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AI TONG SCHOOL

2017 MID-YEAR EXAMINATION PRIMARY THREE SCIENCE

DURATION: 1 hour

DATE: 9 May 2017

INSTRUCTIONS

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

Name : _____ ()

Class : Primary 3 _____

Parent's Signature : _____

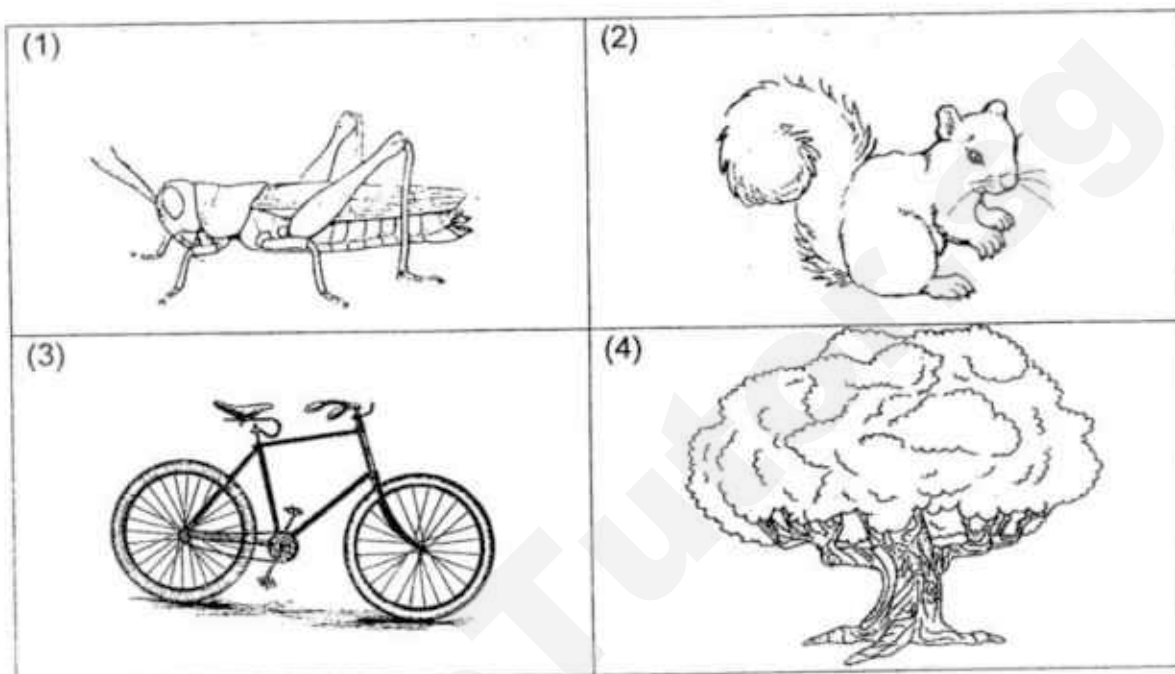
Date : _____

Section A	30
Section B	20
Total	50

Section A (15 x 2 marks)

For each question from 1 to 15, four options are given. One of them is the correct answer. Make your choice and shade the correct oval (1, 2, 3 or 4) on the Optical Answer Sheet.

1. Which of the following does **not** belong to the same group as the rest?



2. Study the following characteristics of a group of animals.

Characteristic A: Most of them give birth to their young.

Characteristic B: They are covered with hair or fur.

Characteristic C: They breathe through their lungs.

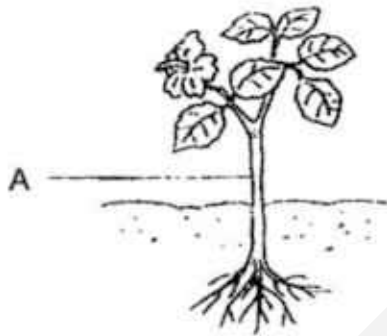
Which one of the following groups of animals has the above three characteristics?

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

3. Which of the following is **false** about fungi?

- (1) Fungi can reproduce.
- (2) Not all fungi can be seen without microscopes.
- (3) Fungi can move from place to place on its own.
- (4) Fungi feeds on other living things, which may be dead or alive.

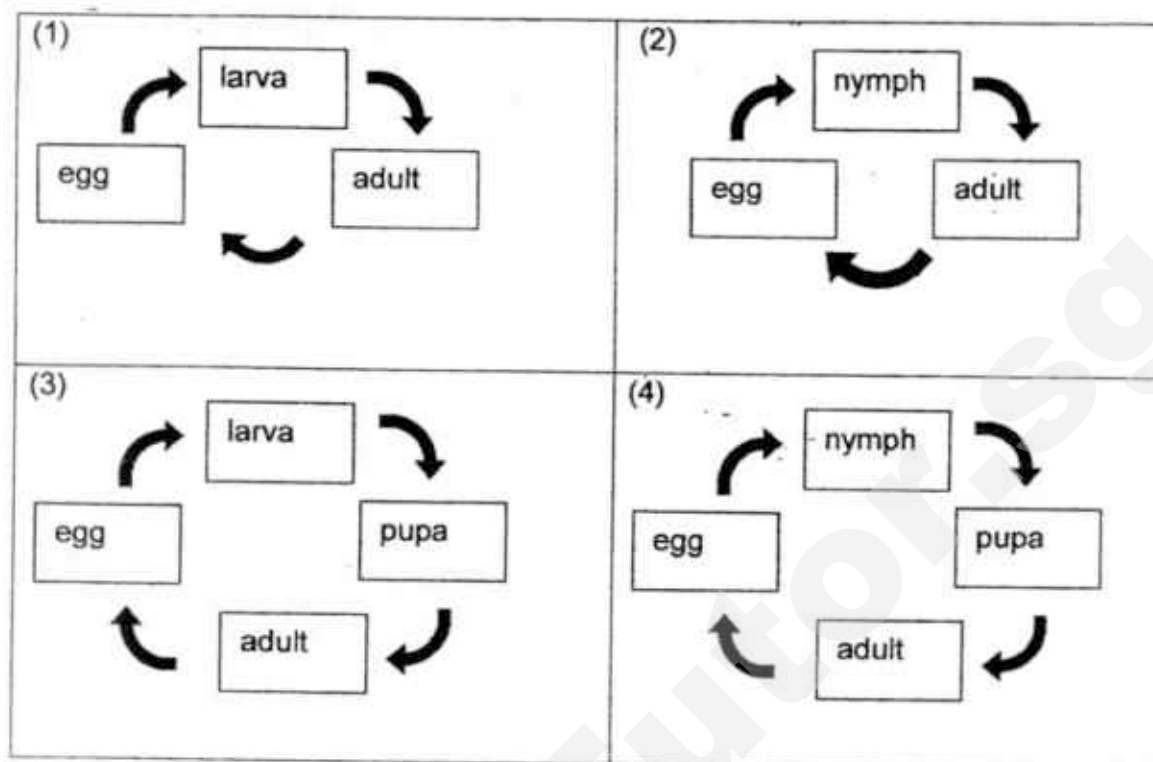
4. The diagram below shows a plant with one part labelled A.



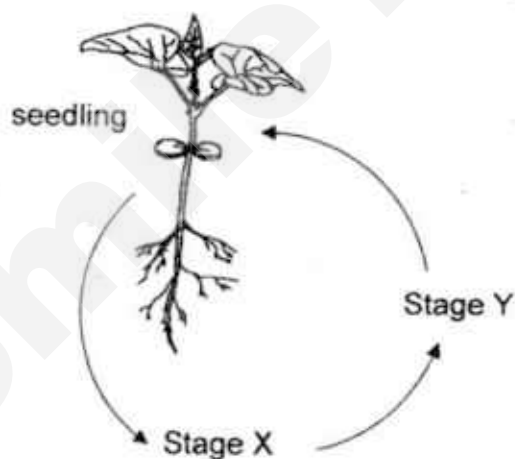
What is the function of Part A?

- (1) Makes food for the plant
- (2) Holds the plant firmly to the ground
- (3) Supports the plant by holding it upright
- (4) Helps the plant take in and give out gases

5. Which diagram shows the life cycle of a butterfly correctly?



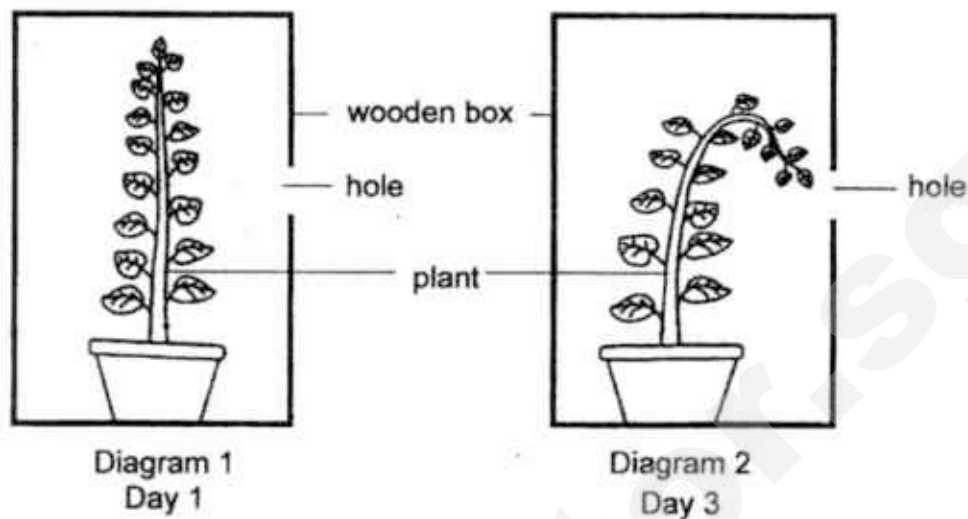
6. The diagram below shows the life cycle of a flowering plant.



Which of the following gives the correct names of Stages X and Y of the life cycle?

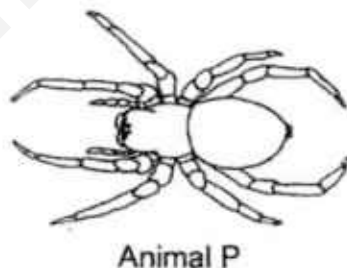
	Stage X	Stage Y
(1)	adult plant	seed
(2)	egg	adult plant
(3)	adult plant	egg
(4)	seed	adult plant

7. Mike placed a plant into a wooden box that had a hole at its side on Day 1 as shown in diagram 1 below. By Day 3, it was observed that the plant grew towards one side as shown in diagram 2. The plant was watered daily.



What does the above experiment show about living things?

- (1) Living things reproduce.
 - (2) Living things need light to survive.
 - (3) Living things need water to survive.
 - (4) Living things respond to changes around them.
8. Devi found animal P as shown in the diagram below.



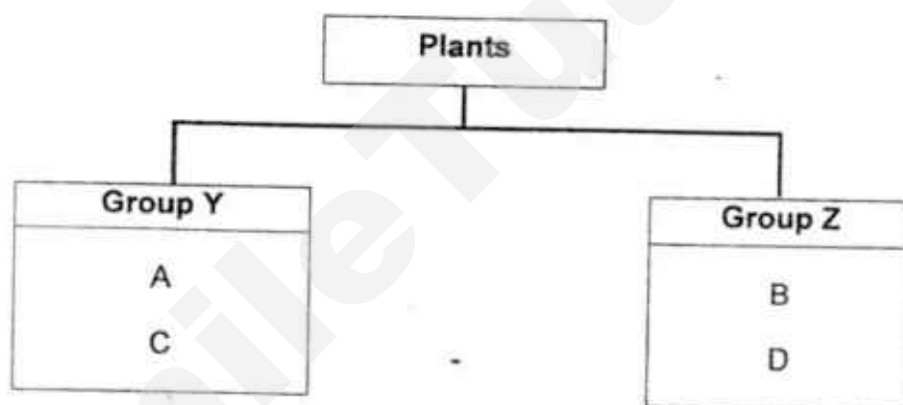
Which one of the following characteristics about Animal P tells her that it is **NOT** an insect?

- (1) It has no wings.
- (2) It has eight legs.
- (3) It has a pair of feelers.
- (4) It has more than one body part.

9. Lily observed four plants, A, B, C and D. She put a tick (✓) in the table below to indicate the characteristics which the plants have.

Characteristic	Plant			
	A	B	C	D
Reproduces by spores	✓		✓	
Lives on land	✓			✓
Bears flowers		✓		✓
Lives in water		✓	✓	

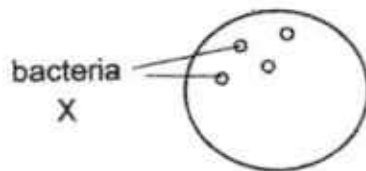
Using the information above, Lily drew the following classification diagram to classify them.



Which of the following sub-headings best represent Group Y and Group Z?

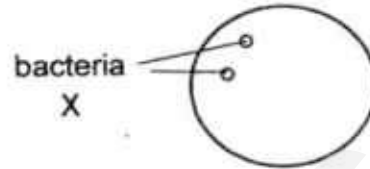
	Group Y	Group Z
(1)	Ferns	Fungi
(2)	Fungi	Flowering plants
(3)	Land plants	Water plants
(4)	Non-flowering plants	Flowering plants

10. Jimmy conducted an experiment to find out if the temperature of the surroundings affects the growth of bacteria X. He placed the same amount of bacteria X on three dishes, A, B and C. Each dish contained the same amount of a substance which provides food for bacteria X to grow. He left the dishes alone for four days and observed the amount of bacteria X in the dishes after four days. The diagram below shows the results.



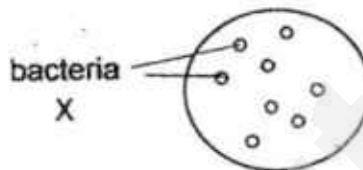
Dish A

- Dish was placed in the cold refrigerator at 5°C



Dish B

- Dish was placed in the hot sun at 40°C



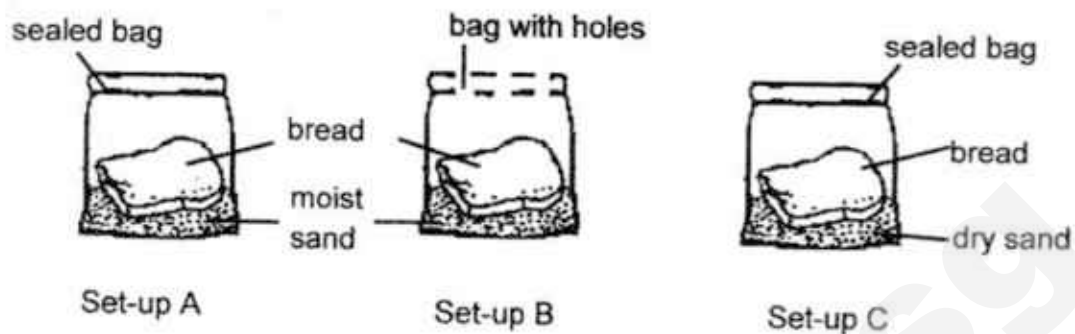
Dish C

- Dish was placed on the kitchen table in normal room temperature at 25°C

Based on the results above, which temperature makes bacteria X grow the fastest?

