living things grow.
 - (2) Living things move by themselves.
 - (3) Living things respond to changes around them.
 - (4) Living things need air, food and water to survive.
14. Ronald kept some guinea pigs in his cage. He fed them daily with food and water. At the end of each month, he recorded the number of guinea pigs in the table below. No guinea pigs were added or taken out of his cage.

Month	Number of guinea pigs
January	4
March	7
June	10
September	14
December	20

Based on the table above, what can you conclude about living things?

- (1) Living things die.
- (2) Living things reproduce.
- (3) Living things can respond to changes.
- (4) Living things need air, food and water to survive.

15. Sam had an outing to the Singapore Zoo and decided to group the things he saw into the classification chart below.



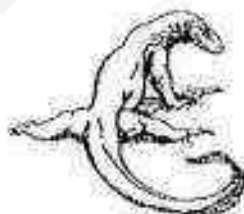
He also observed the following things during the outing as well and added them (A, B, C and D) into the groups above.



Cockroach



Lion



Komodo dragon



Umbrella

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

	A	B	C	D
(1)	Umbrella	Komodo dragon	Cockroach	Lion
(2)	Umbrella	Lion	Komodo dragon	Cockroach
(3)	Umbrella	Lion	Cockroach	Komodo dragon
(4)	Umbrella	Cockroach	Lion	Komodo dragon





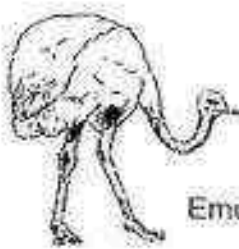

16. The table below shows characteristics of living things A, B, C and D. A tick (✓) shows that the living thing has that characteristic.

Characteristic	A	B	C	D
Bear fruits	✓			✓
Grow on land		✓	✓	✓
Reproduce from spores		✓	✓	
Have roots, stems and leaves	✓		✓	✓

Which of the following is/are non-flowering plant(s)?

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

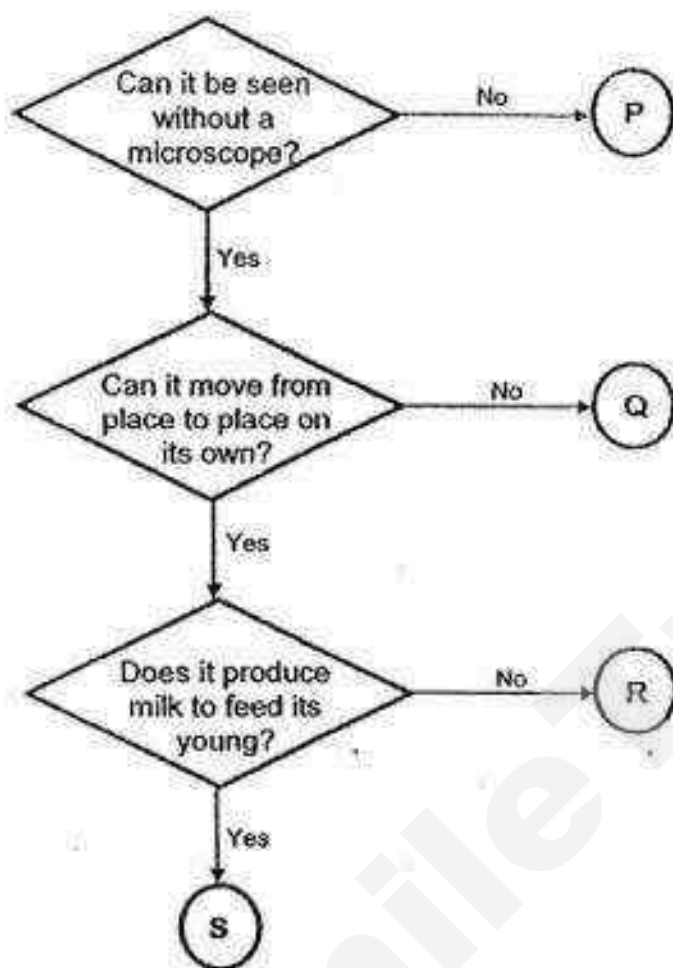
17. Study the table below.

Group P	Group Q
 Eagle	 Butterfly
 Penguin	 Spider
 Emu	 Grasshopper

Which of the following are suitable headings for Group P and Group Q?

	Group P	Group Q
(1)	Birds	Insects
(2)	Covered with feathers	Not covered with feathers
(3)	Can fly	Cannot fly
(4)	Give birth to young	Lay eggs

18. Study the flowchart below.



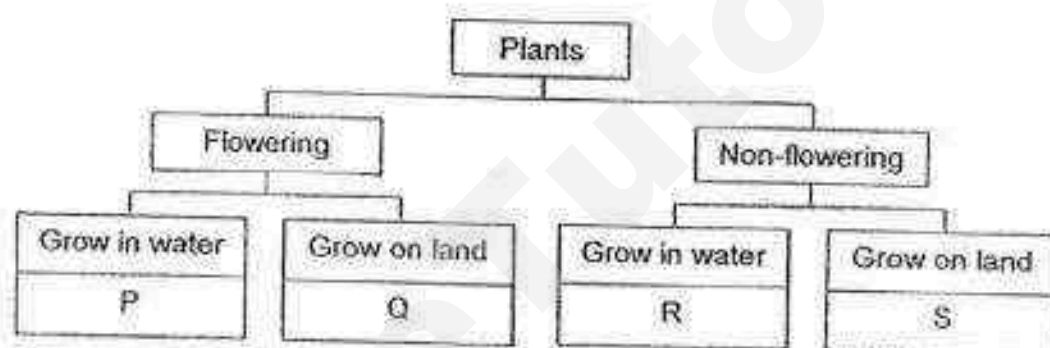
Which one of the following correctly represent living things P, Q, R and S in the above flowchart?

	P	Q	R	S
(1)	Bacteria	Yeast	Mushroom	Goat
(2)	Yeast	Goat	Bacteria	Shark
(3)	Bacteria	Mushroom	Shark	Goat
(4)	Mushroom	Bacteria	Goat	Shark

19. The characteristics of two plants, A and B, are shown in the table below:

Characteristics	Plant A	Plant B
Bears flowers	Yes	No
Grows in water	Yes	No
Grows on land	No	Yes

From the information given in the table above, where would you classify plants A and B in the following chart?



	Plant A	Plant B
(1)	P	Q
(2)	R	S
(3)	P	S
(4)	R	Q

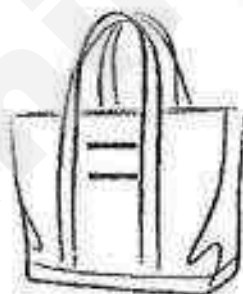
20. Daniel recorded the characteristics of three materials in the table below. A tick (✓) shows that the material has that characteristic.

Material	Sinks in water	Breaks easily	Flexible
Q	✓	✓	
R	✓		✓
S	✓		

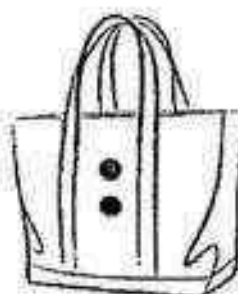
Which of the following represents materials Q, R and S?

	Material Q	Material R	Material S
(1)	Metal	Ceramics	Rubber
(2)	Ceramics	Rubber	Metal
(3)	Rubber	Metal	Ceramics
(4)	Metal	Rubber	Ceramics

21. Alif put items of equal mass into two bags, X and Y. The bags were similar but made of different materials. When both bags were lifted off the ground, bag Y burst and all the items in the bag fell out. Bag X did not burst.



Bag X



Bag Y

What could Alif conclude from this observation?

- (1) Bag X is lighter than Bag Y.
- (2) Bag X is softer than Bag Y.
- (3) Bag X is stronger than Bag Y.
- (4) Bag X is more flexible than Bag Y.

22. Jane weighed the mass of 4 materials, A, B, C and D, before placing them into a container of water. The objects were taken out after 10 minutes and their mass were weighed again. She recorded the results in the table below.

Materials	Mass at the start	Mass after 10 minutes in water
A	5 g	15 g
B	10 g	50 g
C	15 g	15 g
D	20 g	35 g

Which one of the following materials can be used to make a raincoat?

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

23. Rachelle observed and recorded the characteristics of 4 materials, A, B, C and D, in the table below.

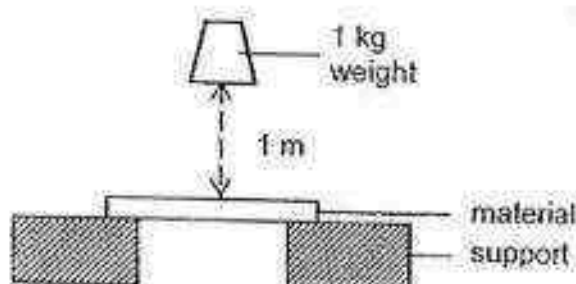
Material	Is it flexible?	Does it allow light to pass through?	Is it waterproof?
A	Yes	No	Yes
B	No	No	Yes
C	Yes	Yes	No
D	No	Yes	Yes



Based on the information given in the table above, which material is most suitable for making Part S of the car?

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

24. Sophia tested the strength of materials A, B, C and D by dropping 1 kg weight from a height of 1 m, using the set-up shown below. The materials were of the same size, thickness and shape.



She noted the number of times the weight was dropped before the materials broke. Her results are shown below.

Material	Number of drops to break the material
A	40
B	25
C	55
D	18

Based on the results in the table above, which one of her conclusions is correct?

- (1) Material C is the weakest material.
- (2) Material A is the strongest material.
- (3) Material B is weaker than material D.
- (4) Material C is stronger than material B.



NAN HUA PRIMARY SCHOOL
SEMESTRAL ASSESSMENT 1 – 2016
PRIMARY 3

SCIENCE

BOOKLET B

10 Open-ended questions (32 marks)

Total Time for Booklets A and B: 1 hour 30 minutes

INSTRUCTIONS TO CANDIDATES

1. Write your name and index number in the space provided.
2. Do not turn over the page until you are told to do so.
3. Follow all instructions carefully.
4. Answer all questions.
5. Write your answers in this booklet.

Marks Obtained

Section B

	/ 32
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Name: _____ () Class: P 3 _____

Date: 10 May 2016

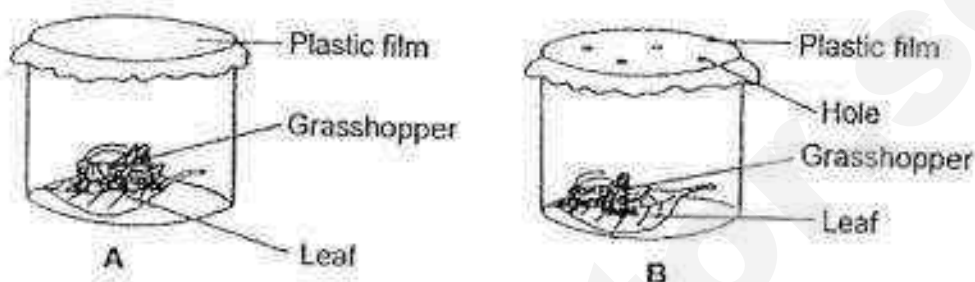
Parent's Signature: _____

Section B: (32 marks)

Write your answers to questions 25 to 34 in the space provided.

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

25. Cindy placed two grasshoppers in two separate containers, A and B, as shown in the diagram below. The two containers are sealed with a plastic film.



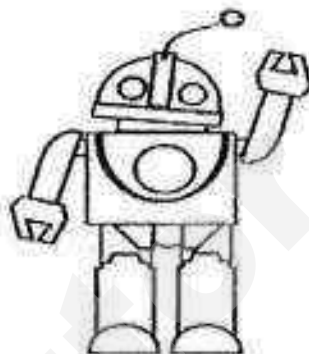
- (a) In her experiment, she is trying to find out if living things need _____ to survive. [1]
- (b) In which of the containers, A or B, would the grasshopper survive for a longer period of time? Give a reason for your answer. [1]

26. Sandy received a dog from her parents as her birthday present. She also received a toy robot from her aunt. Both started to respond and move towards her when she gave a command, "Come!"

Sandy said that both are living things since they both can respond and move by themselves.



A dog



A robot

- (a) Do you agree with her statement? Explain your answer. [1]

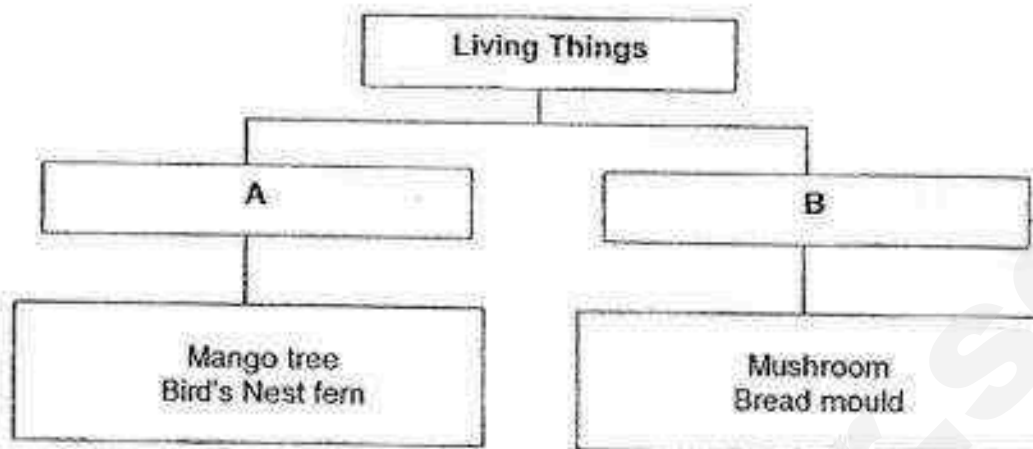
- (b) During her Science lesson, her teacher, Mrs Loh, introduced different groups of animals to the class. Sandy said that her dog is a mammal.

List two characteristics of the dog which show that it is a mammal. [2]

- (i) _____
- (ii) _____

Score	3
-------	---

27. Study the classification chart below.



- (a) Give suitable headings for groups A and B. [2]

A: _____

B: _____

- (b) State one difference between the way the mango tree and the bread mould obtain food. [1]

- (c) State one similarity between the Bird's Nest fern and the mushroom [1]

28. Some objects are put into four groups according to the material that they are made of.

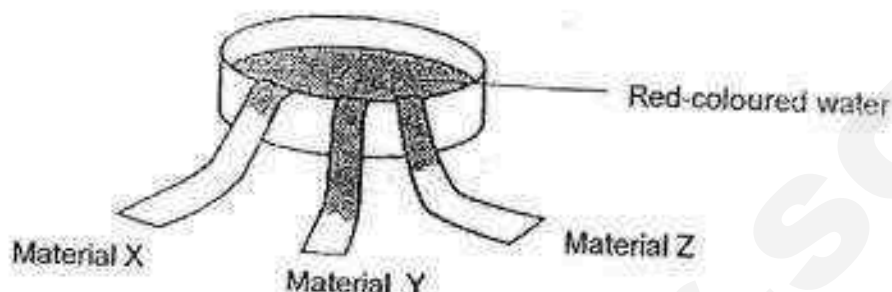
Group A	Group B	Group C	Group D
Car windscreen	Needle	Water bottle	T-shirt
Window pane	Screwdriver	Pail	Towel

- (a) Identify the materials that are used to make the following objects. [2]

Group	Materials
A	
B	
C	
D	

- (b) Name two properties of the material that made it suitable for making the objects in Group B. [2]

29. Amy carried out an experiment using equal lengths of three materials. She dipped part of the material into a dish of coloured water and waited for five minutes. The diagram below shows the result of her experiment.



- (a) Based on the results above, which material, X, Y or Z, should Amy use to wipe away the water that she spilled on the table quickly? [1]

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

30. A cleaner at the canteen saw some crows pecking at left-over food in the rubbish bin. She yelled at them and upon hearing her scream, the crows flew away.



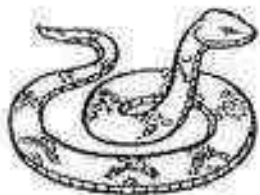
- (a) The crows flew away upon hearing her scream. What characteristic of living things does this show? [1]

- (b) Despite yelling at the crows, the crows kept flying back to peck at the food. List two other characteristics of living things shown in this observation. [2]

(i)

(ii)

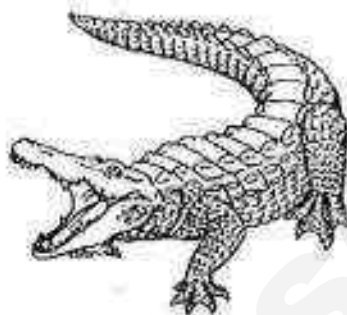
31. Study the animals below.



X



Y



Z

- (a) Based on your observations, which one of the above animals, X, Y or Z, does not belong to the same group? Give a reason for your answer. [1]

- (b) What animal group does animal X belong to? [1]

- (c) State two characteristics of the animal group mentioned in (b). [2]

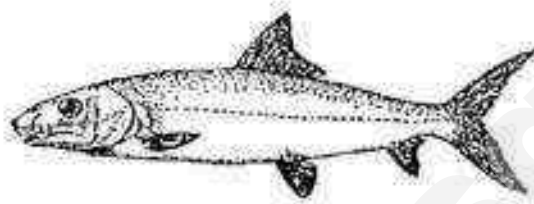
(i)

(ii)

32. Jayden went to the school pond and saw two animals as shown in the diagrams below.



Frog



Fish

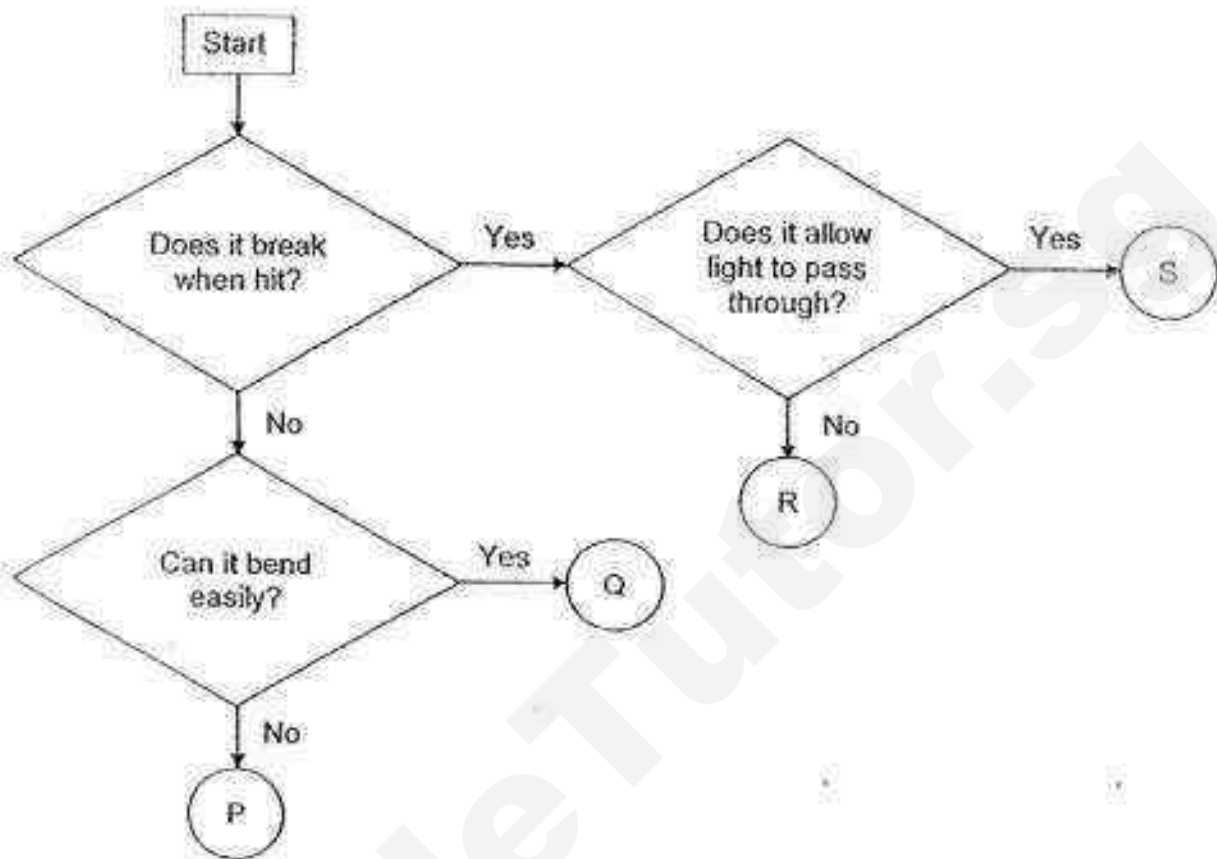
- (a) How do the frog and fish reproduce? [1]

- (b) State two **observable** differences between the frog and the fish. (Do not compare their shape, colour and size) [2]

(i) _____

(ii) _____

33. Study the flow chart below carefully.



(a) Based on the flow chart above, state two properties of object Q. [2]

(b) Match the following objects with the correct letters (P, Q, R and S) shown in the diagram above. [2]

Iron nail : _____

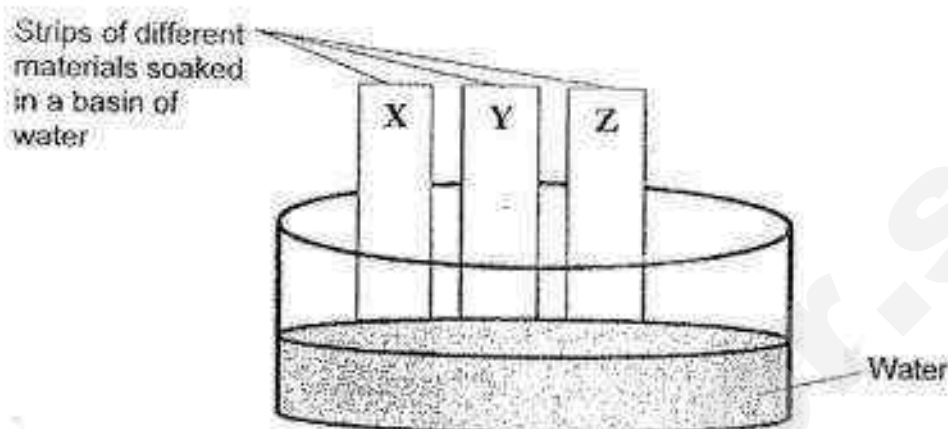
Ceramic tile : _____

Rubber band : _____

Spectacle lens: _____

Score	
	4

34. Daniel experimented with three different types of materials, X, Y and Z. He soaked each material in a basin of water as shown in the diagram below. After 30 minutes, he weighed them and recorded the mass.



Material	Mass of material before experiment	Mass of material after experiment
X	1000g	1300g
Y	1000g	1100g
Z	1000g	1000g

- (a) Which material (X, Y, or Z) would be most suitable to make a bath towel? Using the information provided in the table above, explain your answer clearly. [2]

- (b) Daniel repeated the same experiment a few times. Why is there a need to repeat the experiment? [1]

Score	3
-------	---

End of paper

EXAM PAPER 2016 (P3)

SCHOOL : NAN HUA

SUBJECT : SCIENCE

TERM : SA1

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

25)a)air

b)Container B. There are holes in the plastic film which allow air/oxygen to enter.

26)a)No. The robot is not a living thing ad it does not need air, food, water to survive.

b)i)The dog is covered with hair.

ii)It reproduce by giving birth to young.

27)a)A: Plants

B: Fungi

27)b)The mango tree makes its own food but the bread mould depend on bread for food.

c)Both of them reproduce by spores.

28)a)A: Glass

B: Metal

C: Plastic

D: Fabric

b)Hard/ strong/ does not break easily.

29)a)Material Y.

b)Material Y absorb the most water.

30)a)Living things respond to changes around them.

b)i)Living things need food to survive.

ii)Living things can move by themselves.

31)a)Animal Y. Animal Y an insect but animals X and Z are reptiles.

b)Reptile.

c)i)They are cold blooded.

ii)Reproduce by laying eggs.

32)a)They reproduce by laying eggs.

b)i)The frog is a amphibians but the fish is a fish.

ii)The frog have legs but the fish do not have legs.

33)a)Object Q has does not break when hit and it can bend easily.

b)P, R, Q, S

34)a)Material X. It gained the greatest mass after the experiment so it absorbs the most amount of water.

b)So Daniel can know if the result are the same.



NANYANG PRIMARY SCHOOL

PRIMARY 3 SCIENCE

SEMESTRAL ASSESSMENT 1
2016

BOOKLET A

Date : 4 May 2016
Duration : 1 h 20 min

Name : _____ ()

Class: Primary 3 ()

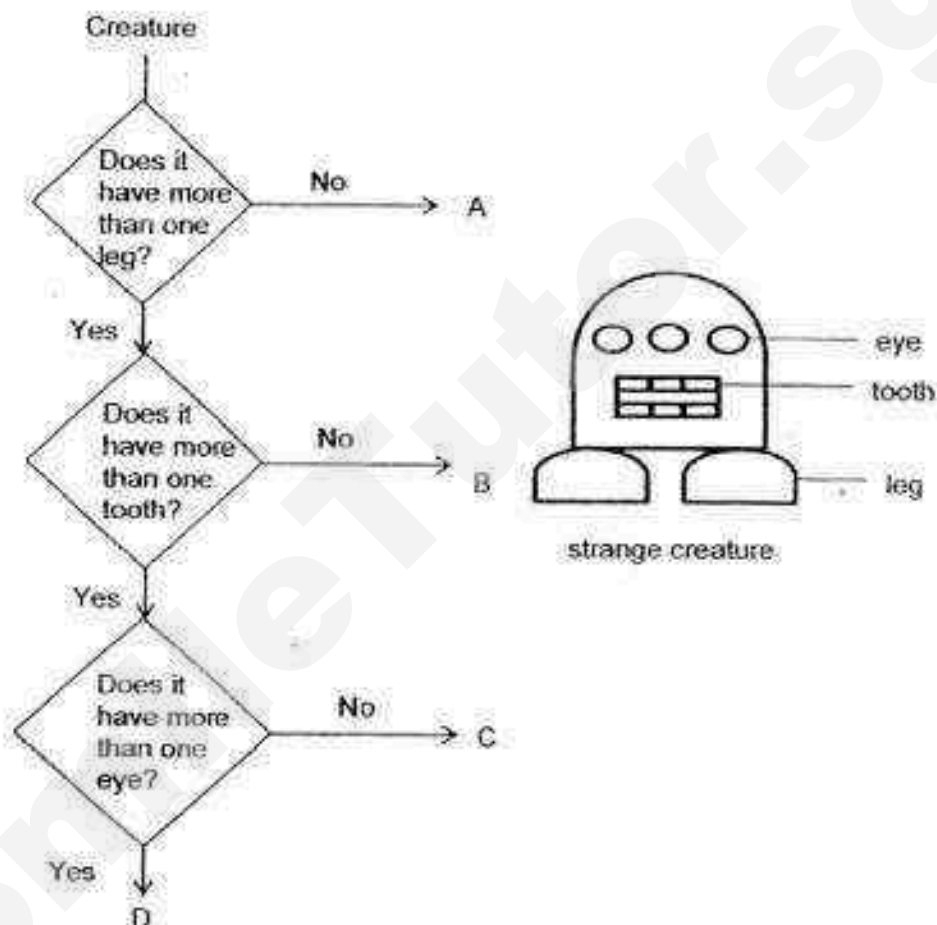
DO NOT OPEN THIS BOOKLET UNTIL YOU ARE TOLD TO DO SO.
FOLLOW ALL INSTRUCTIONS CAREFULLY.

Booklet A consists of 13 printed pages including this cover page.

Section A (24 x 2 marks = 48 marks)

For each question from 1 to 24, 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 provided.

1. John saw a picture of a strange creature as shown below. He then tried to classify it using a flowchart that he had created.



Based on the flowchart, which letter could correctly represent the creature?

- (1) A
(3) C

- (2) B
(4) D

2. John was given the following information about Z.

- Z can reproduce.
- Z needs air, food and water.
- Z can respond to changes in the surrounding.

Which of the following could Z represent?

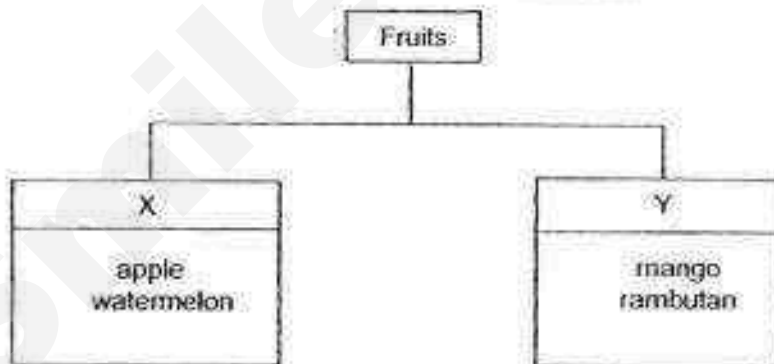
- A Fish
B Robot
C Rose plant

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

3. Matthew studied the four fruits below.



He then classified the fruits into the chart below.



Which of the following shows the suitable heading for X and Y?

	X	Y
(1)	Many Seeds	One seed
(2)	Land plant	Water plant
(3)	Flowering plant	Non-flowering plant
(4)	Smooth texture of skin	Hairy texture of skin

4. Rachel observed a plant and concluded that it was a non-flowering plant as it did not bear any flowers.

Her friends said that she was wrong and concluded that it was a flowering plant. They gave the following reasons:-

- A It is a young plant.
- B It reproduces by spores.
- C It is not the correct time to bear flowers.

Which of the reasons given are possible explanations for why the flowering plant did not have flowers?

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

5. Some children were discussing about their observation of plants and made the following statements.

- A All plants need air, food and water.
- B Some leaves are green while others are not.
- C All plants have flowers, stems, leaves and roots.
- D Some plants can make their own food while others cannot.

Which of the above statements are correct?

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

6. Mrs Tan placed a healthy potted plant in the brightly-lit garden of her house and left it unattended for two weeks. It did not rain for the whole two weeks. The picture below shows the plant after two weeks.



What can be concluded from the result above?

- (1) Plants need air to survive.
- (2) Plants need soil to survive.
- (3) Plants need light to survive.
- (4) Plants need water to survive.

7. Which of the following statements show the importance of plants?

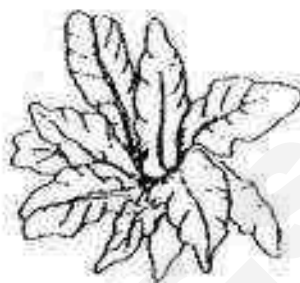
- A Plants can be used for medicine.
- B Plants can be used to build furniture.
- C Plants can be food for animals and humans.

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

8. The diagram below shows two types of living things.



Rose plant



Bird's nest fern

Which of the following statements **correctly** identify the difference between the rose plant and the bird's nest fern?

- A Rose plant has flowers but bird's nest fern does not have flowers.
- B Rose plant can make food but bird's nest fern cannot make food.
- C Rose plant reproduces by seed but bird's nest fern reproduces by spores.
- D Rose plant grows on the ground but bird's nest fern only grows on other trees.

- (1) A and B only
- (3) B and D only

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

9. Which one of the following characteristics is **not true** of amphibians?

- (1) They reproduce by laying eggs.
- (2) They have scales as their outer covering.
- (3) They breathe through their moist skin in water.
- (4) They breathe through gills when they are young.

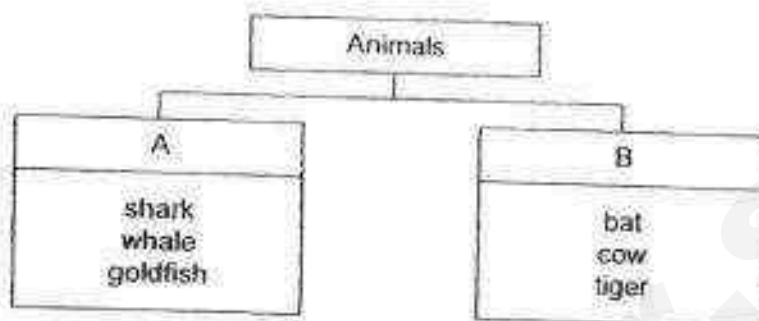
10. Ali, Brenda and Charlie made the following statements about the similarity between birds and insects.

- | | |
|---------|-----------------------------|
| Ali | They can all fly. |
| Brenda | They all lay eggs. |
| Charlie | They have three body parts. |

Which of the children had made the correct statement?

- | | |
|-----------------------------|-----------------------------|
| (1) Ali only | (2) Brenda only |
| (3) Brenda and Charlie only | (4) Ali, Brenda and Charlie |

11. The animals below had been grouped according to their characteristics.



Which of the following could represent A and B?

	A	B
(1)	Breathes through gills	Breathes through lungs
(2)	Has scales	Has hair
(3)	Lays eggs	Gives birth to young alive
(4)	Lives in water	Lives on land

12. Melissa saw an animal which can fly. She concluded that it is a bird. Which of the following additional characteristics can help her confirm that the animal is a bird?

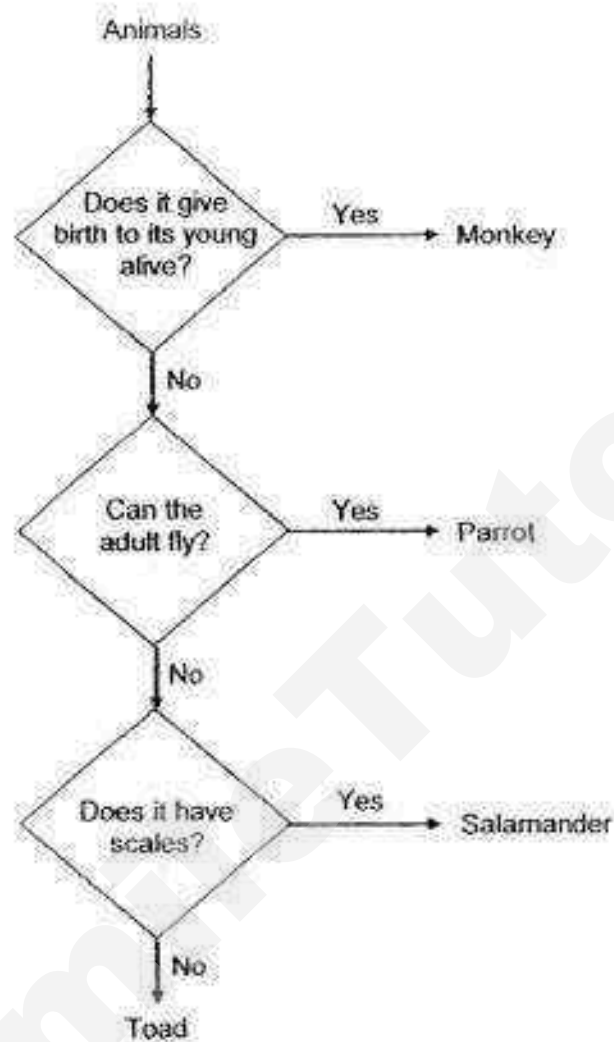
- (1) It has feathers.
- (2) It has two wings.
- (3) It has a pair of feelers.
- (4) It has three body parts.

13. Which of the following options are the characteristics of a fish?

- A They have fins to help them swim.
- B They all reproduce by laying eggs.
- C They have moist skin as their outer covering.
- D They have gills to help them breathe in water.

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

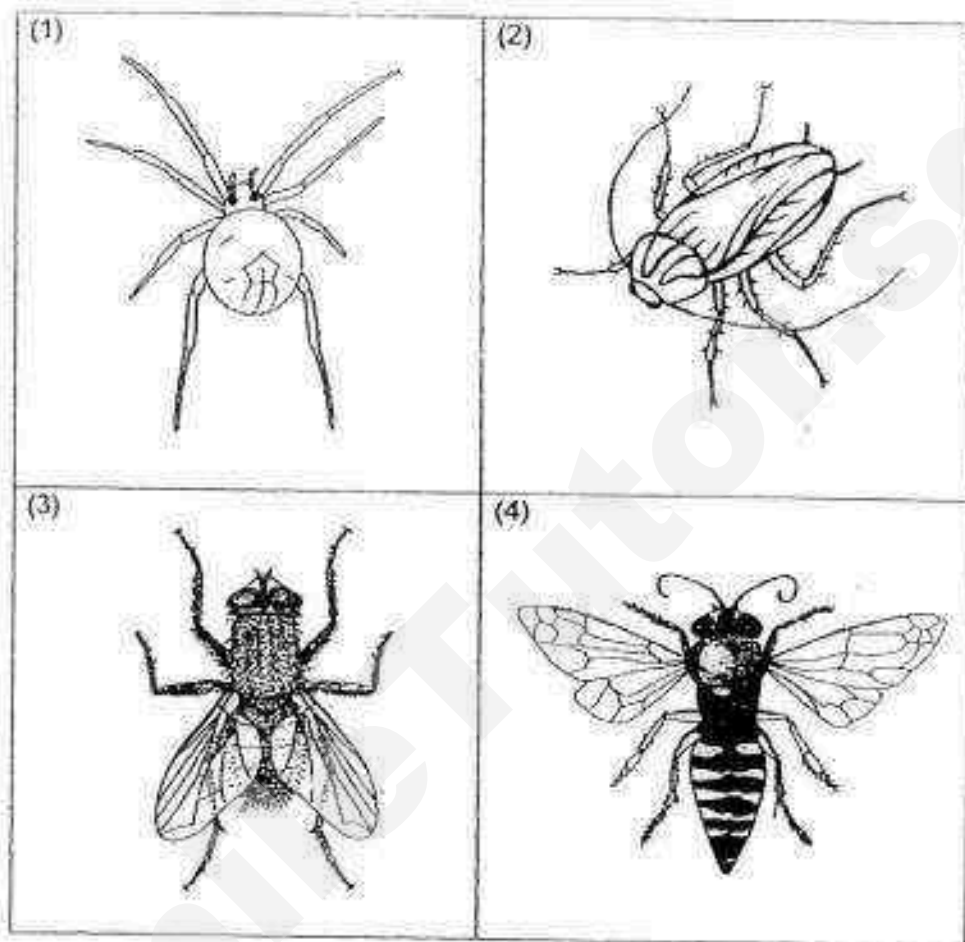
14. Study the flow chart below.



Which one of the following animals had been classified wrongly?

- (1) Toad
- (2) Parrot
- (3) Monkey
- (4) Salamander

15. Edward listed the four animals below as examples of insects. His teacher told him that he had made a mistake. Which animal had he classified wrongly?



16. Andy went to the zoo and saw an animal. He was not sure which group of animals it belongs to. He made the following observations:-

- It has wings.
- It takes care of its young.
- It feeds its young with its milk.

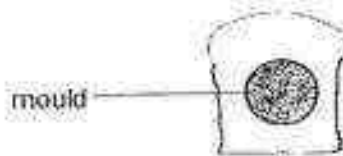
Which group does this animal most likely belong to?

- (1) Birds
- (2) Insects
- (3) Reptiles
- (4) Mammals

17. Mrs. Tan kept a slice of bread in her science laboratory as shown below.



At the start



After two weeks

Based on her observation, which of the following correctly explains the change in the size of the bread?

- (1) The mould provides food to the bread as it grows.
- (2) The mould turns the bread into mould as it grows.
- (3) The mould absorbs food from the bread as it grows.
- (4) The mould uses the bread to make food as it grows.

18. Which of the following statements about bacteria are **true**?

- A Bacteria can be found only in water.
- B Bacteria need only air and food to grow.
- C Bacteria have different shapes and sizes.
- D Bacteria can only be seen with the microscope.

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

19. Sameer bought a new sweater and described the properties of the material below.



- The material is flexible.
- The material absorbs water.
- The material is made from plants.

Based on his description, which of the following is the most likely material that had been used to make his new sweater?

- (1) silk
- (2) wool
- (3) plastic
- (4) cotton

20. Ranbir was choosing a material for the sole of his running shoes.



He listed a few properties below:-

- A flexibility
- B waterproof
- C transparency
- D floats on water

Which of the properties are important for him to consider when choosing a material for the sole of the shoes?

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

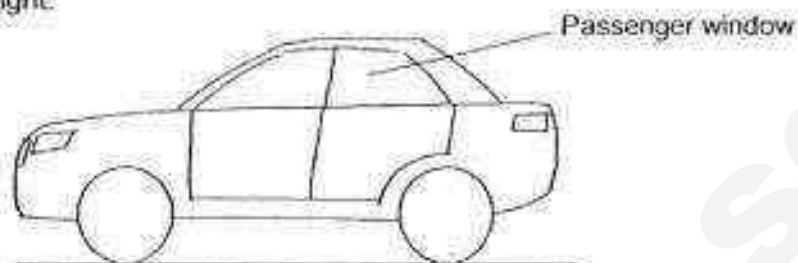
21. Jane wanted to test the strength of a plank. Her friends suggested different methods to test for the strength of the plank as follows:-

Adam	Put the plank in water.
Ben	Shine light through the plank.
Cally	Place weights on the plank until it breaks.
Damon	Bend the plank to see how far it can bend.

Which one of her friends had given the correct suggestion?

- (1) Adam
- (2) Ben
- (3) Cally
- (4) Damon

22. Ali wanted to choose a material for the passengers' windows of his car. He wanted the windows to protect the passengers from too much sunlight.



He was given four materials to choose from. The properties of the four materials are found in the table below.

Materials	Strength	Transparency
A	breaks easily	allows some light to pass through
B	does not break easily	allows most light to pass through
C	does not break easily	allows some light to pass through
D	breaks easily	allows most light to pass through

Which one of the materials is the most suitable for him to choose for the passengers' windows?

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

Study the following experiment and answer questions 23 and 24.

Zhi Wei placed 4 identical cubes made of different materials in 4 different cups. Each cup has 150 ml of water at first. After a minute, he took the cubes out and measured the amount of water left in the cup.

Cubes	Amount of water (ml)	
	Before	After
A	150	100
B	150	150
C	150	80
D	150	115

23. What property was Zhi Wei testing for?

- (1) strength (2) transparency
(3) ability to float on water (4) ability to absorb water

24. Which of the materials, A, B, C or D, should he use to make a beach ball.



(1) A
(3) C

(2) B
(4) D



NANYANG PRIMARY SCHOOL

PRIMARY 3 SCIENCE

**SEMESTRAL ASSESSMENT 1
2016**

BOOKLET B

Date : 4 May 2016

Duration : 1 h 20 min

Name : _____

Class: Primary 3 ()

Marks Scored:

Booklet A:		48
Booklet B :		32
Total :		80

Any query on marks awarded should be raised by 18 May 2016. We seek your understanding in this matter as any delay in the confirmation of marks will lead to delays in the generation of results.

Parent's signature:

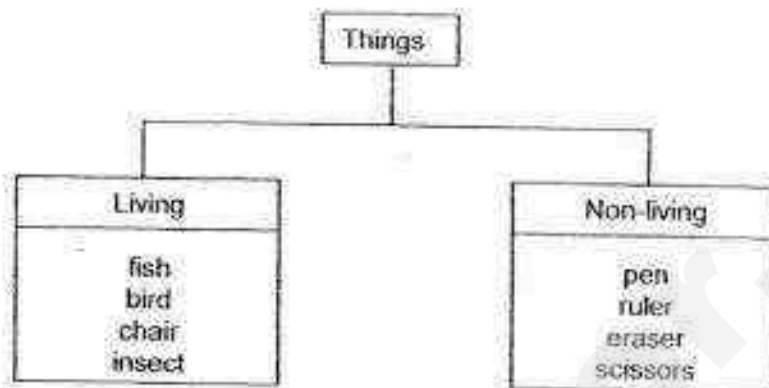
**DO NOT OPEN THIS BOOKLET UNTIL YOU ARE TOLD TO DO SO.
FOLLOW ALL INSTRUCTIONS CAREFULLY.**

Booklet B consists of 13 printed pages including this cover page.

Section B (32 marks)

Write your answers to questions 25 to 34 in the spaces provided.

25. Study the classification chart below.

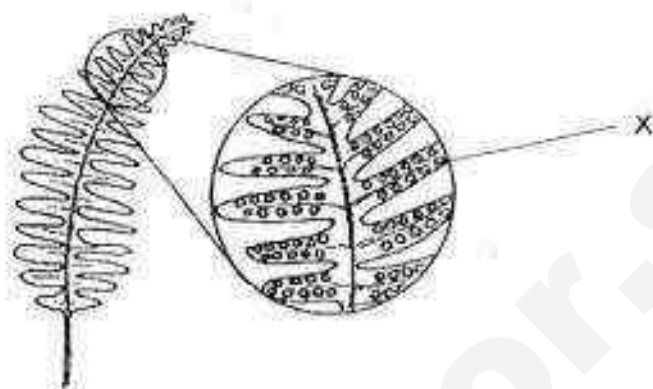


(a) Which example had been wrongly classified? [1]

(b) Explain your answer in (a) using one of the characteristics of living and non-living things. [1]

(c) In which group should amphibians be placed? Give a reason for your answer. [1]

26. Tiffany saw a plant and noticed part X under its leaves as shown in the diagram below. She noticed that the plant did not bear flowers.

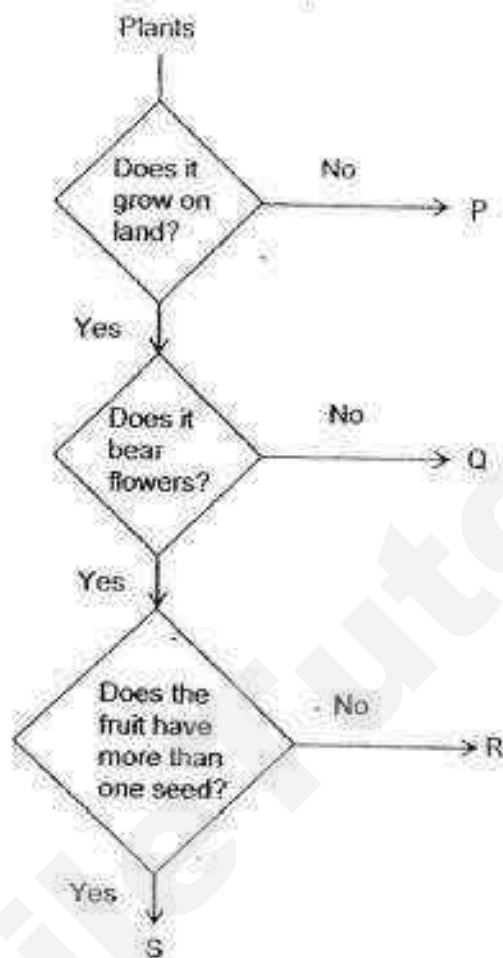


- (a) What is part X most likely be? [1]

- (b) Tiffany concluded that the plant is a fern and that it cannot make food. Is the statement correct? Give a reason for your answer. [1]

- (c) Can the fern produce fruits? Explain your answer. [1]

27. Study the following flowchart on plants.



- (a) State all the characteristics of plant R. [1]

- (b) Give an example of plant R. [1]

A plant has the following descriptions.

- It grows in water.
- The fruit has many seeds.
- It bears flowers only at certain times of the year.

(c) Which plant, P, Q, R or S, suits the above description? [1]

(d) Using the information given in the flowchart above which letter could correctly represent the examples below? [1]

Moss	Orange

28. Sarah observed Animal X. She went back home and researched on it. She came up with the following statements and concluded that Animal X is a mammal.

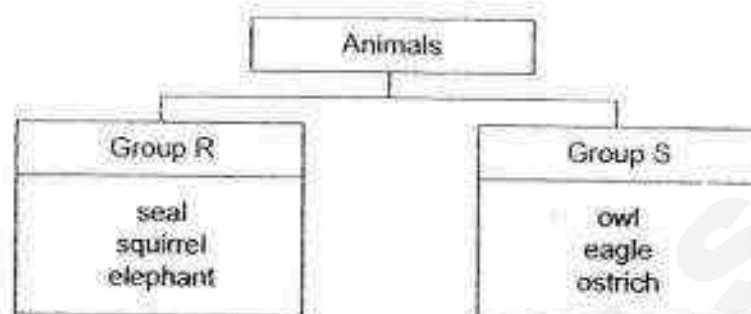
- A: It can swim.
- B: It has four legs.
- C: It has hair on its body.
- D: It produces milk for its young.

(a) Based on the statements above, identify **two** statements that help Sarah to confirm that Animal X is a mammal. **Write down the letters.** [1]

(b) State an example of Animal X. [1]

(c) State another characteristic of mammals **not stated above.** [1]

29. Study the classification chart below.



- (a) Write the correct animal groups that R and S represents. [1]

(i) R: _____

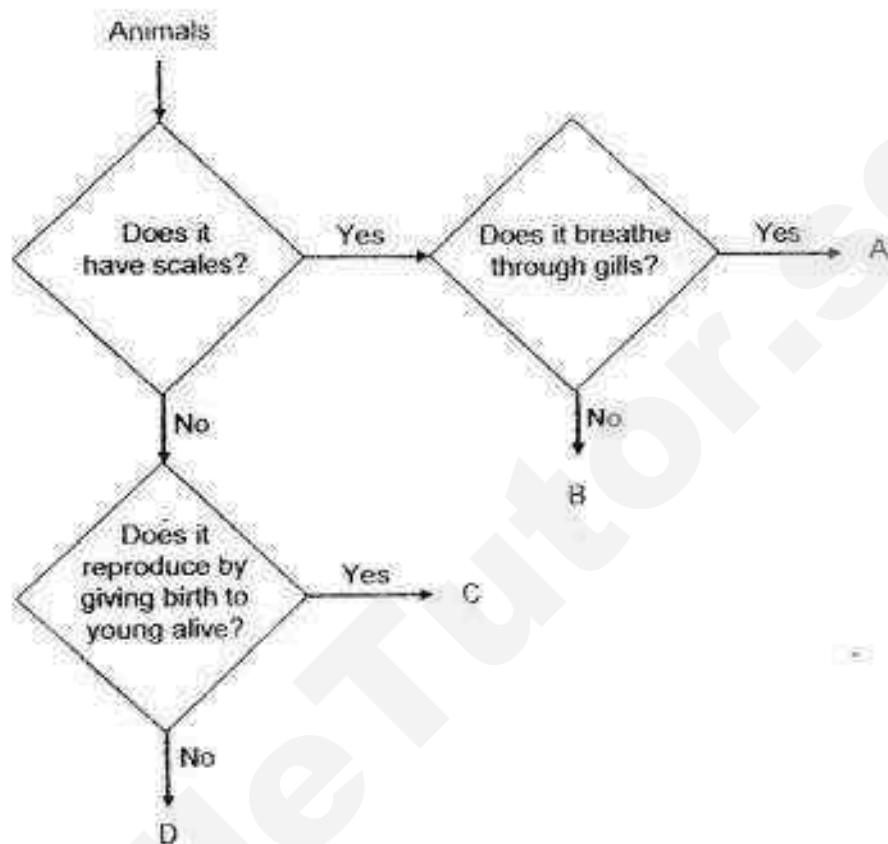
(ii) S: _____

- (b) Compare the characteristics of the animals in group R and group S. State **two differences** between the **two groups**. (Do not compare their size, shape and colour.) [2]

(i) _____

(ii) _____

30. Study the flow chart below.



(a) Match the four animals below to the letters, A, B, C or D, in the flow chart. [2]

- (i) Dolphin: _____
- (ii) Goldfish: _____
- (iii) Penguin: _____
- (iv) Snake: _____

- (b) Describe **all** the characteristics of organism C in the flow chart. [1]

- (c) Based on the flow chart above, state **one similarity** and **one difference** between animal A and animal B? [1]

- (i) Similarity:

- (ii) Difference:

31. James took three slices of bread. He toasted one slice of bread and then placed it into a bag labelled A. He took another slice of bread and put it into a bag labelled B. For the last slice of bread, he sprinkled some water on the bread and placed it into a bag labelled C. He left all three bags in a warm place for a week.

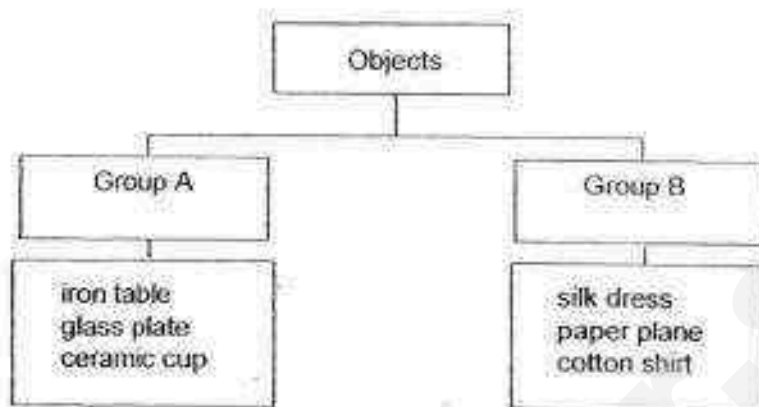
A week later, James recorded his observations in the table below.

Bags	Observation
A	No changes were observed.
B	Three small black spots were observed.
C	One big green spot and one big black spot were observed.

Based on James' results, which of the following statements are true (T), false (F) or not possible to tell (N)? [3]

	Statements	T/ F/ N ?
(a)	The green spot in bag C is bacteria and the black spot is mould.	
(b)	Mould could not grow in bag A as there is no moisture.	
(c)	The three black spots in bag B are three spores.	

32. Six objects had been classified in the chart below.



- (a) Based on the properties of the materials, state a suitable heading that could represent Groups A and B.

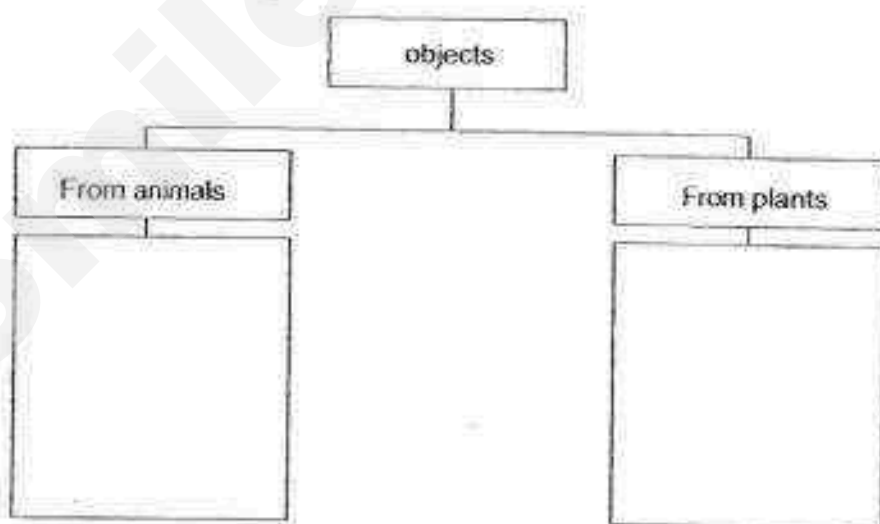
[1]

Group A: _____

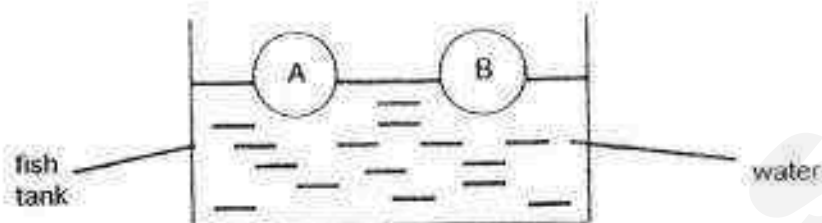
Group B: _____

- (b) Reclassify all the **three** items in **group B** into two groups below.

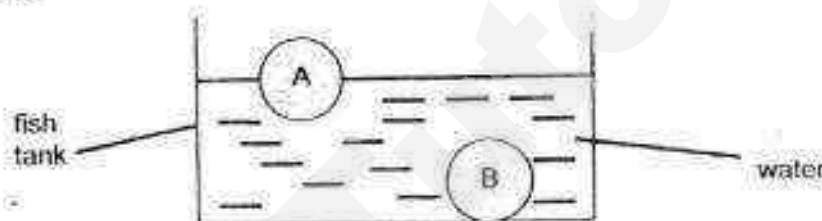
[1]



33. Liam conducted an experiment to find out the ability of some materials to absorb water. He placed 2 balls, A and B, made of different materials in a fish tank filled with water. He observed that both the balls were floating in the water at first as shown in the diagram below.

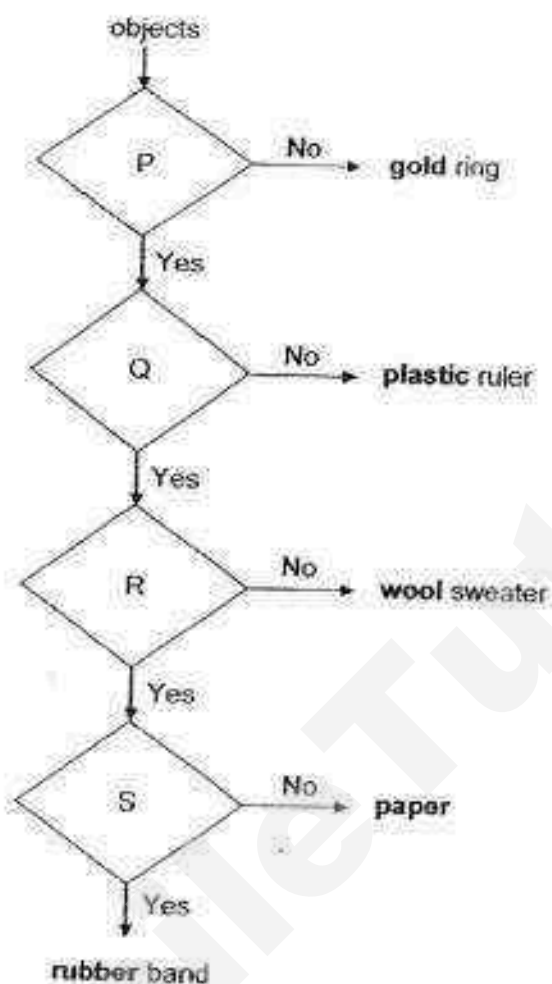


An hour later, he recorded his observation in the diagram below. He realised that ball B had sunk to the bottom of the fish tank, as shown below.



- (i) Based on the property Liam was testing, compare material A and material B. [1]
- _____
- (ii) Which one of the materials, A or B, will be suitable for making a raincoat? Explain your answer. [1]
- _____
- _____
- (iii) Which one of the materials, A or B, will be suitable for making a towel? Explain your answer. [1]
- _____
- _____

34. Study the flow chart below.



The letters P, Q, R and S represent the questions in the flowchart.

- (a) The questions are listed in the table below. Fill in the table with the correct letters P, Q, R and S. [2]

Is it made from plants?	Is it waterproof?	Is it flexible?	Is it made from living things?

- (b) Which one of the materials (**in bold**) in the flowchart is suitable to make a basketball. Explain your answer. [1]

- (c) Which one of the materials (**in bold**) in the flowchart is suitable to make a water bottle. Explain your answer. [1]

EXAM PAPER 2016

SCHOOL : NANYANG PRIMARY SCHOOL (PRIMARY)
SUBJECT : PRIMARY 3 SCIENCE
TERM : SA1 EXAMINATION

BOOKLET A

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

BOOKLET B

Q25(a) The chair

Q25(b) Living things can response to changes around them and need air, food and water to survive. Non-living things do need air, food and water at all.

Q25(c) Living, amphibians can respond to changes around them.

Q26(a) Part X is most likely to be spores.

Q26(b) No, the fern is a plant and plants can make their own food.

Q26(c) No, the fern is a non-flowering plant and non-flowering plant do not bear fruits.

Q27(a) Plant R grows on land, bears flowers and has fruits that has one seed.

Q27(b) A mango tree

Q27(c) Plant P

Q27(d)

Moss	Orange
Q	S

Q28(a) C and D

Q28(b) Tiger

Q28(c) Mammals give birth to young alive.

Q29(a) (i) R: Mammals, (ii) S: Birds

Q29(b)

- (i) Group R has hair as a outer covering but Group S has feather as a outer covering.
- (ii) Group R gives birth to young alive but group S lays eggs.

Q30(a) (i) Dolphin: C (ii) Goldfish: A (iii) Penguin: D (iv) Snake: B

Q30(b) Organism C does not have scales and it reproduces by giving birth to young alive.

Q30(c) (i) Both animals A and B have scales. (ii) Animal breathes through gills but animal B does not breathe through gills.

Q31(a) N

(b) T

(c) F

Q32(a) Group A: Not flexible, Group B: Flexible

Q32(b)

From animals	From Plants
Silk dress	Paper Plane
	Cotton shirt

Q33

- (i) Material A cannot absorb water but Material B absorbs water.
- (ii) Material A. It is waterproof. It will keep the person wearing the raincoat dry.
- (iii) Material B. It absorbs water, it will be able to absorb water to dry things.

Q34(a)

Is it made from plants?	Is it waterproof?	Is it flexible?	Is it made from living things?
R	S	P	Q

Q34(b) Rubber. It is important so that it can be used on wet surface.

Q34(c) Plastic. It is light. User is able to carry it easily.

Pei Chun Public School
Semestral Assessment 1 – 2016
Science
Primary 3

Name : _____ () Date : 10 May 2016

Class : Pri. 3 ()

Science Teacher : _____

Time : 50 min

Section A (15 × 2 marks)

For questions 1 to 15, choose the most suitable answer and shade its number (1, 2, 3 or 4) on the Optical Answer Sheet (OAS) provided.



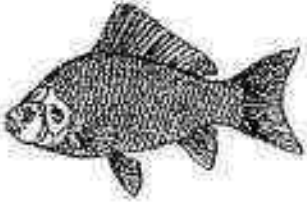

1. The table below shows the height of Sarah from the age of five years old to ten years old.

age (years)	height (cm)
5	110
6	114
7	119
8	125
9	129
10	135

From the information given in the table, we can conclude that Sarah is a living thing because she _____.

- (1) grows
- (2) reproduces
- (3) responds to changes
- (4) needs food to stay alive

2. The table below shows how things can be grouped.

Group A	Group B
 plant	 book
 fish	 train

Which of the following can be put in group A?

(1)



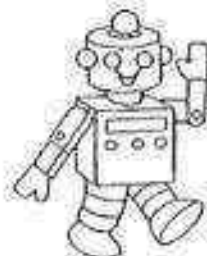
baby

(2)



frying pan

(3)



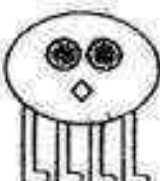


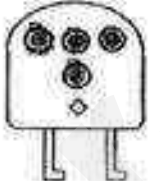
robot

(4)



watch

3. The table below shows how four creatures can be grouped.

Group A	Group B
 	 

The creatures are grouped according to _____.

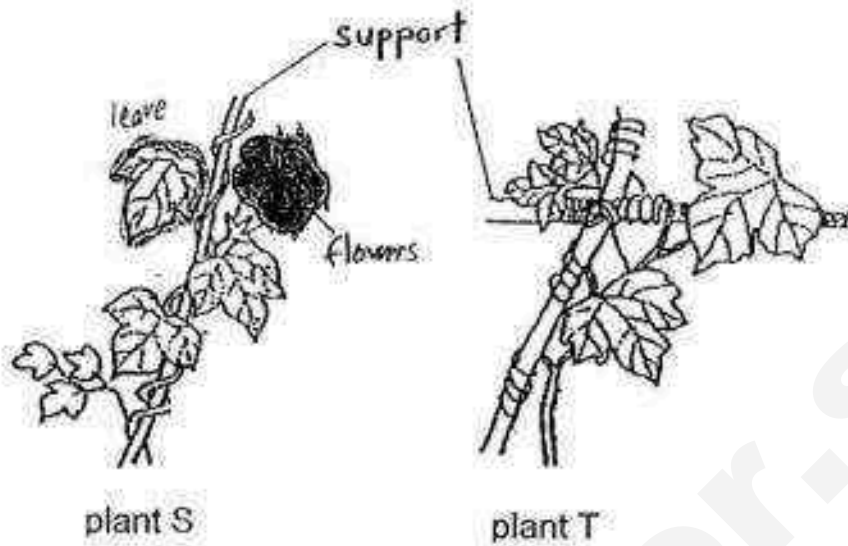
- (1) the shape of their bodies
 - (2) whether they have a mouth
 - (3) the number of legs they have
 - (4) the number of eyes they have
4. The table below gives information on three plants, X, Y and Z. A tick (✓) shows that the plant has the characteristic.

Characteristics	X	Y	Z
has a strong stem	✓	✓	
reproduce by seeds	✓		
reproduce by spores		✓	✓

Which of the plants is a/are **non-flowering** plant(s)?

- (1) X only
- (2) Y only
- (3) X and Y only
- (4) Y and Z only

5. The diagram below shows some plants.



Based on the diagram, what do plants S and T have in common?

- A : They have leaves.
- B : They have flowers
- C : They have a weak stem.
- D : Their stem enables the plant to stand upright.

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

6. The table below shows how some leaves can be grouped.

	oval-shaped	heart-shaped
smooth edge	P	Q
jagged edge	R	S

Which group do leaf C and leaf D belong to?





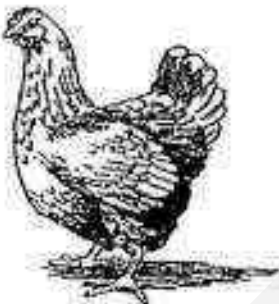

leaf C



leaf D

	leaf C	leaf D
(1)	Q	S
(2)	R	P
(3)	P	Q
(4)	S	R

7. The table below shows how four animals can be grouped.

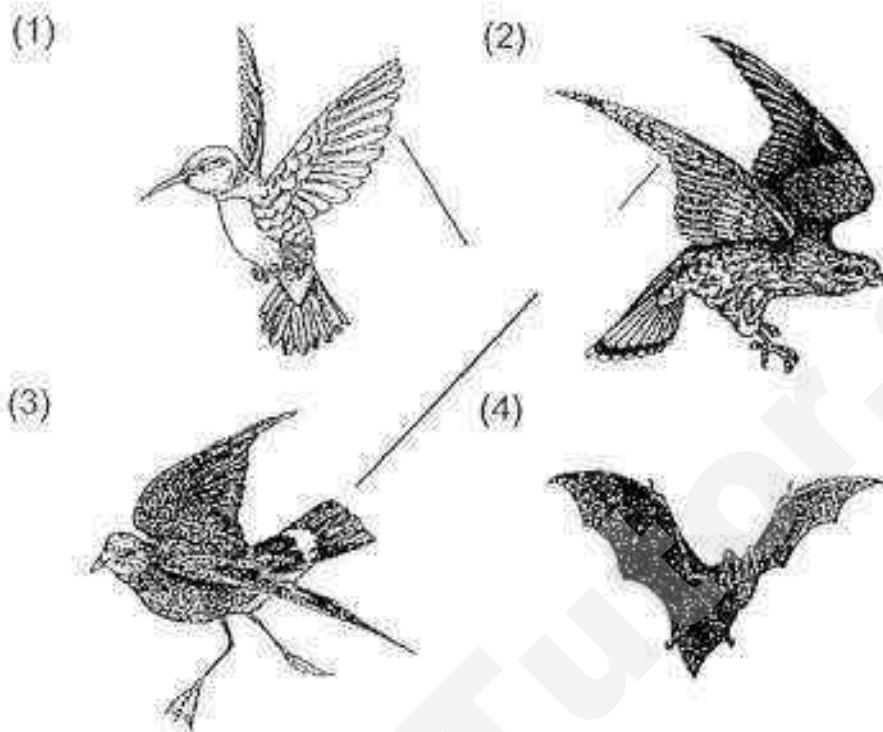
Animals	
lay eggs	give birth
 dolphin	 monkey
 chicken	 giraffe

Which of the animals above has been classified wrongly?

- (1) chicken
- (2) dolphin
- (3) giraffe
- (4) monkey

8. The diagrams below show four animals.

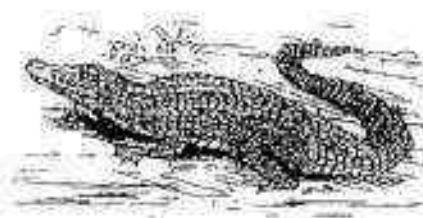
Which animal does not belong to the group?



9. The diagrams below show two animals.



animal A



animal B

Which of the following best describes animal A and animal B?

	animal A	animal B
(1)	has short tail	has long tail
(2)	has moist skin	has dry scales
(3)	lives in water only	lives on land only
(4)	eats mosquitoes only	eats fish only

10. Four pupils made the following statements about the characteristics of yeast.

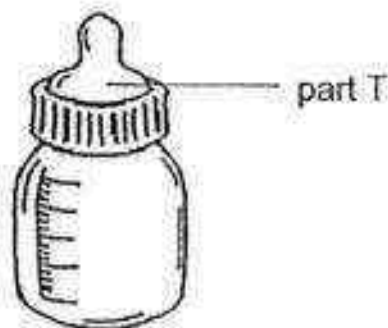
Joe : Yeast is microscopic.
Siti : Yeast and bacteria are fungi.
Mei Xin : Yeast grows faster in cold places.
Devi : Yeast needs air and water only to grow.

Which pupil is correct?

- (1) Joe
(2) Siti
(3) Mei Xin
(4) Devi
11. The table below shows the properties of materials A, B, C and D. A tick (✓) shows that the material has the property.

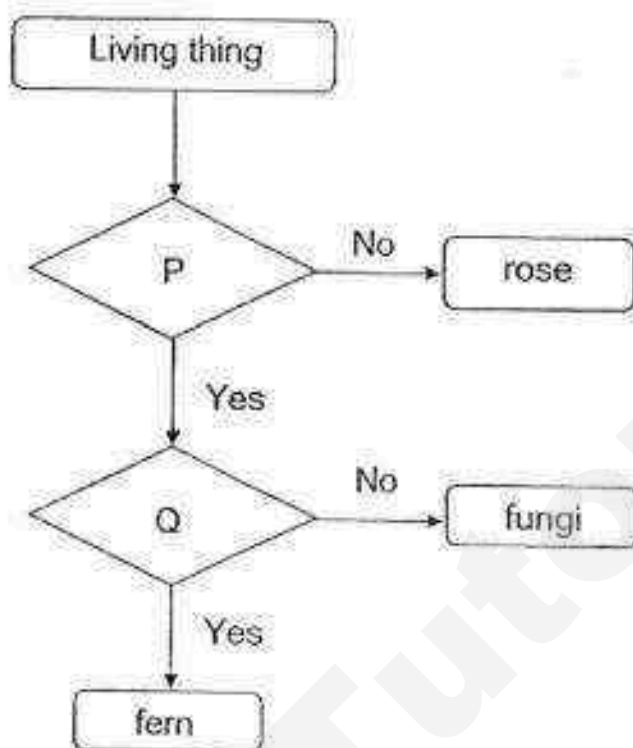
materials	flexible	waterproof
A		✓
B	✓	
C		
D	✓	✓

Which of the materials above is the most suitable for making part T of a milk bottle?



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

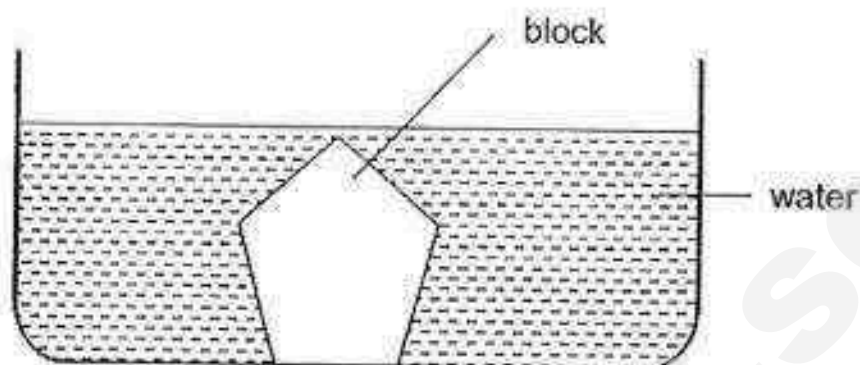
12. Ken had three living things. He classified the living things with the help of the chart below.



What are questions P and Q?

	P	Q
(1)	Is it a flowering plant?	Can it make its own food?
(2)	Can it make its own food?	Is it a non-flowering plant?
(3)	Does it reproduce by spores?	Can it make its own food?
(4)	Can it make its own food?	Does it reproduce by spores?

13. Jia Xuan had a solid block shown below. When she placed it in water, it sank to the bottom of the tank as shown in the diagram below.

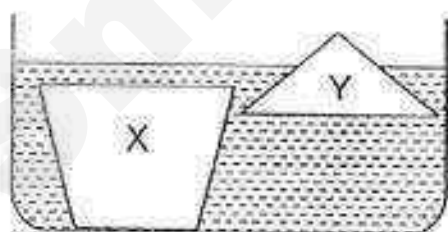


She cut the solid block into two pieces, X and Y. She then placed both pieces into the tank of water and observed the positions of X and Y in the water.

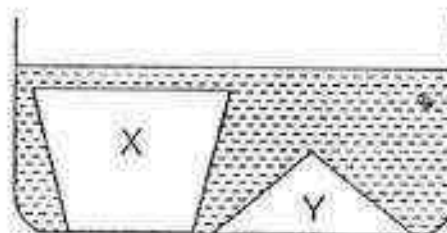


Which of the following diagrams correctly shows the positions of X and Y?

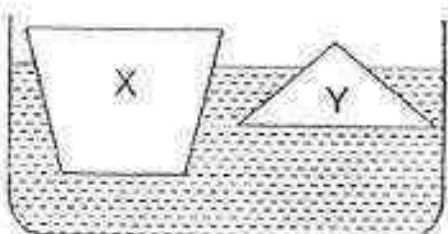
(1)



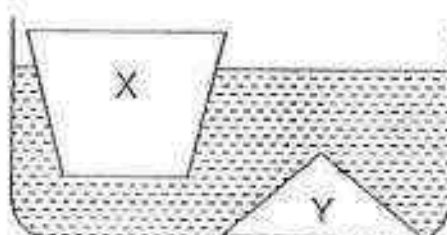
(2)



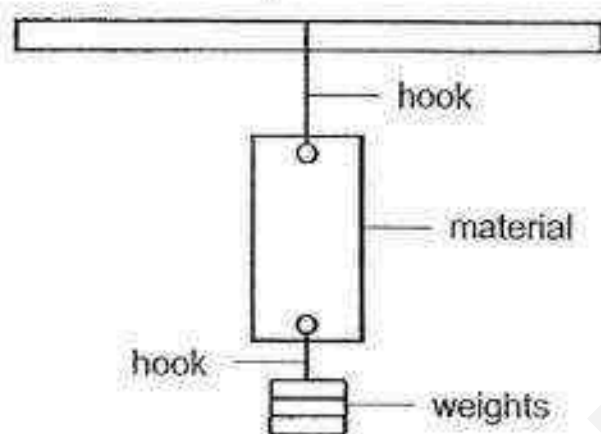
(3)



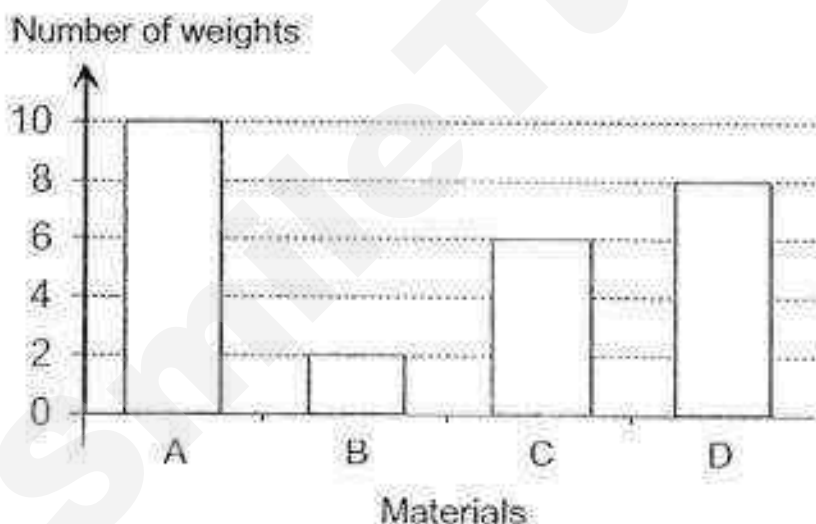
(4)



14. Sally conducted an experiment with four types of materials, A, B, C and D. She placed each piece of the material, one at a time onto a hook as shown in the set-up below.



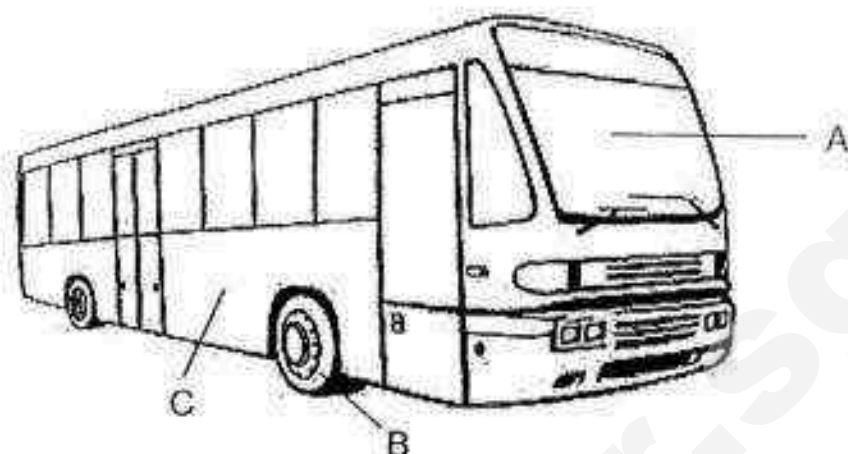
Then, she added weights one at a time onto the other end of the plastic until it tore. She recorded the least number of weights needed for each material to tear in a graph below.



Based on her experiment, which of the following statements is true?

- (1) B is the strongest.
- (2) D is stronger than C.
- (3) B is the least flexible.
- (4) A is more flexible than C.

15. The diagram below shows a bus.



The parts labelled A, B and C are made of certain materials. The table below shows the reason why they are chosen.

Part	Why this material is chosen
A	It does not allow light to pass through it.
B	It is waterproof and flexible.
C	It is waterproof and strong.

Which of the parts are matched to the correct reasons?

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

End of Section A

Pei Chun Public School
Semestral Assessment 1 – 2016
Science
Primary 3

Name : _____ ()

Class : Pri. 3 ()

Date : 10 May 2016

Time : 50 min

Science Teacher : _____

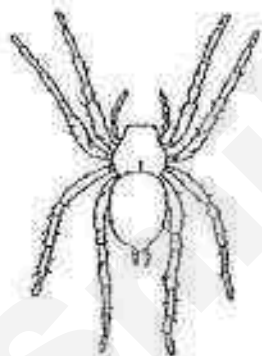
Parent's signature: _____

Section A	30
Section B	20
Total	50

Section B (20 marks)

For questions 16 to 22, write your answers in the spaces provided.

16. The diagrams below show three animals.



E



F



G

a) Which animal, E, F or G, is **not** an insect?

[1]


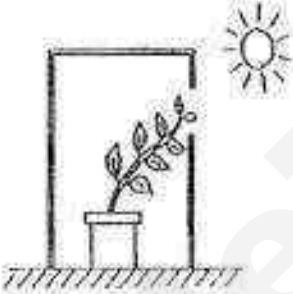
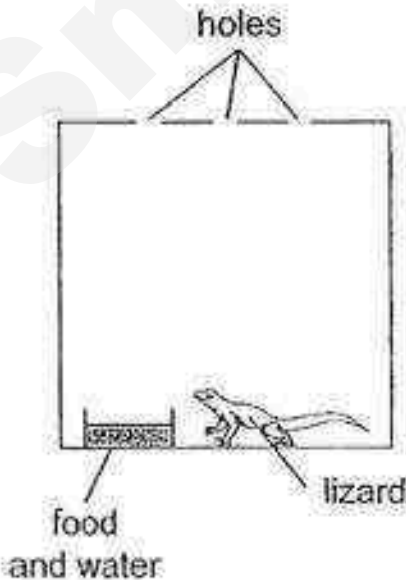
Animal _____

b) For your answer in (a), give a characteristic that shows that it is not an insect.

[1]

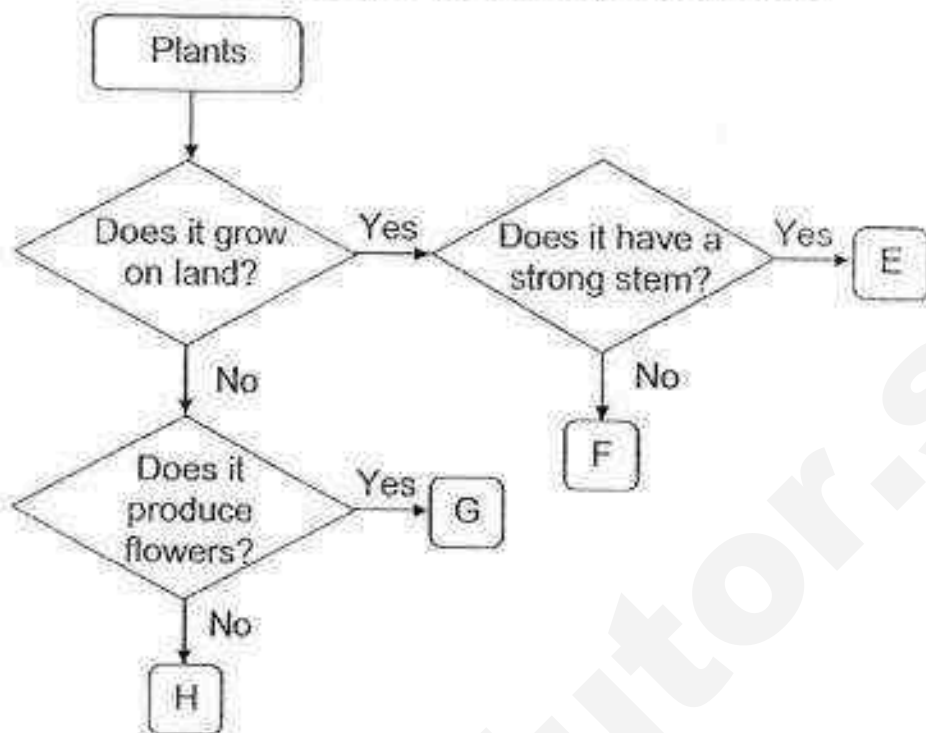
17. State the correct characteristics of living things for the following observations.

[3]

Observation	Characteristic
<p>(a) A cat gives birth to its kittens.</p> 	<p>Living things _____</p> <p>_____</p>
<p>(b) A plant grows towards sunlight.</p> 	<p>Living things _____</p> <p>_____</p>
<p>(c) The lizard was alive after two weeks.</p> 	<p>Living things _____</p> <p>_____</p>

SCORE

18. The flowchart below shows the classification of plants.



Letters E, F, G and H represent four different plants.

- a) Based on the flowchart, state two characteristics of plant G. [1]

Characteristic 1: _____

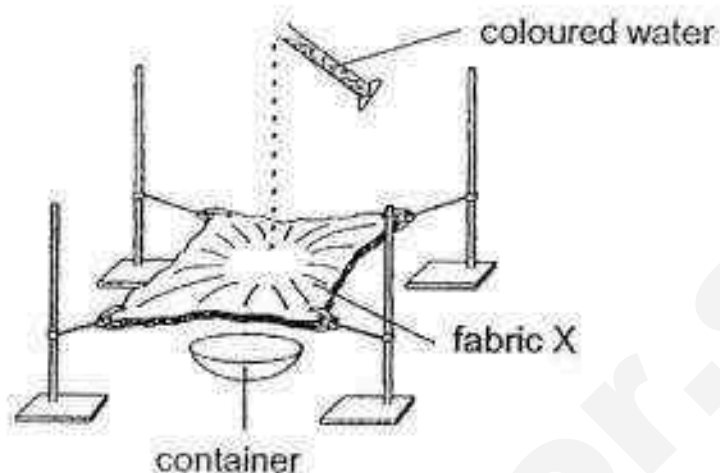
Characteristic 2: _____

- b) Based on the flowchart, state a similarity between plants E and F. [1]

- c) Based on the flowchart, state a difference between plants E and H. [1]

SCORE	
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19. A piece of fabric, X, was placed in the set-up as shown below. 20 ml of coloured water was poured onto it and its increase in mass was measured after a few minutes.



The experiment was repeated using fabrics Y and Z made of the same size and thickness. The table below shows the results of the experiment.

Fabric	Increase in mass (g)
X	0
Y	25
Z	13

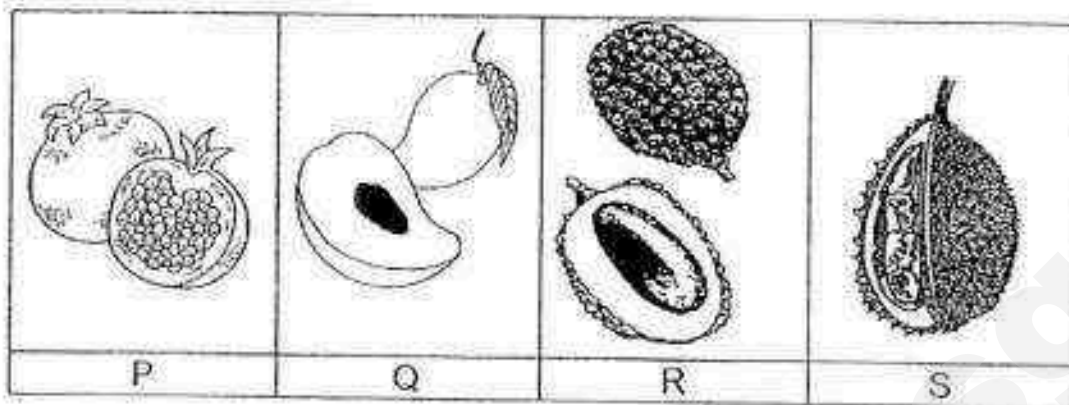
- a) State the property of the material that was tested in this experiment. [1]

- b) Which of the following fabrics, X, Y or Z, is the most suitable for making a raincoat? Give a reason for your answer. [1]

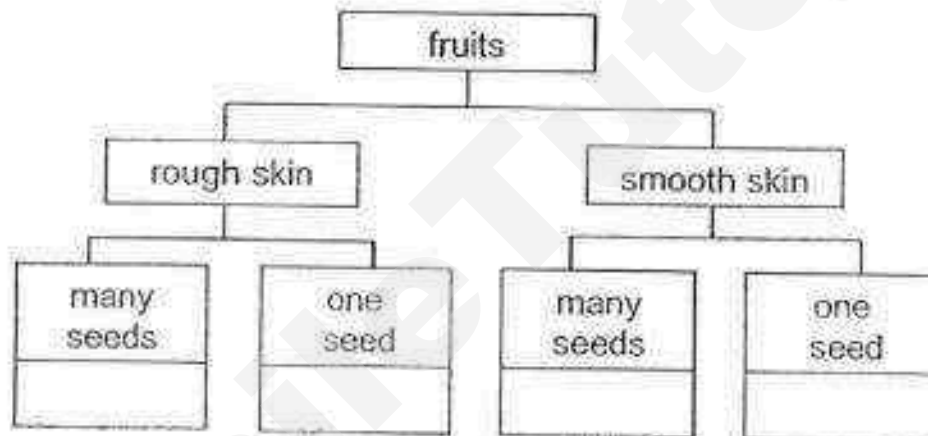
- c) Which of the following fabrics, X, Y or Z, is the most suitable for making bath towels? Give a reason for your answer. [1]

SCORE	
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20. The diagram below shows four fruits.



- a) Based on your observation of the fruits above, classify them into the classification diagram shown below. Complete the diagram by writing the correct letters, P, Q, R and S, in the boxes provided. [2]



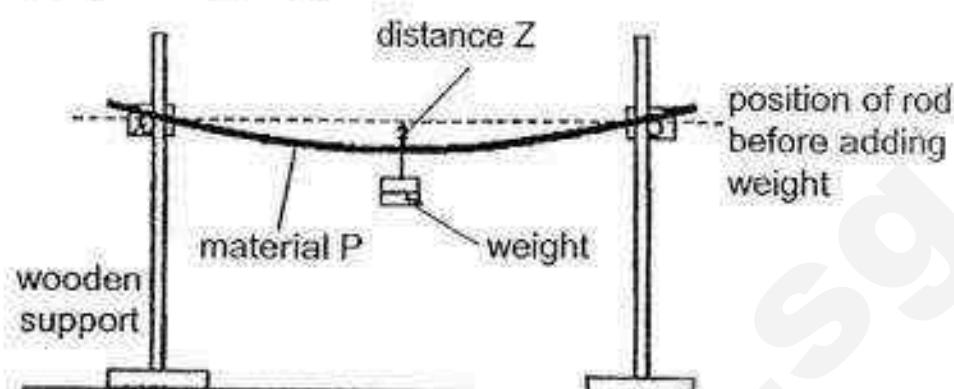
- b) The picture below shows a coconut plant.
Based on your observation of the diagram, which of the following statements is/are true? Put a tick (✓) in the correct box(es). [1]



Statement	True
The coconut fruits grow in a bunch.	
The coconut tree is a flowering plant.	
The stem of the coconut tree is strong.	

SCORE	
-------	--


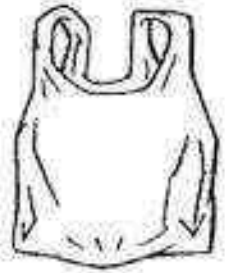
21. Rashid carried out an experiment on material P using the set-up shown below. She measured distance Z at the middle of the rod after hanging a 350 g weight on it.



She repeated the experiment using materials Q and R but of the same length and thickness as material P. Her results are shown below.

Material	Distance Z (cm)
P	10
Q	0
R	3

- a) Using the information collected in the table above, match each object to its possible material used, P, Q or R, and give a reason for your choice. [2]





Object	Choice of material / reason
<p>(i) Key</p> 	<p>Most suitable material : _____</p> <p>Reason: _____</p> <p>_____</p> <p>_____</p>
<p>(ii) Plastic Bag</p> 	<p>Most suitable material : _____</p> <p>Reason: _____</p> <p>_____</p> <p>_____</p>

(question continues on the next page)

SCORE	
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- b) Name the property that Rashid tested in her experiment. [1]

22. Jie Ying conducted an experiment. She took four slices of bread from the same loaf of bread and placed them under the following conditions as listed in the table below.

bread A	bread B	bread C	bread D
			
moist bread placed on a table	moist bread placed in the refrigerator	cooled toasted bread placed on a table	cooled toasted bread placed in the refrigerator

- a) After five days, which bread, A, B, C or D, will have the most amount of mould growing on it? [1]

- b) Explain your answer in (a). [2]

End of Section B

Set by : Mrs Magdeline Lien & Ms Parvin Kaur D/O Harbhajan Singh
Vetted by: P3 Science teachers

SCORE	
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EXAM PAPER 2016 (P3)

SCHOOL : PEI CHUN

SUBJECT : SCIENCE

TERM : SA1

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

16)a)E

b)It does not have three body parts / six legs.

17)a)Living thing can reproduced and have young.

b)Living thing respond to changes around them.

c)Living thing need air, food and water survive.

18)a)1)plant G does not grow on land.

2)plant G produces flowers.

b)Plants E and F both grow on land.

c)Plant E grows on land but plant H does not grow on land.

19)a)Waterproof.

b)X is more suitable for making a raincoat, a raincoat needs to be waterproof and X is waterproof.

c)Y is more suitable for making bath towels, a bath towel needs to absorb water and Y can absorb the most water.

20)a)S , R, P, Q

b)

✓
✓
✓

21)a)i)Q.

It is not flexible / the least flexible.

ii)P

It is the most flexible.

b)Flexibility.

22)a)Bread A.

b)Bread A has moisture and warmth.



RED SWASTIKA SCHOOL

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. |

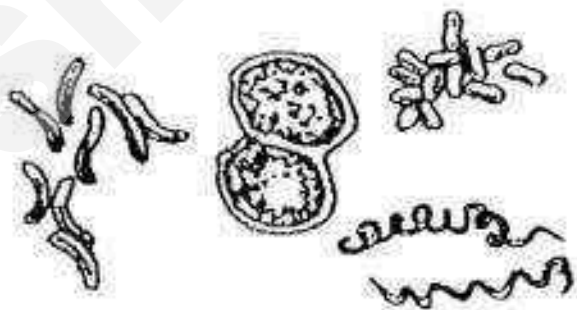
Which student(s) has/have made the correct statement(s)?

- (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.

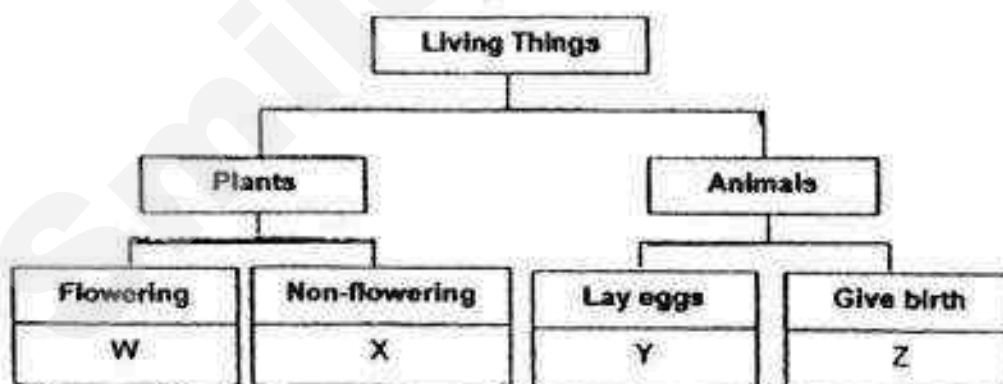
Ivy : A football is a non-living thing as it cannot reproduce

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

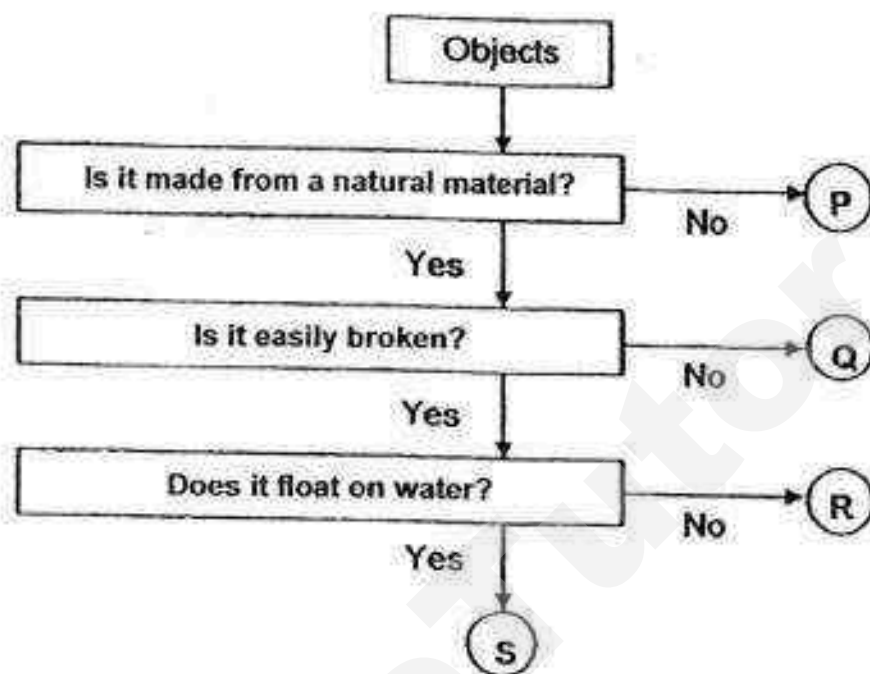
- 11 Study the classification chart below.



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?