- (1) 5 °C
- (2) 25 °C
- (3) 40 °C
- (4) Temperature does not affect the growth of bacteria X.

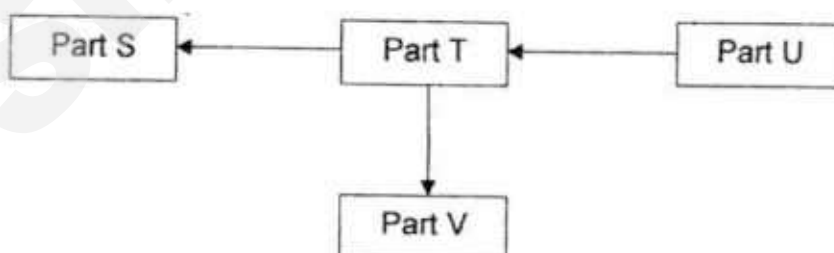
11. John carried out an experiment using set-ups A, B and C as shown below. Identical slices of bread were placed in each bag.



The set-ups were left on the table for three days. Which one of the following shows the possible observations on the bread in set-ups A, B and C?

	A lot of bread mould	Some bread mould	Very little bread mould
(1)	A	B	C
(2)	B	C	A
(3)	B	A	C
(4)	C	B	A

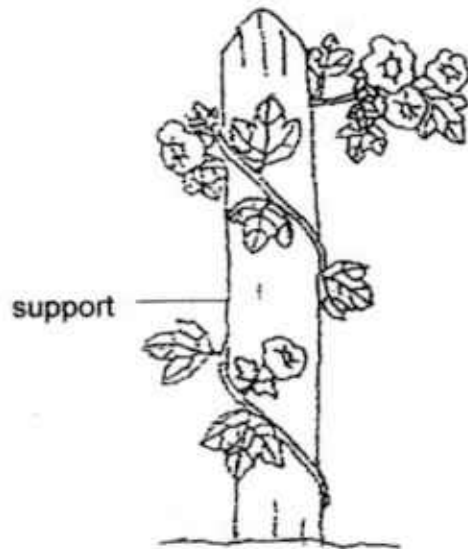
12. The arrows in the diagram below shows how water moves in a plant.



Which plant part represents the roots?

- (1) S
- (2) T
- (3) U
- (4) V

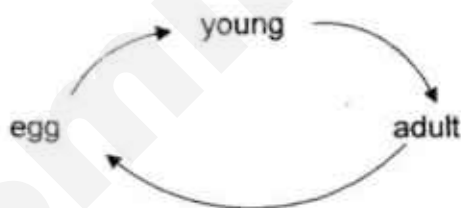
13. The diagram below shows a plant with a weak stem.



Which of the following gives the correct reason why the plant needs to climb up a support?

- (1) This helps the plant take in more water.
- (2) This helps the leaves take in more sunlight.
- (3) The plant will be able to store food in the stem.
- (4) The leaves will be able to take in and give out more gases.

14. The diagram below shows the life cycle of a living thing.



Based only on the life cycle above, which of the following statements is true?

- (1) The living thing lives on land.
- (2) The living thing definitely lays eggs.
- (3) The young of the living thing does not resemble the adult.
- (4) The time taken for the living thing to grow from one stage to another may not be the same.

15. Mary tried to grow seeds in four different set-ups, W, X, Y and Z. The table below shows what conditions each set-up has. A tick (✓) means that the seeds in the set-up had that condition.

Set-up	Conditions present			
	warmth	air	light	water
W	✓	✓		✓
X		✓	✓	
Y	✓	✓	✓	✓
Z	✓			

In which set-ups will the seeds germinate?

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

END OF SECTION A

Name: _____


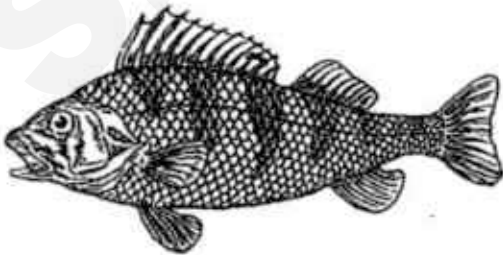
Mid-Year 2017

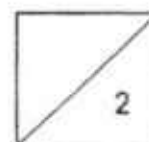
Class: Pri 3 _____

Section B: 20 Marks

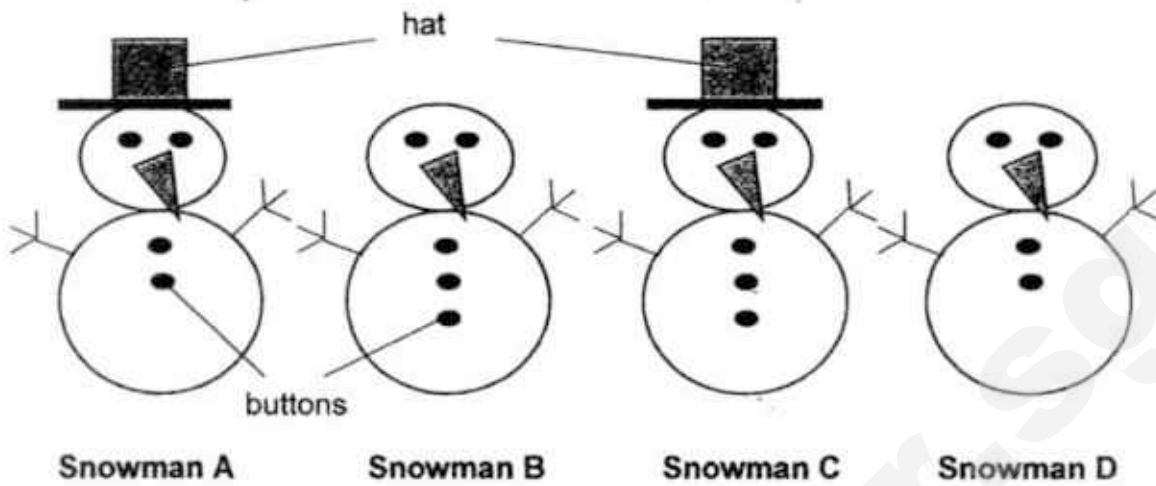
Read the questions carefully and write your answers in the spaces provided.

16. Name the type of outer covering that each animal has. [2]

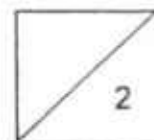
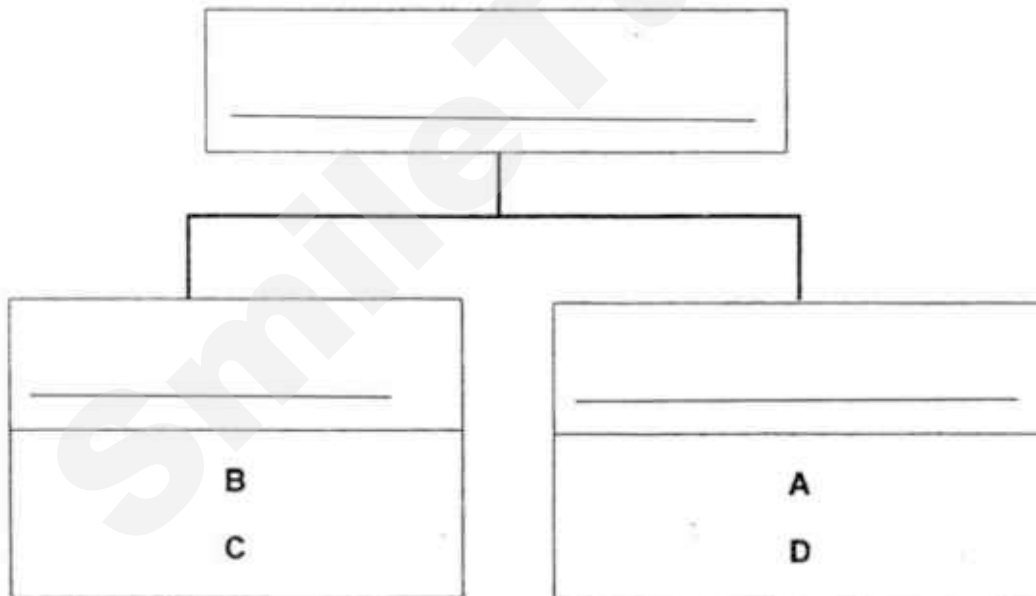
	Animal	Type of outer covering
(a)		
(b)		



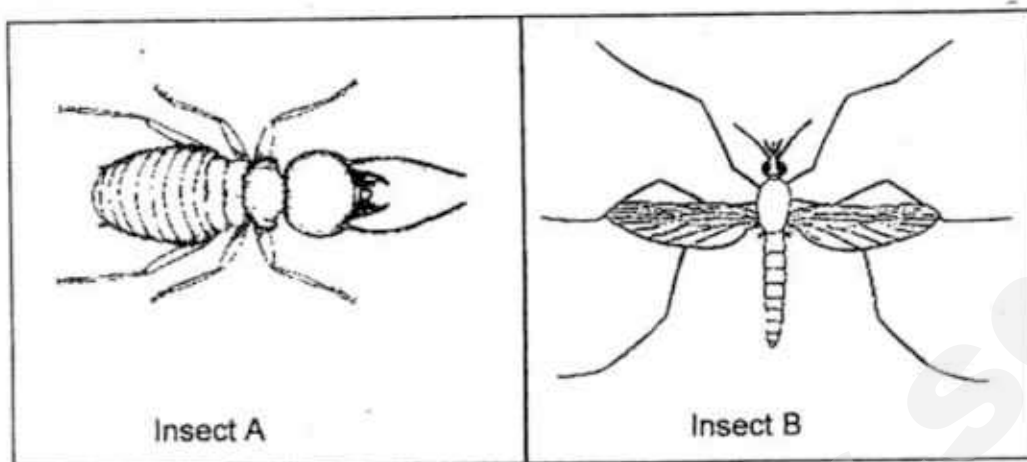
17. The pictures below show four snowmen, A, B, C and D



Complete the classification diagram below by writing in a main heading and suitable headings for each of the two groups such that Snowmen A and D are in one group and Snowmen B and C are in the other group. [2]

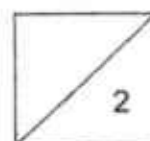


18. The diagram below shows two insects A and B.



- (a) Based only on the diagrams above, state one similar observable physical characteristic between the two animals that makes them insects. [1]

- (b) Based only on the diagrams above, state one observable physical characteristic that is different between the two insects that would affect the way it moves. [1]



19. The diagram below shows a classification table.

Living Things				
X			Y	
Insects	P	Q	Flowering	Non-flowering
ant	duck	guppy	rose	fern
bee	chicken	shark	orchid	moss

- (a) All the living things in group Y are able to do something that the living things in group X cannot do.

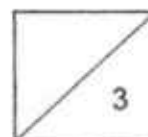
State this characteristic. [1]

All the living things in group Y are able to _____

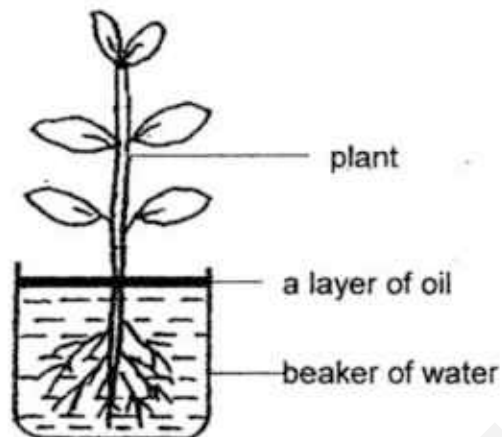
- (b) What do P and Q in the table above represent? [2]

P: _____

Q: _____

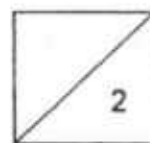


20. Wendy set up an experiment as shown below. The layer of oil stops water in the beaker from escaping into the surrounding air.

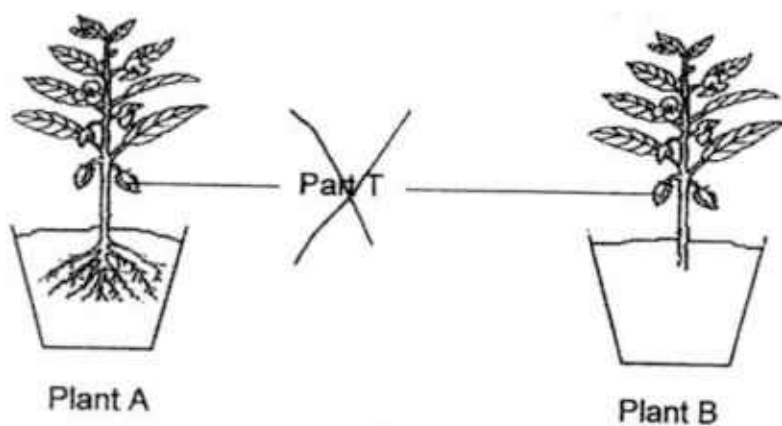


- (a) After one week, will the level of water in the beaker increase, decrease or remain the same? [1]

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



21. Jim had two identical plants, A and B. He cut off the roots of Plant B but did not touch the roots of Plant A. He planted both plants into similar pots of soil.

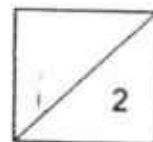


He placed a powerful fan at equal distance away from both plants and switched the fan on.

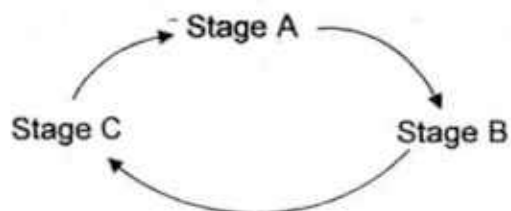
- (a) Which plant, A or B, will be blown out of the pot of soil first? [1]

Plant _____

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



22. The life cycle of Animal Z is shown below.



- Animal Z is only able to reproduce at stage A.
- At stage A, Animal Z is able to live both in water and on land.
- At stage B, it has a jelly-like covering and is found in water.
- At stage C, Animal Z has a tail. It does not have a tail at stages A and B. It lives in water at this stage.

(a) Based on the above information, at which stage, A, B or C is the egg stage of Animal Z?

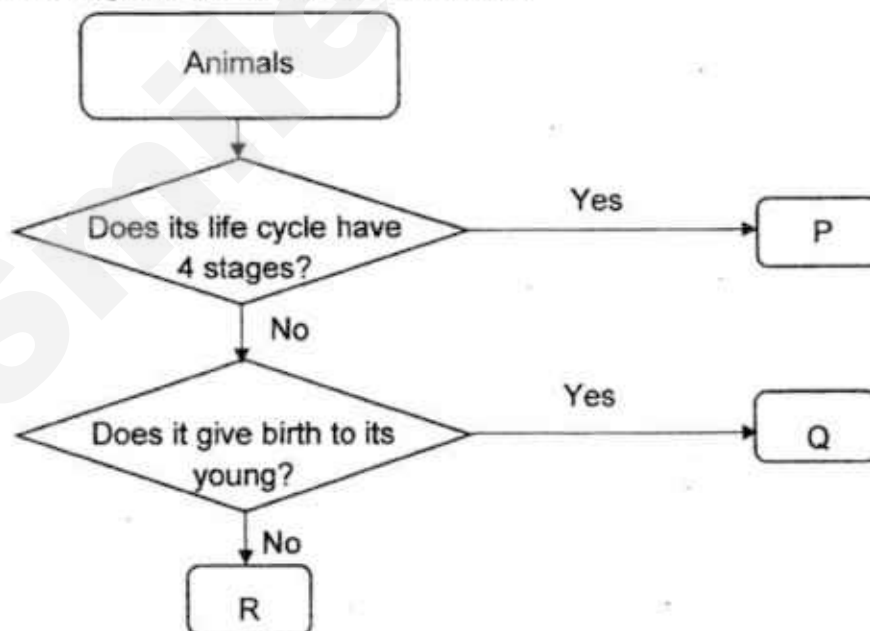
[1]

Stage _____

(b) Based on the above information, which animal group does Animal Z belong to?

[1]

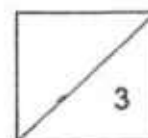
The diagram below shows a flowchart.



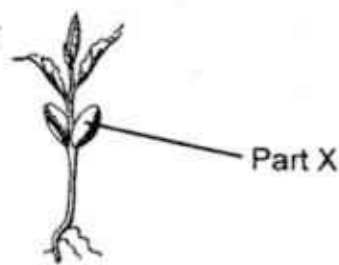
(c) Which animal, P, Q or R, in the flowchart represents Animal Z?

[1]

Animal _____



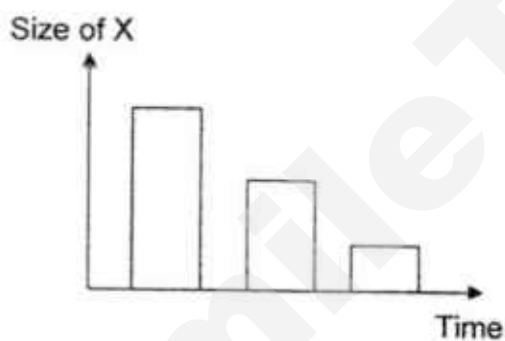
23. The diagram below shows a seedling with Part X labelled.



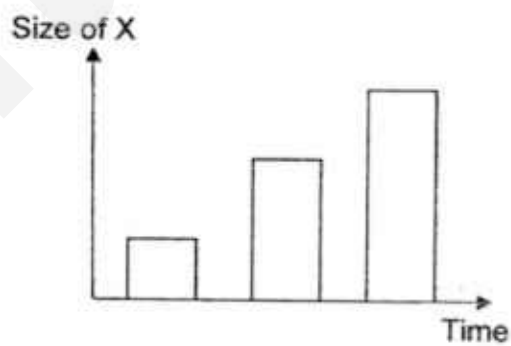
- (a) What is the name of Part X? [1]

- (b) State the function of Part X. [1]

There are two graphs shown below.



Graph 1



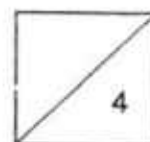
Graph 2

- (c) Which graph, Graph 1 or Graph 2, correctly shows how the size of Part X of the seedling will change over time? [1]

Graph _____

- (d) Explain your choice in (c) above. [1]

END OF PAPER



EXAM PAPER 2017

LEVEL : PRIMARY 3
SCHOOL : AI TONG SCHOOL
SUBJECT : SCIENCE
TERM : SA1

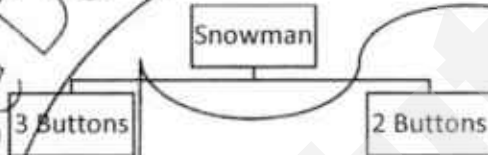
SECTION A

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

SECTION B

- Q16 (a) Feathers
 (b) Scales

Q17



- Q18 (a) Both the insects have 6 legs/3 body parts.
 (b) Insect B has wings but insect A do not have wings.

- Q19 (a) All living things in group Y can make their own food.
 (b) P: birds
 Q: fish

- Q20 (a) The water level will decrease.
 (b) The roots of the plant take in water.

- Q21 (a) Plant B
 (b) Plant B has no roots to hold the plant firmly to the soil.

- Q22 (a) Stage B
 (b) Amphibian
 (c) Animal R

- Q23 (a) Seed leaf
 (b) Part X provides food for the seedling.
 (c) Graph 1
 (d) Size of X decreases over time because the seedlings would be using up the food stored in Part X.

1
END.

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**CATHOLIC HIGH SCHOOL
SEMESTRAL ASSESSMENT ONE (2017)
PRIMARY THREE**

SCIENCE

BOOKLET A

Name: _____ ()

Class: Primary 3 - _____

Date: 9 May 2017

20 questions

40 marks

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

This booklet consists of 11 printed pages, excluding the cover page.

Booklet A (20 × 2 marks)

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 your answer on the Optical Answer Sheet. (40 marks)

1 Which one of the following consists of only living things?

- (1) boy, car, rain
- (2) girl, plant, tiger
- (3) air, bird, candle
- (4) cloud, smoke, paper

2 Kieran touched a snail that he saw in his school ecogarden.



snail



Kieran's hand

The snail pulled its head into the shell.

What does this tell him about living things?

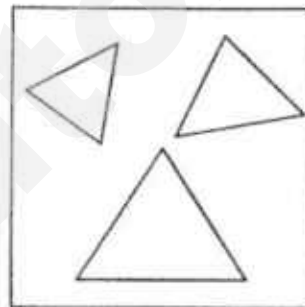
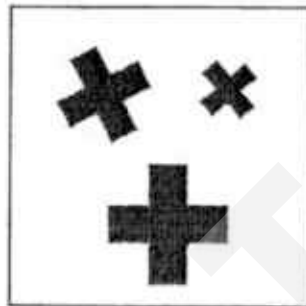
- (1) Living things grow.
- (2) Living things respond to changes.
- (3) Living things need air, food and water to survive.
- (4) Living things reproduce to ensure continuity of its kind.

3 Which of the following shows the characteristics of living things?

- A Water flowing in the river
- B A giraffe giving birth to its young
- C A hot air balloon floating in the sky
- D A chick growing to become a chicken

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

4 Study the objects below carefully.



The objects above are grouped according to their _____.

- A sizes
- B colours
- C shapes

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

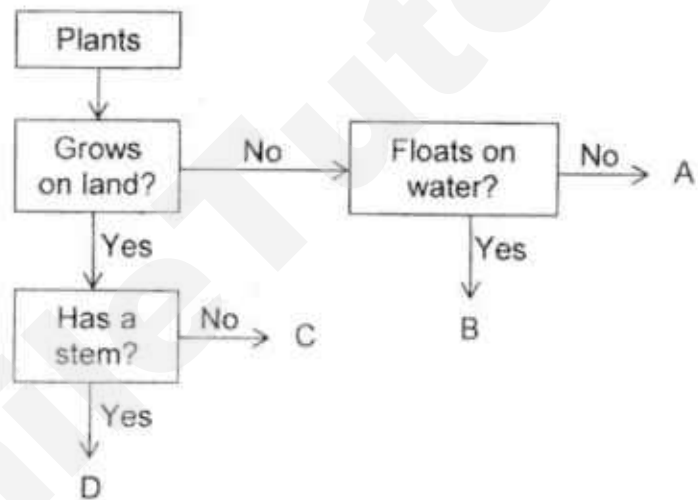
5 What are the parts of a non-flowering plant?

- (1) roots, stem and fruits
- (2) roots, stem and leaves
- (3) stem, leaves and flowers
- (4) leaves, flowers and fruits

- 6 The diagram below shows an orchid plant.



Study the flowchart below.



Which plant, A, B, C or D, represents the orchid plant?

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

- 7 The picture below shows a fern.



Ali made the following observations about the fern.

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

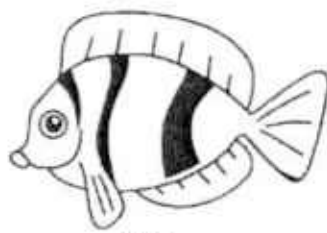
Which of the above observations is/are correct?

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

- 8 Which of the following is correct about flowering and non-flowering plants?

	Flowering plants	Non-flowering plants
(1)	edible	inedible
(2)	bear fruits	do not bear fruits
(3)	have stems	do not have stems
(4)	cannot move freely from place to place	can move freely from place to place

- 9 Which one of the following is a common characteristic of a fish and an insect?



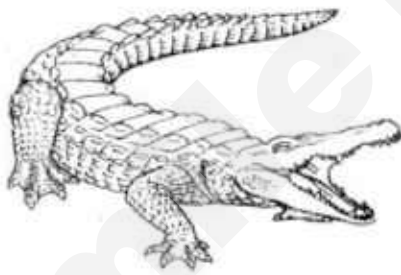
fish



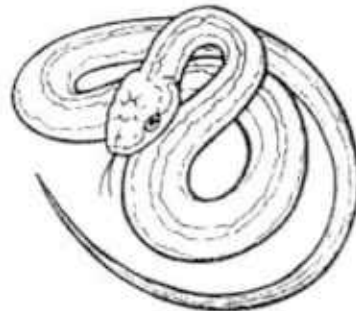
insect

- (1) Both lay eggs.
- (2) Both have six legs.
- (3) Both live on land only.
- (4) Both have scales on their body.

- 10 A crocodile is similar to a snake because both _____



crocodile



snake

- (1) have no legs
- (2) have three body parts
- (3) give birth to their young
- (4) have dry skin covered with scales

- 11 Sally observed three animals, A, B and C, and recorded her observations in the table shown below. A tick (✓) indicates the presence of the characteristic.

Observation	Animals		
	A	B	C
Has hair			✓
Has feathers	✓		
Has three body parts		✓	
Has three pairs of legs		✓	

Which one of the following could animals A, B and C belong to?

	A	B	C
(1)	bird	insect	mammal
(2)	amphibian	reptile	bird
(3)	bird	amphibian	insect
(4)	insect	mammal	amphibian

- 12 Four pupils recorded their observations of an animal they each saw at the Singapore Zoo.

Alice It can fly.

Bryan It has three body parts.

Carson Its body is covered with hair.

Dominic Its body is covered with scales.

Who gave the correct observation about an orang-utan?

- (1) Alice
- (2) Bryan
- (3) Carson
- (4) Dominic

13 Which one of the following is correct about bacteria?

- (1) All bacteria are harmful to man.
- (2) Bacteria can make their own food.
- (3) Bacteria can be found everywhere.
- (4) Bacteria can be seen with the naked eye.

14 Which one of the following is correct about mould and mushroom?



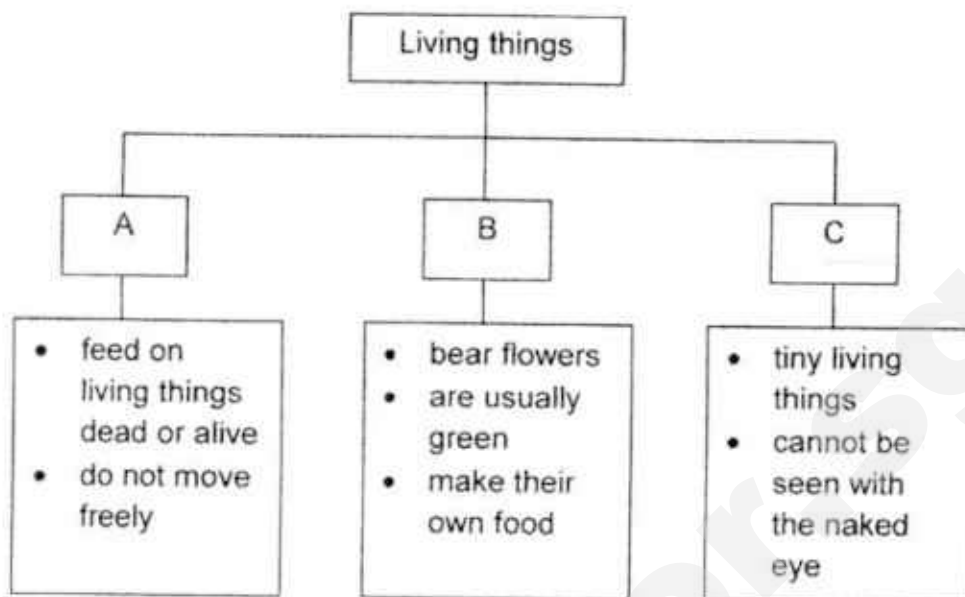
mould



mushroom

- (1) Both are harmful to man.
- (2) Both reproduce by spores.
- (3) Both can make their own food.
- (4) Both can move from one place to another to look for food.

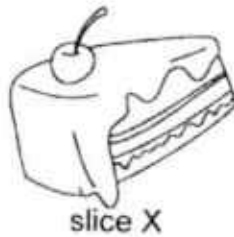
15 Study the classification chart below.



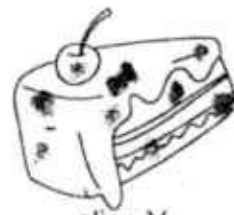
Which of the following could A, B and C be?