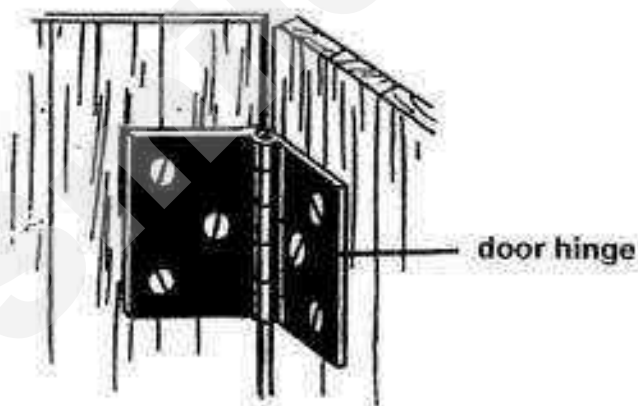
- (1) Object P
- (2) Object Q
- (3) Object R
- (4) Object S

- 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

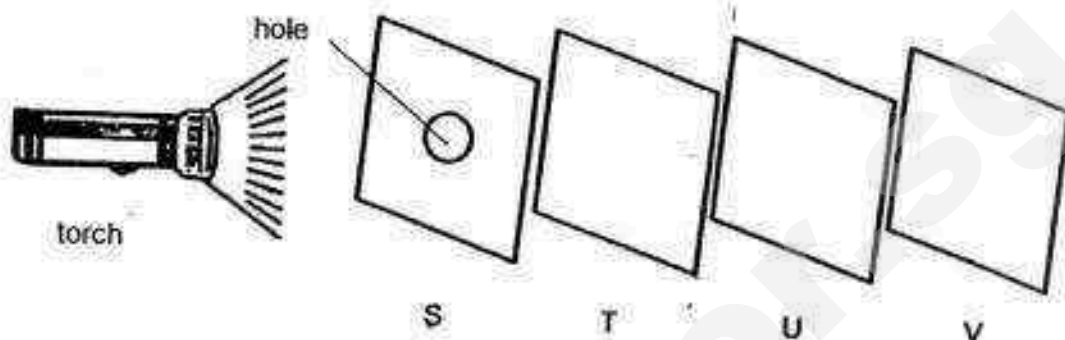
- 15 The diagram below shows a door hinge.



Iron is used to make door hinges because iron is _____

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

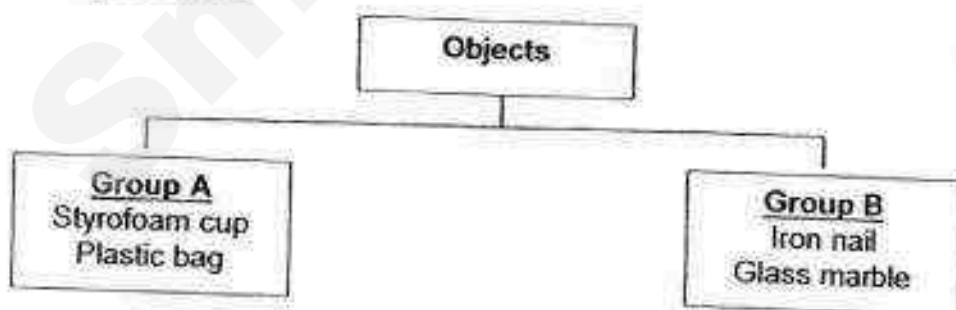
- 16 Jaymond conducted an experiment shown below in a dark room. He arranged the sheets, S, T, U and V in a straight line. When the torch was switched on, he could see a bright spot of light on sheet U only.



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

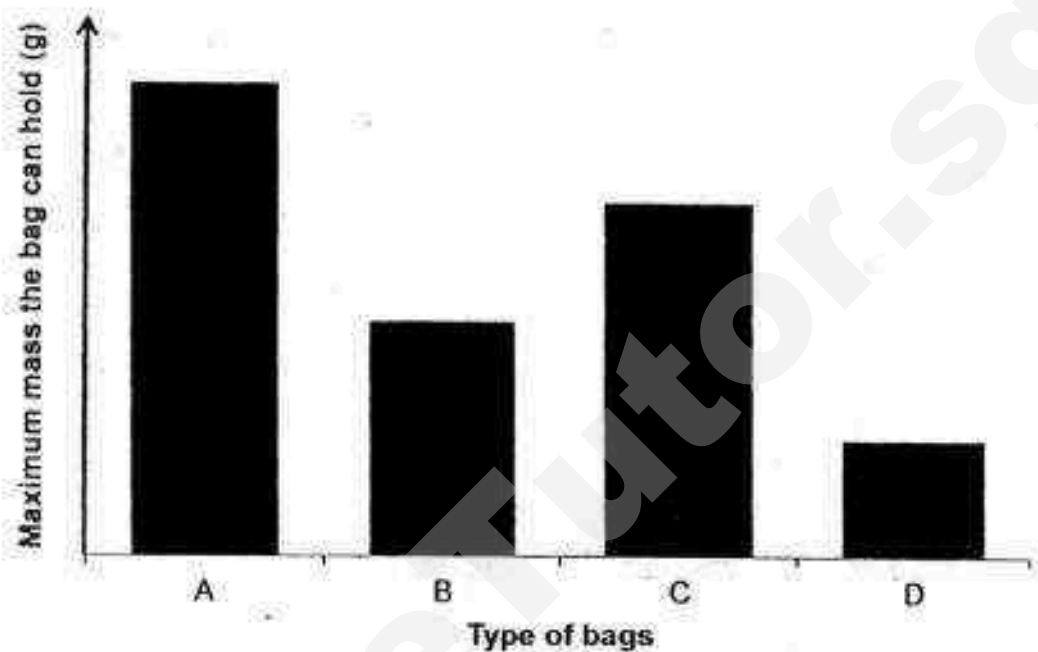
- 17 Study the chart.



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



RED SWASTIKA SCHOOL

SCIENCE 2016 SEMESTRAL EXAMINATION 1 PRIMARY 3

Name : _____ ()

Class : Primary 3/ _____

Date : 10 May 2016

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

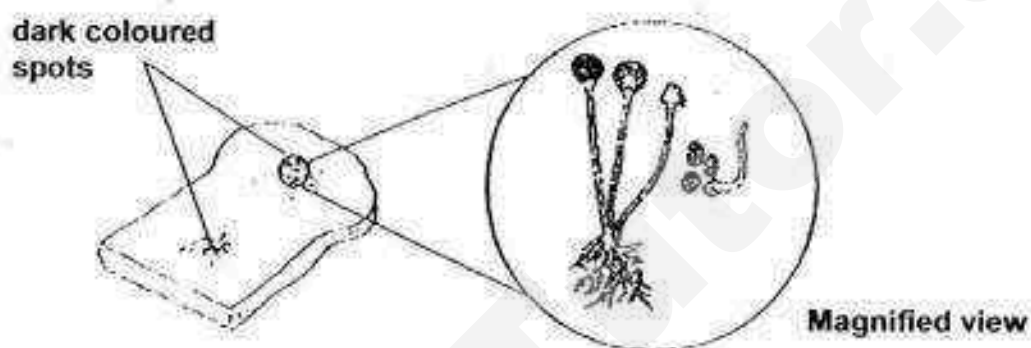
	OBTAINED	POSSIBLE
BOOKLET A		36
BOOKLET B		24
TOTAL		60

Parent's Signature : _____

Section B: Open-ended Questions

Answer all questions in the space provided.

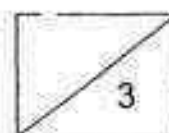
- 19 James left a piece of bread on the table untouched. After a week, he observed that some dark coloured spots had formed on the bread.



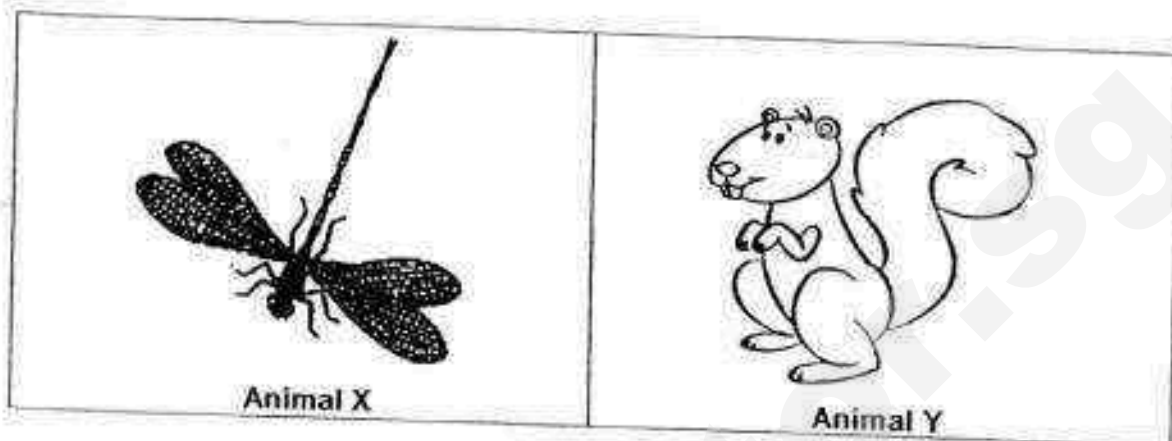
- a) What are these dark coloured spots? (1m)

- 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)

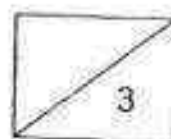
a) Similarity:

b) Difference:

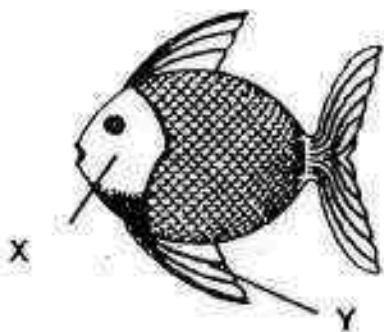
c) Zion's mother told her that both animals are living things. List two characteristics of living things. (1m)

i)

ii)



21 The picture below shows a fish.



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

X: _____

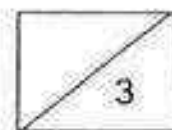
Y: _____

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

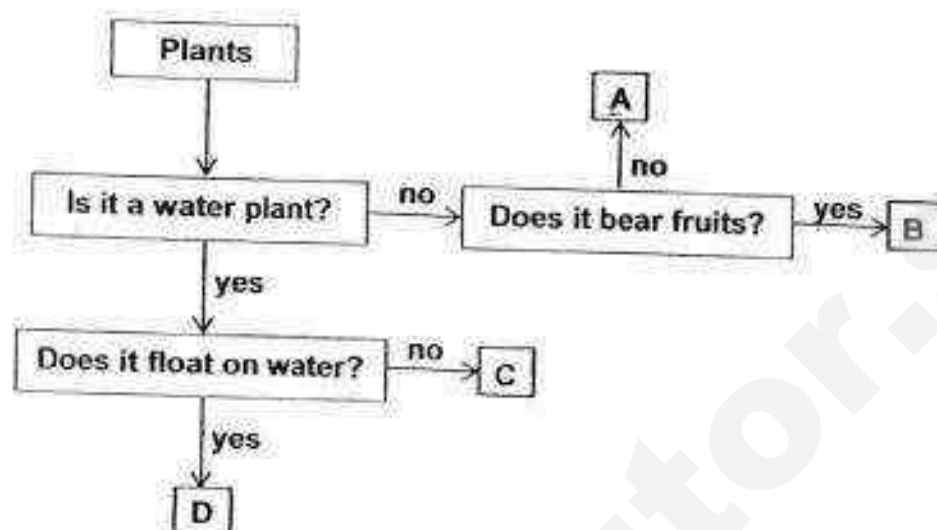
c) A dolphin lives in water and can swim like a fish but it is a mammal.
Compare two characteristics to show that the dolphin is a mammal but the fish is not. (1m)

i) _____

ii) _____



22 Study the flowchart below.



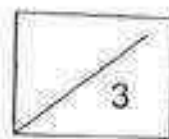
a) Based on the flowchart above, describe C. (1m)

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 - _____

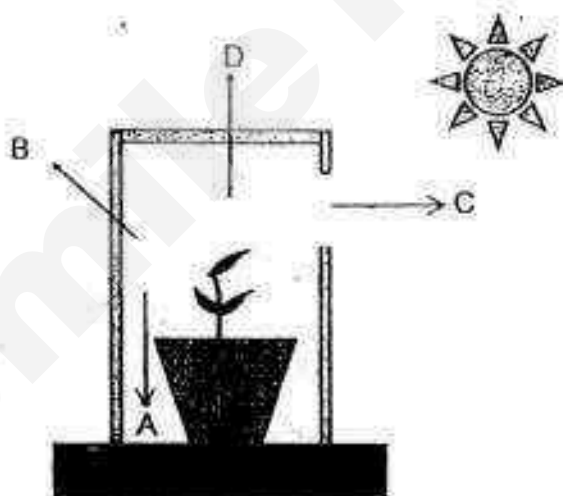


23 Raymond conducted an experiment to find out if plants need water to survive.

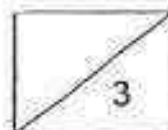
- a) In the table below, tick (✓) the variables that Raymond should keep the same. (1m)

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

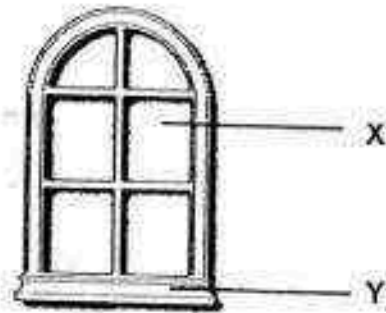
Raymond placed a pot of young plant in a black box with an opening as shown in the diagram below. The box was placed in a sunny place. He watered the plant daily. After a few days, he observed that the young plant grew in a certain direction.



- 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.

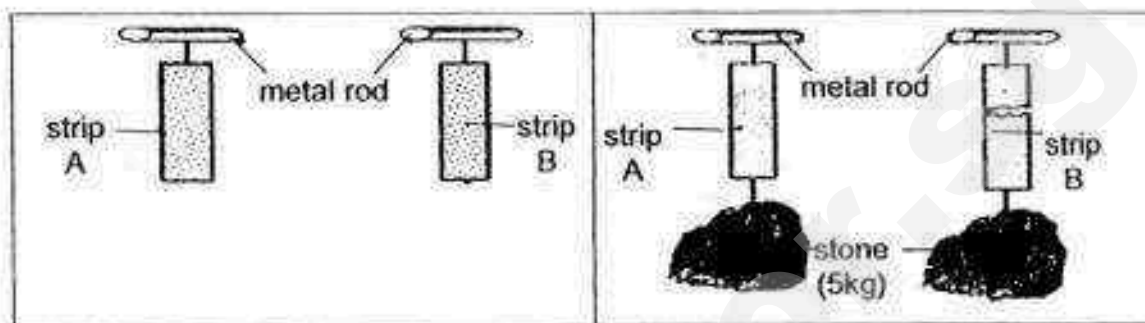


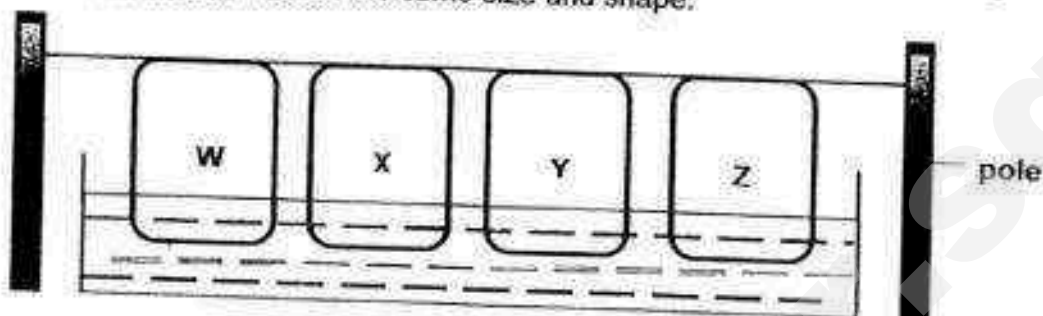
Diagram A (before)

Diagram B (after)

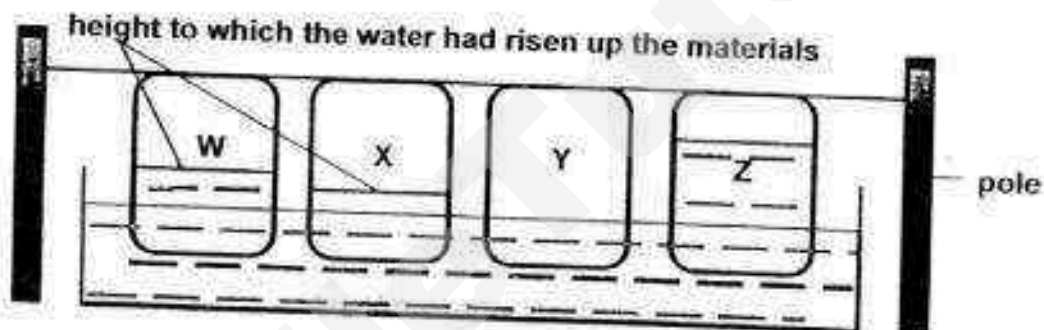
- a) Which physical property of the strips was tested? (1m)
- _____
- b) Based on the results shown in diagram B, what can be concluded about Strip B as compared to Strip A? (1m)
- _____
- _____
- c) A student conducts an experiment to test whether Strip A is flexible. What will the student observe to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



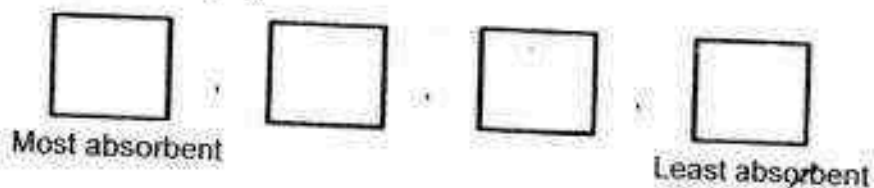
- 26 En Xi conducted an experiment by placing the ends of four pieces of different materials, W, X, Y and Z, into a container of water as shown in the diagram below. The materials were of the same size and shape.



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



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



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

RIVER VALLEY PRIMARY SCHOOL
SEMESTRAL ASSESSMENT 1 / 2016
PRIMARY 3

SCIENCE

(BOOKLET A)

Name : _____ ()

Date : 10th May 2016

Class : P3 _____

Total Time for Booklet A & Booklet B : 1 hour

INSTRUCTIONS TO CANDIDATES

1. Write your name, index number and class in the space above.
2. Do not turn over this page until you are told to do so.
3. Follow all instructions carefully.
4. Answer all questions.
5. For Section A, shade your answers for questions 1 to 15 in the Optical Answer Sheet (OAS) provided.
6. For Section B, write your answers for questions 16 to 20 in the space provided in the booklet.
7. The total marks for Booklet A is 30 marks.

Section A (30 marks)

For each question 1 to 15, four options are given. One of them is the correct answer. Make your choice (1, 2, 3 or 4). Shade the oval (1, 2, 3 or 4) on the Optical Answer Sheet.

1. The table below shows a diversity of things you can find at a park.

Things found at a park	
Living Things	Non-living Things
Fishes	Bridges
Benches	Stones
Insects	Grass
Trees	Lamps

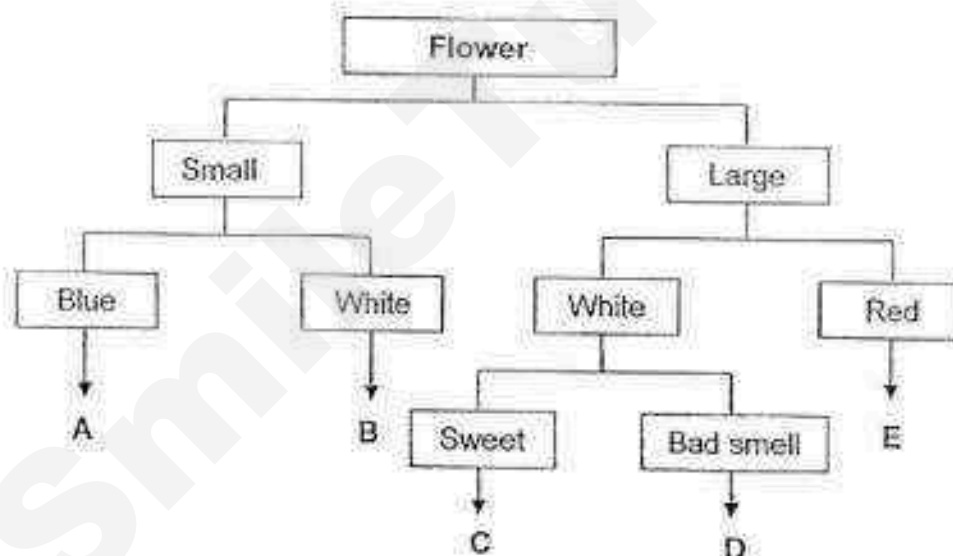
Which of the above-items have been grouped wrongly?

- (1) Trees and lamps
- (2) Insects and stones
- (3) Fishes and bridges
- (4) Benches and grass

2. The table below shows the characteristics of some flowers which attract certain animals.

Animal	Characteristics of flowers		
	Size	Colour	Smell
beetle	large	white	bad smell
bee	small	bright blue	no smell
butterfly	small	white	no smell
bird	large	red	no smell
bat	large	white	sweet

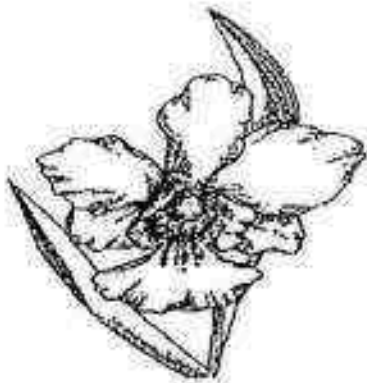
Study the classification diagram given below. A, B, C, D and E represent five different types of flowers.



Based on the classification diagram above, which animal would be attracted to Flower B and which animal would be attracted to Flower C?

	Flower B	Flower C
(1)	beetle	bird
(2)	butterfly	bat
(3)	bee	bat
(4)	butterfly	beetle

3. The diagram below shows an orchid plant and a fern plant.



Orchid



Fern

Which of the following statements is/are correct?

- A: Both the orchid plant and the fern plant are flowering plants.
- B: The fern plant has a stem but the orchid plant does not.
- C: The orchid plant is a flowering plant.
- D: The orchid plant can make food using sunlight but the fern cannot.

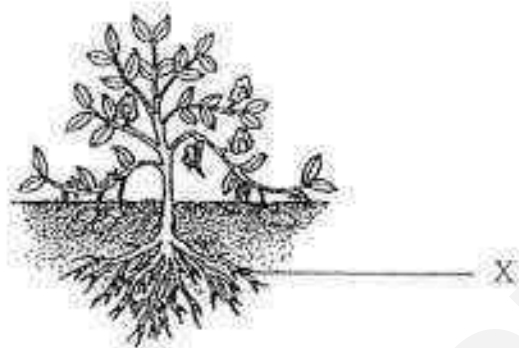
(1) A only

(2) C only

(3) A and B

(4) C and D

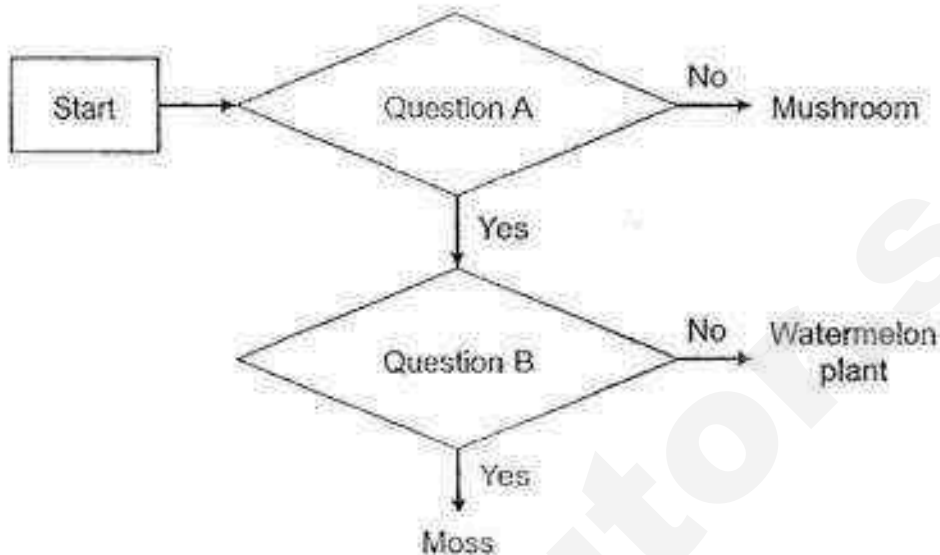
4. The picture below shows a plant.



What is the function of part X?

- (1) To attract insects.
 - (2) To make food for the plant.
 - (3) To absorb water and minerals for the plant.
 - (4) To transport water and minerals to the rest of the plant.
5. Lydia had a pet hamster. One day, she forgot to shut the door of her hamster's cage. When she reached home at the end of the day, she found her hamster under her bed. Which characteristic of living things does this show?
- (1) Living things can breathe.
 - (2) Living things can reproduce.
 - (3) Living things change as they grow.
 - (4) Living things can move by themselves.

6. Study the flowchart carefully.



Based on the flowchart above, what are Question A and Question B?

	Question A	Question B
(1)	Can it reproduce by seeds?	Does it live on land?
(2)	Does it live on land?	Can it make its own food?
(3)	Can it make its own food?	Can it reproduce by spores?
(4)	Can it reproduce by spores?	Can it bear flowers?

7. Which of the following statements about bacteria is correct?

- (1) All bacteria are harmful to our body.
- (2) All bacteria do not need food and water.
- (3) Some bacteria can be found in our body.
- (4) Bacteria can be seen with the naked eye.

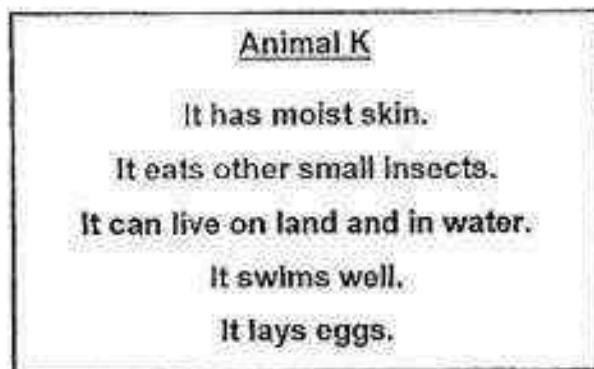
8. Seed X was placed in the soil and its growth was monitored and recorded in the table shown below.

Date	Observations of Seed X
Day 1	Seed was put in the soil
Day 7	Roots appeared
Day 15	First shoot appeared
Day 20	Leaves appeared

Based on the information provided in the table above, by which day can Seed X survive without its seed leaves?

- (1) Day 1
- (2) Day 7
- (3) Day 15
- (4) Day 20

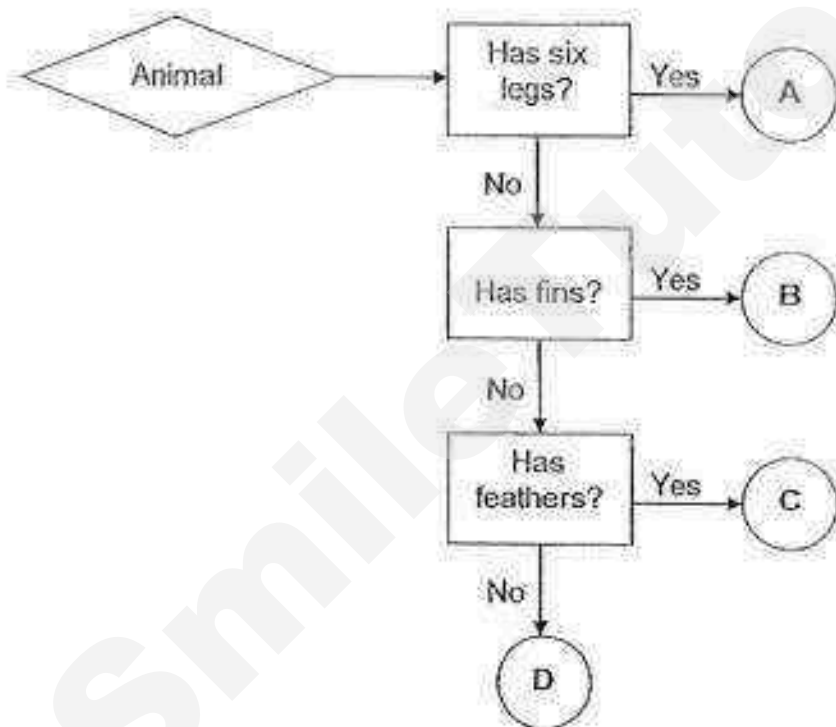
9. Study the characteristics of Animal K.



Animal K is most likely to be a/an _____.

- (1) fish
- (2) reptile
- (3) mammal
- (4) amphibian

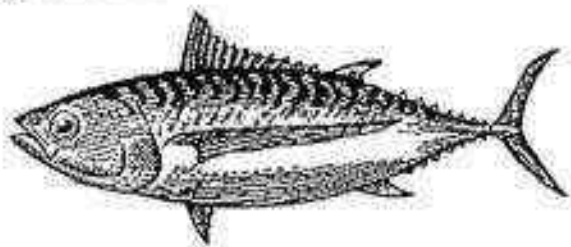
10. Study the animal below.



Which letter (A,B,C or D) in the flowchart above best represents the animal in the picture?

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

11. Study the diagram below.

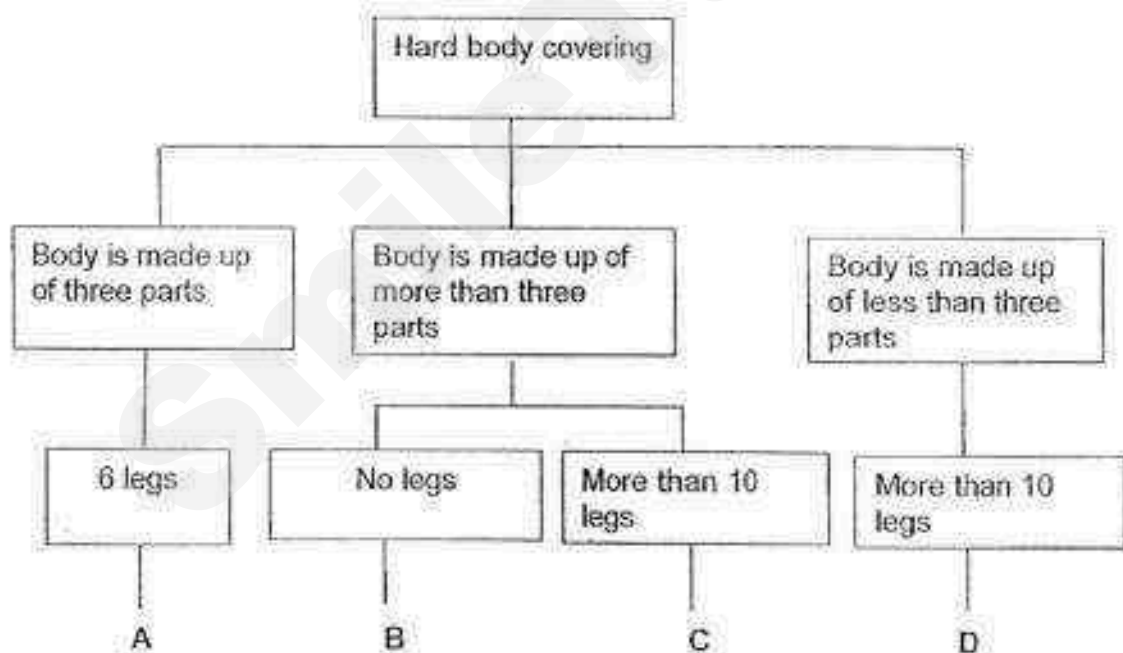
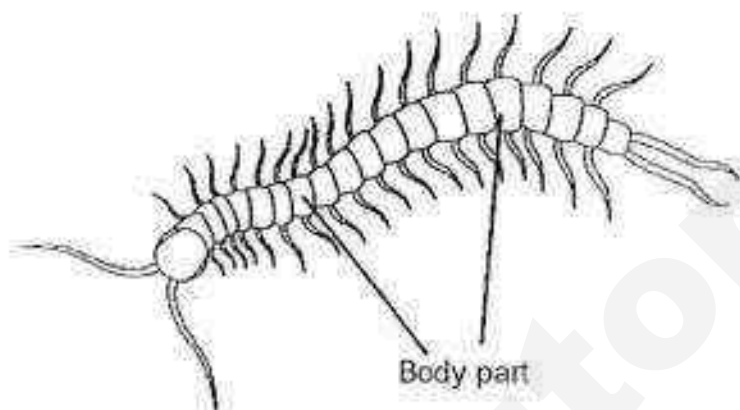


Which of the following statement(s) is/ are true?

- A: It has scales to protect its body.
- B: It has gills to help it to lay eggs.
- C: It has fins and a tail to help it move in water.

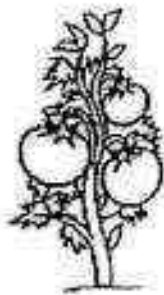
- (1) A only
- (2) B only
- (3) A and C only
- (4) A, B and C

12. Jack found an animal with a hard outer body covering as shown below.
He wanted to classify the animal based on the classification chart below.
Which group, A, B, C or D should Jack place this animal in?



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

13. Study the two plants shown below carefully,



pole



Which of the following correctly describes the similarities between them?

- A Both are land plants.
- B Both have weak stems.
- C Both reproduce from seeds.

- (1) A and B only
- (2) A and C only
- (3) B and C only
- (4) All of the above

14. Ali wanted to investigate what should be the best temperature for seeds to germinate and prepared 4 set-ups similar to the one shown in the diagram below.



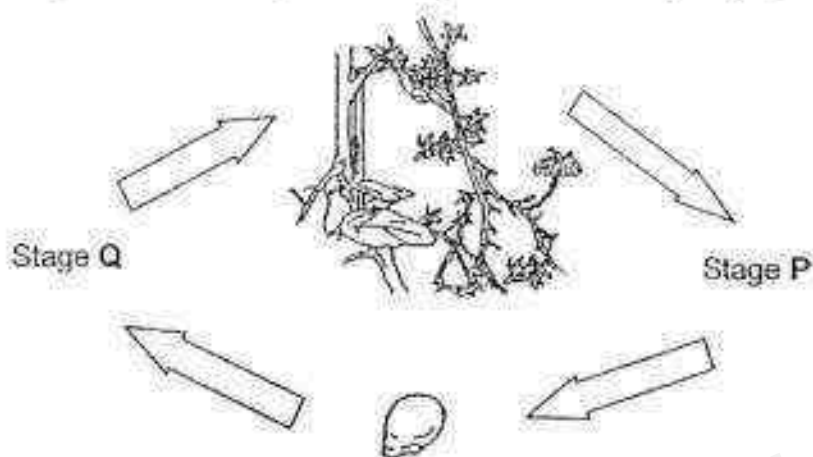
He placed each set-up at a different place as shown in the following table.

Set-up	Place	Temperature
A	In a classroom	25°C
B	In a refrigerator	3°C
C	In a warm room	29°C
D	In a heated oven	90°C

In which two set-ups, would the seeds grow into young plants?

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

15. The diagram shows the growth of a plant with missing stages, P and Q.



Which of the following shows the correct growth stages for P and Q?

	P	Q
(1)		
(2)		
(3)		
(4)		

~ End of Section A ~

RIVER VALLEY PRIMARY SCHOOL
SEMESTRAL ASSESSMENT 1 / 2016
PRIMARY 3

SCIENCE

(BOOKLET B)

Name : _____ ()

Date : 10th May 2016

Class : P3 _____

Total Time for Booklet A & Booklet B : 1 hour

INSTRUCTIONS TO CANDIDATES

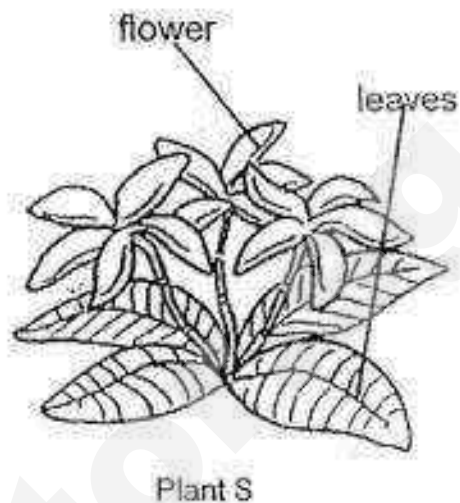
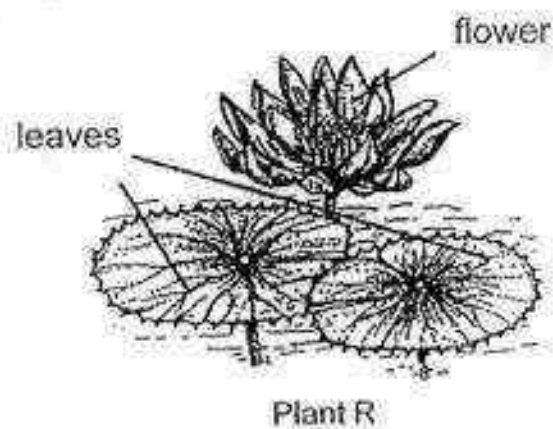
1. Write your name, index number and class in the space above.
2. Do not turn over this page until you are told to do so.
3. Follow all instructions carefully.
4. Answer all questions.
5. For Section A, shade your answers for questions 1 to 15 in the Optical Answer Sheet (OAS) provided.
6. For Section B, write your answers for questions 16 to 20 in the space provided in the booklet.
7. The total marks for Booklet B is 20 marks.

Booklet A		/30
Booklet B		/20
Total		/50
Parent's Signature		

Section B (20 marks)

Write your answers to questions 16 to 20 in this booklet.

16. Study the 2 plants below.



- (a) Write down 2 differences between the leaves of Plant R and Plant S. [2]
(Do not compare the size.)

Difference 1: _____

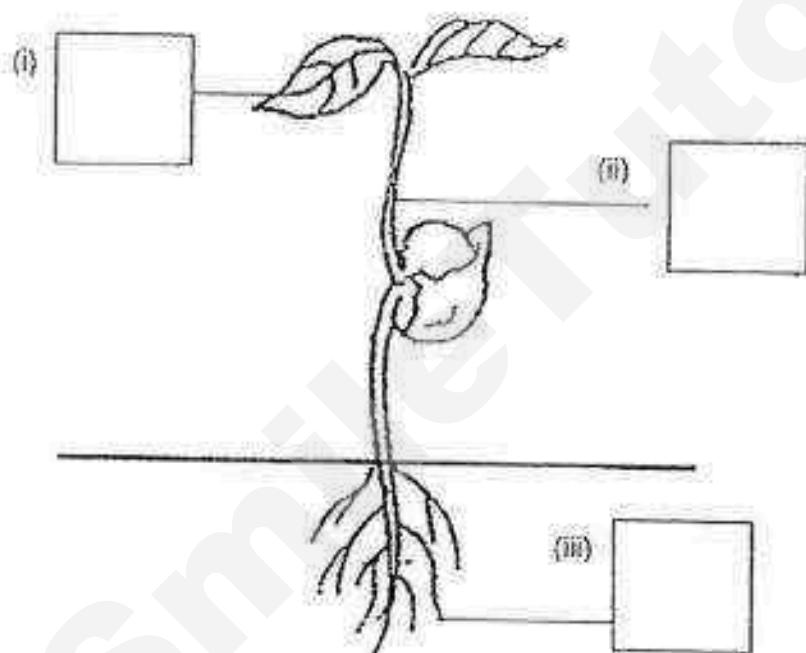
Difference 2: _____

	2
--	---

(b) The table below shows a seedling and its function.

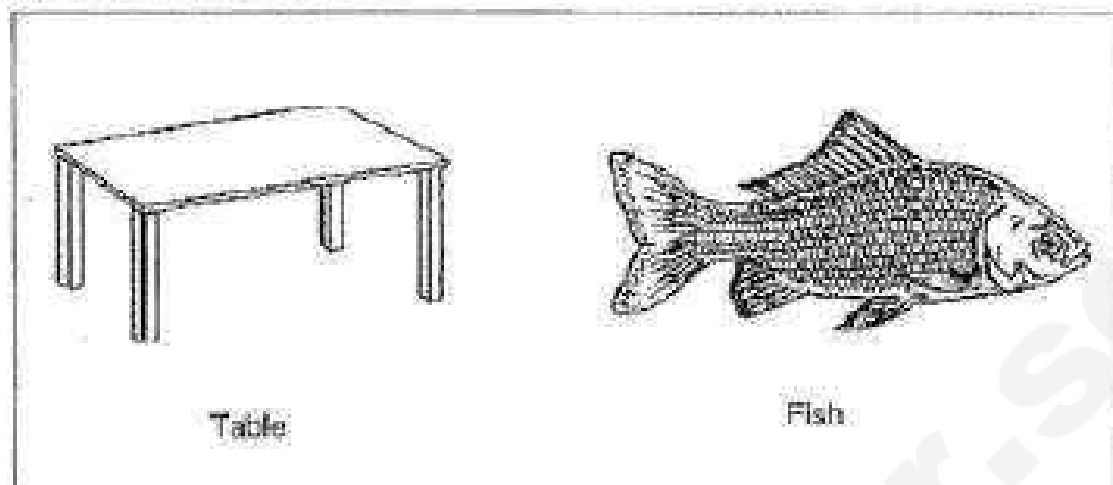
Function	Part of the seedling
Makes food for the plant.	A
Takes in water and mineral salts.	B
Transports water to the leaves.	C

Write A, B or C in the boxes provided below to show the correct function of the parts of the seedling. [2]



	2
--	---

17. Study the diagrams below.



(a) Tick (✓) the correct boxes to show the groups which the table and fish belong to. [2]

	Living Thing	Non-living Thing
Table		
Fish		

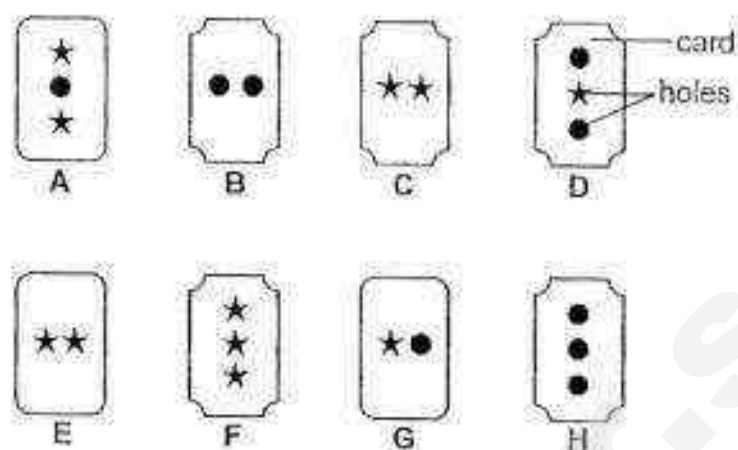
(b) Based on the characteristics of living and non-living things, give two reasons to explain your answer. [2]

Reason 1 : _____

Reason 2 : _____

	4
--	---

18. Bryan found some game cards with holes as shown below.



- (a) Classify the cards into two groups. Fill in the table below with the letters (A-H) according to the heading. [2]

Game Cards			
2 holes		3 holes	
Same shape	Different shape	Same shape	Different shape

	2
--	---

(b) Characteristics of things S, T, U and V were noted down in the table shown below.

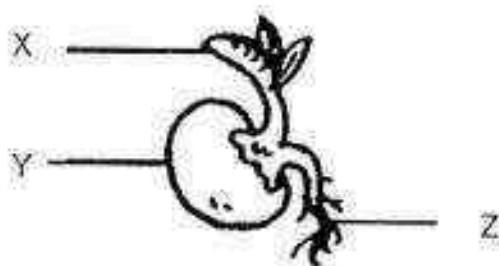
Thing	Needs sunlight	Can move from place to place	Needs air, food and water
S		✓	
T	✓	✓	✓
U		✓	✓
V		✓	

Based on the table above, read each of the statements below and write down 'True' or 'False' in the column provided. [2]

Statement	True or False
(a) V is a rabbit.	
(b) T and U are living things.	
(c) T is a mushroom.	
(d) S is a toy car.	

	2
--	---

19. Look at the diagram of the seedling below.



(a) Which part of the plant, X, Y or Z appears first? [1]

(b) Besides air, what is needed for the seed to germinate? [1]

A seedling was placed in a room with all the suitable conditions for it to develop into a young plant. The table below shows the change in the mass of the seed leaves.

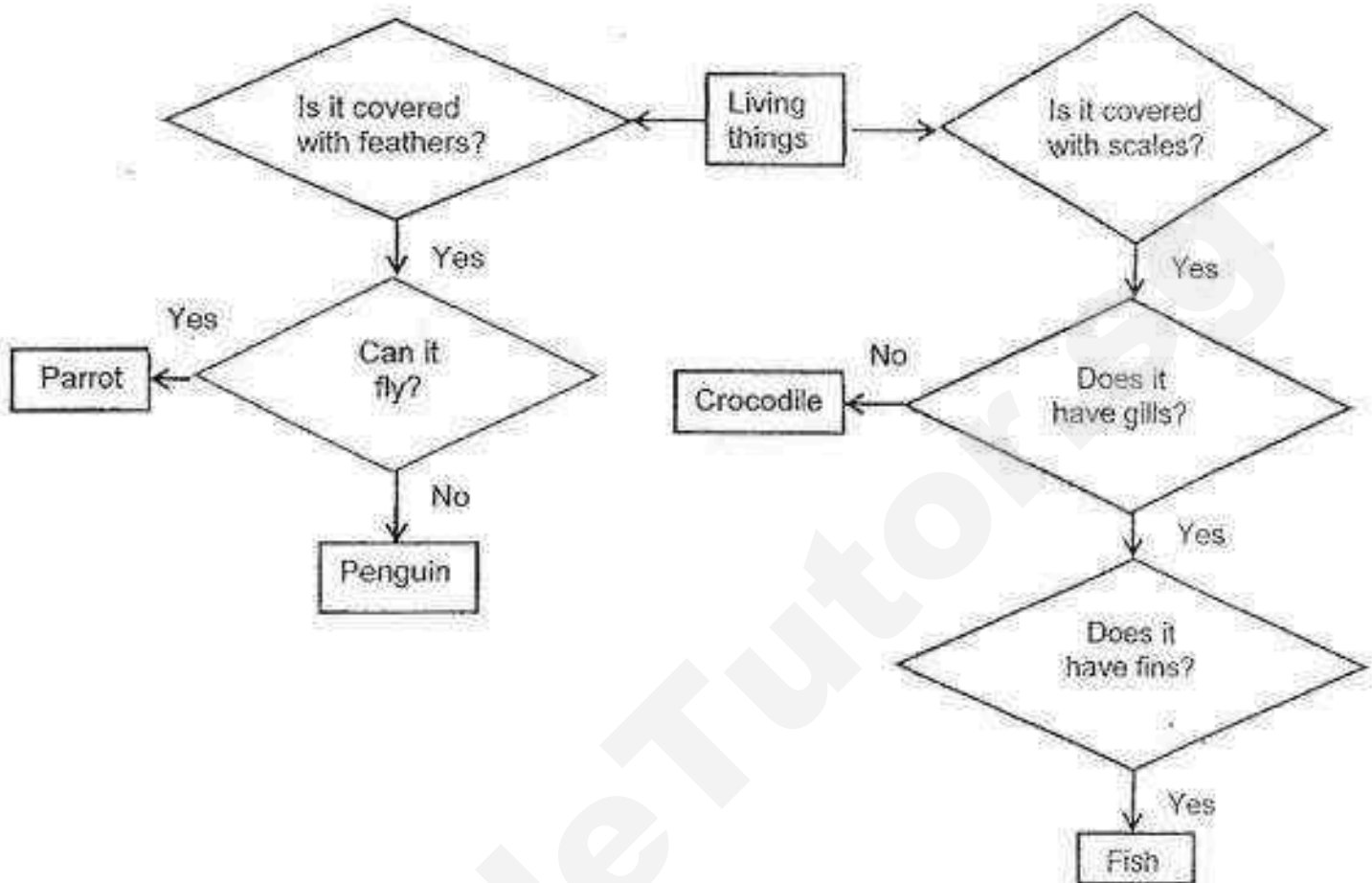
Day	Day 1	Day 3	Day 5	Day 7	Day 9
Mass (g)	1 g	_____ g	0.8 g	0.4 g	0.2 g

(c) What do you think will be the mass of the seed leaves on Day 3 be? [1]

(d) From the table above, explain the change in the mass of the seed leaves. [1]

	4
--	---

20. Study the flowchart below.



(a) Based on the flowchart above, name the animal that belong to the following groups.[2]

	Common observable characteristics	Name of living things
(i)	It is covered with scales but it does not have gills.	
(ii)	It has wings but it cannot fly.	

(b) Based on the flowchart above, name a similarity between the fish and crocodile.[1]

(c) Based on the flowchart above, name a difference between the penguin and the parrot.[1]

~ End of Paper ~

	4
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EXAM PAPER 2016 (P3)

SCHOOL : RIVER VALLEY

SUBJECT : SCIENCE

TERM : SA1

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

16)a)1)The leaves of plant R have jagged edges, but the leaves of plant S have entire edges.

2)Plant R has leaves that grow in water but plant S does not.

b)i)A ii)C iii)B

17)a)Table ----Non- living Thing

Fish ----- Living Thing

b)1)Living thing can grow but non-living things do not.

2)Living things reproduce but non-living things do not .

18)a)

C , B , E	G	H , F	A, D
-----------	---	-------	------

18)b)a)False b)True c)False d)True

19)a)Part Z.

b)Water and warmth.

c)0.8g

d)As the seed leaves grows the seed leaves are used up to provide nutrients for the plant. Therefore, it will reduce in mass plant.

20)a)i)crocodile ii)penguin

b)Both the fish and the crocodile have scales.

c)The penguin cannot fly but the parrot can fly.



Rosyth School
Semestral Examination 1 for 2016
SCIENCE
Primary 3

Name: _____

Total
Marks:



Class: Pr 3 _____ Register No. _____ Duration: 1 h 30 min

Date: 11 May 2016 Parent's Signature: _____

BOOKLET A

Instructions to Pupils:

1. Do not open the booklets until you are told to do so.
2. Follow all instructions carefully.
3. This paper consists of 2 booklets, Booklet A and Booklet B.
4. For questions 1 to 17 in Booklet A, shade the correct ovals on the Optical Answer Sheet (OAS) provided using a 2B pencil.
5. For questions 18 to 26, give your answers in the spaces given in Booklet B.

* This booklet consists of 12 printed pages (including cover page).

Booklet A (34 marks)

For each question from 1 to 17, four options are given. One of them is the correct answer. Make your choice (1, 2, 3 or 4) and shade the correct oval (1, 2, 3 or 4) on the Optical Answer Sheet (OAS).

1. Study the table below carefully.

Group A	Group B
Tree	Television
Tiger	Coins
Y	Z

What are Y and Z likely to be?

	Y	Z
(1)	Mushroom	Paper
(2)	Eraser	Stone
(3)	Butterfly	Ant
(4)	Belt	Dog

2. Four children found a car. The remote control can be used to move the car.



car



remote control

They made the following statements.

Ayden: The car is a living thing because it responds to changes

Barry: The car is a non-living thing because it needs battery to move.

Cathy: The car is a living thing because it is able to move from place to place.

Dylan: The car is a non-living thing because it does not need air, food and water.

Who has/have made the correct statement(s)?

(1) Ayden only

(2) Cathy only

(3) Barry and Dylan only

(4) Barry and Cathy only

3. Ting Ting put two fish in a tank. She observed and recorded the number of fish in the tank from Day 1 to Day 50 in a table below.

	Number of Fish
Day 1	2
Day 10	6
Day 30	12
Day 50	25

From the data collected, what can she say about the characteristic of living things?

- (1) Living things reproduce.
- (2) Living things move by themselves.
- (3) Living things respond to changes around them.
- (4) Living things need air, food and water to stay alive.

4. Which of the following characteristics are similar between animals and plants?

- A: Both grow.
- B: Both reproduce.
- C: Both need air and water.
- D: Both make their own food.

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

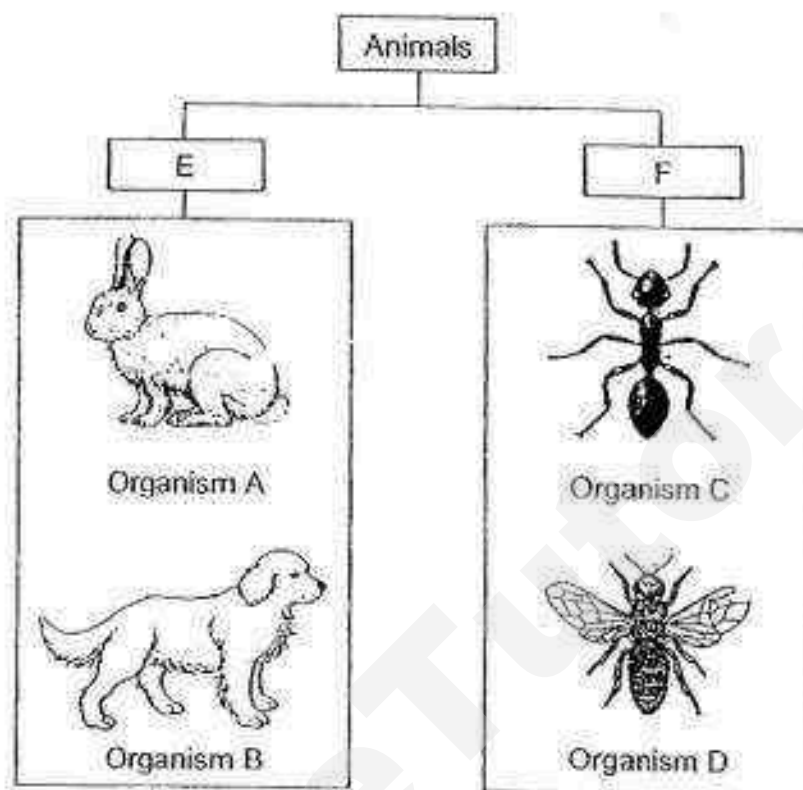
5. Ali observed an organism and wrote down the following statements:

- A: It lays eggs.
- B: It has a beak.
- C: It has feathers.
- D: It has two legs.

Which of the following statements helped him to identify that the organism is a bird?

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

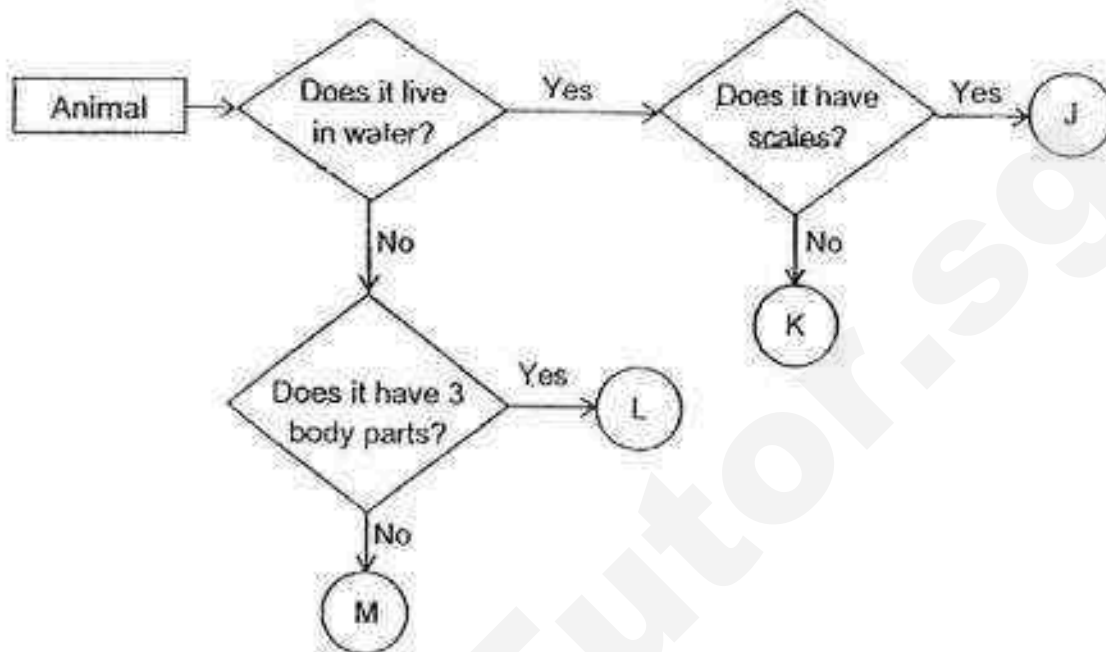
6. Study the classification chart below.



Which one of the following set of headings best represents E and F?

	E	F
(1)	Has feelers	Does not have feelers
(2)	Has six legs	Does not have six legs
(3)	Does not have wings	Has wings
(4)	Does not have three body parts	Has three body parts

Study the flow chart below carefully and answer questions 7 and 8.

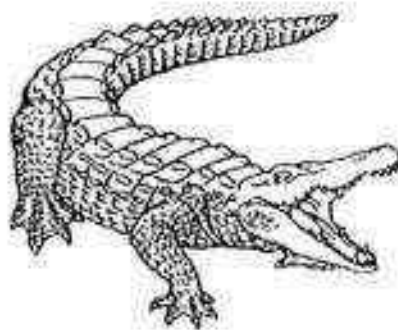


7. Which of the following statement(s) is/are the characteristic(s) of animal L?

- A: It has scales.
- B: It has 3 body parts.
- C: It does not live in water.

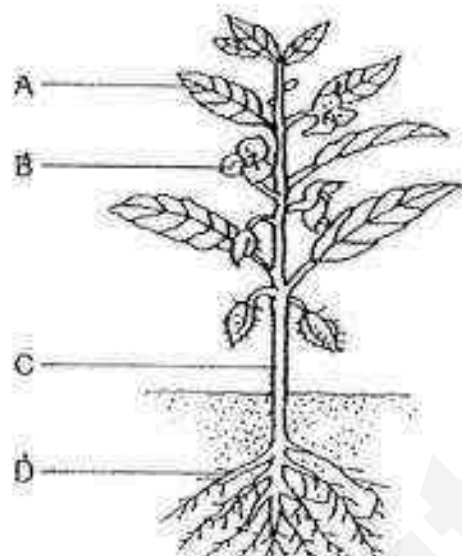
- (1) A only
- (2) B only
- (3) B and C only
- (4) A, B and C

8. Which letter, J, K, L or M, best represents the animal shown below?



- (1) J
- (2) K
- (3) L
- (4) M

9. The diagram below shows a plant.



10. Which one of the following correctly represents the parts marked A, B, C and D?

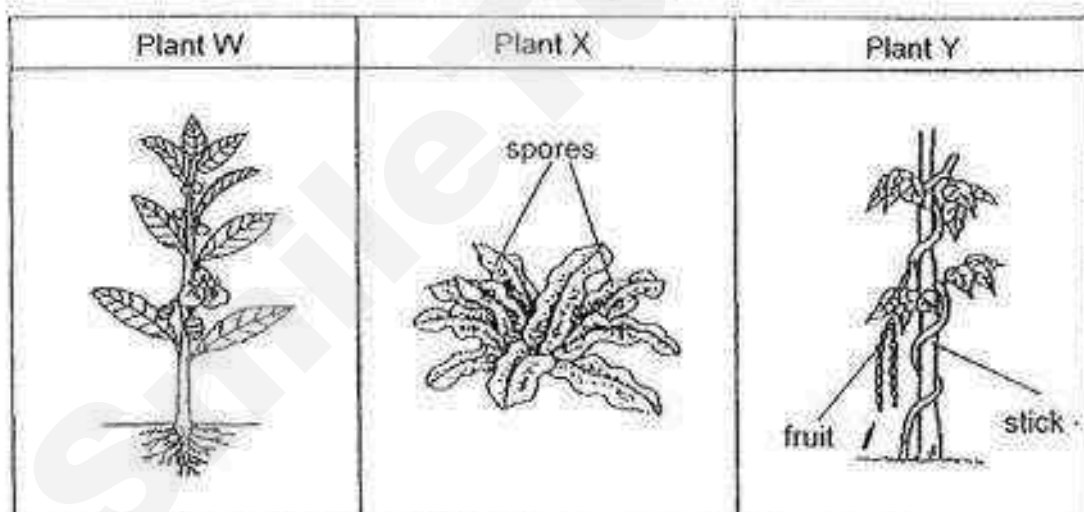
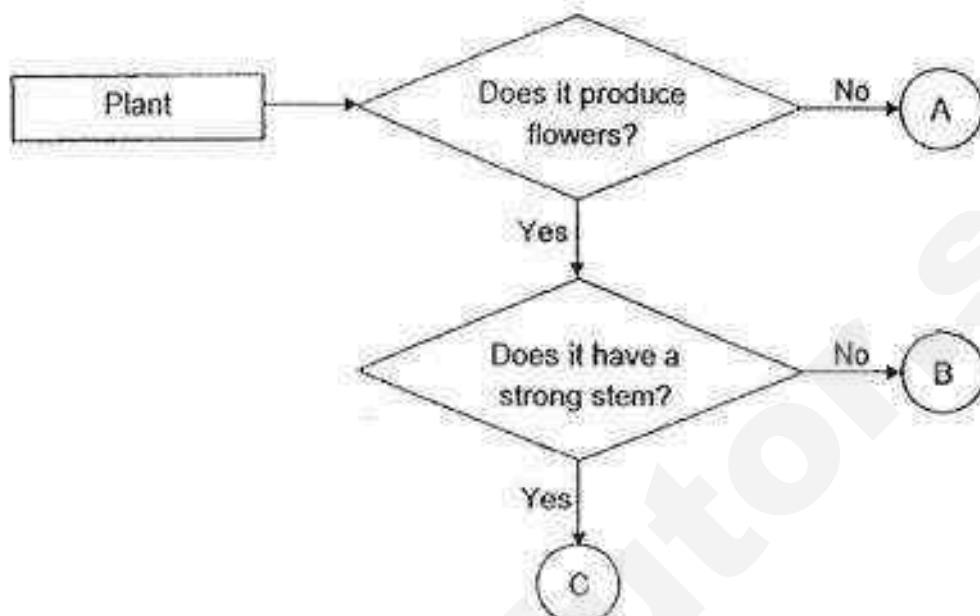
	A	B	C	D
(1)	Flower	Leaf	Root	Stem
(2)	Leaf	Flower	Stem	Root
(3)	Root	Stem	Flower	Leaf
(4)	Leaf	Fruit	Stem	Root

Plants and ferns have common characteristics. Which of the following are the common characteristics?

- W: They reproduce from seeds
 X: They can make their own food
 Y: They can move from place to place
 Z: They need air, food and water to survive

- (1) W and X only
 (2) X and Y only
 (3) X and Z only
 (4) Y and Z only

11. Study the flow chart below.



Which of the plants above can be classified as A, B and C in the flow chart?





	A	B	C
(1)	Plant W	Plant X	Plant Y
(2)	Plant X	Plant Y	Plant W
(3)	Plant Y	Plant W	Plant X
(4)	Plant Y	Plant X	Plant W

12. Mary saw a living thing in her garden. She described the characteristics of the living thing as shown below.

It lives on land.
It does not bear flowers.
It reproduces from spores.
It cannot make its own food.

Which one of the following groups of living things does it most likely belong to?

- (1) Plants
(2) Animals
(3) Fungi
(4) Micro-organisms
13. Tom took four slices of bread from the same loaf. He added different amount of water on the four slices of bread, Bread A, Bread B, Bread C and Bread D. He kept them in a dark room. The results are as shown in the pictures below.

	Bread A	Bread B	Bread C	Bread D
Number of droplets of water added to the bread	0	10	5	15
Bread mould on bread (if any)				

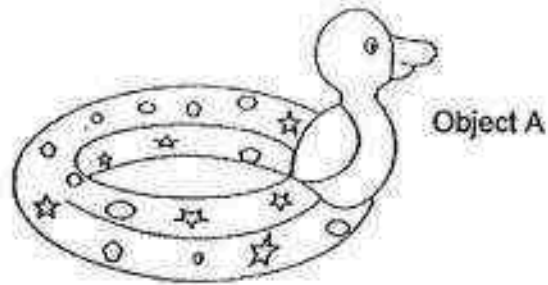
a patch of mould on each slice of bread

Tom made the following statements based on his observations. Which of the statements below are correct?

- P: Bread mould needs water to grow.
Q: Bread mould grows better in the dark.
R: Bread mould grows better when there is more water.

- (1) P and Q only
(2) P and R only
(3) Q and R only
(4) P, Q and R

14. The picture below shows an object A.



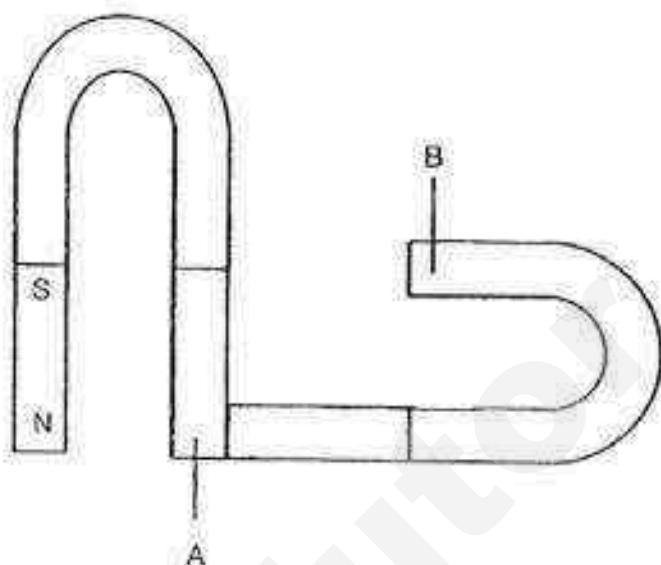
What could be the reasons why object A is usually made of plastic?

- A: It is light.
- B: It is waterproof.
- C: It is transparent.
- D: It is able to float in water

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

- (2) C and D only
- (4) A, B and D only

15. Study the arrangement of the five magnets below. They are attracted to each other.



What should the poles at A and B be?

	A	B
(1)	North pole	North pole
(2)	South pole	South pole
(3)	South pole	North pole
(4)	North pole	South pole

16. The classification table shows the properties of four materials, E, F, G and H.

Properties of material	Material			
	E	F	G	H
Is it flexible?	No	No	Yes	Yes
Is it able to absorb water?	Yes	No	Yes	No
Does it break easily when dropped?	No	Yes	No	No



Based on the table above, which material is most suitable for making part Z of the mop shown above?

- | | |
|-------|-------|
| (1) E | (2) F |
| (3) G | (4) H |

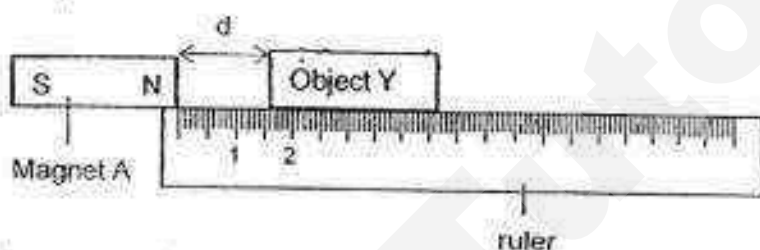
17. Siti placed magnet A and object Y at both ends of a ruler as shown in diagram 1.

Diagram 1



She then moved object Y towards magnet A and measured the distance, d , at which object Y is attracted as shown in diagram 2.

Diagram 2



She repeated the experiment using Magnets B, C and D. Then she recorded the results in the table below.

Magnet	Distance between magnet and object Y d (in cm)
A	1
B	4
C	3
D	2

Based on the results above, which of the following correctly shows the magnet with the strongest magnetic attraction to the magnet with the weakest magnetic attraction.

	strongest magnetic attraction				weakest magnetic attraction
(1)	A	B	C	D	
(2)	B	C	D	A	
(3)	C	D	A	B	
(4)	D	A	B	C	

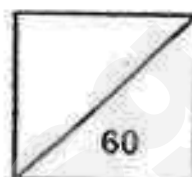
End of Booklet A



Rosyth School
Semestral Examination 1 for 2016
SCIENCE
Primary 3

Name: _____

Total
Marks:



Class: Pr 3 _____ Register No. _____ Duration: 1 h 30 min

Date: 11 May 2016 Parent's Signature: _____

BOOKLET B

Instructions to Pupils:

1. For questions 18 to 26, give your answers in the spaces given in this Booklet B.

	Maximum	Marks Obtained
Booklet A	34 marks	
Booklet B	26 marks	
Total	60 marks	

* This booklet consists of 8 printed pages (including cover page).

Booklet B (26 marks)

For questions 18 to 26, write your answers in this booklet.

18. The table below shows the height of a child over a period of 5 years.

Year	Height (cm)
1	74
2	85
3	94
4	100
5	107

- (a) From the table above, what do you observe about the height of the child from the Year 1 to Year 5? (1m)

- (b) What is the characteristic of living things observed in part (a)? (1m)

19. Norlin found three things, Q, R and S in her house. She observed them for a month and stated their characteristics as shown in the table below.

Characteristics	Q	R	S
• Able to grow	No	Yes	Yes
• Able to make its own food	No	Yes	No
• Able to respond to changes	No	Yes	Yes
• Able to move from place to place	No	No	Yes

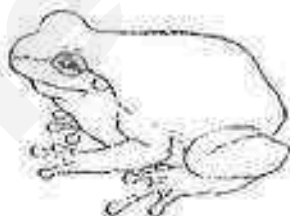
- (a) Based on the table, match the items given below with the letter Q, R or S. (2m)

(i) Water Bottle:

(ii) Cat:

- (b) Which three things, Q, R or S is definitely a plant? Explain why. (1m)

20. Yiting saw an Animal W as shown below.



Animal W

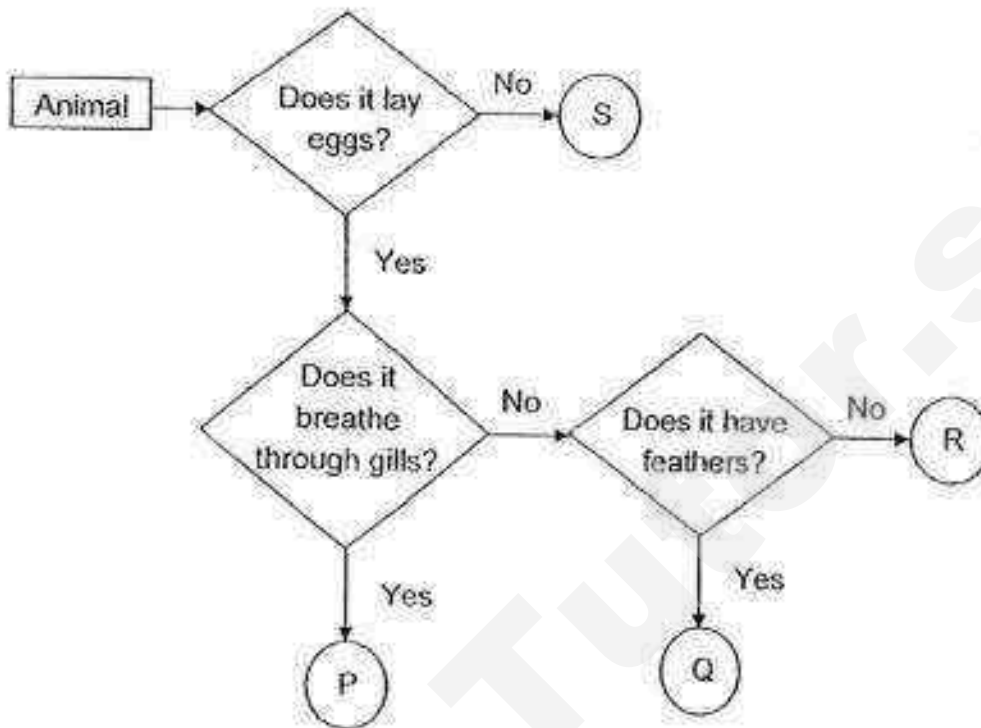
- (a) Which group of animals would she most likely classify animal W under? (1m)

- (b) State two characteristics of the group of animal that you have stated in (a). (2m)

(i)

(ii)

21. Study the flow chart below.



(a) State a similarity between animals, R and Q. (1m)

(b) State a difference between animals, P and Q. (1m)

(c) Which group of animals do P and S belong to? Fill in the boxes with 'Mammals' or 'Fishes'. (2m)

(i) P: (ii) S:

22. Fungi and bacteria are organisms.

(a) State one similarity between fungi and bacteria. (1m)

(b) Give one example of fungi. (1m)

23. Study the classification table below.

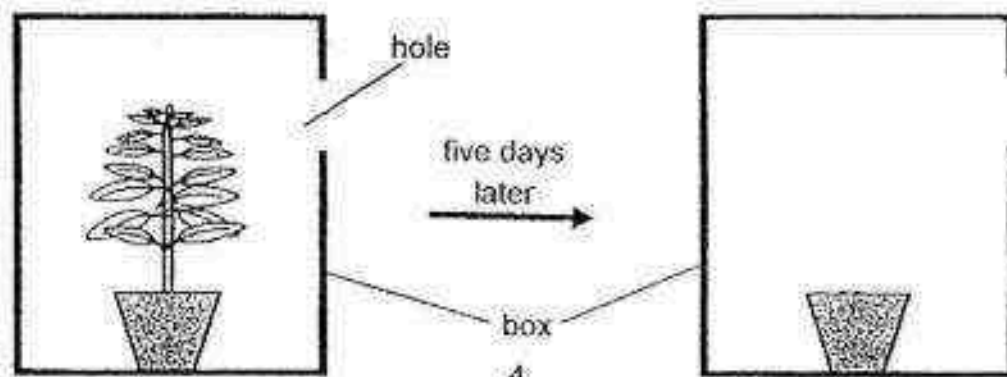
Plant	A	B	C	D
Grows on land?	No	Yes	No	Yes
Bears flowers?	Yes	No	No	Yes

(a) Based on the classification table, which of the letter, A, B, C or D, best represents the plant shown below? Write A, B, C or D in the box provided. (1m)

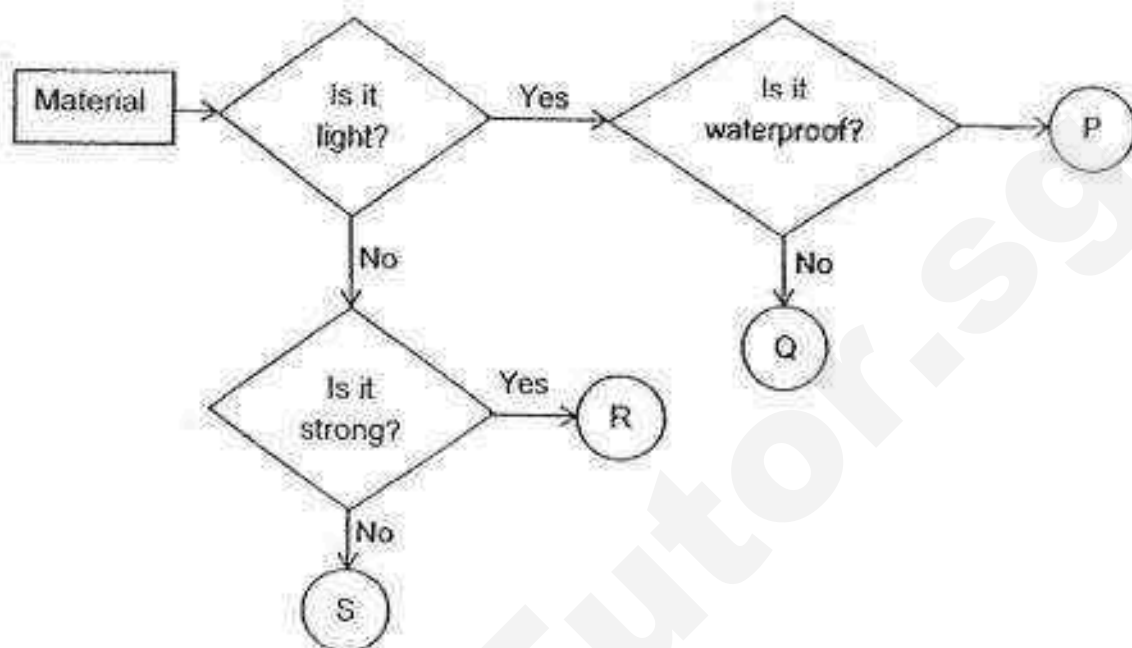


(b) Andrew put a plant in a box with a hole as shown below to find out if the plant responds to light. He placed the box in an open area and watered the plant daily.

Draw the plant in the space provided to show what Andrew would observe five days later. (1m)

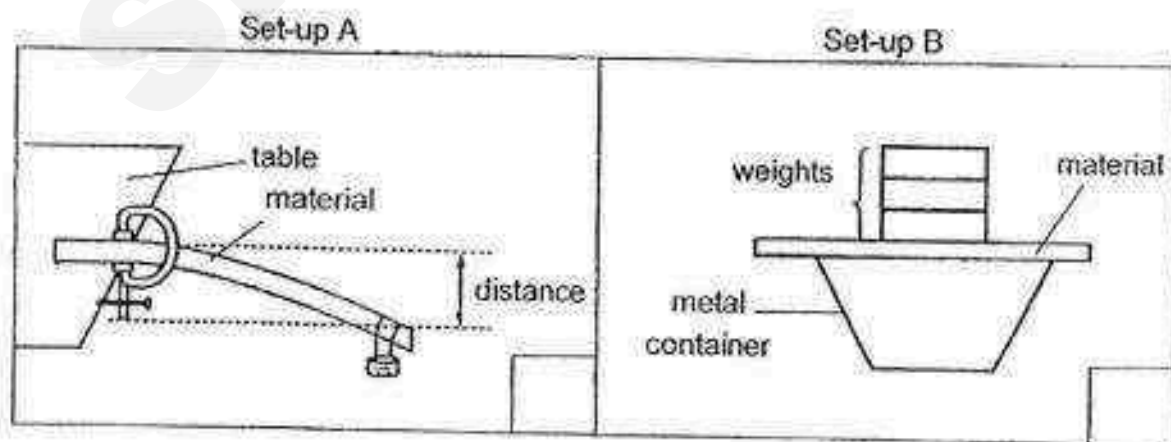


24. Study the flow chart below carefully.

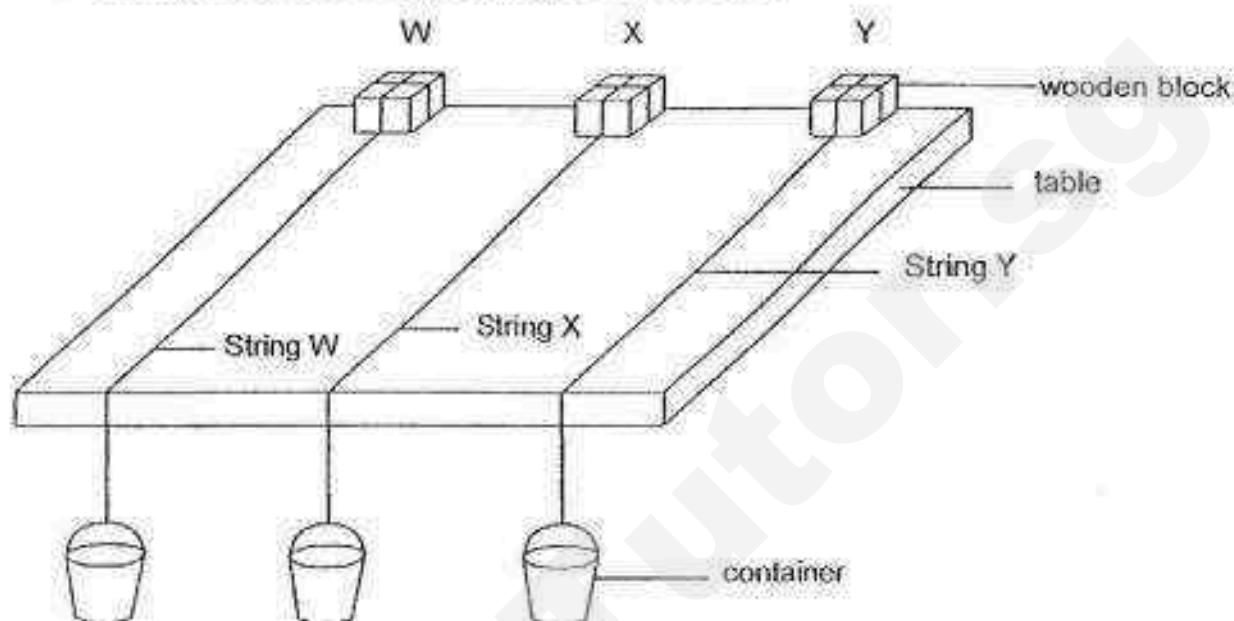


- (a) Which material, P or Q, would you use to make a toy boat? Explain why. (2m)

- (b) Ahmad was given some material. Which one of the set-up below should he use to find out if the material is strong?
Pick a tick (✓) in Set-up A or Set-up B below to indicate your choice. (1m)



25. Terence set up an experiment to find out which was the best material for carrying heavy objects. He took an equal length of three different strings, W, X and Y. He tied them to three identical wooden blocks on a table and hung three identical containers at the end of the string as shown below.



He dropped some marbles, one at a time into each container until the string broke. The table below shows the number of marbles in each container just before the string broke.

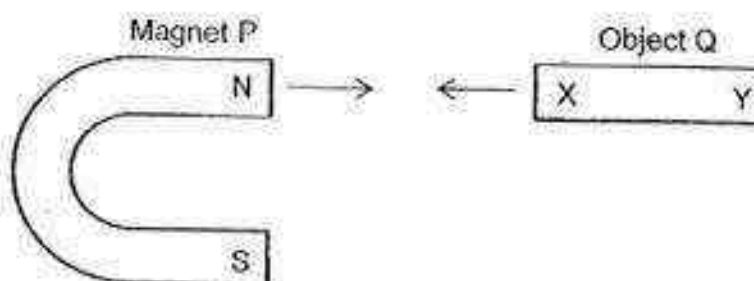
String	Number of marbles in the container before the string broke
W	67
X	96
Y	75

- (a) Arrange the materials W, X and Y, according to their strength starting from the weakest to the strongest. (1m)

weakest

- (b) Which material, W, X or Y, is most suitable to be used as the string to fly a kite? Explain why? (2m)

26. The diagram below shows a U-shaped magnet and an object Q.



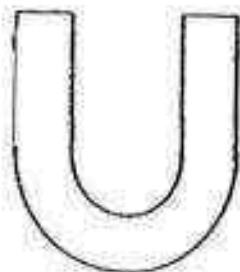
Side X is attracted to the north pole of the magnet but side Y will repel the north pole of the magnet.

- (a) Study the following statements and put a tick (✓) in the correct box. (2m)

	Statements	True	False
(i)	Object Q is made of non-magnetic material.		
(ii)	The south pole of the magnet will attract side Y of object Q.		

- (b) Explain your answer for statement (ii) above. (1m)

- (c) Circle the part(s) of the U-shaped magnet below that can attract the most iron nails. (1m)



End of Booklet B

EXAM PAPER 2016 (P3)

SCHOOL : ROSYTH

SUBJECT : SCIENCE

TERM : SA1

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

18)a)The child grew taller each year but the amount it grew became smaller until the 4 year.

b)Living things grow.

19)a)i)Q ii)S

b)R it is able to make its own food , a plant can make its own food.

20)a)Amphibians.

b)i)Amphibians live on land and in water.

ii)Amphibians have moist skin.

21)a)Both R and Q lay eggs.

b)P breathes through while Q does not.

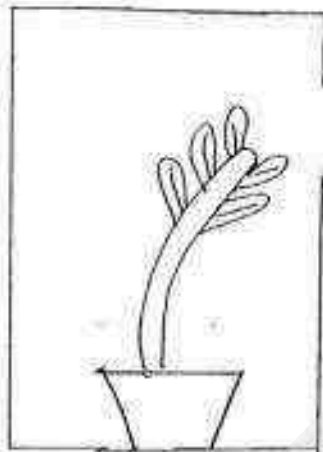
c)i)P: Fishes ii)S: Mammals

22)a)Both do not make their own food.

b)Toadstools.

23)a)D

b)



24)a)P, as it must be waterproof if it not it will sink in the water.

b)Set-up B

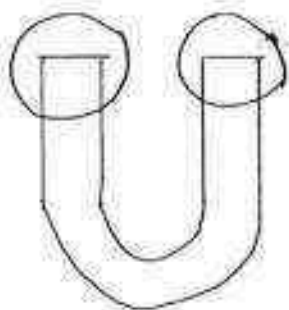
25)a)W, Y, X

b)X. It is the strongest as it could hold the most number of marbles before it broke, so that the string will not snap when you fly the kite.

26)a)i)False ii)True

b)Unlike poles attract, so side Y, which is a North Pole, will attract Magnet P's South Pole.

c)





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.

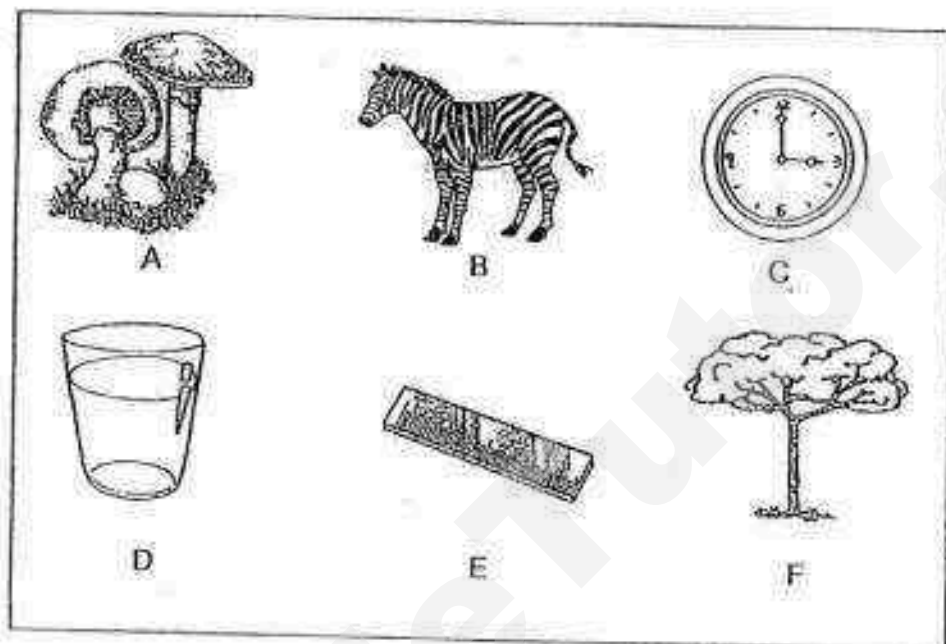
Follow all instructions carefully.

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.

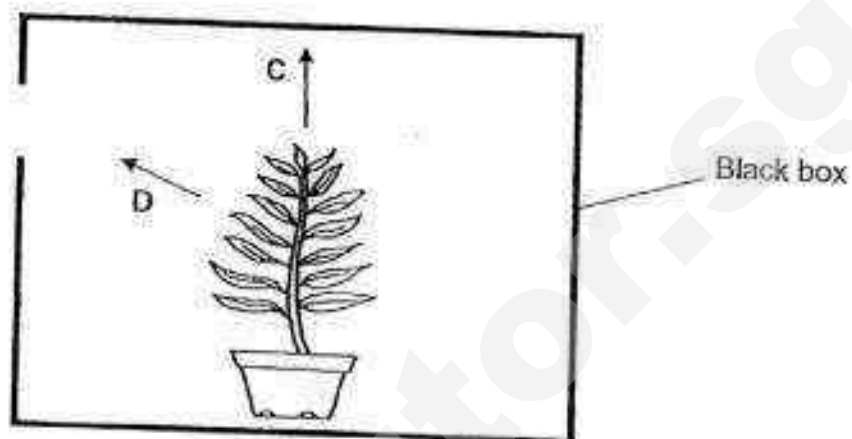
- 1 Mala wants to classify the items shown below.



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

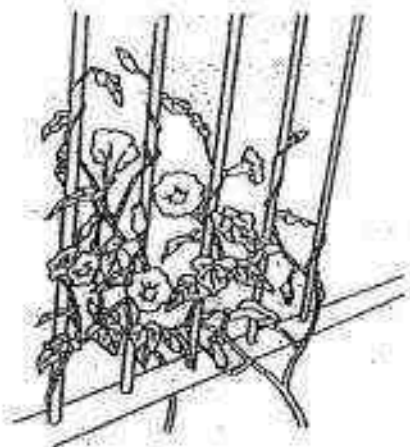
2. A teacher placed a potted plant in a thick black box with a hole on one side as shown below. The box was placed in a sunny spot and the plant was watered daily. Four pupils predicted the direction the plant would grow and provided their explanations.



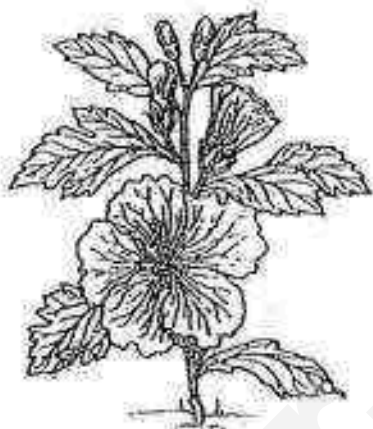
Which child predicted the direction correctly and gave the correct explanation?

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

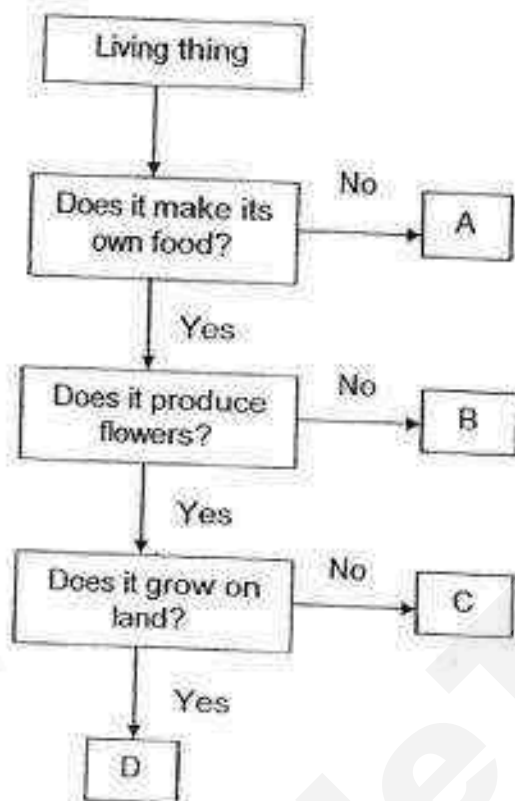


Plant B

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

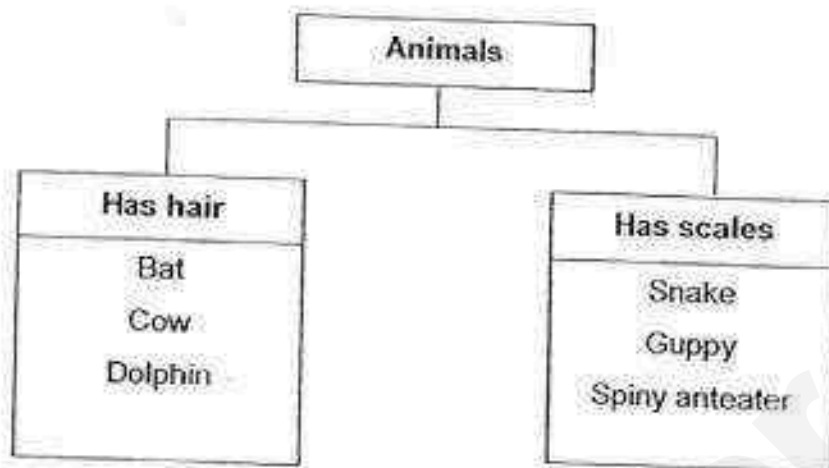
5. Study the table below.

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?

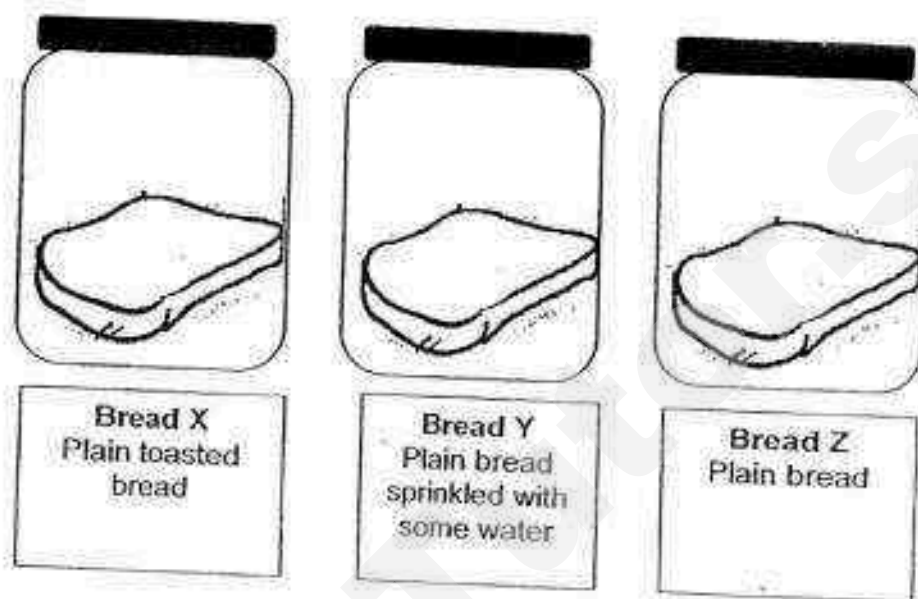
- A. A pair of wings
- B. Three main body parts
- C. Three pairs of legs

- (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.

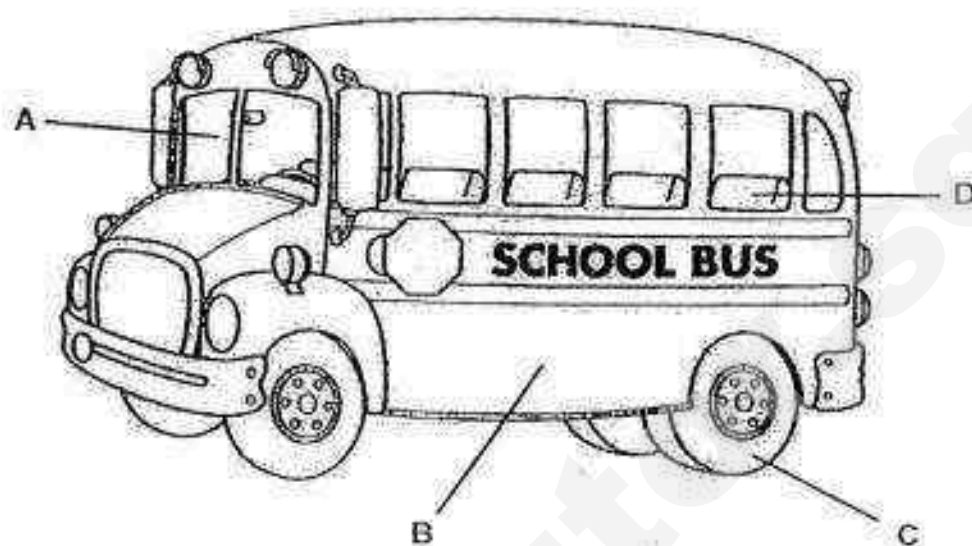
10. James has 3 identical slices of bread, Bread X, Bread Y and Bread Z. He toasted Bread X, sprinkled some water onto Bread Y and nothing was added to Bread Z. Then, he placed the 3 slices of bread into 3 sealed containers as shown below. He left the 3 containers in a warm, dark corner for 10 days.