	A	B	C
(1)	Fungi	Microorganisms	Non-flowering plants
(2)	Fungi	Flowering plants	Microorganisms
(3)	Non-flowering plants	Fungi	Microorganisms
(4)	Microorganisms	Flowering plants	Fungi

- 16 Justin had 2 similar slices of cakes, slice X and slice Y. He left slice X in the refrigerator and slice Y on a table in the dining room. After a few days, he observed some green and black patches on slice Y. There were no green and black patches on slice X.



slice X



slice Y

green and
black patches

Justin's observation shows that mould grows well in _____ places.

- (1) dry
 - (2) wet
 - (3) cold
 - (4) warm
- 17 Materials used to make raincoats, umbrellas and plastic bags should _____

- A be flexible
- B be waterproof
- C be able to float
- D allow most light to pass through it



raincoat



umbrella

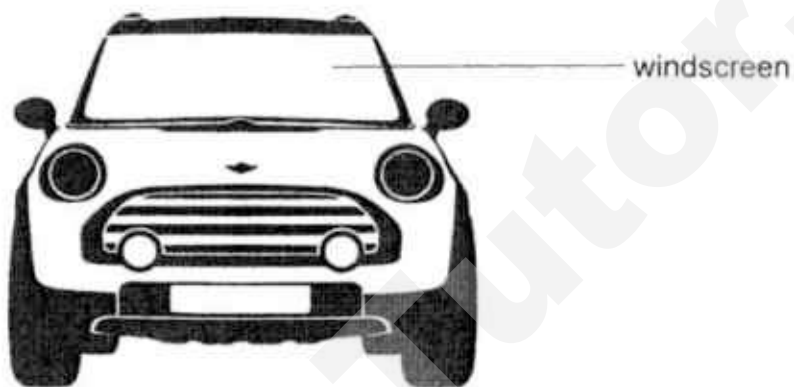


plastic bag

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

18 The table below shows the properties of some materials.

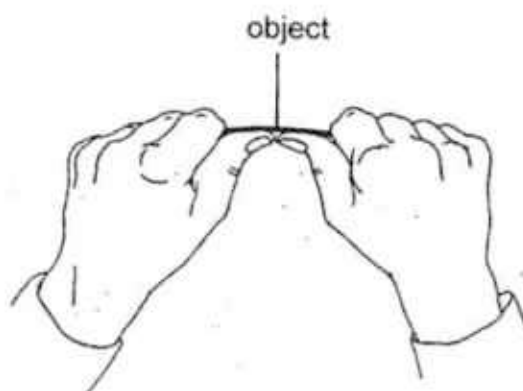
Material	Properties
W	<ul style="list-style-type: none">flexibleallows light to pass through
X	<ul style="list-style-type: none">flexibledoes not allow light to pass through
Y	<ul style="list-style-type: none">not flexibleallows light to pass through
Z	<ul style="list-style-type: none">not flexibledoes not allow light to pass through



Which material is most suitable for making the windscreen of a car?

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

- 19 Charles was given three objects made of different materials. He held each object in two hands and bent it as shown in the diagram below.



Which property of material was Charles testing on the three objects?

- (1) Flexibility
 - (2) Waterproof
 - (3) Ability to float
 - (4) Amount of light passing through
- 20 Ashton observed some materials and recorded his observations in the table shown below. A tick (✓) indicates the presence of the property.

Materials	Able to float	Waterproof	Breaks easily
A			✓
B	✓	✓	
C	✓		
D		✓	✓

Based on the results in the table above, which material is glass?

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

End of Booklet A



**CATHOLIC HIGH SCHOOL
SEMESTRAL ASSESSMENT ONE (2017)
PRIMARY THREE**

SCIENCE

BOOKLET B

Name: _____ ()

Class: Primary 3 - _____

Date: 9 May 2017

Booklet A	40
Booklet B	20
Total	60

7 questions

20 marks

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

INSTRUCTIONS TO CANDIDATES

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

Follow all instructions carefully.

Answer all questions.

Write your answers in this booklet.

This booklet consists of 8 printed pages, excluding the cover page.

Booklet B (20 marks)

For questions 21 to 27, 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 table below shows the characteristics of four plants, K, L, M and N. A tick (✓) in the box represents that the plant has that characteristic.

Characteristic	Plant			
	K	L	M	N
Bears flowers	✓		✓	
Lives on land	✓	✓		
Reproduces by spores		✓		✓

- (a) Based on the table above, describe the characteristics of plant K. [1]

- (b) Which of the following represents plant L? Put a tick (✓) in the correct box. [1]

			
mushroom	rose	water lettuce	bird's nest fern
<hr/>			

The diagram below shows a sunflower plant and a fern.



sunflower plant







fern

- (a) Based on the diagram above, state a similarity and a difference between the ~~tomato~~ ^{sunflower} plant and the fern. Do not compare shape and size. [2]

Similarity:

Difference:

- (b) Paul classified the plants as shown below.

(i)	(ii)
  <div style="display: flex; justify-content: space-around;"> sunflower plant fern </div>	  <div style="display: flex; justify-content: space-around;"> water lily water hyacinth </div>

Give a suitable heading for (i) and (ii) in the table above. [1]

- 23 Alex classified the four animals in the flowchart based on their characteristics as shown below.



goldfish



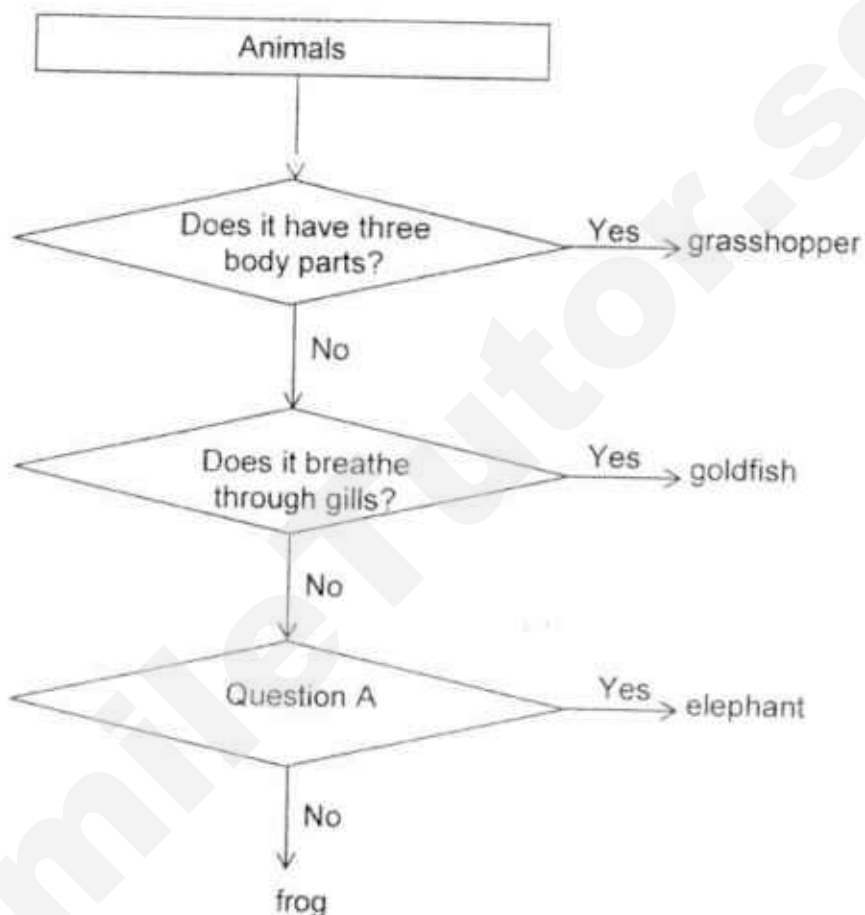
elephant



frog



grasshopper



- (a) What was Question A? Put a tick (✓) in the correct box.

[1]

	Tick (✓)
Does it have hair?	
Does it have feathers?	
Does it have moist skin?	

Continue from Question 23

Based on the flowchart on page 3,

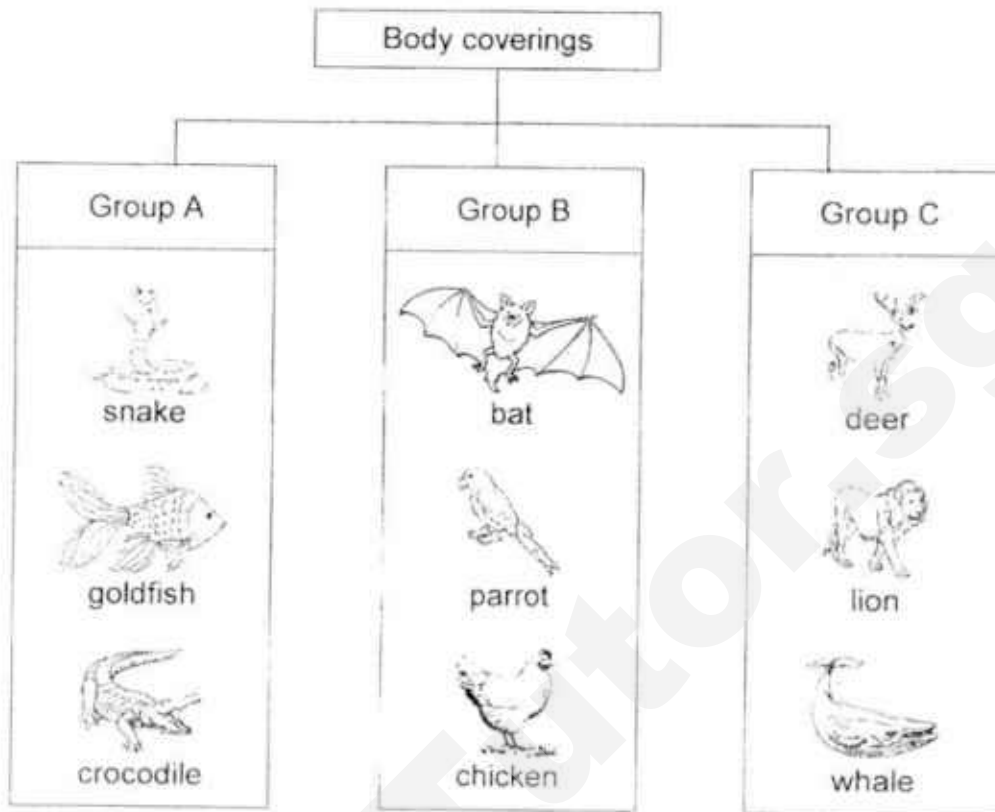
(b) list all the characteristics of a goldfish.

[1]

(c) write down the difference between a grasshopper and a goldfish.

[1]

- 24 The classification chart below shows how some animals are grouped according to their body coverings.



- (a) Which of the above animals is classified wrongly? [1]

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

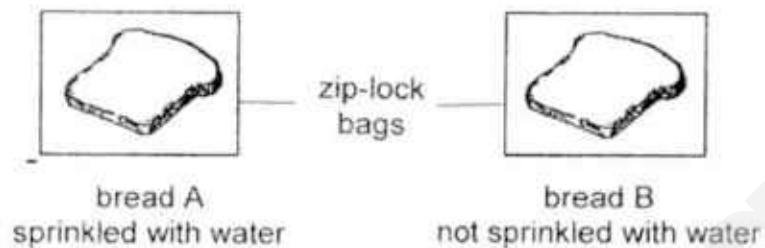
- (c) Give a heading for each group. [1]

Group A: _____

Group B: _____

Group C: _____

- 25 Bernice had two slices of bread. She sprinkled a few drops of water on bread A only. She then put each of the bread into two separate zip-lock bags. She sealed the bags and placed them on a table.



- (a) What would Bernice observe on bread A and bread B three days later? [2]

Bread	Observation
A	
B	

- (b) Explain your observations for bread A. [1]

26 Look at the swimming float below.






- (a) State two important properties of the material used to make the swimming float. [2]

(i) _____

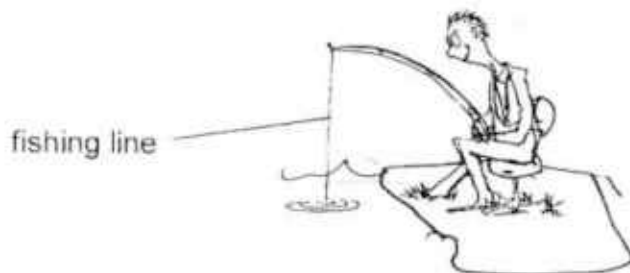
(ii) _____

- (b) Classify the following objects into the table below. [1]

 inflated balloon	 glass marble	 stone
--	---	---

Able to float	Not able to float

- 27 Caleb carried out an experiment to test the strength of four materials, P, Q, R and S, used to make fishing lines. He added weights of 1 kg at a time to each of the four materials.

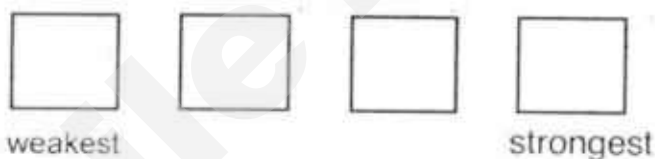


He recorded the number of weights needed for each material to break in the table below.

Material	Number of weights added just before the material broke
P	4
Q	9
R	6
S	2

- (a) Arrange the materials from the weakest to the strongest.

[1]



- (b) Based on Caleb's experiment, which material, P, Q, R or S, is most suitable for making a school bag as shown below? Explain your answer.



End of Booklet B

EXAM PAPER 2017

LEVEL : PRIMARY 3
SCHOOL : CATHOLIC HIGH SCHOOL
SUBJECT : SCIENCE
TERM : SA1

Section A

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

Section B

- Q21. (a) K bears flowers and lives on land.
(b) Bird's nest fern.
- Q22. (a) Similarity: They both have stem.
Difference: Sunflower plant has a flower but the fern does not have a flower.
(b) (i) Land plants
(ii) Water plants
- Q23. (a) Does it have hair?
(b) A goldfish does not have three body parts and it breathes through gills.
(c) A grasshopper has three body parts while a goldfish does not.
- Q24. (a) Bat
(b) A bat is a mammal. Its body is covered with hair and not feathers. It should be put in Group C.
(c) A: Scales B: Feathers C: Hair

- Q25. (a) A: Has green patches of mould.
B: Nothing
(b) Mould needs moisture to grow, thus it grew well on bread A which was sprinkled with water but does not grow well on bread B which does not have water.
- Q26. (a) (i) Waterproof
(ii) The ability to float
(b) Able to float: Inflated balloon
Not able to float: Stone, glass marble
- Q27. (a) S, P, R, Q
(b) Material Q. It is the strongest among the four materials as it could hold the greatest number of weight just before the material broke.