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

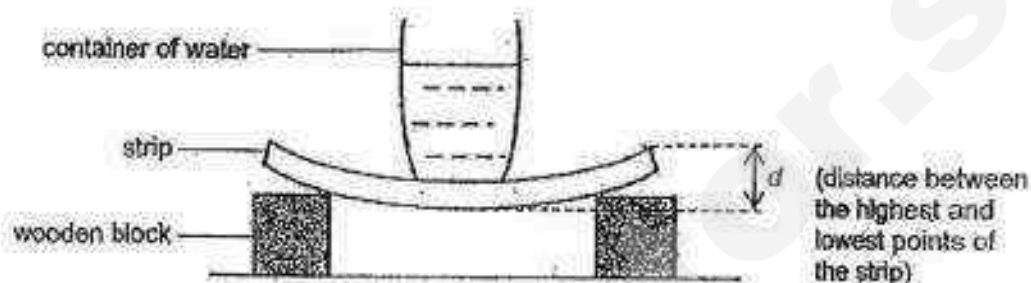
12. Jamie observed and recorded the properties of three objects as shown below.

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.



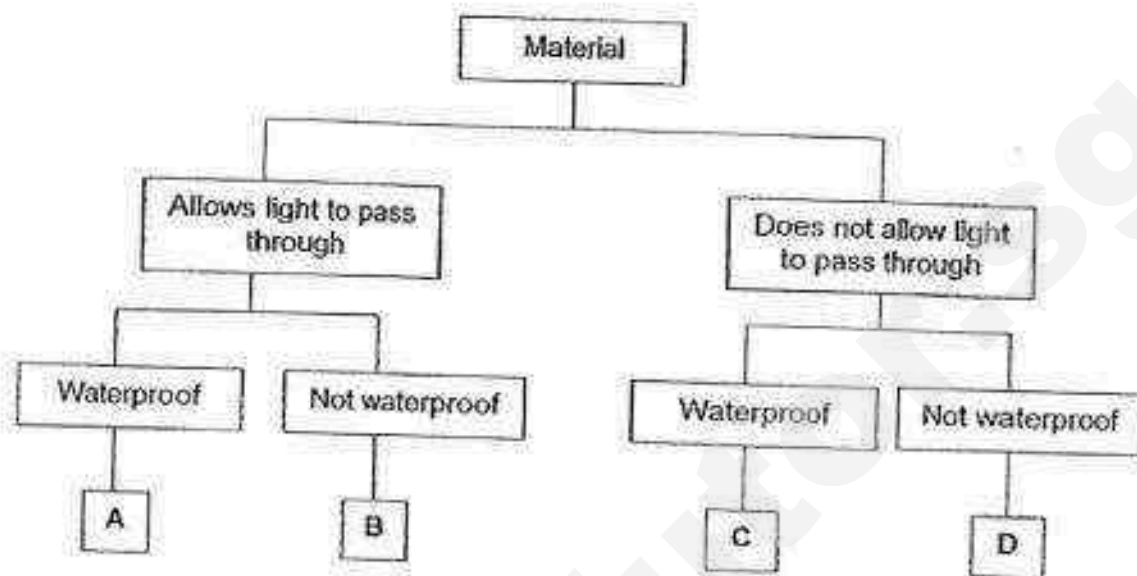
Her results are shown below.

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.

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

Follow all instructions carefully.




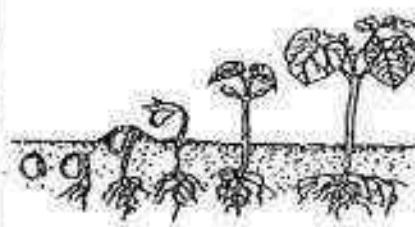
Answer all questions.

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>Living things can respond to changes around them.</p>
<p>(b)</p> 	<p>Living things can reproduce.</p>
<p>(c)</p>  <p>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.

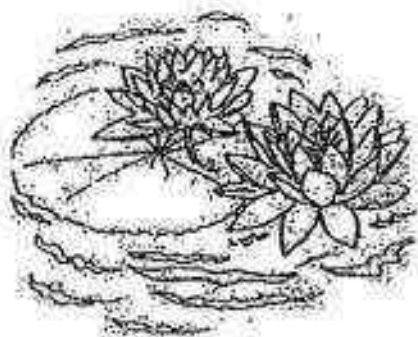
Jar	Amount of bread at first (g)	Amount of bread after 1 day (g)
A	250	160
B	250	250

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

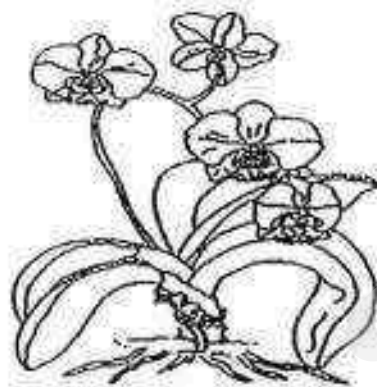
- (a) Why did Mark make holes in the covers of the two jars? (1m)

- (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

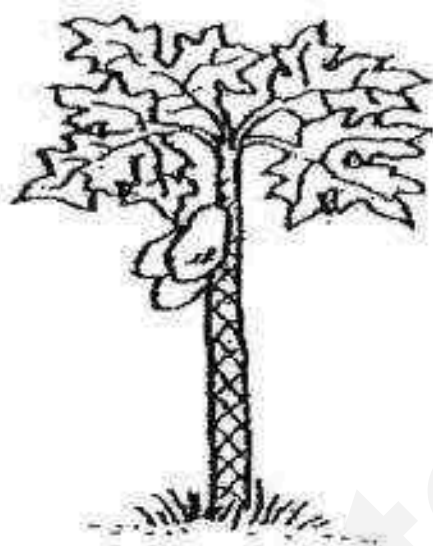


Plant B

- (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)

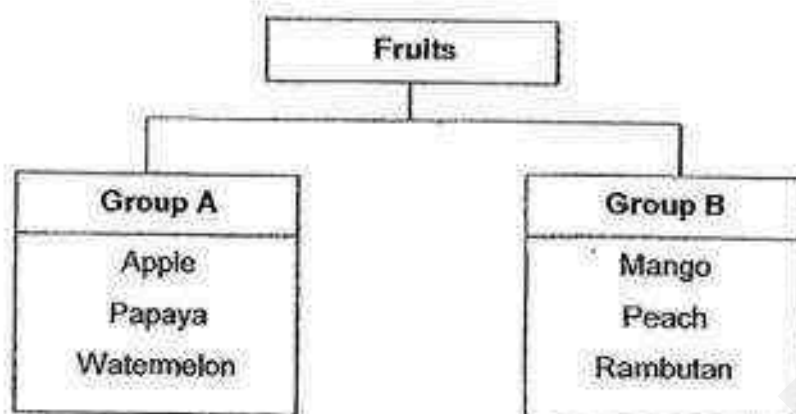
18. Danny saw the papaya plant in the garden as shown in the picture below.



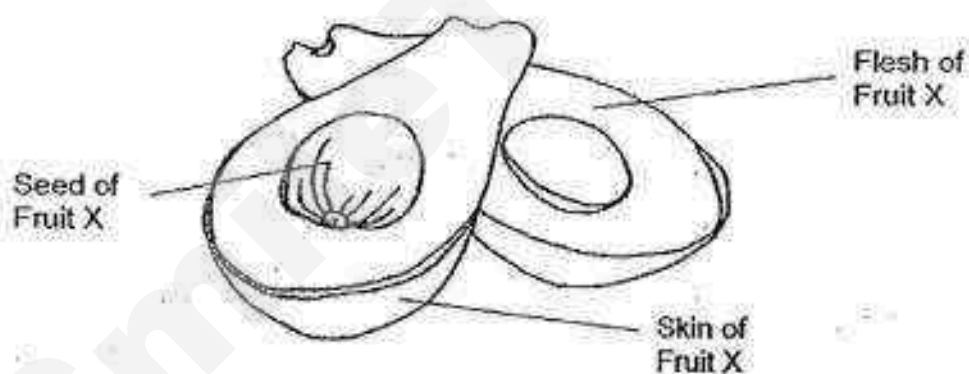
Papaya plant

- (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.



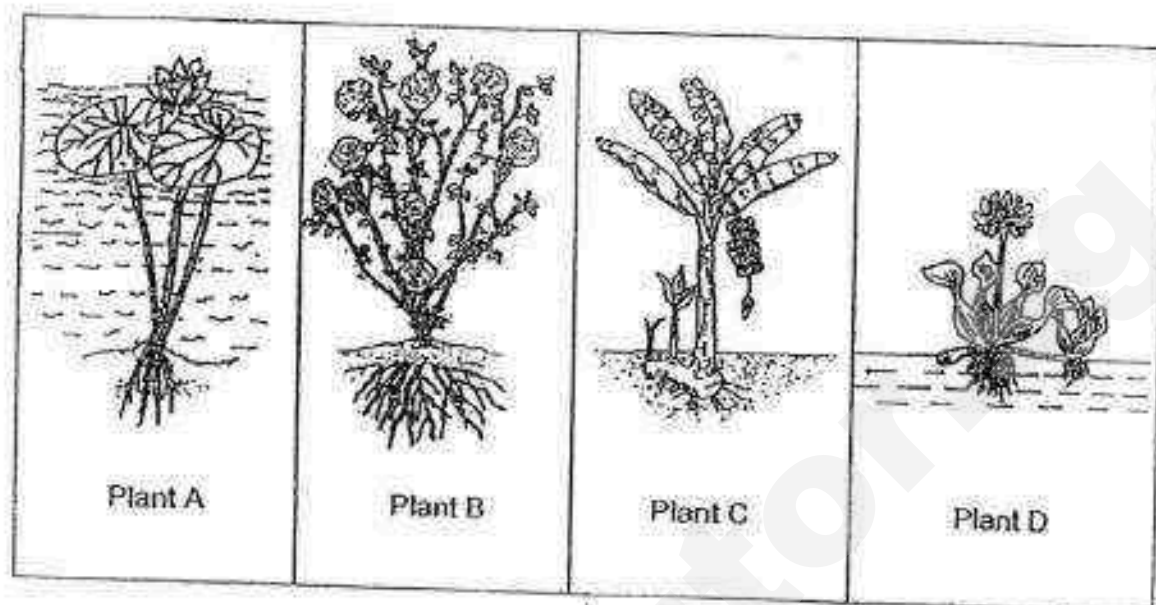
Danny also saw Fruit X in the garden. He cut Fruit X into half as shown below.



In Group A or Group B would Danny place Fruit X in? Explain why.

(1m)

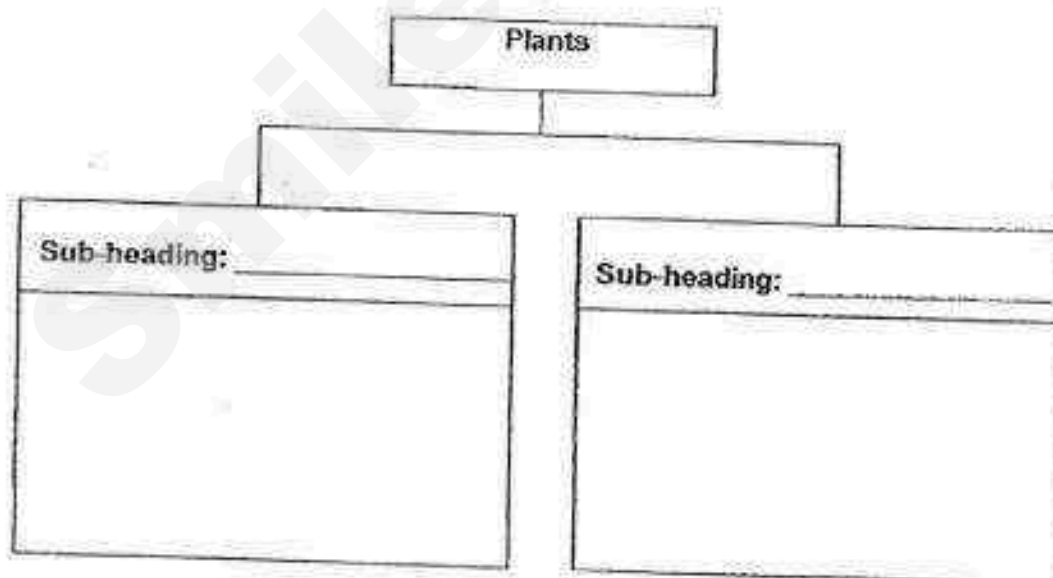
19. The pictures below show 4 plants.



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: _____

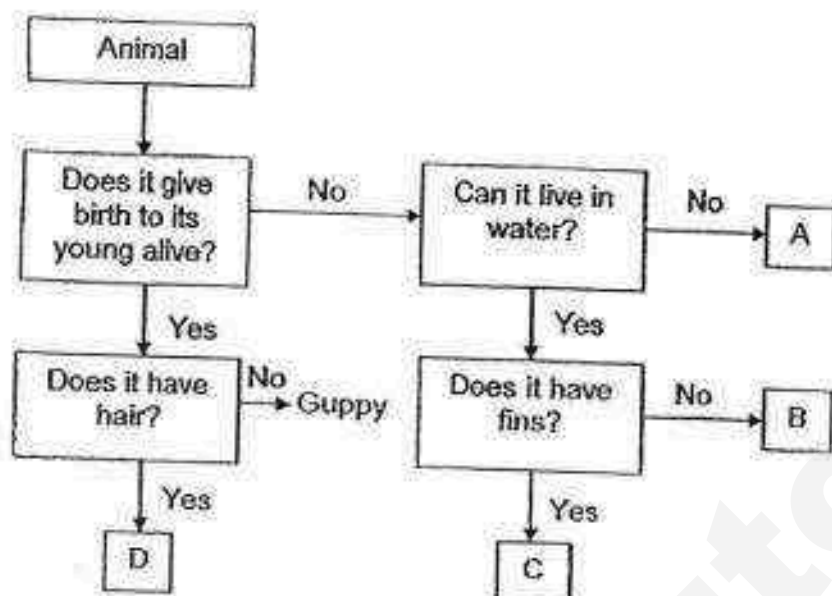
- (b) State two functions of Animal A's outer body covering.

(1m)

(i) _____

(ii) _____

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



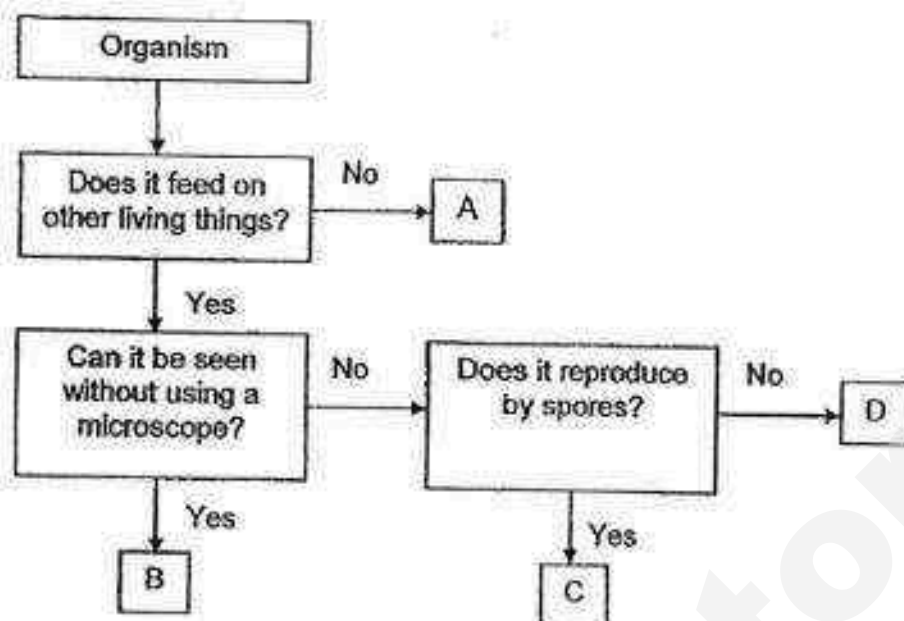
- (a) In which animal group does C belong to? (1m)

- (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.



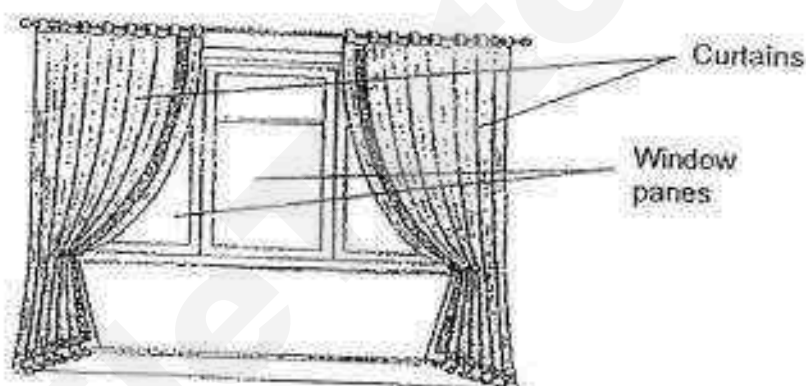
(a) Based on the flowchart above, state all the characteristics of the organism B. (1m)

(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)

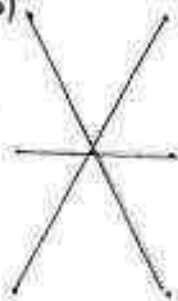
SCHOOL : TOA NAN

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						

15)



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

Plant B

Plant C

Sub-heading: Lives in water

Plant A

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.



Temasek Primary School

Semestral Assessment 1

Primary Three

2016

SCIENCE
(Booklet A)

Name: _____ ()

Class: Primary 3 _____

Date: 10 May 2016

Parent's Signature: _____

48 Marks

Total Time for Booklet A and B: 1h 30 min

INSTRUCTIONS TO CANDIDATES

1. Do not open this booklet until you are told to do so.
2. Follow all instructions carefully.
3. Answer all questions.
4. Shade your answers in the Optical Answer Sheet (OAS) provided.

For each question from 1 to 24, four options are given. One of them is the correct answer. Shade your choice (1, 2, 3, or 4). Shade your answer on the Optical Answer Sheet.

(48 marks)

- 1 Adam could not fit into a shirt he bought one year ago. What characteristic of living things does this show?

- (1) Living things can grow.
- (2) Living things can move.
- (3) Living things can reproduce.
- (4) Living things need air, food and water.

- 2 Brenda saw an organism. She wanted to find out if it is a bird. Which of the following actions would enable her to do so?



- (1) Measure its length.
- (2) Count the number of legs.
- (3) Find out whether it has feathers.
- (4) Find out whether it has three body parts.

- 3 Claris set up an experiment to find out the best conditions to grow bread mould as shown below. The slices of bread were placed in sealed bags as shown in the set-ups below.



Set-up A
toasted bread
kept in a warm place



Set-up B
toasted bread
kept in a refrigerator



Set-up C
bread not toasted
kept in a warm place



Set-up D
bread not toasted
kept in a refrigerator

She observed that bread mould started appearing on the bread at different times. In which of the above set-ups A, B, C or D will bread mould most likely appear first?

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

- 4 Compare the two organisms below.



Mushroom



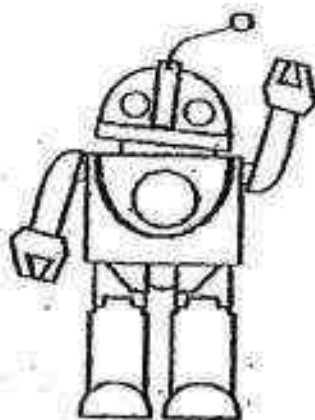
Fern

Which of the following statements is/are true?

- A Both produce flowers.
- B Both reproduce by spores.
- C Both can make their own food.
- D Both need air, food and water.

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

- 5 Darren made the following statements about a toy and a man as shown below.



Toy



Man

- A Both can grow.
- B Both need air, water and food.
- C The man can reproduce but not the toy.

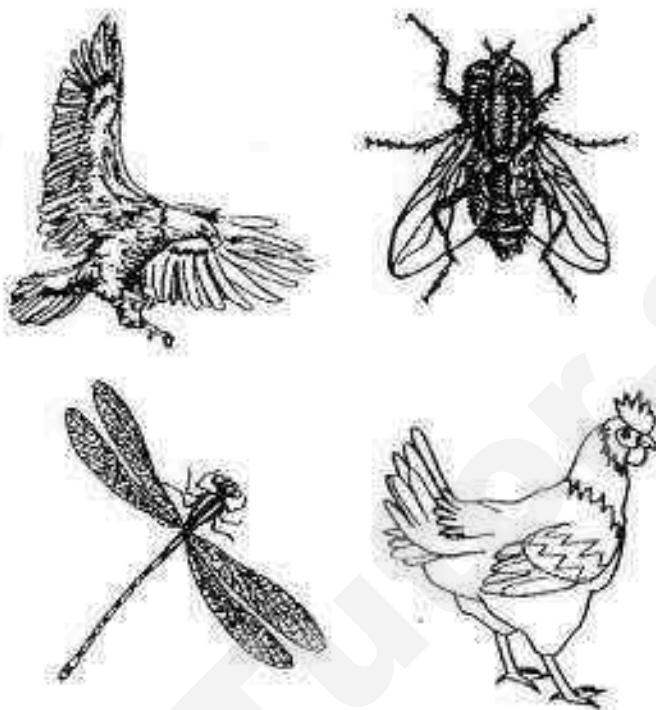
Which of the statements is/are correct?

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

- 6 Adil made the following statements about plants. Which of the following statements is true?

- (1) All plants have flowers.
- (2) All plants reproduce from seeds.
- (3) Plants can make their own food.
- (4) Flowering plants grow only on land.

7 Look at the pictures below carefully.

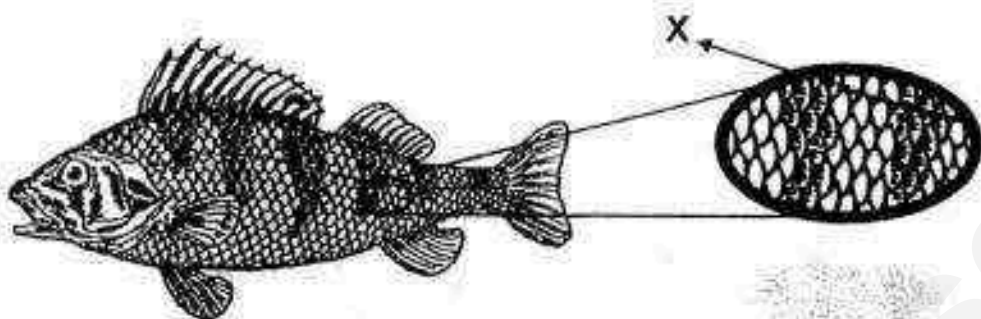


Based on the pictures, in what way(s) is/are the animals above similar?

- A They have wings.
- B They have two legs.
- C They have three body parts.

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

- 8 The diagram below shows a fish.



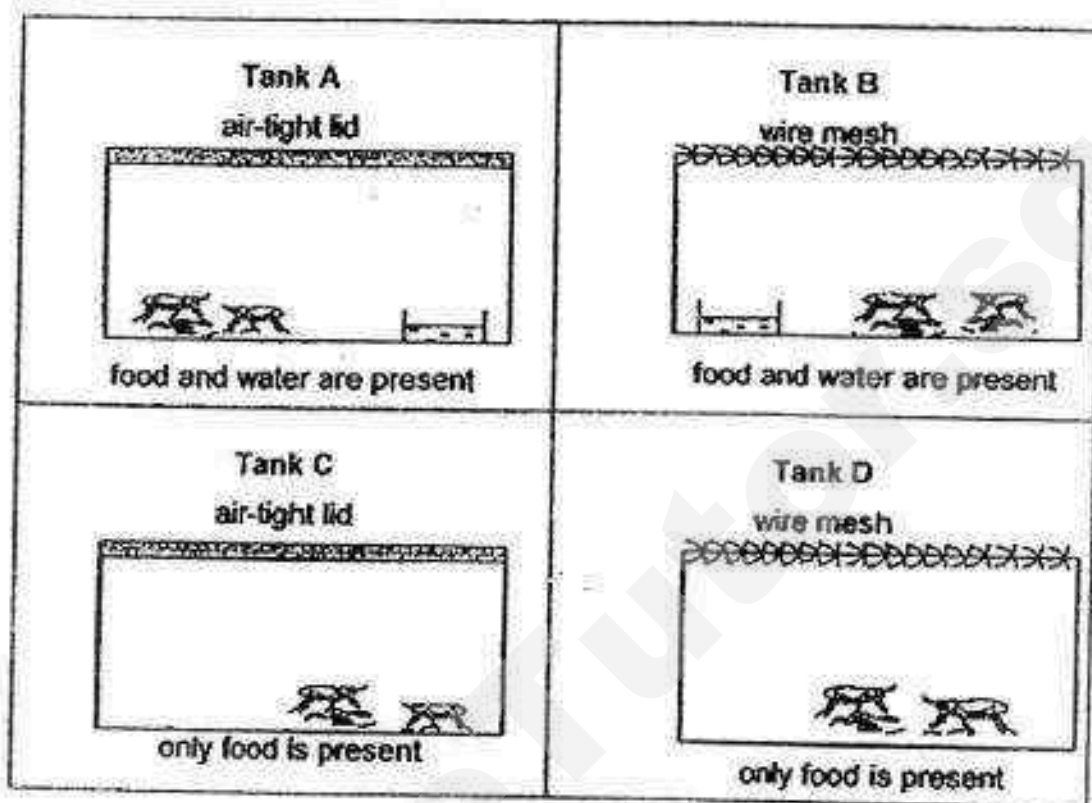
What is the function of part 'X'?

- (1) Helps the fish breathe in water.
- (2) Enables the fish to float in water.
- (3) Helps to protect the body of the fish.
- (4) Enables the fish to change direction in water.

- 9 Which of the following statements is not correct?

- (1) A staghorn fern can reproduce.
- (2) An ant needs air, food and water to survive.
- (3) A monkey can respond to changes around it.
- (4) A doll can move from one place to another on its own.

- 10 Grasshoppers of a similar size were kept in glass tanks as shown below.



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

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

11 Eileen wrote some notes about a living thing.

- It produces spores.
- It can make its own food.
- It is green in colour.
- It grows on a tree branch.

Which group does this living thing belong to?

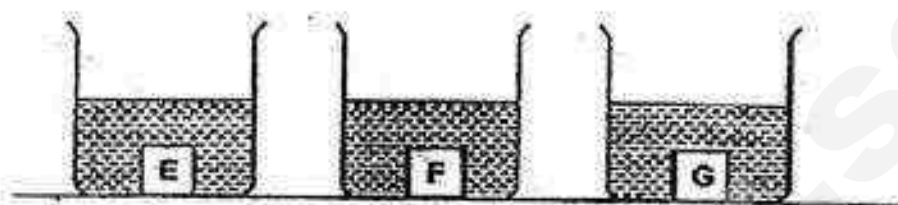
- (1) Plants
- (2) Fungi
- (3) Bacteria
- (4) Animals

12 Fatimah picked up a dried plant. Her teacher said it was a non-living thing because it _____.

- A cannot grow anymore
- B cannot reproduce anymore
- C cannot respond to changes

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

13. Three similar-sized sheets made of different materials, E, F, G, were weighed individually before they were put into three beakers containing equal amounts of water. After 15 minutes, each sheet was taken out and weighed again.



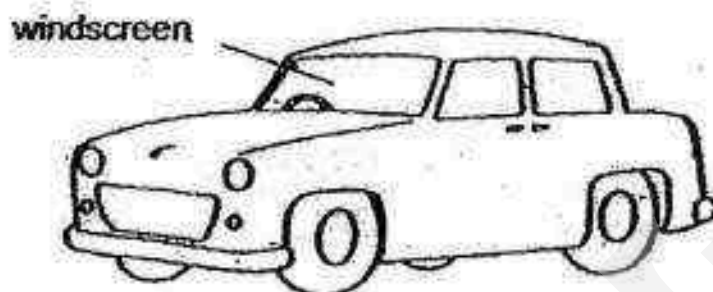
Their masses were recorded in a table as shown below.

	Mass at the beginning (g)	Mass after 15 minutes(g)
E	8	12
F	6	6
G	11	12

Which one of the following shows the arrangement of material E, F and G beginning with the most absorbent to the least absorbent?

- (1) F, G, E
- (2) G, F, E
- (3) E, F, G
- (4) E, G, F

- 14 A car manufacturer has to decide on the best material to make the windscreen of a car. Some information on the four available materials A, B, C and D is shown in the table below.

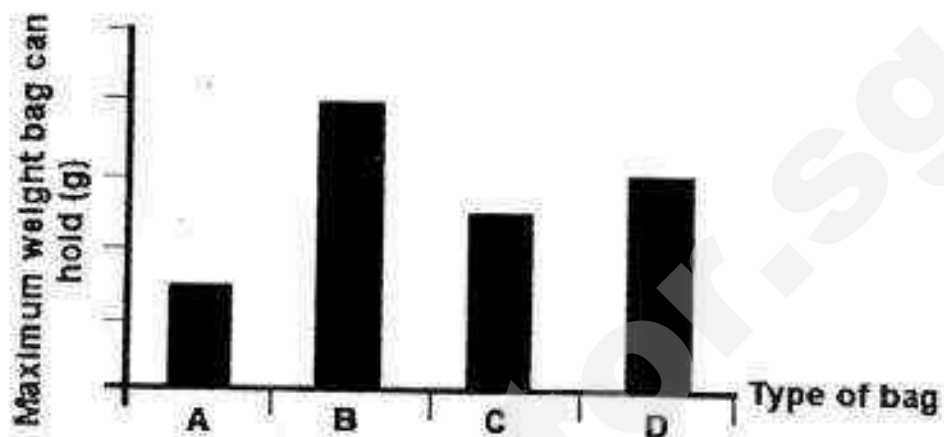


Material	Properties
A	Strong, waterproof and transparent
B	Able to float on water and long-lasting
C	Transparent and long-lasting
D	Waterproof, fragile and transparent

Which material is most suitable for making the windscreen?

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

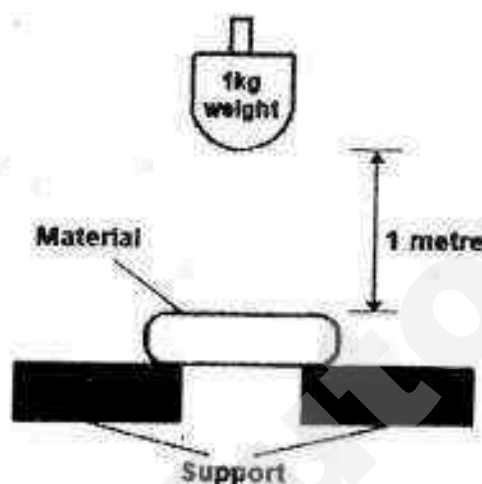
- 15 The bar graph below shows the maximum weight of four different types of bags, A, B, C and D, can hold before tearing.



Based on the graph above, which one of the following statements about the bags is true?

- (1) Bag B is the weakest.
- (2) Bag A is the least flexible.
- (3) Bag D is stronger than Bag C.
- (4) Bag C is more waterproof than Bag A.

- 16 Grace tested the strength of four different materials by dropping a 1 kg weight from a height of 1 metre. All four materials have the same shape and size. She noted the number of times the weight was dropped before the material broke into two pieces.



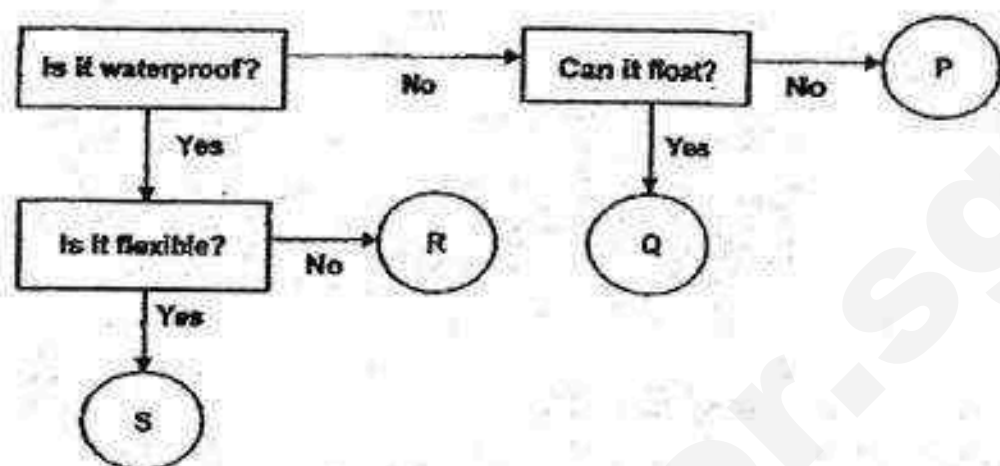
The results were shown in the table below.

Material	Number of drops
A	45
B	39
C	23
D	53

Based on the results above, which one of the following statements best describes the materials correctly?

- (1) Material D is the weakest.
- (2) Material A is the strongest.
- (3) Material B is stronger than Material A.
- (4) Material C will be the first to break if a 2 kg weight is dropped on each material.

- 17 Study the flow chart below.



Based on the flow chart, which letter best represents a rubber hose?

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

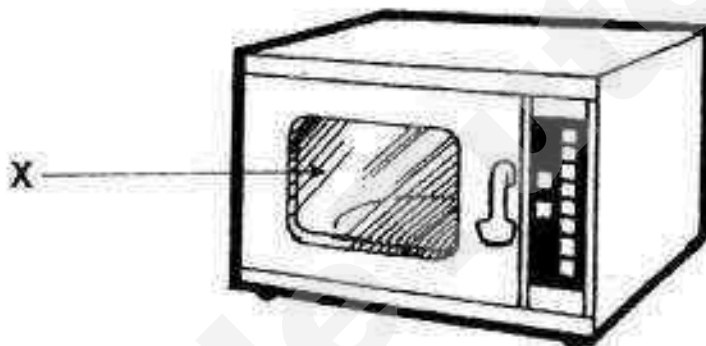
- 18 Henry did an experiment to find out the properties of an object. He dropped the object on the floor and it changed its shape but did not break. He could press the object back to its original shape with his hands. What was the object he was testing?

- (1) Mirror
- (2) Pencil
- (3) Plasticine
- (4) Ceramic Cup

- 19 Jeremy was playing with a ball inside his house. The ball hit a vase and the vase broke. Which of the following materials is the vase most likely to be made of?

- (1) Glass
- (2) Metal
- (3) Wood
- (4) Plastic

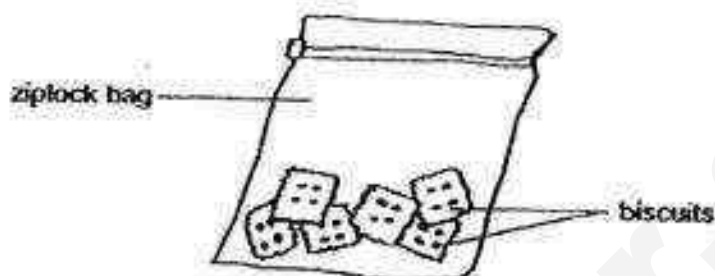
- 20 The diagram below shows a microwave oven.



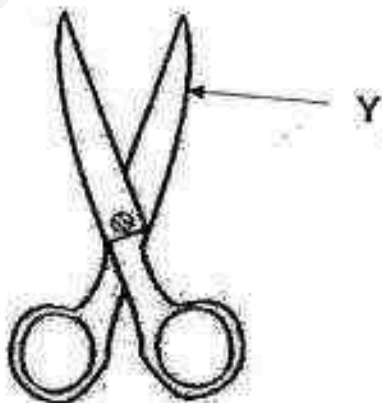
What material and its property should be taken into consideration to make part X of the microwave oven?

	Material	Property
(1)	Glass	It is transparent.
(2)	Metal	It is strong.
(3)	Plastic	It is waterproof.
(4)	Rubber	It is elastic.

- 21 Kelly placed her biscuits in a ziplock bag. She accidentally spilt water over it, but observed that the biscuits inside the bag did not get wet. Which of the following could be the reason for this?



- (1) The ziplock bag was strong.
 - (2) The ziplock bag was flexible.
 - (3) The ziplock bag was waterproof.
 - (4) The ziplock bag was transparent.
- 22 Part Y of a scissors is usually made of metal. Why is metal a suitable material for Part Y?



- (1) It is light.
- (2) It is strong.
- (3) It is flexible.
- (4) It is waterproof.

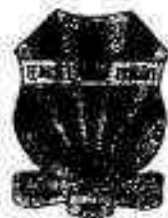
23 Which of the following are obtained from plants?

- A Silk Scarf
- B Metal Ruler
- C Cotton T-shirt
- D Rubber Glove

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

24 Lisa bought some plates for a birthday party. They were light, cheap and can be thrown away after use. They did not break easily. What material could they be made of?

- (1) Plastic
- (2) Glass
- (3) Wood
- (4) Ceramic



Temasek Primary School

Semestral Assessment 1

**Primary Three
2016**

**SCIENCE
(Booklet B)**

Name _____

Class: Primary 3 _____

Date: 10 May 2016

Parent's Signature: _____

32 Marks

Total Time for Booklet A and B: 1h 30 min

INSTRUCTIONS TO CANDIDATES

1. Do not open this booklet until you are told to do so.
2. Follow all instructions carefully.
3. Answer all questions.
4. Write your answers in this booklet.

Paper	Marks	Scores
Booklet A	48	
Booklet B	32	
Total	80	

For questions 25 to 34, write your answers in this booklet.

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

(32 marks)

- 25 Some scientists discovered an animal Z. They observed that the animal Z bears the following characteristics:

<p>It lays eggs.</p> <p>It lives in water.</p> <p>It breathes through gills.</p> <p>It has a body covering of scales.</p>

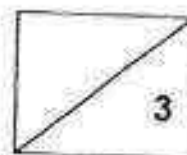
- a) Meena said that animal Z is a frog because it lays eggs. Is she correct? [2]
Give two reasons for your answer.

(i) _____

(ii) _____

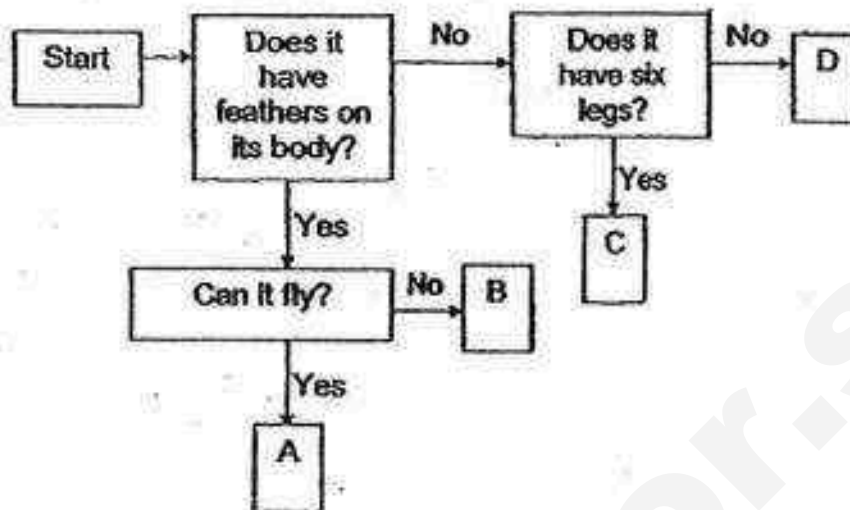
- b) Based on the information above, which animal group would the animal Z [1]
most likely belong to?

(Go on to the next page)



26

Study the flow chart below.



- a) Based on the chart, describe one similarity and one difference between Animal C and Animal D.

(i) Similarity:

[1]

(ii) Difference:

[1]

- b) Using the information from the chart, write the letters, A, B, C or D that represent the animals in the boxes below. [2]

Animals	A, B, C or D
Butterfly	
Eagle	
Penguin	
Goldfish	

(Go on to the next page)



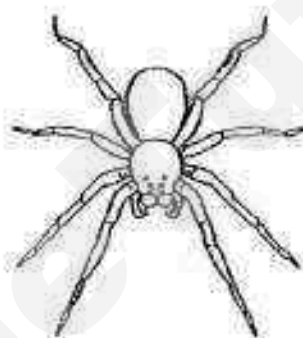
- 27 Nathan wants to find out if an animal is an insect. What are the possible actions he should take to confirm if it is an insect? Put a tick accordingly.

a)

Action	Tick (✓)
Check to see if it has feelers.	
Check to see if it has six legs.	
Check to see if it has wings.	
Check to see if it has three body parts.	

[1]

Nathan found Animal Y which is shown in the diagram below.

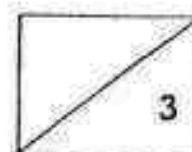


- b) He concluded that Animal Y is not an insect. Do you agree with him? Give two reasons for your answer. [2]

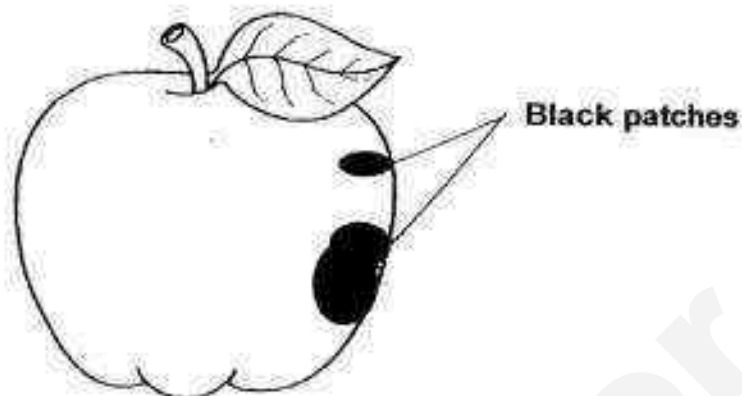
(i)

(ii)

(Go on to the next page)



- 28 Millie observed some black patches on her apple. Her classmate told her that the apple cannot be eaten anymore.



- a) What are the black patches found on the apple? [1]

- b) How do the black patches reproduce? [1]

- c) Name another organism that reproduces in a similar way. [1]

(Go on to the next page)



- 29 Study the table below.

Plants	
Group A	Group B
Papaya tree	Staghorn fern
Rose plant	Moss
Green bean plant	Ladder fern

- a) Give suitable headings for Group A and Group B.

[2]

Group A: _____

Group B: _____

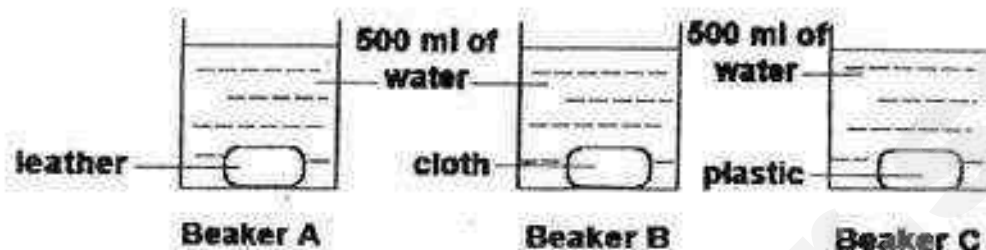
- b) How do the plants in Group A reproduce?

[1]

(Go on to the next page)



- 30 Three different materials, leather, cloth and plastic were placed into beakers containing 500 ml of water each. The materials were of the same shape and size, as shown in the diagrams below.

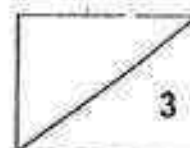


After 30 minutes, the materials were then removed from the beaker and the amount of water left in each beaker was recorded.

Beakers	Amount of water left in the beaker (ml)
A	480
B	420
C	

- a) Fill in the amount of water that would be left in beaker C in the table above. [1]
- b) Which material, leather, cloth or plastic, is the most suitable for making a towel? Explain your answer. [1]
- c) Which material, leather, cloth or plastic, is most suitable for making an umbrella? Explain your answer. [1]

(Go on to the next page)



Study the flowchart given below.



- a) Based on the chart, state one similarity and one difference between object A and B.

(i) Similarity:

[1]

(ii) Difference:

[1]

- b) Using the information from the chart, write the letters, A, B, C, D or E that represent the objects in the boxes below. [2]

Objects	A, B, C, D or E
Metal nail	
Plastic straw	

(Go on to the next page)



- 32 Fandi's class is involved in a recycling project. The following are the objects Fandi found in the recycling bin.

Mineral water bottle
Aluminium drink can
Newspaper
Drinking straw
Magazine
Cardboard box

Classify the objects according to the materials they are made of in the [3] boxes below.

Paper

Metal

Plastic

(Go on to the next page)



- 33 The diagram below shows a mop.



- a) Name the materials used to make Parts X and Y of the mop.

[2]

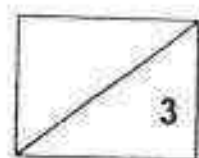
X: _____

Y: _____

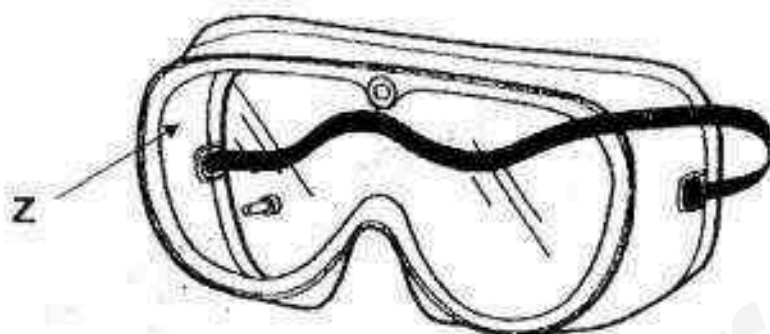
- b) Give a reason for your choice for material Y.

[1]

(Go on to the next page)



- 34 The diagram below shows a pair of goggles. Goggles are used to protect the eyes when swimming.

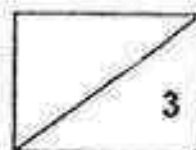


- a) State two physical properties of plastic that make it suitable to be made into part Z of the goggles. [2]

(i) _____

(ii) _____

- b) State one reason why part Z of the goggles should be made of plastic and not glass. [1]



End of paper

YEAR : 2016
 LEVEL : PRIMARY 3
 SCHOOL : TEMASEK PRIMARY
 SUBJECT : SCIENCE
 TERM : SA1

Booklet A

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

Booklet B

- Q25 (a) (i) Meena is wrong. A frog does not breathe through gills.
- (ii) Meena is wrong. A frog does not have a body covering of scales.
- (b) Animal Z belongs to a fish.

- Q26 (a) (i) Both animal C and animal D have feathers on its body.
- (ii) Animal D does not have six legs but animal C has.
- (b)

Animals	A, B, C or D
Butterfly	C
Eagle	A
Penguin	B
Goldfish	D

Q27

(a)

Action	Tick (✓)
Check to see if it has feelers.	✓
Check to see if it has six legs.	✓
Check to see if it has wings.	
Check to see if it has three body parts.	✓

- (b) (i) Yes agreed. Because animal Y does not have three body parts.
- (ii) Yes agreed. Because animal Y does not have six legs.

Q28

(a) Mould

(b) They reproduce by spores.

(c) Mushroom

Q29

(a) Group A : Flowering plant.Group B : Non-flowering plant.

(b) By seeds.

Q30

(a) Beakers C \Rightarrow 500 ml

(b) Material cloth is the most suitable because the cloth can absorb the most amount of water.

(c) Material plastic is the most suitable because the plastic absorbs the least amount of water.

Q31

(a) (i) Similarity : Both object A and B float on water.

(ii) Difference : Object A is flexible but B is not.

(b)

Objects	A, B, C, D or E
Metal nail	C
Plastic straw	A

Q32

Paper
Newspaper
Magazine
Cardboard box

Metal
Aluminium drink can

Plastic
Mineral water bottle
Drinking straw

Q33

(a) X : Plastic

Y : Cloth

(b) Material Y absorbs water.

Q34

(a) (i) Plastic does not break easily.

(ii) It is transparent.

(b) Glass would break easily.

End



Anglo-Chinese School (Primary)

END-OF-YEAR EXAMINATION 2016
SCIENCE
PRIMARY THREE
(BOOKLET A)

Name: _____ ()

Class: Primary 3 _____

Date: 25 October 2016

Duration of paper: 1 h 30 min

Parent's/Guardian's signature

INSTRUCTION TO CANDIDATES

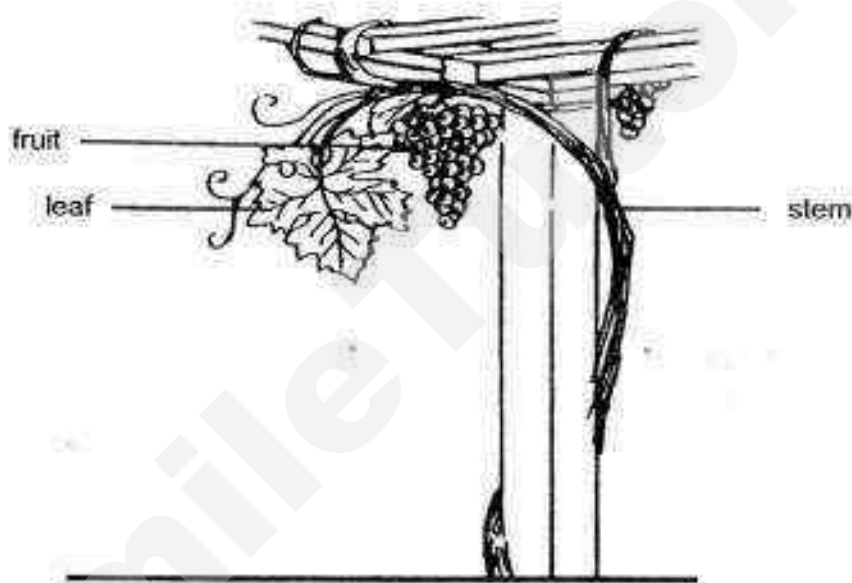
1. This question paper consists of **15** printed pages including this cover page.
2. Do not turn over this page until you are told to do so.
3. Follow all instructions carefully.
4. Answer all questions.
5. Shade your answer on the Optical Answer Sheet (OAS) provided.

For each of the following questions from 1 to 24, 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. [48 marks]

- 1 Gordon found an organism which has moist skin, lays eggs and can live on both land and in water. Which group of animals does it most likely belong to?

- (1) Fish
- (2) Birds
- (3) Mammals
- (4) Amphibians

- 2 Hassan found a plant in a garden as shown in the diagram below.



Based on your observation of the plant above, which of the following statements are true about the plant?

- A It has a weak stem.
- B It is a flowering plant.
- C It cannot make its own food.

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

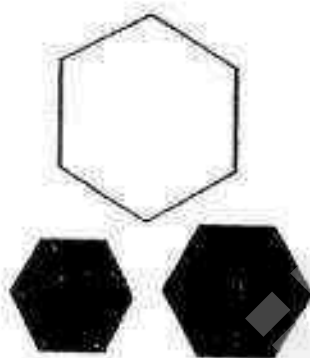
(Go on to the next page)

3 Which of the following statements about fungi are true?

- A All fungi can be eaten.
- B All fungi reproduce from spores.
- C All fungi grow only on rotten logs.
- D All fungi feed on other living things that are dead or alive.

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

4 Joe classified some stickers into two groups as shown below.



Group A



Group B

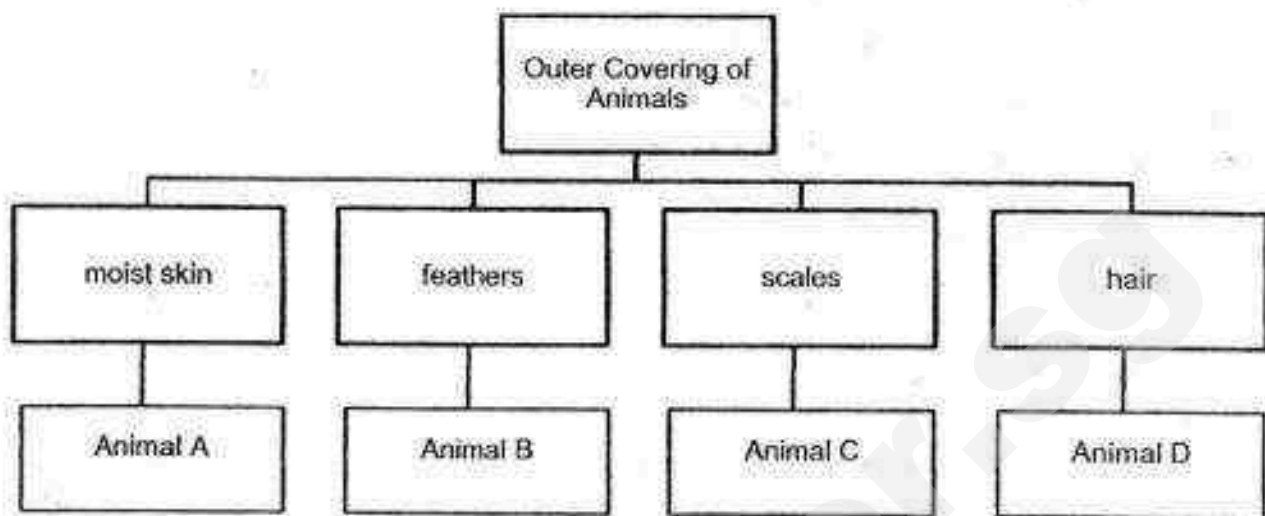
The stickers above are grouped according to their _____.

- A sizes
- B shapes
- C colours

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

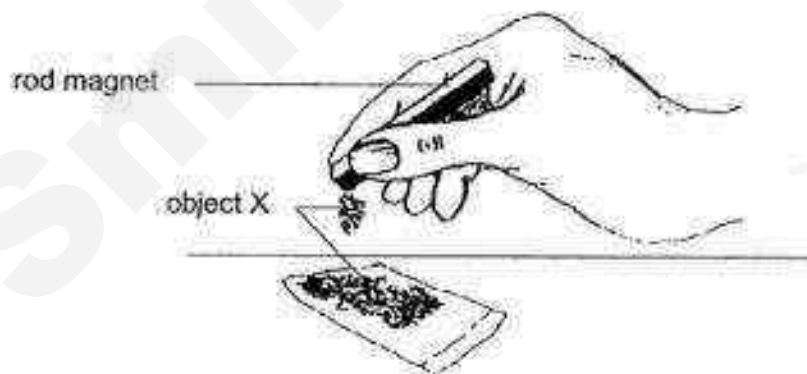
(Go on to the next page)

- 5 Study the classification chart below.



Which animal best represents Animal C?

- (1) Whale
 - (2) Snake
 - (3) Rabbit
 - (4) Grasshopper
- 6 Mabel used a rod magnet to attract object X as shown in the diagram below.

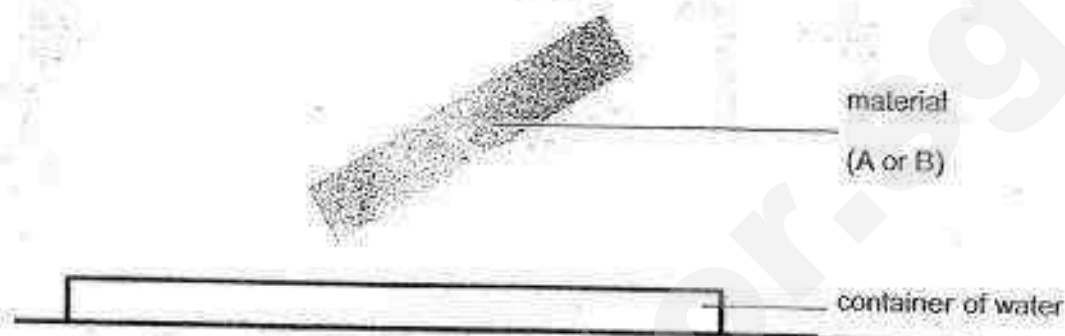


What material could object X be made of?

- (1) Iron
- (2) Wood
- (3) Glass
- (4) Aluminium

(Go on to the next page)

7. Mohan had two types of materials, A and B, which were of the same size and thickness. He wanted to find out which material was able to absorb the most amount of water in the same amount of time. He put the material, one at a time, into a container containing various amounts of water as shown in the table below.



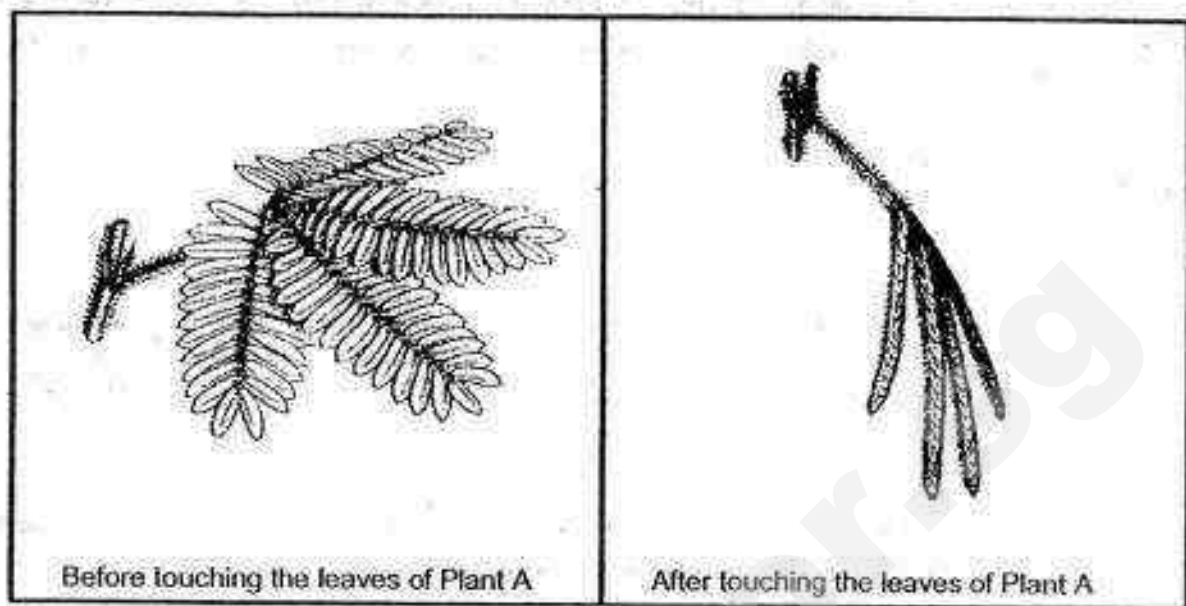
Set-up	Materials	Amount of water in container at first (ml)
P	A	20
Q	B	30
R	A	50
S	B	20

Which two set-ups should he choose to conduct a fair test in this experiment?

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

(Go on to the next page)

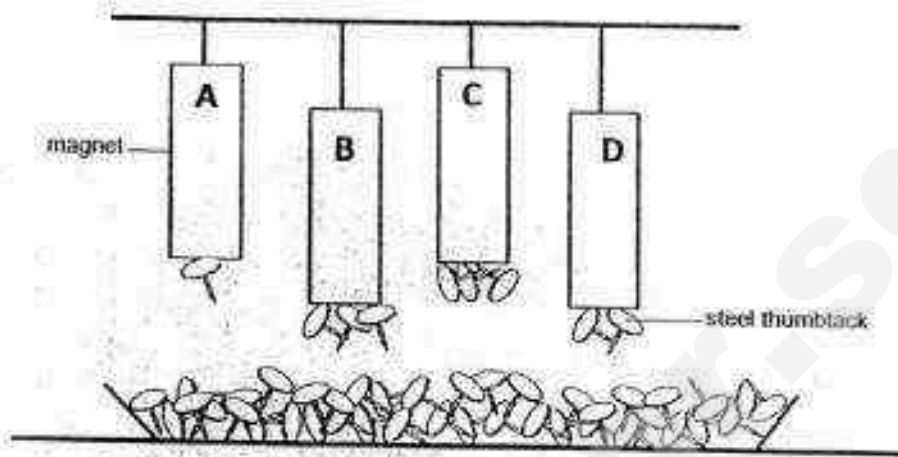
- 8 Peter found plant A growing in his garden. He made the following observations shown below.



Which characteristic of living things is shown by Plant A?





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

- 9 Jolin hung four magnets, A, B, C and D, above a tray of steel thumbtacks and recorded her observation as shown below.



From her observation above, which magnet, A, B, C or D is the strongest?

- (1) A
 - (2) B
 - (3) C
 - (4) D
- 10 Which one of the following objects shown below uses a magnet to work?

<p>(1)</p>  <p>Compass</p>	<p>(2)</p>  <p>Stapler</p>
<p>(3)</p>  <p>Chair</p>	<p>(4)</p>  <p>Book</p>

(Go on to the next page)

- 11 Si Min is choosing a cage for her pet hamster. She would like the cage to be able to withstand 10 kg of mass. Which property of material X makes it suitable for making the hamster cage?



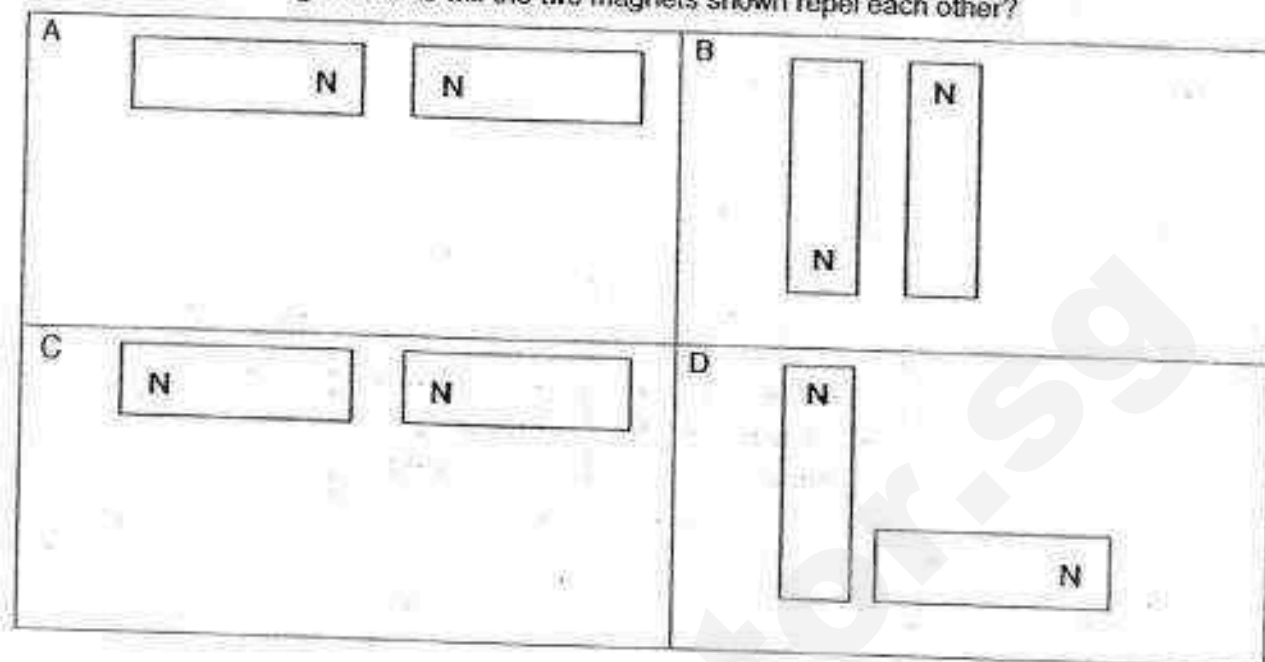
- (1) Strong
 - (2) Flexible
 - (3) Waterproof
 - (4) Ability to float
- 12 Which two actions will cause a magnet to lose its magnetism?

- A Dropping a magnet many times
- B Heating a magnet over a flame
- C Putting a magnet near a stronger magnet
- D Putting a magnet near a weaker magnet

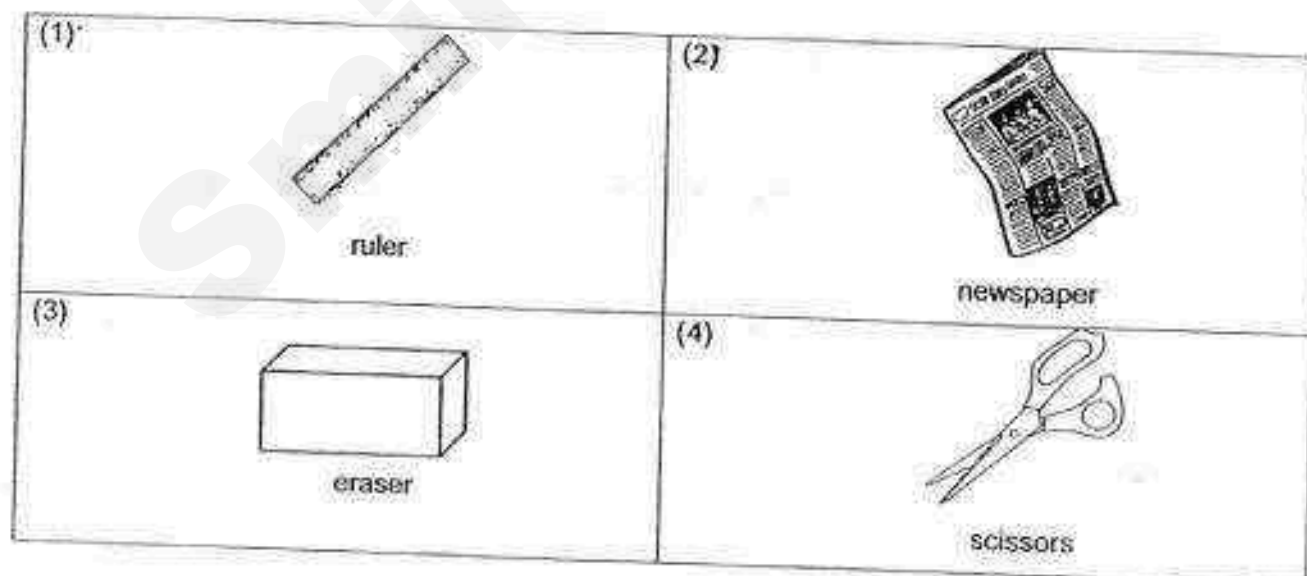
- (1) A and B
- (2) B and C
- (3) C and D
- (4) A and D

(Go on to the next page)

- 13 In which of the following situations will the two magnets shown repel each other?

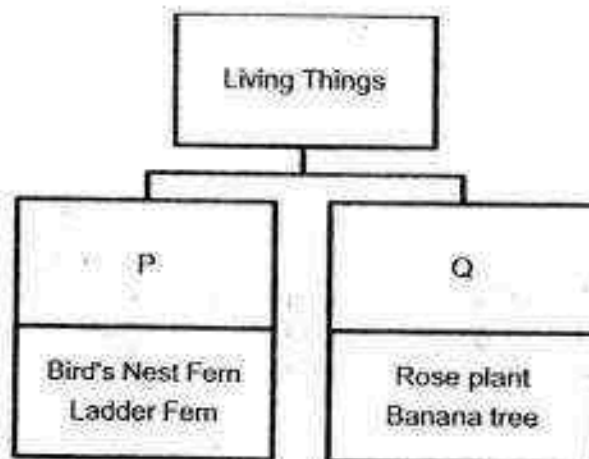


- (1) A and B only
 (2) B and C only
 (3) C and D only
 (4) A and D only
- 14 Which one of the following objects forms a system?



(Go on to the next page)

- 15 Study the classification chart below carefully:



Based on the classification chart above, which of the following represent the correct headings for P and Q?

	P	Q
(1)	Fungi	Flowering Plants
(2)	Flowering Plants	Non-flowering Plants
(3)	Non-flowering Plants	Flowering Plants
(4)	Fungi	Non-flowering Plants

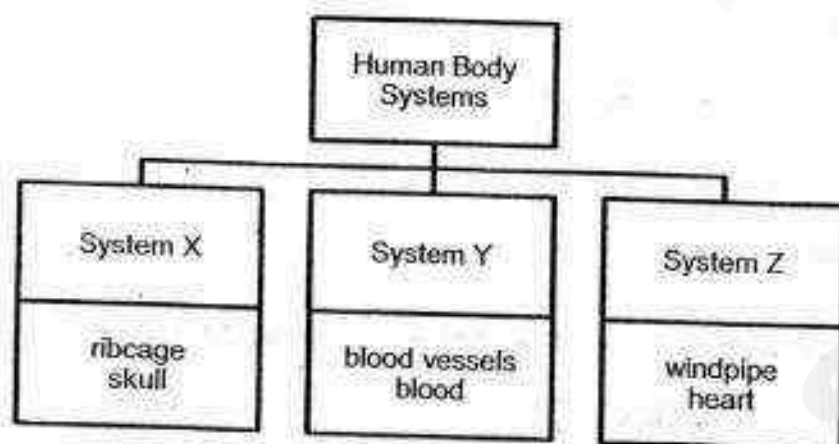
- 16 Which one of the following shows the correct path taken by the food that we eat during digestion?

A	B	C	D	E
large intestine	stomach	mouth	small intestine	gullet

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

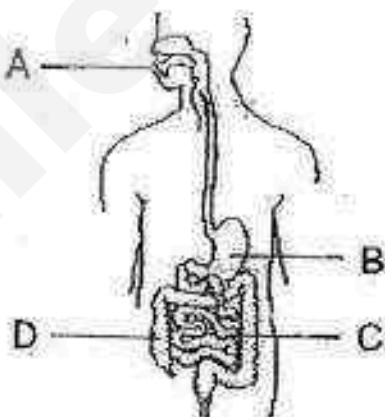
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- 17 Study the classification chart below carefully.



Which one of the following has been put under the wrong system?

- (1) Skull
 - (2) Blood
 - (3) Heart
 - (4) Ribcage
- 18 Mrs Tan would always cut carrots into small pieces when she is cooking.



Which part of the digestive system performs the same function as cutting the carrots into smaller pieces?

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

(Go on to the next page)

19 Which of the following human body systems have to work together in order for the digested food to be absorbed into our bodies?

- (1) Skeletal and muscular systems
- (2) Digestive and skeletal systems
- (3) Digestive and circulatory systems
- (4) Respiratory and circulatory systems

20 Study the information given in the table shown below carefully.

Parts of the digestive system	Function
A	Pushes the chewed food down into the stomach
B	Allows the digested food to be absorbed
C	Absorbs water from the undigested food

What are the parts, A, B and C, likely to be?

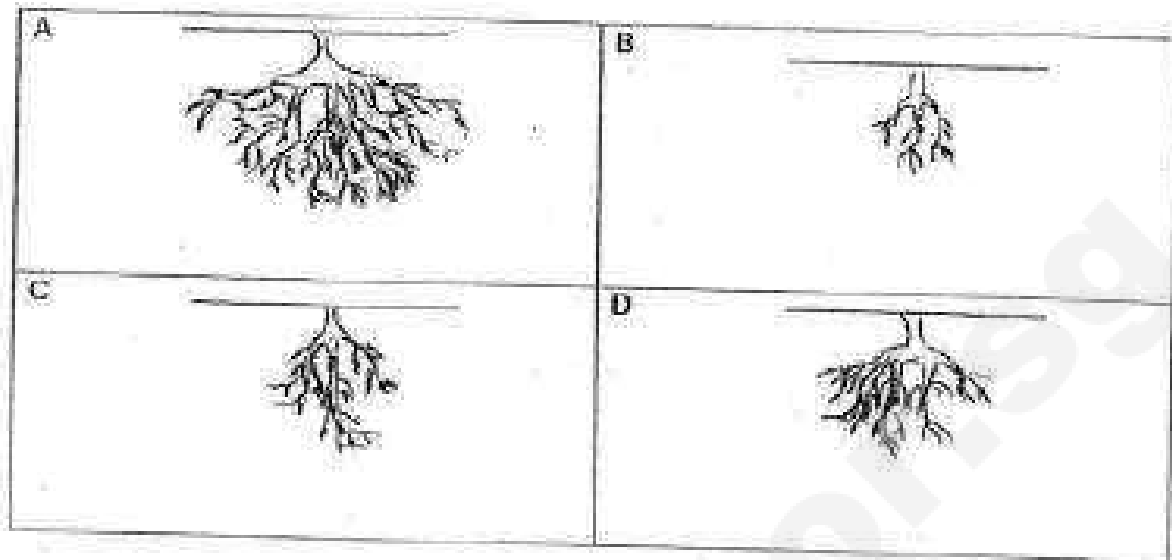
	A	B	C
(1)	tongue	small intestine	large intestine
(2)	tongue	large intestine	small intestine
(3)	gullet	small intestine	large intestine
(4)	gullet	large intestine	small intestine

21 Which part of a plant develops into fruits under the right conditions?

- (1) Roots
- (2) Stems
- (3) Leaves
- (4) Flowers

(Go on to the next page)

- 22 The diagram below shows the root systems of four different plants.



Which one of the root systems above will hold the plant most firmly to the ground?

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

(Go on to the next page)

- 23 Kenneth took four identical plants, A, B, C and D, and removed some parts from each plant as shown in the table below.

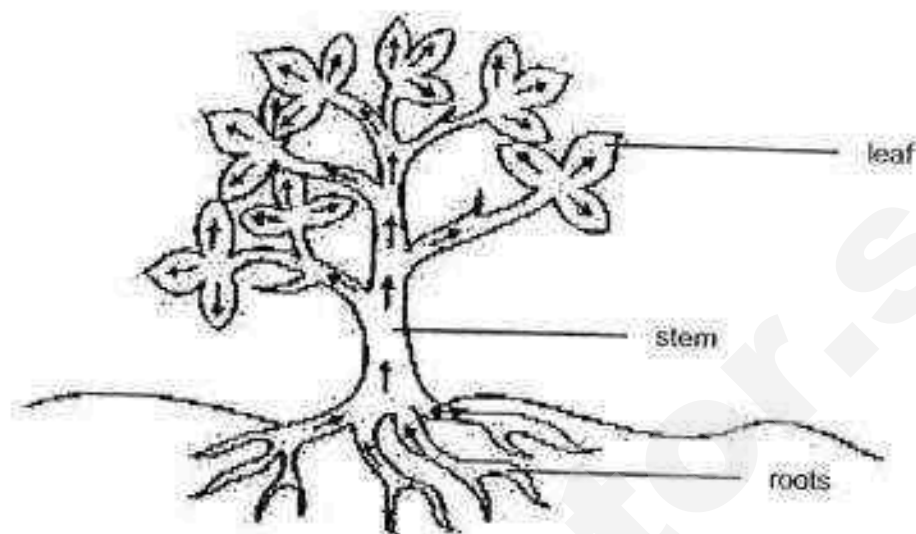
Plant	Parts that were removed
A	All fruits and flowers
B	All flowers and leaves
C	All leaves and roots
D	All roots and fruits

Which one of the following plants would most likely survive the longest?

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

(Go on to the next page)

24. Study the diagram below carefully. The arrows represent things that get transported throughout the plant.



What do the arrows represent?

- A Food
- B Water
- C Oxygen
- D Mineral salts

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

End of Booklet A

Please go on to Booklet B.



Page No. _____ Date _____

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Anglo-Chinese School (Primary)

END-OF-YEAR EXAMINATION 2016

SCIENCE

PRIMARY THREE

BOOKLET B

Name: _____ ()

Class: Primary 3 _____

Date : 25 October 2016

Duration of paper: 1 h 30 min

Parent's/Guardian's signature _____

INSTRUCTION TO CANDIDATES

1. This question paper consists of **11** printed pages including this cover page.
2. Do not turn over this page until you are told to do so.
3. Follow all instructions carefully.
4. Answer all questions.
5. Write your answers in this booklet.

Booklet	Maximum marks	Marks obtained
A	48	
B	32	
Total	80	

For questions 25 to 34, write your answers in the spaces provided in this booklet. The number of marks available is shown in the brackets [] at the end of each question or part question.

(32 marks)

- 25 Using a ruler and pen, draw straight lines to match the different body systems to their correct function. Join the correct black dots on the left to those on the right. [2]

Body System	Function
Muscular system •	• Absorbs digested food, nutrients, minerals and water to be used by the body.
Skeletal system •	• Takes in oxygen to be used by the body and removes carbon dioxide from the body.
Digestive system •	• Supports the body and gives it shape.
Respiratory system •	• Enables different parts of the body to move.

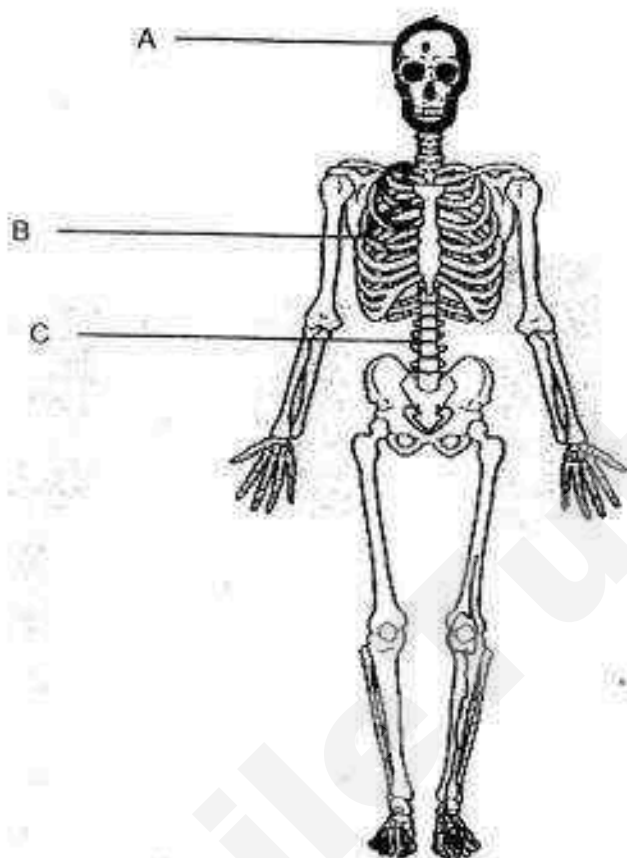
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SCORE	2
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26 Study the human system below carefully.

(a) Label the parts, A, B and C.

[3]



A: _____

B: _____

C: _____

(b) Name the human system shown in the diagram above.

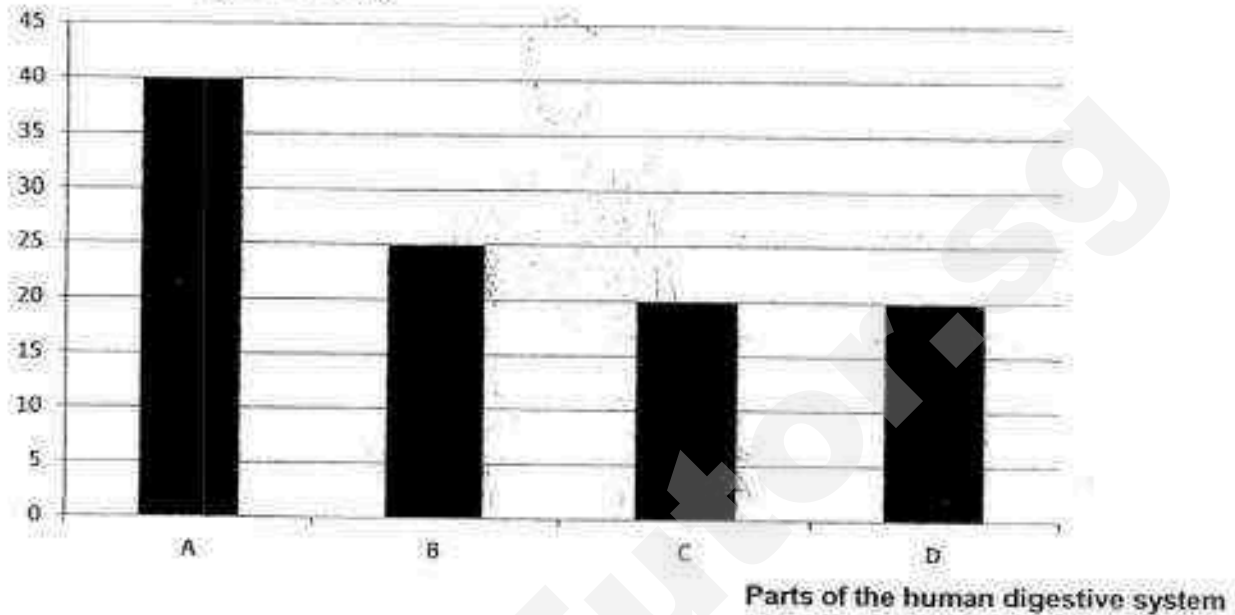
[1]

(Go on to the next page)

SCORE	
	4

- 27 The graph below shows the amount of undigested food found in four different parts of a human digestive system.

Amount of undigested food (g)



- (a) Which part, A, B, C or D, represents the mouth?

[1]

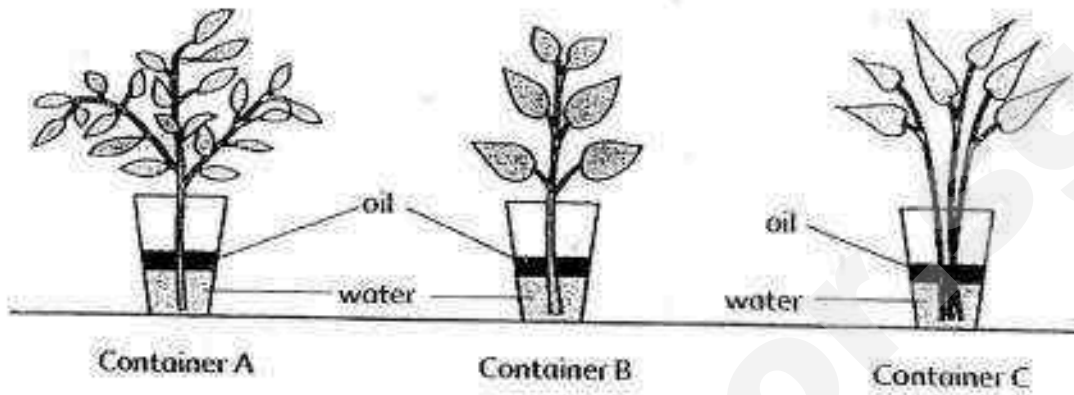
- (b) Why is the amount of undigested food the same at parts C and D?

[1]

(Go on to the next page)

SCORE	
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- 28 Ahmad wanted to find out if the type of plant affects the amount of water taken by the plant. He set up the following experiment. Oil was added to prevent evaporation of water.

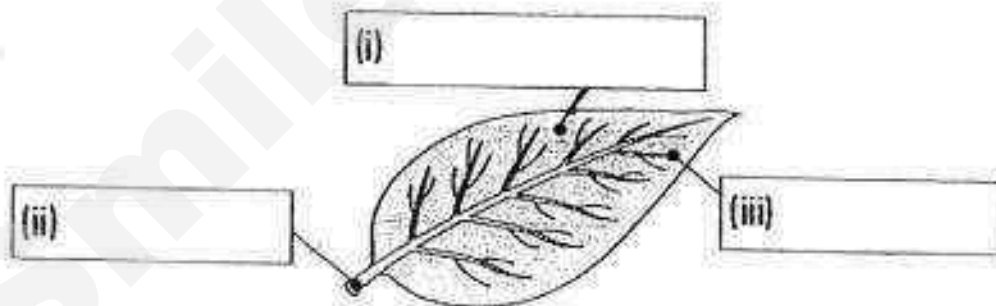


- (a) Was Ahmad's experiment a fair one? Explain.

[1]

- (b) Label the parts of a leaf in the space provided below.

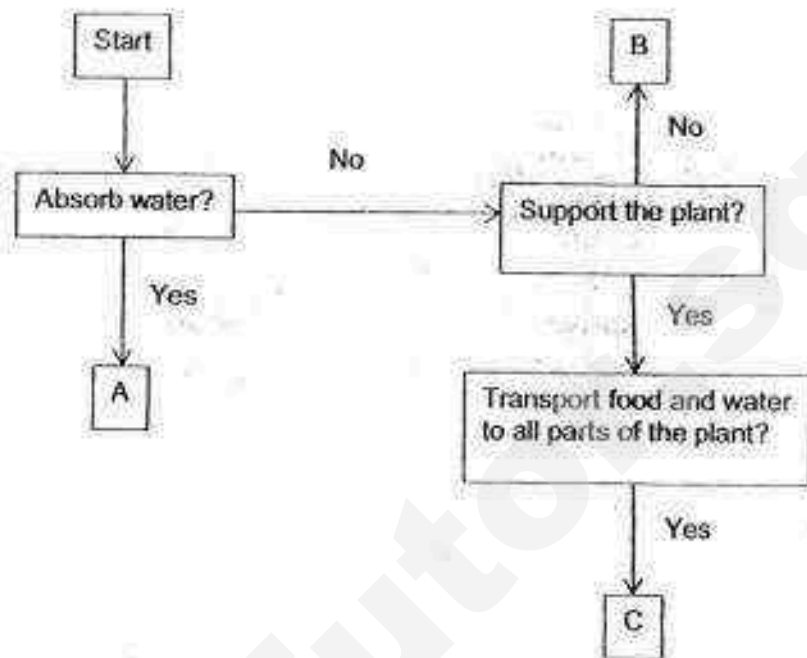
[3]



(Go on to the next page)

SCORE	
	4

- 29 The flow chart below summarises the different plant parts and their functions.



Identify the parts, A, B and C.

[3]

A: _____

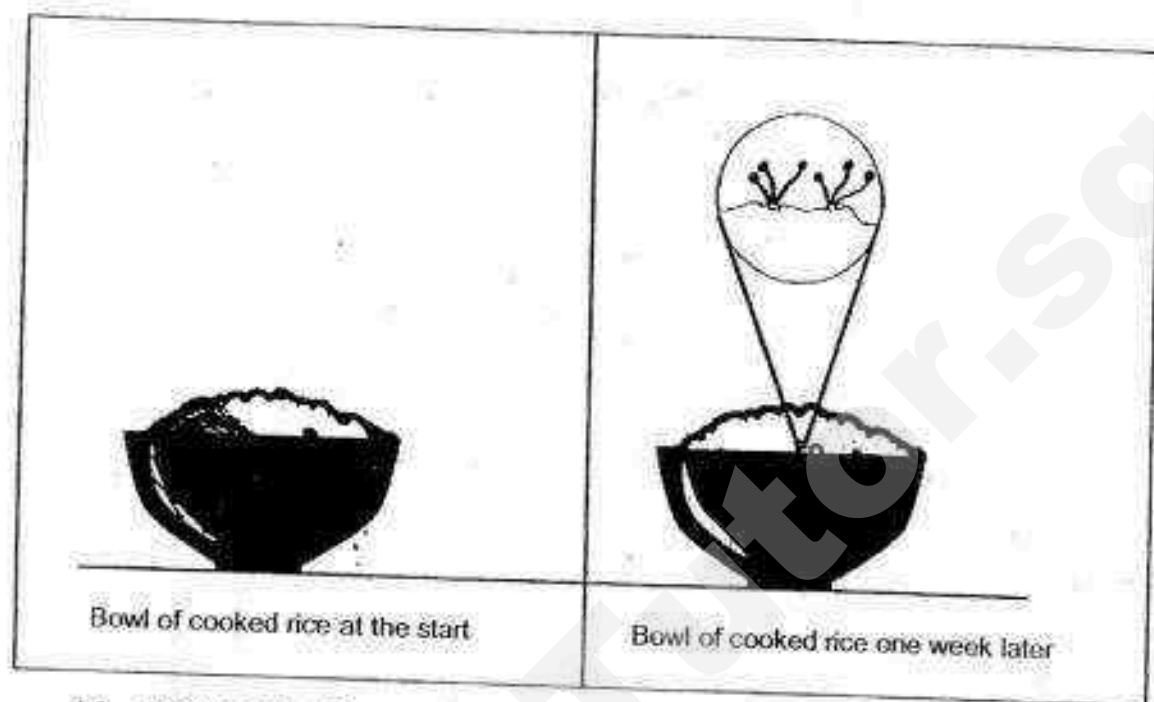
B: _____

C: _____

(Go on to the next page)

SCORE	
	3

- 30 Dave left a bowl of cooked rice on a table as shown in the diagram below. After one week, he noticed some living things growing on the cooked rice.



- (a) Based on the diagram above, what did Dave observe growing on the bowl of cooked rice after one week? [1]

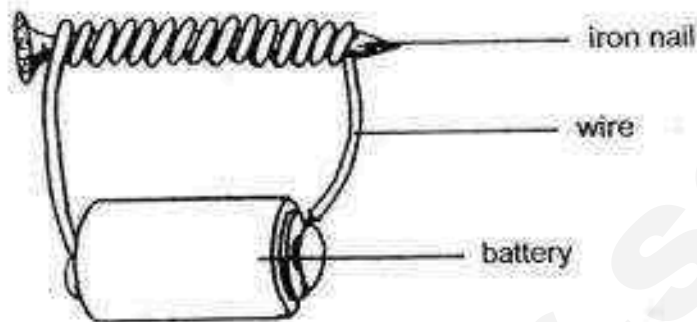
- (b) How does the living thing growing on the bowl of cooked rice reproduce? [1]

- (c) What does the living thing feed on? [1]

(Go on to the next page)

SCORE	
	3

- 31 Ismail used an electromagnet as shown below to find out how the number of coils of wire around the iron nail affects its magnetic strength.



He recorded the results of his experiment in the table below.

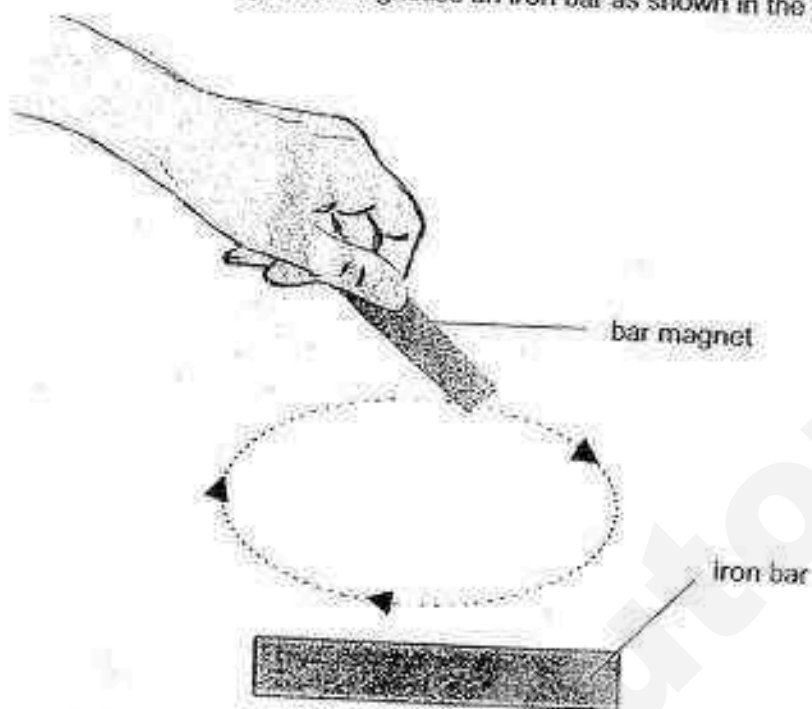
Number of coils of wire around the iron nail	20	30	40	50	60
Number of paperclips attracted to the electromagnet	3	5	7	9	12

- (a) Based on Ismail's findings, how many paperclips could the electromagnet attract when there were 40 coils of wire around its iron nail? [1]
- _____
- (b) State the relationship between the number of coils of wire around the iron nail and the number of paperclips that got attracted. [1]
- _____
- (c) Besides increasing the number of coils of wire around the iron nail, what else could Ismail have done to increase the magnetic strength of the electromagnet? [1]
- _____

(Go on to the next page)

SCORE	3
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- 32 Jim used a bar magnet to magnetise an iron bar as shown in the diagram below.



- (a) What is the name of the method which Jim used to magnetise the iron bar? [1]

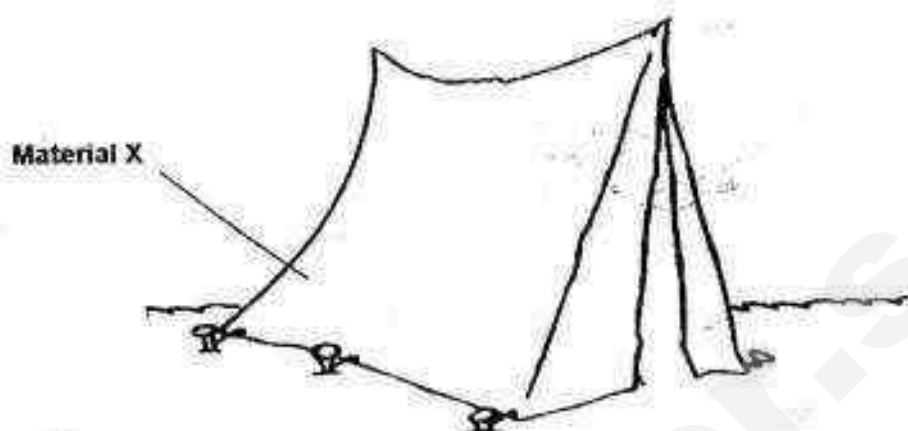
- (b) Using the method shown above, state two actions that Jim can take to increase the magnetism of the iron bar? [2]

- (i) _____
- (ii) _____

(Go on to the next page)

SCORE	3
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- 33 Bobby set up a tent for his Scouts Camp as shown in the diagram below.



- (a) What suitable material can X be made up of? [1]

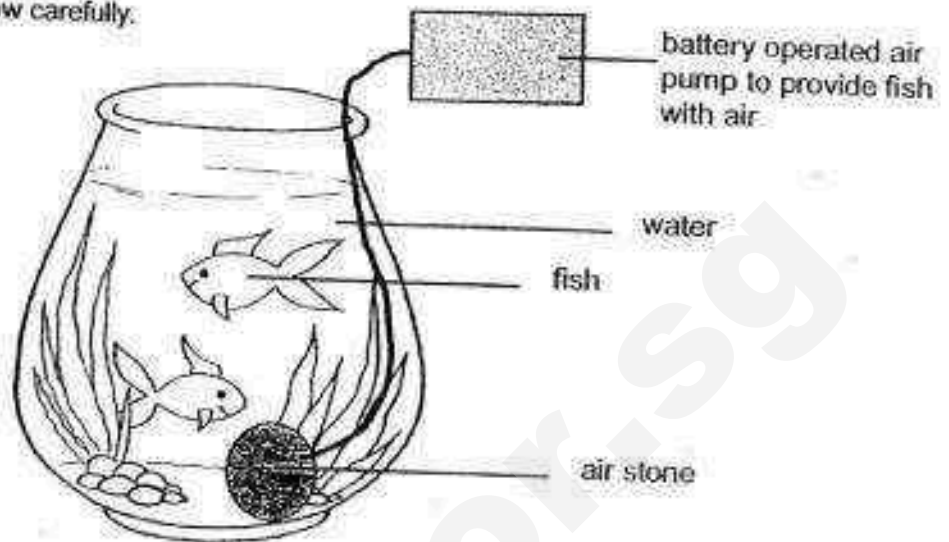
- (b) Give two properties of Material X that make it suitable to be used as part of the tent. [2]

- (c) Bobby wanted to have "windows" for his tent. Other than the properties mentioned in (b), what property must the windows have? [1]

(Go on to the next page)

SCORE :	<div style="text-align: right;">4</div>
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- 34 Study the diagram below carefully.



- (a) State one more condition that the fish need to continue to survive in the aquarium above.

[1]

Zhi Wei set up an aquarium with 12 goldfish. The table below shows how the number of goldfish changed over time.

	January	February	March	April
Number of Goldfish	12	12	15	9

- (b) Based on the table above, what happened to the number of goldfish from February to March?

[1]

- (c) Give a possible explanation for your answer in (b).

[1]

- (d) In April, there was a drop in the number of goldfish in the aquarium. Suggest a reason to explain the drop in the number of goldfish.

[1]

END OF BOOKLET B

Please check all your answers carefully.

SCORE	
	4

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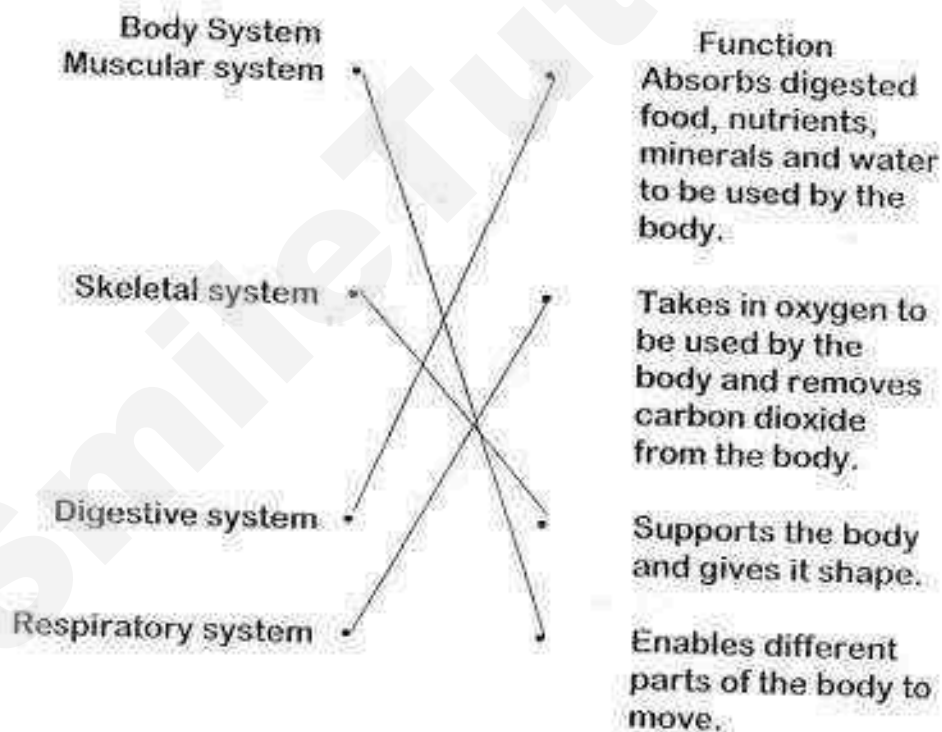
YEAR : 2016
 LEVEL : PRIMARY 3
 SCHOOL : ANGLO-CHINESE
 SUBJECT : SCIENCE
 TERM : SA2

Booklet A

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

Booklet B

Q25



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- Q26 (a) A : Skull
B : Rib cage
C : Back bone
- (b) Skeletal system.
- Q27 (a) A
- (b) Parts C and D do not digest food.
- Q28 (a) No. Container A and B have one plant.
- (b) (i) Leaf blade
(ii) Leaf stalk
(iii) Leaf veins
- Q29 (a) Roots
- (b) Leaves
- (c) Stem
- Q30 (a) Fungus
- (b) It reproduce by spores.
- (c) It feed on dead or alive things.
- Q31 (a) 7
- (b) The increase number of coils, the increase in number of attracted paper clips.
- (c) Ismail could increase the number of battery.

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Q32

- (a) Stroking
- (b) (i) Stroke the iron bar more.
(ii) Use a strong magnet to stroke the iron bar.

Q33

- (a) Fabric
- (b) Waterproof and flexible.
- (c) Ability to allow light to pass through.

Q34

- (a) Food
- (b) The number of gold fish increased.
- (c) Living thing reproduce.
- (d) Some gold fish got sick and died.

End

Name: _____ ()

Class: Primary 3 _____

CHIJ ST NICHOLAS GIRLS' SCHOOL



Primary 3

Semestral Assessment 2 – 2016

SCIENCE

BOOKLET A

27 Oct 2016

Total Time for Booklets A and B: 1 hour 30 minutes

24 questions

48 marks

Do not open this booklet until you are told to do so.
Follow all instructions carefully.
Answer all questions.

This booklet consists of 17 printed pages.

11. 2

11. 2

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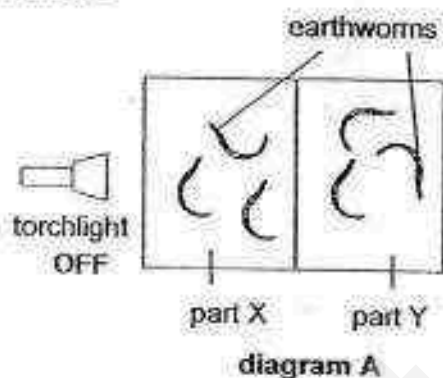
11. 2

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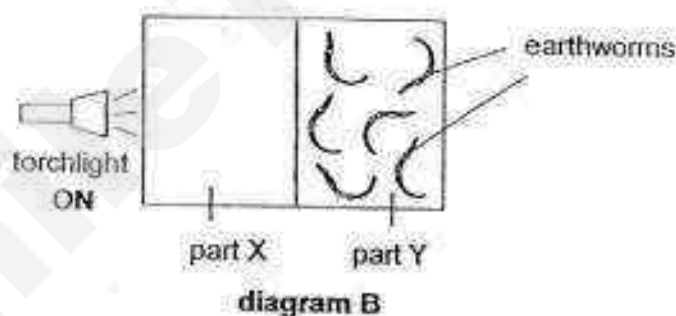
Section A (24 x 2 marks = 48 marks)

For each question from 1 to 24, 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 provided.

1. Joseph divided a tray of soil filled with earthworms into two equal parts as shown in diagram A below.



He then switched on the torchlight placed near part X of the tray. After a day, he observed that all the earthworms went to part Y of the tray as shown in diagram B.



What can he conclude from his experiment?

- (1) Earthworms can reproduce.
- (2) Earthworms respond to stimuli.
- (3) Earthworms need water to stay alive.
- (4) Earthworms like to grow in bright places.

2. Sally observed her puppy for an hour.



Which of her observations would not support the fact that her puppy is a living thing?

- (1) It drinks milk.
- (2) It has four legs.
- (3) It barks at strangers.
- (4) It wags its tail when it sees its owner.

3. Anette, Bala and Caixin found a bird's nest fern in the school garden as shown below.



bird's nest fern

They made the following statements.

- Anette: The plant bears flowers.
- Bala: The plant reproduces from spores.
- Caixin: The plant can make its own food.

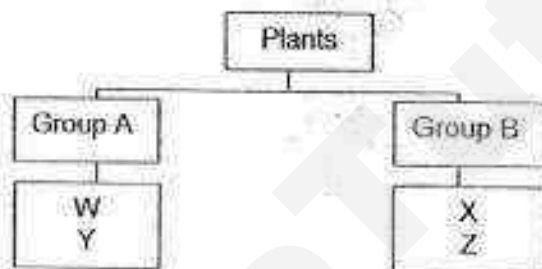
Whose statements are correct?

- (1) Anette and Bala only
- (2) Bala and Caixin only
- (3) Caixin and Anette only
- (4) Anette, Bala and Caixin

4. The table below shows the characteristics of plant, W, X, Y and Z. A tick (✓) indicates that the characteristic is present in the plant.

Plant	Characteristics		
	Has Flowers	Lives on Land	Makes its own food
W	✓	✓	✓
X		✓	✓
Y	✓		✓
Z			✓

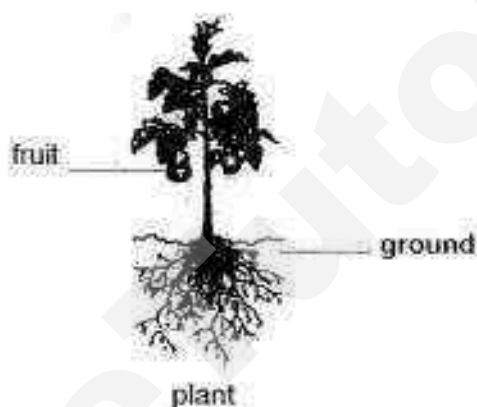
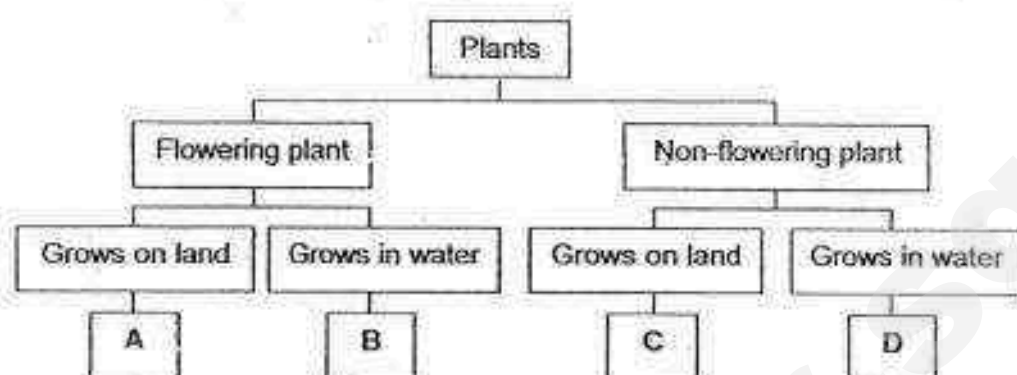
Tina uses the information above and draws the classification chart below.



Which of the following are possible headings for group A and B?

	Group A	Group B
(1)	Edible fruits	Inedible fruits
(2)	Strong stem	Weak stem
(3)	Land plants	Water plants
(4)	Flowering plants	Non-flowering plants

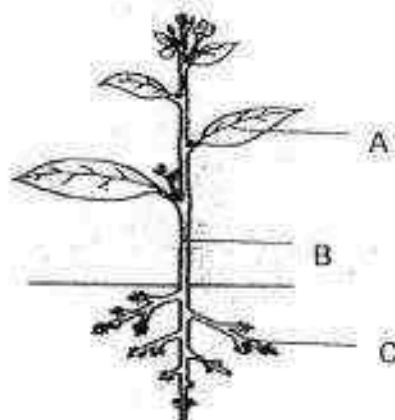
5. Study the classification chart below.



Based on the chart, which letter, A, B, C or D, best represents the plant shown above?

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

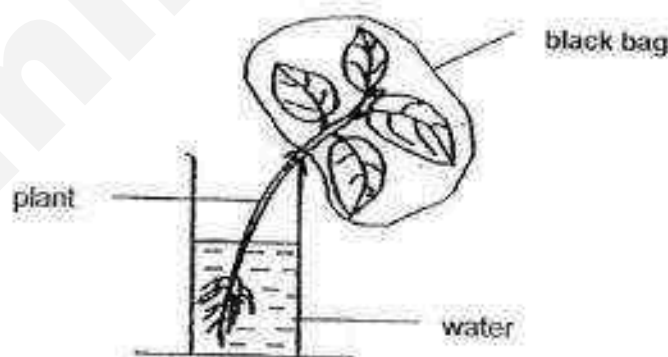
6. Mallika observed a plant shown below.



Which of the following best describes the functions of parts, A, B and C?

	A	B	C
(1)	Absorb water and mineral salts	Holds the plant upright	Make food
(2)	Holds the plant upright	Make food	Absorb water and mineral salts
(3)	Make food	Transport water, food and mineral salts	Anchor the plant firmly to the ground
(4)	Make food	Absorb water and mineral salts	Transport water, food and mineral salts

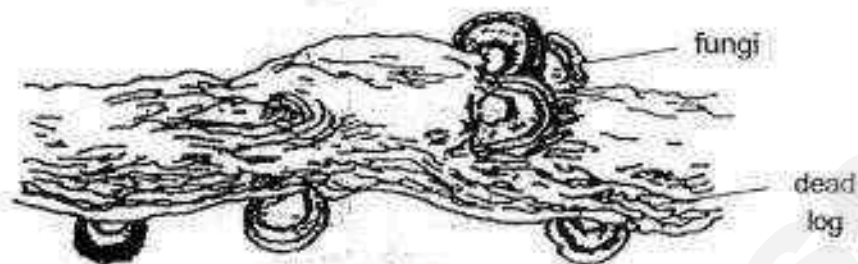
7. Hannah placed a plant with a plastic bag wrapped around its leaves in water as shown below. The plant died after a week.



Which one of the following best explains her observation?

- (1) The plant did not have sufficient warmth.
- (2) The plant could not reproduce as it had no flowers.
- (3) The leaves could not take in sunlight to make food.
- (4) The leaves of the plant could not get enough water.

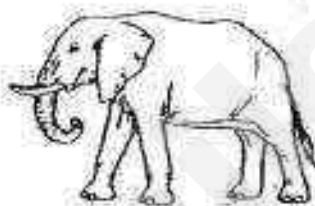
8. The diagram below shows some fungi growing on a dead log.



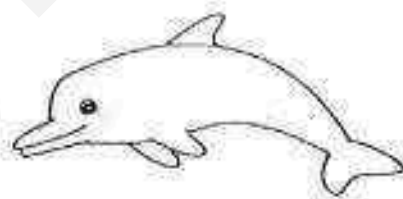
Which of the following statements about the fungi is true?

- (1) The fungi reproduce by seeds.
- (2) The fungi make food for the log.
- (3) The fungi depend on the dead log for food.
- (4) The fungi are plants that grow on dead logs.

9. The diagram below shows two animals.



elephant







dolphin

Which of the following statements show the common characteristics of both animals?

- A They breathe through lungs.
- B They reproduce by laying eggs.
- C They feed their young with milk.
- D They have an outer body covering of scales.

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

10. Study the classification table below.

Group X	Group Y
 Eagle	 Termite
 Bat	 Spider

Which one of the following headings best represents Group X and Group Y?

	Group X	Group Y
(1)	Bird	Insect
(2)	Can fly	Cannot fly
(3)	Covered with feathers	Hard outer covering
(4)	Gives birth to live young	Lays eggs

11. Which of the following statements are true of all insects?

- A They can fly.
- B They have six legs.
- C They cause diseases.
- D They have three body parts.

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

12. Which one of the following best explains why bacteria is not classified as plants?

- (1) They do not produce seeds.
- (2) They are harmful to humans.
- (3) They cannot make their own food.
- (4) They can only be seen through a microscope.

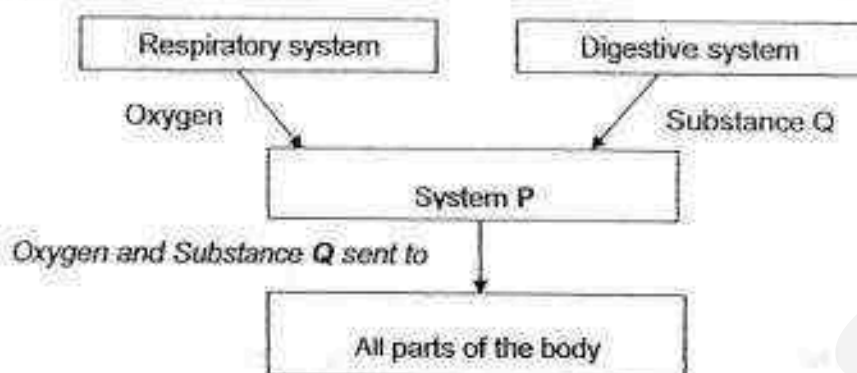
13. Which one of the following will have fungi growing on it after one week?

- (1) A tin of biscuits
- (2) A sealed bottle of water
- (3) A slice of cake left on a table
- (4) A tub of ice cream in the freezer

14. Digested food is absorbed into our blood through the walls of the _____.

- (1) gullet
- (2) stomach
- (3) large intestine
- (4) small intestine

15. Study the chart below.



Which of the following best represent system P and substance Q in the chart above?

	System P	Substance Q
(1)	Circulatory	Digested food
(2)	Skeletal	Undigested food
(3)	Circulatory	Undigested food
(4)	Muscular	Digested food

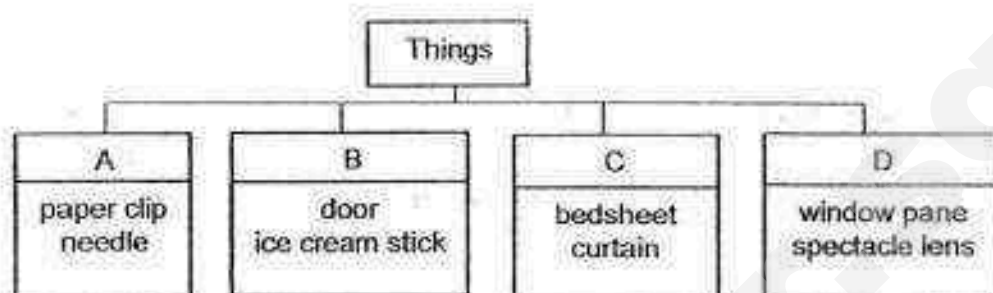
16. The diagram below shows a fork.



Metal is used to make a fork because it _____.

- A is strong
 - B is not flexible
 - C does not float on water
 - D does not allow light to pass through it
- (1) A and B only
 - (2) A and D only
 - (3) B and C only
 - (4) B and D only

17. Some things are grouped according to the materials they are made of in the classification chart below.



In which group would you classify a key?

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

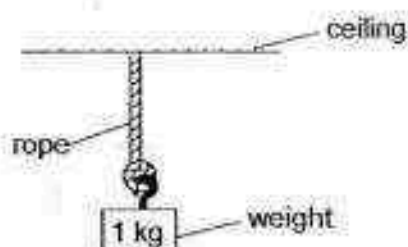
18. The properties of materials, S, T, U and V, are listed in the table below. A tick (✓) shows that the material has the property.

Properties	Materials			
	S	T	U	V
Breaks easily		✓		✓
Flexible	✓		✓	
Absorbs water	✓			
Allows light to pass through				✓

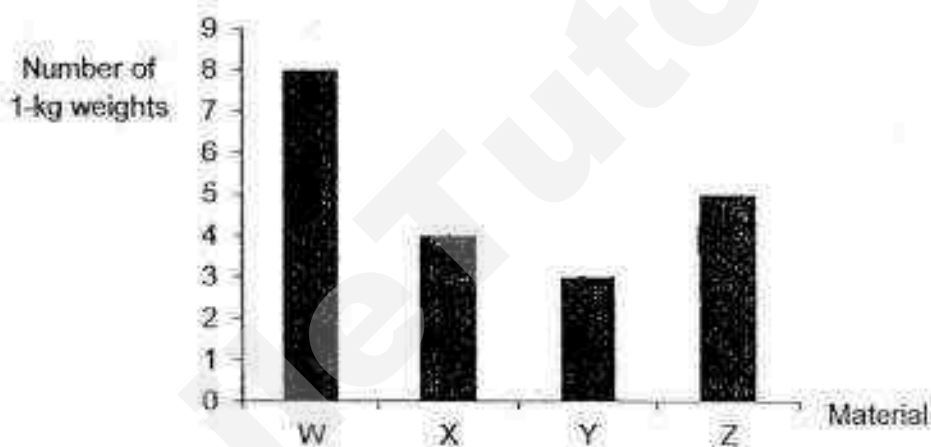
Based on the table above, which material, S, T, U or V, is most suitable for making a raincoat?

- (1) S
- (2) T
- (3) U
- (4) V

19. Mary carried out an experiment on four ropes made of different materials. The length and thickness of the ropes were the same. She hung a 1-kg weight on each of the ropes as shown below.



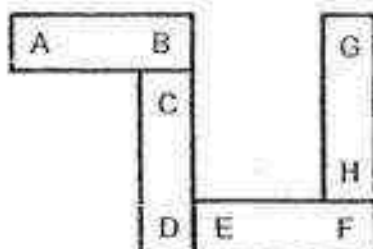
The bar graph below shows the number of 1-kg weights each of the ropes could hold before it broke.



Which of the following conclusions can be made from the experiment?

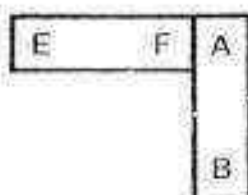
- (1) Material X is stronger than material W.
- (2) Material Z is stronger than material X.
- (3) Material Y is less flexible than material Z.
- (4) Material W is more flexible than material Y.

20. Five bar magnets with the ends marked A to H are arranged as shown below.

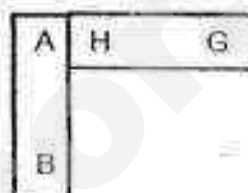


Which one of the following diagrams shows a possible arrangement of two of the magnets?

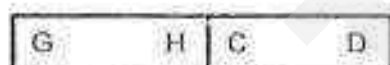
(1)



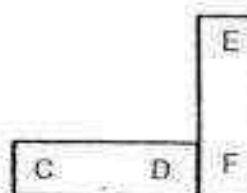
(2)



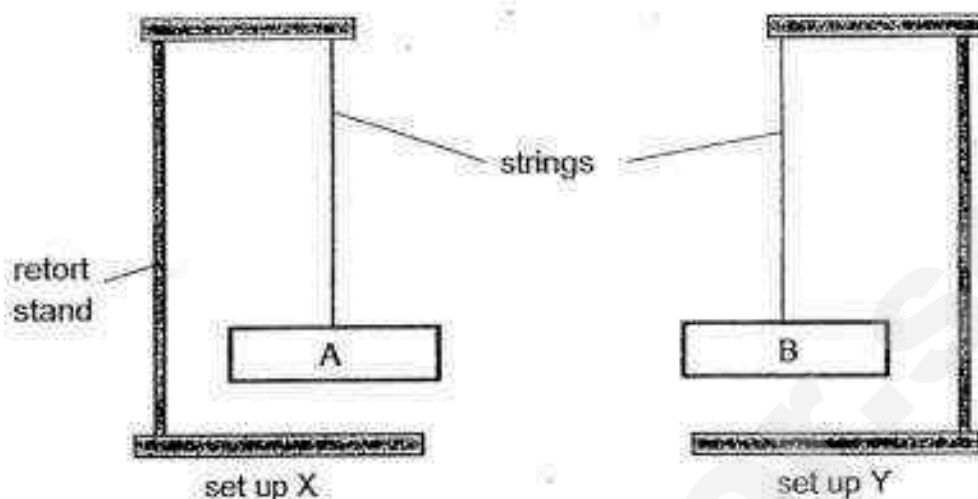
(3)



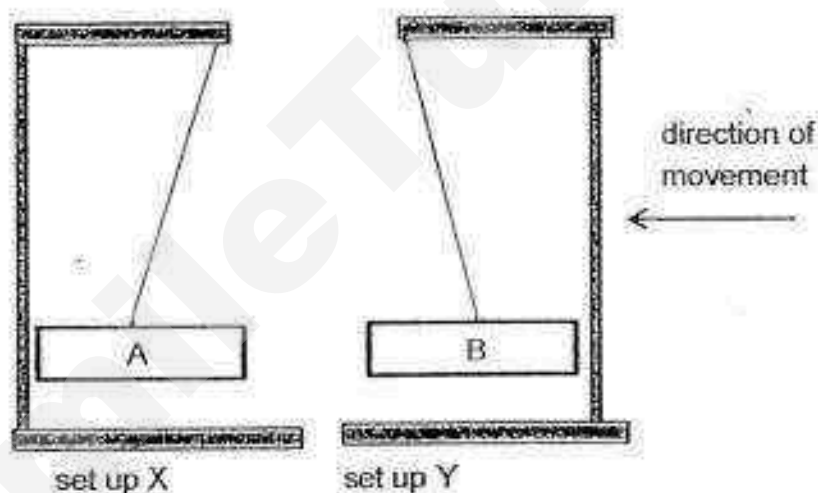
(4)



21. Objects, A and B, were freely suspended from two retort stands as shown below.



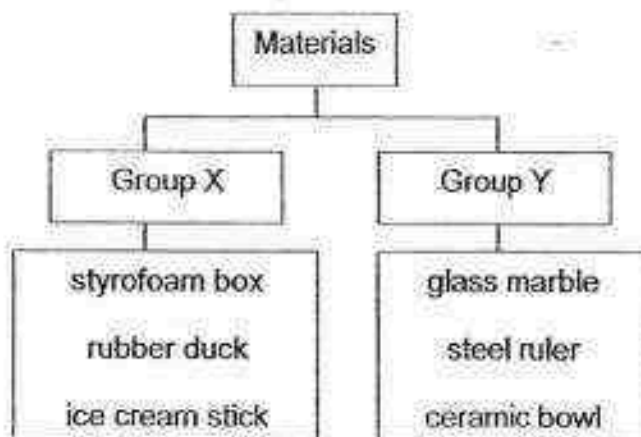
When set up Y was pushed closer to set up X, the following was observed.



Which one of the following statements best explains the observation above?

- (1) Only object A is a magnet.
- (2) Only object B is a magnetic material.
- (3) The like poles of both magnets are facing each other.
- (4) The unlike poles of both magnets are facing each other.

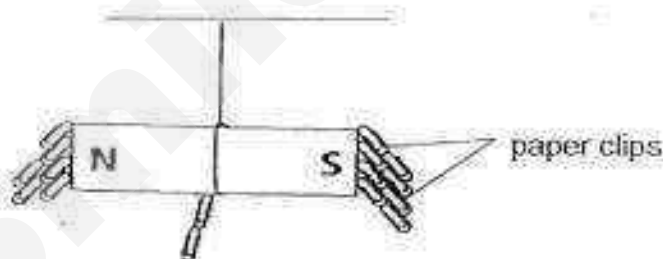
22. Study the classification chart below.



Which of the following are suitable headings for group X and Y?

	Group X	Group Y
(1)	man-made	natural
(2)	flexible	stiff
(3)	magnetic	non-magnetic
(4)	floats on water	sinks in water

23. The diagram below shows a bar magnet attracting some paper clips.

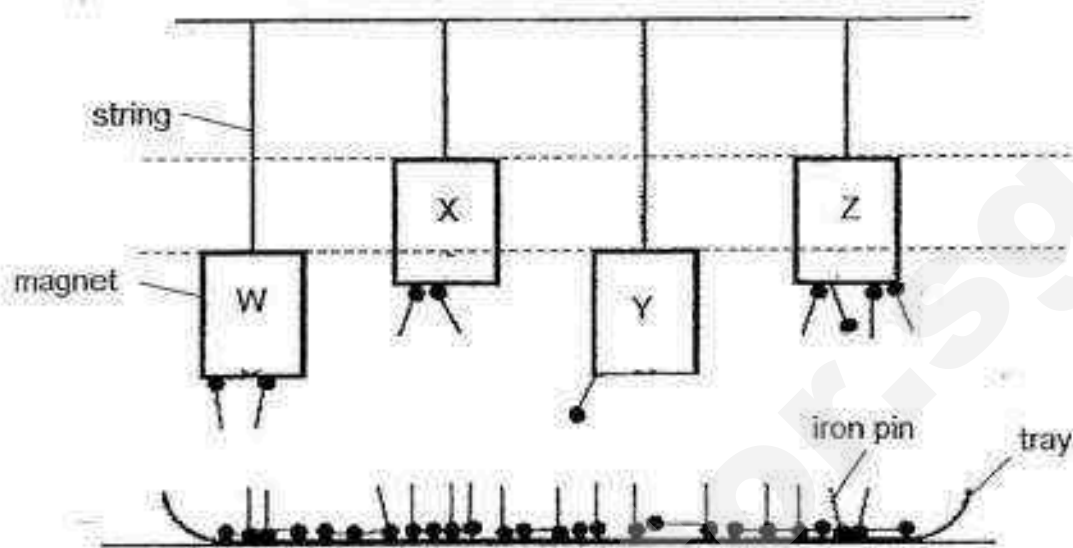


Which of the following statement(s) is/are correct?

- A The paper clips are made of magnetic materials.
- B The paper clips are made of non-magnetic materials.
- C The magnetic attraction is strongest at the poles of the bar magnet.

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

24. Amy hung four similar magnets, W, X, Y and Z, above a tray of iron pins as shown below.



Based on their magnetic strength shown above, arrange the magnets from the weakest to the strongest.

- (1) Z, X, Y, W
- (2) Y, Z, W, X
- (3) Y, W, X, Z
- (4) Z, Y, X, W

END OF BOOKLET A

Name : _____ ()

Class : Primary 3 _____

CHIJ ST NICHOLAS GIRLS' SCHOOL



Primary 3

Semestral Assessment 2 – 2016

SCIENCE

BOOKLET B

27 Oct 2016

Total Time for Booklets A and B: 1 hour 30 minutes

10 questions

32 marks

Do not open this booklet until you are told to do so.

Follow all instructions carefully.

Answer all questions.

This paper consists of 11 printed pages.

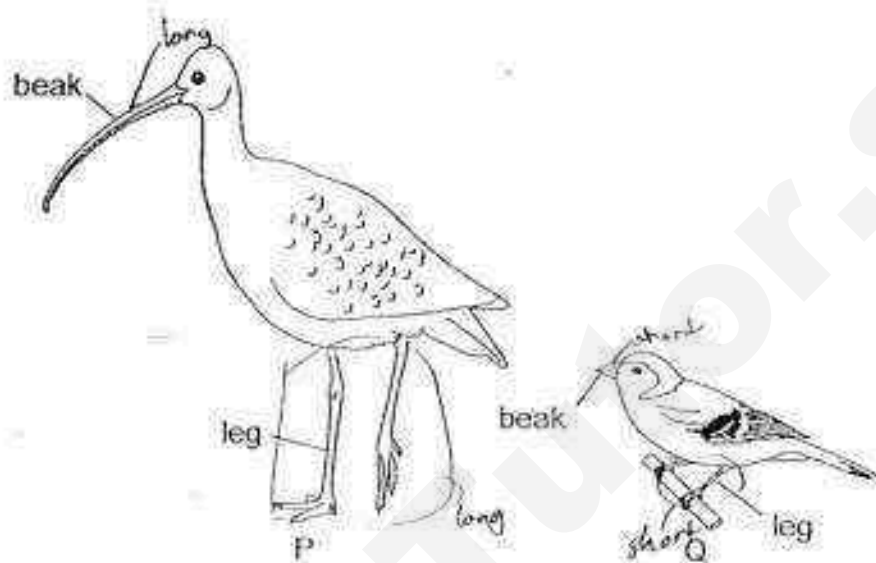
Booklet A	48
Booklet B	32
Total	80

Section B (32 marks)

For questions 25 to 34, write your answers in this booklet.

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

25. The diagram below shows two birds, P and Q.



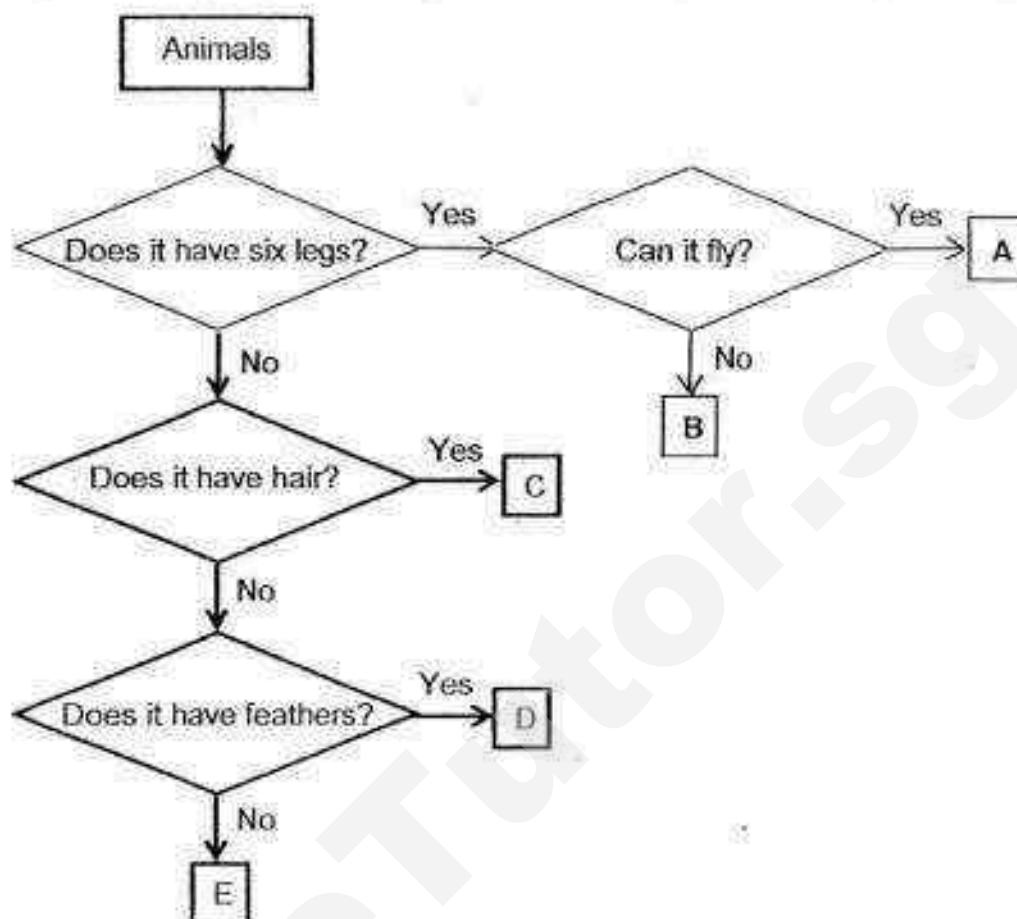
- (a) Based only on what is observable in the diagram above, state two main differences in their beaks and legs. [2]

Beaks: _____

Legs: _____

- (b) State one similarity in the reproduction method of P and Q. [1]

26. Study the flow chart below.



- (a) Based on the flowchart above, write the letters, A, B, C, D or E, that best represent the following animals in the boxes below.

[2]

Bee	Frog	Bat	Penguin

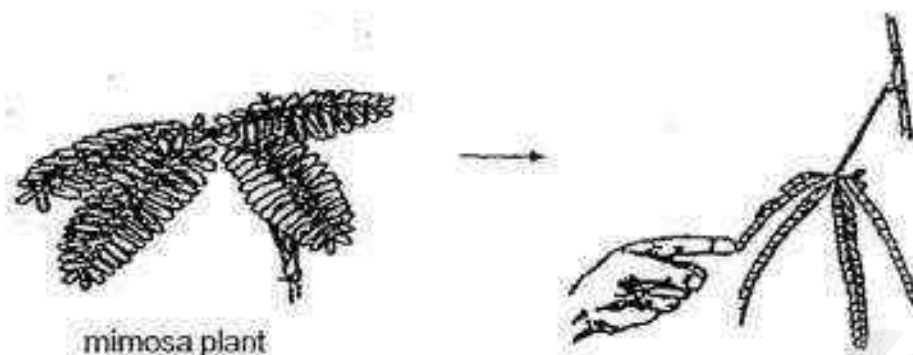
- (b) Based on the above flowchart, state one similarity between A and B.

[1]

- (c) Based on the above flowchart, state one difference between C and D.

[1]

27. The diagram below shows the leaves of the mimosa plant before and after being touched. The mimosa plant closes its leaves when touched.



- (a) Name the characteristic of living things shown by the above observation. [1]

The diagram below shows a mushroom.

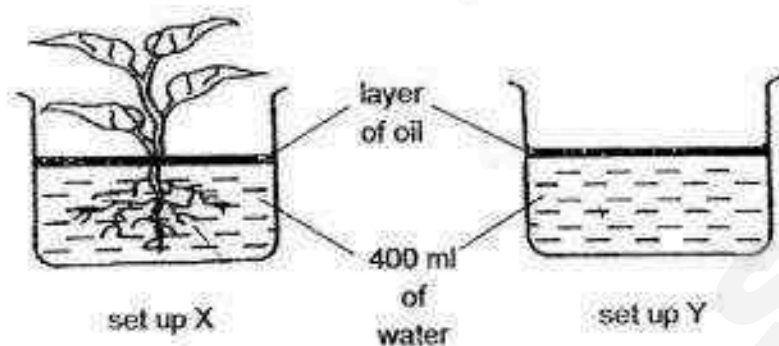


- (b) Tom said the following, "Both the mimosa plant and the mushroom can make their own food."

Explain why this statement is not correct.

[2]

28. Alice set up the following experiment as shown below. She placed a plant in set up X but not in set up Y.

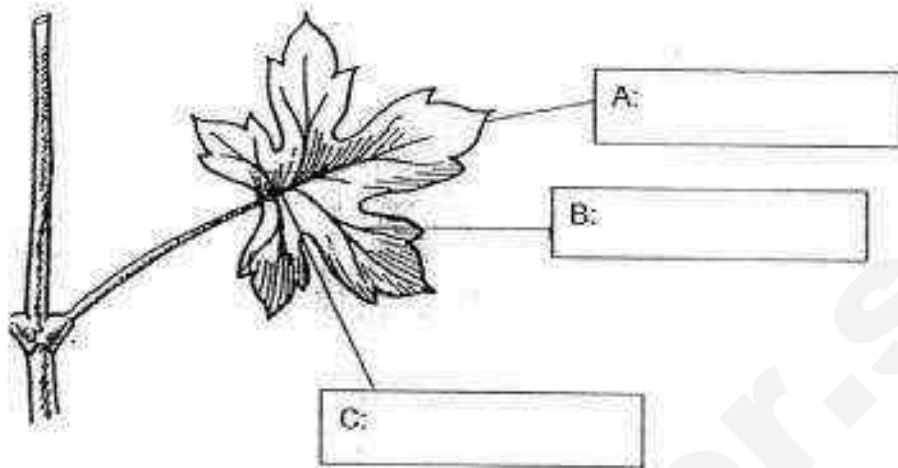


- (a) Which of the set ups, X or Y, would have lesser water after 4 days? [1]

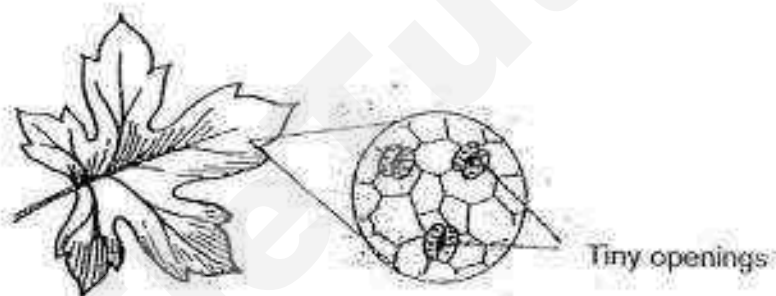
- (b) Give a reason for your answer in (a). [2]

29. The diagram below shows a leaf from a plant.
(a) Identify parts, A, B and C.

[3]



There are many tiny openings on the leaf as shown below.

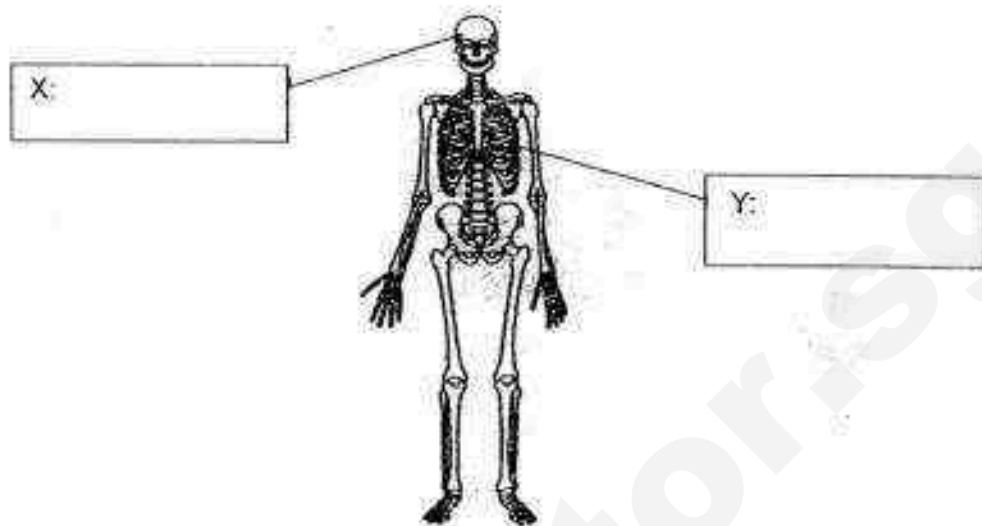


- (b) What is the function of the tiny openings on the leaf?

[1]

30. Study the diagram below.
(a) Identify parts, X and Y.

[1]

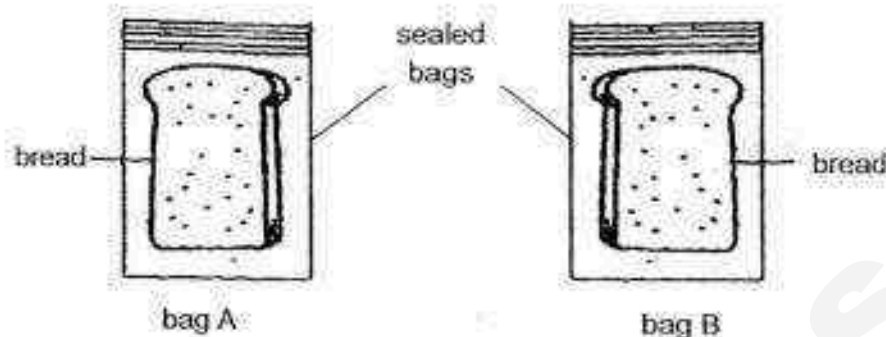


- (b) Part X protects the _____ [½]

- (c) Part Y protects the _____ [½]

- (c) Name the other body system which needs to work with the skeletal system to enable us to move around. [1]

31. Ann carried out an experiment to find out if mould needs light to grow. She used two slices of bread as shown in the set ups below.

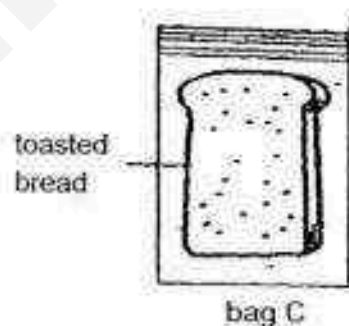


- (a) In the table below, place a tick (✓) next to each condition that needs to be kept the same in the experiment.

[1]

Condition	Kept the same
Type of bread	
Location to place bag A and B	
Amount of water on the bread	
Type of bag	

- (b) In another experiment, Ann toasted a piece of bread for ten minutes under high temperature and placed it into bag C after it had cooled down.



After two weeks, she observed no mould had grown on the bread. Explain why.

[1]

32. Mei Ling set up an experiment as shown below to compare the flexibility of three different materials, X, Y and Z, which are of the same length and thickness.

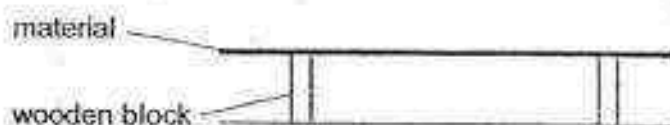


diagram 1



diagram 2

A metal weight of 50g was placed in the middle of material X. She measured the distance d . She repeated her experiment using materials, Y and Z. She recorded her results in the table below.

Material	Amount of weight (g)	Distance (cm)
X	50	3
Y	50	1
Z	50	2

- (a) Arrange the materials, X, Y and Z, according to their flexibility. Start with the least flexible material.

[1]

(least flexible)

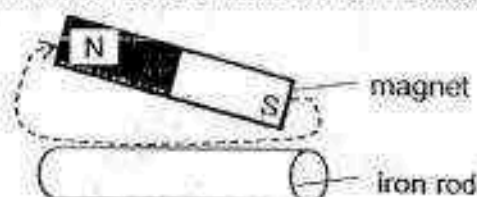
(most flexible)

- (b) Based on the experiment above, which material, X, Y or Z, is most suitable for making a food tray? Explain your answer.

[2]



33. Amy stroked an iron rod ten times in the direction shown below.



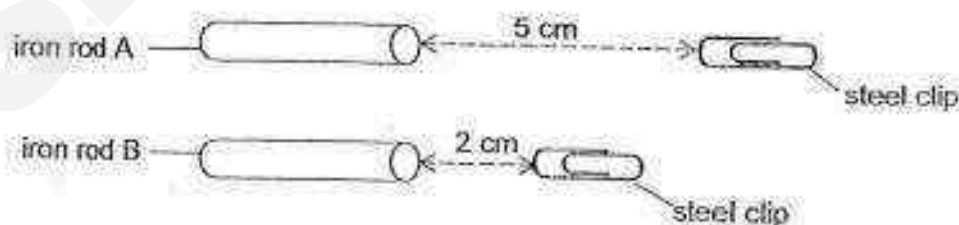
- (a) Explain what would happen to the iron rod after she stroked it with a magnet? [1]

Amy then placed the iron rod next to some paper clips and recorded the number of paper clips attracted. She repeated the experiment with different number of strokes and recorded her results in the table shown below.

Total number of strokes	Number of paper clips attracted
10	2
15	5
20	11

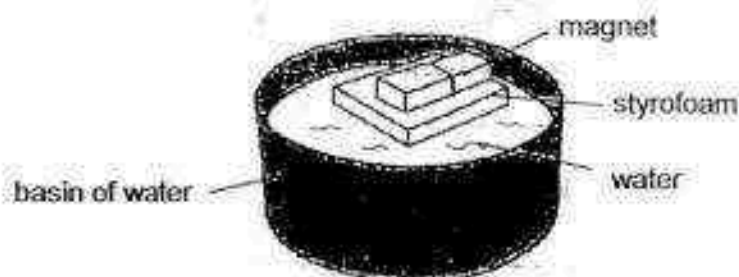
- (b) Based on the results above, what can she conclude about the experiment? [1]

In another experiment, Amy stroked another two iron rods, A and B, using the same magnet. She observed that iron rod A attracted the steel clip from a distance of 5 cm while iron rod B attracted the steel clip from a distance of 2 cm.



- (c) Based on her observations, which iron rod was stroked more times? Give a reason for your answer. [2]

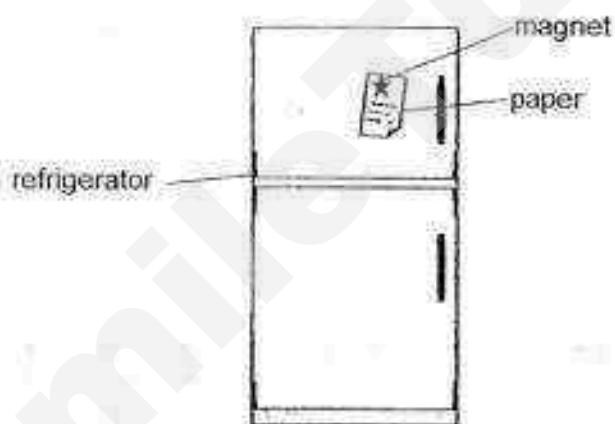
34. John conducted an experiment as shown below. He placed a magnet on a piece of styrofoam and allowed it to float on the water surface in a basin of water as shown below.



- (a) When the magnet was allowed to turn freely, in which direction would the magnet come to rest?

[1]

John noticed that his mother had left a piece of paper on the door of the refrigerator. The paper was held onto the door with the help of a magnet as shown below.



- (b) Name the material that the door of the refrigerator is most likely made of?

[1]

- (c) Give a reason why the magnet was able to hold the piece of paper on the door of the refrigerator?

[1]

END OF PAPER

YEAR : 2016
 LEVEL : PRIMARY 3
 SCHOOL : CHIJ ST NICHOLAS GIRLS'
 SUBJECT : SCIENCE
 TERM : SA2

Booklet A

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

Booklet B

- Q25 (a) Beaks: Bird P has a long beak while bird Q has a short beak.
- Legs : Bird P has long legs while bird Q has short legs.
- (b) They reproduce by laying eggs.

Q26 (a)

Bee	Frog	Bat	Penguin
A	E	C	D

- (b) Animal A and B has six legs.
- (c) Animal C has hair while animal D does not have hair.

- Q27 (a) Living things responds to changes.
- (b) The mimosa plant can make its own food while the mushroom cannot make its own food. Mushrooms obtain their food from dead or living things.

Q28

- (a) Set up X.
- (b) The roots of the plant in set up X absorbed the water as living things need water to survive. There was no plant in set up Y, so it will not have lesser water after 4 days.

Q29

- (a)
- A : Leaf blade
- B : Veins
- C : Stalk

- (b) To exchange gases with its surroundings.

Q30

- (a)
- X : Skull

Y : Ribcage

- (b) Part X protects the brain.
- Part Y protects the lungs and the heart.

- (c) The muscular system.

Q31

- (a)
- | Condition | Kept the same |
|-------------------------------|---------------|
| Type of bread | ✓ |
| Location to place bag A and B | |
| Amount of water on the bread | ✓ |
| Type of bag | ✓ |

- (b) It had no moisture. Mould needs moisture to grow.

Q32 (a) Material Y, Material Z, Material X

(b) Material Y. It is the least flexible.

Q33 (a) She was turning the iron rod into a temporary magnet.

(b) As the total number of strokes increases, the number of paper clips attracted increases.

(c) Iron rod A. It could attract the steel clip from the longer distance.

Q34 (a) It would rest in a north-south direction.

(b) Iron

(c) Magnetism is able to pass through the paper which is a non-magnetic material.

End



MARIS STELLA HIGH SCHOOL (PRIMARY)

SEMESTRAL ASSESSMENT 2

SCIENCE

27 OCTOBER 2016

BOOKLET A

NAME: _____ ()

CLASS: Primary 3 ()

24 questions

48 marks

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

DO NOT OPEN THIS BOOKLET UNTIL YOU ARE TOLD TO DO SO.

FOLLOW ALL INSTRUCTIONS CAREFULLY.

For each question from 1 to 24, 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). (48 marks)

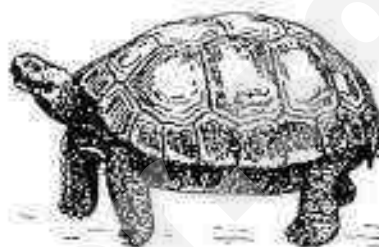
1 Study the animals below.



Animal X



Animal Y

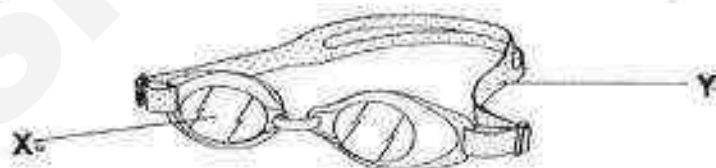


Animal Z

Which of the following shows the correct body covering of animals X, Y and Z?

	Animal X	Animal Y	Animal Z
(1)	Hair	Scales	Feathers
(2)	Feathers	Hair	Scales
(3)	Hair	Shell	Scales
(4)	Feathers	Scales	Hair

2 The diagram below shows a pair of swimming goggles.



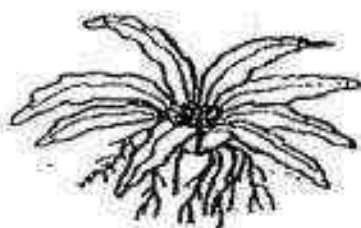
Which materials are suitable to make parts X and Y?

	X	Y
(1)	Plastic	Metal
(2)	Rubber	Fabric
(3)	Metal	Plastic
(4)	Plastic	Rubber

3 Which of the statements is true about bacteria?

- (1) Bacteria will not die.
- (2) Bacteria cannot reproduce.
- (3) All bacteria can be seen by the naked eye.
- (4) Some bacteria are useful to human beings.

4 Study the two organisms shown below.



Bird's nest fern



Bracket fungus

Which of the following states the correct similarity and difference between the two organisms?

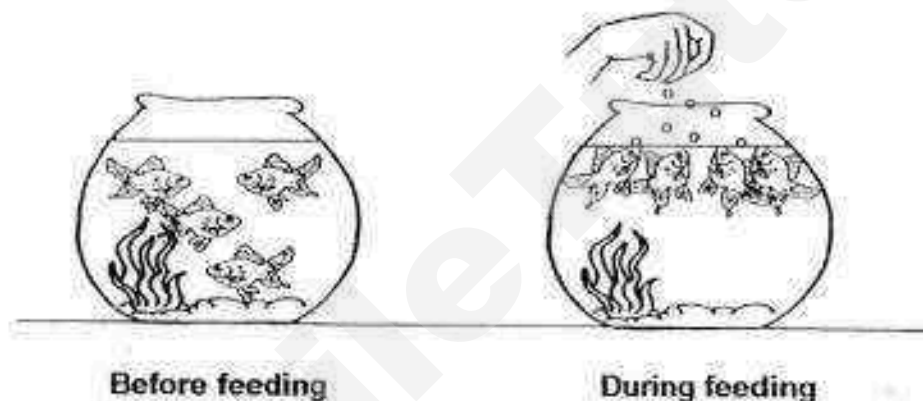
	Similarity	Difference
(1)	Both can make their own food.	The bird's nest fern reproduces by seeds but the bracket fungus reproduces by spores.
(2)	Both can make their own food.	The bird's nest fern produces flowers but the bracket fungus does not produce flowers.
(3)	Both reproduce by spores.	The bird's nest fern can make its own food but the bracket fungus cannot.
(4)	Both can only grow on trees.	The bird's nest fern reproduces by seeds but the bracket fungus reproduces by spores.

5 Which of the following statements about reptile and amphibian are correct?

- A Both reproduce by laying eggs.
- B Both breathe through their skin.
- C Reptile lives on land but amphibian lives only in water.
- D Reptile has dry skin covered with scales but the amphibian has moist skin.

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

6 The diagrams below show fishes in the fish bowl before and during feeding.



Based on her observation, what can Susan learn about living things?

- A Living things can die.
- B Living things need water to survive.
- C Living things can move on their own.
- D Living things can respond to changes around them.

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

7 Study the objects below.



Metal cup



Claypot



Ceramic teapot

In what way are the objects shown above similar?

- (1) They are weak.
- (2) They are flexible.
- (3) They are absorbent.
- (4) They do not allow light to pass through.

8 The table below shows the properties of materials A, B, C and D.

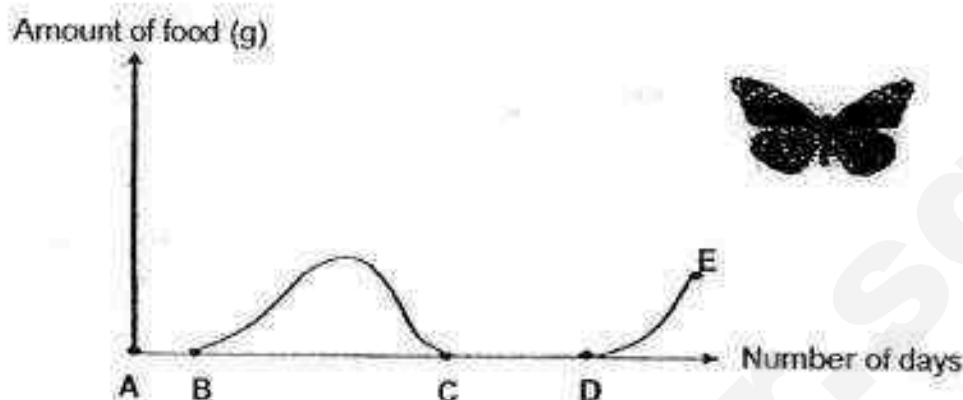
Properties	Material A	Material B	Material C	Material D
Light weight	Yes	No	No	Yes
Flexible	Yes	No	No	Yes
Able to keep things warm	No	Yes	No	Yes
Allows light to pass through	Yes	No	No	No

Mrs Lee wants to choose a material to make a sweater that can be worn in a cold country.

Which material is most suitable?

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

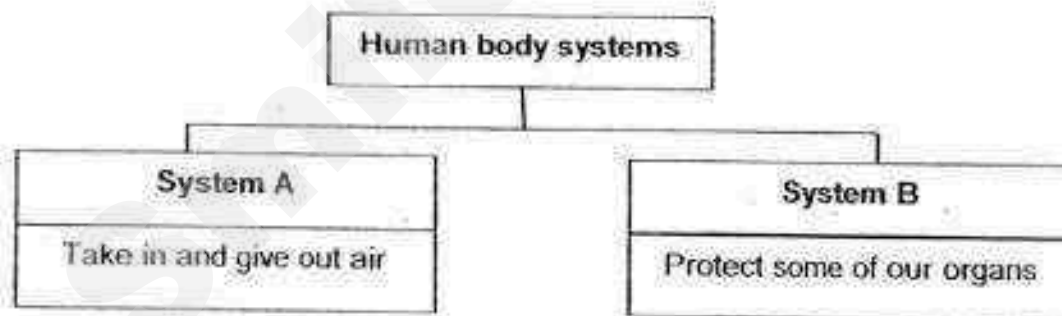
- 9 The graph below shows the amount of food that was eaten by a butterfly from its egg stage to adult stage.



Which section shows the butterfly in its pupal stage?

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

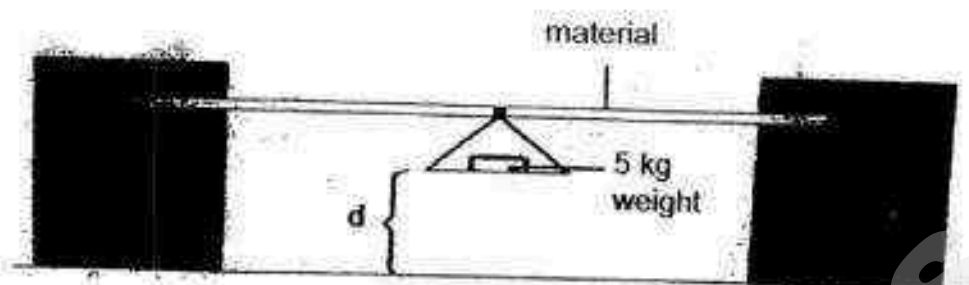
- 10 Study the classification chart below.



Which of the following correctly identifies systems A and B?

	System A	System B
(1)	Muscular system	Respiratory system
(2)	Circulatory system	Skeletal system
(3)	Muscular system	Circulatory system
(4)	Respiratory system	Skeletal system

- 11 Paul set up the experiment below. He wanted to find out which material, A, B, C or D is the most flexible. He attached a 5 kg weight to each material and measured distance "d".



The table below shows his results.

Material	d (cm)
A	8
B	3
C	2
D	6

Which material is the most flexible?

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

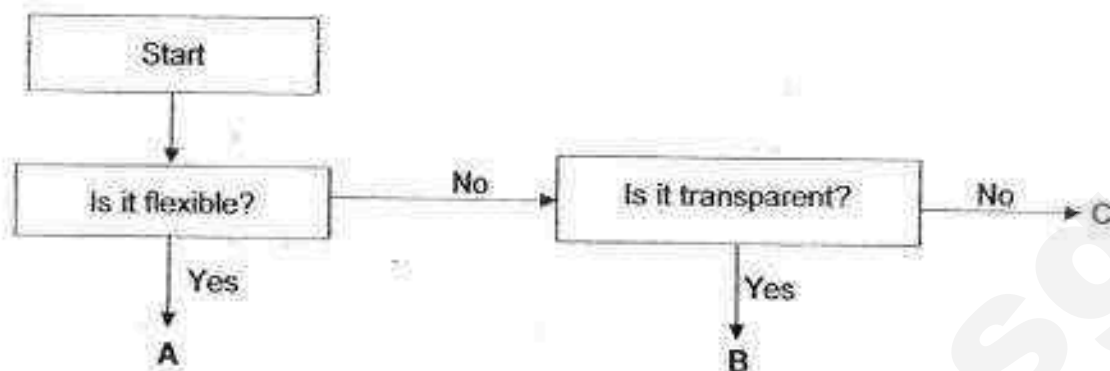
- 12 Study the classification table below.

Plant parts		
Part A	Part B	Part C
Makes food for the plant	Holds the plant firmly to the ground	Transports water and food to all parts of the plant

Which one of the following correctly represents plant parts A, B and C?

	A	B	C
(1)	leaves	stem	roots
(2)	stem	roots	leaves
(3)	seeds	flowers	roots
(4)	leaves	roots	stem

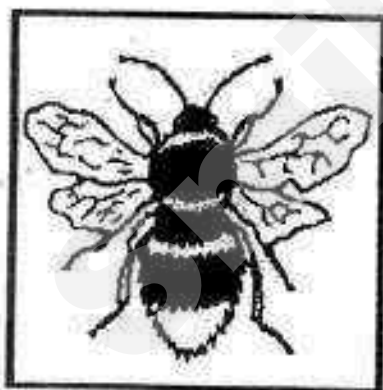
- 13 Study the flow chart below.



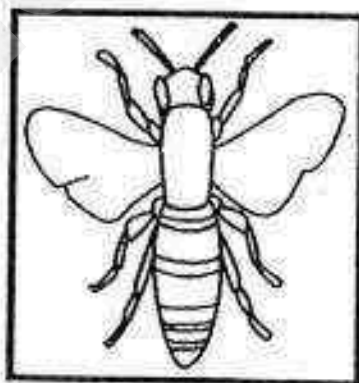
Which one of the following correctly shows what objects A, B, C and D could be?

	A	B	C
(1)	iron rod	ceramic tile	rubber band
(2)	rubber band	spectacle lens	ceramic tile
(3)	iron rod	ceramic tile	fish tank
(4)	rubber band	glass	spectacle lens

- 14 Study animals P and Q in the diagram below.



Animal P

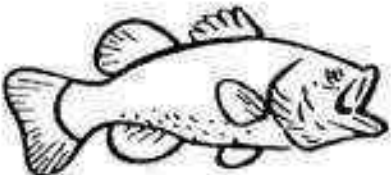





Animal Q

Based on your observation, which of the following statements about animals P and Q is **incorrect**?

- (1) Both have 3 body parts.
- (2) Both have 3 pairs of legs.
- (3) Both have 1 pair of feelers.
- (4) Both have 2 pairs of wings.

- 15 Study the classification table below.

Group A	Group B
 Fish	 Fly
 Whale	 Bird

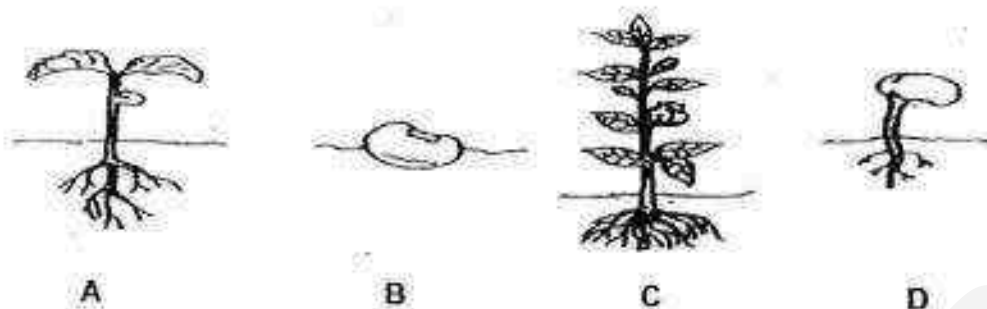
Which one of the following is suitable headings for Group A and Group B?

	Group A	Group B
(1)	Fish	Bird
(2)	Has scales	Has feathers
(3)	Has no wings	Has wings
(4)	Breathe through gills	Breathe through lungs

- 16 Which one of the following has items incorrectly matched to its heading?

	Living things	Non-living things
(1)	Deer	Paper
(2)	Bread mould	Plastic bottle
(3)	Wooden chair	Tea cup
(4)	Rose plant	Pencil

- 17 The diagram below shows the different stages in the life cycle of a green bean plant.

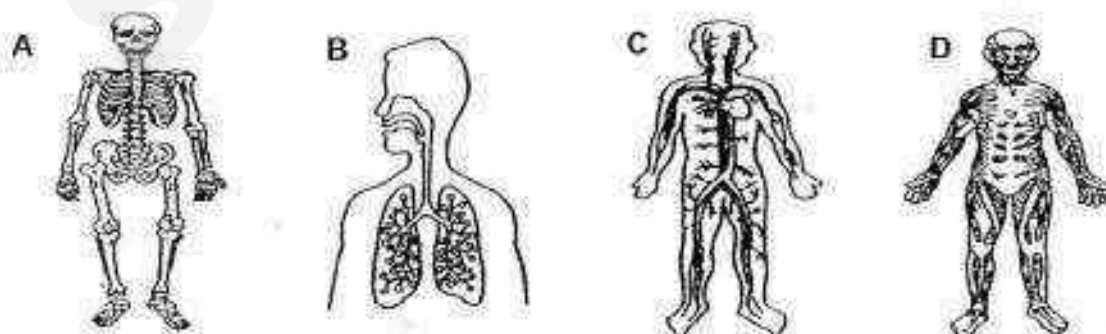


Which of the following shows the correct order of the life cycle of the green bean plant?

- (1) A → D → B → C
 - (2) B → C → D → A
 - (3) C → B → D → A
 - (4) D → B → A → C
- 18 Jerry is dancing. He is swinging and bending his arms and legs.

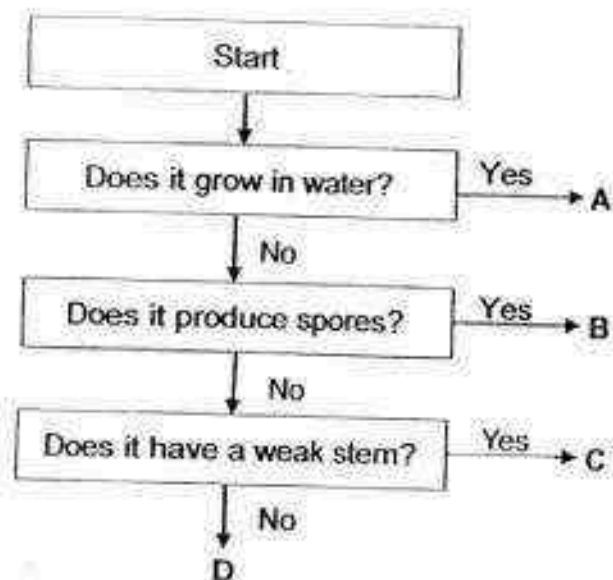


Which of the two body systems below, work together to enable jerry to move his body?



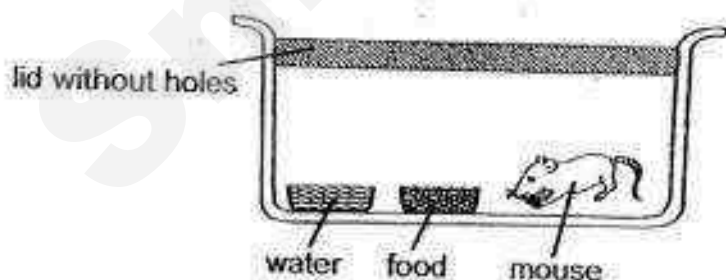
- (1) A and B
- (2) A and D
- (3) B and C
- (4) C and D

- 19 Study the flow chart and plant X shown below.



Which of the following most likely represents plant X?

- (1) A
 - (2) B
 - (3) C
 - (4) D
- 20 Jonathan put a mouse in a sealed container as shown below.



A week later, he found that the mouse had died. Which of the following is most likely to have caused the mouse to die?

- (1) There is not enough air in the container.
- (2) There is not enough food in the container.
- (3) There is not enough water in the container.
- (4) There is not enough space in the container.

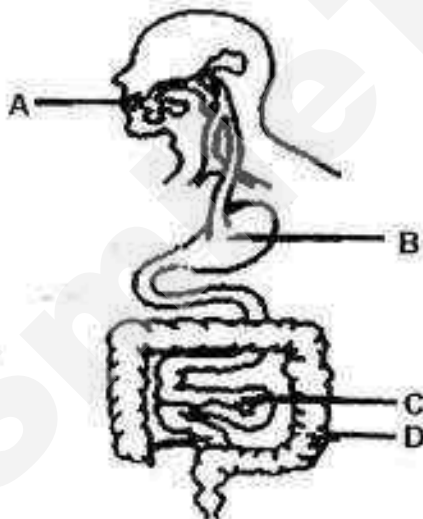
- 21 The table below shows the characteristics of animals P and Q.

Characteristics	Animal P	Animal Q
Lays eggs	✓	✓
Has a 3-stage life cycle	x	✓

Which of the following would be correct?

	Animal P	Animal Q
(1)	Grasshopper	Chicken
(2)	Grasshopper	Mosquito
(3)	Butterfly	Chicken
(4)	Butterfly	Mosquito

- 22 The diagram below shows the human digestive system.

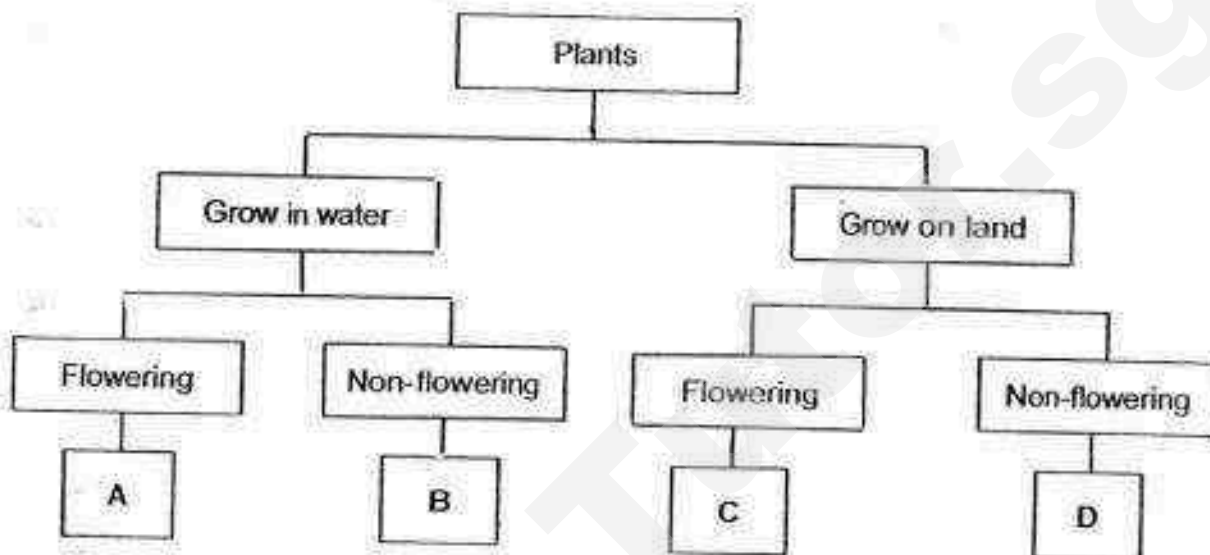


Which one of the following correctly identifies the body parts where digestion begins and ends?

	Digestion begins	Digestion ends
(1)	A	D
(2)	A	C
(3)	B	D
(4)	B	C

- 23 The following table shows some characteristics of plants X and Y.

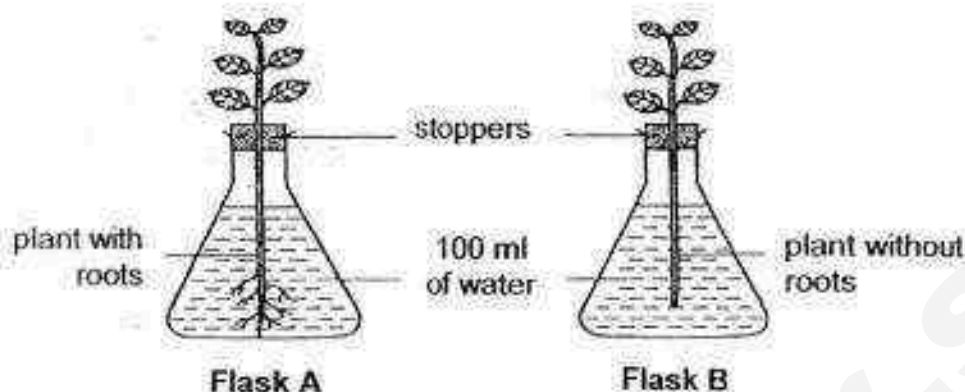
Characteristics	Plant X	Plant Y
Does it grow in water?	Yes	No
Does it have flowers?	No	Yes



Using the information in the table, which of the following letters, A, B, C and D, in the classification chart best represent plants X and Y?

	Plant X	Plant Y
(1)	B	A
(2)	D	C
(3)	A	D
(4)	B	C

24 Shaun had the following set-ups for his experiment.



He left the two set-ups in an open field and recorded the amount of water in the conical flasks every 2 hours. At the end of 4 hours, Shaun noticed that the plant in flask B looked less healthy than the plant in flask A.

Time (h)	Amount of water (ml)	
	Flask A	Flask B
0	100	100
2	60	100
4	25	100

Based on the results of the experiment, which of the following conclusions are correct?

- A Water is taken in by the stem.
- B Water is taken in by the roots.
- C Water is transported to the leaf.
- D Water is needed for the plant to grow well.

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

END OF BOOKLET A



MARIS STELLA HIGH SCHOOL (PRIMARY)

SEMESTRAL ASSESSMENT 2

SCIENCE

27 OCTOBER 2016

BOOKLET B

NAME: _____ ()

CLASS: Primary 3 ()

10 questions

32 marks

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

DO NOT OPEN THIS BOOKLET UNTIL YOU ARE TOLD TO DO SO.
FOLLOW ALL INSTRUCTIONS CAREFULLY.

BOOKLET A: _____ / 48

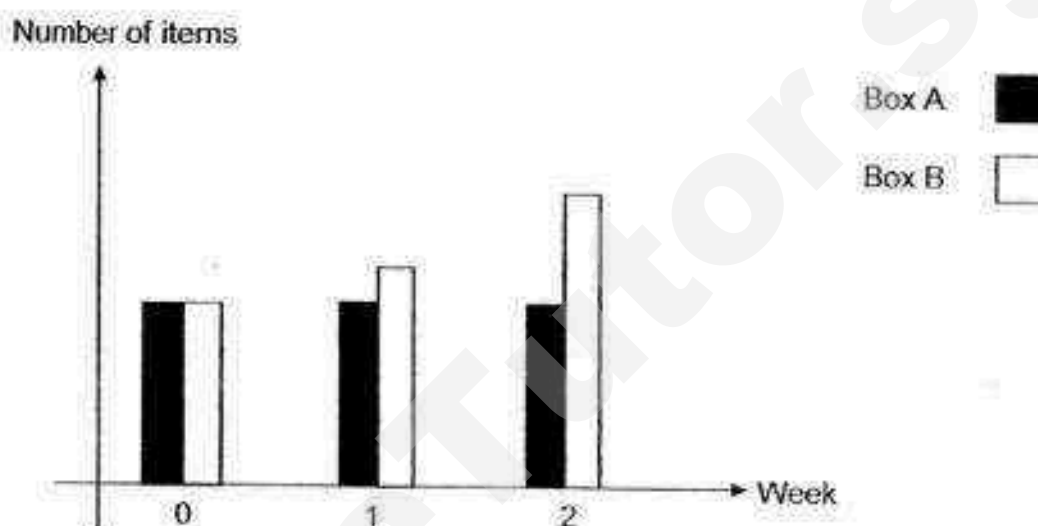
BOOKLET B: _____ / 32

TOTAL: _____ / 80

PARENT'S SIGNATURE: _____

For questions 31 to 40, write your answers in this booklet. The number of marks available is shown in brackets [] at the end of each question or part question. (32 marks)

- 31
25. Ben set up two boxes, A and B. He placed some living things in one box and an equal number of non-living things in another box. Both boxes were provided with air, water and food. Every week, Ben counted the number of items in both boxes and drew the graph as shown below.



- (a) Based on the graph above, which box (A or B) contained the living things and the non-living things? [1]

Living things: Box _____

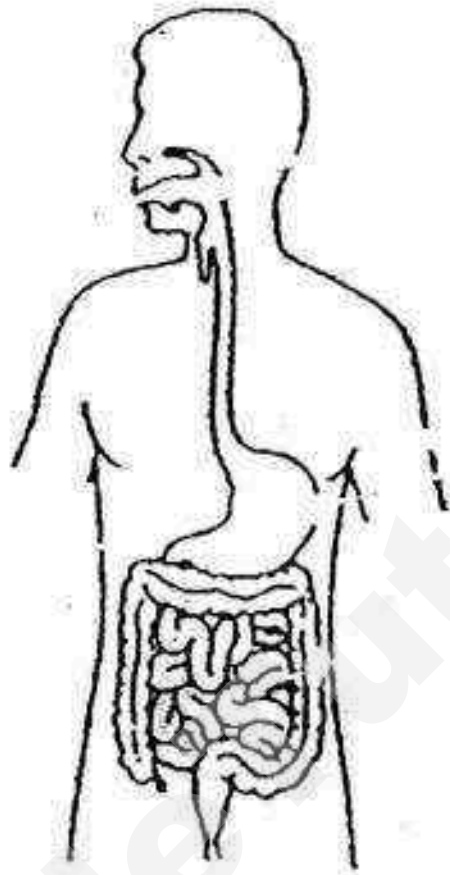
Non-living things: Box _____

- (b) Based on the graph, state one characteristic of non-living things. [1]

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

32
26

The diagram below shows the human digestive system.



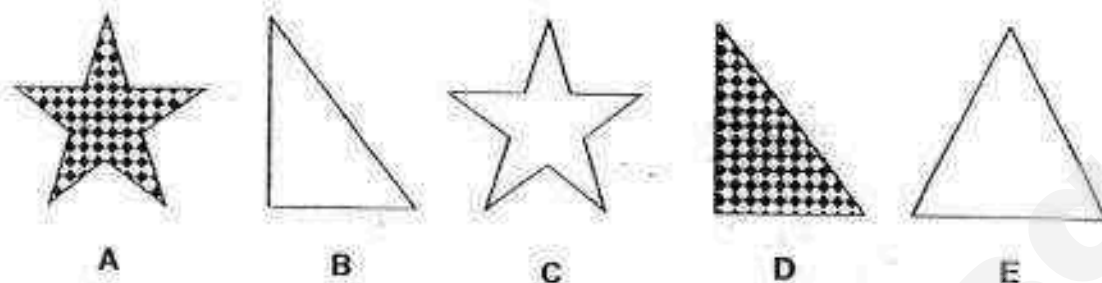
In the diagram above, only name and label the parts where digestion takes place.

[3]

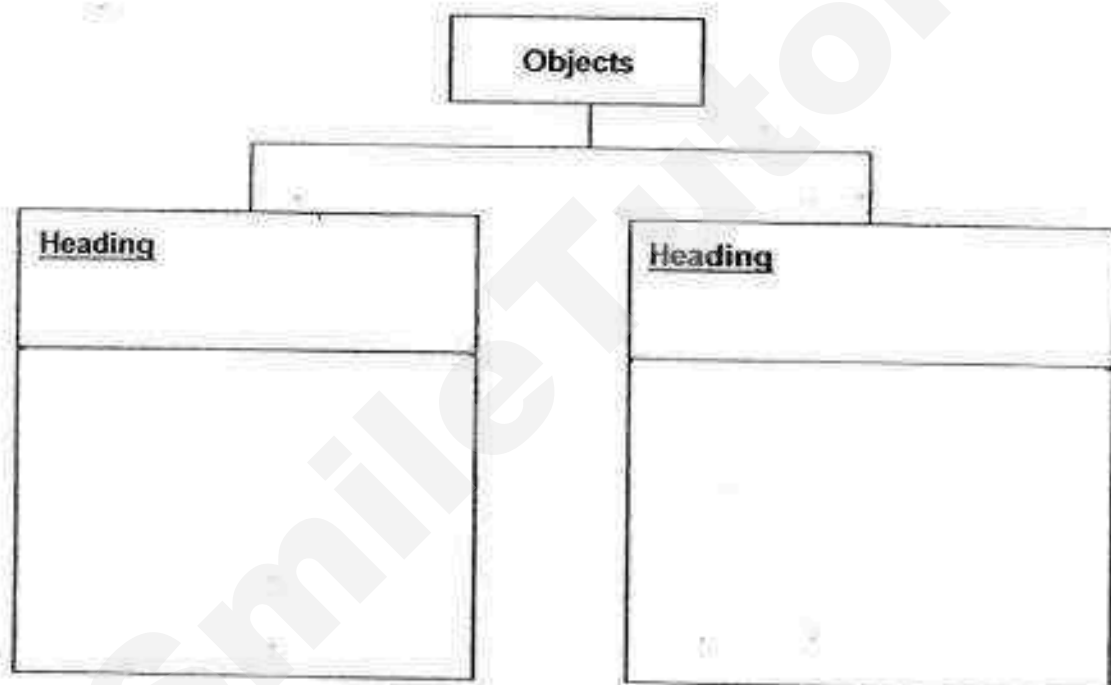
	3
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(Go on to the next page)

- 23 Ken was given five objects, A, B, C, D and E, of the same size.
27



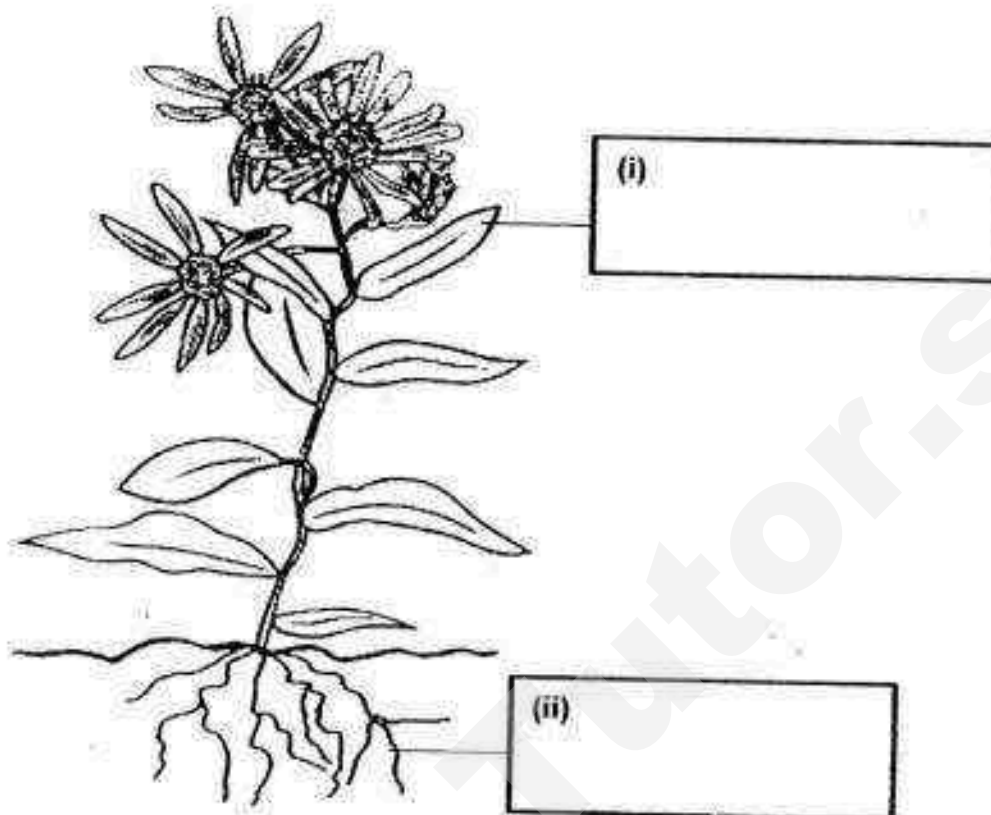
- (a) Classify the objects A, B, C, D and E using the classification chart below. [2]



- (b) State another method to classify objects A, B, C, D and E into two groups. [1]

34 Study the plant below.

28.



(a) Label the parts of the plant in the boxes provided above.

[2]

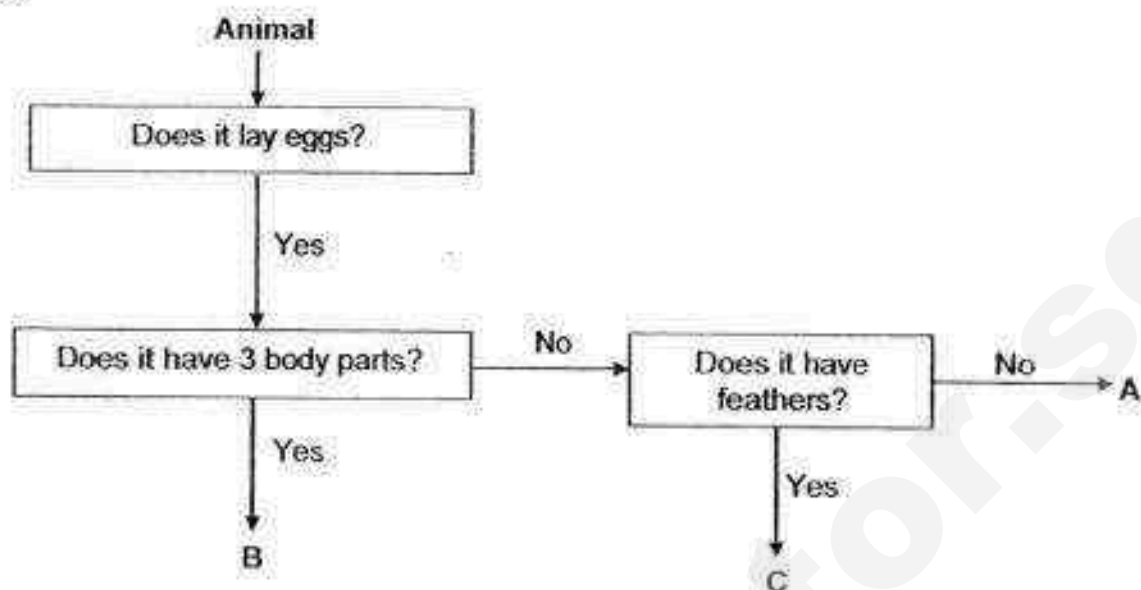
(b) Read the statements below.

Write "True" in the box for a true statement and "False" in the box for a false statement.

[2]

	Statements	True / False
(i)	Yeast is a type of fungi.	
(ii)	Ferns reproduce by spores.	
(iii)	Mushroom is a non-flowering plant.	
(iv)	Mould will grow best in cold and dry places.	

35 Study the flow chart below.
29.



(a) State the animal groups for animals B and C. [2]

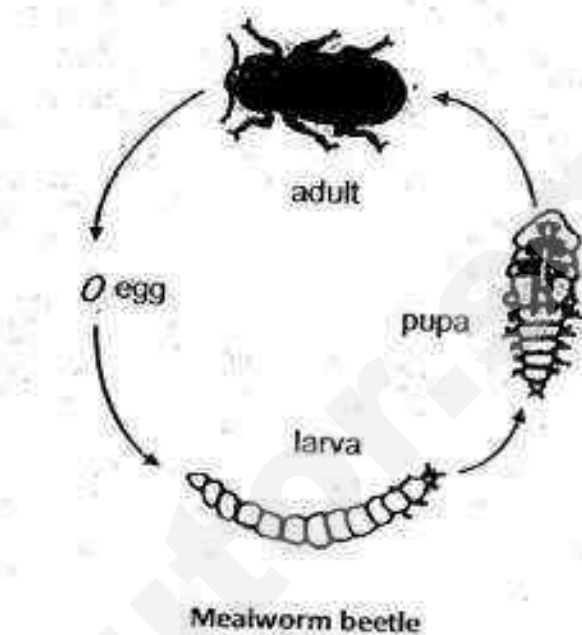
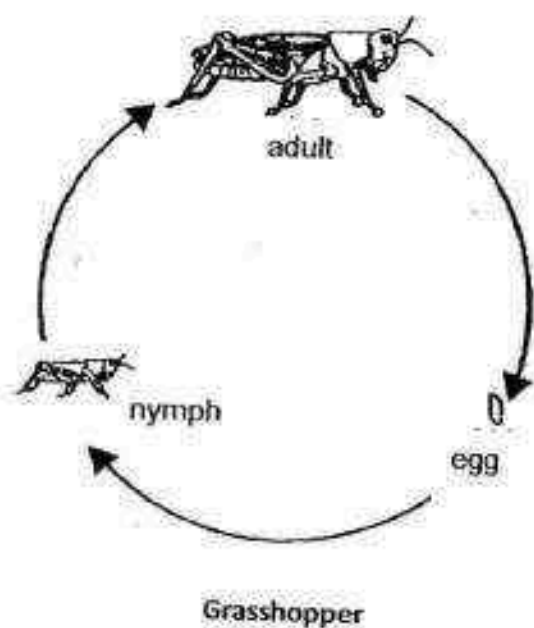
(i) Animal B: _____

(ii) Animal C: _____

(b) Based on the flow chart, state one similarity between animals B and C. [1]

(c) Based on the flow chart, state one difference between animals A and B. [1]

The life cycles of a grasshopper and mealworm beetle is shown below.

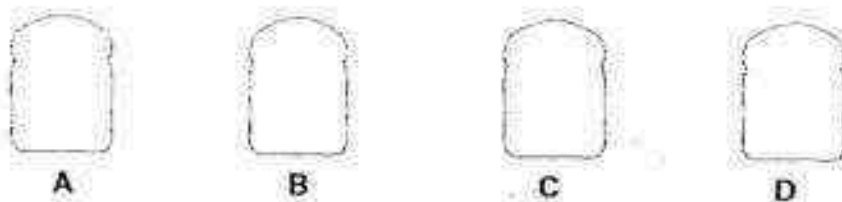


- (a) State one similarity between the life cycle of the grasshopper and the mealworm beetle. [1]

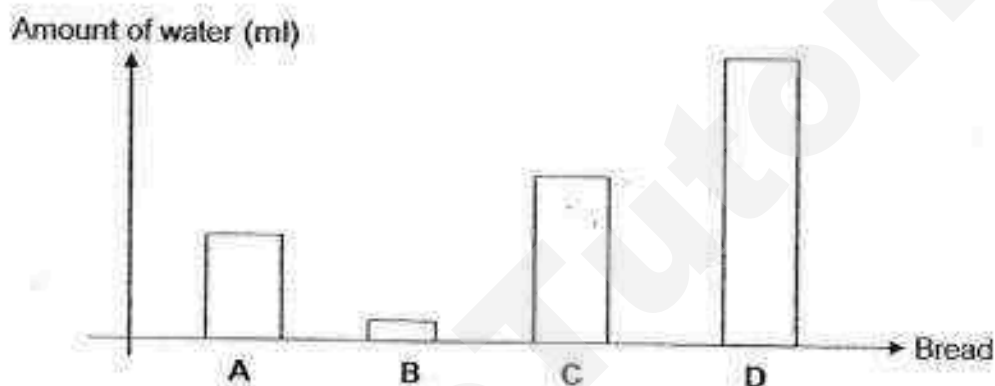
- (b) State one difference between the life cycle of the grasshopper and the mealworm beetle. [1]

- (c) Why is life cycle important to living things? [1]

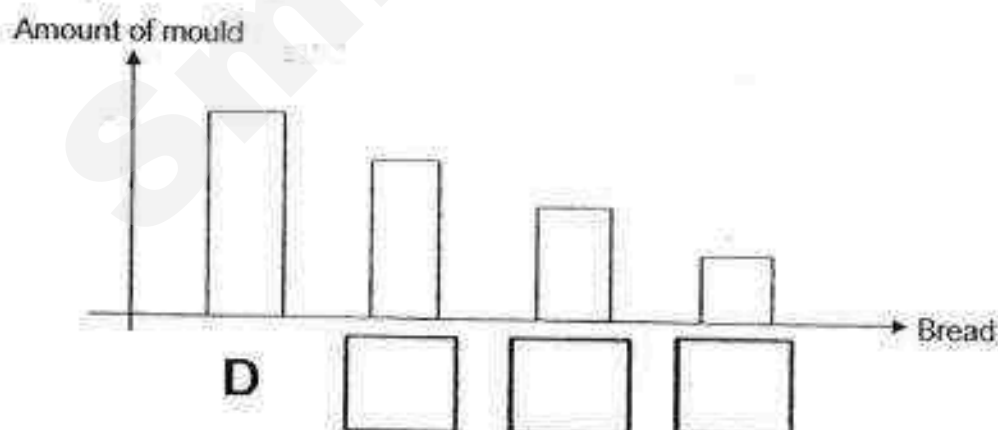
- 37 Thomas had 4 identical slices of bread A, B, C and D.
31.



He added different amount of water onto bread A, B, C and D as shown in the graph below. None of the bread was soaking wet even when the most amount of water was added onto it. The 4 slices of bread were then placed in an exposed area in the kitchen.



- (a) 3 days later, Thomas observed mould growing on all 4 slices of bread. In the graph below, identify the amount of mould found on bread A, B and C. Write A, B and C in the boxes provided. [1]



- (b) Other than water, state two other conditions needed for the mould to grow. [2]

- 38 The diagram below shows animals X and Y.
32.



Animal X



Animal Y

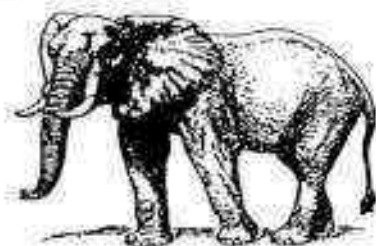
- (a) State one difference between these two animals in terms of their body covering.

[1]

- (b) State one difference between these two animals in terms of their breathing method.

[1]

Study animal Z below.



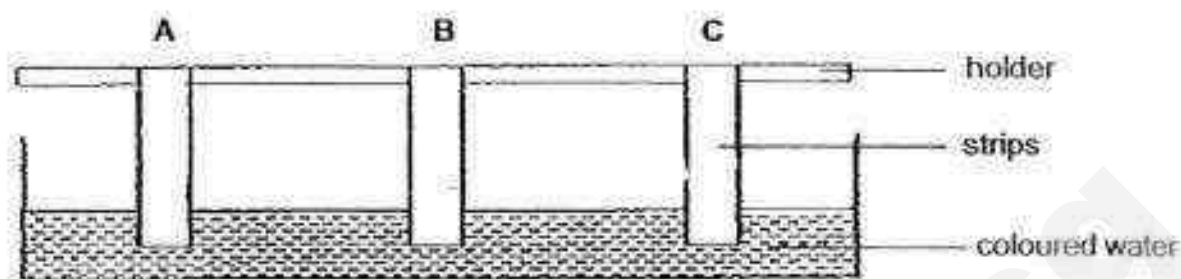
Animal Z

- (c) Which animal (X or Y) belongs to the same group as Animal Z? _____ [1]



(Go on to the next page)

- 39 3 similar strips made of different materials, A, B and C, were used in an experiment
33. as shown below.



After 10 minutes, the height of the water level on the strips were measured and recorded as shown below.

Strip	Height of water level on the material (cm)	
	Before	After
A	0	6
B	0	1
C	0	4

- (a) What property of material was tested in the above experiment? [1]

- (b) The picture below shows a mop.



Based on the result, which material (A, B or C) is most suitable to make part X? [1]

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



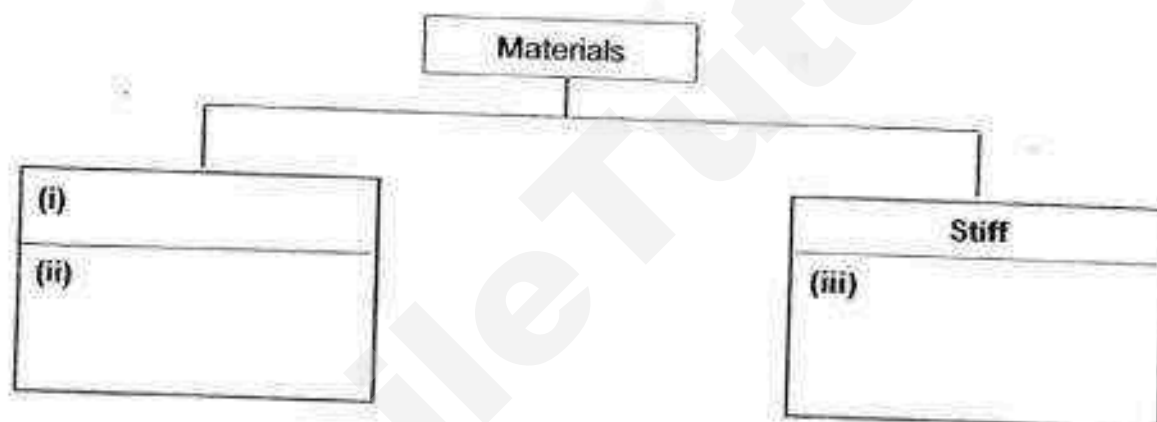
(Go on to the next page)

- 40 The table below shows the characteristics of four materials, A, B, C and D.
34.

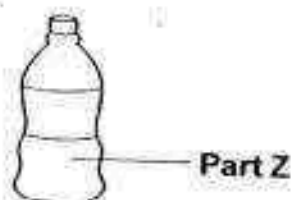
A tick (✓) shows that the material has the characteristics.

Characteristics	Materials			
	A	B	C	D
It is flexible.	✓			✓
It is waterproof.		✓	✓	
It is transparent.	✓	✓		✓

- (a) Using the information above, complete the classification chart by placing materials A, B, C and D into the chart. [2]



- (b) The picture below shows a bottle.



Based on the information above, which material(s) is/are suitable for making part Z?
Give a reason.

[1]

END OF BOOKLET B

YEAR : 2016
 LEVEL : PRIMARY 3
 SCHOOL : MARIS STELLA HIGH
 SUBJECT : SCIENCE
 TERM : SA2

Booklet A

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

Booklet B

- Q25
- (a) Living things : Box B
 Non-living things : Box A
- (b) Non-living things cannot reproduce.
- (c) Because the amount of items in Box A did not change but the amount of items in Box B increased.