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Name: _____ ()

Class: Primary 3 _____

CHIJ ST NICHOLAS GIRLS' SCHOOL



Primary 3

Semestral Assessment 1 – 2017

SCIENCE

BOOKLET A

9 May 2017

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.

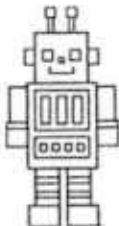



This booklet consists of 11 printed pages.

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Section A (15 x 2 marks = 30 marks)

For each question from 1 to 30, 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 table below.

Group X		Group Y	
			
robot	dog	mushroom	chilli plant

Based on the objects given above, which one of the following headings best represents group X and group Y?

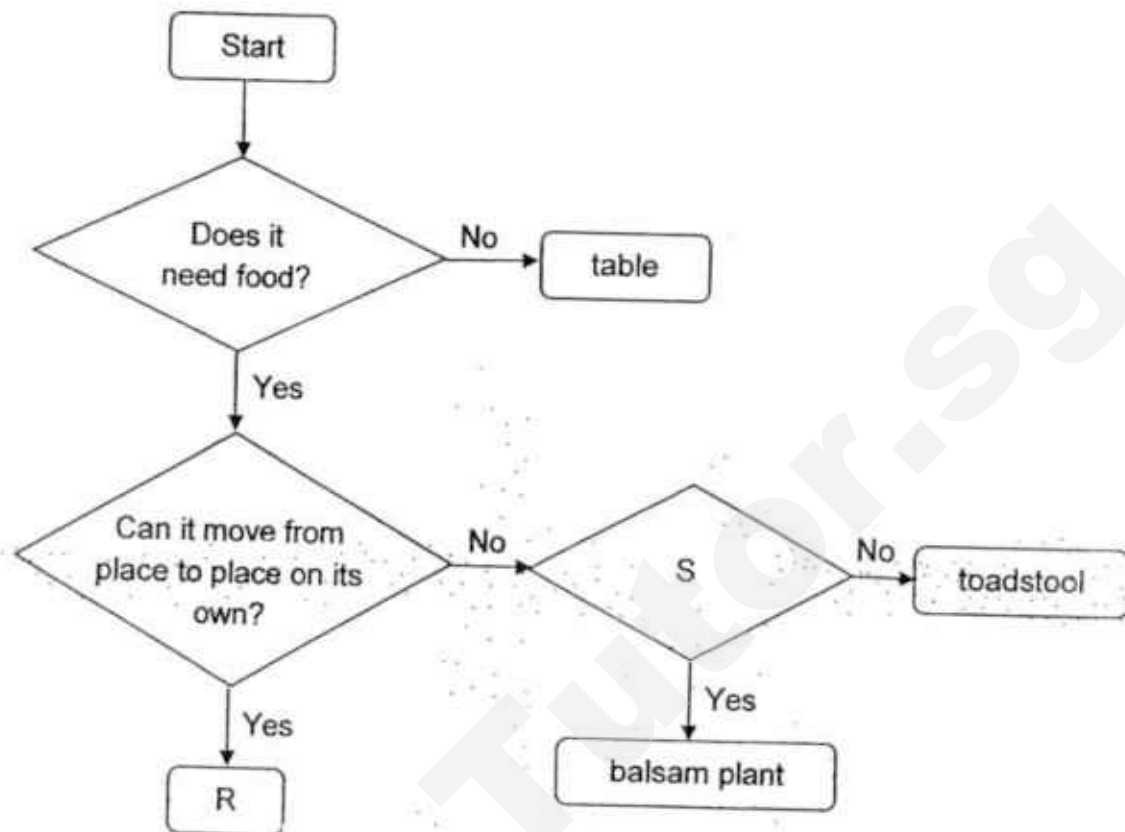
	Group X	Group Y
(1)	has legs	has no legs
(2)	cannot grow	can grow
(3)	can respond to changes	cannot respond to changes
(4)	does not need air, food and water	needs air, food and water

2. Which of the following characteristics are found in birds?

- A They have wings.
- B They have beaks.
- C They breathe through gills.
- D They have feathers on their bodies.

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

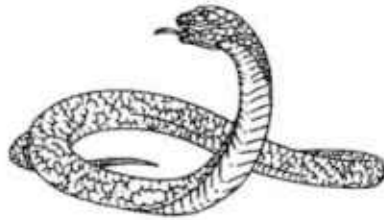
3. Study the chart below.



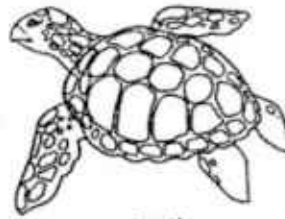
Which one of the following best represents R and S?

	R	S
(1)	Fungi	Does it produce flowers?
(2)	Bacteria	Does it produce spores?
(3)	Coconut tree	Does it produce spores?
(4)	Chicken	Does it produce flowers?

4. The diagram below shows two animals.



snake



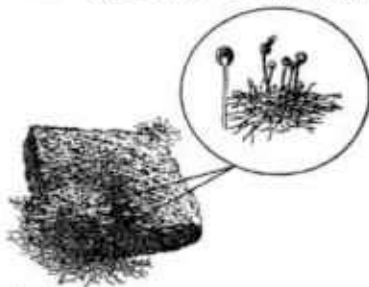
turtle

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

5. The diagram below shows four organisms.



A: bread mould



B: bird's nest fern



C: hibiscus plant



D: toadstool

Which of the above organisms do not make their own food?

- (1) A and B only
 - (2) A and D only
 - (3) B and C only
 - (4) C and D only
6. Jessica noticed animal T near a pond. She recorded her observations of animal T as shown in the box below.

It has a tail.
It has four legs.
It has moist skin.
It can find its food on land.

Based on the description above, which one of the following best represents animal T?

- (1) Guppy
- (2) Snake
- (3) Lizard
- (4) Salamander

7. The animals in the table below have been grouped according to similar characteristics.

X	Y	Z
Goldfish Shark Swordfish	Ostrich Parrot Penguin	Grasshopper Butterfly Spider

Based on the table, which one of the following animals has been grouped **incorrectly**?

- (1) Shark
- (2) Spider
- (3) Ostrich
- (4) Penguin

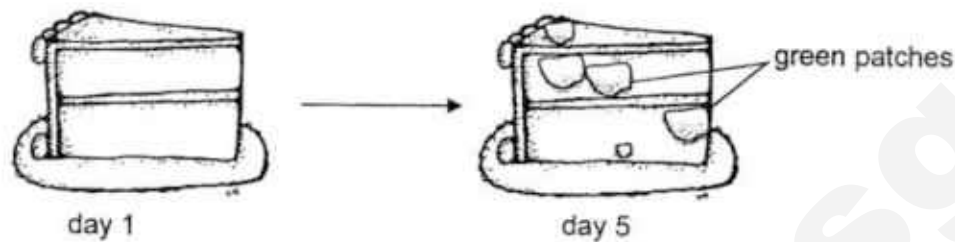
8. Some information on organism X are stated below.

It can reproduce very quickly.
It does not make its own food.
It can be used to make yoghurt.
It is very small and can only be seen under a microscope.

Which one of the following best represents organism X?

- (1) Yeast
- (2) Bacteria
- (3) Bread mould
- (4) Bracket fungi

9. Sally had two similar slices of cake. She placed one slice in the fridge and the other on the kitchen table for five days. After five days, she saw some green patches growing only on the cake that was placed on the table as shown below.



Based on Sally's observation, she can conclude that _____.

- (1) air is needed for mould to grow.
 - (2) light is needed for mould to grow.
 - (3) food is needed for mould to grow.
 - (4) warmth is needed for mould to grow.
10. The diagram below shows plant P.

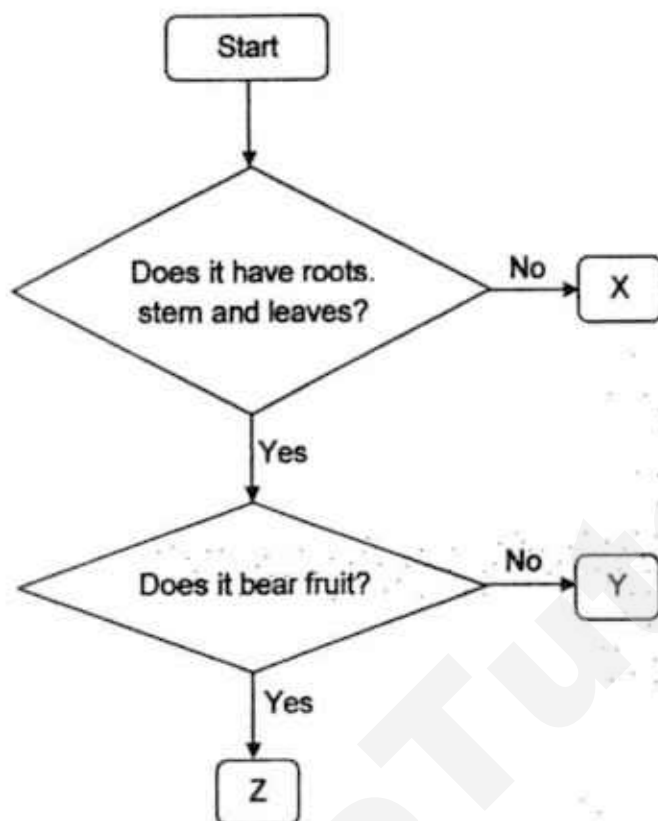


plant P

Based on the diagram above, how can you tell that plant P is a flowering plant?

- (1) It has fruits.
- (2) It reproduces by spores.
- (3) It has leaves to make food.
- (4) It has roots, stem and leaves.

11. Study the chart below.



Which of the following statements best describe X, Y and Z?

- A Z is a flowering plant.
- B Y reproduce from spores.
- C X is a non-flowering plant.
- D Both Y and Z do not depend on others for food.

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

12. Some plants are classified as shown in the table below.

Flowering plants	Non-flowering plants
Banana Balsam Water Lily	Moss Mimosa Stag's horn fern

Which one of the plants has been classified incorrectly?

- (1) Moss
- (2) Balsam
- (3) Mimosa
- (4) Water Lily

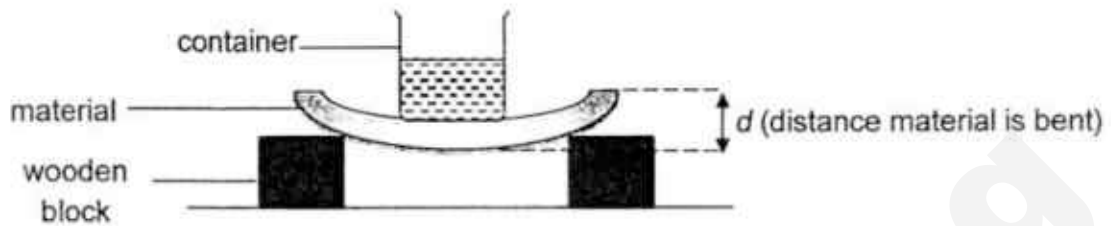
13. Margaret uses the umbrella below to keep out the rain and the sun.



Which one of the following best represents the properties of the material used to make part C?

	Flexible	Waterproof	Allow light to pass through
(1)	Yes	No	Yes
(2)	No	No	Yes
(3)	Yes	Yes	No
(4)	No	Yes	No

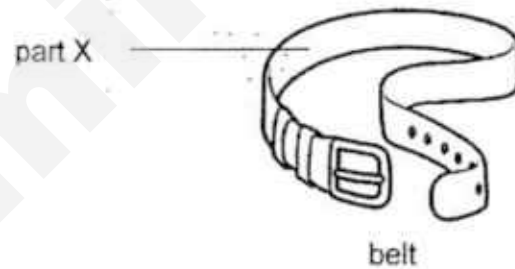
14. An experiment was conducted to compare the flexibility of four different materials P, Q, R and S, which are of the same length and thickness.



For each material, 500g of water was added into the container and the distance (d) was measured. Their results are shown in the table below.

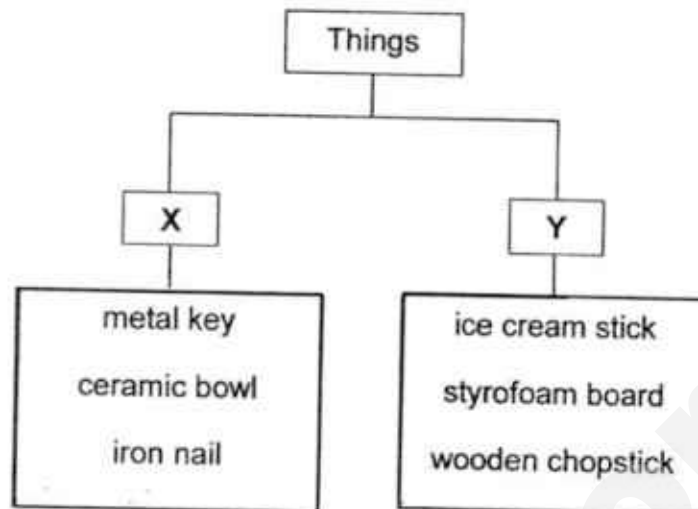
Material	d (Distance material is bent) (mm)
P	48
Q	20
R	10
S	0

Based on the experiment, which material P, Q, R or S, is most suitable for making part X of the belt?



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

15. Study the classification chart below.



Which one of the following are suitable headings for group X and Y?

	Group X	Group Y
(1)	flexible	not flexible
(2)	not waterproof	waterproof
(3)	sink in water	float on water
(4)	allow light to pass through	does not allow light to pass through

End of Section A

Name : _____ ()

Class : Primary 3 _____

CHIJ ST NICHOLAS GIRLS' SCHOOL



Primary 3

Semestral Assessment 1 – 2017

SCIENCE

BOOKLET B

9 May 2017

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.

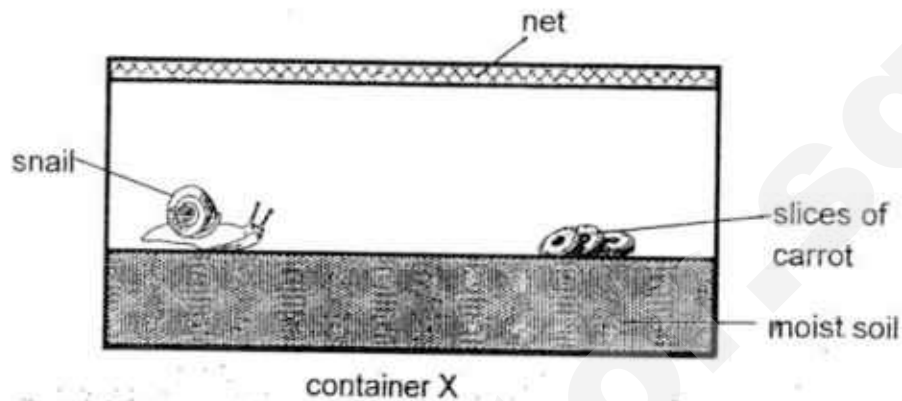
This paper consists of 8 printed pages.