Q26



Q27

- (a)
- | |
|---------|
| Heading |
| Stars |
| A and C |
- | |
|------------|
| Heading |
| Triangles |
| D, B and E |

- (b) We could classify them by patterns in the shape and no patterns in the shape.

Q28

- (a) (i) Leaf
(ii) Roots

(b)

	Statements	True / False
(i)	Yeast is a type of fungi.	True
(ii)	Ferns reproduce by spores.	True
(iii)	Mushroom is a non-flowering plant.	False
(iv)	Mould will grow best in cold and dry places.	False

Q29

- (a) (i) Animal B : Insects
(ii) Animal C : Birds
- (b) Both Animal B and C lay eggs.
- (c) Animal B has three body parts but animal A does not.

Q30

- (a) Both life cycles have the adult stage.
- (b) The grasshopper has three stages in its life cycle but the mealworm beetle has four stage in its life cycle.
- (c) It is important to living things because we need life cycle to continue the type of our species.

Q31

- (a)

D

C

A

B

- (b) Warmth
The more water added to the bread, the more the mould will grow.

- Q32
- (a) Animal X has scales as its outer body covering but animal Y has hair as its outer body covering.
 - (b) Animal X breathe through gills but animal Y breathe through lungs.
 - (c) Animal Y.

- Q33
- (a) Absorbency
 - (b) Material A.
 - (c) It can absorb the most amount of water.

Q34

(a)	(i) Flexible	Stiff
	(ii) A and D	(iii) B and C

- (b) Material B and C. Both are waterproof.

End

SmileTutor.sg

METHODIST GIRLS' SCHOOL
Founded in 1887



END-OF-YEAR EXAMINATION 2016
PRIMARY 3
SCIENCE

BOOKLET A

Total Time for Booklets A and B: 1 hour 30 minutes

INSTRUCTIONS TO CANDIDATES

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

Follow all instructions carefully.

Answer all questions.

Shade your answers in the Optical Answer Sheet (OAS) provided.

Name: _____ ()

Class: Primary 3. _____

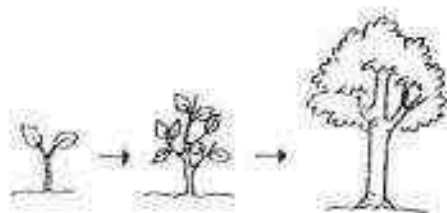
Date : 28 October 2016

This booklet consists of 21 printed pages including this page.

For each question from 1 to 28 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 (OAS).

[56 marks]

1. Study the pictures below.



Picture 1



Picture 2

Which characteristic of living things do they show?

- (1) Living things grow.
 - (2) Living things reproduce their own kind.
 - (3) Living things respond to changes around them.
 - (4) Living things need air, water and food to stay alive.
2. Tim poured some oil into a fish tank as shown below.

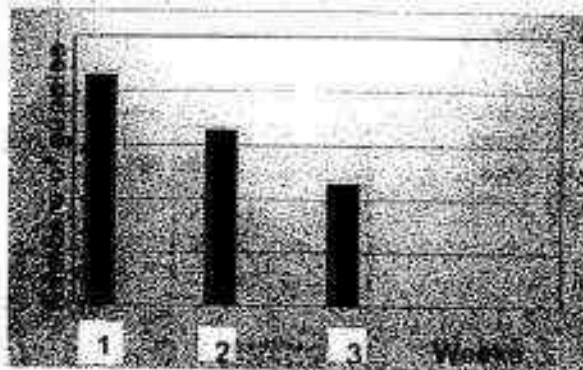


What will Tim observe about the fish after a day?

- (1) The fish will reproduce.
- (2) The fish will respond by swimming faster.
- (3) The fish will die as there will not be enough oxygen.
- (4) The fish will grow bigger as the oil becomes food for the fish.

(Go on to the next page)

3. Study the bar chart below carefully.



The changes in the number of guppies over time shows that living things

- (1) die
- (2) grow
- (3) reproduce
- (4) move by itself X

4. The picture below shows two organisms.



Bacteria



Yeast

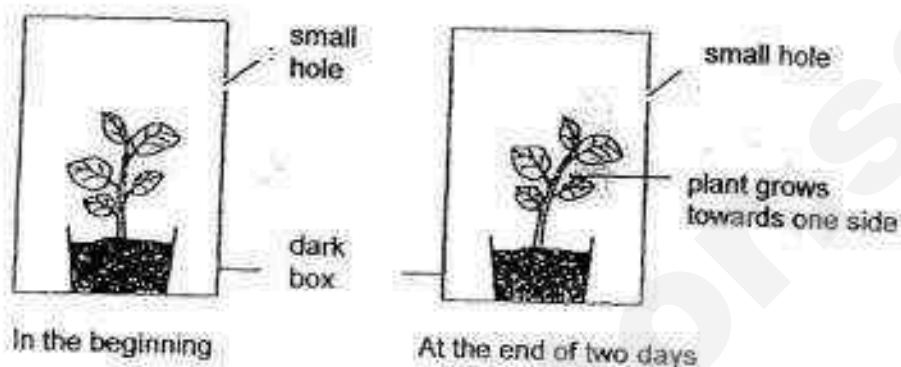
In what ways are both organisms similar?

- A They cause food to decay.
- B They can make their own food.
- C They are unable to move by themselves.
- D They cannot be seen without the help of a microscope.

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

(Go on to the next page)

5. Naomi bought a pot of plant and placed it in an enclosed box which had a small hole. She then placed the enclosed box in a garden. At the end of two days, she realised that her plant was growing towards the hole.



Which one of the following statements explains why her plant was growing towards the hole?

- (1) It did not receive air.
 - (2) It was not watered daily.
 - (3) It was not given fertilizer.
 - (4) It did not receive enough sunlight.
6. Three pupils made a few statements about animals with a 4- stage life cycle.

Abigail: The young does not look like the adult.

Bernard: During its larval stage, the organism does not feed at all. X

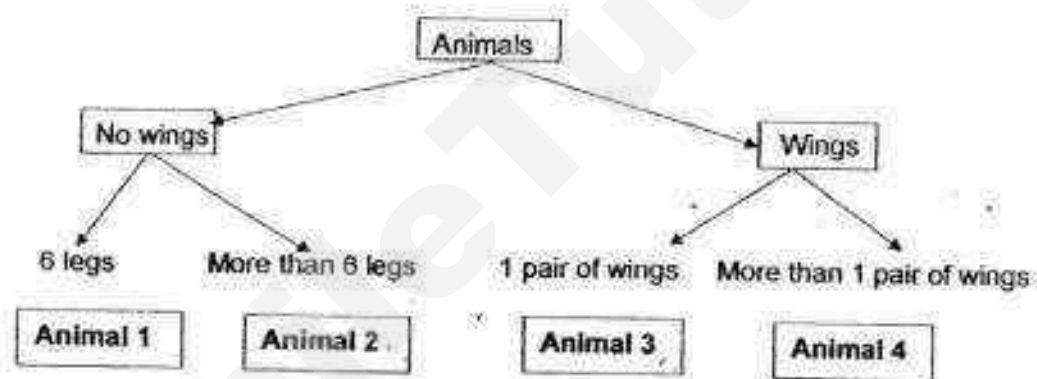
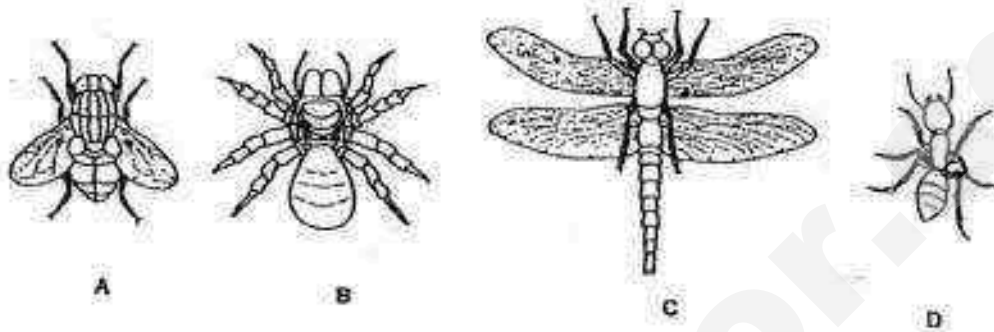
Cindy: All insects have a 4 - stage life cycle. X

Whose statement(s) is/are incorrect?

- (1) Abigail only
- (2) Bernard only
- (3) Abigail and Cindy only
- (4) Bernard and Cindy only

(Go on to the next page)

7. The picture below shows four different animals. The animals are classified using the chart below.



Which one of the following options is correct?

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

(Go on to the next page)

8. Four pupils in a class made the following comments about animals.

Melody: All mammals have fur or hair.

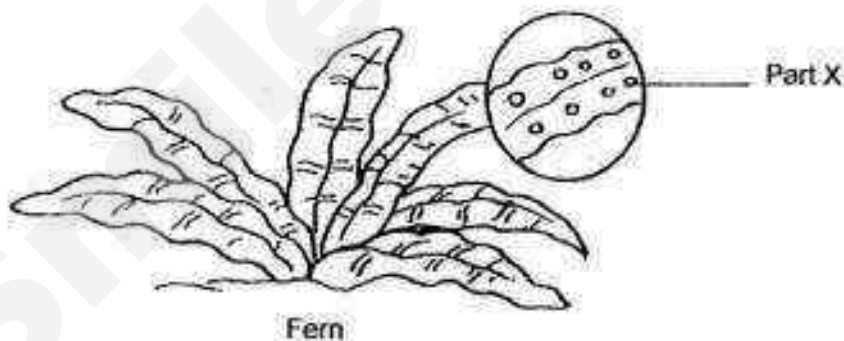
Keith: All birds have a beak, feathers and can fly.

Lyn: Some animals lay eggs while others give birth to young alive.

Joel: Outer coverings such as feathers and scales protect animals from injuries.

Whose statements are correct?

- (1) Keith and Joel only
 - (2) Lyn and Joel only
 - (3) Melody, Lyn and Joel only
 - (4) Melody, Keith, Lyn and Joel.
9. Part X can be found on the underside of the leaf. It can be seen using a magnifying glass as shown in the diagram below.

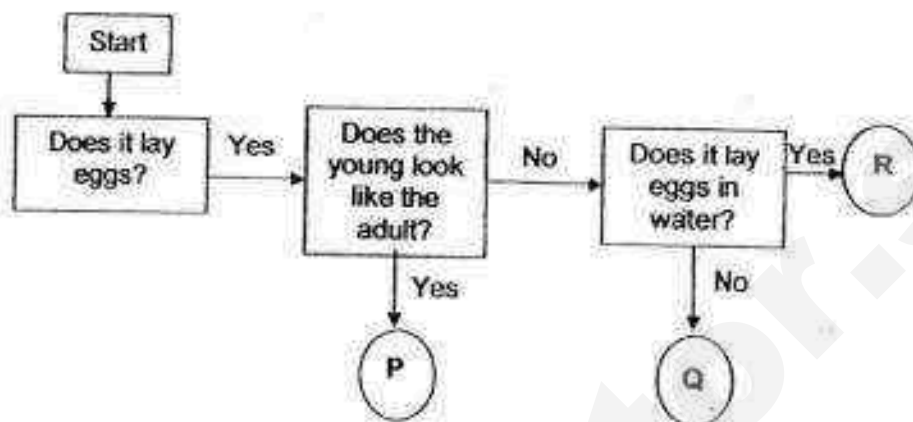


What is the function of Part X?

- (1) It is to reproduce a new fern.
- (2) It is for the fern to take in air.
- (3) It is to help the fern make food.
- (4) It is to protect the fern from animals.

(Go on to the next page)

10. Study the flowchart below carefully. The letters P, Q and R, represent three different animals.

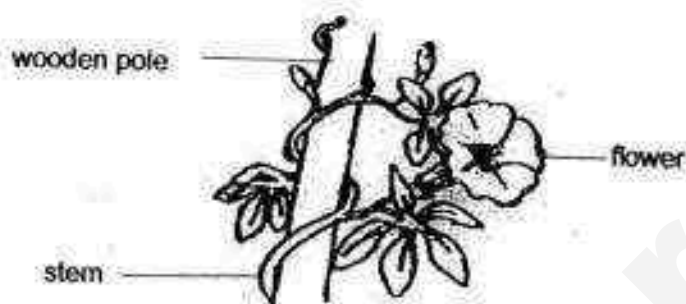


Based on the flowchart, what could animals P, Q and R be?

	Animal P	Animal Q	Animal R
(1)	Chicken	Butterfly	Mosquito
(2)	Butterfly	Chicken	Mosquito
(3)	Mosquito	Chicken	Butterfly
(4)	Chicken	Mosquito	Butterfly

(Go on to the next page)

11. The diagram below shows a morning glory plant growing in the garden.



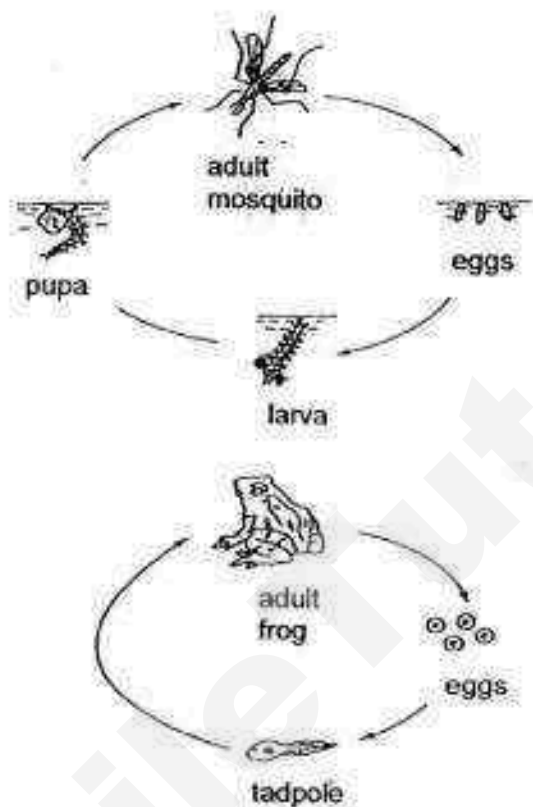
Which of the following statements are true about the morning glory plant?

- A Its flowers grow singly.
- B It reproduces from spores.
- C The stem is strong and holds the plant upright.
- D The stem climbs up the wooden pole to get more sunlight.

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

(Go on to the next page)

12. The diagram below shows the life cycles of a mosquito and a frog.



How are the two life cycles similar?

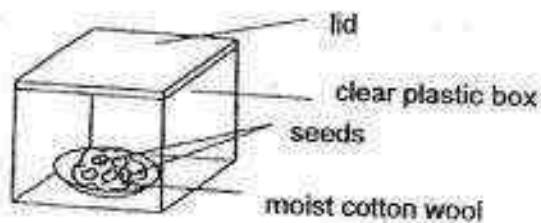
- A The young do not resemble the adult.
- B Both adult stages live on land and in water.
- C At least two stages of the life cycle are spent in water.
- D They have the same number of stages in their life cycles.

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

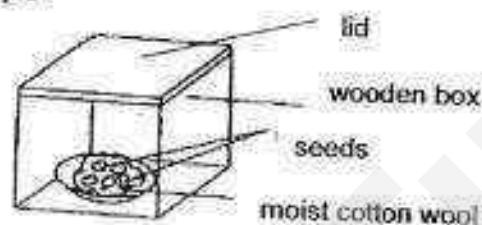
(Go on to the next page)

13. Mrs Lee prepared four different set-ups to teach her class about the conditions needed for seeds to germinate. She placed an equal number of seeds in each set-up as shown below.

Set – up A



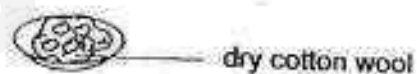
Set – up B



Set – up C



Set – up D



In which of the following set-ups will Mrs Lee observe roots growing from the seed after a few days?

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

(Go on to the next page)

14. Jennifer wanted to find out if the amount of water affects the germination of seeds.

She conducted the experiment using 4 similar set-ups, A, B, C and D.

Variables	A	B	C	D
Duration of experiment	5 days	5 days	5 days	3 days
Location	In the room	In the room	In the field	In the room
Number of seeds	10	10	20	10
Amount of water given daily (ml)	10	20	10	20
Amount of soil	500	500	500	300

Which two set-ups should Jennifer choose to ensure that the experiment is a fair test?

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

(Go on to the next page)

15. Justin is trapped on an island shown in the diagram below. He needs to build a boat to help him leave the island.



Which properties of the material should Justin consider when building his boat?

- A strength
- B flexibility
- C waterproof
- D ability to float or sink

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

16. The diagram below shows a spoon which is used to open the lid of a tin.

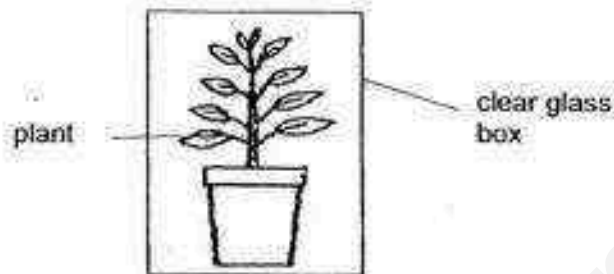


Which one of the following material is most suitable for the spoon to be made of?

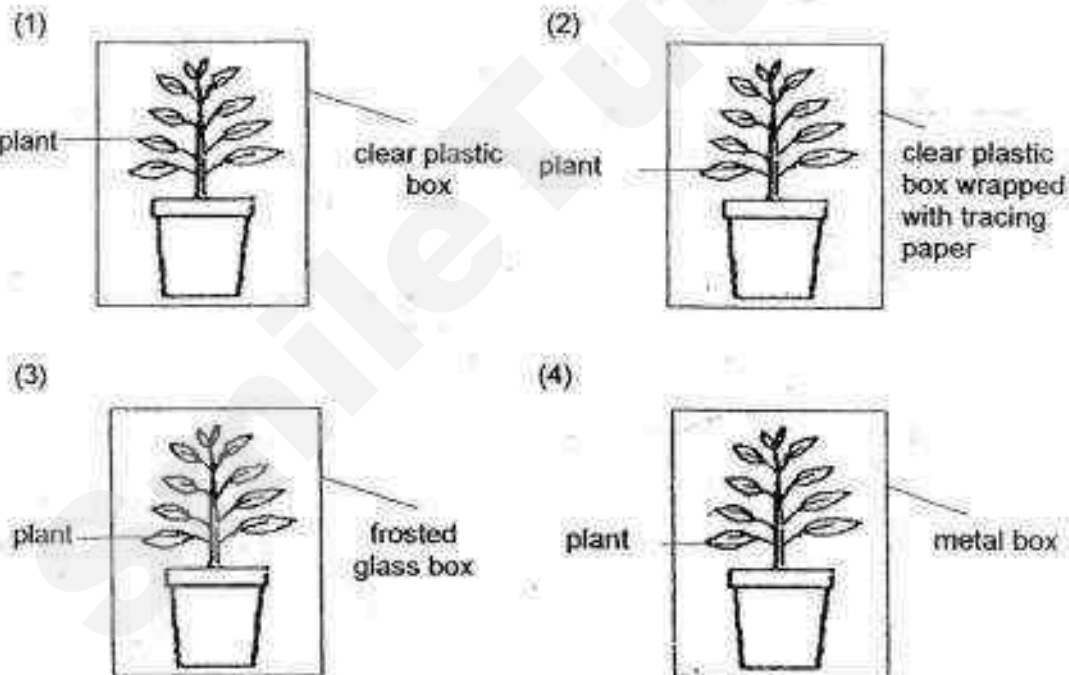
- (1) glass
- (2) metal
- (3) rubber
- (4) plastic

(Go on to the next page)

17. Raj wanted to find out if the presence of light affects the growth of plants. He did a set-up as shown in the diagram below. He recorded the growth of the plants daily.

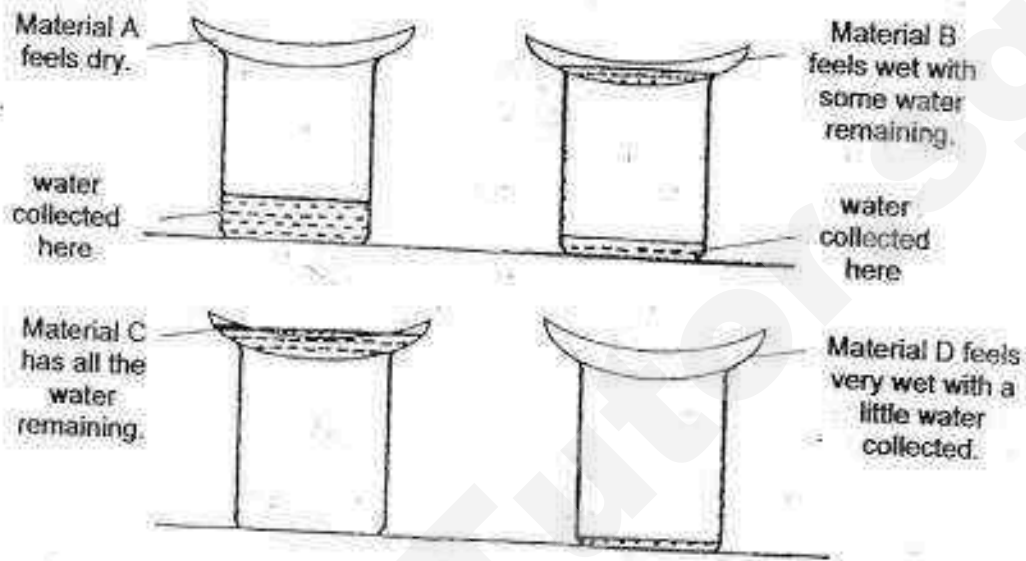


Which one of the following set-ups should he use as a comparison in order to conduct a fair test for his experiment?



(Go on to the next page)

18. Sharon placed four sheets A, B, C and D, made of different materials over the mouth of four containers. She then poured an equal amount of water onto each material. The following diagram shows her observations.



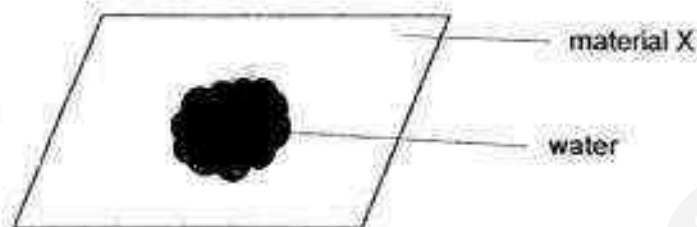
Based on her observation, which one of the following materials is the best for making the canopy of an umbrella as shown in the diagram below?



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

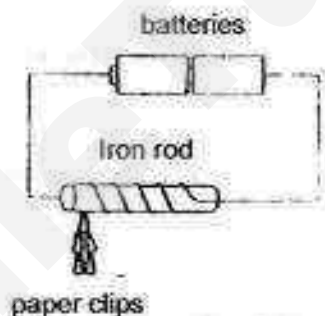
(Go on to the next page)

19. Sam poured some water onto material X to test for one of its property as shown in the diagram below.



Which property is he trying to test on material X?

- (1) strength
 - (2) flexibility
 - (3) waterproof
 - (4) ability to float or sink in water
20. The diagram below shows an electromagnet setup.



Which one of the following changes will enable the electromagnet to attract more paper clips?

- A Add another battery.
- B Change the iron rod to copper rod.
- C Increase the size of the paper clips used.
- D Increase the number of coils of wire around the iron rod.

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

(Go on to the next page)

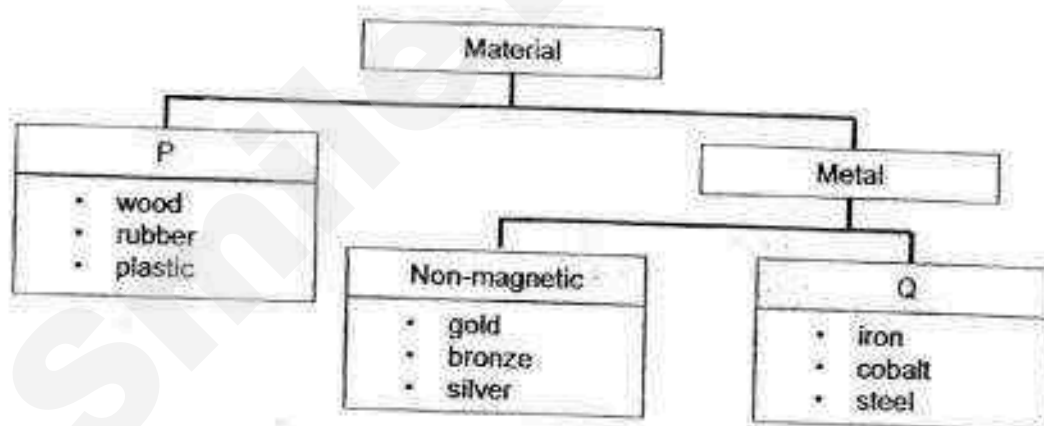
21. Ally placed a magnet on the door of the refrigerator as shown below and it dropped off immediately.



Which one of the following statements correctly explains why the magnet dropped?

- (1) The magnet has a crack on it.
- (2) The refrigerator door is made of aluminum.
- (3) The refrigerator door is too cold for the magnet.
- (4) The magnet lost its magnetism to the refrigerator door.

22. Study the classification table as shown below.



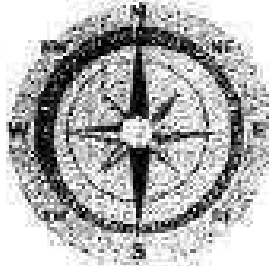
Which one of the following options best represents the headings, P and Q?

	P	Q
(1)	Non-magnetic	Metal
(2)	Non-metal	Strong
(3)	Non-magnetic	Magnetic
(4)	Non-metal	Magnetic

(Go on to the next page)

23. Which one of the following objects below does not make use of a magnet to work?

(1)



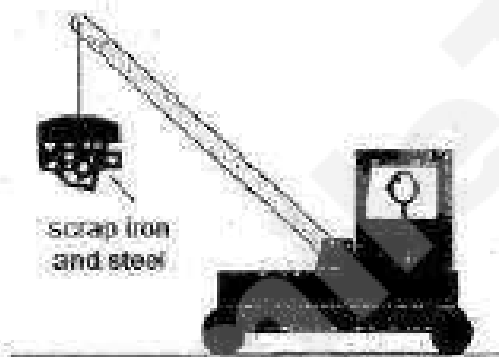
A compass

(2)



A floating globe

(3)



A crane

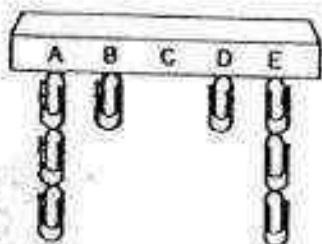
(4)



A toaster

(Go on to the next page)

24. The diagram below shows the number of steel paper clips attracted to different positions of a bar magnet.



Position	A	B	C	D	E
Number of steel paper clips	3	1	0	1	3

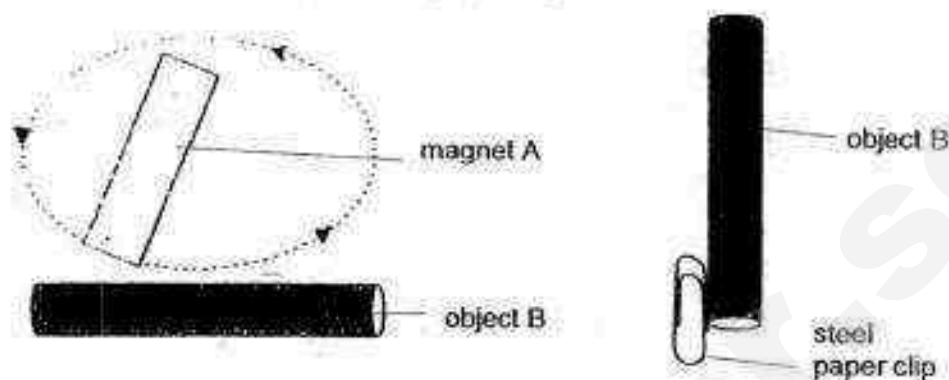
Based on the results, what can be concluded from the experiment?

- A The poles of the magnet have the strongest magnetic force.
- B The magnet made the steel paper clips into temporary magnets.
- C The magnet can attract the magnetic steel paper clips at any position.

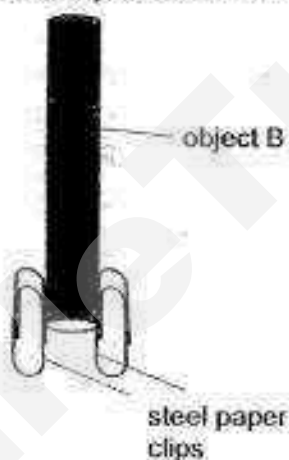
- (1) A only
- (2) A and B only
- (3) B and C only
- (4) A, B and C

(Go on to the next page)

25. Alice used magnet A to stroke object B from one end to the other 20 times. After that, object B was able to attract a steel paper clip.



She then repeated the experiment by using magnet A to stroke object B for another 10 times. After that, object B was able to attract 1 more steel paper clip.



Which statement below best explains Alice's observation?

- (1) The magnetic force of magnet A was lost to object B.
- (2) Object B became a stronger magnet with greater number of strokes.
- (3) The magnetic force of object B increased with greater number of strokes.
- (4) The magnetic force from magnet A was transferred to the steel paper clips.

(Go on to the next page)

26. Jane wanted to find out if object X is a magnet. She brought a magnet near object X.



Object X



Magnet

Which must Jane observe to determine that Object X is a magnet?

- (1) The North pole of the magnet repels Object X.
 - (2) The North pole of the magnet attracts Object X.
 - (3) The magnet loses its magnetism when brought close to Object X.
 - (4) No reaction is observed when both the North pole and South pole of the magnet are brought close to Object X.
27. The diagram below shows four magnets, A, B, C and D. Siti placed each magnet into a box of paper clips.



Magnet A



Magnet B



Magnet C



Magnet D

The number of paper clips attracted by each magnet is recorded in the table as shown below.

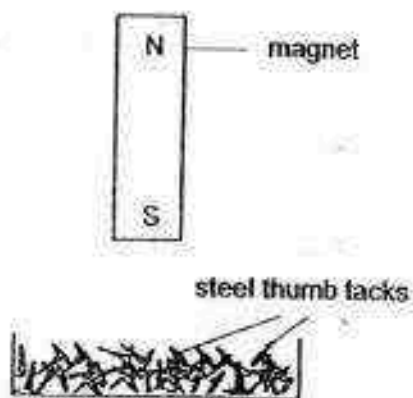
Magnet	A	B	C	D
Number of paper clips attached	14	10	12	8

Based on the results above, what could Betty conclude?

- (1) The largest magnet has the weakest magnetism.
- (2) The largest magnet has the strongest magnetism.
- (3) The magnetism of a magnet does not depend on its size.
- (4) The magnetism of a magnet depends largely on its thickness.

(Go on to the next page)

28. Benny wanted to find out if the distance between the magnet and the steel thumb tacks affects the number of steel thumb tacks attracted. He then carried out an experiment as shown below, each time with the magnet at a different distance from the thumb tacks.



Which of the following variables should he keep the same to ensure that the experiment is fair?

- A The size of the steel thumb tacks.
- B The magnet used for the experiment.
- C The number of the steel thumb tacks left in the tray
- D The distance between the magnet and steel thumb tacks.

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

End of Booklet A

METHODIST GIRLS' SCHOOL

Founded in 1887



END-OF-YEAR EXAMINATION 2016

PRIMARY 3

SCIENCE

BOOKLET B

Total Time for Booklets A and B: 1 hour 30 minutes

INSTRUCTIONS TO CANDIDATES

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

Follow all instructions carefully.

Answer all questions.

Shade your answers in the Optical Answer Sheet (OAS) provided.

Name: _____ ()

Class: Primary 3. _____

Date : 28 October 2016

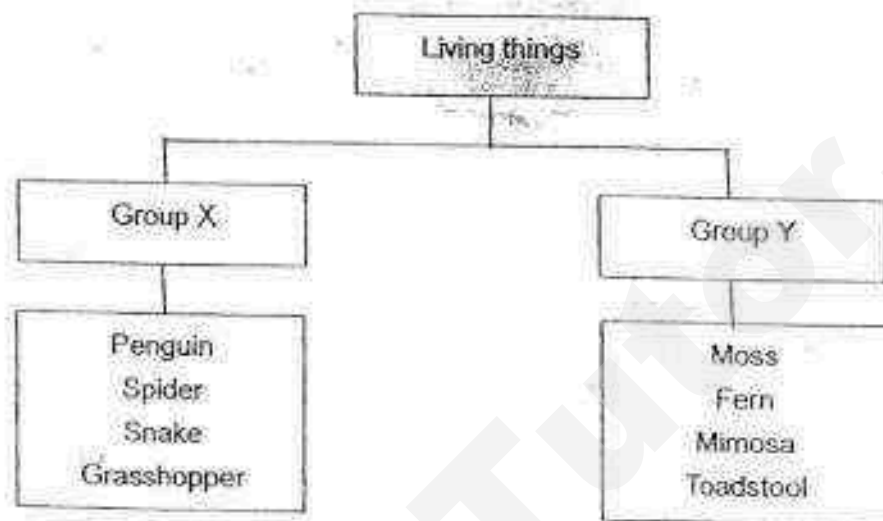
Booklet A	56
Booklet B	34
Total	90
Parent's Signature	

This booklet consists of 13 printed pages including this page.

For questions 29 to 38, write your answers in the spaces provided. The number of marks available is shown in brackets [] at the end of each question or part question.

[34 marks]

29. The classification chart below shows how some living things are classified into two groups, X and Y.



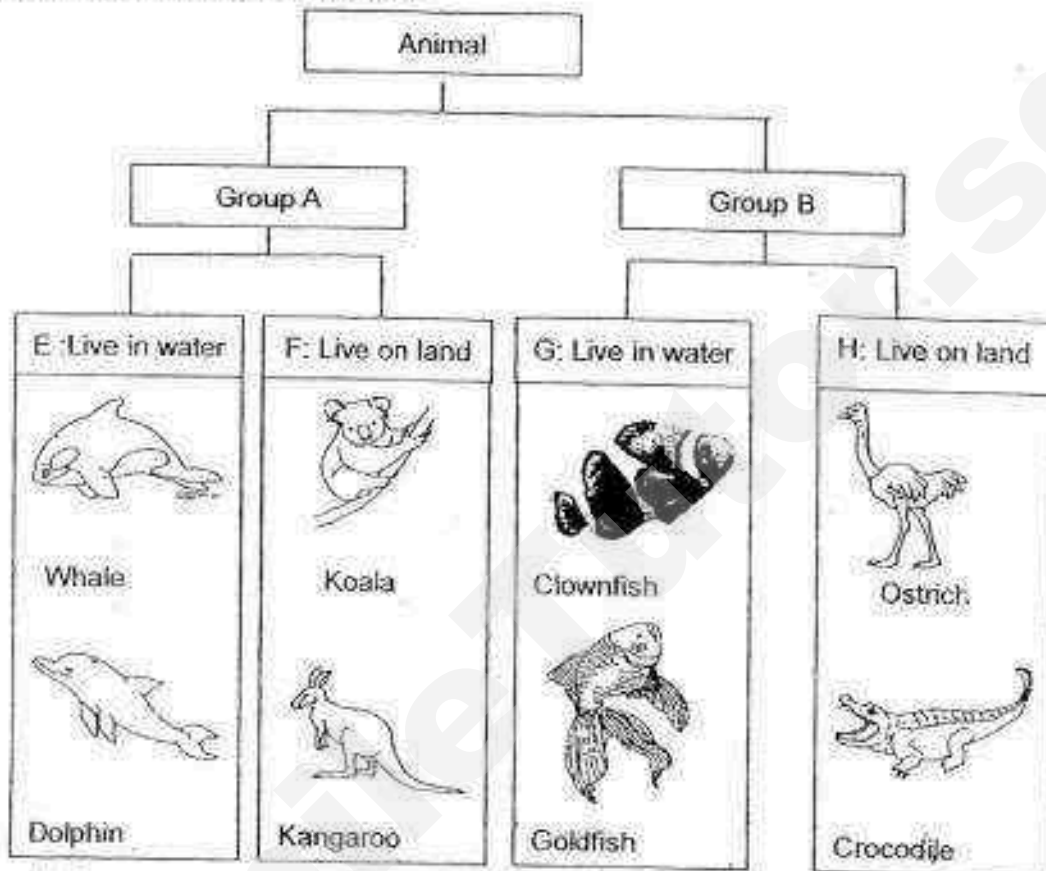
- (a) Based on the chart above, which one of the living things is **wrongly** grouped? Give a reason for your answer. [1]

- (b) Name an organism which is in the same group as your answer in (a). Explain how it gets its food. [1]



(Go on to the next page)

30. The chart below shows how some animals are classified into Group A and B according to their methods of reproduction. The animals are further classified into Groups E, F, G and H according to where they live.



(a) Suggest suitable headings for Group A and B.

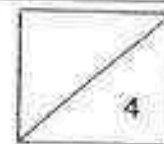
[1]

Group A: _____ Group B: _____

(b) Which animal group do the four animals in Group A belong to?

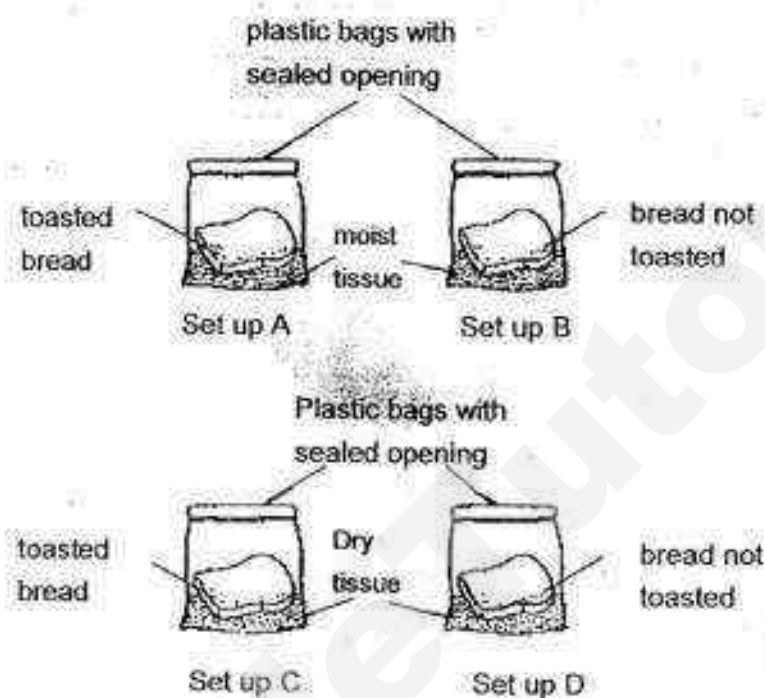
[1]

(c) What is the difference in breathing methods for animals in Group E and G? [2]



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31. Gopal set up the following experiment in the classroom to grow some bread mould. He asked his pupils to observe the four pieces of bread every day. After a week, the pupils observed some mould growing on some of the pieces of breads.



- (a) Which set-ups would likely have mould growing after a few days?
Explain your answer.

[1]

- (b) Where did the mould obtain its food?

[1]

- (c) What could Gopal do to see mould growing faster on the bread?

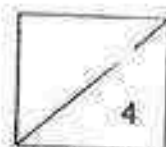
[1]

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After a hot shower, Gopal dropped his towel into the laundry basket. After a few days, he noticed patches of mould on it. His mother told him that he should have hung his wet towel on the towel rack instead of putting it into the laundry basket.

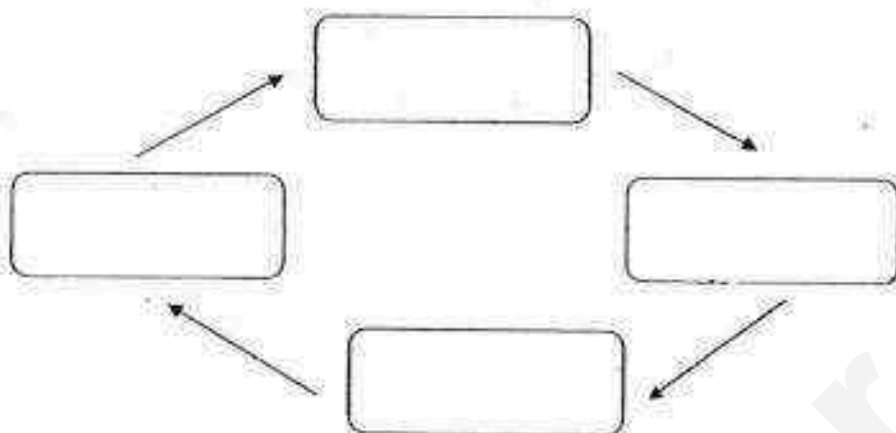
d) How does hanging the towel prevent the growth of mould?

[1]



(Go on to the next page)

32. Ahmad wants to depict the life cycle of a Diamondback moth.



- (a) Help him by writing the **stages** of the life cycle of the moth in the boxes provided in the diagram.

[2]

- (b) At which stage is the moth considered a pest to the gardener?

Explain your answer.

[1]

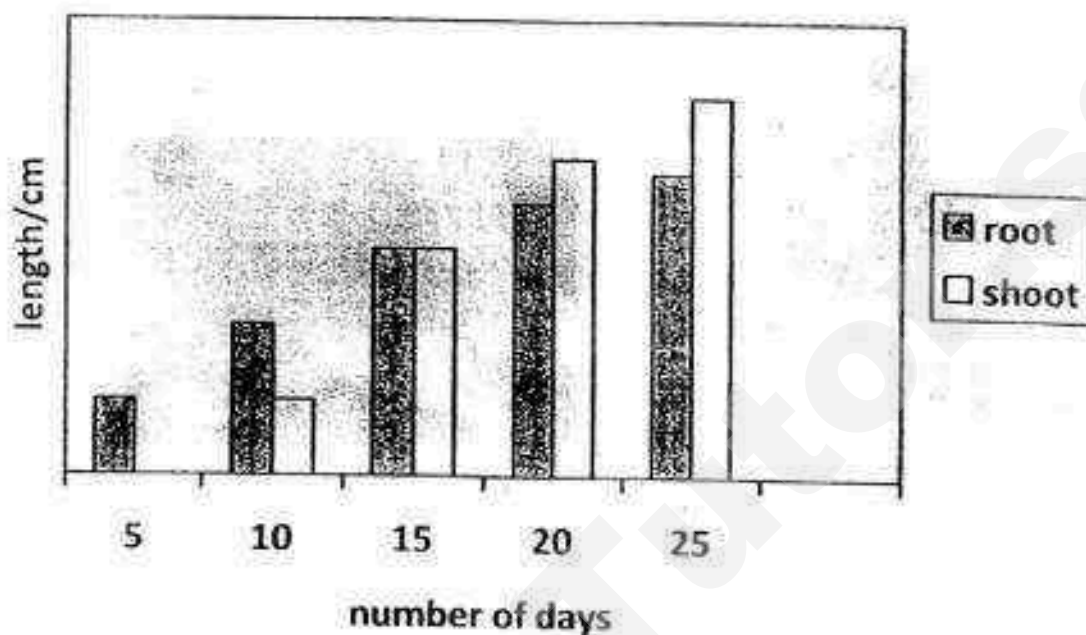
- (c) How does laying many eggs at a time help the moth in its life cycle?

[1]



(Go on to the next page)

33. The graph below shows the length of the root and shoot of a germinating seed over time.



- (a) Based on the graph, which part of the seed grows out first? Explain how the part is important for the germinating seed.

[1]

(Go on to the next page)

Susan found these two plants in her garden.



Tomato plant



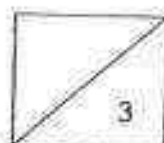
Moss

- (b)
(c) State two differences between these two plants.

[2]

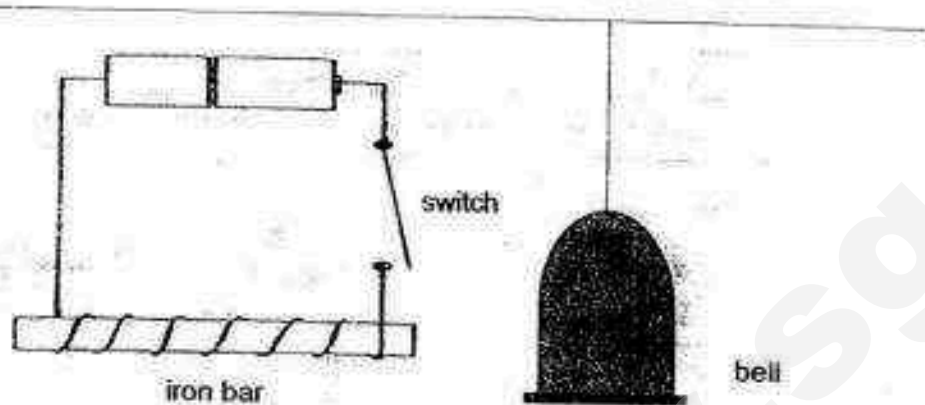
Difference 1: _____

Difference 2: _____



(Go on to the next page)

34. Sally hung a bell near an iron bar as shown in the diagram below.

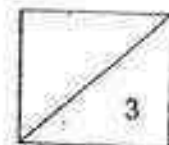


- (a) Explain why the bell rang when the switch was turned on.

[2]

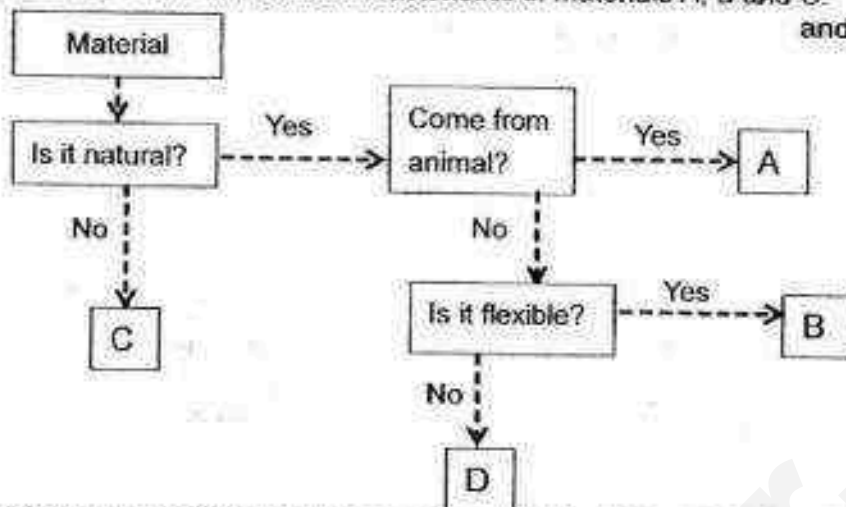
- (b) Would the bell ring if it was made of copper? Explain why.

[1]



(Go on to the next page)

35. The flow chart below shows the characteristics of materials A, B and C and D



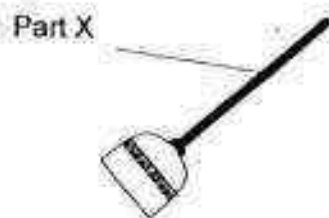
- (a) Which of the materials below are represented by letters A, B, C or D? Write the letters in the box provided. [1]

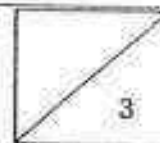
Leather

Plastic

- (b) What is the similarity for both materials A and B? [1]

- (c) The picture below shows a broom. Can part X be made using material D? Explain your answer. [1]





(Go on to the next page)

36. Rayce set up the following experiment as shown in Diagram 1. Four rings of the same size, A, B, C and D, are stacked through a wooden rod. Three of them are magnets.

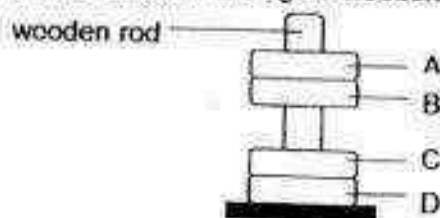


Diagram 1

The rings are then removed and stacked in another way through the wooden rod in Diagram 2.

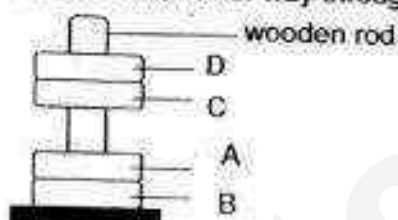
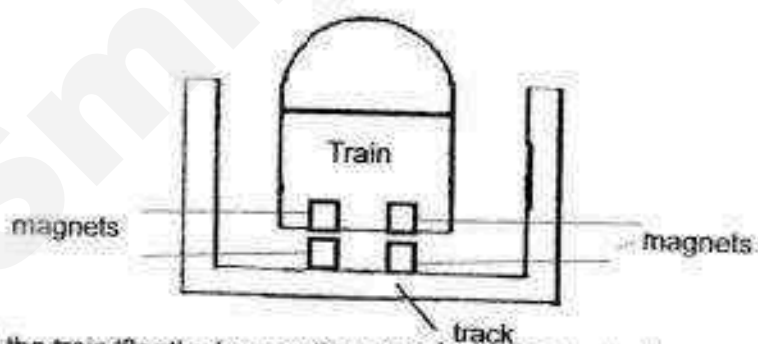


Diagram 2

- (a) Which of the rings are definitely magnets? Explain your answer.

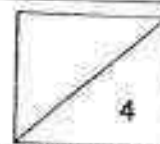
[2]

- (b) The picture below shows a maglev train which makes use of magnets to work as shown in the diagram below. It is observed that the train is 'floating' a few centimeters above the track when traveling.



Why did the train 'float' a few centimeters above the track when travelling?

[2]



(Go on to the next page)

37. Anna wanted to find out how dropping a magnet too often can affect its magnetism. She carried out the experiment and recorded the result in the table shown below.

Number of times the magnet was dropped	3	4	5	6	7	8	9
Number of paper clips attracted	10	9	8	7	5	3	1

- (a) What is the variable that Anna changed in this experiment?

[1]

- (b) How does dropping the magnet affect its magnetism? Explain your answer based on the results above.

[2]

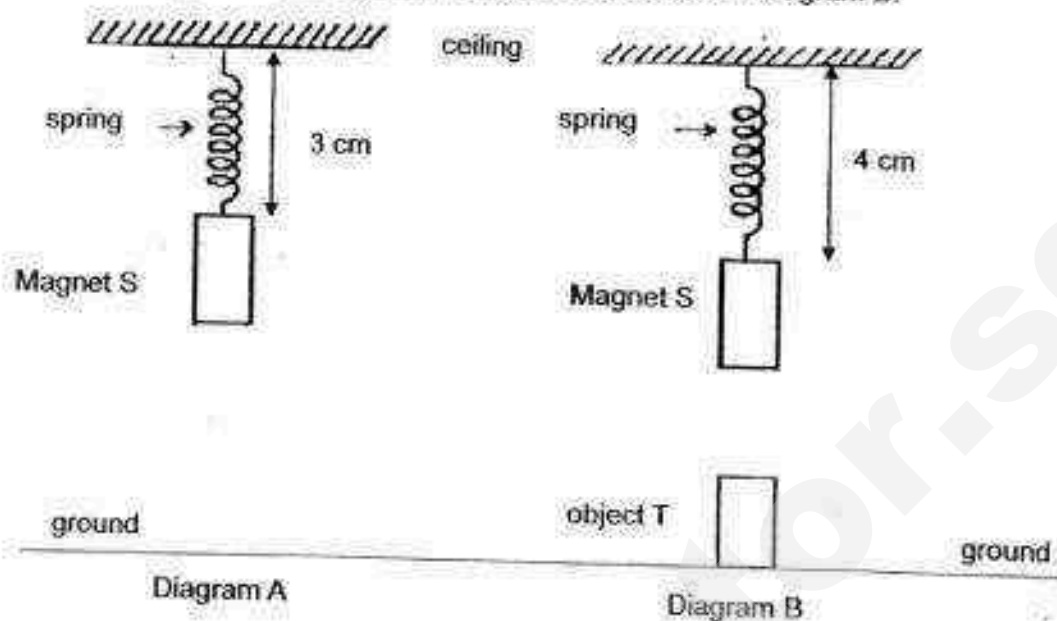
- (c) How can Anna ensure that the result of her experiment is accurate?

[1]



(Go on to the next page)

38. Magnet S was hung from a spring as shown in diagram A below. Object T was then placed on the ground, directly below magnet S as shown in diagram B.



- (a) Explain why the spring gets longer in the arrangement as shown in diagram B. [2]

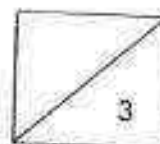
The experiment is then repeated by replacing object T by magnets U, V and W. The result is recorded in the table shown below.

Magnet	U	V	W
Length of spring between the ceiling and magnet S	6 cm	5 cm	4 cm

- (b) Based on the table above, which magnet has the strongest magnetic force? Explain your answer.

[1]

End of paper



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YEAR : 2016
 LEVEL : PRIMARY 3
 SCHOOL : METHODIST GIRLS'
 SUBJECT : SCIENCE
 TERM : SA2

Booklet A

Q1	Q2	Q3	Q4	Q5	Q6	Q7
1	3	1	1	4	4	2
Q8	Q9	Q10	Q11	Q12	Q13	Q14
3	1	1	2	2	2	1
Q15	Q16	Q17	Q18	Q19	Q20	Q21
4	2	4	3	3	1	2
Q22	Q23	Q24	Q25	Q26	Q27	Q28
4	4	1	3	1	3	1

Booklet B

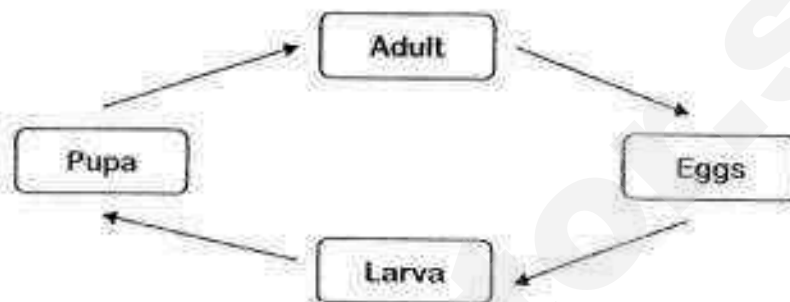
- Q29**
- (a) **Mimosa.** Mimosa is a flowering plant and all the other plants in the same group as mimosa are non-flowering plants.
 - (b) **A sunflower.** The sunflower makes its own food by using the photosynthesis method.

- Q30**
- (a) **Group A :** Give birth to young alive
Group B : Lay eggs
 - (b) **Mammals**
 - (c) **In group E the animals take in air through their lungs but in group G the animals breathe through their gills.**

- Q31
- (a) Set up A and B. It has a necessary conditions air, water and warmth for grow.
 - (b) The mould obtains food in the bread.
 - (c) Sprinkle more water.
 - (d) Hanging the towel will make the wet towel dry and mould needs moist to grow.

Q32

(a)



- (b) At the larva stage. The moth will eat up the gardener's crops.
- (c) If a predator damages the eggs some might still be alive.

Q33

- (a) The roots. The roots help absorb water transporting the water to the stem and the stem to the leaves.
- (b) Difference 1 : The tomato plant is a flowering plant but the moss is a non-flowering plant.
Difference 2 : Moss reproduce by spores but a tomato plant reproduce by seeds.

Q34

- (a) The switch made the iron bar an electromagnet and the bell is made out of a magnetic material so the bell got attracted by the electromagnet.
- (b) No as copper is not a magnetic material and will not be attracted.

Q35

(a) Leather

A

Plastic

C

(b) Materials A and B are both natural.

(c) Yes. Part X needs to be made using a material that is not flexible.

Q36

(a) A, B and C. They repel.

(b) Like poles of the magnet are facing each other so they repel.

Q37

(a) The number of times the magnet was dropped.

(b) Dropping the magnet weakens the magnetism and the more times the magnet was dropped, the fewer paper clips it attracted.

(c) She can do the experiment again.

Q38

(a) Object T could be a magnetic material and object T got attracted by magnet S.

(b) Magnet U. It pulled magnet down the most and caused the spring to extend the most.

End

SmileTutor.sg



NAN HUA PRIMARY SCHOOL
SEMESTRAL ASSESSMENT 2 – 2016
PRIMARY 3

SCIENCE

BOOKLET A

24 Multiple Choice Questions (48 marks)

Total Time for Booklets A and B : 1 hour 30 minutes

INSTRUCTIONS TO CANDIDATES

1. Write your name and index number in the space provided.
2. Do not turn over the page until you are told to do so.
3. Follow all instructions carefully.
4. Answer all questions.
5. Shade your answers in the Optical Answer Sheet (OAS) provided

Marks Obtained

Booklet A		/ 48
Booklet B		/ 32
Total		/ 80

Name: _____ () Class: P 3 _____

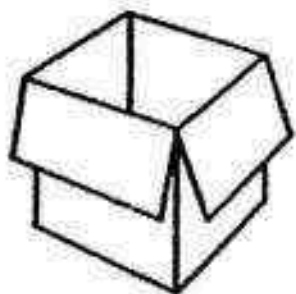
Date : 27 October 2016

Parent's signature: _____

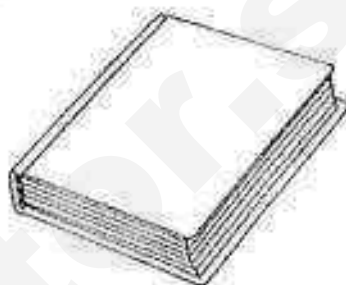
Section A: (24 x 2 marks = 48 marks)

For each question from 1 to 24, 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.

1. Study the diagrams below.



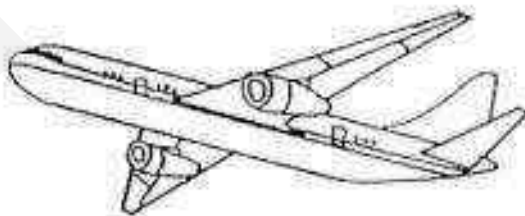
Box



Book



Plant

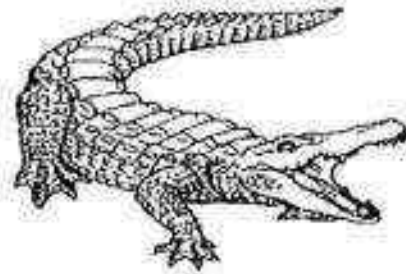


Aeroplane

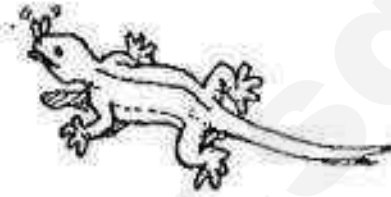
Based on the characteristics of living and non-living things, which one of the following does not belong to the same group as the others?

- (1) Box
- (2) Book
- (3) Plant
- (4) Aeroplane

2. The four animals shown in the diagrams below were placed in the same group.



Crocodile



Lizard



Clown fish



Frog

The animals belong to the same group because _____.

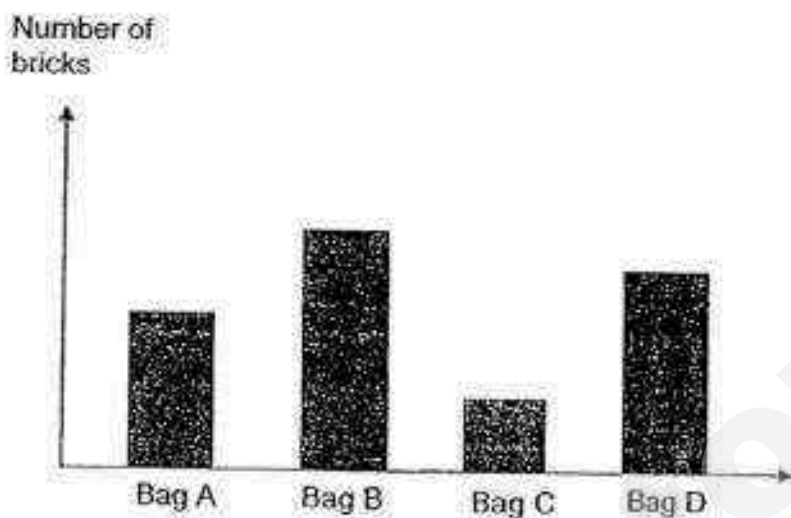
- (1) they lay eggs
 - (2) they can swim
 - (3) they can live on land and in water
 - (4) they have scales as an outer-covering
3. The table below shows the properties of four materials.

Material	Flexible	Transparent	Waterproof
P	Yes	No	No
Q	No	Yes	Yes
R	No	No	No
S	Yes	Yes	Yes

Which one of the following materials is suitable for making a raincoat?

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

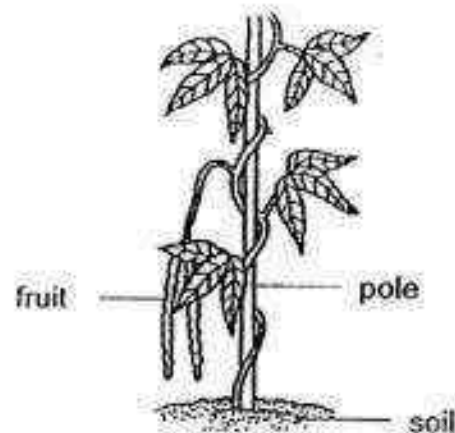
4. The graph below shows the maximum number of bricks that four bags made of different materials could hold before breaking.



Which of the following conclusions cannot be drawn from the graph?

- (1) Material of Bag A is stronger than Bag C.
 - (2) Material of Bag D is stronger than Bag A.
 - (3) Material of Bag B has the greatest strength.
 - (4) Material of Bag C is the weakest and is waterproof.
5. Which of the following statements about the stem is incorrect?
- (1) It holds the plant firmly to the ground.
 - (2) It holds the leaves up to get as much sunlight as possible.
 - (3) It transports water from the roots to other parts of the plant.
 - (4) It transports food from the leaves to other parts of the plant.

6. The diagram below shows a plant growing in a garden.



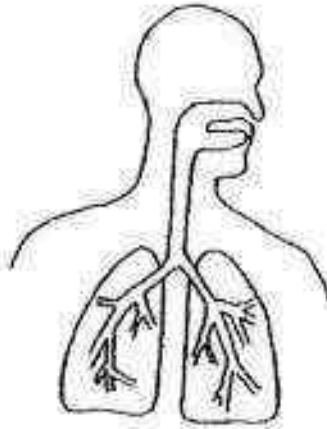
A group of children made the following statements about the plant.

- Alex : This plant has a weak stem.
Bala : This plant has a strong stem.
Candy : This plant is a flowering plant.
Denise : This plant is a non-flowering plant.

Who made the correct statements?

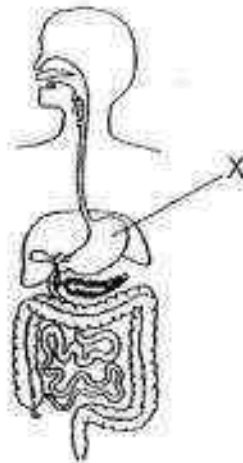
- (1) Alex and Candy
- (2) Bala and Candy
- (3) Alex and Denise
- (4) Bala and Denise

7. The diagram below shows a system in the human body.



Which human body system does it represent?

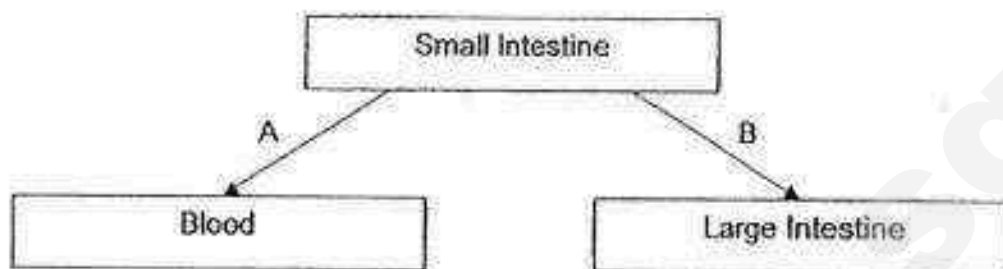
- (1) Skeletal system
 - (2) Muscular system
 - (3) Circulatory system
 - (4) Respiratory system
8. The diagram below shows the digestive system.



Which of the following takes place at part X?

- (1) Water is removed from the undigested food.
- (2) Digested food is absorbed into the bloodstream.
- (3) Food is chewed and grinded into smaller pieces.
- (4) Food is broken down by the digestive juices into simple substances.

9. The diagram below shows the materials that move out of the small intestine into the blood and into the large intestine.



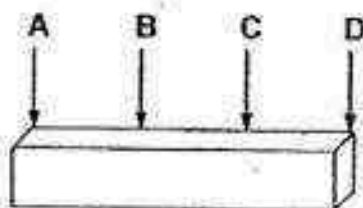
What materials do A and B represent in the diagram above?

	A	B
(1)	Water	Digested food
(2)	Digested food	Undigested food
(3)	Undigested food	Digested food
(4)	Undigested food	Water

10. Which of the following metals is magnetic?

- (1) Iron
- (2) Silver
- (3) Copper
- (4) Aluminium

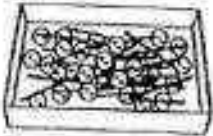
11. Study the diagram below.

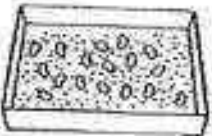



Which parts of the magnet have the strongest magnetic pull?


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

12. There are two types of objects in each of the trays below. Which mixture of objects can be easily separated by using a magnet?

(1)  plastic buttons and steel needles

(2)  beans and sugar granules

(3)  wooden sticks and plastic beads

(4)  steel needles and iron thumbtacks

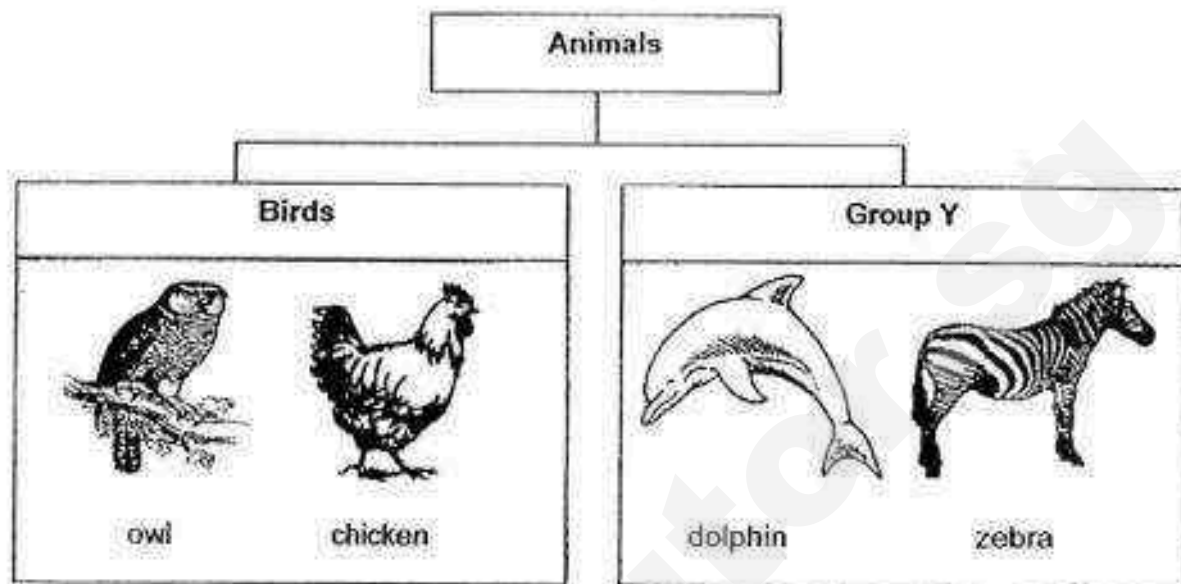
13. Study the table below. A tick (✓) shows that the thing, A, B, C or D, has the characteristics.

	Ability to move from place to place	Needs water	Reproduces	Has legs
A		✓	✓	
B	✓	✓	✓	✓
C	✓	✓	✓	
D	✓			✓

Which of the following is most likely a non-living thing?

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

14. Study the classification chart below carefully.



Which of the following animals belongs to Group Y?

- (1) Bat
 - (2) Shark
 - (3) Ostrich
 - (4) Butterfly
15. Lena observed an adult animal and recorded the following information.

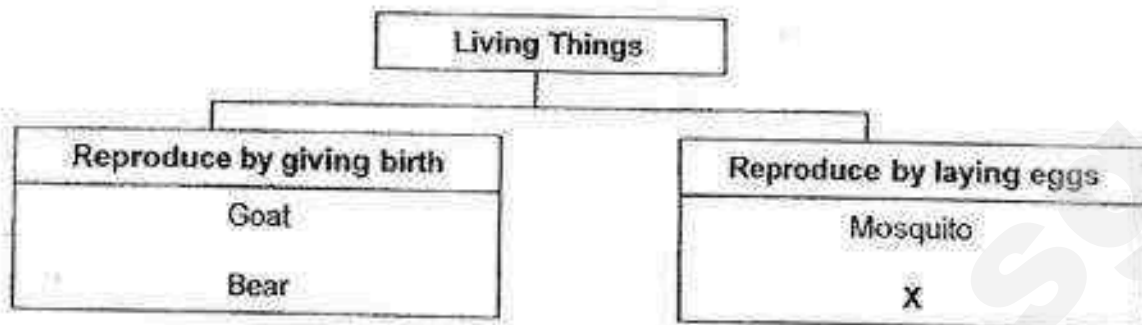
- It lays eggs.
- It has two legs.
- It does not have fins and gills.
- It does not produce milk to feed its young.

What can you conclude about the animal from the information given?

- A. The animal is not a fish.
B. The animal is not a bird.
C. The animal is not an insect.
D. The animal is not a mammal.

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

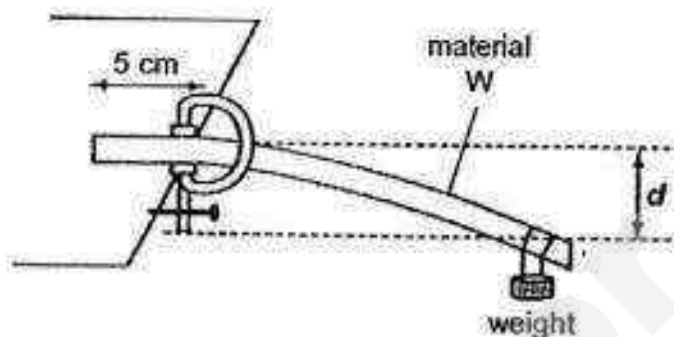
16. Study the classification chart below carefully.



What could "X" be?

- (1) Lion
- (2) Turtle
- (3) Giraffe
- (4) Monkey

17. Ahmad used the following set-up to investigate the flexibility of 4 rods made from different materials. He secured one end of the rod on the table top and put a weight on the other end. He measured the distance of d in centimetres as shown below.

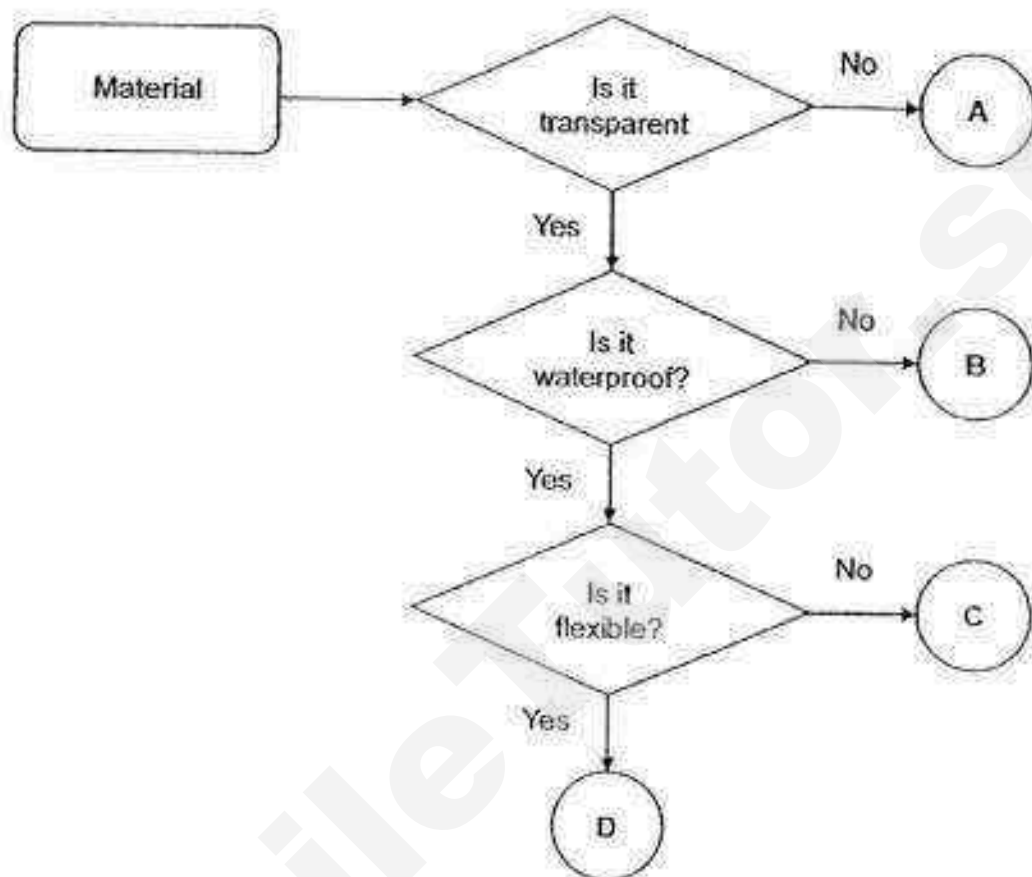


Material	d (cm)
W	8
X	3
Y	0
Z	2

Which of these material is most suitable for making a food tray?

- (1) W
- (2) X
- (3) Y
- (4) Z

18. Study the flowchart below.



Which of the following letters will most likely represent the lens of spectacles?

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

19. There are 3 different types of fabrics of the same size. Jane folded each of them in the same way and placed them on top of the containers with a net over the opening. She poured 500 ml of water onto each type of fabric.



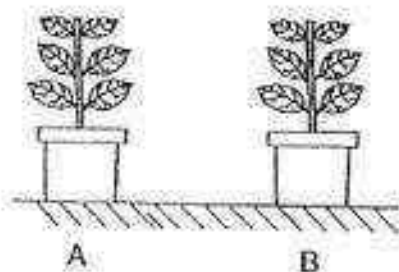
The diagrams below show the observations 5 minutes after pouring the water.



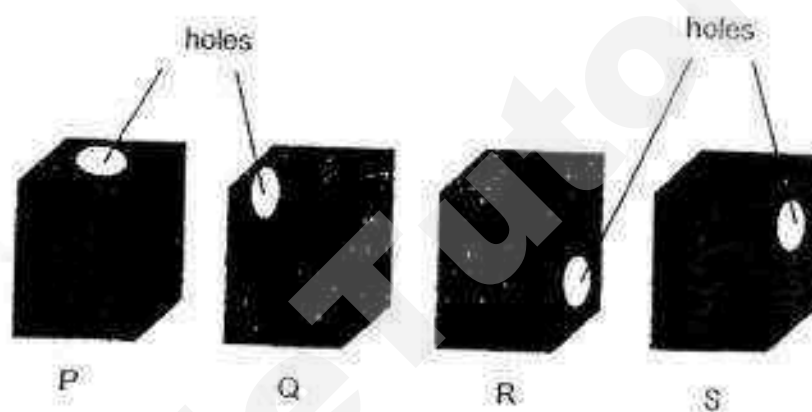
What can you conclude from the observations?

- A Fabric X absorbs the most water.
 - B Fabric Y absorbs less water than Fabric Z.
 - C The fabrics absorb different amounts of water.
 - D All the three types of fabrics are not waterproof.
- (1) B only
(2) A and B only
(3) C and D only
(4) A, C and D only

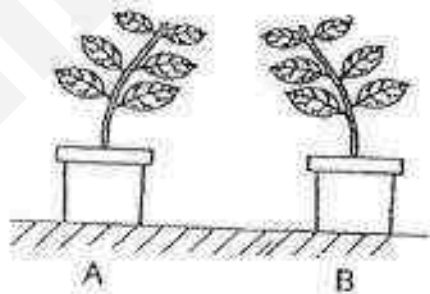
20. Two pots of plants were placed in an open field.



Each pot was covered with one of the black boxes shown below. The black boxes had holes made on different parts of the boxes as shown.



The diagram below shows what the plants looked like after three weeks.

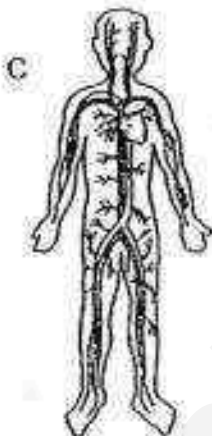
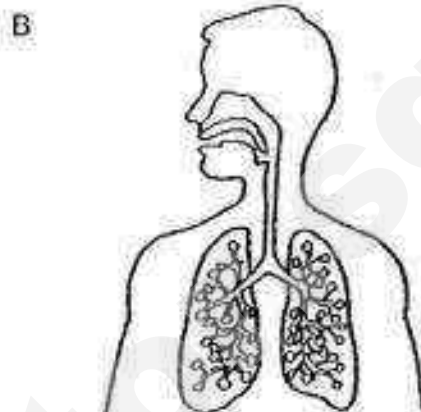


By looking at the plants, we can conclude that Pot A was covered with box _____ and Pot B was covered with box _____.

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

21. Peter is playing soccer in a field.

Which systems work together to enable Peter to play soccer?

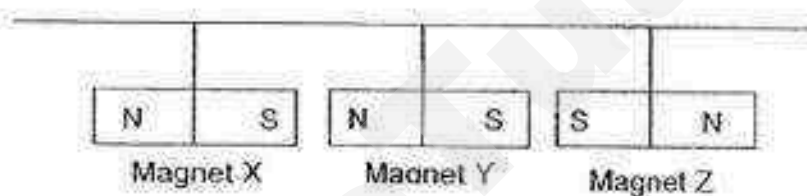


- (1) A and D only
- (2) B and C only
- (3) A, B and D only
- (4) A, B, C and D

22. Constipation is a condition of the digestive system. A person who suffers from constipation has hard and dry waste materials that are difficult to pass out. Which part of the digestive system could possibly have cause this condition and what is the reason?

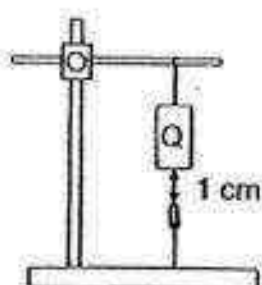
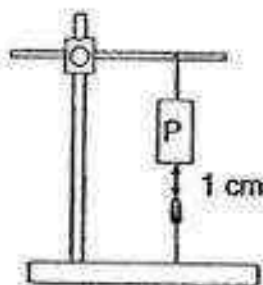
	Digestive organ	Reason
(1)	Small intestine	Too much digested food is absorbed into the bloodstream.
(2)	Small intestine	Too much water is absorbed into the bloodstream.
(3)	Large intestine	Too much water is absorbed from the undigested food.
(4)	Large intestine	Too little water is absorbed from the undigested food.

23. What will happen when three bar magnets are hung in the manner as shown below?

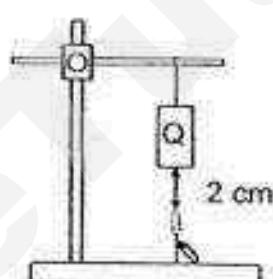
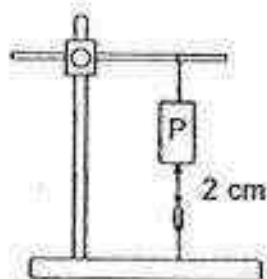


- (1) The magnets remain stationary.
- (2) Magnet Y will start spinning.
- (3) Magnet Y will move towards Magnet X.
- (4) Magnet Y will move towards Magnet Z.

24. There are two bar magnets, P and Q, of the same size. Both magnets can attract a paper clip held by a string even though the magnets are 1 cm above the paper clips. The diagrams below are not drawn to scale.



The experiment is repeated by moving the magnets further away from the paper clips. The observations when the magnets are 2 cm above the paper clips are shown below.



What can you conclude from the observations?

- A Magnets can act at a distance.
- B Unlike poles of the magnet attract.
- C The strength of the magnet is dependent on the size.
- D Magnet P has a stronger magnetic strength than Magnet Q.

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



NAN HUA PRIMARY SCHOOL
SEMESTRAL ASSESSMENT 2 – 2016
PRIMARY 3

SCIENCE

BOOKLET B

10 Open-ended questions (32 marks)

Total Time for Booklets A and B : 1 hour 30 minutes

INSTRUCTIONS TO CANDIDATES

1. Write your name and index number in the space provided.
2. Do not turn over the page until you are told to do so.
3. Follow all instructions carefully.
4. Answer all questions.
5. Write your answers in this booklet.

Marks Obtained

Section B

	/ 32
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Name: _____ () Class: P 3 _____

Date : 27 October 2016

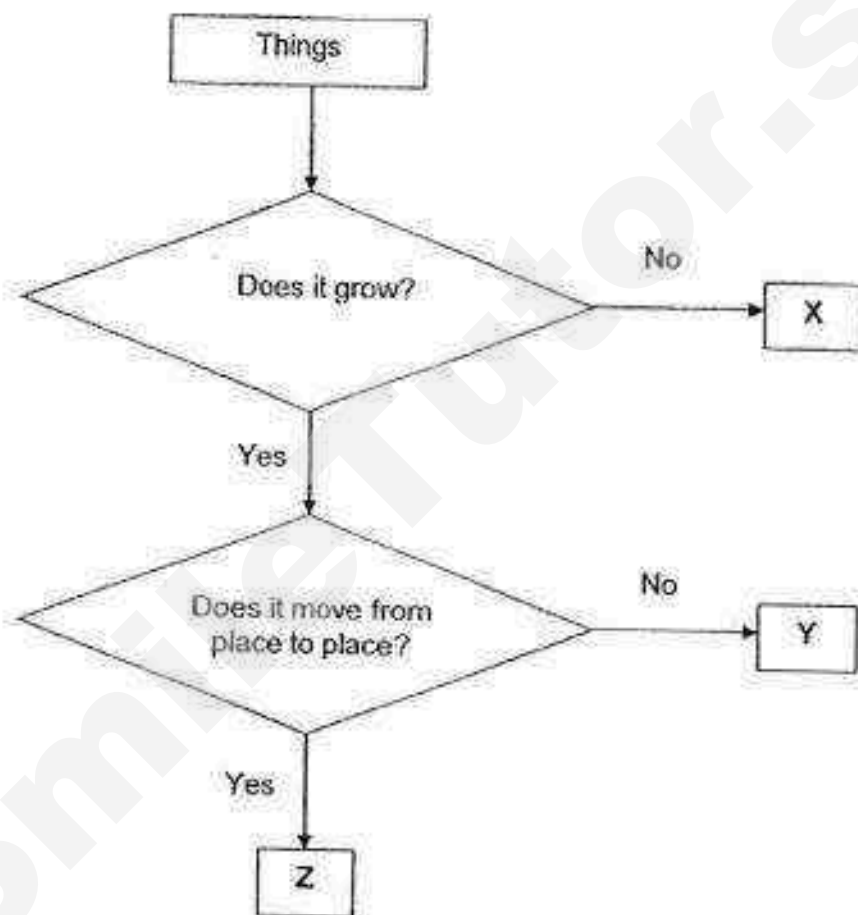
Parent's Signature: _____

Section B: (32 marks)

Write your answers to questions 25 to 34 in the space provided.

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

25. The flowchart below shows the characteristics of three things, X, Y and Z.



- (a) Based on the flowchart above, list two characteristics of Thing Z.

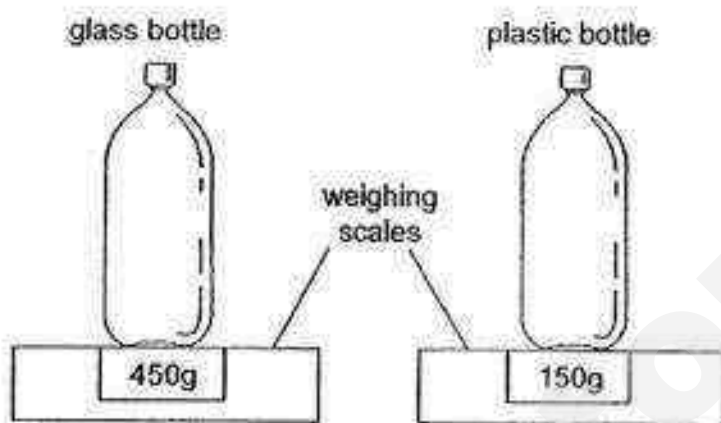
[2]

- (b) Based on the flowchart above, which group of living things does "Y" belong to?

[1]

Score	3
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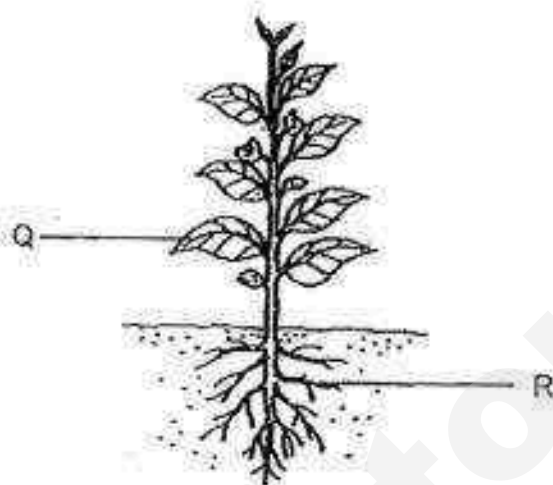
26. The diagrams below show a glass bottle and a plastic bottle of the same size. The bottles were placed on a weighing scale. The mass of each bottle is shown on the weighing scale.



Which bottle will you carry with you during an excursion? Give two reasons to support your answer. [2]

Score	2
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27. Study the diagram of a plant below.



(a) Identify parts Q and R of the plant above.

[1]

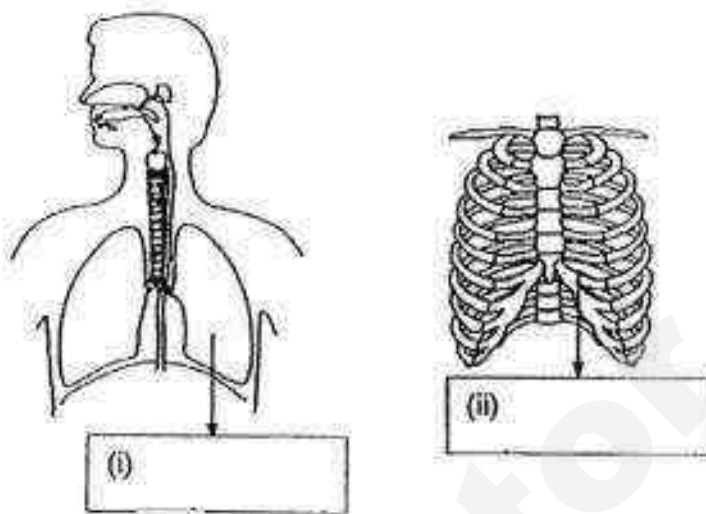
Part Q : _____

Part R : _____

(b) The plant died when all of its parts Q and R are removed. Give two reasons to explain why the plant died.

[2]

28. The diagram below shows parts of two human systems.



a) Identify the organ and the structure shown above.

[1]

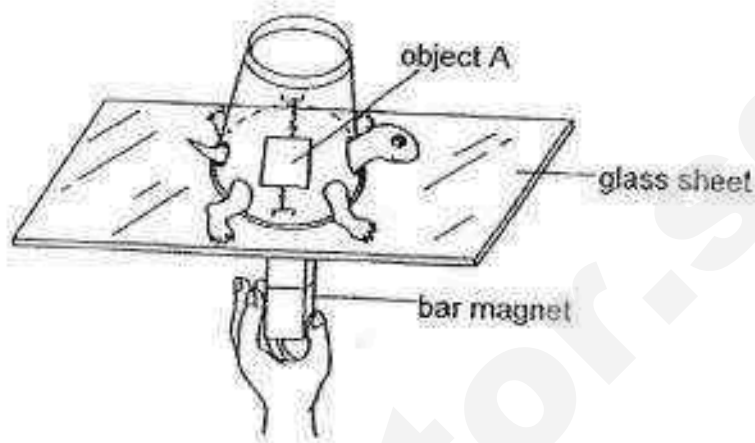
b) With reference to the functions of the skeletal system, explain how the structure in (ii) helps the organ in (i).

[1]

c) Name the human system that works together with the skeletal system to help different parts of the body to move.

[1]

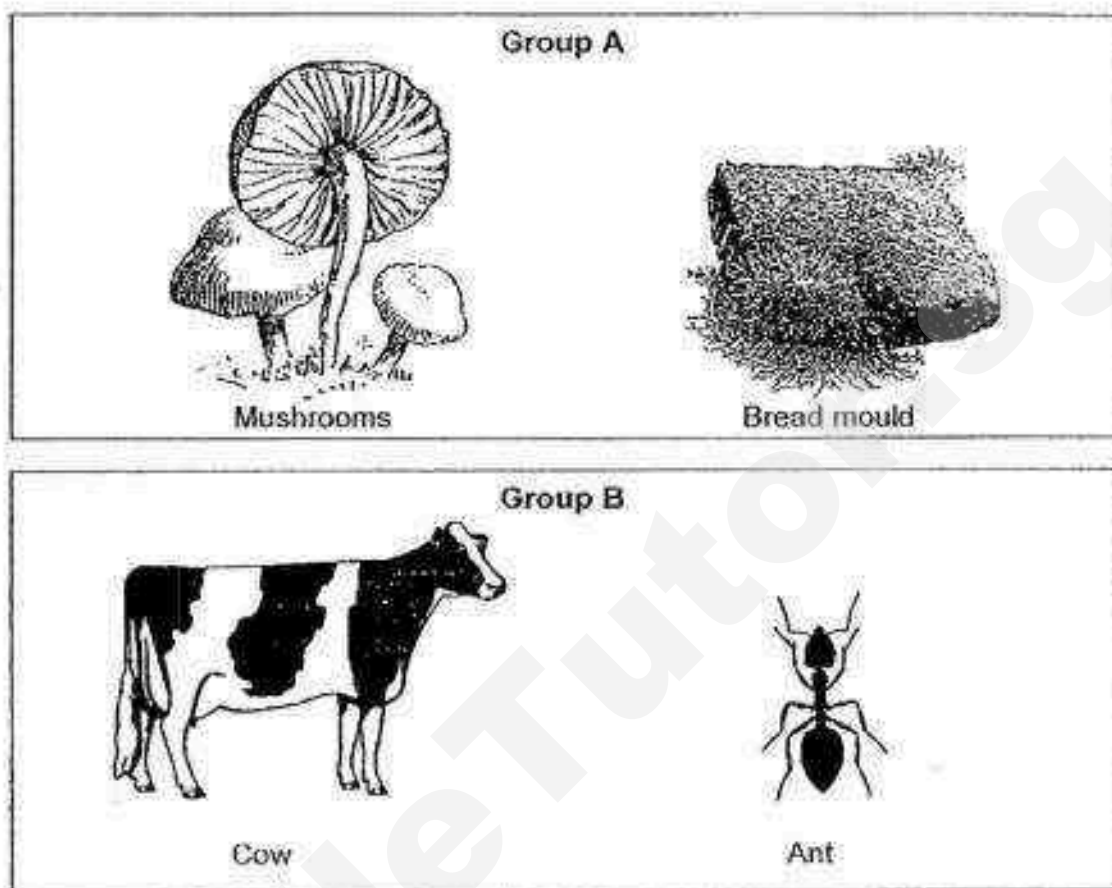
29. Peter made a toy tortoise using a foam cup and fixed an object A inside the cup. He placed the toy tortoise on a thin glass sheet and put a strong bar magnet right under it. As he moved the bar magnet, the toy tortoise did not move.



- (a) Why do you think Peter was not able to move the toy tortoise across the glass sheet? [1]

- (b) What should he do in order to move the toy tortoise using the magnet? Explain your answer. [2]

30. Study the two groups of living things shown below.



(a) Give a suitable heading for each of the groups above. [1]

Group A : _____

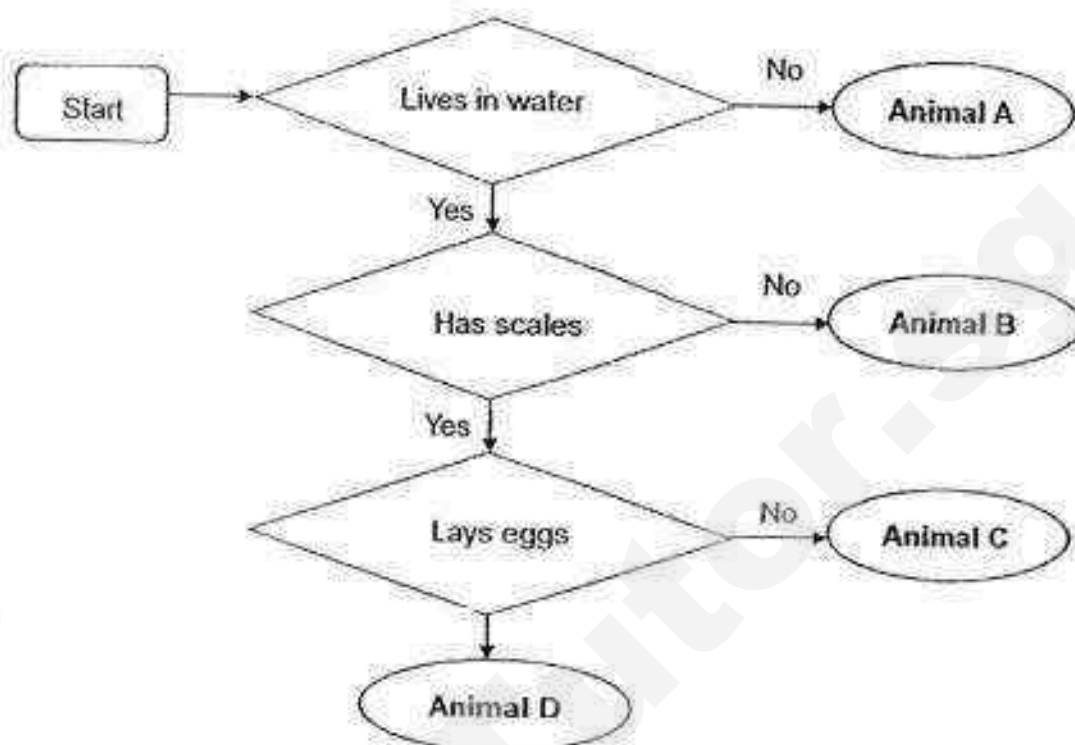
Group B : _____

(b) What is one common characteristic between the living things in groups A and B? [1]

(c) State the difference between the outer coverings of the cow and the ant. [1]

(d) How does the mushrooms and bread mould reproduce? [1]

31. Study the flowchart below carefully.



(a) Based on the flowchart above, state one difference between Animals A and B. [1]

(b) Based on the flowchart above, state two similarities between Animals C and D. [2]

(i)

(ii)

(c) Name the group of animal that Animal D belongs to. [1]

32. Betty conducted some tests to find out the properties of materials P, Q, R and S. The results of the tests are shown in the table below.

Property	Material			
	P	Q	R	S
Breaks easily	No	No	Yes	Yes
Bends easily without breaking	No	Yes	No	Yes
Allows water to pass through	No	No	No	No
Allows light to pass through	No	No	Yes	Yes
Floats on water	Yes	No	No	No

- (a) Based on the table above, state a property shared by the four materials. [1]

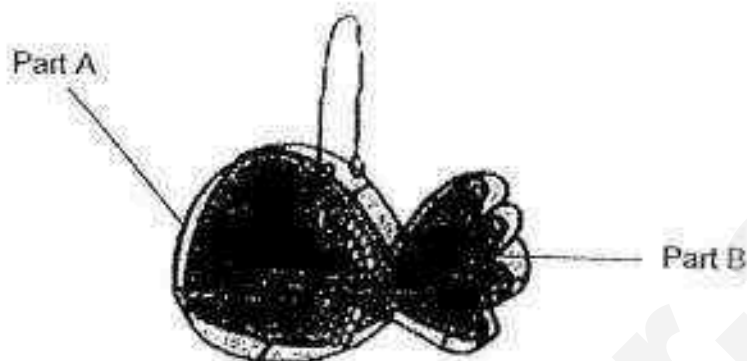
- (b) The diagram below shows a swimming board.