Booklet A	30
Booklet B	20
Total	50

Section B (20 marks)

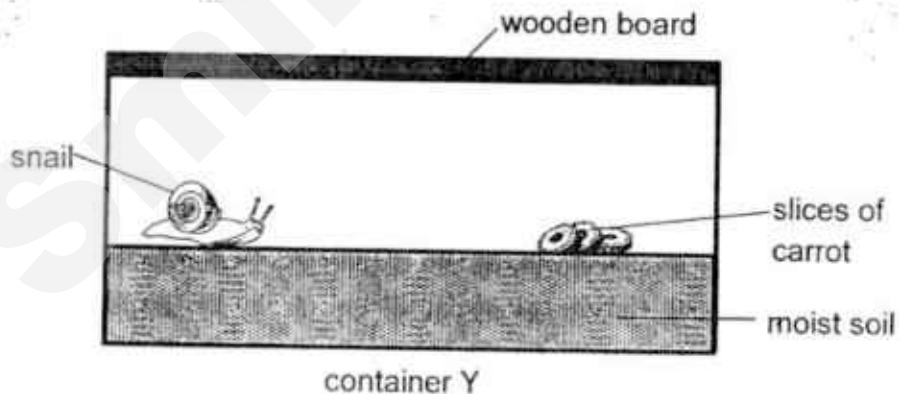
For questions 16 to 22, write your answers in this booklet. The number of marks available is shown in the brackets [] at the end of each question or part question.

16. Tina placed a snail in container X and observed it for a week.



- (a) Give a reason why the snail is able to survive for a week. [1]

Tina then placed the snail in another container, Y, as shown below. A few days later, she noticed that the snail died.



- (b) Explain why the snail died a few days later when it was placed in container Y. [1]

17. The diagram below shows a ladder fern and some mushrooms.



ladder fern



mushrooms

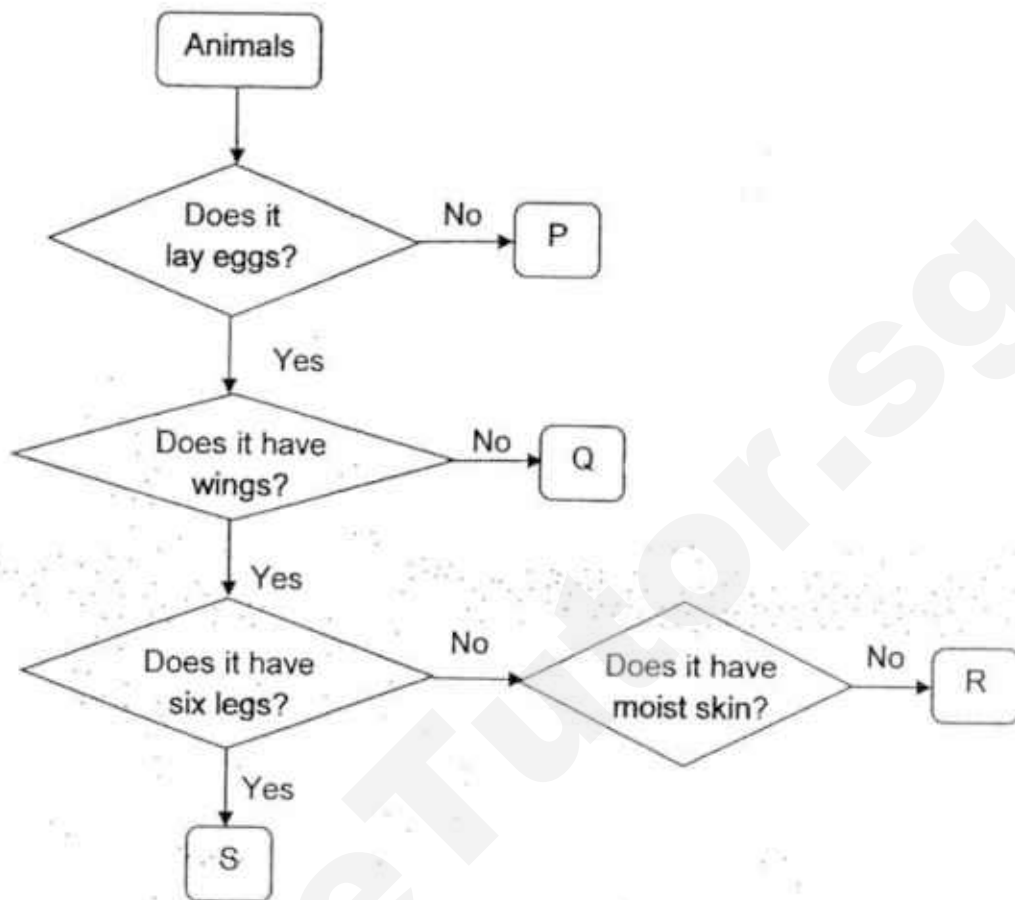
- (a) State one similarity in the reproduction method of the ladder fern and the mushrooms. [1]

- (b) State two differences between the ladder fern and the mushrooms. [2]

Difference 1:

Difference 2:

18. Study the chart below.



(a) Based on the chart above, state one similarity between Q and S. [1]

(b) Based on the chart above, state one difference between S and R. [1]

(c) Based on the chart above, match the animals below with the correct letters P, Q, R or S, in the blanks provided. [2]

Chicken: _____

Fish: _____

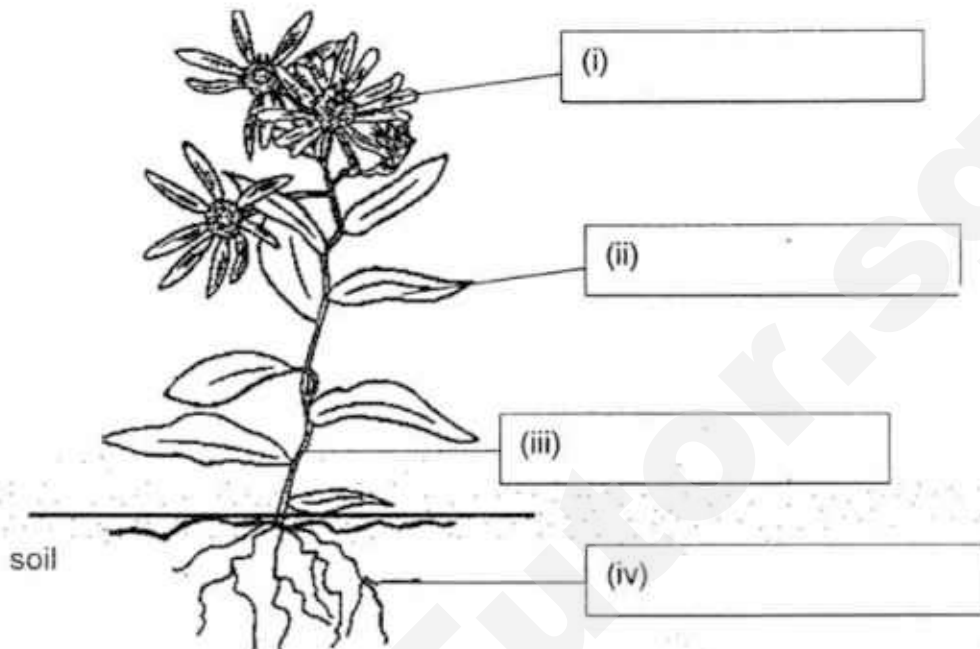
Beetle: _____

Orang-utan: _____

19. The diagram below shows a plant.

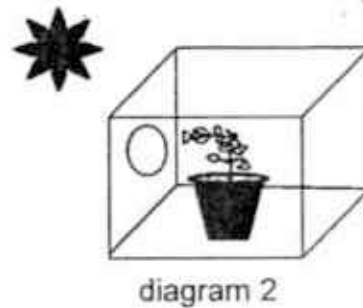
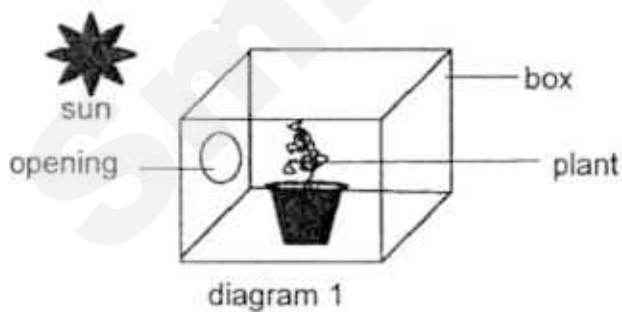
(a) Label the parts of the plant by writing in the boxes provided.

[2]



The plant above is placed in a wooden box with an opening and left in the field as shown in diagram 1.

After five days, the plant in the box is seen to be growing towards the opening as shown in diagram 2.



(b) State one characteristic of living things that is shown by the plant.

[1]

20. Mudskippers are special animals. They live mainly in water but are able to survive on land for short periods of time. However, mudskippers are not classified as amphibians.



mudskipper

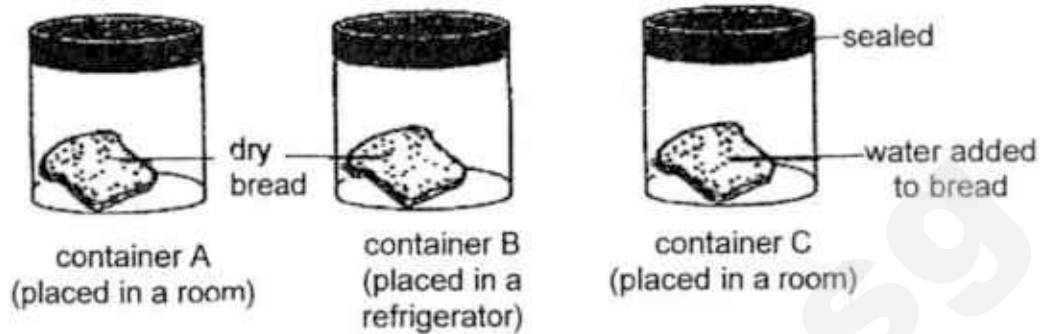
- (a) Which animal group do you think the mudskipper belongs to? [1]

- (b) Give two reasons to support your answer in (a). [1]

Reason 1:

Reason 2:

21. The diagram below shows three sealed containers A, B and C, with a piece of bread each.



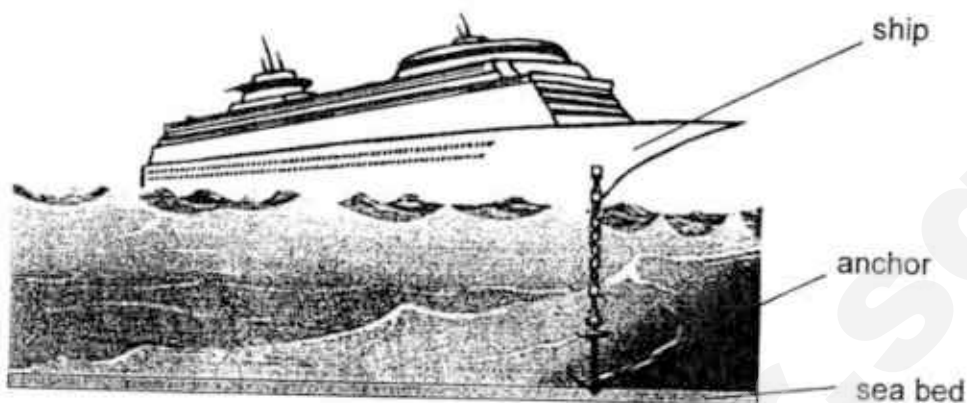
- (a) In the spaces provided below, arrange the letters A, B and C, starting from the bread that grow mould the slowest to the bread that will grow mould the fastest. [1]

_____ (slowest) _____ (fastest)

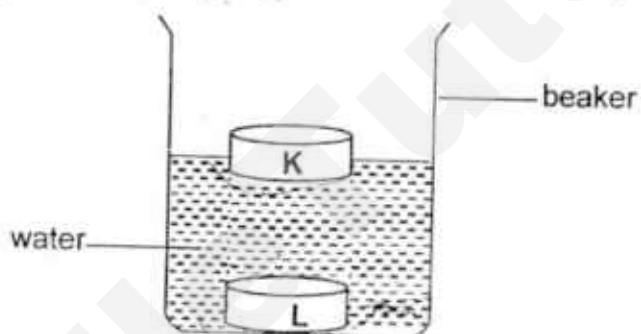
- (b) Based on your answer in (a), name the condition that most likely caused the mould to grow the fastest. [1]

- (c) Which group of living things do bread mould belong to? [1]

22. The picture below shows a ship with its anchor thrown into the sea. The anchor holds the ship and prevent it from moving on its own.



Alex placed two objects K and L, made of different materials, into a beaker of water as shown below.



- (a) Based on the diagram shown above, which material K or L, would be suitable for making the anchor? Give a reason for your answer. [2]

- (b) Based on the diagram shown above, name one object that material K is suitable for making. [1]

End of Booklet B

ANSWER KEY

YEAR : 2017
 LEVEL : PRIMARY 3
 SCHOOL : CHIJ ST NICHOLAS GIRLS'
 SUBJECT : SCIENCE
 TERM : SA1

Booklet A

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

Booklet B

16	(a)	Living things like animals need air, food and water to survive.
	(b)	There was little air for the snail.
17	(a)	They both reproduce by spores.
	(b)	The ladder fern can make its own food but the mushroom cannot make its own food.
18	(a)	They both lay eggs.
	(b)	S has six legs but R does not have six legs.
	(c)	Chicken : <u>K</u> (K)
		Fish : <u>Q</u>
19	(a)	Beetle : <u>S</u>
		Orang-utan: <u>P</u>
		(i) flowers
		(ii) leaf
	(b)	(iii) stem
		(iv) root
	(b)	Living thing can respond to changes in their environment.

20	(a)	It belongs to fish.
	(b)	Reason 1: It has fins to swim. Reason 2: It has scales.
21	(a)	B, A, C
	(b)	Moisture helps mould to grow faster.
	(c)	It belongs to fungi.
22	(a)	Material L. It can sink and prevent the ship from moving its own.
	(b)	Material K can make a float.

End

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HENRY PARK PRIMARY SCHOOL
FIRST SEMESTRAL ASSESSMENT 2017
PRIMARY 3
SCIENCE
SECTION A (40 MARKS)

INSTRUCTIONS TO CANDIDATES

1. Do not turn over this page until you are told to do so.
2. Follow all instructions carefully.
3. Answer all questions.
4. Shade your answers on the Optical Answer Sheet (OAS) provided.

Name: _____ ()

Class: Primary 3 ()

Date: 12 May 2017

Total Time for Sections A, B and C : 1 h 30 min

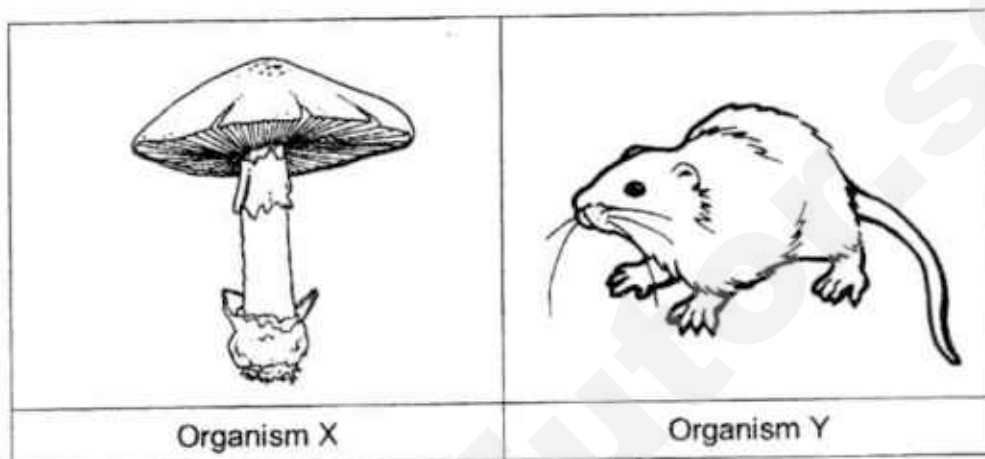
Section	Marks
A	/ 40
B	/ 16
C	/ 24
Total	/ 80

Parent's Signature: _____

Section A: Multiple-choice Questions (40 marks)

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 it in the Optical Answer Sheet provided.

1. Look at the organisms X and Y shown in the diagrams below.



Which of the following about the organisms shown above is **not** correct?

- (1) Both need air and water.
- (2) Both can respond to changes.
- (3) Both depend on other organisms for food.
- (4) Both can move from place to place on their own.

2. The chart below shows how some living things, A, B, C and D, are observed and compared.

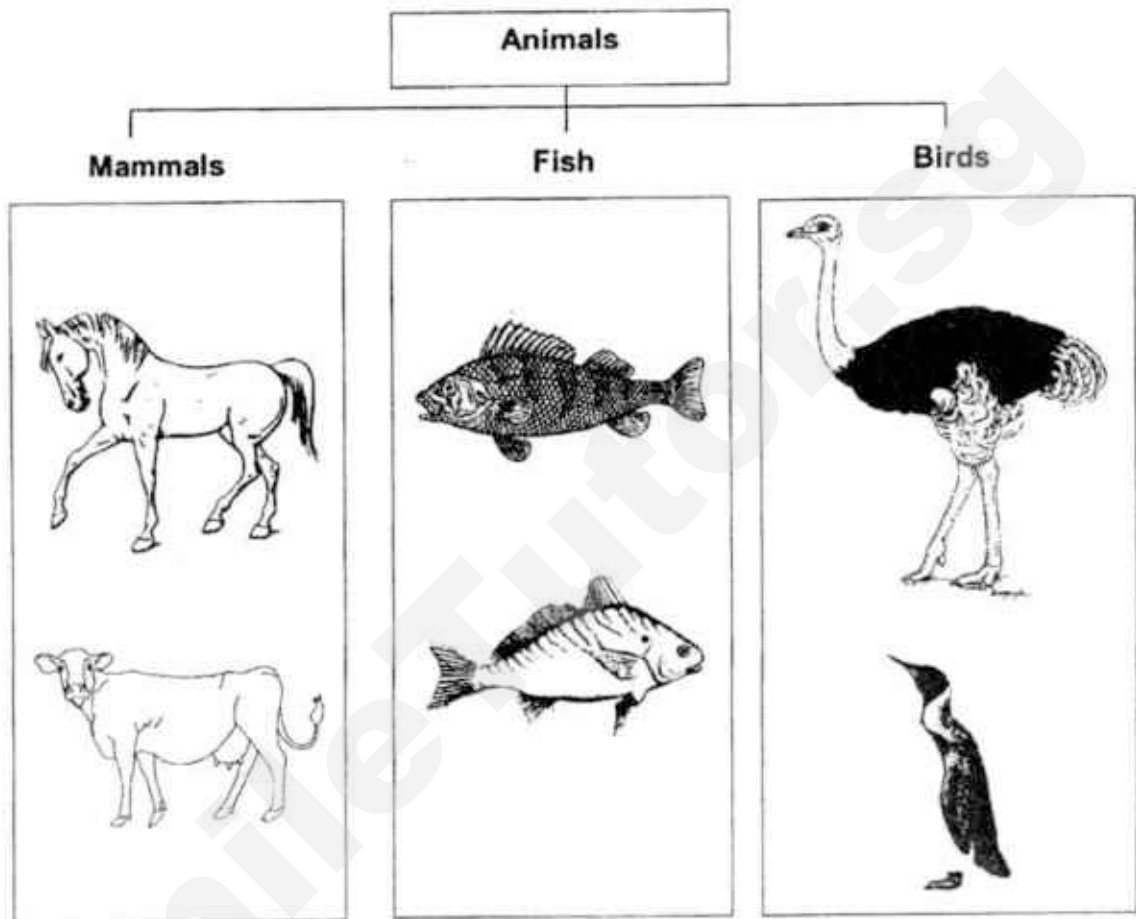
Living Thing	Need air, food and water	Can move from one place to another	Make its own food	Is a micro-organism
A	✓	✓	X	X
B	✓	X	✓	X
C	✓	✓	X	X
D	✓	✓	X	✓

(✓ - Yes, X - No)

Which of the following has similar characteristics of a plant?

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

3. The table below shows six animals classified into three groups.

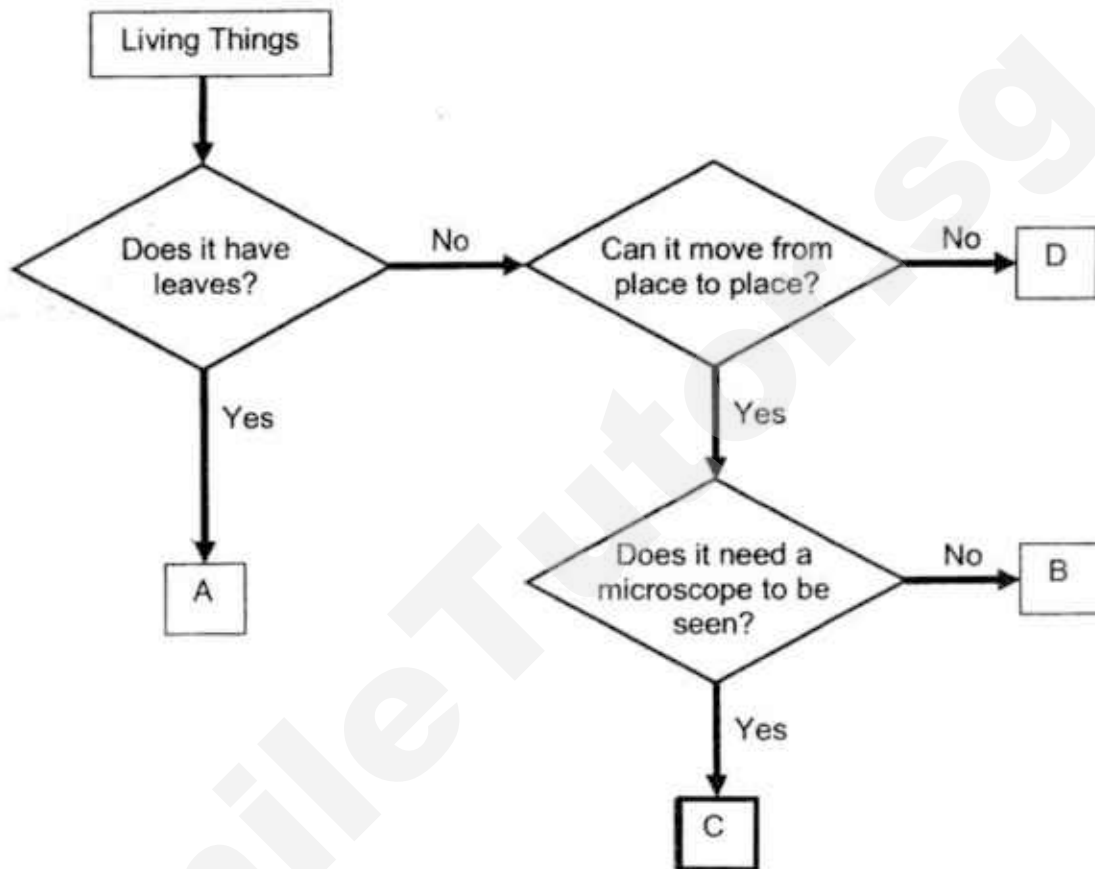


The six animals can be kept in the same groups shown above if they are classified according to _____.

- (1) their size
- (2) the food they eat
- (3) how they reproduce
- (4) their outer covering

()

4. The diagram below shows a flow chart which can be used to classify living things.



Which of the following letters, A, B, C or D represents the correct living thing?

	Letter	Living Thing
(1)	A	mushroom
(2)	B	moss
(3)	C	bacteria
(4)	D	chicken

()

5. The table below shows the characteristics of four animals, A, B, C and D.
(✓) means the animal has the characteristic and (X) means it does not.

Animal	Has feelers	Has dry scales as outer covering	Reproduces by laying eggs	Lives on land
A	X	✓	✓	✓
B	✓	X	✓	✓
C	X	✓	✓	X
D	X	X	X	✓

The diagram below shows animal R.



Which of the following animals from the table above is likely to be animal R?

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

()

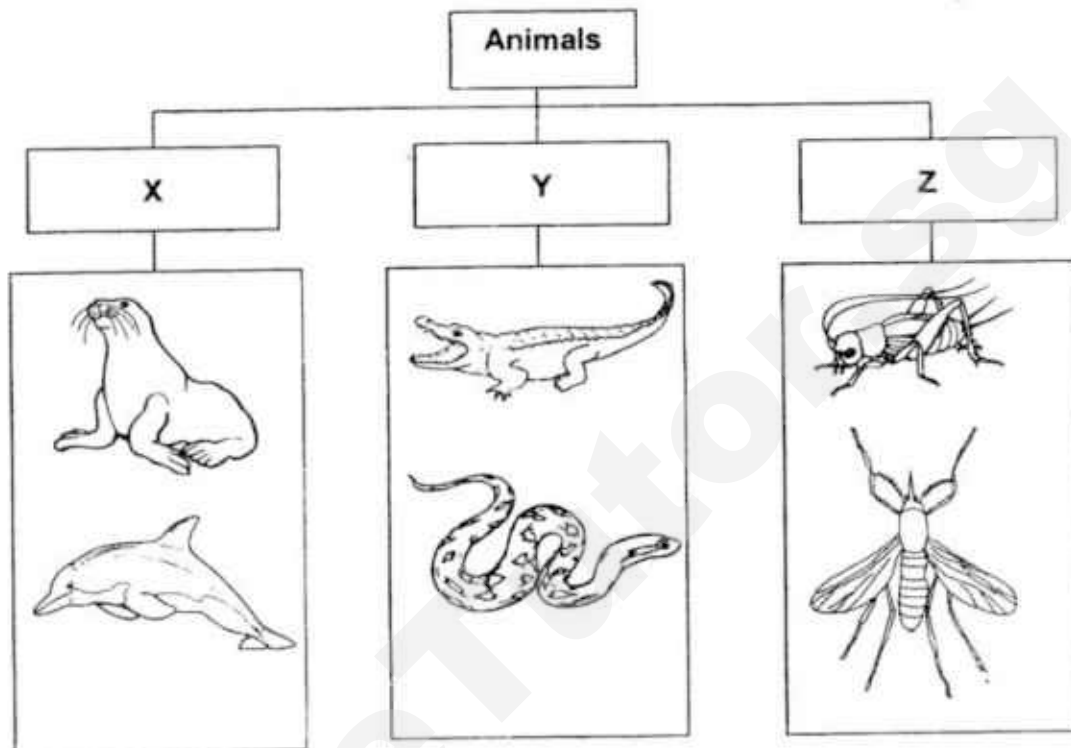
6. Which of the following characteristics are common to all birds?

- A: They can fly.
- B: They lay eggs.
- C: They have feathers.

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

()

7. Study the classification diagram below carefully.

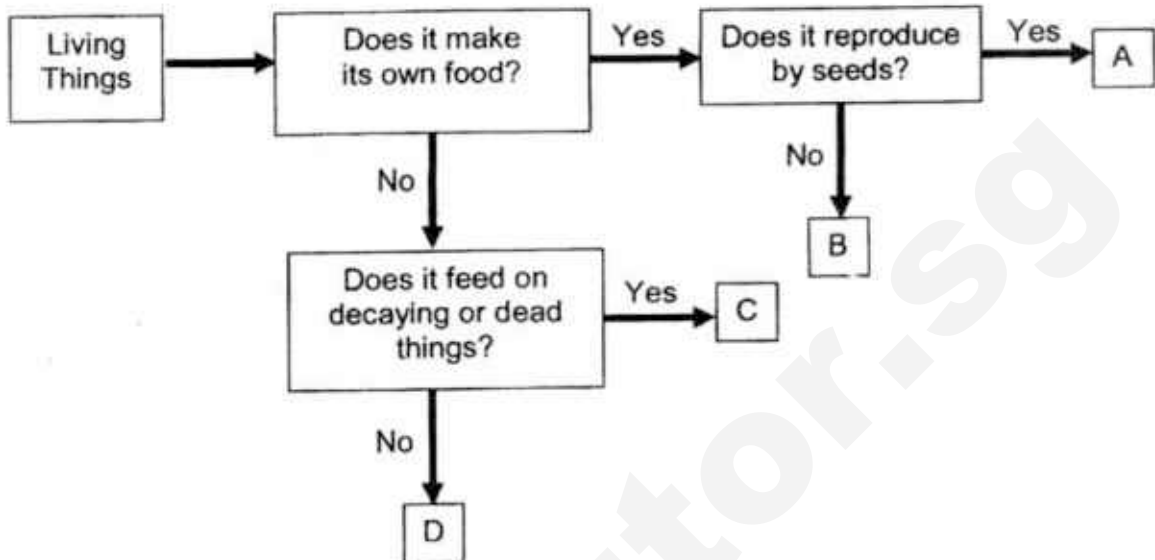


What are the most suitable headings for each group of animals?