Which material (P, Q, R or S) is suitable for making the swimming board? Give a reason for your answer. [1]

Score	2
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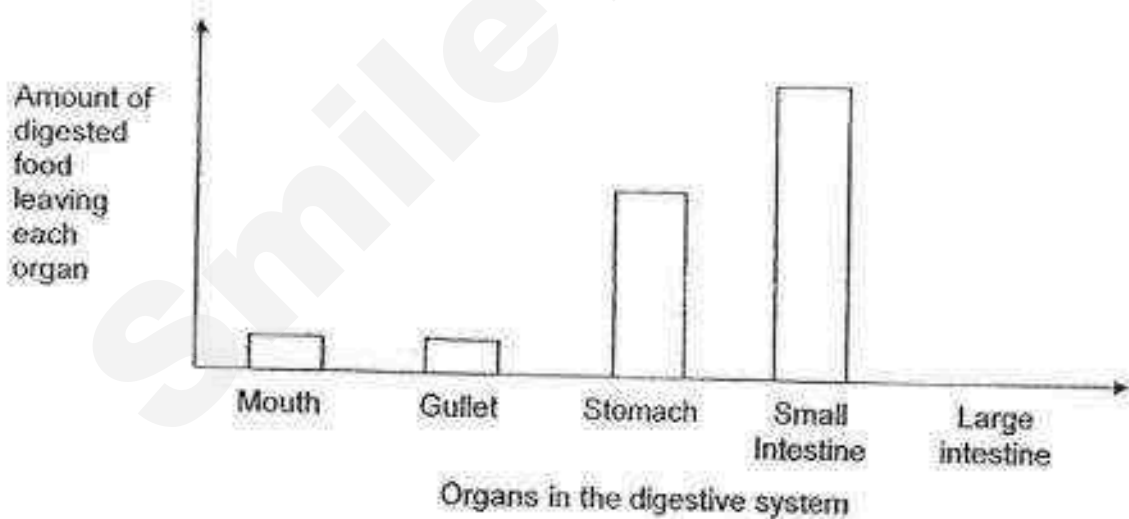
- (c) James wants to make a lantern for the mid-autumn festival. Which material (P, Q, R or S) should he choose to make parts A and B? [1]



Part A: _____

Part B: _____

33. The graph below shows the amount of digested food leaving each organ in the human digestive system.



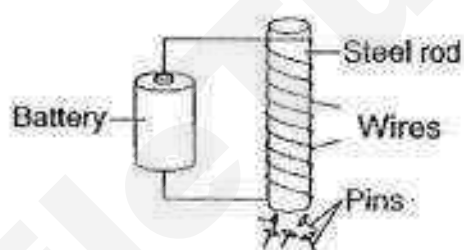
- (a) Based on the graph above, why does the amount of digested food leaving the mouth and the gullet is the same? [1]

Score	2
-------	---

- (b) The graph shows that there is no digested food leaving the large intestine. Explain why. [2]

- (c) Andrew said that if he cuts his food into smaller pieces, it will help in his digestion. Do you agree with Andrew? Explain your answer. [1]

34. Randy set up an experiment as shown below.



He conducted the experiment using 4 identical steel rods, A, B, C and D, each with different number of turns of the wire around it. He recorded the number of pins that each steel rod attracted in the table below.

Steel Rod	Number of turns of wire	Number of pins attracted
A	12	3
B	18	5
C	22	6
D	28	8

- (a) Based on the table above, what happens to the number of pins attracted when the number of turns of wire increases? [1]

Score	4
-------	---

- (b) Identify the variables in the experiment. Put a tick (✓) in the correct boxes below. [2]

Variables	Constant Variable (variable that is kept the same)	Dependent Variable (variable that is measured)	Independent Variable (variable that is changed)
Size of rod			
Number of turns of wire			
Number of pins attracted			
Number of batteries			

End of Paper

Score	2
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EXAM PAPER 2016 (P3)

SCHOOL : NAN HUA

SUBJECT : SCIENCE

TERM : SA2

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

25)a)It can grow and also can move from place to place.

b)Plant.

26)I would bring the plastic bottle as it is light and won't break easily.

27)a)Q: Leaf R: Root

b)Part R can't absorb anymore mineral salt and water and part Q cannot take food from the sunlight to the plant.

28)a)i)Lung ii)Ribcage b)It will protect the Lung.

c)Muscular system.

29)a)Object A is a non-magnetic material.

b)He should change object A to a magnetic material. The magnet will then be able to attract object A.

30)a)A: Cannot move B: Can move

b)They both reproduce.

c)The outer covering of the cow is fur but the outer covering of the ant is not fur.

d)It reproduce by spores.

31)a)Animal B lives in water but Animal A do not lives in water.

b)i)Both if them live in water. ii)Both of them have scales.

c)Fish.

32)a)All of them do not allow water to pass through.

b)Material P. It floats on water.

c)A: Material Q B: Material S

33)a)There have no digestion taking place in the gullet.

b)Digestion is completed in the small intestine. All the digested food is absorbed into the blood at the small intestine so no digested food goes into the large intestine.

c)Yes, By cutting the food into smaller pieces, there will be more surface area for the digested juices to act on. This will help to increase the speed of digested.

34)a)The more number of wire turn the more pins the steel rod attracted.

b)

✓		
		✓
	✓	
✓		

NANYANG PRIMARY SCHOOL

PRIMARY 3 SCIENCE

2016

PRACTICE PAPER 1
For SA 2

BOOKLET A

Name: _____ ()

Class: 3()

Date: _____

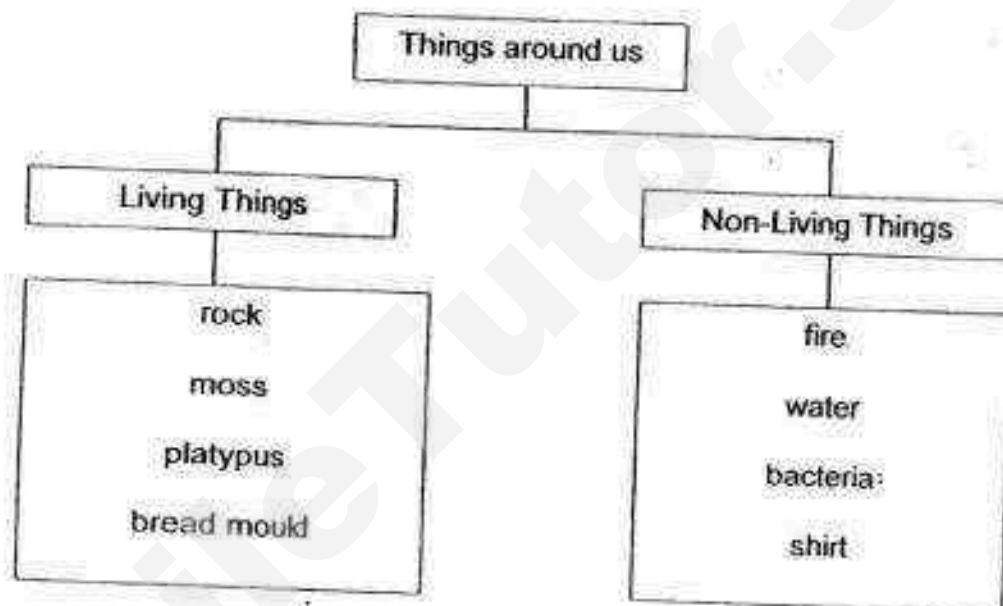
Booklet A consists of 14 printed pages including this cover page.

Section A (24 x 2 marks = 48 marks)

For each question from 1 to 24, 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 provided.

1. The table below shows a classification diagram of things that are placed into two different groups.



Based on the classification diagram above, which of the following things are wrongly classified?

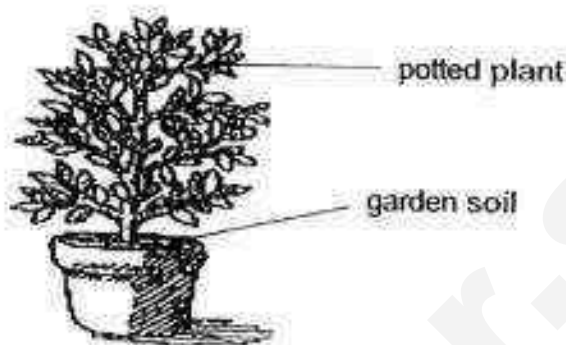
- (1) rock and bacteria
(2) water and platypus
(3) moss and shirt
(4) bread mould and fire
2. Three pupils gave examples of how living things respond to changes in the environment.

Siti : The bird lays eggs in the nest.
Devi : The owl hunts for food in the night.
Jimmy : An indoor plant grows towards the window.

Which of the following pupil(s) had given the correct example?

- (1) Siti only
(2) Devi only
(3) Siti and Jimmy only
(4) Devi and Jimmy only

3. Fabian bought four similar pots of plants as shown below and placed them along the corridor where there was sunlight.



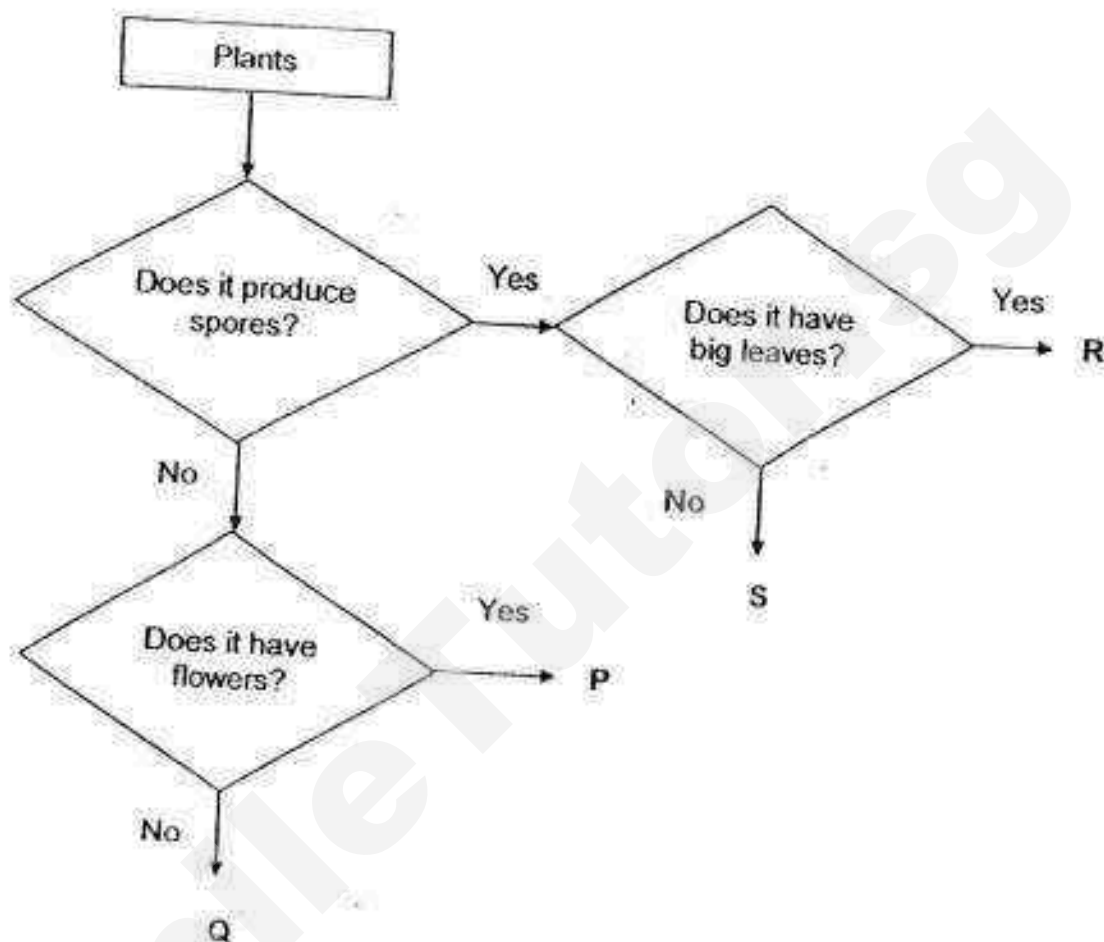
He watered the plants daily with different amount of water. The table below records his observations after five days.

Plant	Cup(s) of water	Observation after five days
A	0	dying
B	10	grows poorly
C	20	grows well
D	30	dying

Both plant A and plant D were dying.
What could have caused plant D to die?

- (1) There was too much wind.
- (2) He had given plant D too much water.
- (3) He did not give plant D enough water.
- (4) There was too much light where plant D was placed.

4. Study the flowchart below.



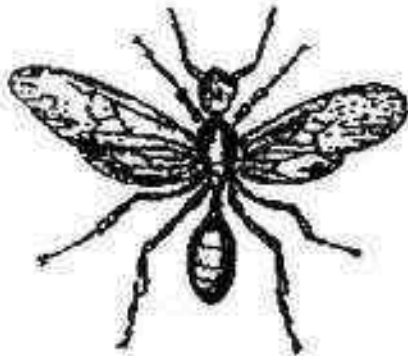
Based on the flowchart, which one of the following letters represents 'moss'?

- | | |
|-------|-------|
| (1) P | (2) Q |
| (3) R | (4) S |
5. Joe saw animal X on his trip to an island. He described the animal as the following:
- It could swim in water.
 - It fed its young with milk.
 - It reproduced by laying eggs.

Which group does animal X belong to?

- | | |
|----------------|--------------|
| (1) fish | (2) mammals |
| (3) amphibians | (4) reptiles |

6. The picture below shows an insect and a fish.



insect



fish

Jenna made the following statements about the insect and the fish.

- A Both have wings.
- B Both reproduce by laying eggs.
- C The body covering of the insect and the fish is hard.

Which of the following is/are common characteristic(s) of an insect and a fish?

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

7. Joanne said that she had difficulties grouping reptiles and amphibians. Her friends gave her several suggestions on how she could group these animals.

	Suggestion
Kayla	Check if they lay eggs.
Hui Min	Check if they have backbones.
Elliot	Check if they have moist or dry skin.
Gordon	Check if they have a constant body temperature.

Which one of her friends had given the best suggestion?

- (1) Elliot
- (2) Kayla
- (3) Hui Min
- (4) Gordon

8. Kristen wanted to find out how different amount of water affects the growth of bread mould. She used four slices of bread and kept them in separate sealed plastic bags. They were left at two different places to test for the growth of bread mould after two weeks.

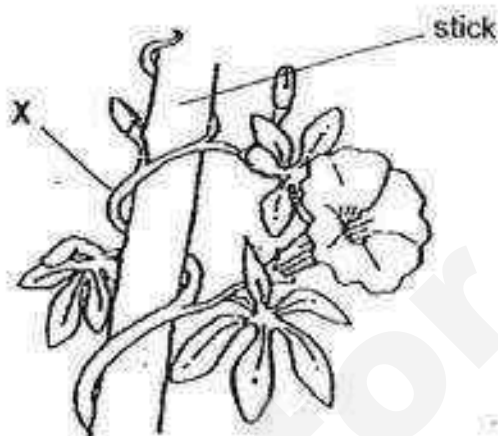
The results were shown below.

<p>On the kitchen table top</p>  <p>Bread A 10 drops of water added</p>	<p>In a dark cupboard</p>  <p>Bread B 10 drops of water added</p>
<p>On the kitchen table top</p>  <p>Bread C 20 drops of water added</p>	<p>In a dark cupboard</p>  <p>Bread D 20 drops of water added</p>

Based only on the results above, which one of the following statements about the bread mould is true?

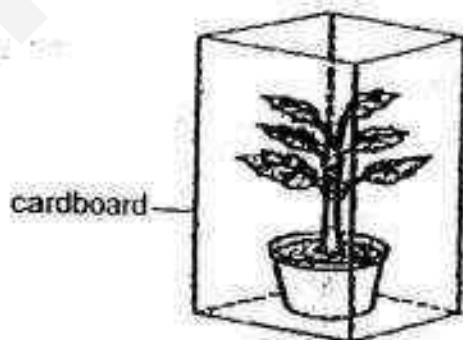
- (1) The amount of light will affect the growth of the bread mould.
- (2) The place the bread is kept affects the growth of the bread mould.
- (3) The amount of water added does not affect the growth of the bread mould.
- (4) The amount of water added to the bread will affect the growth of the mould.

9. Amir found the following plant in the garden.



What is the function of part X of the plant?

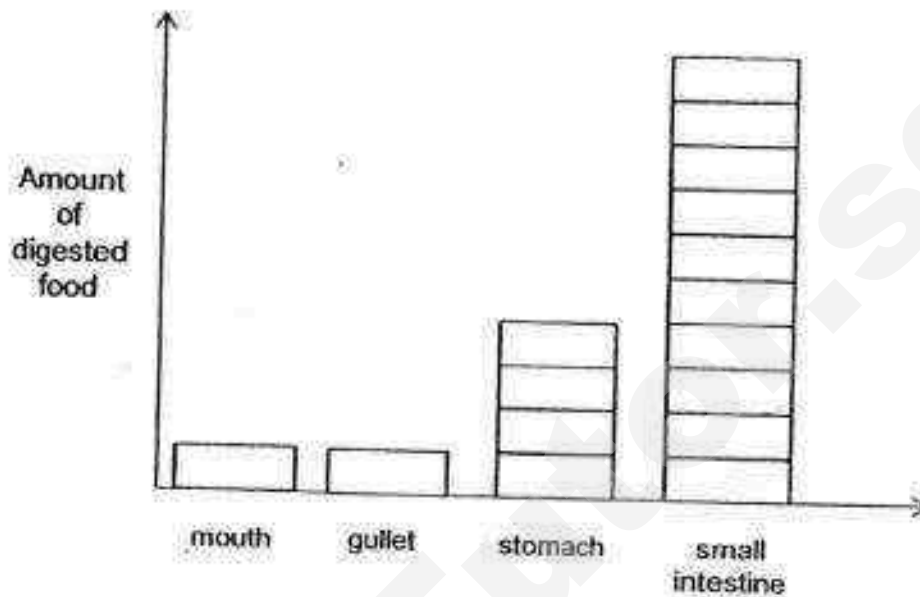
- (1) To help the plant to absorb nutrients.
 - (2) To help the plant absorb water and make food.
 - (3) To help the plant to grow towards sunlight to make food.
 - (4) To help the plant to move around freely from one place to another.
10. Angel placed a plant in a cardboard box. There were no holes on the cardboard box. The plant was watered every day.



What would most likely happen to the plant after 2 weeks?

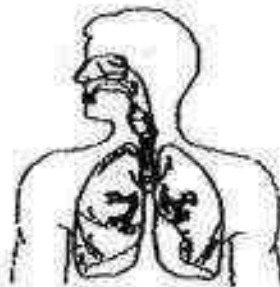
- (1) The plant would grow taller.
- (2) The plant would remain healthy.
- (3) The plant would die due to lack of air.
- (4) The plant would die due to lack of food.

11. Nakim had some food for dinner. The graph below shows the amount of food that had been digested when the meal passed through the organs in his digestive system.



Based on the graph, which one of the following descriptions about the digestive system is **true**?

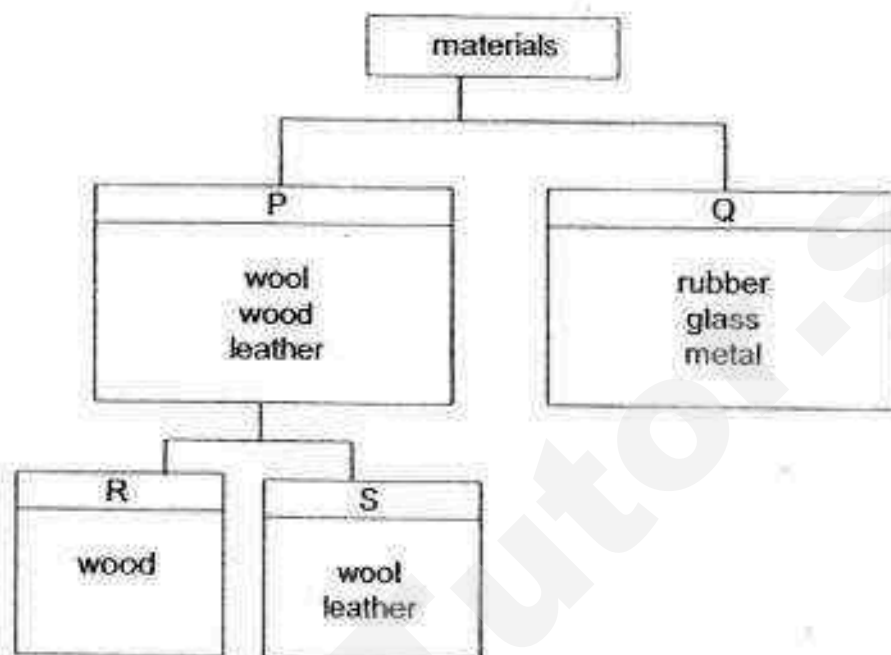
- (1) Digestion starts and ends in the mouth.
 - (2) All food are digested in the small intestine only.
 - (3) Gullet does not produce any digestive juice to digest the food.
 - (4) Stomach produces the most digestive juice so that it can digest most of the food.
12. Study the diagram of a human system below.



Which one of the statements about the system shown is correct?

- (1) It makes food for the body.
- (2) It takes in and removes air from the body.
- (3) It helps to support the body and gives it shape.
- (4) It transports food through the blood to all parts of the body.

13. Study the chart below.



Which one of the following sets of headings could represent P, Q, R and S?

	P	Q	R	S
(1)	strong	breaks easily	from plants	from animals
(2)	from plants	from animals	strong	breaks easily
(3)	flexible	stiff	waterproof	not waterproof
(4)	not waterproof	waterproof	from plants	from animals

14. Jevita wanted to make a beach ball. The table below shows the properties of the materials given to her.

material	flexible	waterproof	breaks easily
A	No	No	Yes
B	Yes	Yes	No
C	No	Yes	Yes
D	Yes	No	No

Based on the information above, which one of the above materials is the most suitable for making the beach ball?

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

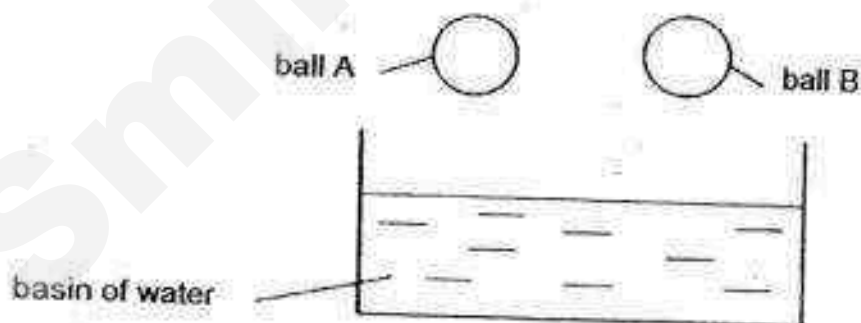
15. Zhi Wei needs to choose a material to build part X of a camping tent. Which of the following properties should he consider when choosing a material?



- A flexibility
- B waterproof
- C transparency
- D ability to float on water

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

16. Jeena had two balls made of different materials. She dropped both balls into a basin of water.

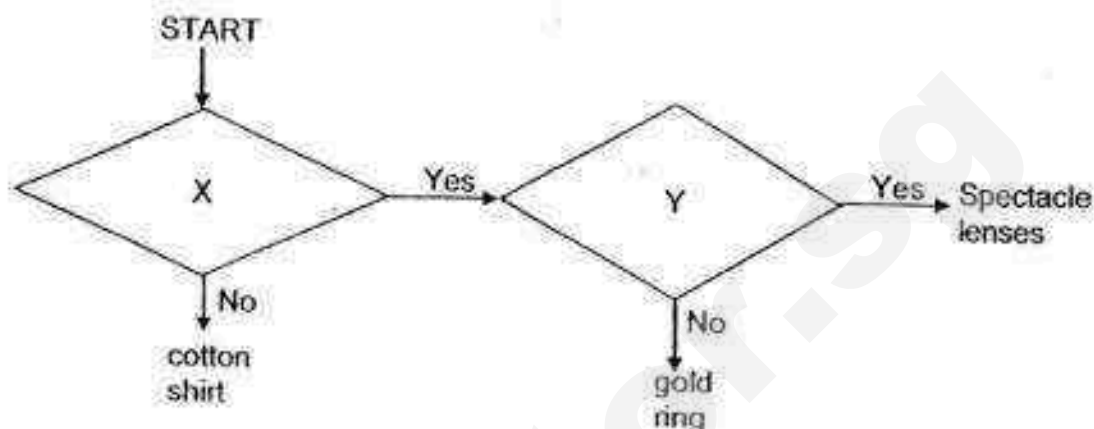


Which of the following properties of the ball could Jeena be testing for?

- A strength
- B waterproof
- C transparency
- D ability to float on water

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

17. Study the flow chart below.



Which one of the following represents the missing questions, X and Y, in the flow chart?

	X	Y
(1)	Does it absorb water?	Is it flexible?
(2)	Is it transparent?	Is it strong?
(3)	Does it absorb water?	Is it transparent?
(4)	Is it waterproof?	Is it transparent?

18. Lauren placed the two poles of a magnet near three different materials, A, B and C, to find out how they interacted. The results are shown below.

Observation	A	B	C
moved away from magnet	√		
moved towards the magnet	√	√	
remained in the same position			√

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

- (1) B is made of glass.
- (2) C is made of copper.
- (3) A is made of aluminium.
- (4) A and C are not magnets.

19. Jessy placed four different magnets, A, B, C and D, near a paper clip placed beside a ruler.



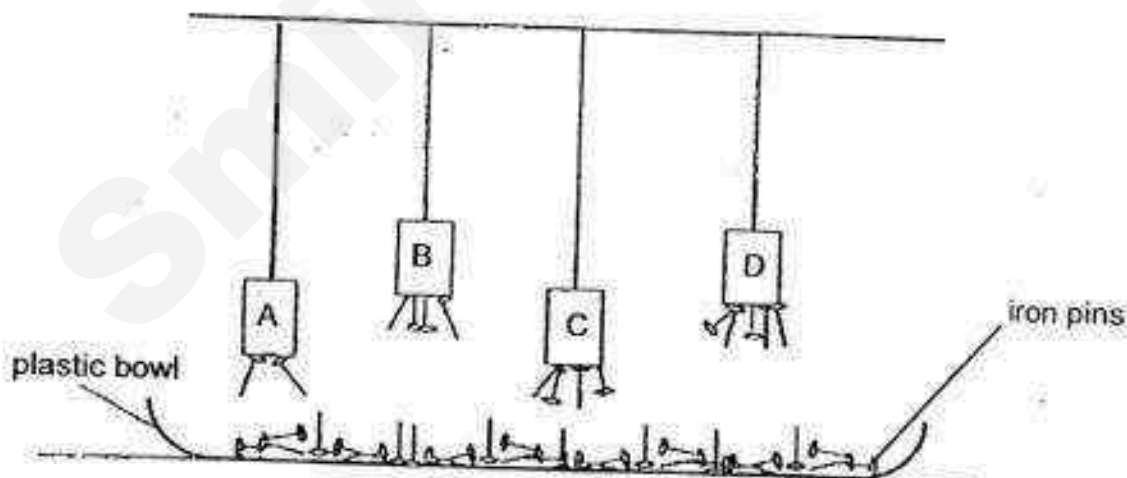
She then measured the distance taken for the different magnets to attract the paper clip.

Magnet	Distance
A	7cm
B	3cm
C	5cm
D	2cm

Based on the data above, which one of the magnets is the strongest?

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

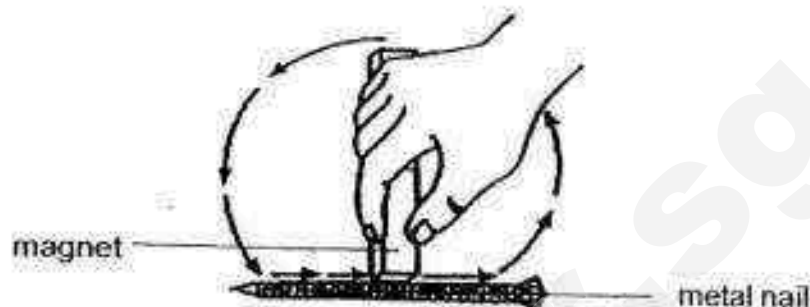
20. Ranveer arranged four magnets, A, B, C and D as shown below.



Based on the diagram above, arrange the strength of the magnets from the strongest to weakest.

	Strongest		Weakest
(1)	A	C	B
(2)	D	B	D
(3)	C	A	A
(4)	B	D	B

21. Qian Hua stroked a metal nail with a magnet for a few minutes.



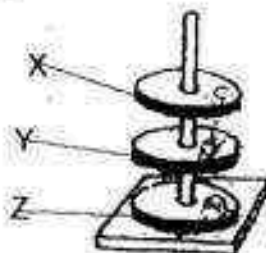
However, after the stroking, the metal nail was not able to attract any steel paper clip.

What is/are the possible reason(s) to explain the results?

- A The nail had a few scratches.
- B The nail was made of copper.
- C Qian Hua was stroking the nail too hard.
- D The number of strokes was not enough.

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

22. Three ring magnets, X, Y and Z, were suspended on top of each other as shown below.

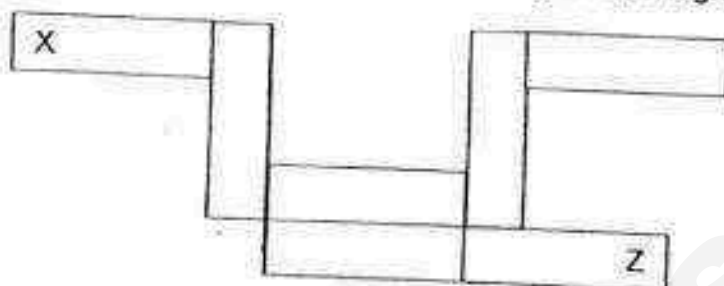


Which of the following actions would allow all the magnets to be attracted to each other?

- A Flip X only
- B Flip Y only
- C Flip X and Y only
- D Flip Y and Z only
- E Flip X and Z only

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

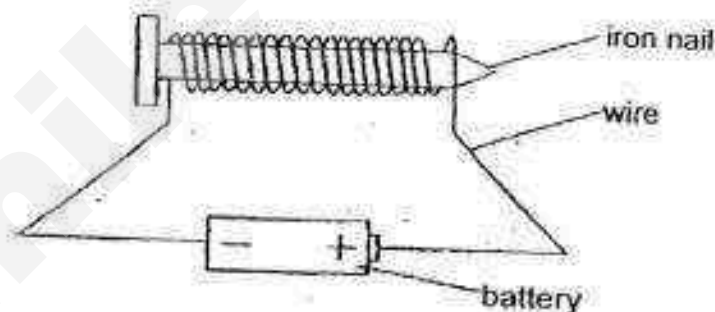
23. Seven magnets have been arranged according to the diagram below.



Based on the diagram above, which one of the following represents the correct poles for magnets X, Y and Z?

	X	Y	Z
(1)	south	north	north
(2)	north	south	south
(3)	south	north	south
(4)	north	north	south

24. Ali set up an experiment as shown below.



He wanted to make the electromagnet stronger. Which of the following actions should he take in order to make the electromagnet stronger?

- A Use a longer wire
 - B Use more batteries
 - C Use an aluminium nail instead of iron
 - D Use more turns of wire around the nail
- (1) A and B only (2) B and C only
 (3) B and D only (4) B, C and D only

NANYANG PRIMARY SCHOOL

PRIMARY 3 SCIENCE

2016

PRACTICE PAPER 1
For SA 2

BOOKLET B

Booklet A:		48
Booklet B :		32
Total :		80

Name: _____ ()

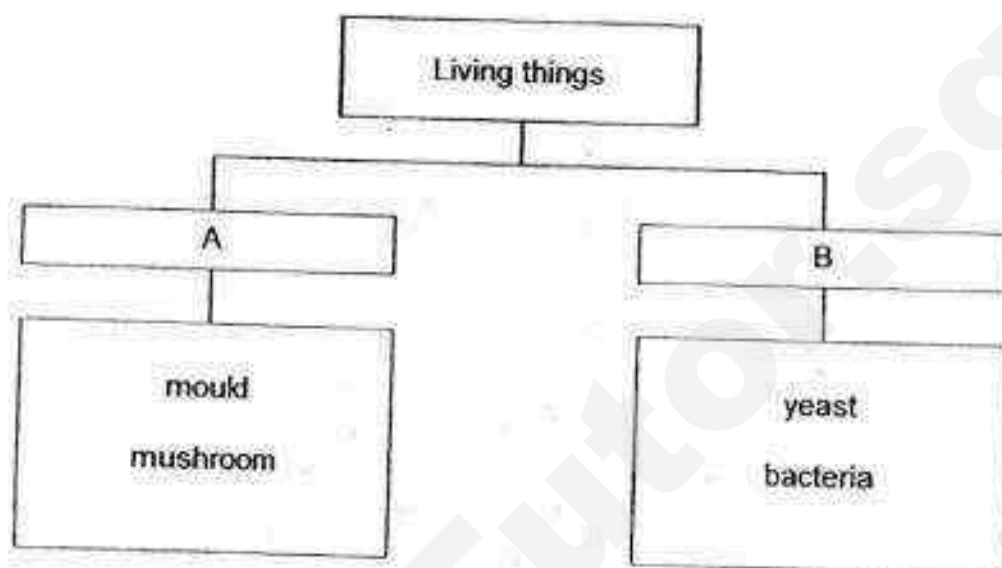
Class: 3 ()

Date: _____

Booklet B consists of 12 printed pages including this cover page.
Section B (32 marks)

Write your answers to questions 25 to 34 in the spaces provided.

25. Study the classification chart below.



(a) What are the possible headings for group A and group B. [1]

A: _____

B: _____

(b) George claimed that bacteria could be harmful or useful. Explain how they could be harmful or useful. [2]

bacteria	Explanation
useful	
harmful	

26. Limei saw a plant in the school garden and observed that it did not bear flowers and fruits. She concluded that it was a non-flowering plant.

- (a) Apart from the observation stated above, what could Limei observe to make the same conclusion. [1]

Limei's teacher identified the plant as a flowering plant.

- (b) Give a reason why there are no flowers on this flowering plant. [1]

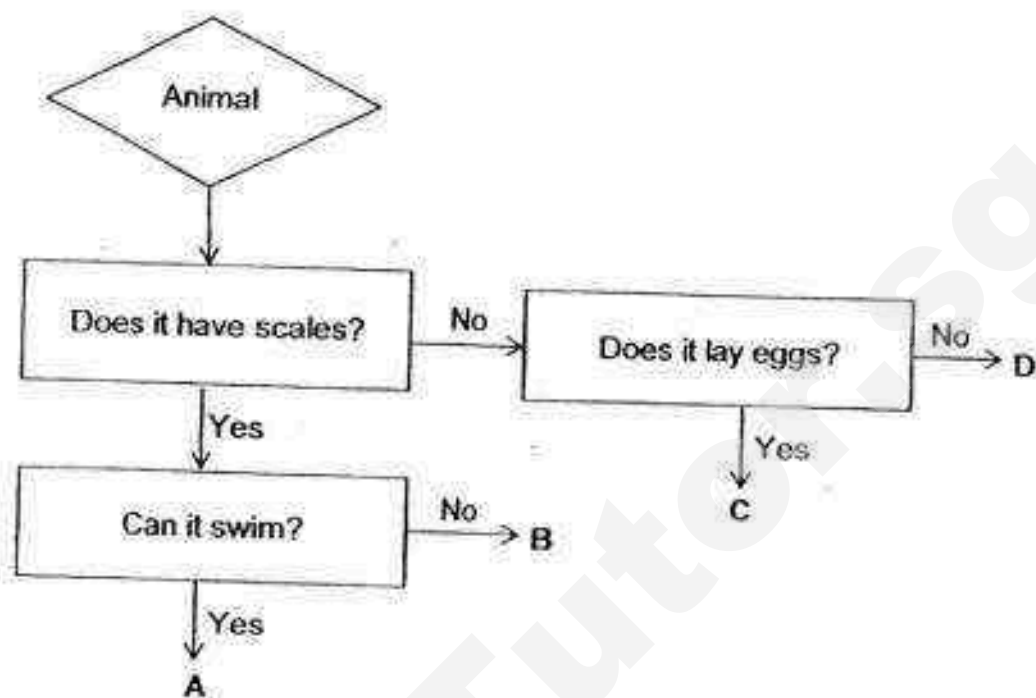
- (c) Limei spotted another organism in the garden as shown below.



- She concluded that it is not a plant. Using the characteristic of the organism, explain why it is not a plant. [1]

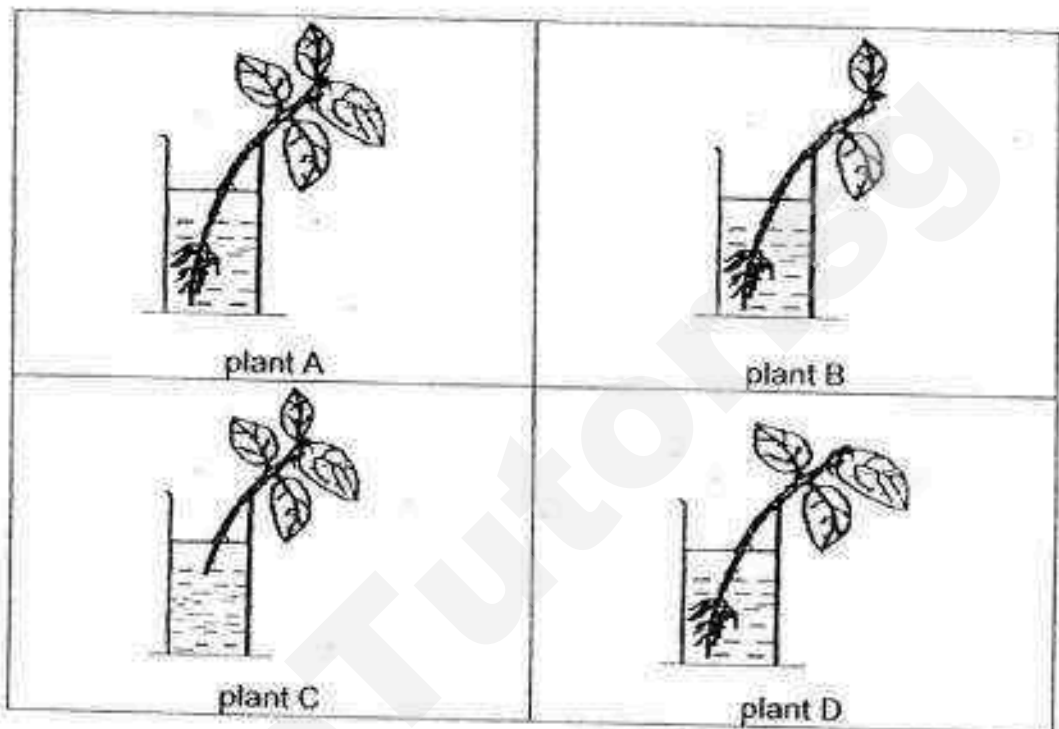
- (d) State a similar characteristic between a fungus and a plant. [1]

27. Study the flowchart below. Answer the questions based only on the information in the flowchart.



- (a) State the characteristics of animal A. [1]
- _____
- _____
- (b) State one **difference** between animal B and animal C. [1]
- _____
- _____
- (c) Which **group** of animals does animal D belong to? [1]
- _____
- (d) Caleb cannot conclude if animal C is an insect or an amphibian. What other observation must he make in order to decide which group of animal it belongs to? [1]
- _____
- _____

28. Avi placed four plants of the same height, 6 cm, in water as shown below. All the plants were given enough sunlight and water.



- (a) Avi observed that plant A stayed alive longer than plant C. Explain his observation.

[1]

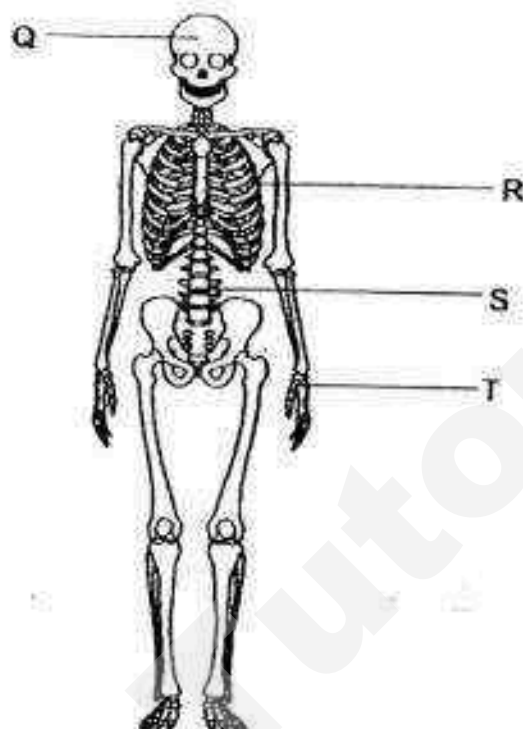
- (b) Avi measured the heights of the plants again at the end of 7 days.

Given that the plants grew under the same conditions, arrange the plants according to their heights. Write down A, B, C and D in the table below.

[2]

Height of the plants			
11cm	9cm	7cm	6cm

29. Study the diagram below.

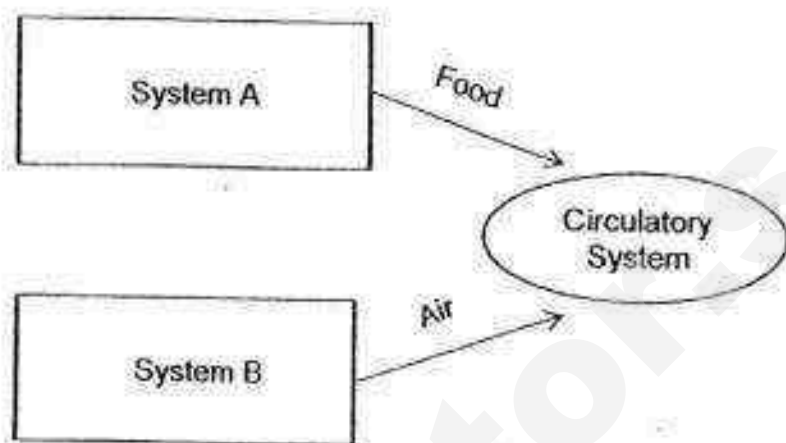


(a) Read the statements carefully. Put a tick (✓) in the correct boxes. [2]

Function of the parts in the skeletal system	True	False
i) Q is not part of the skeletal system.		
ii) R protects the lungs only.		
iii) S allows us to stand upright		
iv) T works with muscle to allow us to move.		

(b) Joe took a deep breath and swam underwater for 10 metres from one end of the pool to the other end. Which **two** main body systems must work together to enable movement in the water? [1]

- (c) Study the diagram about the organ systems of our body below. It shows how three body systems work together to transport food and air to all parts of the body.



Identify systems A and B.

[1]

A : _____ system

B : _____ system

30. Class 3J was given two balls during PE lesson.



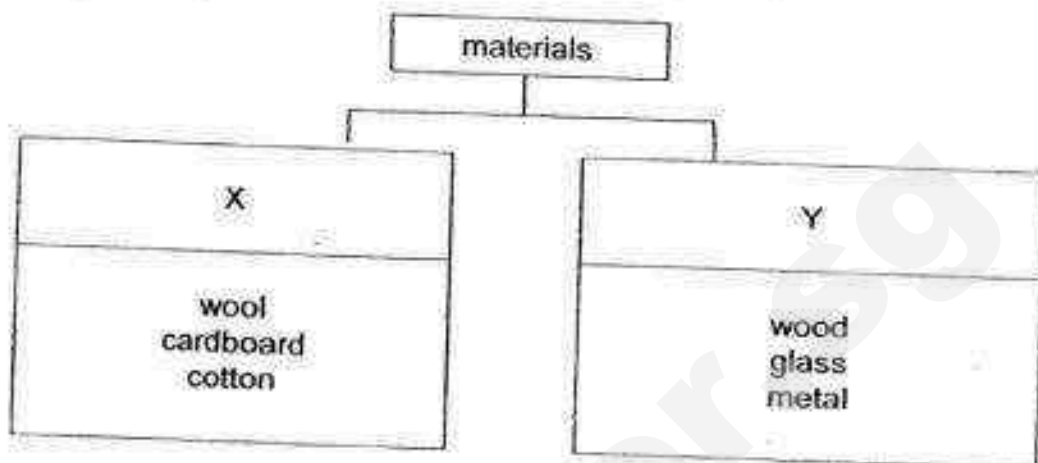
rubber ball



paper ball

Based on the properties of the two materials, which one of the two balls should the class choose to play basketball with? Explain your choice. [2]

31. Study the chart below.



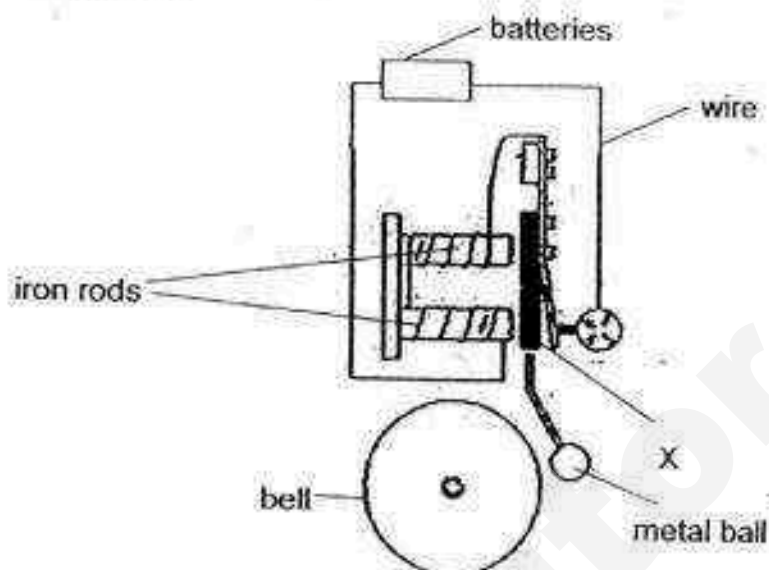
- (a) Based on the properties of materials above, write down suitable heading for boxes X and Y. [1]

X: _____

Y: _____

- (b) Re-group the materials in **group X only**, in the table below, and give **proper headings**. [2]

32. The diagram below shows the circuit of a bell, where 2 iron rods act as electromagnets.



In order for the bell to ring, part X must move towards the iron rods until the metal ball hits the bell.

- (a) After setting up the electromagnet above, the bell did not ring. Explain the possible reason why the bell did not ring.

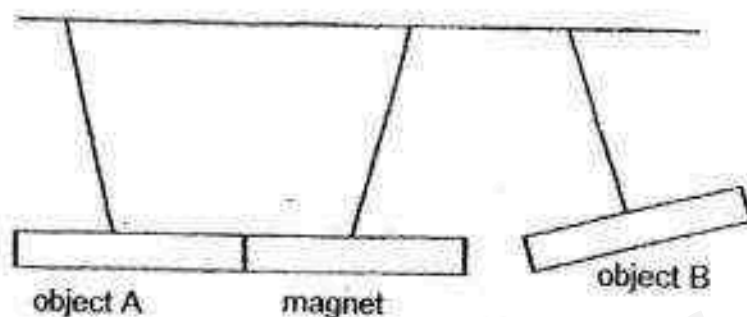
[1]

After making the necessary changes, the bell works perfectly well.

- (b) What will happen to the bell if part X is replaced with a gold plate. Explain your answer.

[1]

33. Zhi Xuan conducted an experiment and he drew the results as shown in the diagram below.

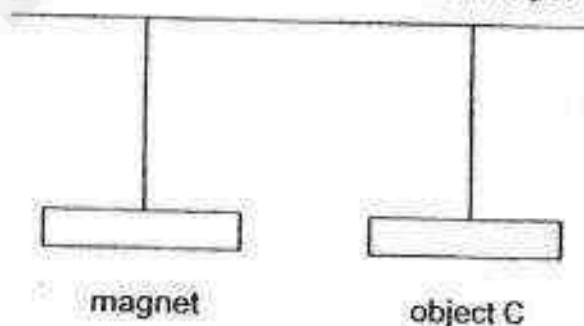


He observed that object A was attracted to the magnet while object B moved away from the magnet.

- (a) Zhi Xuan concluded that object A was definitely a magnet. Explain why he was wrong. [1]

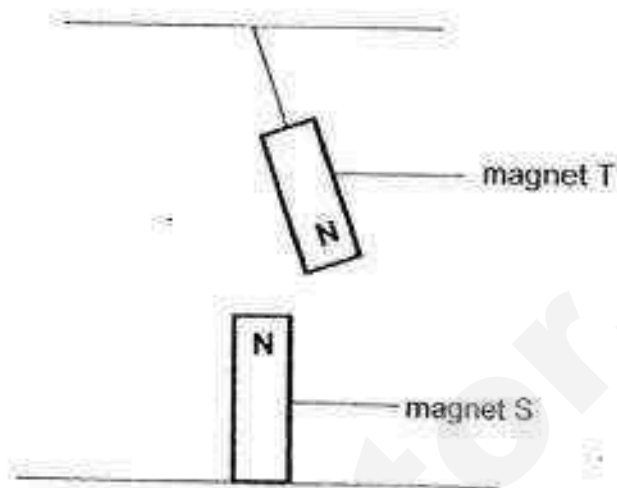
- (b) Explain why object B moved away from the magnet. [1]

He then hung object C and observed that both object did not move.



- (c) Based on the reaction of object C, what can you conclude about the property of object C? [1]

34. Santhi hung one magnet, T, directly on top of another magnet, S, which was secured on the table. She observed that magnet T was always pushed away from magnet S as shown below.



- (a) Explain why magnet T was not able to rest above magnet S. [1]

Santhi then flipped magnet S around such that its north pole is on the table.

- (b) What would Santhi observe about the position of magnet T after the change was made? Explain your answer. [1]

Santhi removed magnet T and heated it for 15 minutes until it was glowing red. She then tried to use magnet T to attract some steel pins but was not able to attract any.

- (c) With the help of another magnet, write down the steps she should take in order for magnet T to be able to attract magnetic materials again. [2]

EXAM PAPER 2016**LEVEL : PRIMARY 3****SCHOOL : NANANG PRIMARY SCHOOL****SUBJECT : SCIENCE****TERM : PRACTICE PAPER 1 FOR SA2**

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

Q25a) A: Can be seen by the naked eye. B: Cannot be seen by the naked eye.

Q25b) Useful: Can be used to make food like cheese and yogurt.
Harmful: Make us sick. Spread diseases

Q26a) She could observe it for a longer period. She could check if the plant has spores.

Q26b) The flowering plant is not at the stage of its flower growth.

Q26c) All plants do not have gills but this organism has gills. It has a cap, gills and stalk but plants have roots, stem and leaves.

Q26d) Fungus reproduce by spores but most plants do not reproduce by spores. They both need air, food, and water.

Q27a) It has scales and can swim.

Q27b) Animal B has scales but animal C does not have scales.

Q27c) Animal D belongs to mammals.

Q27d) He must find out if it has six legs or not. Caleb must observe if it has six legs/ moist skin/ exoskeleton.

Q28a) Plant A has roots to absorb water and mineral salts but plant C does not have roots to absorb water and mineral water

Q28b. 11cm – A 9cm – D 7cm – B 6cm – C

Q29ai) False ii) False iii) True iv) True

Q29b) The skeletal system and the muscular system.

Q29c) A: digestive system B: respiratory system

Q30. The class should probably play with the rubber ball. It is more durable, it can bounce and it is waterproof and it is flexible.

Q31a) X: Flexible Y: Rigid

Q31b)

From plants	From animals
Cotton Cardboard	Wool

Q32a) Maybe the batteries were flat.

Q32b) It will not work. It needs to be a magnetic material so it will attract the iron rods. Gold is a non-magnetic material.

Q33a) We do not know it is a magnet or not as we don't know whether it can repel.

Q33b) B is a magnet and its like poles are facing each other.

Q33c) It cannot be attracted.

Q34a) The like poles at the magnets are facing each other.

Q34b) It would be able to rest above magnet S.

Q34c) She could stroke it and make it into a temporary magnet.

Pei Chun Public School
Semestral Assessment 2 – 2016
Science
Primary 3

Name : _____ () Date : 27 October 2016



Class : Pri. 3 ()

Science Teacher : _____ Time : 1 h 20 min

Section A (24 × 2 marks)

For questions 1 to 24, choose the most suitable answer and shade its number (1, 2, 3 or 4) on the Optical Answer Sheet (OAS) provided.

1. The table below shows the shapes and edges of different types of leaves.

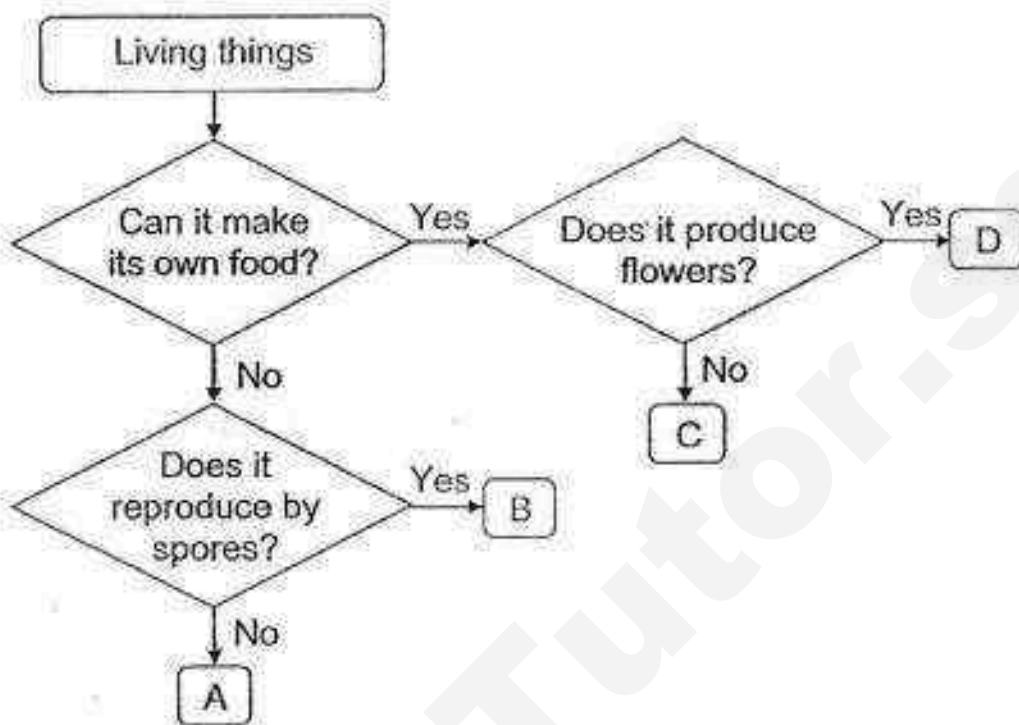
leaf	shape	edge
	heart	toothed
	oval	entire

Which of the following matches the characteristics of the leaf shown below?



	shape	edge
(1)	heart	entire
(2)	heart	toothed
(3)	oval	entire
(4)	oval	toothed

2. Study the following flowchart.



Which of the following is likely to be moss?

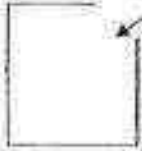











- | | |
|-------|-------|
| (1) A | (2) B |
| (3) C | (4) D |

3. Three similar pots of plants were placed along a corridor. Each pot was placed in a black box. Each box had one or two holes made in it.

The following diagrams show what the plants looked like after some time.



Which of the following correctly shows the boxes in which each pot of plant was placed in?

	Pot X	Pot Y	Pot Z
(1)			
(2)			
(3)			
(4)			

4. Which of the following statements about amphibians is true?

- (1) Amphibians have moist skin.
- (2) Amphibians live on land only.
- (3) Amphibians do not have lungs.
- (4) Amphibians have scales as their body covering.

5. Mary read about animal X in a magazine. She concluded that it is a mammal.

Which of the following characteristics allow her to conclude that animal X is a mammal?

- A : It lives on land.
- B : It has four legs.
- C : It has hair on its body.
- D : It produces milk for its young to feed on.

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

6. The table below shows the properties of materials A, B and C. A tick (✓) shows that the material has the property.

Properties	Materials		
	A	B	C
It bends easily.		✓	✓
It is waterproof.	✓	✓	
It allows most light to pass through.	✓		

Which of the following best represents Material A, B and C?

	A	B	C
(1)	glass	rubber	fabric
(2)	glass	fabric	rubber
(3)	rubber	glass	fabric
(4)	rubber	fabric	glass

7. Which of the following properties of a material should be considered in making part X of the object shown below?

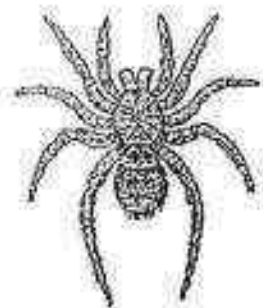


- A : It must be strong.
 B : It must be flexible.
 C : It must be waterproof.
 D : It must allow most light to pass through.

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

8. Which of the following animals is not an insect?

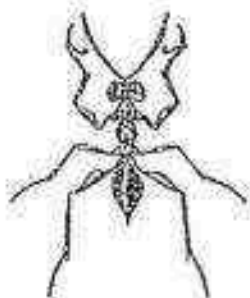
(1)



(2)



(3)

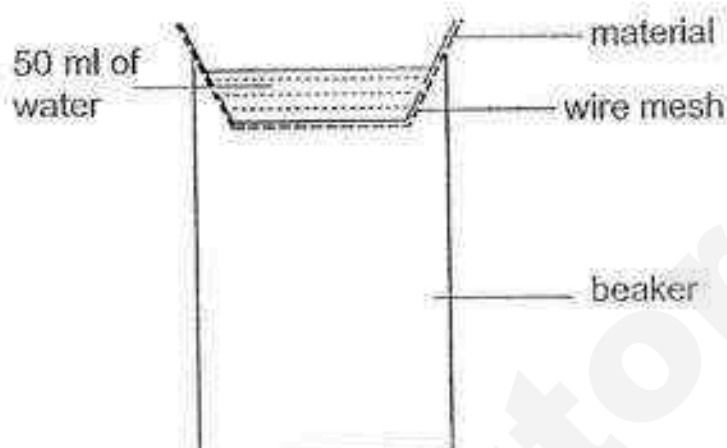


(4)



9. Muthu had four different pieces of materials, A, B, C and D of similar size and thickness. He wanted to find out which material is most suitable to be made into a raincoat.

He set up his experiment using the apparatus as shown in the diagram below and poured 50 ml of water on each material.



After five minutes, he recorded his readings in the table below.

Material	Amount of water in the beaker (ml)	Amount of water left on the material (ml)
A	0	50
B	0	0
C	15	10
D	40	0

Which material, A, B, C or D, is most suitable to be made into a raincoat?

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

10. The table below shows the characteristics of X, Y and Z.

Things	Able to reproduce?	Able to move on its own?	Able to make its own food?
X	Yes	Yes	No
Y	No	Yes	No
Z	Yes	No	Yes

Which of the following statements is true about X, Y and Z?

- (1) Only X is a living thing.
- (2) Only Y is a living thing.
- (3) Only X and Z are living things.
- (4) All X, Y and Z are living things.

11. Four pupils made the following statements about fish and reptiles.

Ron : All fish and reptiles have shells.

Siti : Most of the fish and reptiles reproduce by laying eggs.

Tim : Fish and reptiles have gills to help them breathe underwater.

Uma : Fish and reptiles have dry skin that is usually covered with scales.

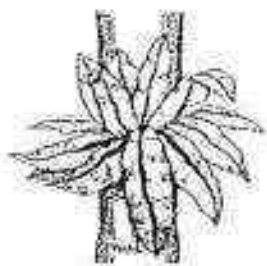
Who is correct?

- (1) Ron
- (2) Siti
- (3) Tim
- (4) Uma

12. Caroline found two living things in the garden, as shown below.



mushroom



bird's nest fern

She made the following statements about the two living things.

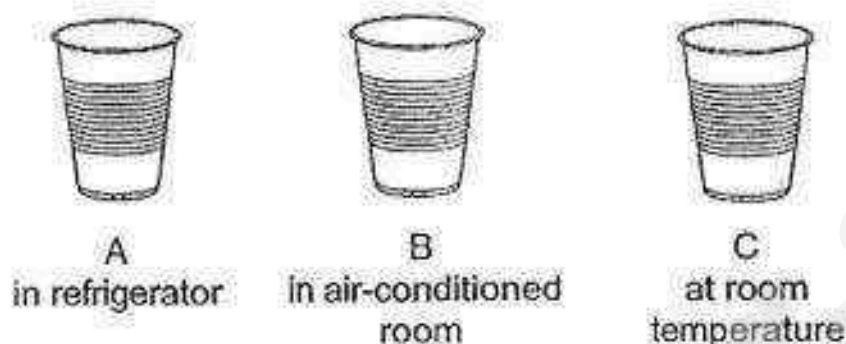
- A : They reproduce by spores.
- B : They are non-flowering plants.
- C : They make use of sunlight to make their own food.

Which of the above statements are false?

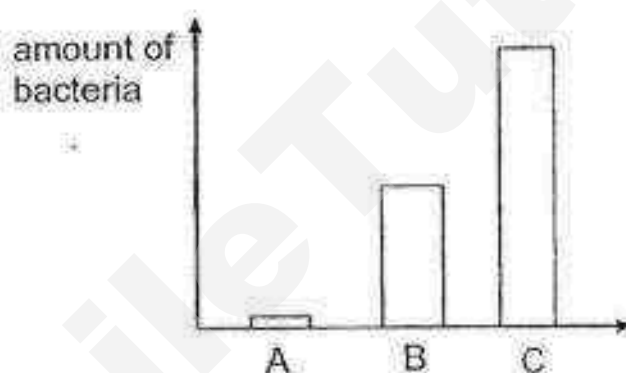
- (1) A and B only
- (2) B and C only
- (3) A and C only
- (4) A, B and C

13. Tim poured the same amount of milk into three similar cups.

He placed the cups at three different places for two days as shown below.



After two days, he measured the amount of bacteria in each cup of milk using a microscope and plotted the graph as shown below.



Based on his results, what can Tim conclude?

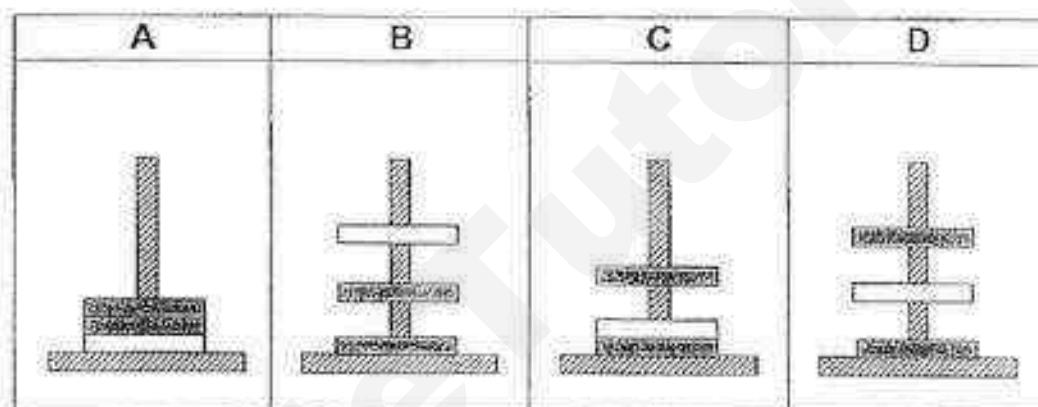
- (1) Bacteria need milk to grow well.
- (2) Bacteria cannot grow in low temperature.
- (3) Bacteria grow faster in warm temperature.
- (4) Bacteria come in different shapes and sizes.

14. Devi had two ring magnets and a thin plastic ring.

She slotted them through the wooden stand as shown in the diagram below.

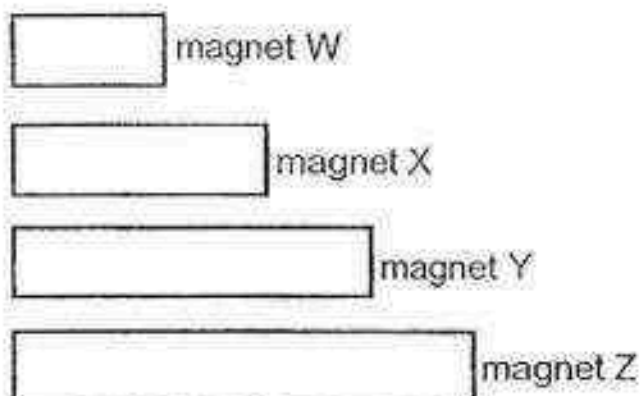


Which of the following observations could Devi possibly make?



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

15. Ali has four magnets as shown below.



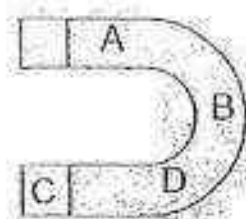
He placed each magnet 8 cm from a pile of iron pins and observed the number of iron pins attracted. He then recorded the results in the table below.

Magnet	W	X	Y	Z
Number of iron pins attracted	19	9	15	12

Based on his results, what can Ali conclude?

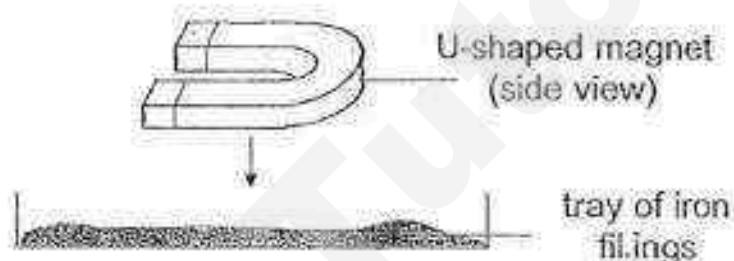
- (1) Magnet X is the strongest.
- (2) The longer the magnet, the stronger its magnetic strength.
- (3) Magnet Y is stronger than magnet Z but weaker than magnet W.
- (4) Magnet Z is stronger than magnet Y but weaker than magnet W.

16. Ravi carried out an experiment to test the magnetic strength of the different parts of a U-shaped magnet.

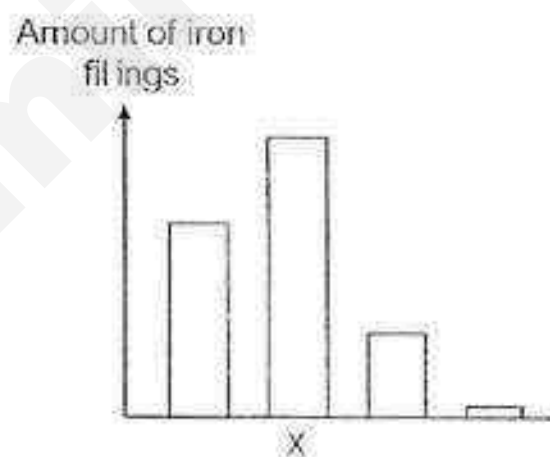


U-shaped magnet
(bottom view)

He placed the U-shaped magnet into a tray of iron filings as shown below.



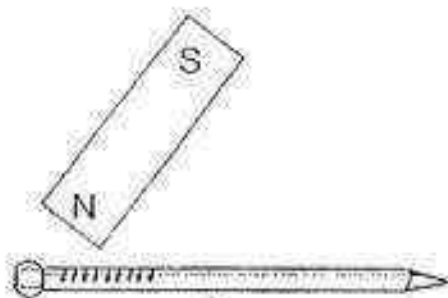
He then recorded the amount of iron filings attracted to each part and plotted a bar graph based on his results as shown below.



Which part A, B, C or D does "x" represent?

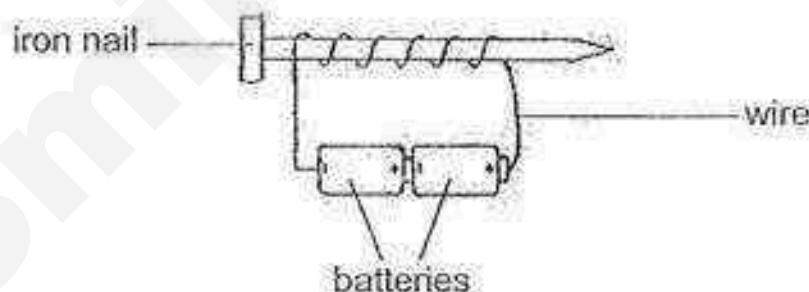
- (1) A
- (2) B
- (3) C
- (4) D

17. Hema used the stroking method to make a magnet as shown below.



However, the nail did not attract any iron filings. Which of the following could be the reason for her observation?

- (1) The nail was made of steel.
 - (2) She stroked the nail back and forth.
 - (3) The magnet she used was too strong.
 - (4) She used the same pole of the magnet to stroke the nail.
18. Tom used the electrical method to make a magnet. He coiled the wire six times around an iron nail as shown below.



He noticed that the magnet attracted three paper clips.

Which of the following would happen if he coiled the wire 15 times around the iron nail?

- (1) No paper clips would be attracted.
- (2) More paper clips would be attracted.
- (3) Three paper clips would be attracted.
- (4) Fewer paper clips would be attracted.

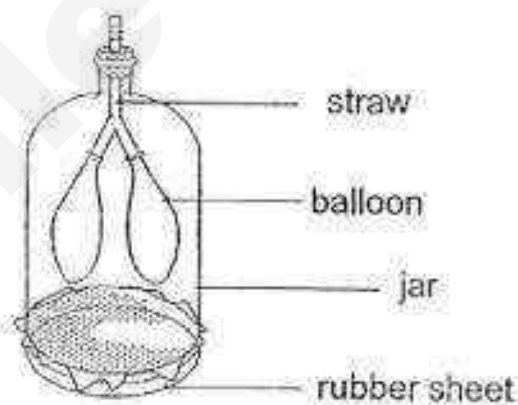
19. Study the table below.

System	Function
skeletal	gives the body shape.
respiratory	removes air from our body
muscular	protects the organs in our body
circulatory	carries useful substances to all parts of our body

Which system is matched with the wrong function?

- (1) Skeletal
- (2) Respiratory
- (3) Muscular
- (4) Circulatory

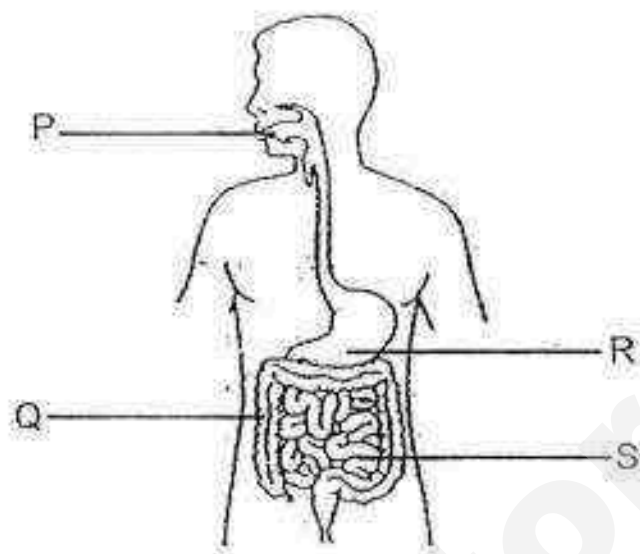
20. The model below represents a body system.



Which body system does it represent?

- (1) Muscular
- (2) Digestive
- (3) Circulatory
- (4) Respiratory

21. At which part, labelled P, Q, R and S, is food completely digested?



- (1) P
 - (2) Q
 - (3) R
 - (4) S
22. Which of the following is not a system?

(1)



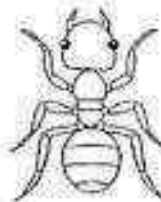
sharpener

(2)



clock

(3)



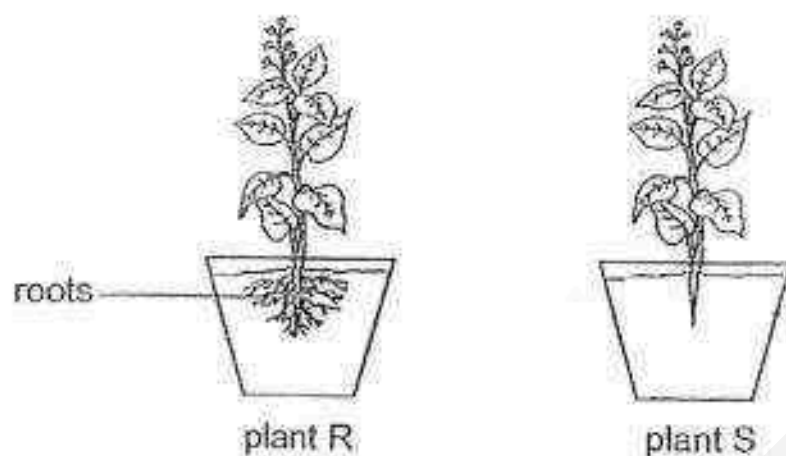
ant

(4)



plastic fork

23. Mary has two identical plants as shown below.

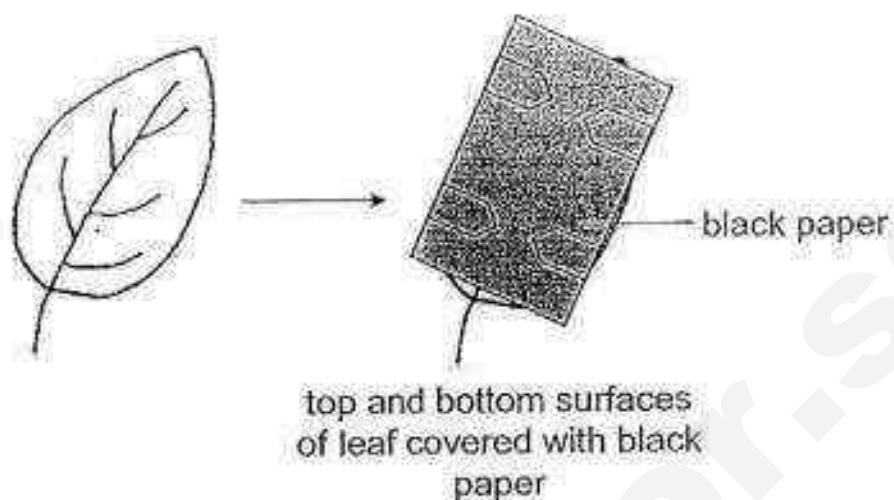


She tried to pull the plants out. She observed that she had to use more strength to pull plant R out as compared to plant S.

Which statement best explains her observation?

- (1) The roots hold the plant firmly to the soil.
- (2) The roots transport water to the rest of the plants.
- (3) The stem transports water to the rest of the plants.
- (4) The stem of plant R is stronger than the stem of plant S.

24. The diagram below shows a leaf from a plant covered in black paper.



What happens to the plant if all the leaves of the plant are covered this way?

- (1) It will not be able to bear fruits.
- (2) It will not be able to make food.
- (3) It will not be able to stand upright.
- (4) It will not be able to absorb water and minerals.

End of Section A

Pei Chun Public School
Semestral Assessment 2 – 2016
Science
Primary 3

Name : _____ ()

Class : Pri. 3 ()

Date : 27 October 2016

Time : 1 h 20 min

Science Teacher : _____



Parent's signature: _____

Section A	48
Section B	32
Total	80

Section B (32 marks)

For questions 25 to 35, write your answers in the spaces provided.

25. Study the two groups of fruits below.

group G	group H
	

a) Give the headings for group G and group H. [2]

group G: _____

group H: _____

b) Suggest another way to group the fruits. [1]

SCORE	
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26. The following table gives information on five animals, P, Q, R, S and T, based on three characteristics. A tick (✓) shows that the animal has the characteristic.

Characteristic	P	Q	R	S	T
Can fly		✓	✓	✓	
Lays eggs	✓	✓		✓	✓
Has feathers	✓			✓	

- a) Based on the information given in the table, state **two** characteristics of animal T. [1]

- b) Which of the animals, P, Q, R, S or T, are birds? Give a reason for your answer. [2]

- c) The diagram below shows a bat.



Match the bat to the correct letter (P, Q, R, S or T) in the table.

It is animal _____.

[1]

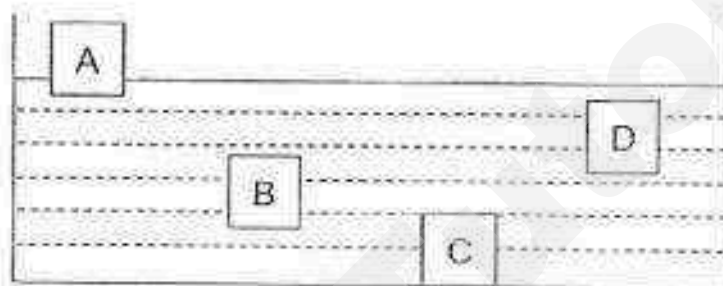
SCORE	
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27. Jill conducted an experiment on four different types of material to be used for making an anchor for a toy boat.

An anchor is an object that is sunk into the water to stop the boat from drifting away. The diagram below shows an anchor.



She placed the materials into a container filled with water as shown below.



- a) Name the property that Jill tested in her experiment.

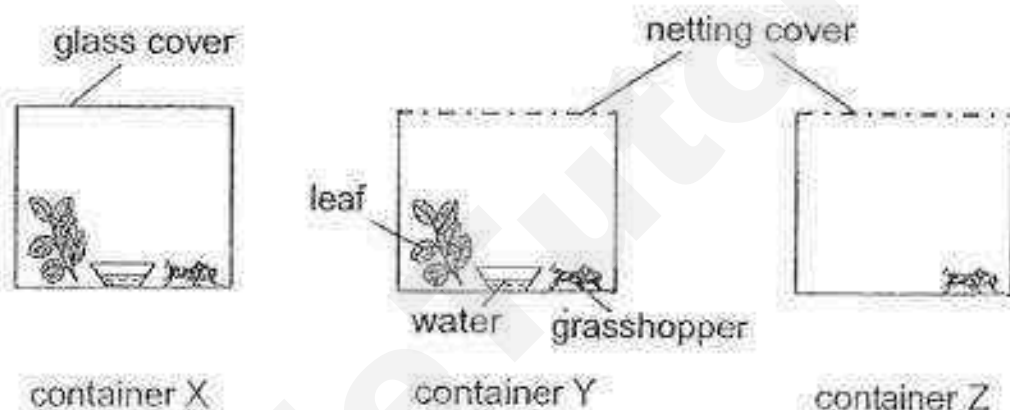
[1]

- b) Which of the following materials, A, B, C or D, is the most suitable for making an anchor for the toy boat?
Give a reason for your answer.

[1]

28. Aminah saw a grasshopper in the field and tried to catch it with her bare hands. The grasshopper hopped away when she went near it.
- a) From her observation, name a characteristic of living things that the grasshopper shows. [1]

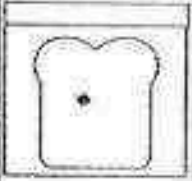

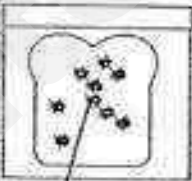
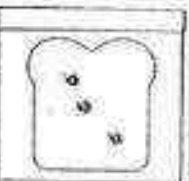
After some time, Aminah caught three grasshoppers of similar sizes and placed each grasshopper into similar containers, X, Y and Z as shown below.



- b) In which container, X, Y or Z, would the grasshopper be able to stay alive for the longest time? Explain why. [2]

29. Lucy took four similar slices of bread and sprinkled different amount of water on each slice. She then placed each slice into a sealed bag and placed them on the kitchen table.

After one week, she recorded her observations as shown in the table below.

	Bag			
	A	B	C	D
Amount of water sprinkled on the bread (ml)	0	10	20	5
Amount of bread mould observed after one week	1 patch 	5 patches 	9 patches 	3 patches 

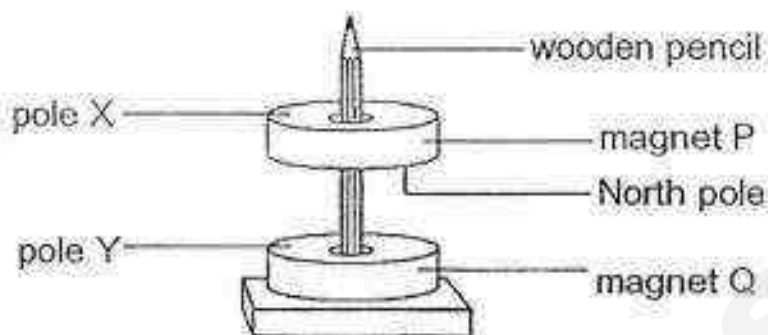
patches of bread mould

- a) How did the amount of water sprinkled on the bread slice affect the amount of mould growth? [1]

- b) Other than water, state the other two conditions needed for bread mould to grow. [1]

SCORE	
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30. Kevina placed two identical ring magnets P and Q through a wooden pencil. She observed that the ring magnets stayed apart when they were placed on top of one another as shown below.



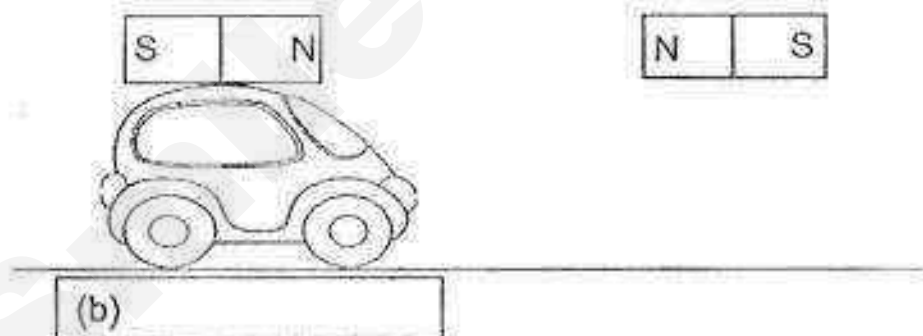
- a) Identify the poles X and Y.

[1]

X: _____

Y: _____

Kevina attached a bar magnet above a toy car. She tried to move the toy car by bringing another bar magnet close to it as shown below.



Draw an arrow (\longrightarrow or \longleftarrow) in the box above to show the direction in which the car would move when Kevina brought the magnet close to the car as shown above.

[1]

- c) Give a reason for your answer in part (b).

[1]

(question continues on the next page)

SCORE	
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Kevina made some changes to her set-up and observed the effect of each change.

Put a tick (✓) in the appropriate box to indicate what would happen to the toy car when the following changes were made to the set-up.

[2]

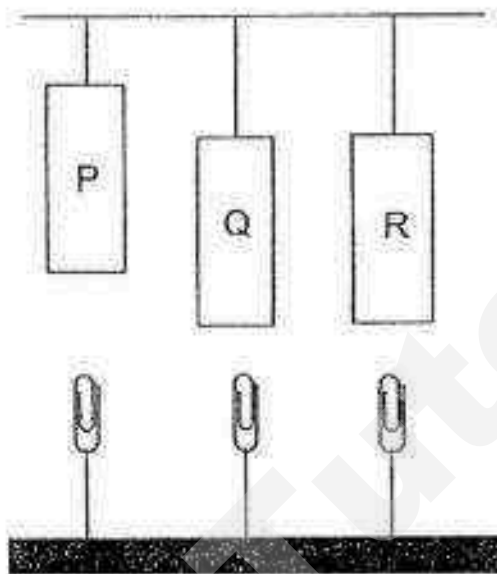
d)

Changes made	Toy car will remain at the same position.	Toy car will move towards the magnet.	Toy car will move away from the magnet.
Kevina turned the magnet that she was holding such that the south-pole was facing the North pole of the magnet on the toy car.			
Kevina replaced the magnet on the toy car with a copper rod.			

SCORE

31. Wei Han has a bar magnet. She used the stroking method to turn three similar iron bars P, Q and R into magnets.

She then set up an experiment using the three iron bars to test their strength. The diagram below shows the greatest distance each iron bar, P, Q and R, can attract the paper clips from.



- a) Which iron bar has become the strongest magnet?

[1]

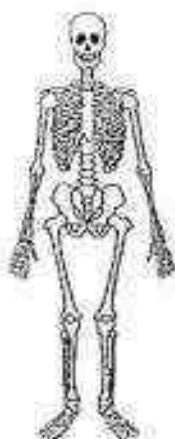
- b) Suggest a reason how the iron bar mentioned in part (a) became a stronger magnet than the other two iron bars.

[1]

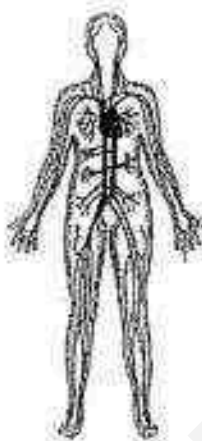
SCORE

32. Match the body systems to its correct function.

[3]



- carries waste materials away from different parts of the body



- takes air into the body

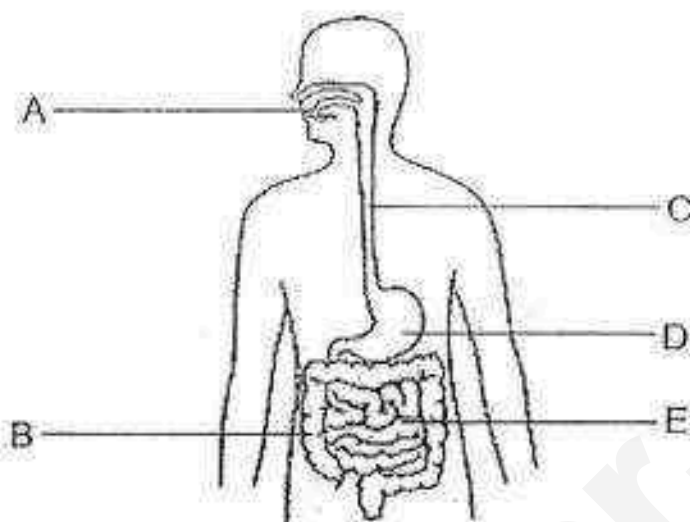


- helps different parts of the body to move.

- protects the organs in the body

- breaks down food into simple substances

33. The diagram below shows the human digestive system.



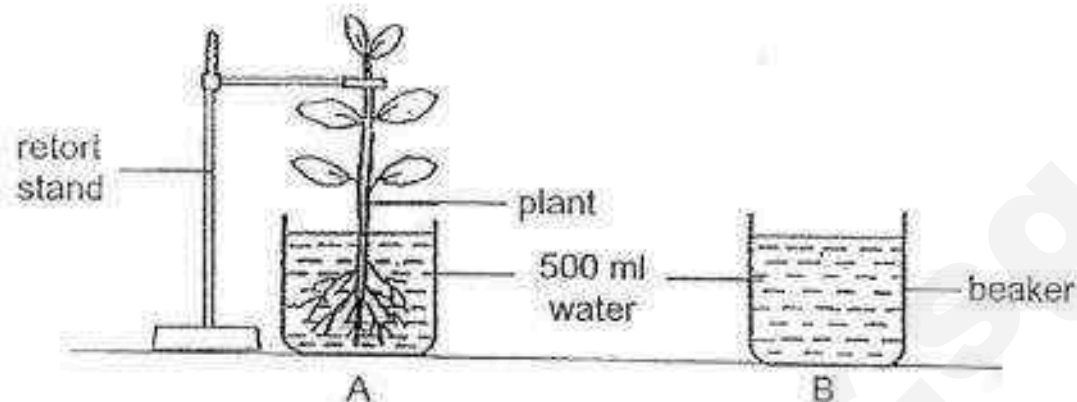
- a) State the part(s) where digestive juices are released. [1]

- b) State the part where water is absorbed into the body. [1]

- c) In the blanks below, indicate the order of the events, by writing numbers 1 to 5, when Mina ate a sandwich. Number '1' has been indicated below. [2]

Order	Event
	Food is mixed with more digestive juices and digestion continues.
	Partially digested food travels down the gullet.
	Water is absorbed and the solid waste is passed out of the body.
	Digestion of food is completed and digested food passes through the walls of the digestive system and into the blood.
1	Mina took a bite of the sandwich. Her teeth chewed her food into smaller pieces.

34. Sam poured 500 ml of water into two identical beakers, A and B. He placed a plant in beaker A as shown below.



He left both set-ups in a room for a few days.

- a) Circle the correct answer below.

After one week, the amount of water in beaker A will be

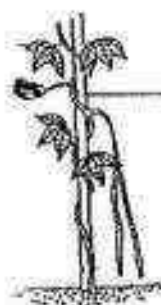
(*less than* / *more than* / *the same as*) the amount of water in beaker B. [1]

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

35. Aini observed two plants in her garden as shown below.



plant A



wooden
pole

plant B

- a) What is the difference between the stems of plant A and B? [1]

- b) Based on your answer in part (a), how does coiling around a wooden pole help plant B? [1]

End of Section B

Set by : Mrs Yogeshwari Manikandan and Mdm Ong Bok Hoon
Vetted by: P3 Science teachers

SCORE	
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EXAM PAPER 2016 (P3)

SCHOOL : PEI CHUN

SUBJECT : SCIENCE

TERM : SA2

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

25)a)G: one seed H: many seed

b)Texture of skin

26)a)T cannot fly and it can lay eggs.

b)P and S are birds, because only birds have feathers and they have feathers.

c)R.

27)a)Ability to float or sink in water.

b)C. It was the only material that sank to the bottom of the water. / It sank the deepest.

28)a) Living things respond to changes around them.

b) In container Y. Only the grasshopper in container Y has enough air, food and water to stay alive for the longest time.

29)a) When the amount of water sprinkled on the bread slice increases, the amount of mould growth increases.

b) Air and warmth.

30)a) X: South Y: North

b) 

c) Like poles of the bar magnet above the toy car and the bar magnet Kevin was holding were facing each other, so they repelled.

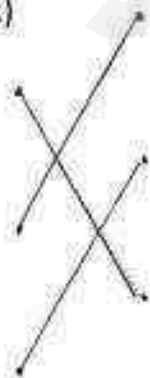
d)

	✓	
✓		

31)a) P is the strongest.

b) It was stroked the most number of times / more times than the rest

32)



33)a)A, D and E.

b)B.

c)3, 2, 5, 4, 1

34)a)les than

b)The roots of the plant in beaker A have absorbed/ taken is some water.

35)a)Plant A's stem is strong ,but plant B's stem is weak.

b)Plant B's stem is able climb higher to support the leaves to get more sunlight to make food.



RED SWASTIKA SCHOOL

SCIENCE 2016 SEMESTRAL EXAMINATION 2 PRIMARY 3

Name : _____ ()

Class : Primary 3/ _____

Date : 27 October 2016

BOOKLET A

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

Booklet A: 24 questions (48 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 15
 - b. Questions 1 to 24

Section A

For Questions 1 to 24, choose the most suitable answer and shade its number in the OAS provided.

1. Study the two groups of things shown in the table below.

Group A	Group B
 bowl	 monkey
 ruler	 plant

Which one of the following is correct?

- (1) Group A can reproduce.
- (2) Group B needs air, food and water.
- (3) Both Group A and Group B can grow.
- (4) Both Group A and Group B move around.

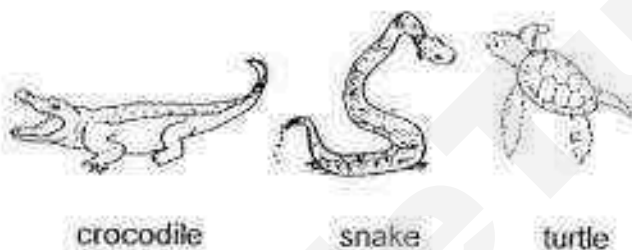
2. Look at the table below.

Age of Ali	Height of Ali
3	80 cm
4	85 cm
5	89 cm
6	94 cm

What characteristic of living things does it show?

- (1) Living things can grow.
- (2) Living things can reproduce.
- (3) Living things can respond to changes.
- (4) Living things can move from place to place.

3. Look at the pictures of animals below.

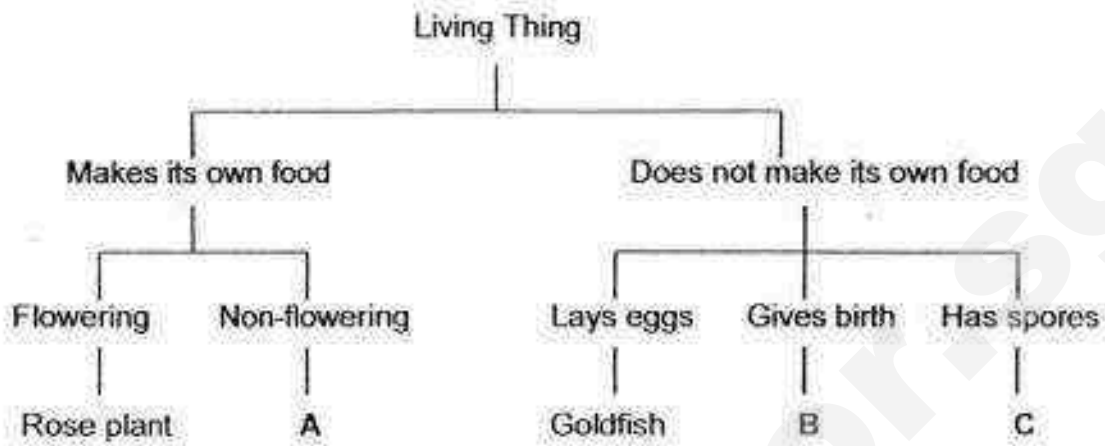


Which of the following characteristics do these animals have that allow(s) them to be classified in the same group?

- A: Legs
- B: Scales
- C: Flippers
- D: Hard shell

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

4. Look at the classification chart below.



Which one of the following shows correctly what A, B and C could be?

	A	B	C
(1)	cat	fern	mushroom
(2)	fern	cat	mushroom
(3)	mushroom	fern	cat
(4)	fern	mushroom	cat

5. Sue has classified the animals below into the same group.



penguin



goldfish



whale

Which one of the following animals can be put into the same group as the animals above and why?

(1)



bat

Reason: It has fur.

(2)



beetle

Reason: It has a hard body covering.

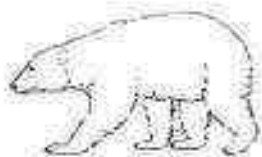
(3)



monkey

Reason: It is a mammal.

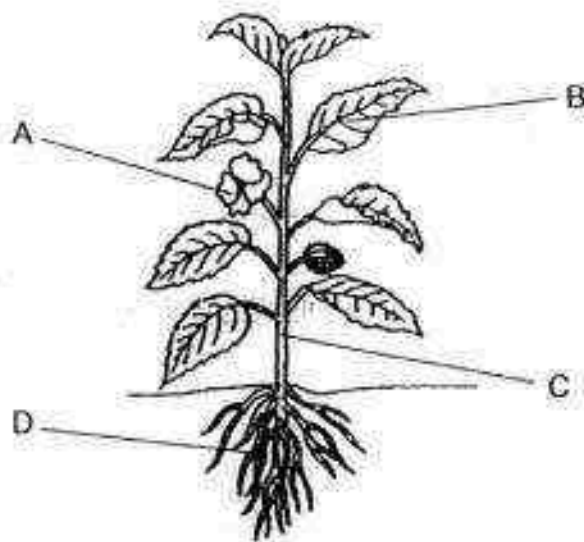
(4)



polar bear

Reason: It can swim.

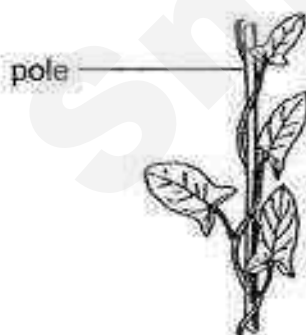
6. Look at the diagram below.



Which part of the plant helps it to make food?

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

7. Look at the plant below.



Which of the statements is correct?

- (1) The root holds the plant upright.
- (2) The stem holds the plant upright.
- (3) The root uses the pole as a support to grow upright.
- (4) The stem uses the pole as a support to grow upright.

8. Which of the following shows the path that food takes after it enters the mouth?

- (1) mouth → stomach → gullet → large intestine → small intestine
- (2) mouth → gullet → stomach → small intestine → large intestine
- (3) mouth → small intestine → large intestine → gullet → stomach
- (4) mouth → large intestine → small intestine → stomach → gullet

9. The leaves of a rose plant were covered completely with black tape. It was then placed in the garden and watered daily. After two weeks, the plant died.



Some students explained why the plant died.

Ariel: The black tape prevented the leaves from getting sunlight to make food.

Bob: The black tape prevented the tiny openings under the leaf from taking in air.

Chris: The black tape prevented the leaves from absorbing water.

Dolly: The black tape prevented the leaves from absorbing minerals.

Which students have given the correct explanations?

- (1) Ariel and Bob only.
- (2) Ariel and Chris only.
- (3) Bob and Chris only.
- (4) Bob and Dolly only.

10. Look at the descriptions of two living things A and B below.

Descriptions	Living thing A	Living thing B
has spores	✓	X
can be found on trees	✓	X
bears flowers	X	✓

Which of the following statements is/are correct?

- A: Living thing A can be a fungus.
B: Living thing B can be a flowering plant.
C: Living thing A can be a fern.

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

11. Mr Tan placed a plant in a set-up as shown in Diagram 1 for four weeks and watered it daily.

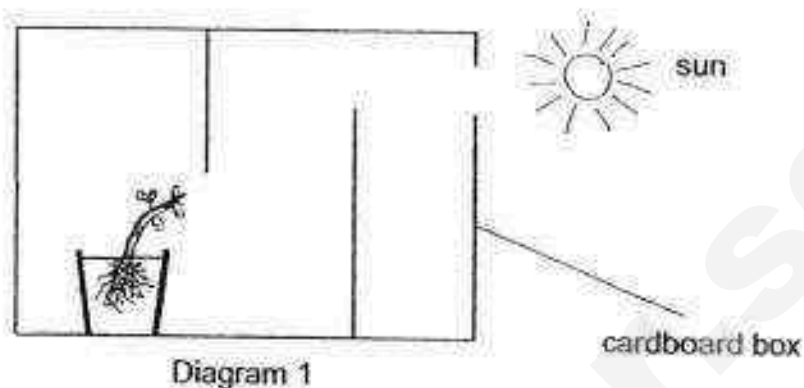
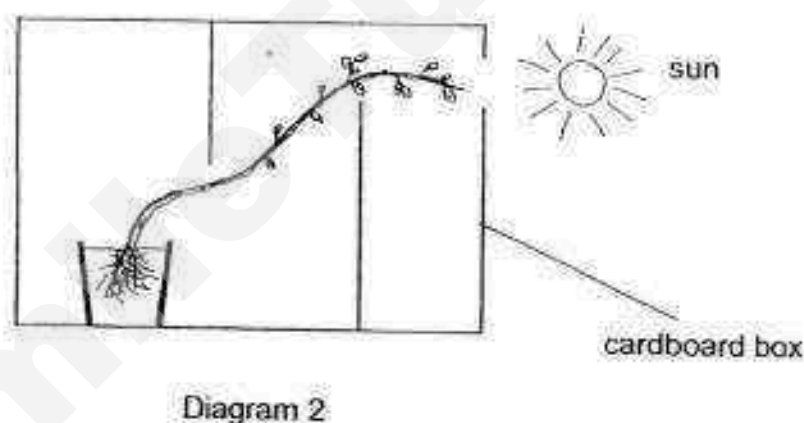


Diagram 2 shows how the plant had grown after four weeks.



Based on the experiment, what can Mr Tan conclude?

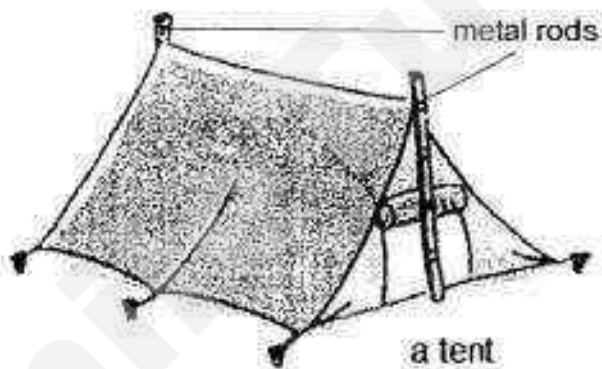
- (1) Plants need air, food and water.
- (2) Living things grow and reproduce.
- (3) Living things do not move on their own.
- (4) Plants respond to changes around them.

12. Xavier carried out an experiment to find out whether his chilli plant would grow better when watered with pond water or sea water. Which of the following variables should he keep the same?

A: the type of soil used
B: the type of water given
C: the place to put the plant
D: the amount of water given

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

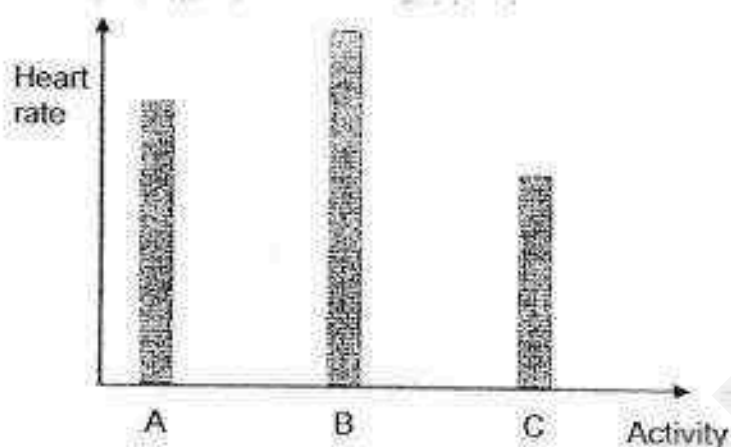
13. A camping tent has metal rods to hold it up, support it and give the tent its shape.



Which of the following systems in our body provides similar functions as the metal rods used in a tent?

- (1) skeletal system
(2) digestive system
(3) muscular system
(4) respiratory system

14. The graph below shows the heart rate of a girl when she was doing each of the activities A, B and C.



Which of the following shows the activities that she was most likely doing?

	A	B	C
(1)	walking	resting	running
(2)	walking	running	resting
(3)	resting	running	walking
(4)	running	walking	resting

15. Four students made some statements about the human digestive system.

Andy: Digestion is completed in the small intestine.

Bala: All the digested food will go to the large intestine.

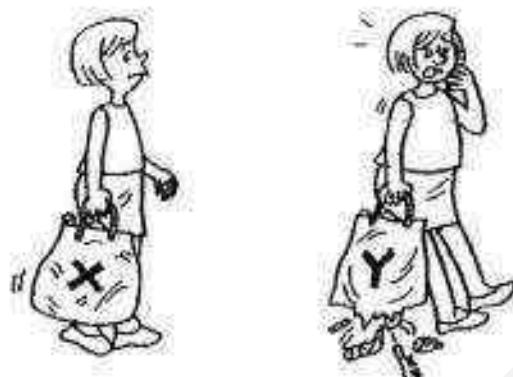
Clara: The small intestine is the longest organ in the digestive system.

Din: Water from the undigested food is absorbed by the small intestine.

Who made the correct statements?

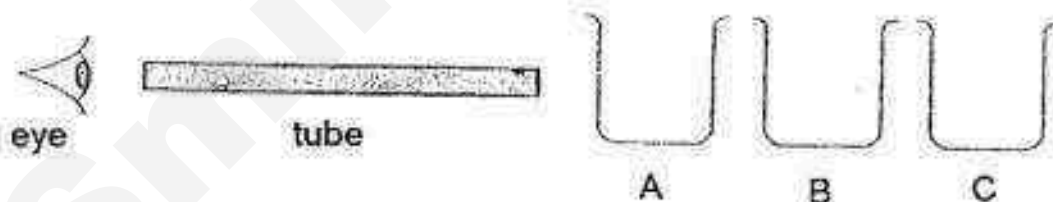
- (1) Andy and Bala
- (2) Andy and Clara
- (3) Clara and Din
- (4) Bala and Din

16. Shi Lin puts the same things into two carrier bags, X and Y, which are made of different materials. The results of her experiment are shown below.



She concludes that _____

- (1) Bag Y is lighter than bag X.
 - (2) Bag X is weaker than bag Y.
 - (3) Bag X is stronger than bag Y.
 - (4) Bag Y is more flexible than bag X.
17. Peter looks through a hollow tube as shown below. Cups A, B and C are made of different materials and they are aligned in a straight line. He can see cups A and B clearly but he cannot see cup C.



Which of the following materials are cups A, B and C likely to be made of?

	Cup A	Cup B	Cup C
(1)	paper	glass	metal
(2)	metal	glass	paper
(3)	metal	paper	glass
(4)	glass	metal	paper

18. Which materials cannot be used to make magnets?

- A: steel
- B: copper
- C: iron
- D: silver

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

19. Look at the magnets below.



W



X



Y



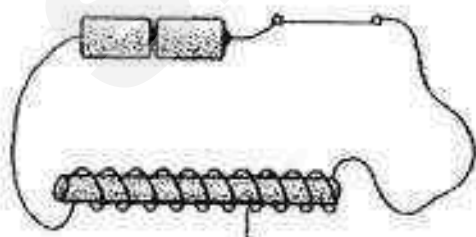
Z

Which of the following correctly classifies the types of magnets shown?

	W	X	Y	Z
(1)	U-shaped	ring	bar	horseshoe
(2)	bar	U-shaped	horseshoe	ring
(3)	bar	horseshoe	U-shaped	ring
(4)	ring	bar	horseshoe	U-shaped

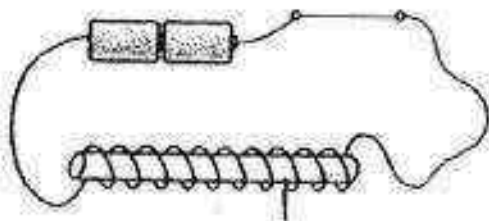
20. Which of the following rods will become an electromagnet?

(1)



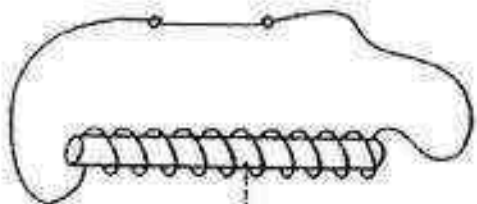
iron rod

(2)



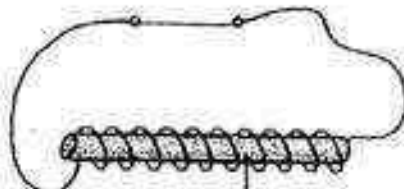
plastic rod

(3)



plastic rod

(4)



iron rod

21. Mina puts a magnet near object L as shown below. The S-pole of the magnet attracts both parts J and K.

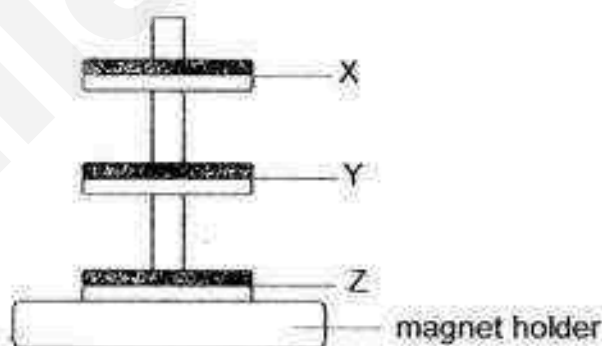


Which of the following statements are true?

- A: Object L is made of steel.
- B: Object L is made of copper.
- C: The N-pole of the magnet will repel part J.
- D: The N-pole of the magnet will attract part K.

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

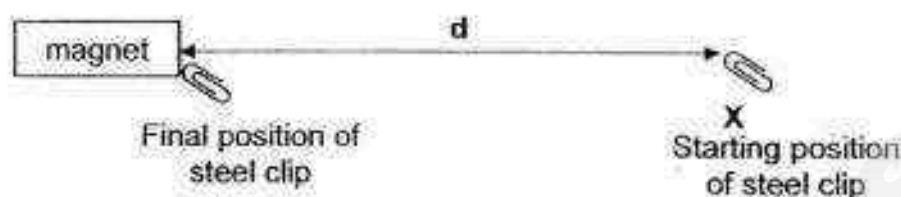
22. The diagram below shows three ring magnets, X, Y and Z. Magnets X and Y are floating in the holder.



What are the poles of the shaded parts of the three magnets?

	Magnet X	Magnet Y	Magnet Z
(1)	N-pole	N-pole	N-pole
(2)	N-pole	N-pole	S-pole
(3)	S-pole	N-pole	S-pole
(4)	S-pole	N-pole	N-pole

23. Dylan had four magnets, A, B, C and D. He placed a steel clip at point X. He kept moving each magnet towards the steel clip until it was attracted to the magnet. He measured the distance (d) at which the magnet was able to attract the steel clip.



He recorded his results in the table shown below.

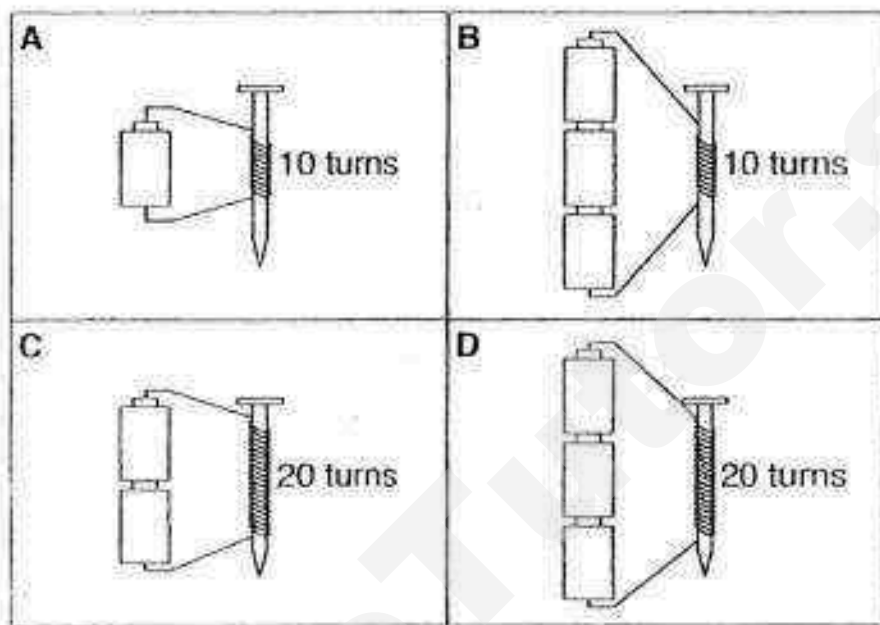
Magnet	Distance (d) in cm
A	8
B	2
C	12
D	4

Based on the information given, arrange the magnets in order of their magnetic strength, from the weakest to the strongest.

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

24. An iron nail becomes a magnet when it is placed in a coil of wire joined to batteries. Alan wants to find out whether the number of turns of wire around the iron nail affects the strength of the electromagnet.

Which two arrangements should he set up to ensure a fair test?



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

End of Section A



RED SWASTIKA SCHOOL

SCIENCE 2016 SEMESTRAL EXAMINATION 2 PRIMARY 3

Name : _____ ()

Class : Primary 3/ _____

Date : 27 October 2016

BOOKLET B

10 Questions
32 Marks

In this booklet, you should have the following:

- a. Page 16 to Page 27
- b. Questions 25 to 34

MARKS

	OBTAINED	POSSIBLE
BOOKLET A		48
BOOKLET B		32
TOTAL		80

Parent's Signature : _____

Section B

Answer all the questions in the space provided.

25. Look at the pictures below.



animal A



animal B

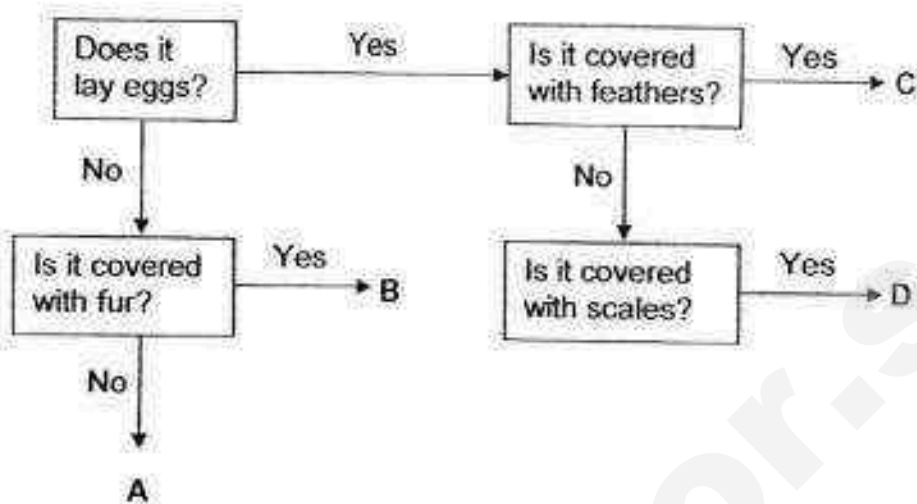
- (a) To which group of living things does animal B belong? (1 m)

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

- (c) Based on the pictures only, state one difference in physical characteristic between animal A and animal B. (Do not compare shape or size.) (1 m)



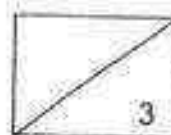
26. Look at the flowchart below.



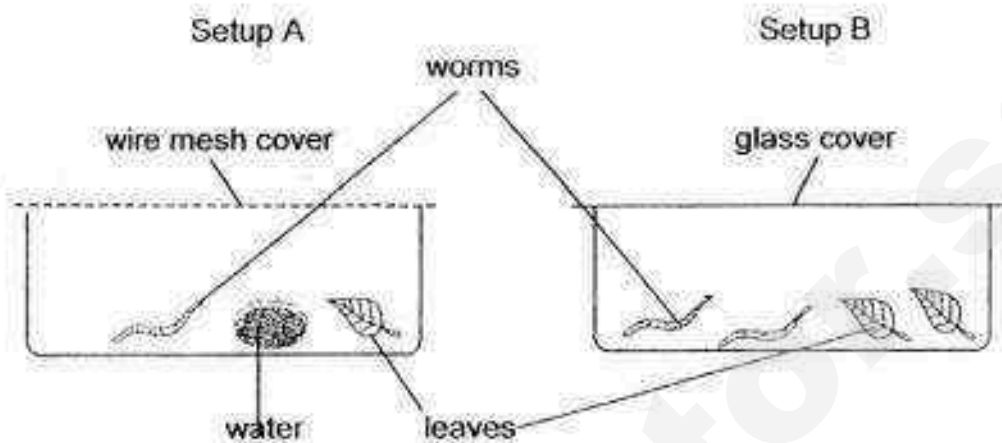
(a) Based on the flowchart, fill in the table below correctly with the letters A, B, C and D. (2 m)

Letter	Animal
	Cat
	Dolphin
	Crocodile
	Chicken

(b) Based on the flowchart, state the characteristics of animal B. (1 m)



27. Susan conducted the experiment below to find out if worms need water to survive. She placed the worms in glass containers and gave them food and water. However, her friend commented that she did not carry out a fair test.



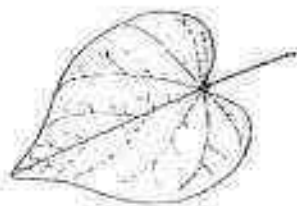
- (a) Look at the table below and help Susan tick (✓) the variables that she should keep the same and cross (x) the ones that she should change. (2 m)

	Type of cover	Amount of water	Number of leaves	Number of worms
Variable(s) that she should keep the same.				
Variable(s) that she should change.				

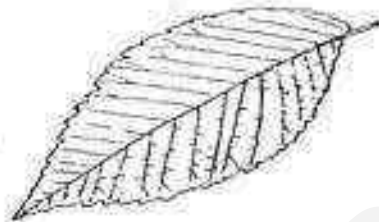
- (b) Besides water, state two other basic needs required by the worms to survive. (1 m)



28. Observe and compare the two leaves below.



leaf X



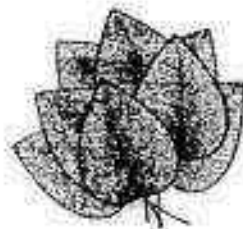
leaf Y

(a) State one difference between leaf X and leaf Y in terms of their edges.
(1 m)

Study the pictures below.



leaves spread out



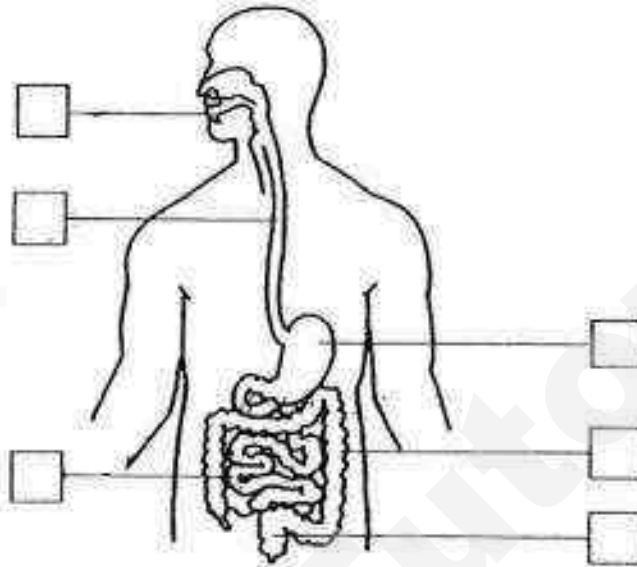
leaves stacked in a pile

(b) Plants spread their leaves out in all directions rather than stack them up in a pile. Explain how the spreading of leaves helps plants to grow better.
(1 m)



29. The diagram below shows the human digestive system.

(a) In which part(s) of the digestive system are digestive juices released to help in digestion? Put ticks (✓) in the correct boxes below. (1½ m)



The table below shows the amount of undigested food left in each part of the digestive system just before it is passed to the next part.

Parts of the digestive system	Amount of undigested food left (units)
mouth	10
gullet	10
stomach	6
small intestine	2
large intestine	?

(b) How many units of undigested food are left in the large intestine before it is removed from the body? (½ m)

_____ units

(c) Explain your answer for part (b). (1 m)



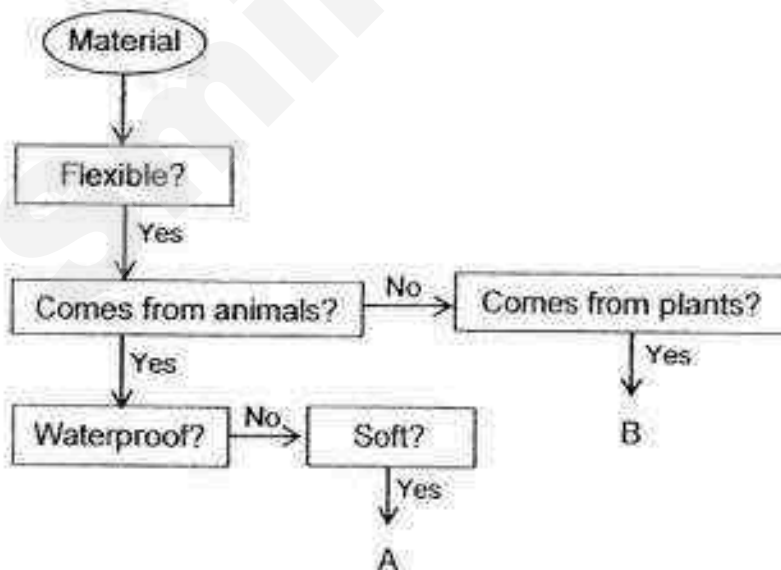
30. Siti used a flowchart to show how the food we eat can reach all parts of our body.



- (a) Describe how digested food gets into System T. (1 m)

- (b) Name two other substances that are carried by System T to all parts of our body. (1 m)

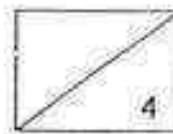
31. Study the flowchart below carefully.



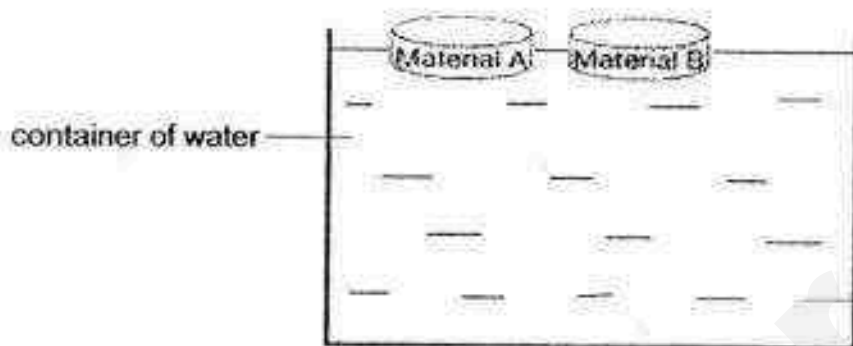
- (a) Give one example each of material A and material B. (2 m)

A: _____

B: _____

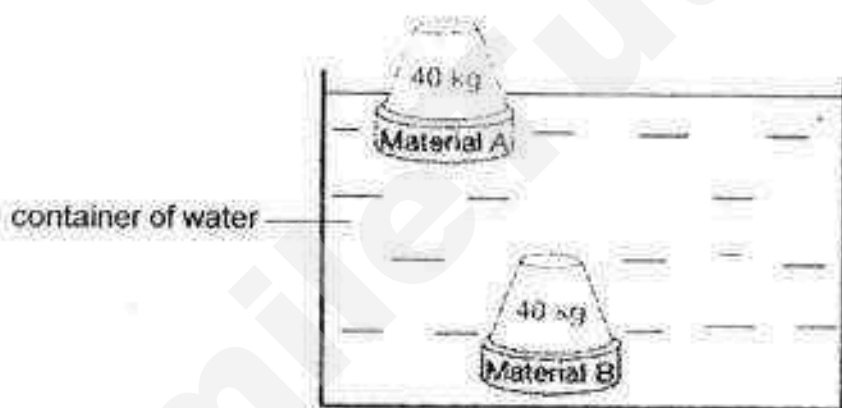


Hao Ming wants to choose a suitable material to make a swimming float. He places materials A, B and C in a container of water as shown below.



Experiment 1

He then places a 40-kg weight on each material and puts them back in the water as shown in the diagram below.



Experiment 2

- (b) Which material, A or B, is more suitable for making a swimming float?
Explain your answer. (1 m)

- (c) State another physical property that must be present in the material used for making a swimming float. (1 m)

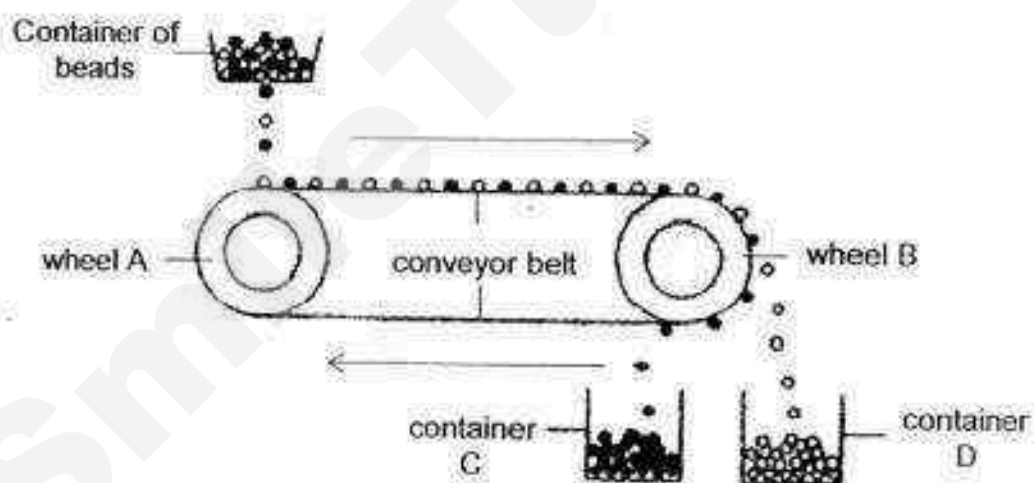


32. Study the table below.

(a) Classify the following objects into the correct groups. (1 m)

<div style="display: flex; justify-content: space-around; padding: 5px;"> glass marble steel paper clip wooden toothpick iron nail </div>			
Can be magnetised		Cannot be magnetised	

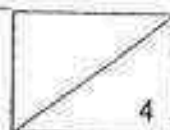
The diagram below shows how a machine separates magnetic beads from non-magnetic beads as the conveyor belt moves in the direction shown by the arrows.



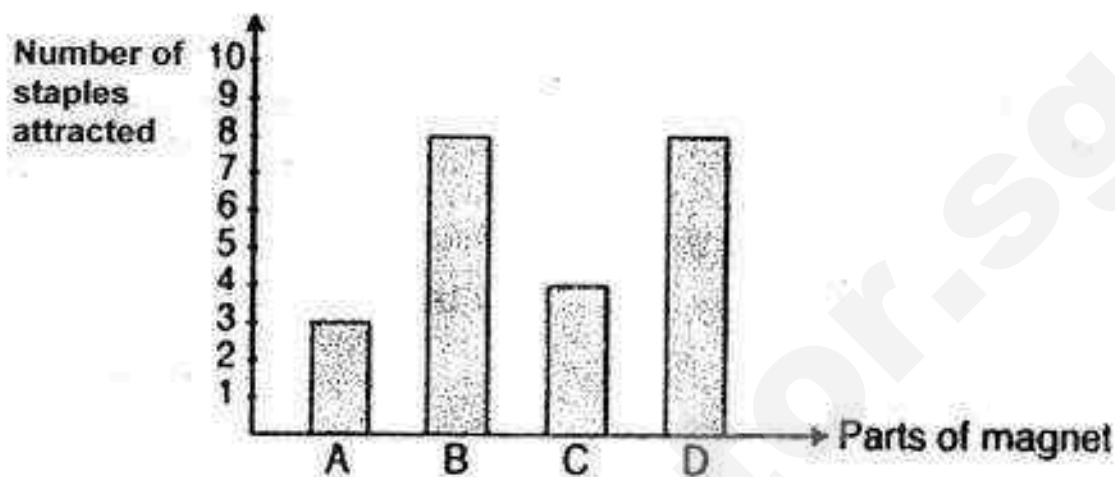
(b) Which part of the machine, wheel A or wheel B, is more likely to be a magnet? (1 m)

(c) In which container, C or D, are the magnetic beads collected? (1 m)

(ii) Explain your answer for part (ci). (1 m)



33. Keng Hong carried out an experiment using a bar magnet and steel staples. He labelled different parts of the magnet as A, B, C and D. He counted the number of staples attracted to each part and recorded the results in the graph below.

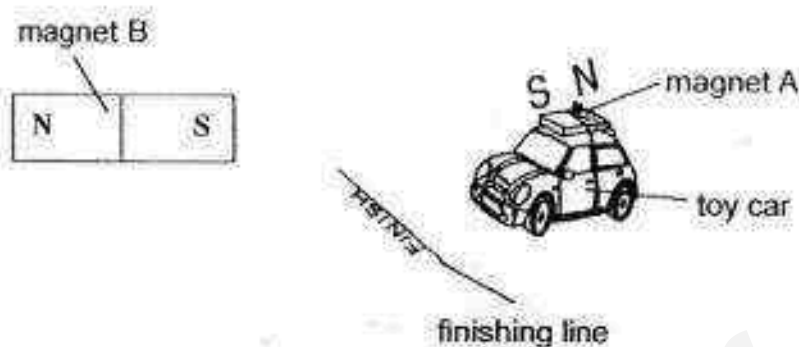


- (a) Which parts of the magnet, A, B, C or D, are most likely the poles of the magnet? (1 m)

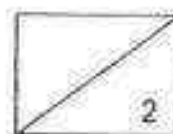
- (b) Explain your answer for part (a). (1 m)



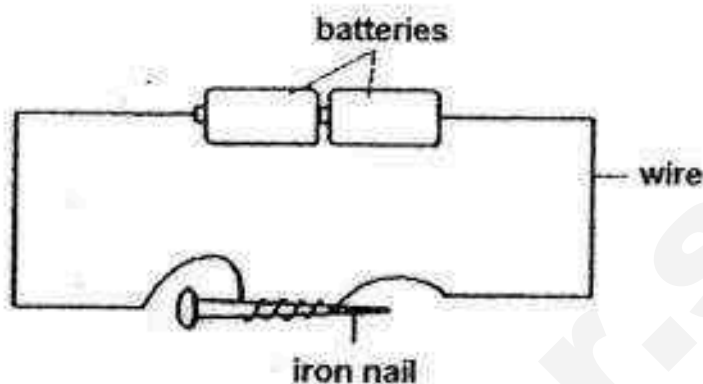
Study the diagram below. Magnet A is tied to the top of a plastic toy car.



- (c) Keng Hong is given magnet B. Explain how he can use magnet B to make the toy car reach the finishing line without touching the toy car or magnet A? (2 m)



34. Ramii tries to turn an iron nail into a temporary magnet. He uses the set-up shown below.



To test the magnetic strength of the magnet, he puts steel paper clips near the iron nail and records the number of steel paper clips attracted to it. He changes the number of wire coils around the iron nail and repeats the experiment. His results are shown in the table below.

Number of coils around the iron nail	Number of steel paper clips attracted
5	10
10	20
15	30
20	40

- (a) What is the relationship between the number of coils of wire around the iron nail and the magnetic strength of the temporary magnet? (1 m)

- (b) State another method of making a temporary magnet. (1 m)



Ramli has four magnets, A, B, C and D. He brings each magnet close to a box of steel pins.



Magnet A



Magnet B



Magnet C



Magnet D

He records the number of steel pins attracted by each magnet in the table below.

Magnet	A	B	C	D
Number of steel pins attracted	25	30	20	40

(c) Based on the results above, what can Ramli conclude about the magnetic strength of magnet D? (1 m)

(d) State a method that can cause a magnet to lose its magnetism. (1 m)



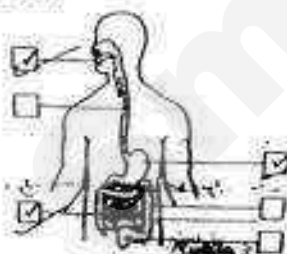
End of Section B
Please check your work.

EXAM PAPER 2016**LEVEL : PRIMARY 3****SCHOOL : RED SWASTIKA SCHOOL****SUBJECT : SCIENCE****TERM : SA2**

Q 1	Q 2	Q 3	Q 4	Q 5	Q 6	Q 7	Q 8	Q 9	Q 10
2	1	1	2	4	2	4	2	1	4
Q 11	Q 12	Q 13	Q 14	Q 15	Q 16	Q 17	Q 18	Q 19	Q 20
4	3	1	2	2	3	4	4	3	1
Q 21	Q 22	Q 23	Q 24						
1	3	2	3						

Q25a. Animal B belongs to the group insects.**Q25b.** Because animal B has six legs.**Q25c.** Animal A has eight legs but animal B has six legs.**Q26a.** Cat – B Dolphin – A Crocodile – D Chicken – C**Q26b.** Animal B does not lay eggs and covered with fur.**Q27a.** Variables she should keep the same – Type of cover, number of leaves, number of worms

Variables she should change – amount of water

Q27b. Worms also need food and air to survive.**Q28a.** Leaf X has entire edges but leaf Y has toothed edges.**Q28b.** Because plant needs more sunlight to make food.**Q29a.****Q29b.** 2 units**Q29c.** Digestion does not take place in the large intestine.**Q30a.** Digested food is absorbed by the system T through the walls of the small intestine.**Q30b.** Oxygen, air.**Q31a.** A: Fur B: Rubber

Q31b. Material A because material A is still floating after putting forty kg on it.

Q31c. Waterproof.

Q32a. Can be magnetised: Steel paper clip, iron nail

Cannot be magnetised: Glass marble, wooden toothpick

Q32b. Wheel B

Q32ci. Container C

Q32cii. Because container C's beads attracted longer than container D.

Q33a. B and D.

Q33b. Because B and D attracted the most number of steel staples.

Q33c. Put the N-pole of magnet B near the S - pole of magnet A to attract magnet A to the finishing line.

Q34a. The more coils around the iron nail the same magnetic strength it has.

Q34b. Stroking method.

Q34c. The magnetic strength of magnet D is the strongest.

Q34d. Burning the magnet.

21

RIVER VALLEY PRIMARY SCHOOL
SEMESTRAL ASSESSMENT 2 / 2016
PRIMARY 3

SCIENCE

(BOOKLET A)

Name : _____ ()

Date : 1st November 2016

Class : P3 _____

Total Time for Booklet A & Booklet B : 1 hour 30 mins

INSTRUCTIONS TO CANDIDATES

1. Write your name, index number and class in the space above.
2. Do not turn over this page until you are told to do so.
3. Follow all instructions carefully.
4. Answer all questions.
5. For Section A, shade your answers for questions 1 to 15 in the Optical Answer Sheet (OAS) provided.
6. For Section B, write your answers for questions 16 to 23 in the space provided in the booklet.
7. The total marks for Booklet A is 30 marks.

Section A (30 marks)

For each question 1 to 15, four options are given. One of them is the correct answer. Make your choice (1, 2, 3 or 4). Shade the oval (1, 2, 3 or 4) on the Optical Answer Sheet.

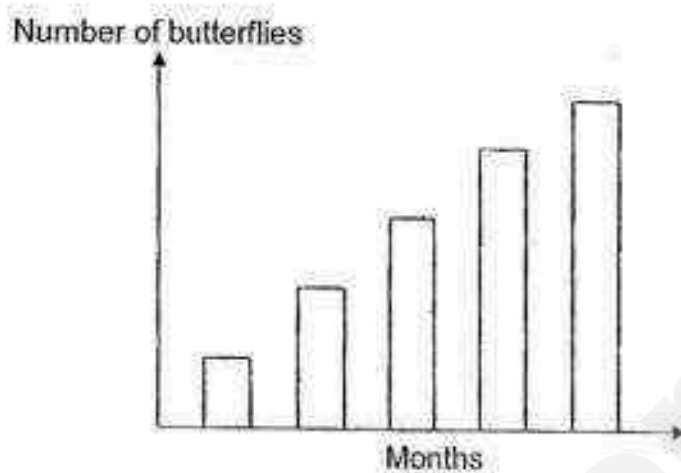
1. The table below shows the characteristics of 4 different things.

Things	Able to move from place to place	Needs water	Lays eggs	Has legs
A	Yes	Yes	Yes	No
B	Yes	Yes	No	Yes
C	Yes	No	No	No
D	No	No	No	Yes

Which of the following is/are living thing(s)?

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

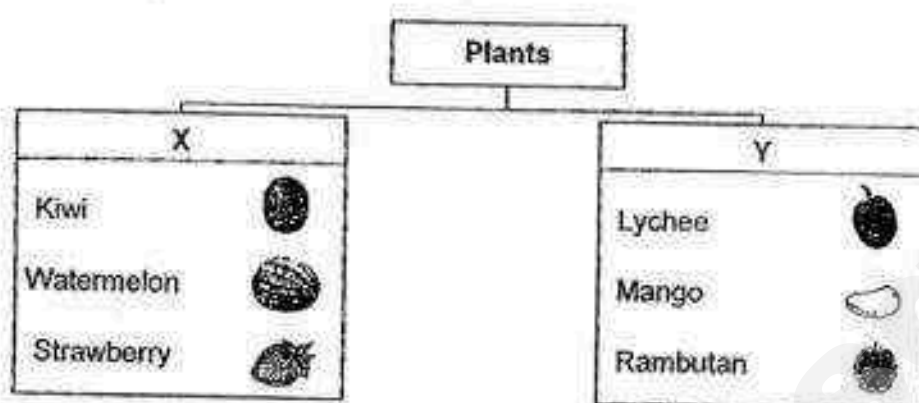
2. The chart below shows that the number of butterflies have increased over 5 months.



This shows that butterflies can _____

- (1) grow
- (2) reproduce
- (3) take in food
- (4) respond to changes around it

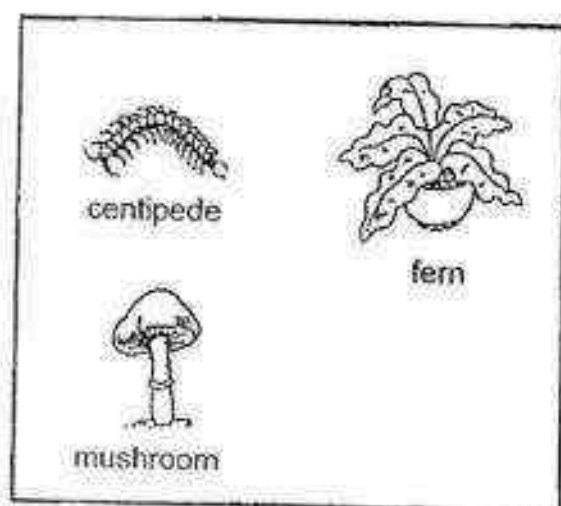
3. The table shows how some plants have been classified.



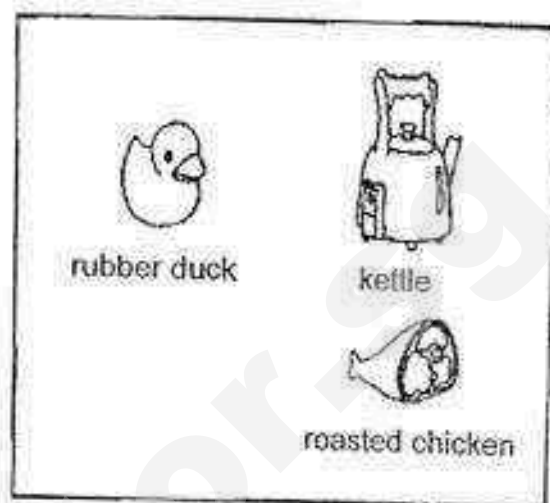
Which of the following is/are likely to be X and Y?

	Heading 1	Heading 2
(1)	Edible	Not Edible
(2)	Non-flowering	Flowering
(3)	Rough skin	Smooth skin
(4)	Many seeds	One seed

4. Alice classified some things into Group Y and Group Z.



Group Y



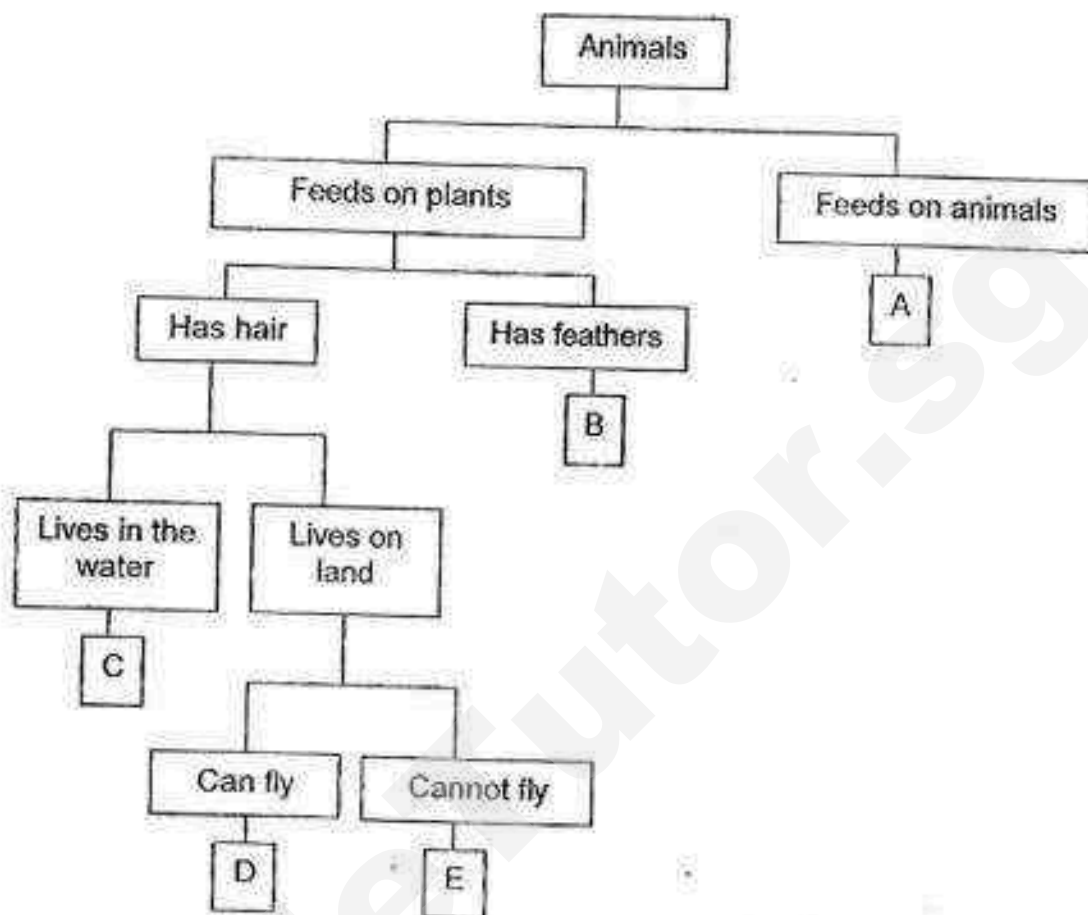
Group Z

Which of the following statements best explain how these things are classified?

	Group Y	Group Z
A	They are alive.	They were once alive.
B	They can make food.	They cannot make food.
C	They are living things.	They are non-living things.
D	They can respond to changes.	They cannot respond to changes.

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

5. Study the diagram below carefully.



According to the diagram above, which of the following statements are correct?

- (1) A and E are mammals.
- (2) D and E feed on animals.
- (3) B and D make their own food.
- (4) C and E have the same type of outer body covering.

6. Gary wanted to group the animals shown below into two groups.



chicken



lion



platypus



seal



eagle

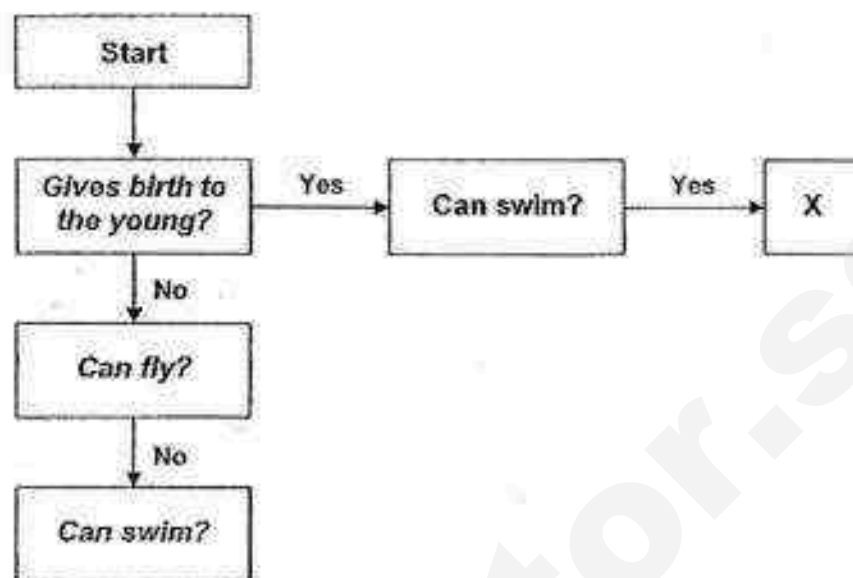


giraffe

If there are only three animals in each group, which of the following is the most appropriate heading?

	Group 1	Group 2
(1)	Mammals	Birds
(2)	Can fly	Cannot fly
(3)	Lays eggs	Gives birth to young
(4)	Has feathers	Does not have feathers

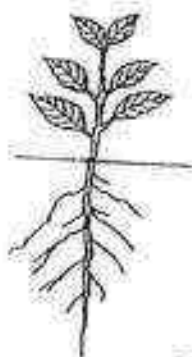
7. The flow chart below shows the characteristics of X.



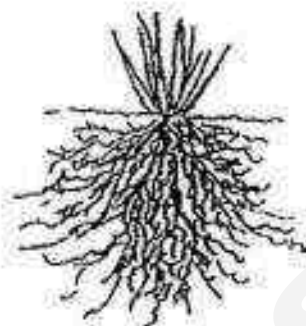
X is most likely a _____.

- (1) mammal
- (2) plant
- (3) bird
- (4) insect

8. The diagram shows the roots of two plants.



Roots of Plant A



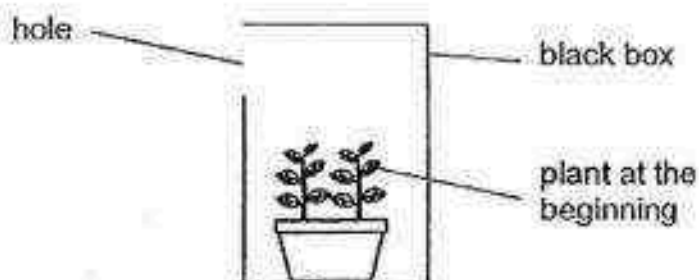
Roots of Plant B

Comparing Plant A with Plant B, the roots of Plant B can _____

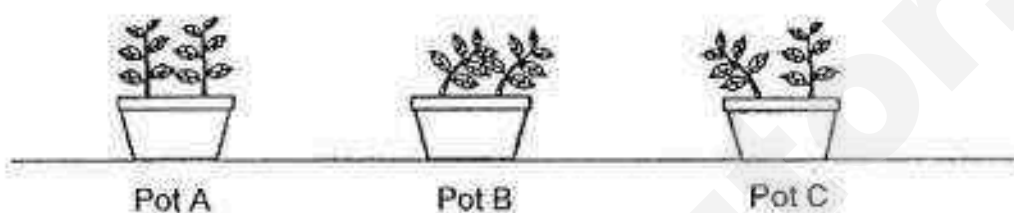
- A: trap more sunlight
- B: absorb more water
- C: hold the plant more firmly to the ground
- D: transport more food to the other parts of the plant

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

9. 3 similar plants were placed in black boxes and put in an open field.
Holes were made on different parts of the boxes.



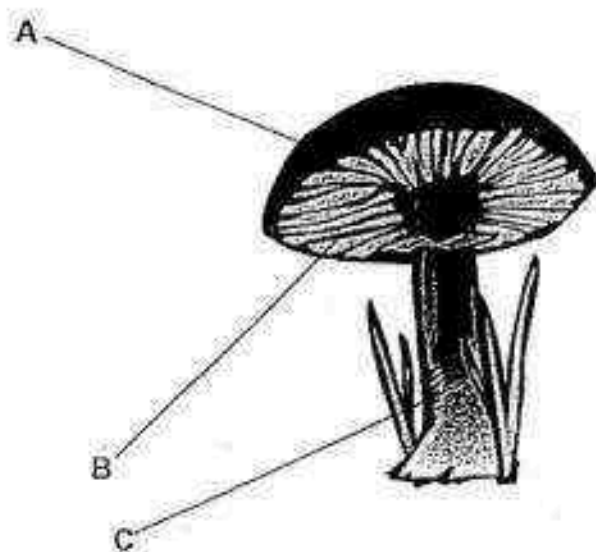
The diagram below shows what the plants looked like after 1 week.



Which one of the following correctly shows the set-ups at the start of the experiment?

	Pot A	Pot B	Pot C
(1)			
(2)			
(3)			
(4)			

10. Look at the picture of the mushroom below carefully.



What are parts A, B and C?

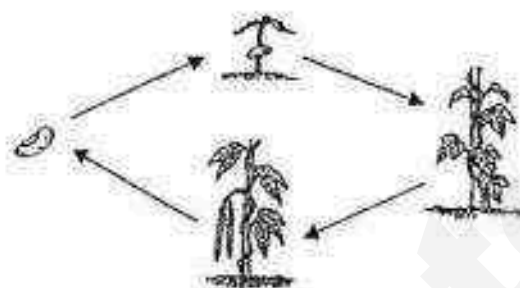
	A	B	C
(1)	Gills	Spores	Stalk
(2)	Cap	Gills	Stalk
(3)	Stalk	Gills	Cap
(4)	Cap	Spores	Gills

11. The pictures below show the different stages in the life cycle of a plant.



Which of the following shows the correct life cycle of a plant?

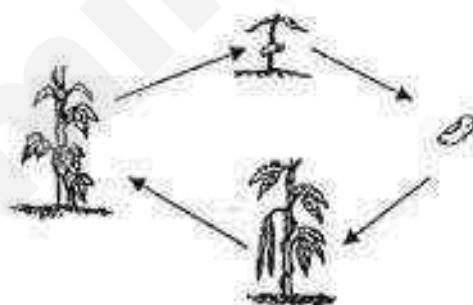
(1)



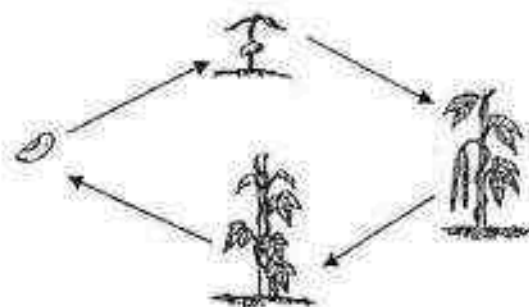
(2)



(3)



(4)



12. Which of the following live In water at one stage and on land at another stage of its life cycle?

Animal A: Mosquito



Animal B: Chicken



Animal C: Frog



Animal D: Cockroach



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

13. Anna placed a ball in a box and covered the box. She made a hole at the side and light could only enter through the hole. Then, she looked through the hole but could not see the ball inside the box.



Which one of the following statement(s) explains why she is not able to see the ball in the box?

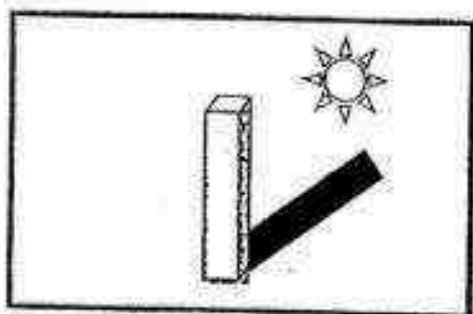
- (A) There is not enough light in the box.
- (B) The ball cannot reflect light to Anna's eyes.
- (C) The ball does not allow light to pass through.

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

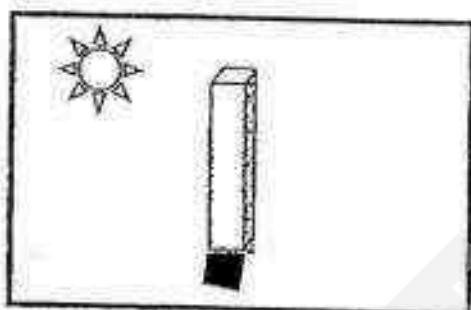
14. Look at the diagrams below.

Which one of the following diagrams shows the correct position of the sun?

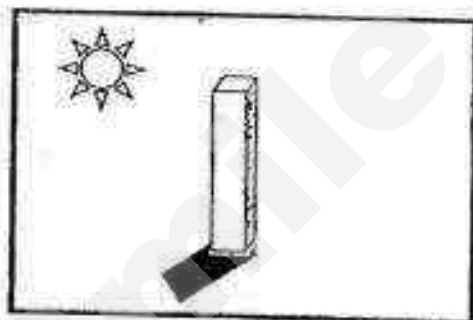
(1)



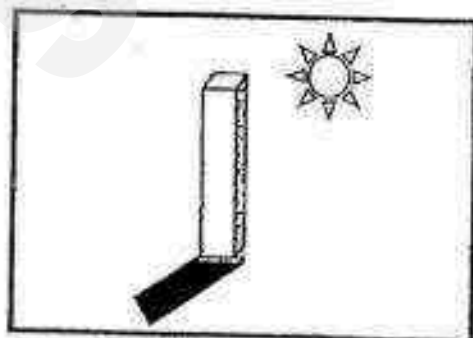
(2)



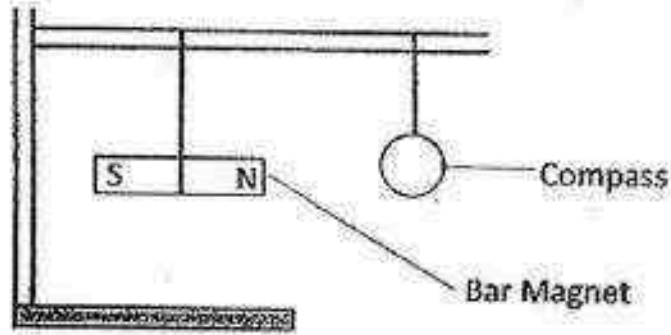
(3)



(4)

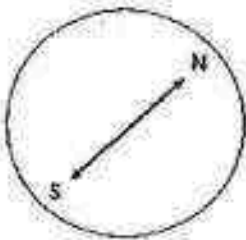


15. The diagram below shows a freely suspended bar magnet.



Which of the following diagrams shows the correct direction in the compass if it is placed beside the bar magnet?

(1)



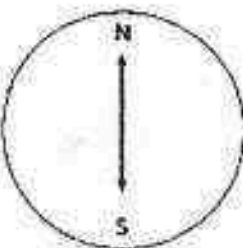
(2)



(3)



(4)



~End of Section A~

RIVER VALLEY PRIMARY SCHOOL
SEMESTRAL ASSESSMENT 2 / 2016
PRIMARY 3

SCIENCE
(BOOKLET B)

Name : _____ ()

Date : 1st November 2016

Class : P3 _____

Total Time for Booklet A & Booklet B : 1 hour 30 mins

INSTRUCTIONS TO CANDIDATES

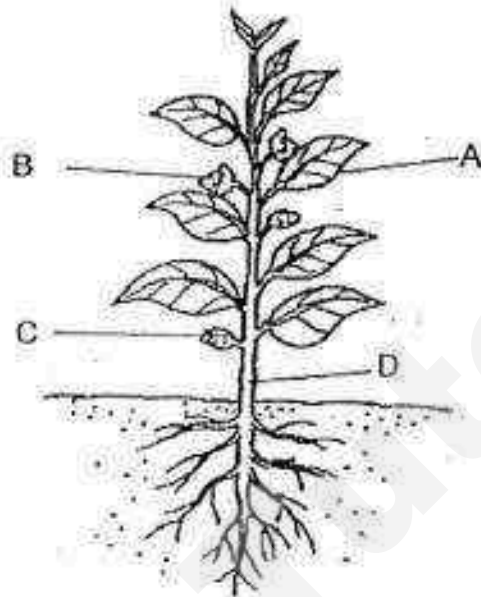
1. Write your name, index number and class in the space above.
2. Do not turn over this page until you are told to do so.
3. Follow all instructions carefully.
4. Answer all questions.
5. For Section A, shade your answers for questions 1 to 15 in the Optical Answer Sheet (OAS) provided.
6. For Section B, write your answers for questions 16 to 23 in the space provided in the booklet.
7. The total marks for Booklet B is 20 marks.

Booklet A		/30
Booklet B		/20
Total		/50
Parent's Signature		

Section B (20 marks)

Write your answers to questions 16 to 23 in this booklet.

16. Study the diagram of a plant below.



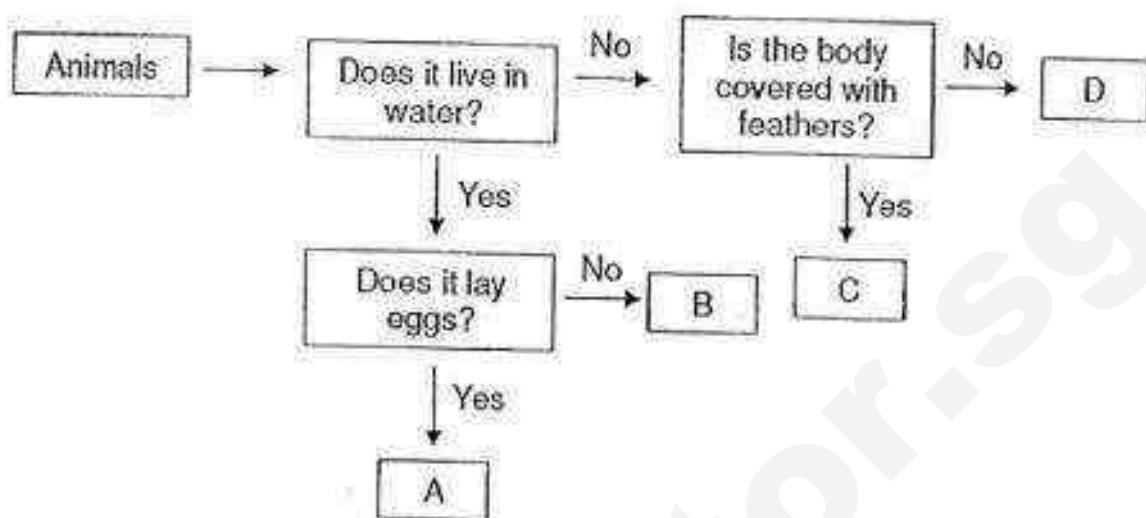
(a) Name the parts in the diagram above. [2]

- A: _____
B: _____
C: _____
D: _____

(b) In an experiment, Part A of the plant was removed. The plant died after a few days.
Explain how this is possible. [1]

	3
--	---

17. Study the flowchart below.



(a) Identify the letters (A, B, C and D) in the flowchart that represent each of the following animals. [2]

Animal	Letter
Dog	
Guppy	
Goldfish	
Parrot	

(b) Based only on the information given in the flowchart, what are the characteristics of C? [1]

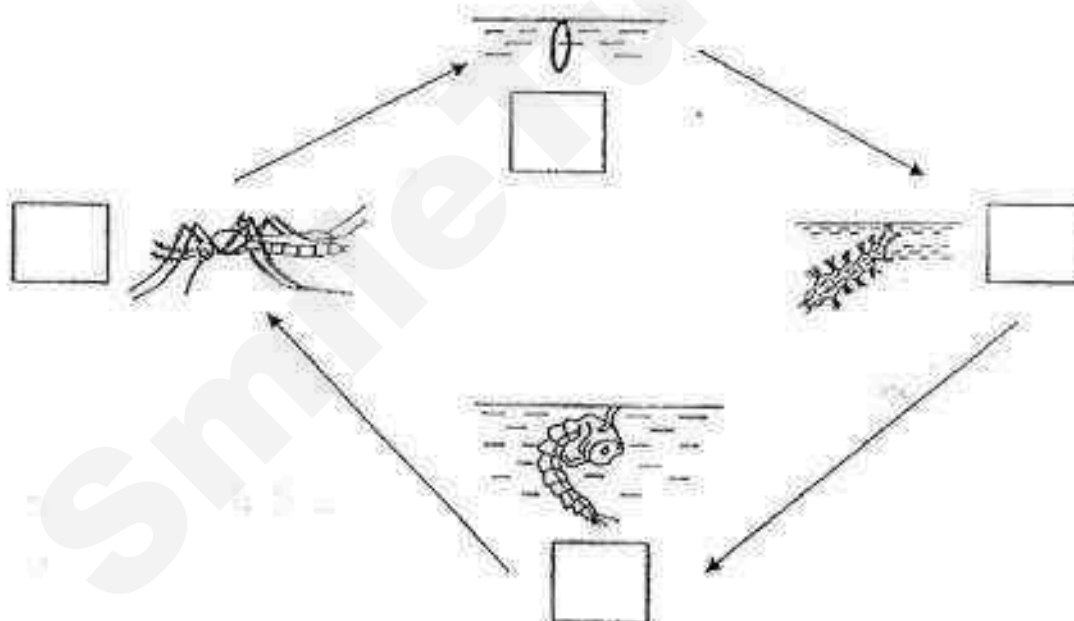
18(a) Read the following information on ways to reduce mosquito breeding in our homes.

Key Steps to Reduce Mosquito Breeding

- Change the water in vases/bowls every two days.
- Remove the water from flower pot plates every two days.

(Source: www.dengue.gov.sg)

(i) At which stage or stages of the life cycle of the mosquito would the above steps be effective in reducing its breeding? Put a tick (✓) in the correct box/boxes. [1]



(ii) From the information given above, what causes the breeding of mosquitoes? [1]

	2
--	---

- (b) There are three stages of the dragonfly's life cycle: the egg, the nymph and the adult dragonfly. A large part of the life cycle of a dragonfly is at the nymph stage in the water.

The following information was obtained from the newspapers.

"Dragonflies can help control the population of dengue-carrying mosquitoes here," said Mr Robin Ngiam, a senior project officer of National Parks Board (NParks).

How do dragonflies help to control the population of dengue-carrying mosquitoes? [1]

	1
--	---

19. Study the three groups of animals in the classification table below.

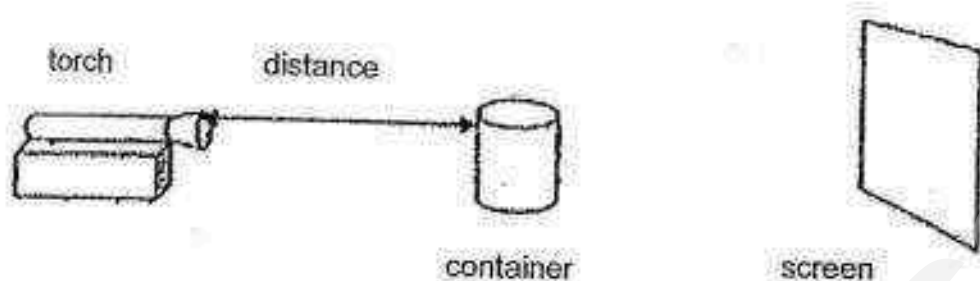
Types of Body Covering		
Group X	Group Y	Group Z
Snail	Bat	Komodo Dragon
Turtle	Penguin	Snake
Crab	Bear	Guppy

(a) Which animal is classified wrongly? [1]

(b) Explain your answer in part (a). [1]

	2
--	---

20. Ryan set up the experiment as shown below. She changed the distance between the torch and the container.



The table below shows the results of Ryan's experiment.

Distance between the torch and container (cm)	Height of the shadow on the screen (cm)
20	?
15	8
10	10
5	12

- (a) In the space given below, draw the shadow formed on the screen. [1]



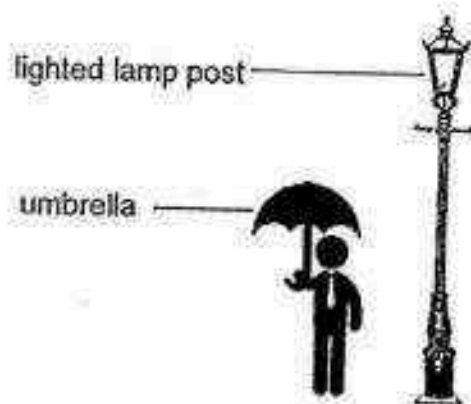
	1
--	---

- (b) Predict the height of the shadow on the screen if the torch is placed 20 cm away from the container. [1]

- (c) What can he do to decrease the height of the shadow without moving the position of the container? [1]

	2
--	---

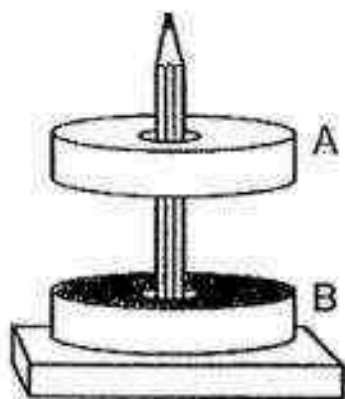
21. Min held an umbrella and stood directly under a lighted lamp post. He could only see the shadow cast by the umbrella instead of his own shadow.



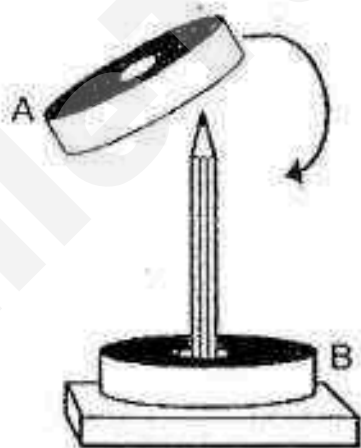
Explain why he was not able to see his own shadow. [1]

	1
--	---

22. The diagram below shows an experiment carried out by Devi using ring magnets A and B.



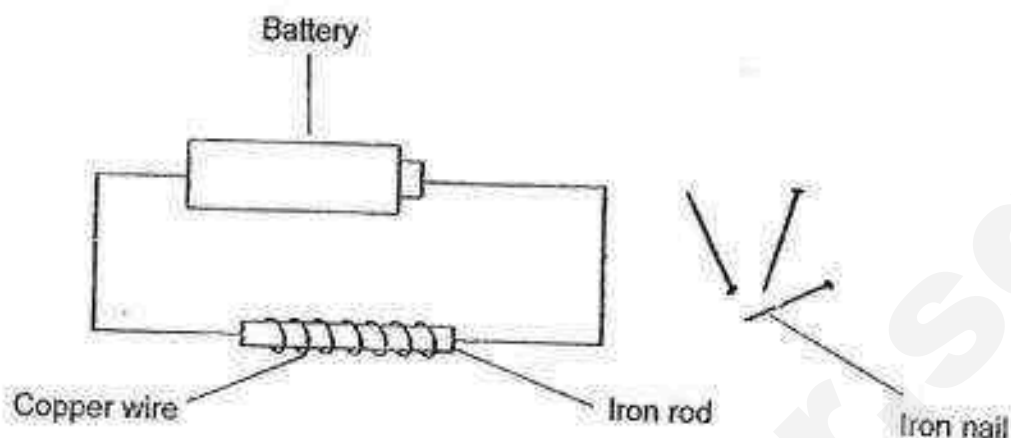
- (a) Explain why Magnet A is able to float. [1]



- (b) If Magnet A is turned over and placed through the pencil, what will happen to both the magnets? [1]

	2
--	---

23. Ren conducted an experiment using the set-up of an electromagnet below.



- (a) State what Ren would observe if he placed some iron nails near the iron rod. [1]
- _____
- _____
- (b) Suggest one change Ren could do to the set-up so that the electromagnet could pick up more iron nails. [1]
- _____
- (c) Ren removed the copper wire from the iron rod and placed the rod near some iron nails. He observed that the iron nails did not move. Give a possible explanation for this observation. [1]
- _____
- _____

EXAM PAPER 2016 (P3)

SCHOOL : RIVER VALLEY

SUBJECT : SCIENCE

TERM : SA2

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

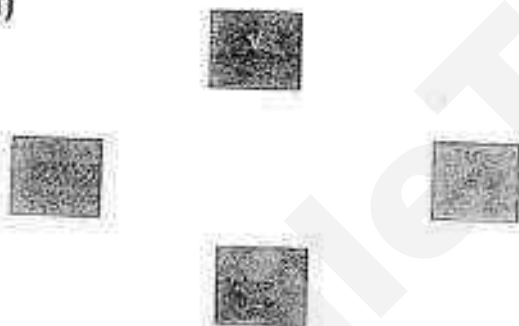
16)a) A: Leaves B: Flower C: Seedling D: Stem

b) Part A does not have leaves to make food for the plant.

17)a) D, B, A, C

b) C does not live in water and its body is covered with feathers.

18)a)i)



ii) Mosquitoes breed in stagnant water.

18)b)The dragonfly nymphs feeds on the eggs of the mosquitoes.

19)a)Penguin.

b)Bear and bat have hair ad their body covering but penguin has feathers.

20)a)



b)6cm

c)Move the screen nearer to the container.

21)Umbrella blocked the light.

22)a)Like poles of magnet A and B are facing each other so they repel and magnet A is able to float above magnet B.

b)Both of the magnets will attract each other.

23)a)The iron rod will attract the iron nails.

b)Increase the number of strokes.

c)The electromagnet has lost its magnetism.



Rosyth School
Second Semestral Examination for 2016
SCIENCE
Primary 3

Name: _____

Class: Pr 3 _____ Register No. _____ Duration: 1 h 30 min

Date: 1 November 2016 Parent's Signature: _____

Booklet A

Instructions to Pupils:

1. Do not open the booklets until you are told to do so.
2. Follow all instructions carefully.
3. This paper consists of 2 booklets, Booklet A and Booklet B.
4. For questions 1 to 23 in Booklet A, shade the correct ovals on the Optical Answer Sheet (OAS) provided using a 2B pencil.

* This booklet consists of 18 printed pages (including cover page).

Booklet A (46 marks)

For each question from 1 to 23, four options are given. One of them is the correct answer. Make your choice (1, 2, 3 or 4) and shade the correct oval (1, 2, 3 or 4) on the Optical Answer Sheet (OAS).

1. A millipede curls up when it is touched to protect itself.



Which characteristic of living things does it show?

- (1) Living things grow.
- (2) Living things reproduce.
- (3) Living things respond to changes.
- (4) Living things need air, food and water to survive.

2. The table below shows some characteristics of animal P, Q, R and S.

Animal	Characteristics	
P	Has a tail	No legs
Q	Has wings	Two legs
R	Has a beak	Two legs
S	Has antennae	Six legs

David found a picture of an animal as shown below.

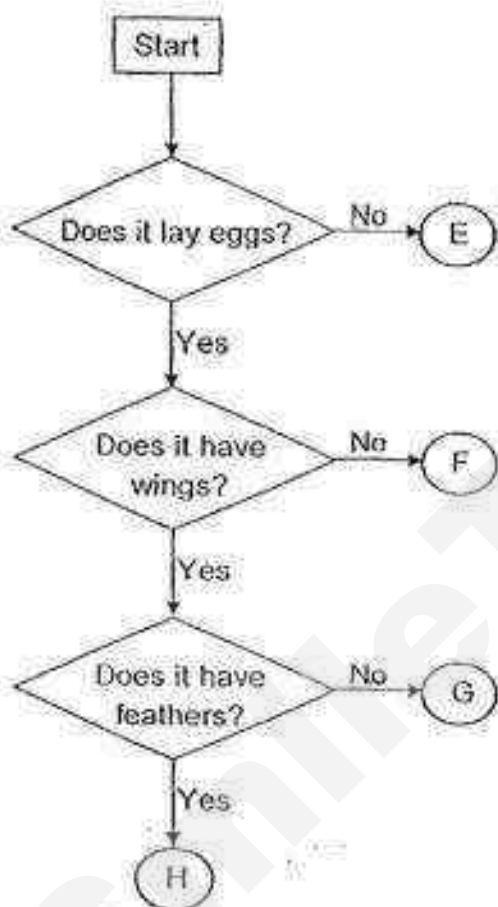


Which animal, P, Q, R or S, has similar characteristics as the above animal?

- (1) P
(3) R

- (2) Q
(4) S

3. Study the flow chart below.



Which letter, E, F, G or H, best represents a bird?

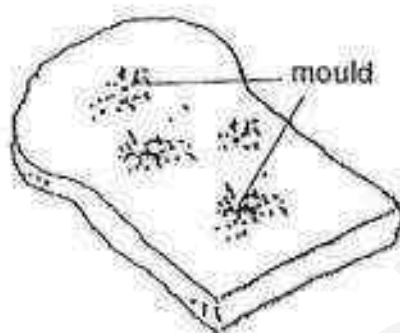
- (1) E
(3) G

- (2) F
(4) H

4. Which one of the following statements is true about ferns?

- (1) They are plants.
- (2) They bear fruits.
- (3) They reproduce by seeds.
- (4) They cannot make their own food.

5. Study the diagram below.



bread mould



mushroom

Which of the following statements are true about both of them?

- A: Both are non-living things.
- B: Both reproduce by spores.
- C: Both are non-flowering plants.
- D: Both do not make their own food.

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

- (2) A and D only
- (4) B, C and D only









6. Tammy placed a slice of bread in a plastic bag and kept in a dark room. She did the same for three other slices but changed the amount of water dropped on the bread. She observed and recorded the number of days the bread took to turn mouldy as shown in the table below.

Bread	Volume of water (ml)	Number of days the bread took to turn mouldy
A	0	7
B	2	5
C	4	4
D	6	3

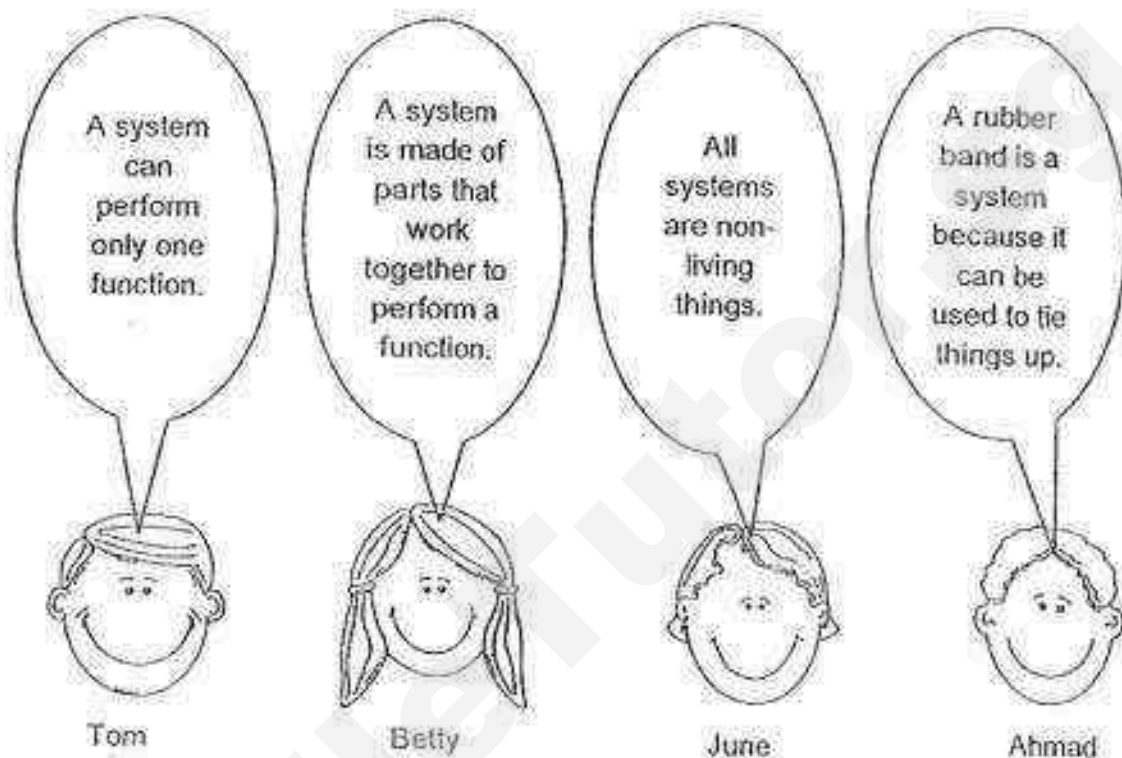
Which one of the following is a correct statement?

- (1) Mould does not need water to grow.
- (2) Bread A was the last to turn mouldy.
- (3) Mould grows best in dry and dark conditions.
- (4) The smaller the volume of water was added, the faster the bread turned mouldy.

7. Look at the pictures below. Which of the following correctly shows a system and a non-system?

	System	Non-system
(1)	 fan	 pencil
(2)	 paper clip	 chair
(3)	 pen	 a piece of plastic
(4)	 ruler	 sharpener

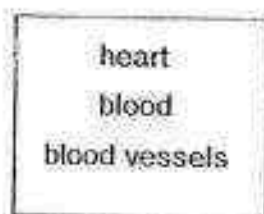
8. Four students made the following statements about a system.



Who made the correct statement?

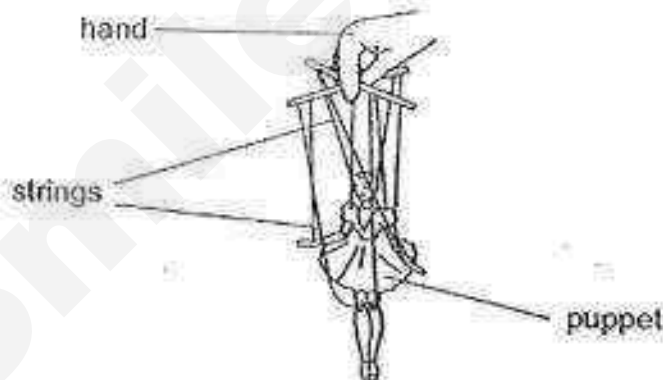
- (1) Tom
- (2) Betty
- (3) June
- (4) Ahmad

9. The box below shows the parts of a human body system.



Which of the following best describes the function of the above body system?

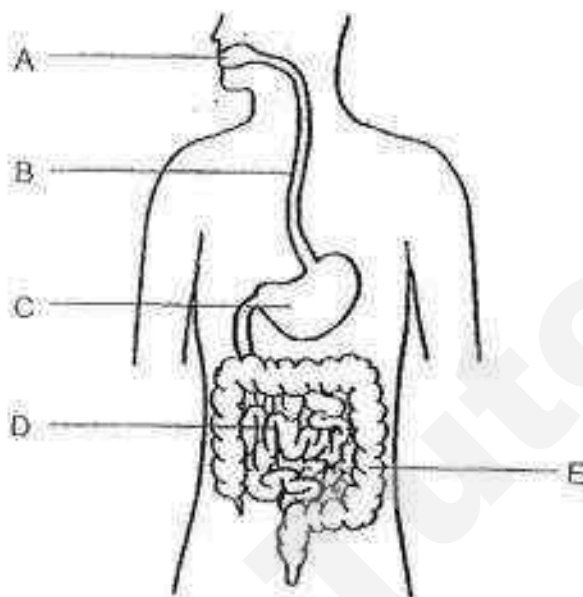
- (1) It takes in oxygen for the body.
 - (2) It protects the organs in the body.
 - (3) It enables the different parts of the body to move.
 - (4) It carries digested food, oxygen and water to all parts of the body.
10. Jean held a string puppet as shown below. She moved the strings attached to the hands and legs of the puppet up and down to make it move.



Which two human body systems work the same way as the string puppet to enable it to move?

- (1) digestive system and skeletal system
- (2) muscular system and skeletal system
- (3) circulatory system and muscular system
- (4) respiratory system and muscular system

Refer to the diagram below (human body's digestive system) and answer Questions 11 and 12.



11. Which parts of the above diagram, A, B, C, D or E, do not produce digestive juices?

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

12. Which of the following sets best describes what takes place at B, C and D?

	B	C	D
(1)	Allows food to flow through	Digested food is absorbed into blood stream	Digestion takes place
(2)	Digestion takes place	Allows food to flow through	Digested food is absorbed into blood stream
(3)	Digested food is absorbed into blood stream	Digestion takes place	Allows food to flow through
(4)	Allows food to flow through	Digestion takes place	Digested food is absorbed into blood stream

13. Which of the following statement(s) correctly describe(s) the functions of the saliva in the mouth?

X : It softens the food.

Y : It helps to digest the food.

Z : It removes the water from food.

(1) X only

(3) X and Y only

(2) Z only

(4) Y and Z only

14. The table below shows what happens in the small intestine and the large intestine when food passes through the digestive system.

	small intestine	large intestine
W	Food is being digested	Food is completely digested
X	Food is completely digested	Water from the undigested food is removed
Y	It passes digested food to the large intestine for further digestion	Undigested food is absorbed into the blood stream

Which of the following is/are correct?

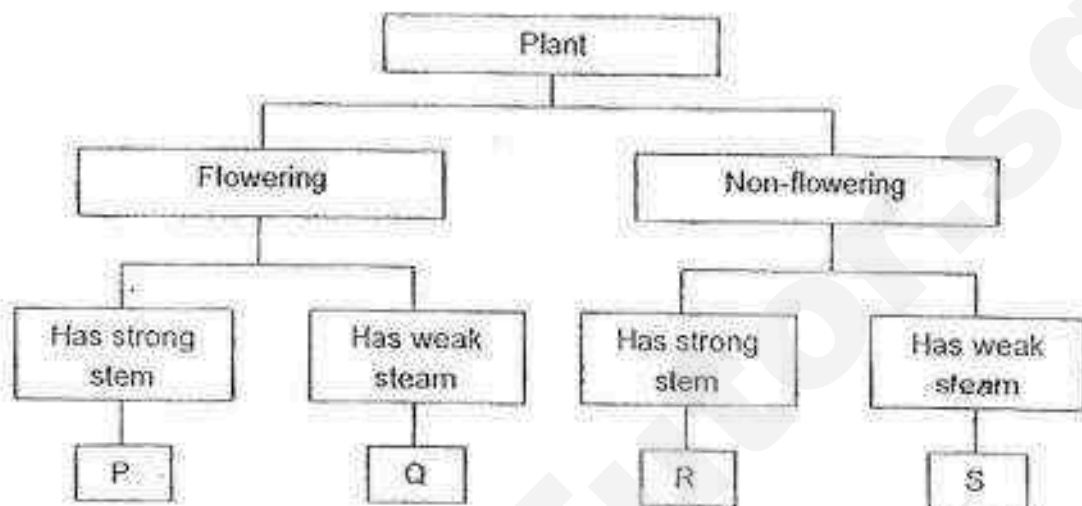
(1) W only

(3) W and Y only

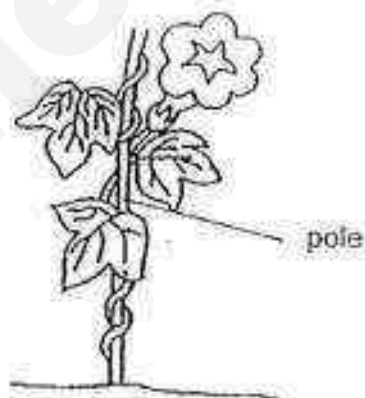
(2) X only

(4) X and Y only

15. Study the classification chart carefully.



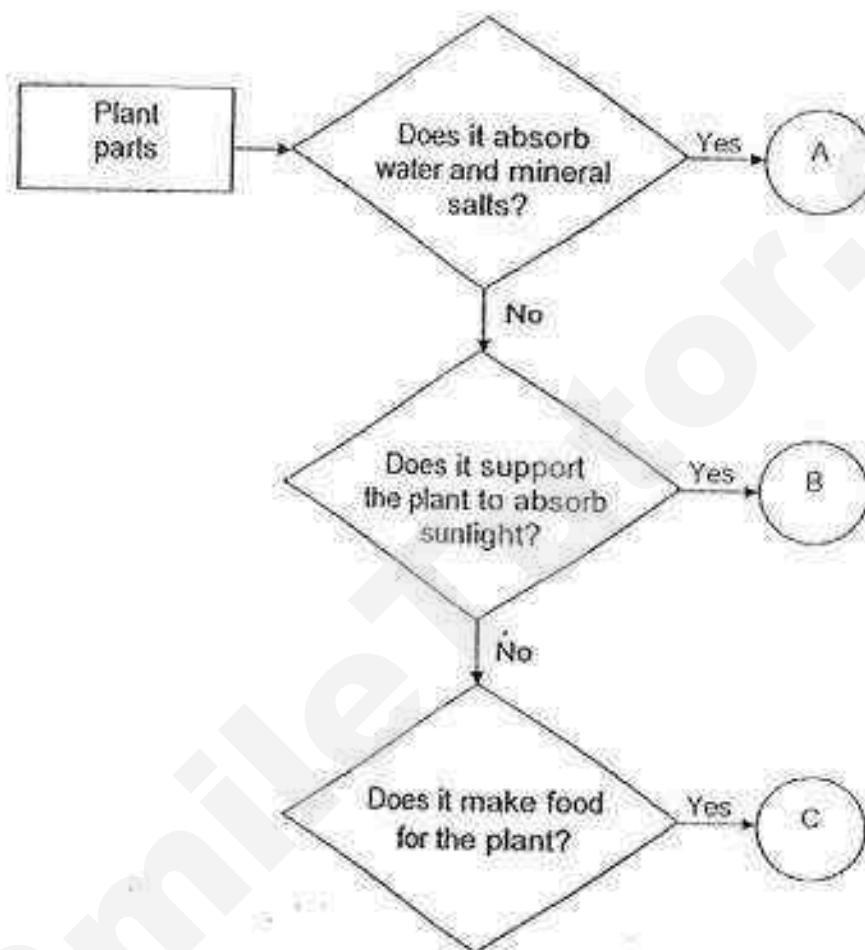
Which group does the plant shown below belong to?



- (1) P
(3) R

- (2) Q
(4) S

16. The flowchart below describes the functions of different parts of a plant.



Which of the following best represents plant parts A, B and C?

	A	B	C
(1)	stem	root	leaf
(2)	stem	leaf	root
(3)	root	leaf	stem
(4)	root	stem	leaf

17. Siti carried out an experiment on four potted plants, P, Q, R and S, by changing the conditions as shown in the table below.

A tick (✓) shows the presence of the condition and a cross (x) shows an absence of the condition.

Plant	Air	Water	Sunlight
P	✓	x	✓
Q	x	✓	✓
R	✓	✓	x
S	✓	✓	✓

- Which plant is most likely to survive the longest?

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

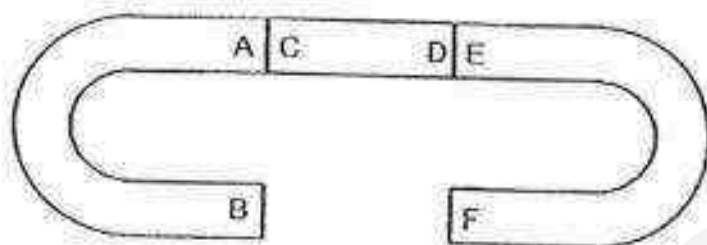
18. Samuel tied a string to a bar magnet. He suspended it freely as shown below.



- In which direction would the bar magnet point when at rest?

- (1) east-west
- (2) north-west
- (3) south-east
- (4) north-south

19. Study the arrangement of the three magnets below. They are attracted to each other.



Cindy made the following statements based on the arrangement above. Which of the statement(s) below is/are correct?

P: C will repel E.

Q: A will be attracted to F

R: F will be attracted to C

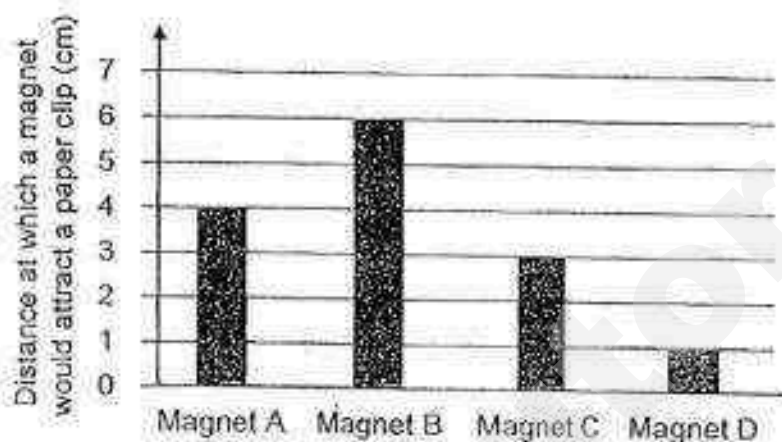
(1) P only

(3) P and R only

(2) Q only

(4) Q and R only

20. Linda conducted an experiment to record the greatest distance at which 4 different magnets, A, B, C and D, would attract a paper clip. She recorded the results in a graph as shown below.



Based on the bar graph above, which is the strongest magnet?

- [illegible]

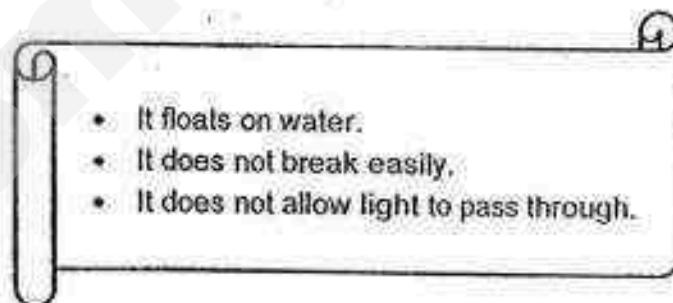
21. The diagram below shows a frying pan.



What materials are part S and T most likely made of?

	S	T
(1)	wood	glass
(2)	metal	plastic
(3)	plastic	wood
(4)	rubber	metal

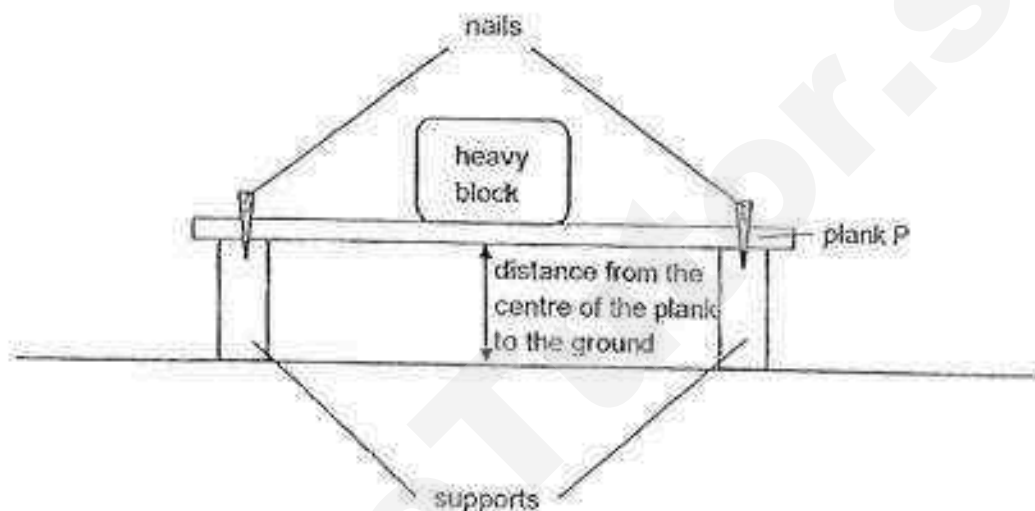
22. Michael described the properties of a material as shown below.



Based on the description above, which of the following is most likely to be the material he has described?

- | | |
|------------|-----------|
| (1) metal | (2) glass |
| (3) fabric | (4) wood |

23. Kelly set up an experiment to test the flexibility of the four planks, P, Q, R and S, which are made of different materials. She placed plank P on supports and nailed their ends firmly as shown below. Then, she placed a heavy block on the plank and measured the distance from the centre of the plank to the ground. She repeated the experiment with the other three planks.



Kelly recorded her results in the table below.

Plank	Distance from the centre of plank to the ground (cm)
P	1
Q	3
R	5
S	7

Based on the above results, which plank is the most flexible?

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

End of Booklet A



Rosyth School
Second Semestral Examination for 2016
SCIENCE
Primary 3

Name: _____

Total
Marks:



Class: Pr 3 - _____ Register No. _____ Duration: 1 h 30 min

Date: 1 November 2016 Parent's Signature: _____

Booklet B

Instructions to Pupils:

1. For questions 24 to 34, write your answers in the spaces given in this booklet.

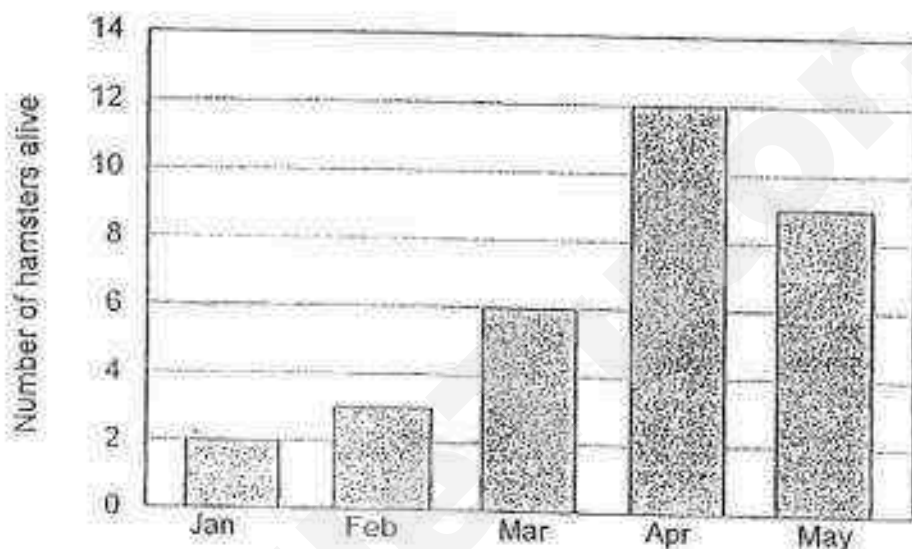
	Maximum	Marks Obtained
Booklet A	46 marks	
Booklet B	34 marks	
Total	80 marks	

* This booklet consists of 12 printed pages (including cover page).

Booklet B (34 marks)

24. Ahmad kept two hamsters in a cage over a period of time. He fed them with the same amount of food and water every day. The bar graph below shows the number of hamsters in the cage during the five months.

(No hamsters were added or removed from the cage.)

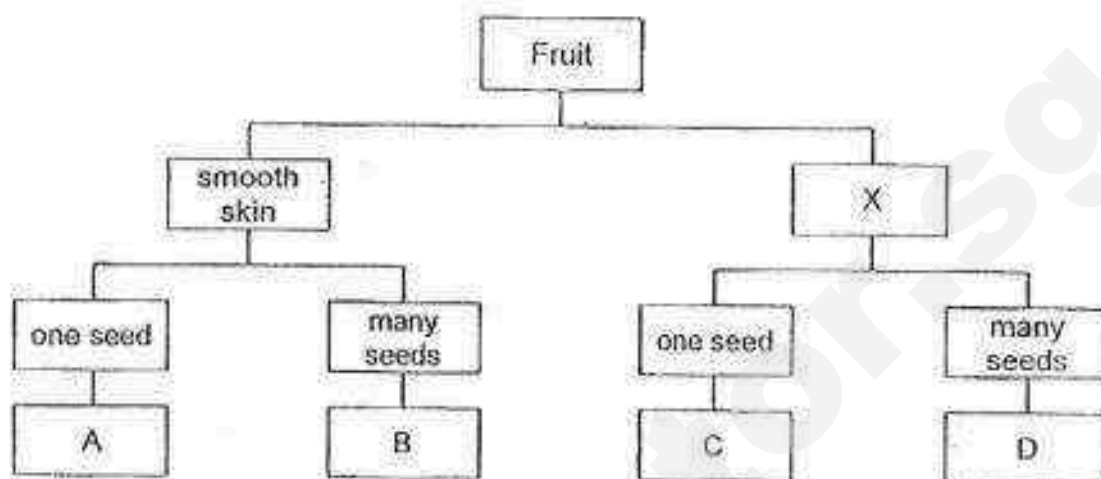


- (a) Based on the graph above, what do you notice about the number of hamsters from January to April? (1m)

- (b) What is the characteristic of living things observed in part (a)? (1m)

- (c) Based on the characteristics of living things, why is there a change in the number of hamsters from April to May? (1m)

25. The classification chart below shows how some fruits have been grouped.



- (a) Give a suitable heading for X. (1m)

- (b) Based on the classification chart above, state the characteristics of fruit A. (1m)

- (c) Based on the classification chart above, state one similarity between fruit B and fruit D. (1m)

26. Martin carried out an experiment to find out which toothpaste was able to reduce the growth of bacteria. The results were recorded as shown below.

Toothpaste	Amount of bacterial growth (mm ²)
A	15
B	10
C	5

- (a) Which toothpaste should Martin use? Explain why. (1m)

- (b) State two conditions that allow the bacteria to grow well inside the mouth. (2m)

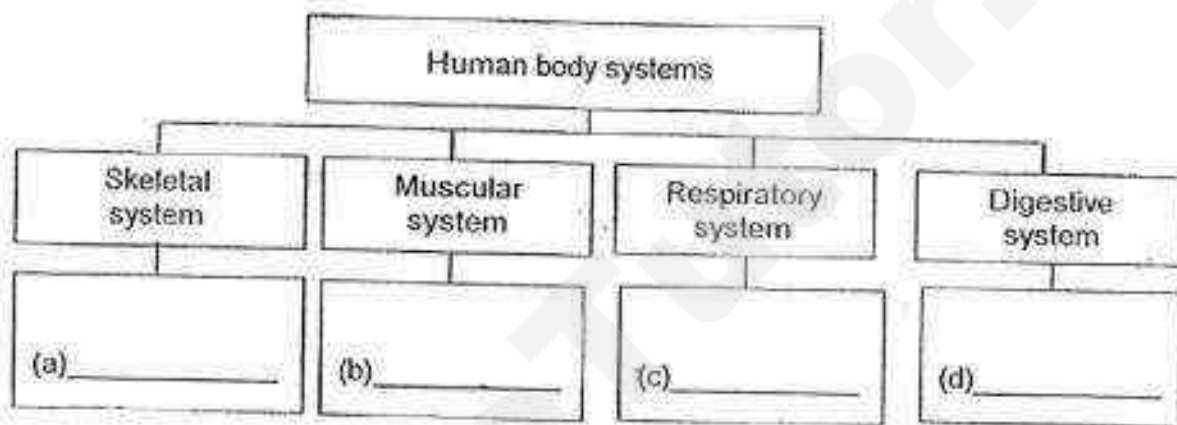
Condition 1:

Condition 2:

27. Classify the following body parts into the different human body systems below.


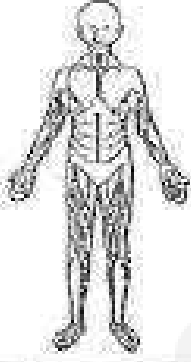
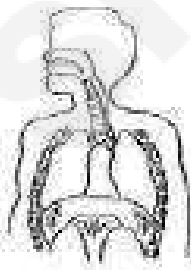
(2m)

windpipe skull muscles gullet

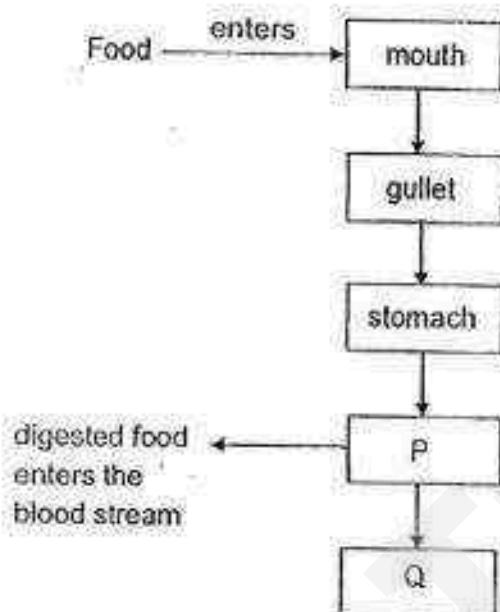


28. Match the body systems to the correct descriptions given in the table below.

(3m)

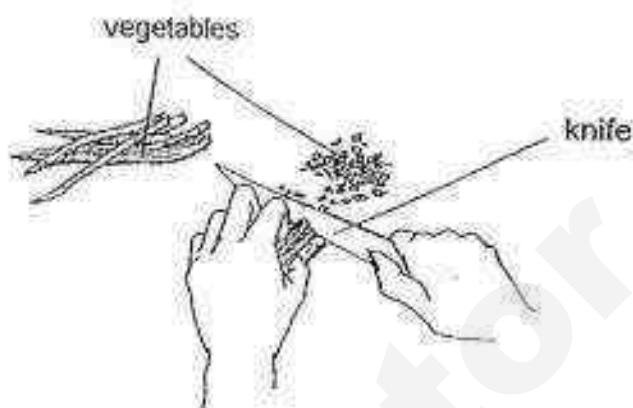
Body System	Description
	It contracts and relaxes to make movement possible.
	It allows exchange of gases with the surroundings.
	It gives the body its shape.

29. The diagram below shows the path in which food travels in the human body.



- (a) What do P and Q in the above diagram represent? (2m)
- (i) P: _____
- (ii) Q: _____
- (b) What substance is passed from P to Q? (1m)

30. Mrs Lee used a knife to cut some vegetables.

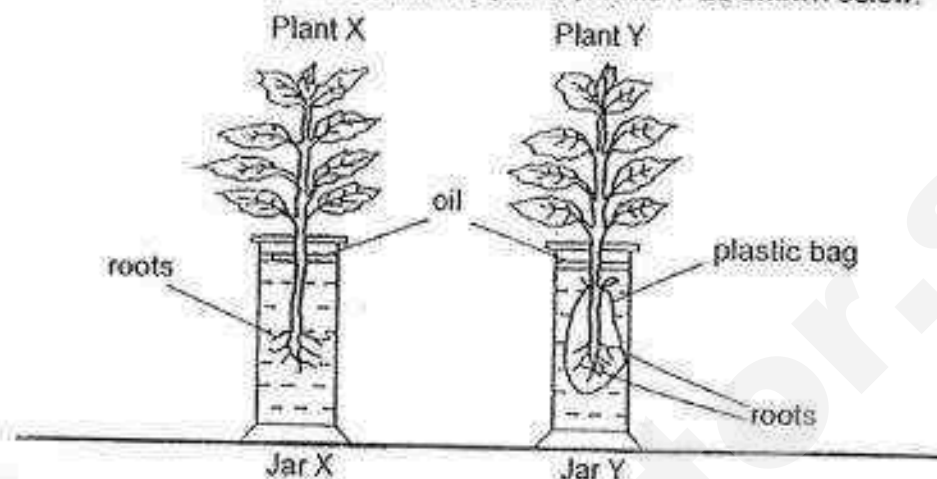


- (a) Which part in the mouth has a function similar to the knife?

(1m)

- (b) Explain how the part in (a) is similar to Mrs Lee using the knife to cut the vegetables. (1m)

31. Jim carried out an experiment on two plants, X and Y as shown below.



He recorded the volume of water in jars X and Y on Day 1 and Day 2. The results were recorded in the table as shown below.

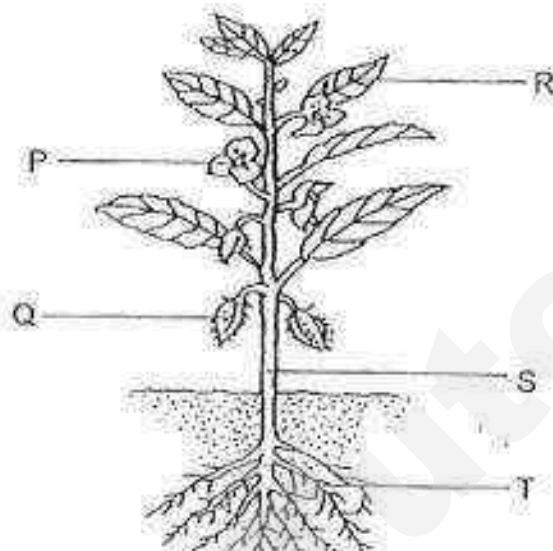
	Volume of water on Day 1 (ml)	Volume of water on Day 2 (ml)
Jar X	100 ml	90 ml
Jar Y	100 ml	100 ml

- (a) From the table above, what do you observe about the volume of water in jar X from Day 1 to Day 2? (1m)

- (b) Sam said that plant Y will wither and die after a week. Do you agree with him? Explain why. (1m)

- (c) From the results above, what can Jim infer about the function of roots? (1m)

32. The diagram below shows a plant with parts labelled P to T.



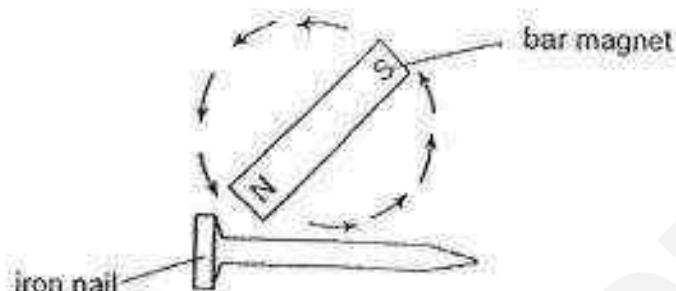
- (a) Which part, P, Q, R, S or T, is the flower? (1m)

- (b) Complete the table below by writing the letters, P, Q, R, S or T, to match the parts of the plant to their functions. (2m)

	Function	Part of plant
(i)	It holds the plant firmly to the ground.	
(ii)	It contains and protects the seeds.	

- (c) Jean said that the plant would eventually die if all the leaves are removed from it. Do you agree with her? Explain why. (1m)

33. Jane made a temporary magnet using an iron nail and a bar magnet as shown below.



When Jane brought some paper clips near her temporary magnet, the temporary magnet did not attract the paper clips.

- (a) What should Jane do to her temporary magnet to attract paper clips? (1m)


Jane then used a bar magnet to find out what would happen when one end of objects, A, B and C, was brought close to it. She recorded her observations in the table below.

Object	Observation when one end of object was brought close to magnet
A	Did not attract or repel
B	Attracted
C	Repelled

Based on the above observations, put a tick (✓) in the correct box to indicate whether her statements were 'true', 'false' or 'not possible to tell'. (3m)

	Statement	True	False	Not possible to tell
(b)	Object A is not made of a metal.			
(c)	Object B is made of copper.			
(d)	Object C is a magnet.			

34. Berry wanted to find out about the property of three different materials, X, Y and Z. He placed each material over the mouth of a beaker and slowly added 100 ml of water. After 10 minutes, he recorded his observations as shown below.

Recording after 10 min			
Set-up	X	Y	Z
Amount of water collected on material (ml)	100	0	0
Amount of water collected in beaker (ml)	0	100	30

- (a) State the property of material which Berry was trying to find out. (1m)
- _____
- (b) Berry noticed that only 30 ml of water was collected in Set-up Z after 10 min. Explain why. (1m)
- _____
- _____
- (c) Based on the results above, which material, X, Y or Z, should she choose to make a raincoat? Explain why. (2m)
- _____
- _____
- _____

End of Booklet B

EXAM PAPER 2016 (P3)

SCHOOL : ROSYTH

SUBJECT : SCIENCE

TERM : SA2

Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9	Q10
3	4	4	1	3	2	3	2	4	2
Q11	Q12	Q13	Q14	Q15	Q16	Q17	Q18	Q19	Q20
1	4	3	2	7	4	4	4	3	2
Q21	Q22	Q23							
2	4	1							

24)a)The number of hamsters increased from January to April.

b)Living thing reproduce.

c)Some hamsters could have died.

25)a)Rough skin.

b)Fruit A has smooth skin and one seed.

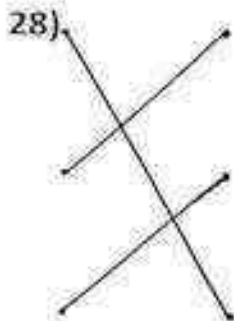
c)Both have many seeds.

26)a)C, because it has the least bacteria growth when used.

b)1: Food

2: water

27) a) skull b) muscles c) windpipe d) gullet



29) a) i) small intestine ii) large intestine

b) Undigested food

30) a) Teeth

b) It cuts the food in to smaller pieces to be swallowed

31) a) The volume of water decreased from Day 1 to Day 2.

b) Yes, The roots were rapped in a plastic bag, so it could not absorb water. Without water the plant would die.

c) Roots absorb water.

32) a) P

b) i) T ii) Q

c) Yes. The leaves will food for the plant so it will die when there is no food for the plant to survive.

33) a) She should stroke it more to increase its magnetism.

b) Not c) False

d) True

34) a) Absorbency.

b) It is because material Z absorbed 70ml of water.

c) Material X, because it is the most waterproof material. Raincoats have to be waterproof too.



PRIMARY 3 END-OF-YEAR EXAMINATION 2016

Name : _____ ()

Date: 25 October 2016

Class : Primary 3 ()

Time: 8.00 a.m. – 9.30 a.m.

Parent's Signature : _____

Marks: _____ / 46

**SCIENCE
BOOKLET A**

INSTRUCTIONS TO CANDIDATES

Write your name, register number and class.

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

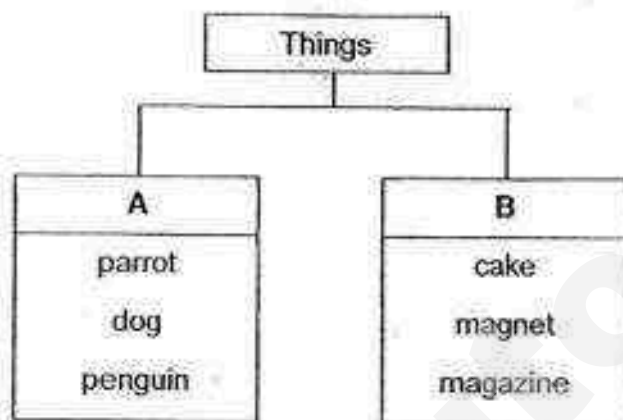
Follow all instructions carefully.

Answer all questions.

Section A (23 x 2 marks)

For each question from 1 to 23, 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.

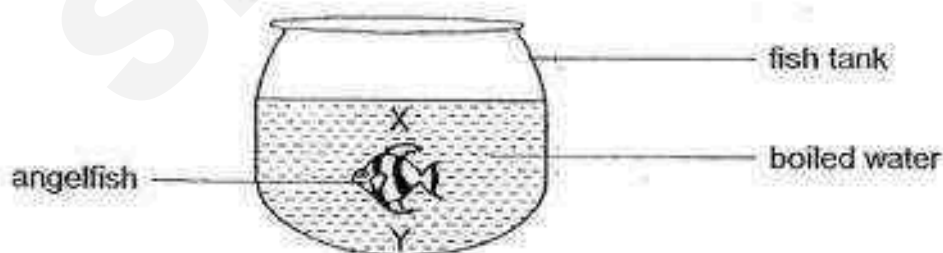
1. Study the classification chart below.



Which of the following is correctly represented by A and B?

	A	B
(1)	Can swim	Cannot swim
(2)	Can reproduce	Cannot reproduce
(3)	Cannot be eaten	Can be eaten
(4)	Can make its own food	Cannot make its own food

2. Study the diagram below.



A healthy and well-fed angelfish was placed in the fish tank above. At which position would it be found after 30 minutes and why?

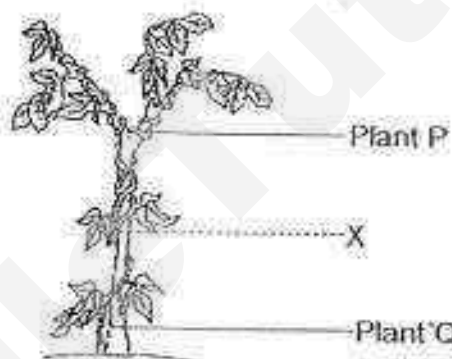
- (1) X because it had died due to lack of food.
- (2) X because it wanted to take in oxygen from the surrounding air.
- (3) Y because it could easily take in more water.
- (4) Y because it needed wet gills to take in oxygen from the water.

3. The pictures below show an earthworm and a strand of noodle.



Which of the following observations show that only the earthworm is a living thing?

- (1) The earthworm has a moist surface while the noodle has a dry surface.
 - (2) The earthworm feels rough while the noodle feels smooth when touched.
 - (3) The earthworm coils up while the noodle remains the same shape when touched.
 - (4) The earthworm is made up of many parts while the noodle is made up of only one part.
4. Plant P climbs up another plant, Plant Q, to get more sunlight to make food.



The stem of Plant P was cut at X. The part above X died after some time. Why?

- (1) It did not get enough water.
 - (2) It had no support from Plant Q.
 - (3) It did not have enough sunlight.
 - (4) It had no support from the roots.
5. Study the classification table below carefully.

P	Q	R	S
bat	turtle	frog	duck
dolphin	snake	newt	goose
spiny anteater	crocodile	salamander	ostrich

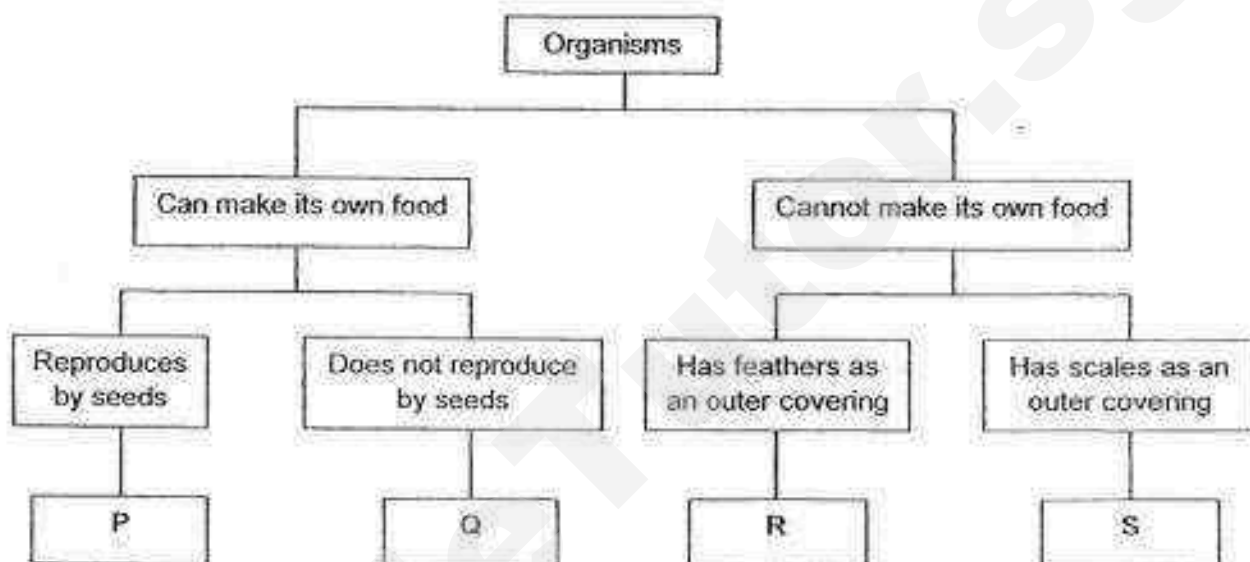
Which groups of animals, P, Q, R or S, lay eggs?

- (1) P and S only
- (2) Q and R only
- (3) Q, R and S only
- (4) P, Q, R and S

6. Which of the following statements about all non-flowering plants and fungi is correct?

- (1) Both have chlorophyll.
- (2) Both reproduce by spores.
- (3) Both feed on other living things.
- (4) Both do not make their own food.

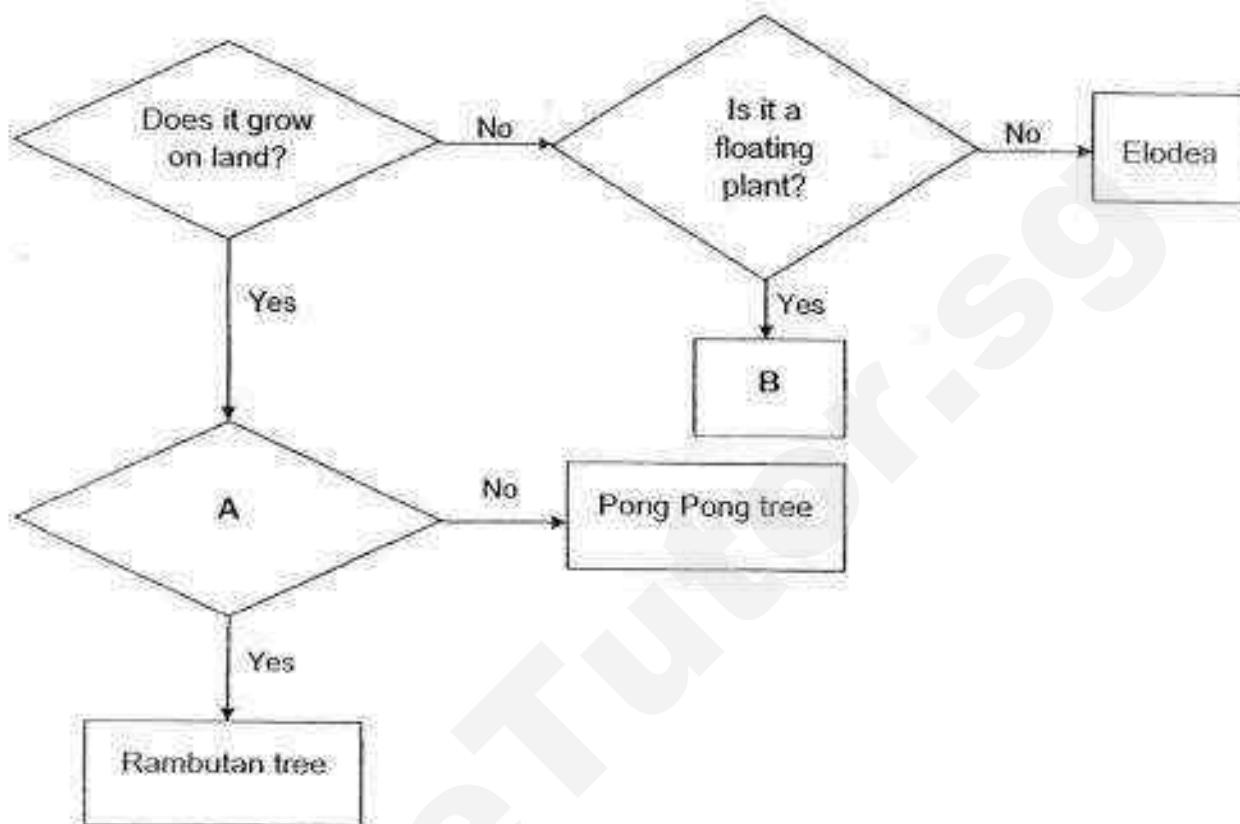
7. Four organisms, P, Q, R and S, are classified according to the flow chart below.



Based on the flow chart above, which of the following statements about P, Q, R and S, is definitely true?

- (1) Both P and Q are plants.
 - (2) P is a plant while Q is a fungi.
 - (3) R could be a platypus while S could be a fish.
 - (4) Q could be a mushroom while S could be a turtle.
8. What is the similarity between insects and reptiles?
- (1) The young look like the adults.
 - (2) They reproduce by laying eggs.
 - (3) They eat the same type of food.
 - (4) They have the same type of outer covering.

9. The flowchart below can be used to identify some types of plants.



What do A and B in the flowchart represent?

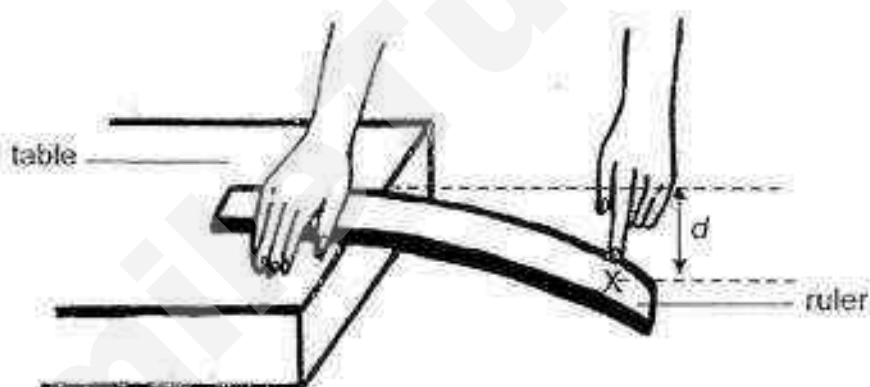
	A	B
(1)	Is it a flowering plant?	Moss
(2)	Is the fruit edible?	Water hyacinth
(3)	Does the fruit have a rough texture?	Bird's nest fern
(4)	Does the fruit have only one seed?	Water lily

10. Joy conducted an experiment with 3 objects, Q, R and S. Her observations of their properties are shown in the table below.

Object Property	Q	R	S
Flexible	Yes	No	Yes
Magnetic	No	No	No
Waterproof	No	Yes	No
Transparent	No	Yes	No

Which property should she use to group objects Q, R and S together?

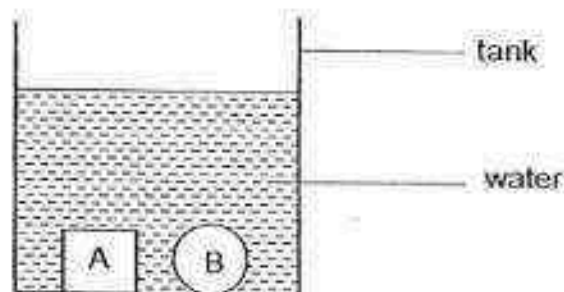
- (1) Flexibility
 - (2) Magnetism
 - (3) Ability to absorb water
 - (4) Ability to allow light to pass through them
11. Joshua conducted an experiment using the set-up below.



He bent 4 rulers made of different materials by pressing at point X. Then, he measured the distance, d , moved by one end of the rulers before they broke. What property of the ruler is he testing?

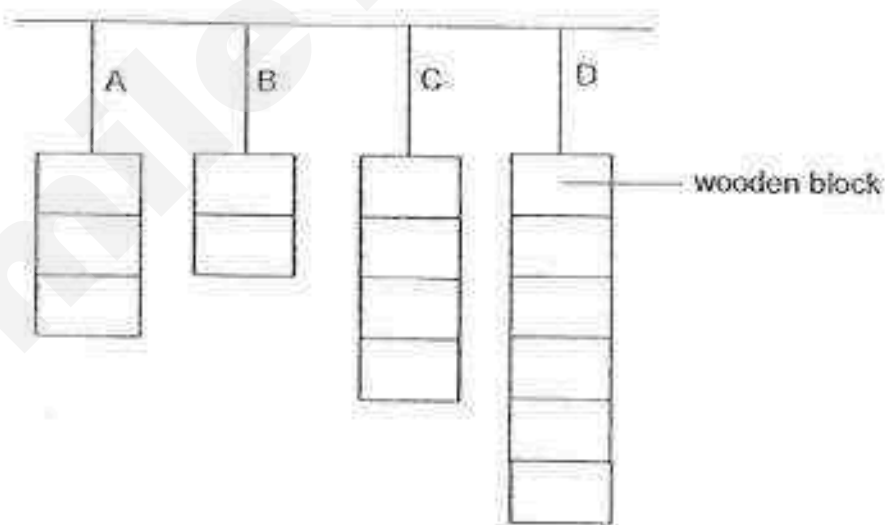
- (1) Flexibility
- (2) Transparency
- (3) Ability to float or sink
- (4) Whether it is waterproof

12. Timothy placed two objects, A and B, into a tank of water. The diagram below shows what happened.



Based on the results of the experiment, what can he conclude about the two objects?

- (1) Both sink in water.
 - (2) Both are waterproof.
 - (3) Both have the same shape.
 - (4) Both are made of the same material.
13. Strings A, B, C and D are made of different materials. The diagram below shows the greatest number of identical wooden blocks each string can support without breaking.



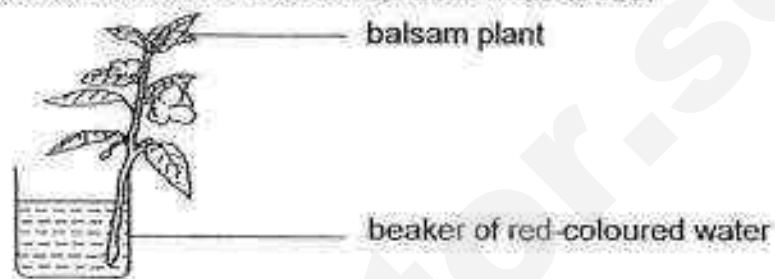
Which string/(s) can support 4 wooden blocks without breaking?

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

14. What is the function of the tiny openings in the leaves?

- (1) Trap light energy from the sun to make food.
- (2) Allow exchange of gases between plant and surroundings.
- (3) Hold the leaves up so that they can get sunlight to make food.
- (4) Climb up other plants for support to get sunlight to make food.

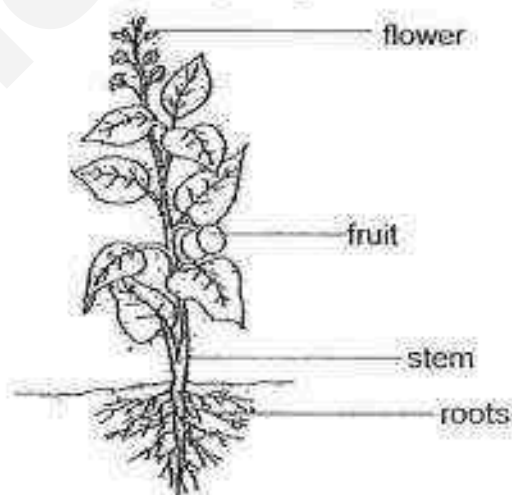
15. Mary puts a balsam plant in a beaker of red-coloured water. A few hours later, she observes that its flowers have turned from white to red.



What does this experiment show?

- (1) The flowers take in water for the plant.
- (2) The plant takes in water through the roots.
- (3) The stem carries water from the stem to the rest of the plant.
- (4) The leaves use the water from the plant to make food to stay alive.

16. The diagram below shows a plant growing in a garden.



Which part of the plant allows it to get maximum amount of sunlight to make food?

- (1) Fruit
- (2) Stem
- (3) Roots
- (4) Flower

17. Which of the following systems of the human body is correctly matched to its function?

	System of the human body	Function
(1)	Skeletal system	Protects organs in the body
(2)	Circulatory system	Carries waste materials to all parts of the body
(3)	Respiratory system	Pumps blood around our body
(4)	Muscular system	Supports our body

18. Which of the following organ systems work together to allow us to run?

A : Skeletal system
B : Muscular system
C : Digestive system
D : Circulatory system
E : Respiratory system

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

19. What is the function of the large intestine in the human digestive system?

- (1) It digests food.
(2) It passes the digested food to the blood.
(3) It removes water from the undigested food.
(4) It passes the digested food out of the body.

20. Which of the following shows the correct order when food moves through some parts of the human digestive system?

(1)



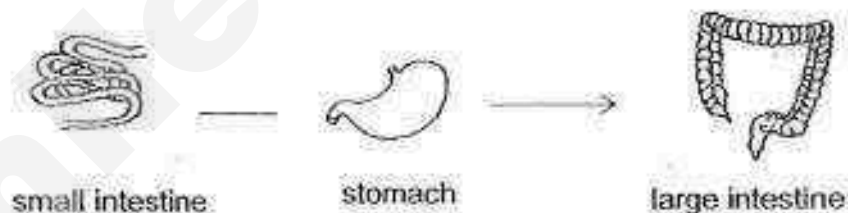
(2)



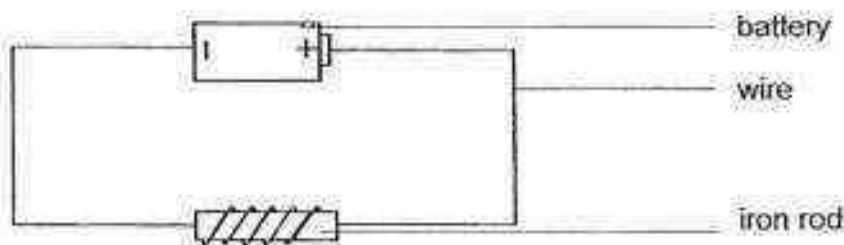
(3)



(4)



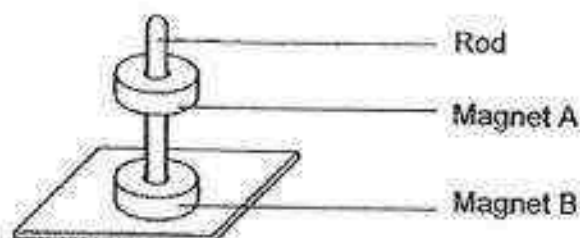
21. May Ling made an electromagnet with 5 coils of wire around an iron rod as shown below.



What can May Ling do to increase the strength of the electromagnet?

- (1) Change the battery to a magnet.
- (2) Increase the number of batteries.
- (3) Change the iron rod to a glass rod.
- (4) Decrease the number of coils of wire around the iron rod.

22. Two ring magnets, Magnet A and Magnet B, are put through a rod as shown below.



Why is Magnet A suspended above Magnet B?

- (1) Both magnets attract the rod.
 - (2) Magnet B is stronger than Magnet A.
 - (3) Like poles of both magnets repel each other.
 - (4) N-pole of Magnet A repels S-pole of Magnet B.
23. Minghao conducted an experiment using the set-up shown below to find out if two objects, object A and object B, are magnets. He placed part X of the object near the S-pole and N-pole of the magnet respectively.



The results of his experiment are shown in the table below.

		When Part X of Object A is placed near the magnet	When Part X of Object B is placed near the magnet
Part of magnet	S-pole	No reaction	Attracted to it
	N-pole	No reaction	Attracted to it

Based on his observations, which of the following conclusions is definitely correct?

- (1) Object A is a magnet
- (2) Object B is a magnet.
- (3) Object B is made of aluminium.
- (4) Object A is a non-magnetic object.



PRIMARY 3 END-OF-YEAR EXAMINATION 2016

Name : _____ ()

Date: 25 October 2016

Class : Primary 3 ()

Time: 8.00 a.m. – 9.30a.m.

Parent's Signature : _____

SCIENCE BOOKLET B

INSTRUCTIONS TO CANDIDATES

Write your name, register number and class.

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

Follow all instructions carefully.

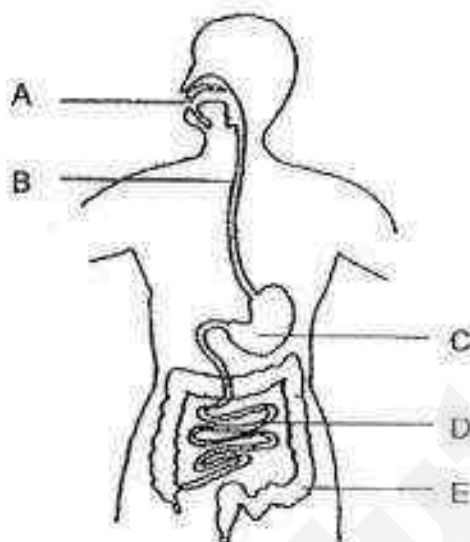
Answer all questions.

Booklet A	46
Booklet B	34
Total	80

Section B (34 marks)

For questions 24 to 34, write your answers in the spaces provided.

24. The diagram below shows the human digestive system.



- (a) At which parts of the digestive system, A, B, C, D or E, do digestion take place?

[1]

Part/ (s) : _____

- (b) At which part of the digestive system, A, B, C, D or E, does digestion end? Identify this part.

[1]

Part _____

Name of part : _____

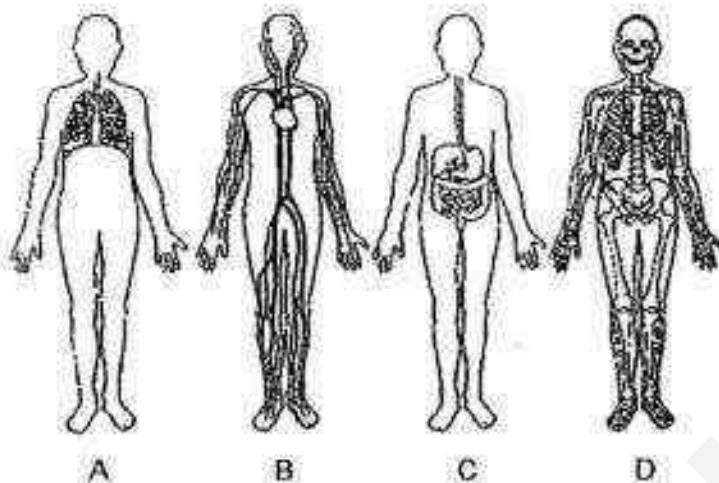
- (c) At which part of the digestive system, A, B, C, D or E, is the digested food absorbed into the bloodstream? Identify this part.

[1]

Part _____



25. The following diagrams show 4 human systems, A, B, C and D.



(a) Identify the 4 systems shown above.

[2]

	Systems	Name of system
(i)	A	
(ii)	B	
(iii)	C	
(iv)	D	

(b) Which system, A, B or D, collects digested food from system C and transports it to the rest of the body?

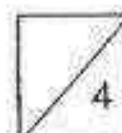
[1]

System _____

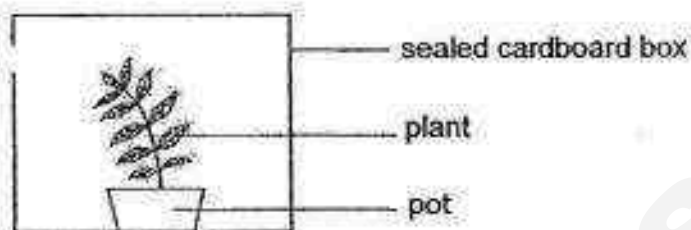
(c) Which system, B, C or D, collects oxygen from system A and transports it to the rest of the body?

[1]

System _____



26. Swee Choo wanted to find out how light would affect the growth of a plant. She watered the plant before leaving it in a sealed cardboard box. She then cut a hole in the box and left it in a field. After a few days, she observed that the plant grew towards one side as shown in the diagram below.



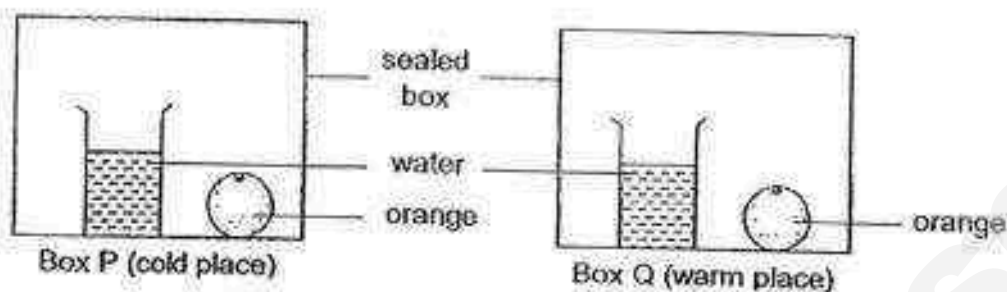
- (a) On the diagram above, draw an \otimes to show a possible position of the hole made by Swee Choo. [1]

- (b) What can Swee Choo conclude about the characteristic of the plant from this experiment? [1]

- (c) Swee Choo then covered the hole with a piece of frosted glass. She watered the plant daily. Would her observation of the plant be the same a few days later? Explain your answer. [1]



27. Rafi placed 2 similar oranges in 2 identical sealed boxes. He placed Box P in a cold place and Box Q in a warm place.



- (a) In which box, Box P or Box Q, would green patches first appear on the orange? Explain your answer.

[1]

- (b) What are the green patches on the orange?

[1]

- (c) Rafi carried out another experiment with 3 similar oranges. He wanted to find out if the amount of water affects the growth of the green patches. He recorded his observations in the table below.

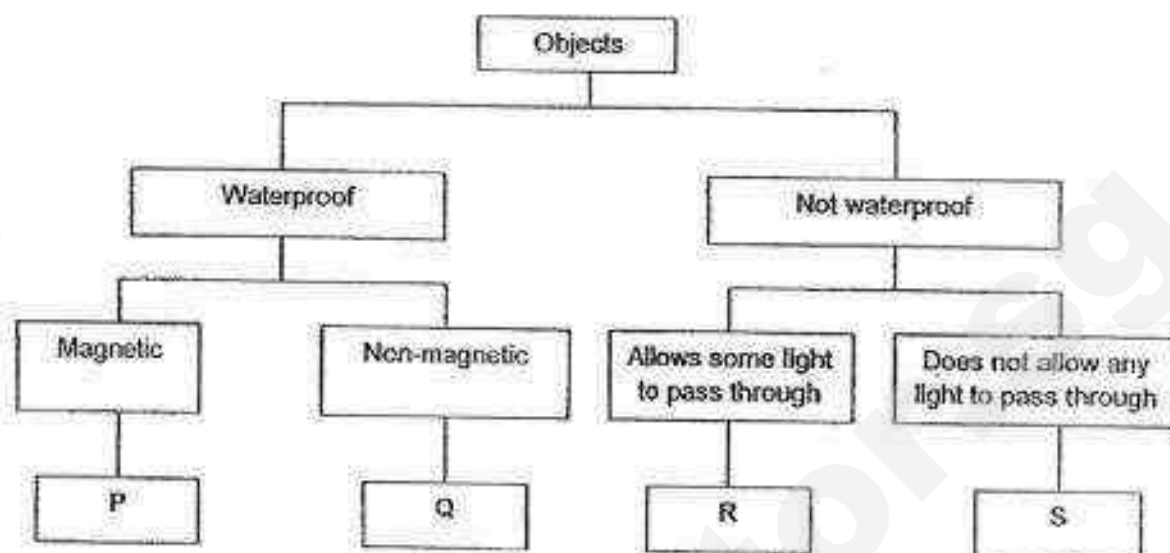
Set-ups	A	B	C
Amount of water added to the orange (ml)	0	1	5
Number of days before green patches appeared on the orange	6	4	2

State the relationship between the amount of water added to the orange and the number of days before the green patches appeared?

[1]



28. Study the flow chart below carefully.



(a) Based on the flow chart above, write the letter, P, Q, R or S, that represents each of the objects below.

[2]

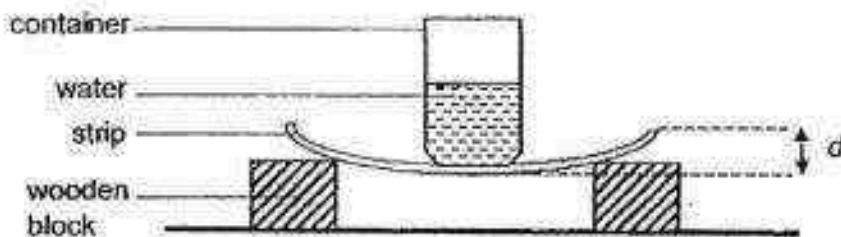
	Object	Letter that represents the object
(i)	Steel pipe	
(ii)	A piece of tissue paper	
(iii)	Copper coin	
(iv)	A stack of newspaper	

(b) Based on the flow chart above, what are 2 characteristics of the object, S?

[1]



29. Ling Ling set up an experiment as shown below to compare 2 strips made of different materials, P and Q.



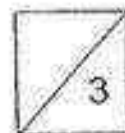
For each strip, she added 100 ml of water into the container. She measured the distance, d , which is the distance between the highest point and lowest point of the strip. The table below shows her results.

Strip	Amount of water added into the container (ml)	d (cm)
P	100	3
Q	100	2

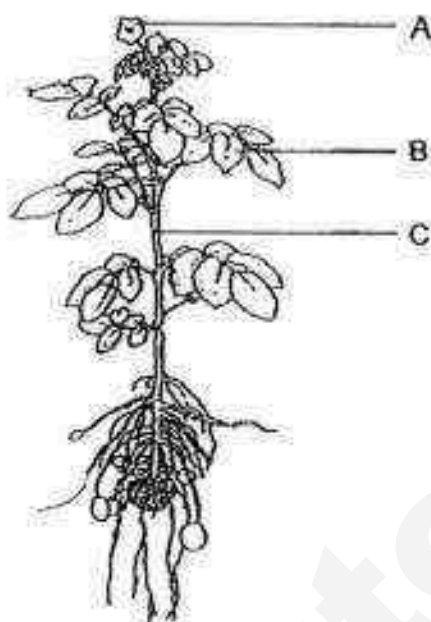
- (a) State a variable of the strip that was fixed so that it would be a fair test for the experiment. [1]

- (b) What can she conclude about Strip P and Q, from this experiment? [1]

- (c) Explain your answer in (b). [1]



30. The diagram below shows a potato plant.



(a) Which part of the plant, A, B or C, helps it to make food?

[1]

(b) (i) Name the plant part which A represents.

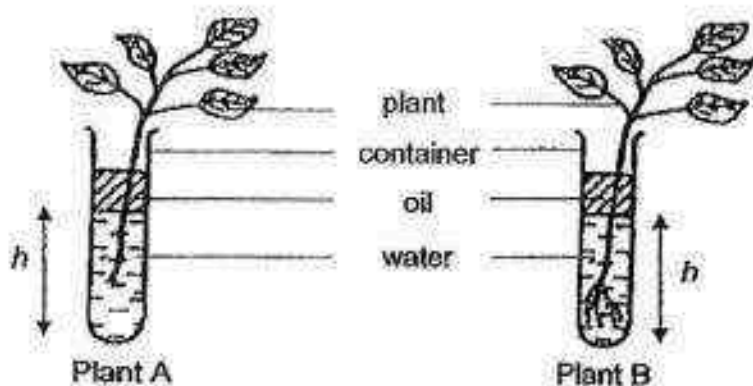
[1]

(ii) What can this plant part mentioned in b(i) develop into?

[1]



31. Ivy conducted an experiment using similar plants, plant A and plant B, in the set-ups shown below. She removed the roots from plant A. She then recorded the water level, h , at regular intervals for both set-ups.



- (a) What is the changed variable in this experiment?

[1]

The results of her experiment are shown below.

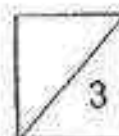
	Amount of water at the start of the experiment (ml)	Amount of water at the end of the experiment (ml)
P	100	80
Q	100	70

- (b) She concluded that Q represents the results obtained for Plant B. What is the evidence she obtained from the results above?

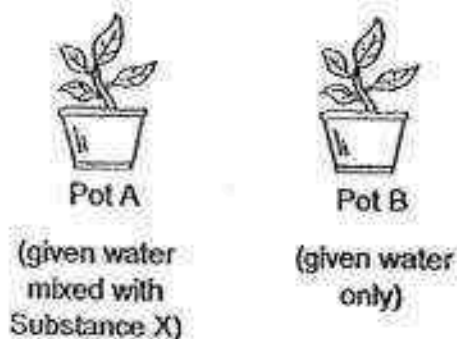
[1]

- (c) What caused the water level to decrease more for Plant B?

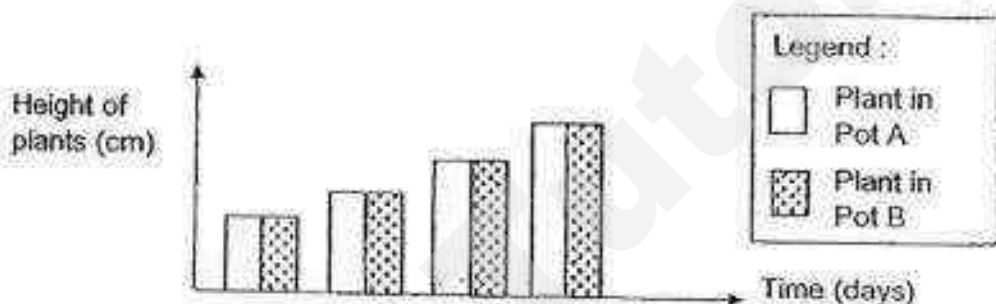
[1]



32. Ben wanted to find out if Substance X affects the growth of plants. He used 2 similar plants in his experiment and placed both pots, A and B, in a field for 4 days.



The graph below shows the change in the height of the plants during the experiment.



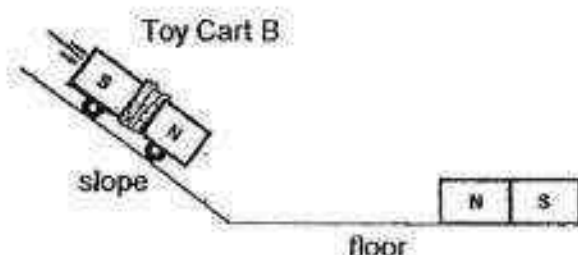
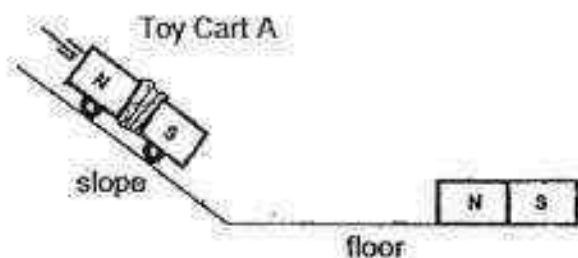
- (a) What can he conclude from the results about Substance X? [1]

- (b) Which part of the plant took in Substance X for the plant in Pot A? [1]

- (c) The plants would die if they were placed in a dark room. Give the reason why this would occur. [1]



33. The diagram below shows 2 identical magnets tied to a toy cart in different ways. They are released from the same starting point, towards another magnet placed on the floor.



- (a) Which of the similar toy carts, Toy Cart A or Toy Cart B, would move faster as it approaches the magnet on the floor? Explain your answer.

[2]

- (b) In another experiment, another similar toy cart, Toy Cart C, was tied with a magnet of same mass but different strength. Toy Cart C travelled faster than Toy Cart A as it approached the magnet on the floor.

- (i) What can you conclude about the strength of the magnet on Toy Cart C?

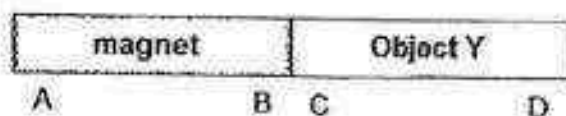
[1]

- (ii) Which pole of the magnet on Toy Cart C was facing the N-pole of the magnet on the floor?

[1]



34. Gopal observed that a magnet and Object Y were attracted as shown below. The letters, A, B, C and D, represent the ends of the magnet and Object Y respectively.

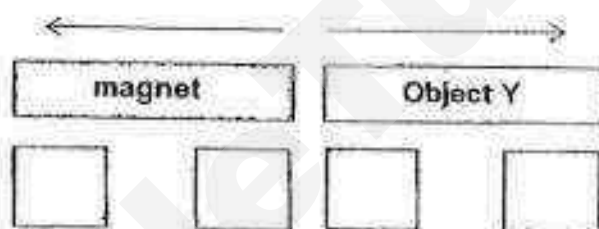


- (a) Gopal cannot conclude that Object Y is a magnet based only on the above observation. Explain why.

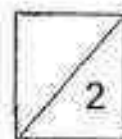
[1]

- (b) Fill in the boxes with letters, A, B, C and D which represent the ends of the magnet or Object Y if Object Y and the magnet repel.

[1]



(End of Paper)



EXAM PAPER 2016 (P3)

SCHOOL : TOA NAN

SUBJECT : SCIENCE

TERM : SA2

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

24)a)A , C and D.

b)D.

c)D.

25)a)i)Respiratory System

ii)Circulatory System

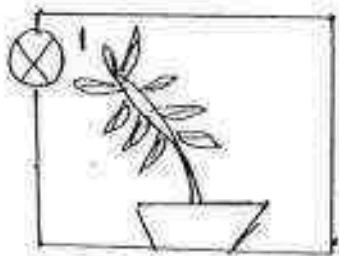
iii)Digestive System

iv)Skeletal System

b)B.

c)B

26)a)



b)The plant respond to changes around it.

c)No. Frosted glass allow lesser light to pass through so the plant cannot trap enough light energy to make food and eventually dies.

27)a)Box Q. It has both moisture and warmth so there is warmth so the patches can grow.

b)They are mould.

c)As the amount of water added to the orange increases, the number of days before green patches appeared on it decreases.

28)a)i)P ii)R iii)Q iv)S

b)It is not waterproof and does not allow any light to pass through.

29)a)Both must have the same length.

b)Strip P is more flexible than strip Q.

c)P bent more than Q when the same amount of water was placed on the strips.

30)a)B.

b)Flower.

c)It can develop into a fruit.

31)a)Plant A has no roots while Plant B has roots.

b)Plant B has roots so it could take in more water.

c)Plant B could take in more water as it has roots so it can make food for the plant.

32)a) Substance X does not affect the growth of plants.

b) The roots.

c) The plant cannot trap sunlight so it cannot make food for the plant.

33)a) Toy Cart A. Their unlike poles are facing each other so they will attract each other.

b)i) It has stronger magnetism in it so it could travel faster.

ii) The S-pole.

34)a) Object Y will only be a magnet when the magnet and object Y repels as only magnets repel each other.

b) A, B, D, C



Temasek Primary School

Semestral Assessment 2

Primary Three

2016

SCIENCE
(Booklet A)

Name: _____ ()

Class: Primary 3 _____

Date: 25 October 2016

Parent's Signature: _____

48 Marks

Total Time for Booklet A and B: 1h 30 min

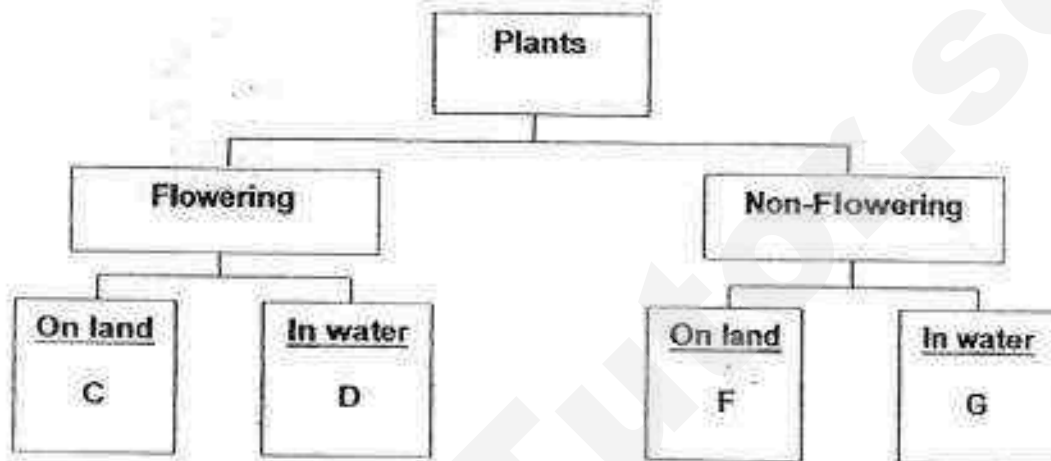
INSTRUCTIONS TO CANDIDATES

1. Write your name, class and register number in the spaces provided clearly.
2. Do not open this booklet until you are told to do so.
3. Follow all instructions carefully.
4. Answer all questions.
5. Shade your answers in the Optical Answer Sheet (OAS) provided.

For each question from 1 to 24, four options are given. One of them is the correct answer. Shade your choice (1, 2, 3, or 4). Shade your answer on the Optical Answer Sheet.

(48 marks)

- 1 Study the classification diagram below.



Joshua sees a red flower in the school field and he wants to classify it into the correct category as shown in the classification diagram above.

Which one of the letters correctly describes the red flower Joshua sees?

- (1) C
- (2) D
- (3) F
- (4) G

- 2 Four children described the things that they have seen.

Ali:	The bus cannot move anymore. It has died.
Tim:	My cat purrs when you pat its head. It can respond to changes.
Lily:	My plant's height changed from 3cm to 5cm. It shows signs of growth.
Siti:	The leaves are rustling in the wind. They are able to move on their own.

Whose statements are correct?

- (1) Ali and Siti only
- (2) Ali and Lily only
- (3) Tim and Siti only
- (4) Tim and Lily only

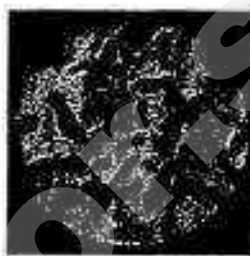
3 Which one of the following statements about non-living things is correct?

- (1) They can have young.
- (2) They respond to changes around them.
- (3) They can move from place to place all by themselves.
- (4) They may have come from things that were once alive.

4 The diagrams below show a mushroom and some bacteria.



mushroom



bacteria

What is one similarity between the mushroom and the bacteria?

- (1) They reproduce by seeds.
- (2) They can make their own food.
- (3) They do not need water to survive.
- (4) They respond to changes in the surrounding.

5 The classification table below shows some materials and where they come from. Which set is correct?

	From animals	From plants
(1)	Silk	Plastic
(2)	Wool	Cotton
(3)	Gold	Paper
(4)	Rubber	Cotton

- 6 Amirah wants to bring a bottle to school. She has chosen to bring a plastic bottle instead of a glass bottle as she will be carrying the water bottle with her everywhere she goes.

A plastic bottle is a better choice than a glass bottle because _____.

A	it is lighter.
B	it is waterproof.
C	it can float on water.
D	it does not break easily.

Which of the above statements are correct?

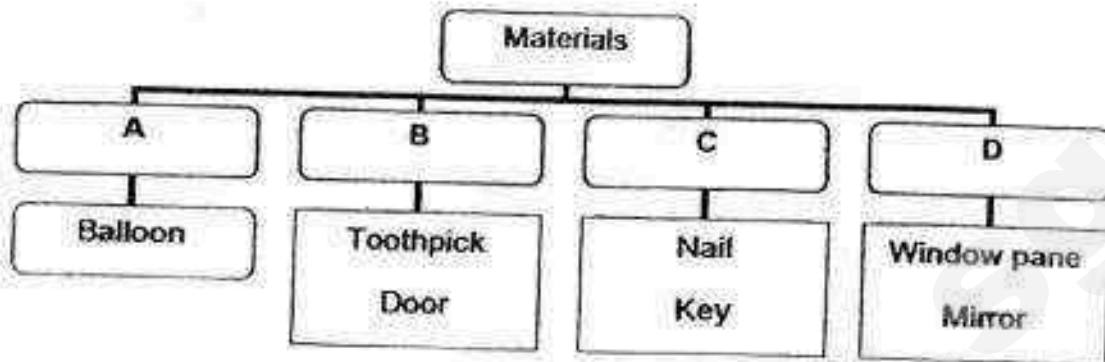
- (1) A and B
- (2) B and C
- (3) C and D
- (4) A and D

- 7 Jolie is a fashion designer. She wants to buy a material to produce a T-shirt suitable for joggers in a hot country. Which material should she buy? (A tick (✓) represents the presence of such characteristics in the material.)

Material	Characteristics		
	Waterproof	Light	Flexible
A	✓		
B		✓	✓
C	✓		✓
D		✓	

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

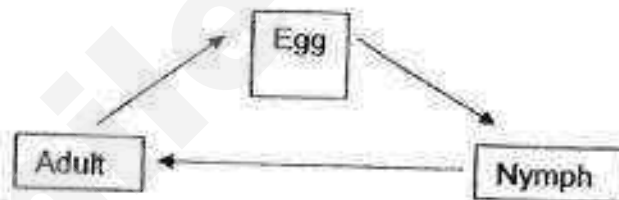
- 8 Study the classification diagram below.



Which of the following correctly shows what headings A, B, C and D can be?

	A	B	C	D
(1)	Plastic	Metal	Ceramic	Wood
(2)	Ceramic	Plastic	Wood	Rubber
(3)	Rubber	Wood	Metal	Glass
(4)	Rubber	Metal	Glass	Plastic

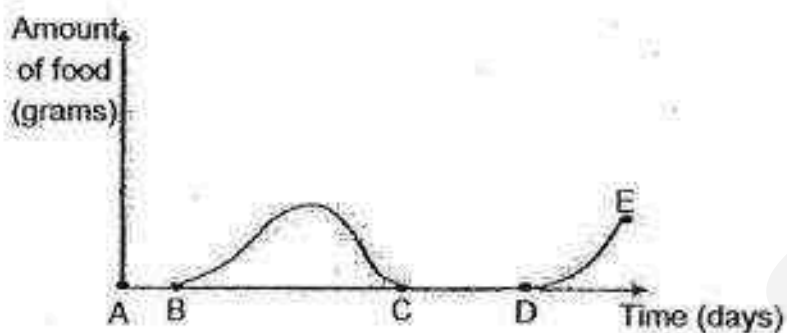
- 9 The diagram below shows the life cycle of an animal.



Which animal is likely to have the life cycle as shown above?

- (1) Frog
- (2) Butterfly
- (3) Cockroach
- (4) Mealworm beetle

- 10 The graph shows the amount of food that is eaten at different stages of the life cycle of a butterfly.

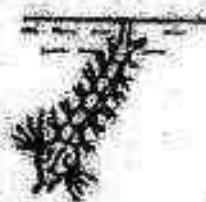


In which of the following parts of the graph is the butterfly in its pupa stage?

- (1) A to D
 - (2) B to C
 - (3) C to D
 - (4) D to E
- 11 The diagrams below show the young of a grasshopper, X, and the young of mosquito, Y.



X



Y

Which one of the following best describes X and Y?

- (1) Both X and Y have wings.
- (2) X lives in water but Y lives on land.
- (3) X looks like its parent but Y does not look like its parent.
- (4) X goes through a four-stage life cycle but Y goes through a three-stage life cycle.

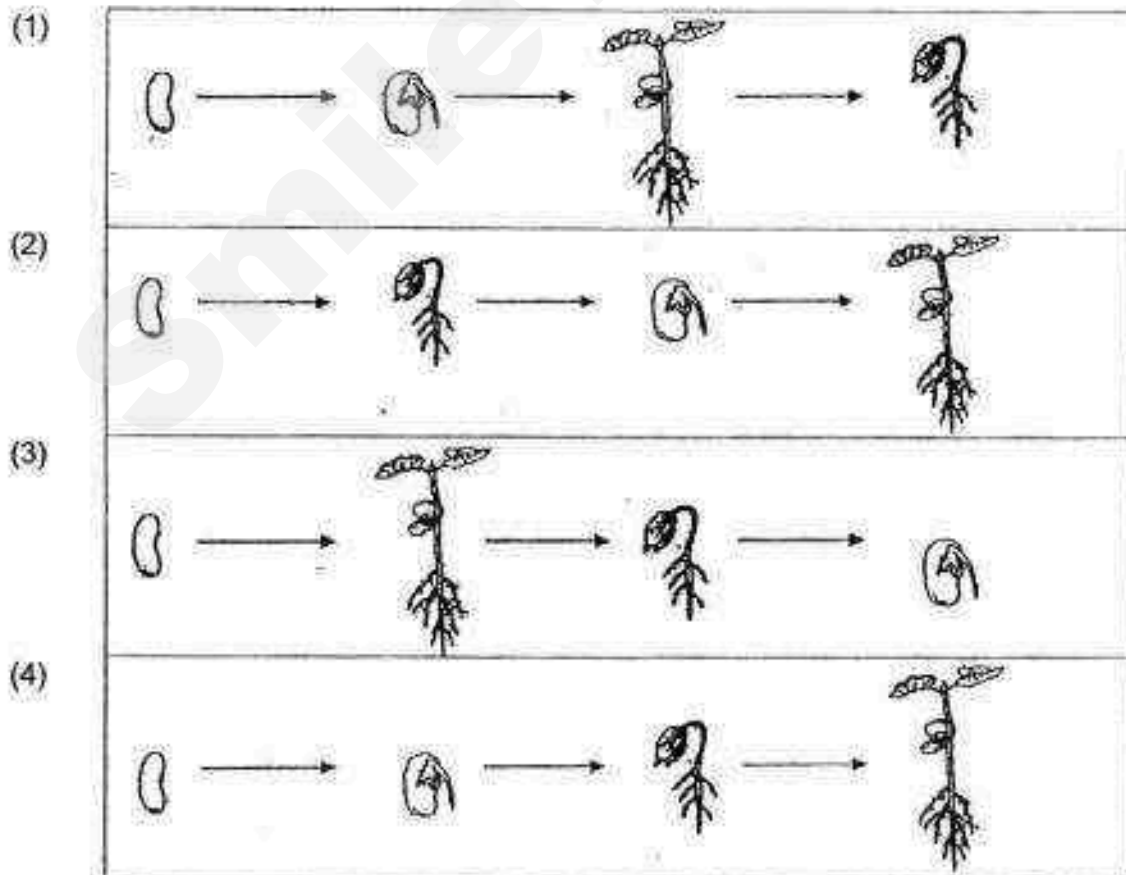
- 12 In the table below, W, X and Y represent characteristics of the animals. (A tick (✓) represents the presence of such characteristics in the animals.)

	W	X	Y
Mosquito	✓	✓	
Cockroach	✓		✓
Grasshopper	✓		✓
Chicken	✓		✓

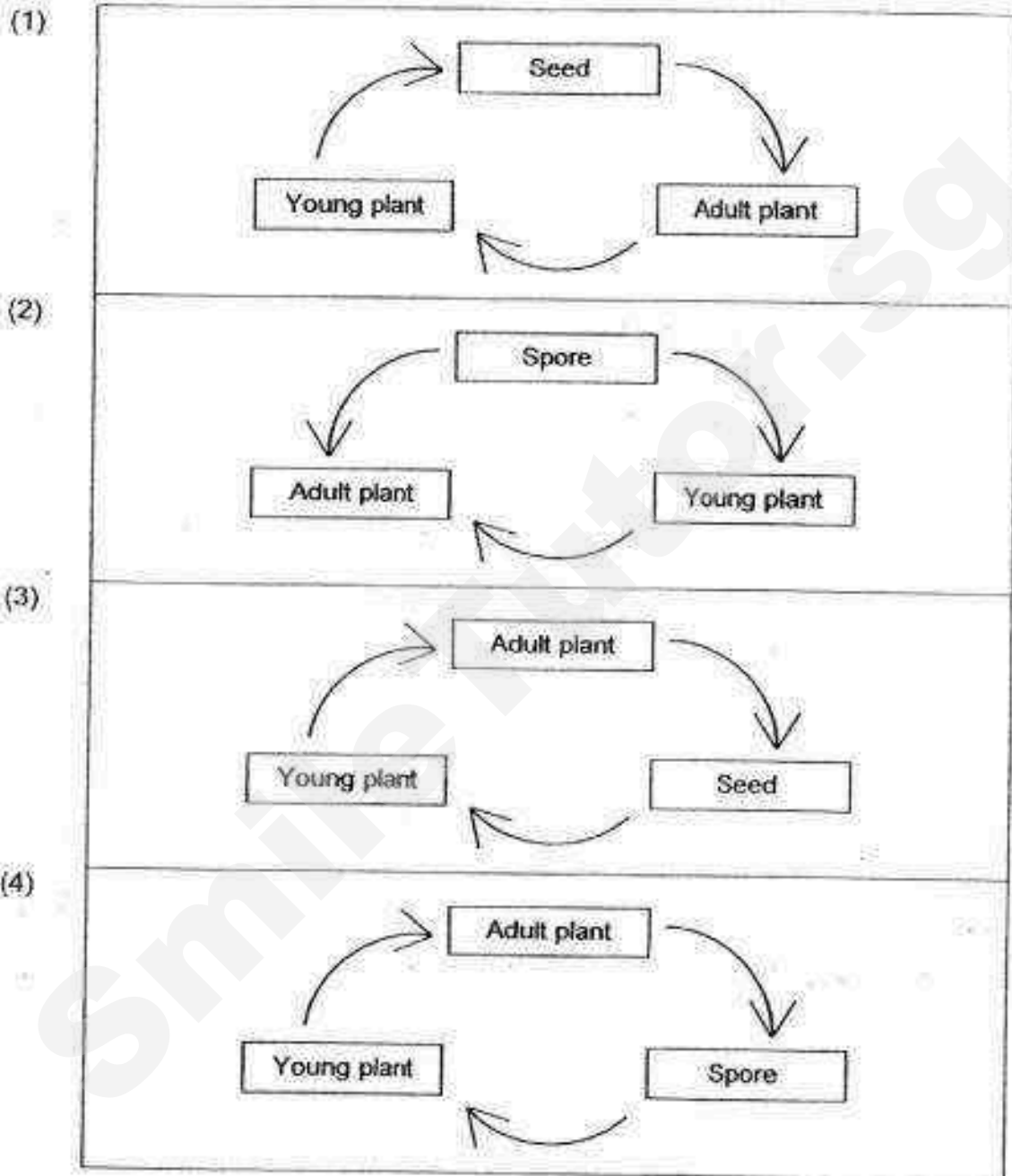
Which of the following do W, X and Y represent?

	W	X	Y
(1)	Lay eggs	Four stages in its life cycle	Three stages in its life cycle
(2)	Lay eggs	Three stages in its life cycle	Four stages in its life cycle
(3)	Young looks like the adult	Four stages in its life cycle	Three stages in its life cycle
(4)	Young does not look like the adult	Three stages in its life cycle	Four stages in its life cycle

- 13 Which one of the following diagrams correctly shows the stages of growth of a plant from a seed?



14 Which one of the following correctly shows the life cycle of a flowering plant?



15 Which one of the following statements about life cycle is incorrect?

- (1) It shows how a living thing grows.
- (2) It must have the egg stage and the adult stage.
- (3) It shows the order of the different stages in the life cycle.
- (4) It is a pattern that repeats itself in the lives of living things.

16 Which of the following describes the function of the human digestive system?

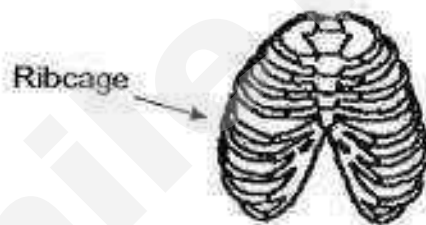
- (1) Transports digested food in the body.
- (2) Breaks down food into simple substances.
- (3) Supports the human body and gives its shape.
- (4) Carries oxygen and removes carbon dioxide from the body.

17 Which body systems in our bodies are involved in helping us run a 100 metres race?

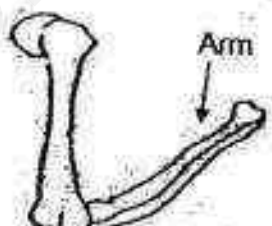
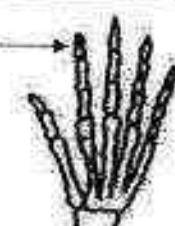

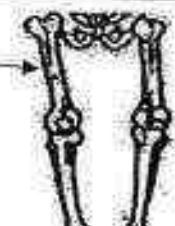
A: Skeletal System	B: Muscular System
C: Respiratory System	D: Circulatory System

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

18 Look at the ribcage below. One of the purposes of the ribcage is to protect the lungs.



Which one of the following bones has the same protective function as the ribcage shown above?

(1)		(2)	
(3)		(4)	

- 19 Which of the following are uses of magnets?

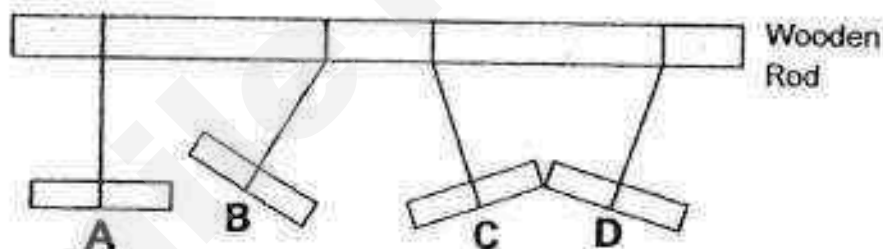
A	To find directions when lost
B	To keep the refrigerator doors tightly closed
C	To separate magnetic from non-magnetic materials

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

- 20 Which of the following statements about magnets is incorrect?

- (1) Magnets attract steel.
 (2) Magnetic pull is able to act from a distance.
 (3) A large magnet is always stronger than a small magnet.
 (4) An iron rod coiled with wire becomes magnetized when electricity flows through the wire.

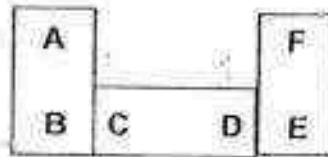
- 21 Study the diagram below carefully. A, B, C and D are four bars hung from a long piece of wooden rod.



Which of the two bars are most likely to be magnets?

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

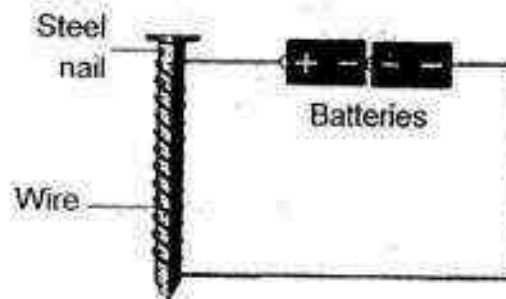
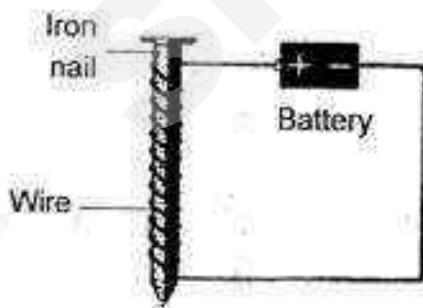
- 22 Devi arranged three magnets such that one end is attracted to another end as shown below.



Which of the following is also another possible arrangement?

(1)		(2)	
(3)		(4)	

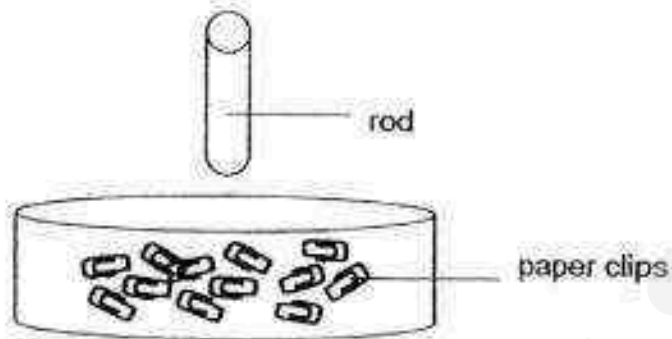
- 23 David wants to find out if the number of batteries will affect the magnetic strength of the electromagnet. He set up an experiment as shown below.



Why is his experiment incorrect?

- (1) The sizes of nails used are the same.
- (2) The types of nails used are not the same.
- (3) The number of batteries used is not the same.
- (4) The number of coils around the nails is not the same.

- 24 Lily tried to attract some paper clips using a rod as shown below. However, she was unable to do so.



Which of the following are possible reason(s) as to why she was unable to attract the paper clips?

- | |
|--|
| A: The rod is not a magnet. |
| B: The paper clips are made of non-magnetic material. |
| C: The rod, which is made of a magnetic material, has not been magnetised. |

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

End of Booklet A



Temasek Primary School

Semestral Assessment 2

Primary Three
2016

SCIENCE
(Booklet B)

Name: _____ ()

Class: Primary 3 _____

Date: 25 October 2016

Parent's Signature: _____

Total Time for Booklet A and B: 1h 30 min

INSTRUCTIONS TO CANDIDATES

1. Write your name, class and register number in the spaces provided clearly.
2. Do not open this booklet until you are told to do so.
3. Follow all instructions carefully.
4. Answer all questions.
5. Write your answers in this booklet.

Paper	Marks	Scores
Booklet A	48	
Booklet B	32	
Total	80	

For questions 25 to 34, write your answers in this booklet.

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

(32 marks)

- 25 On Ali's birthday, his mother gave him a teddy bear. The bear could talk and sing when Ali pressed a button on it. It could crawl and also open and close its eyes when Ali pressed another button.



State two reasons why the the teddy bear cannot be a living thing. [2]

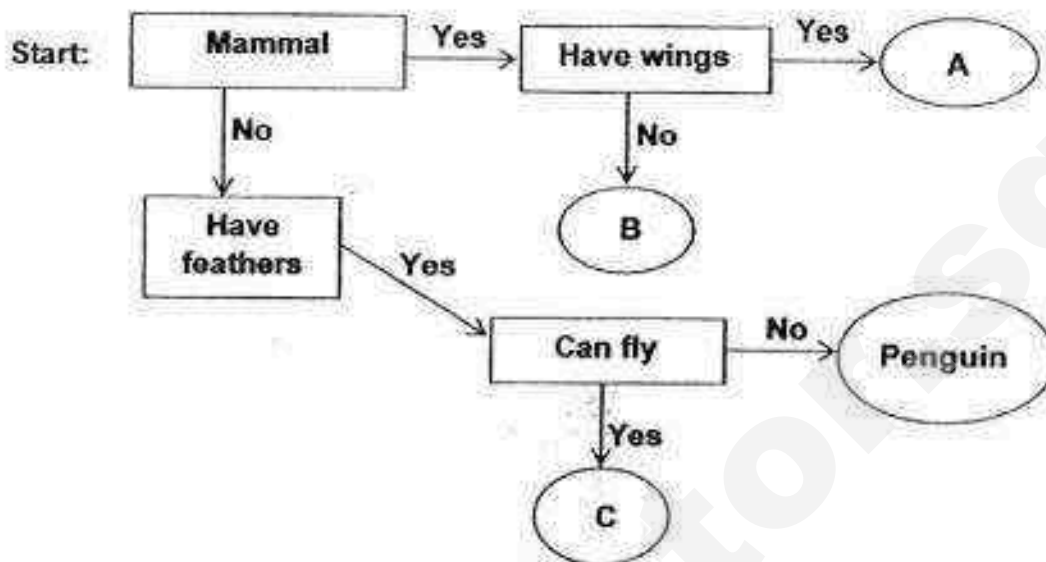
Reason 1: _____

Reason 2: _____

(Go on to the next page)



26 Study the following flow chart carefully.



(a) Complete the table with the letters A, B and C.

You may use the letters more than once

[2]

Animals	Tiger	Dolphin	Parrot	Bat
Letters				

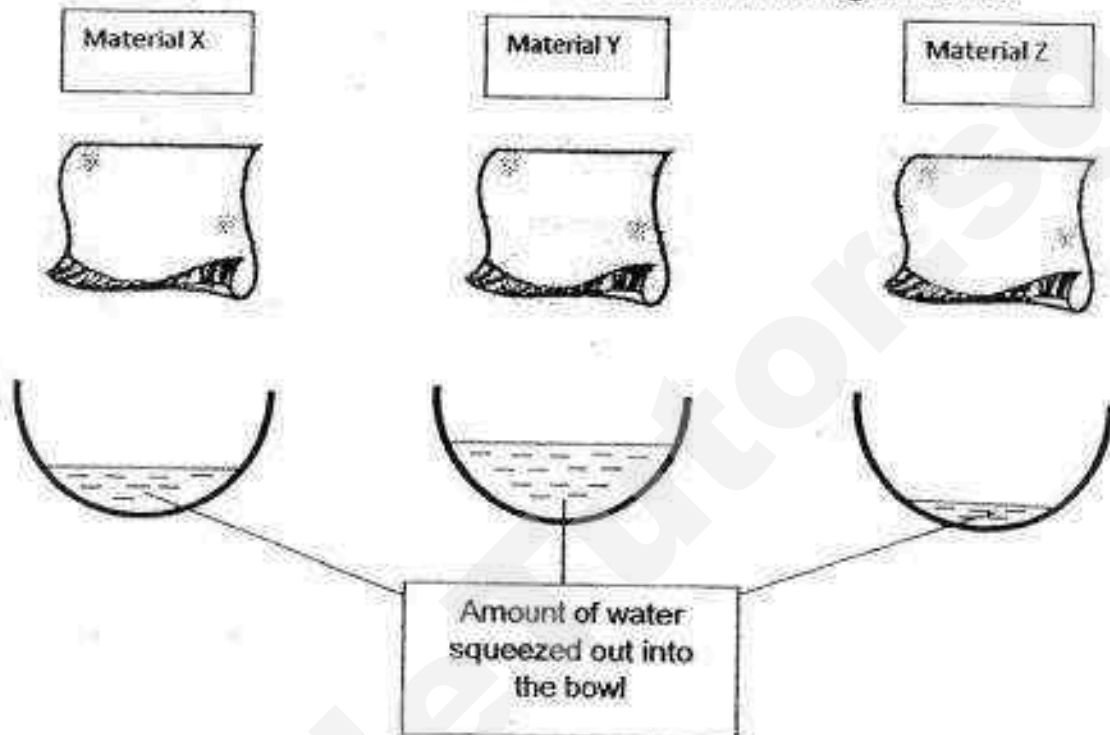
(b) Based on the flow chart, identify two characteristics of the penguin.

[2]

(Go on to the next page)

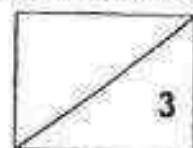


- 27 Siti had three pieces of cloth made of different materials. She had also prepared three beakers containing 500ml of water each. She soaked each cloth in each beaker of water for one minute. She then squeezed the water from the materials into three separate bowls. The results were shown in the diagram below.

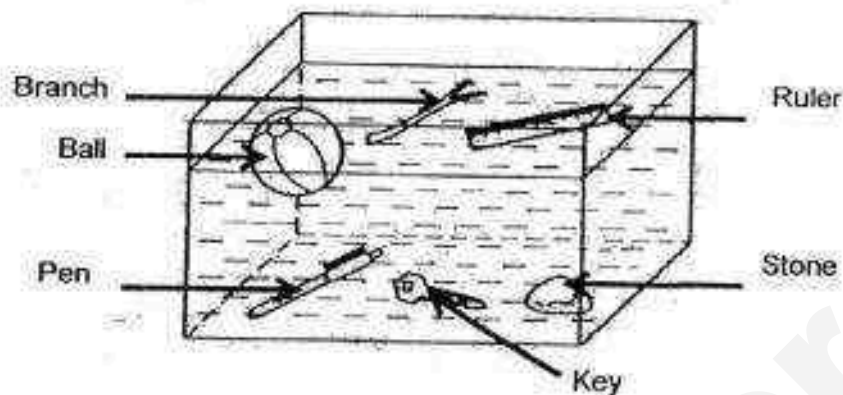


- (a) Which material absorbed the least water? [1]
- _____
- (b) Which material is best for cleaning up spills in the kitchen? [1]
- _____
- (c) Give a reason for your answer in (b). [1]
- _____
- _____

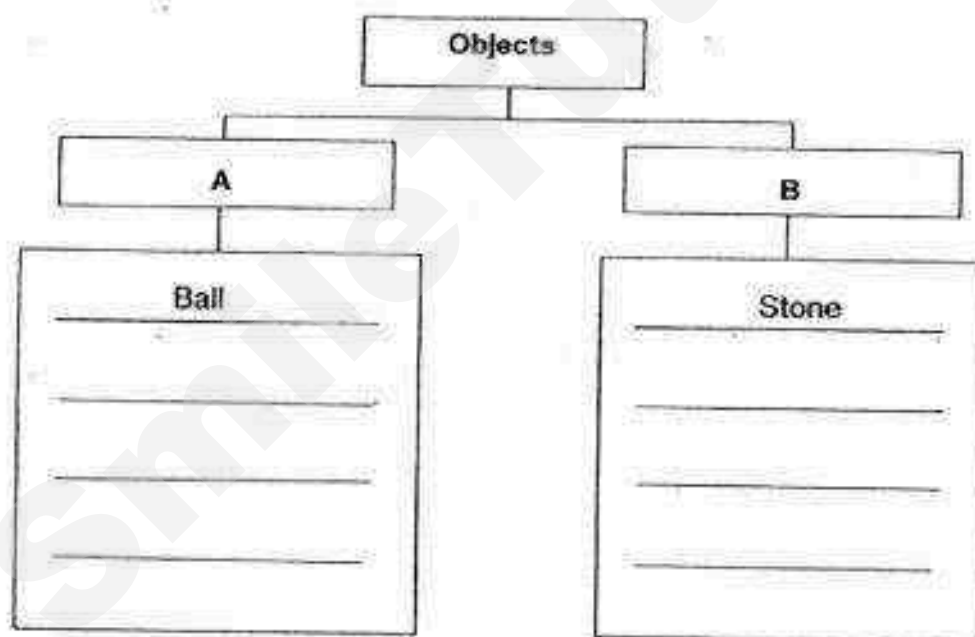
(Go on to the next page)



- 28 Six objects were placed at the bottom of a tank of water at the start of an experiment. The diagram below shows their positions after one minute.



Based on the diagram, classify the remaining four objects into two groups in the table provided below. [2]



Give a suitable heading for A and B

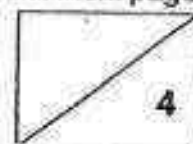
Heading for A: _____

[1]

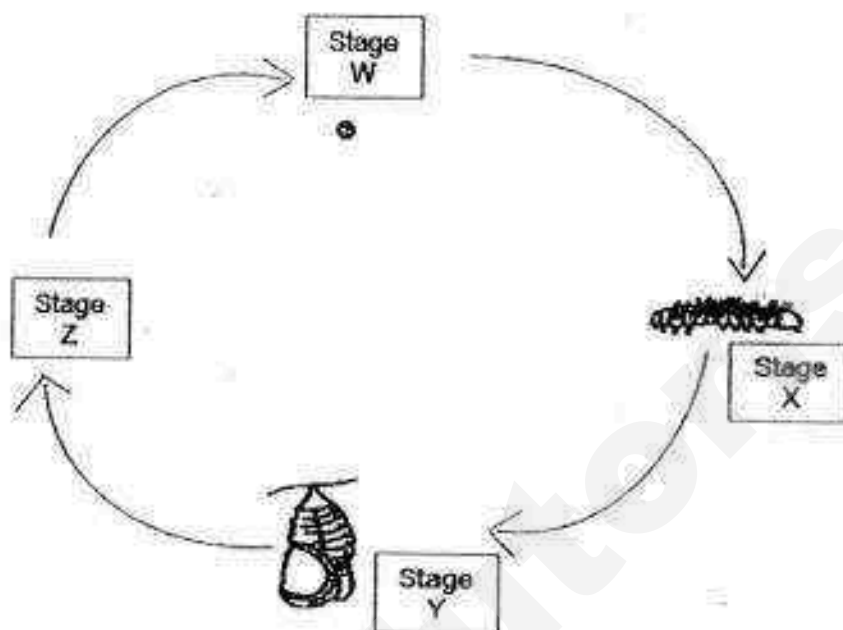
Heading for B: _____

[1]

(Go on to the next page)



- 29 Susan studied the life cycle of an insect and drew a diagram to represent it as shown below.

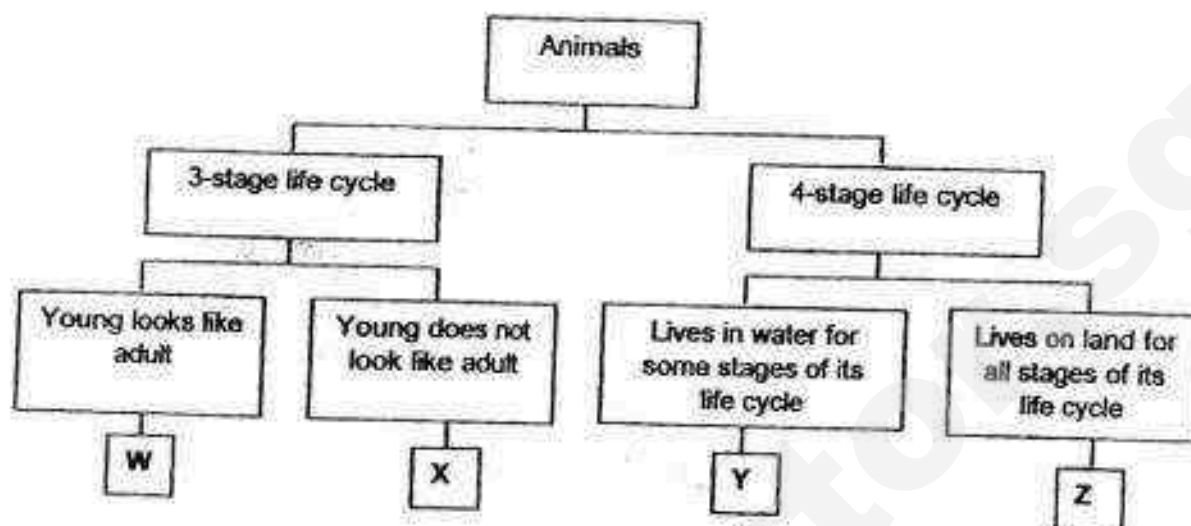


- (a) Name the stage marked Z. [1]
- _____
- (b) Susan observed that the insect has shedded some dry skin at Stage X. Name the process that has taken place at this stage. [1]
- _____
- (c) Farmers use pesticides to get rid of the insect at Stage X. Explain why it is necessary for them to do that. [1]
- _____
- _____

(Go on to the next page)



30 Study the classification chart below carefully.



(a) From the classification chart above, describe the characteristics of animal Z. [2]

(b) Which letter, W, X, Y, or Z, represents each of the following animals? [2]

(i) Frog: _____

(ii) Mosquito: _____

(Go on to the next page)



- 31 Study the life cycle of plant X below.



Life cycle of plant X

- (a) State one similarity between the life cycle of plant X and the life cycle of a grasshopper. [1]

- (b) How are the adults of plant X and grasshopper different in the way they obtain their food? [2]

(Go on to the next page)



- 32 The diagram below shows John eating an apple.



- (a) How do the teeth help in the digestion of the apple that he is eating? [1]

- (b) Name the digestive juice found in the mouth. [1]

- (c) Name another organ that produces digestive juice. [1]

(Go on to the next page)



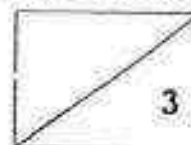
- 33 Kevin wanted to find out how the strength of a magnet changed when it was hit with a hammer. He repeated the experiment by hitting the magnet different number of times. He then recorded the maximum distance the magnet would attract the paper clip from.



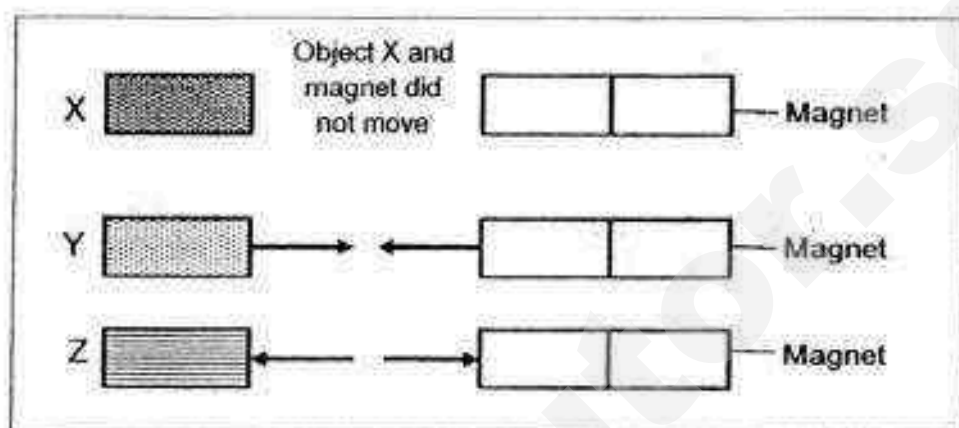
Number of times the magnet is hit with a hammer	The maximum distance the paper clip was attracted from (cm)
0	20
4	17
8	<input type="text"/>
12	8
16	2

- (a) Kevin missed recording the distance when the magnet was hit eight times with a hammer. Write the distance the paper clip could be attracted from in the box above. [1]
- (b) How was the strength of the magnet affected by the number of times it was hit? [2]

(Go on to the next page)



- 34 Max placed three different objects – an iron bar, a magnet and a wooden block, near three magnets. The three objects were labelled X, Y and Z. When the three objects were brought near the magnets, they reacted to the magnets in different ways as shown below. The arrows represent the directions where the objects moved.



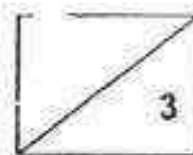
- (a) Based on the diagram, which one of the objects, X, Y or Z was the magnet?

Why?

[2]

- (b) Based on the diagram, which one of the objects, X, Y or Z was the wooden block? Why?

[1]



End of paper

YEAR : 2016
 LEVEL : PRIMARY 3
 SCHOOL : TEMASEK PRIMARY
 SUBJECT : SCIENCE
 TERM : SA2

Booklet A

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

Booklet B

Q25 Reason 1: The bear does not need air, food and water to survive.

Reason 2: It does not respond to changes.

Q26 (a)

Animals	Tiger	Dolphin	Parrot	Bat
Letters	B	B	C	A

(b) The penguin is not a mammal and it cannot fly.

- Q27
- (a) Material Z.
- (b) Material Y.
- (c) Material Y absorbs the most amount of water compare to the other material.

Q28

A	B
Ball	Stone
Branch	Key
Ruler	Pen

Heading for A : Float

Heading for B : Sink

- Q29
- (a) Adult stage.
 - (b) Moulting / Molting
 - (c) They are pest to the farmers.
- Q30
- (a) Animal Z has a 4-stage life cycle and it lives on land for all stages of its life cycle.
 - (b)
 - (i) Frog : Y
 - (ii) Mosquito : Y
- Q31
- (a) Both the grasshopper and plant X has a 3-stage life cycle.
 - (b) Adults of plant X makes their own food but the grasshopper does not make their own food but it catches their food.
- Q32
- (a) The mouth grins the apple to smaller pieces.
 - (b) Saliva
 - (c) Stomach
- Q33
- (a) 14
 - (b) The more number Kevin hits, the strength of the magnet will decrease.
- Q34
- (a) Object Z must be the magnet because only magnets repel.
 - (b) Object X must be the wooden block because a wooden block is a non-magnetic material so the magnet cannot attract object X.

End