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

()

The chart below shows the characteristics of some living things.



8. Based on the flowchart above, which of the following statements is likely to be correct?

- (1) Living thing A is a plant.
- (2) Living thing B is a fungi.
- (3) Living thing C is a fern.
- (4) Living thing D is a non-flowering plant.

()

9. When John chases a rat, it runs away in fear.
Which of the following characteristics does the rat show?

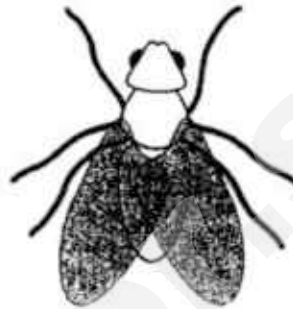
- (1) It can grow.
- (2) It can reproduce.
- (3) It needs food.
- (4) It responds to changes.

()

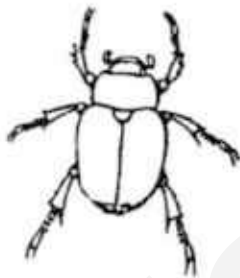
10. Look at the animals shown below.



A



B



C



D

Which of the following animals are insects?

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

()

11. Look at the two plants shown below.

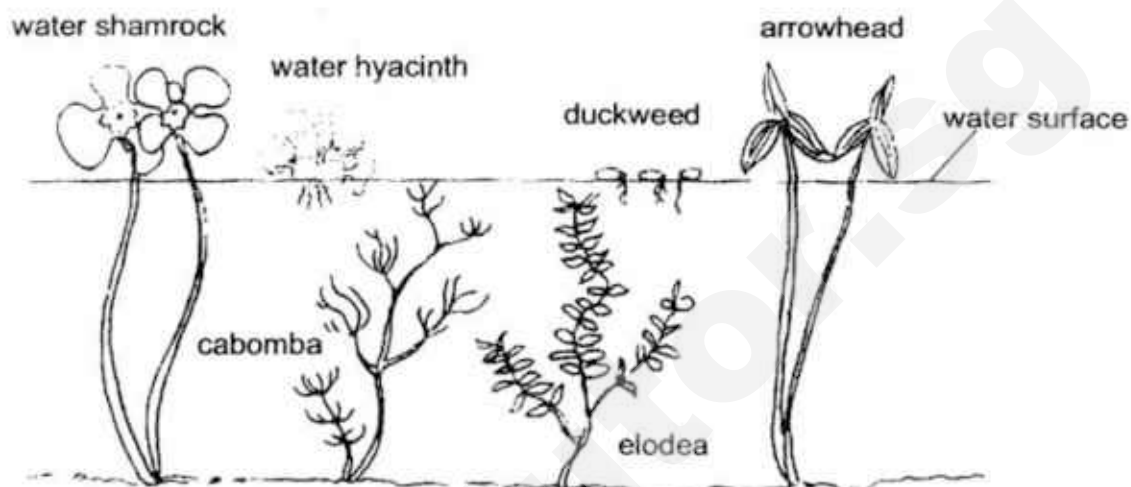


Which statement shows the similarity between the two plants?

- (1) Both can make their own food.
- (2) Both reproduce by spores.
- (3) Both have flowers.
- (4) Both grow in water.

()

12. Study the water plants in the diagram below.



Study the note given below.

Note:

Floating plants – found on the water surface

Half submerged plants – part of the plant grows out of the water

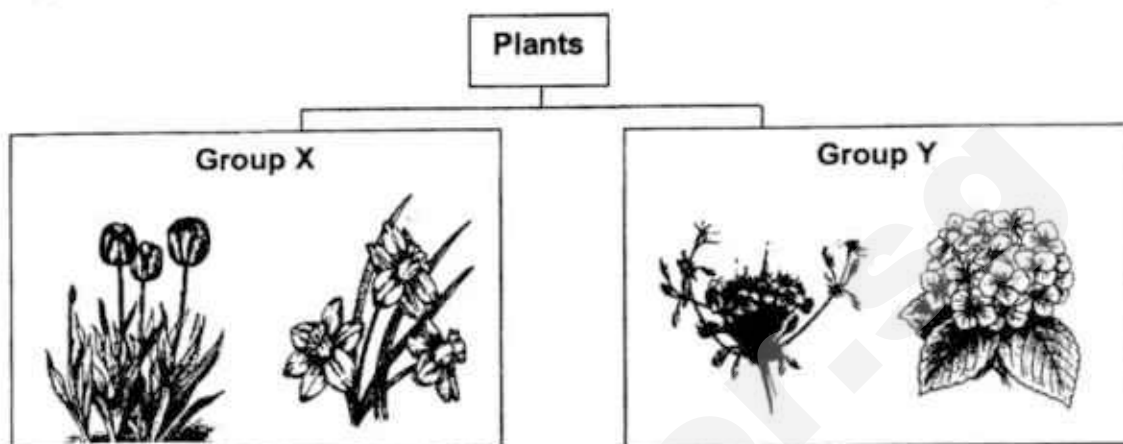
Fully submerged plants – whole plant grows below water surface

Which of the following shows the correct grouping of the water plants?

	Floating plants	Half submerged	Fully submerged
(1)	water shamrock	water hyacinth	arrowhead
(2)	cabomba	elodea	duckweed
(3)	duckweed	arrowhead	elodea
(4)	water hyacinth	water shamrock	arrowhead

()

13. Study the classification table below carefully.



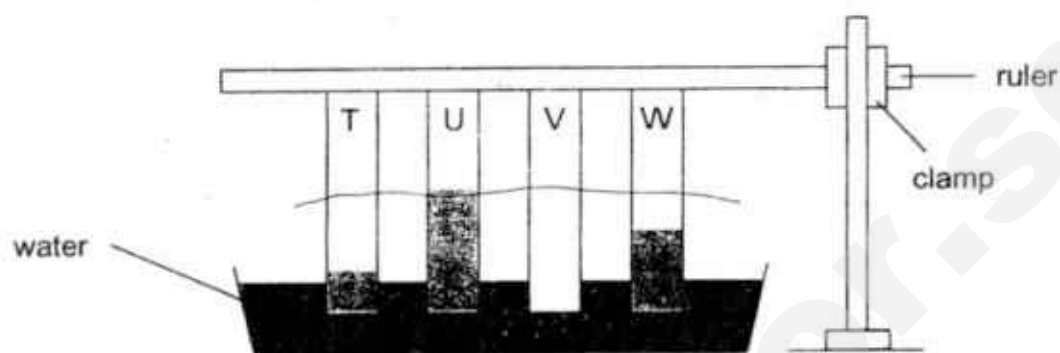
What could group X and group Y represent?

	Group X	Group Y
(1)	water plants	land plants
(2)	flowering plants	non - flowering Plants
(3)	weak stems	strong stems
(4)	flowers grow singly	flowers grow in bunches

()

14. Kenji carried out an experiment to test how well each material can absorb water. He used materials T, U, V and W, which are of the same size and thickness.

The results of his experiment are shown in the diagram below.

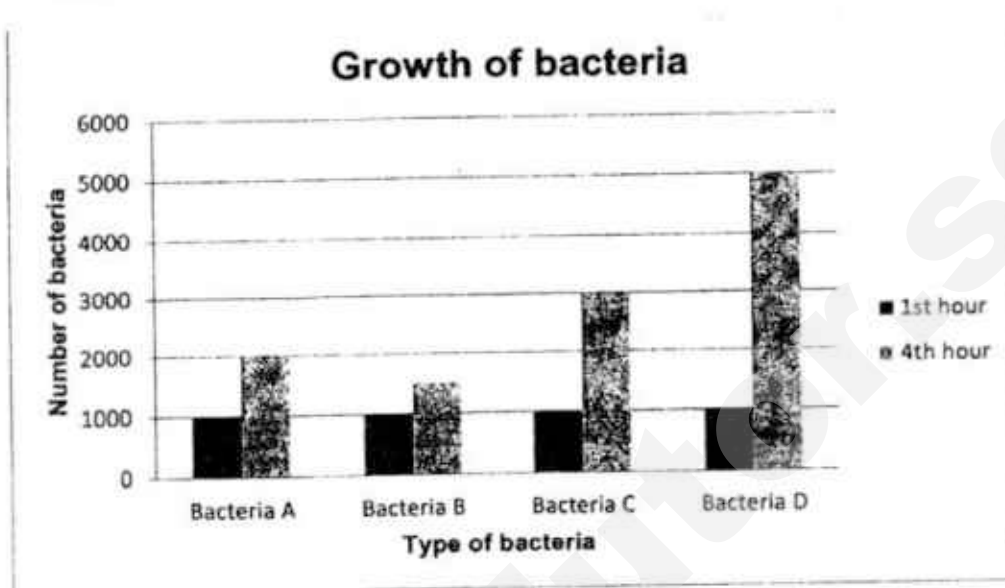


Which material, T, U, V or W, is most suitable for making a bath towel?

- (1) T
- (2) U
- (3) V
- (4) W

()

15. The bar graph below shows the growth of bacteria A, B, C and D at the 1st hour and 4th hour.



Which bacteria reproduced the slowest?

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

()

16. Mr. Tan has to choose a suitable material for making safety helmets for his construction workers.

Safety helmets are worn by workers to protect their heads from falling objects.



Material	Strong	Waterproof	Flexible
A	Yes	No	Yes
B	No	Yes	No
C	No	Yes	Yes
D	Yes	Yes	No

Based on the table above, which material is the **most suitable** to make safety helmets?

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

()

17. Tyler is showing his classmates that he can bend a rod.

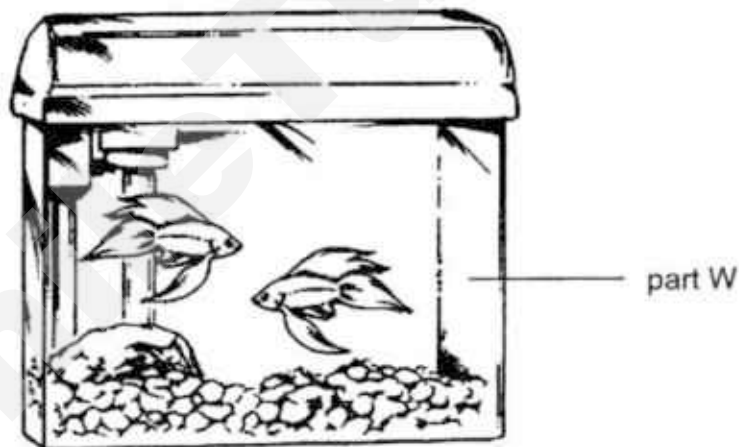


Tyler is able to carry out the above action because the rod is _____.

- (1) light
- (2) heavy
- (3) strong
- (4) flexible

()

18. The diagram below shows a fish tank.



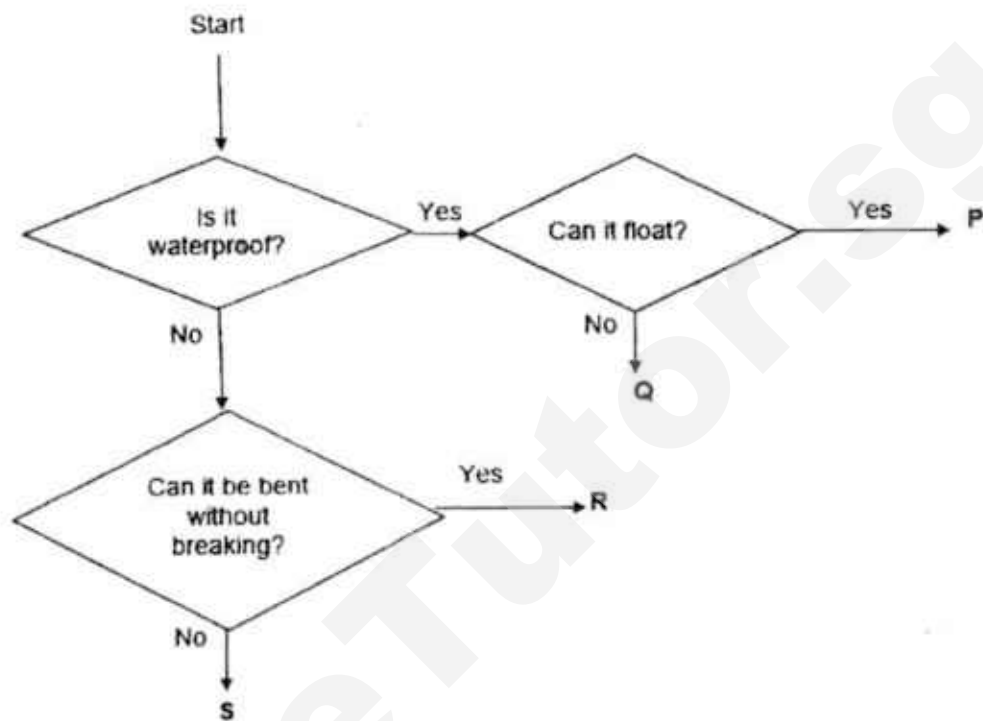
Which of the following statement(s) about the material part W is made of is/are correct?

- A: It must be strong.
- B: It must be waterproof.
- C: It must allow most light to pass through.

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

()

19. The flowchart below shows how James classified some things.

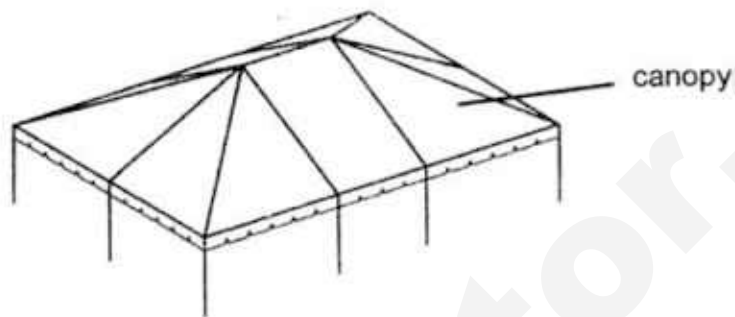


Which of the following best represents a paper towel?

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

()

20. The diagram below shows part of a party tent where guests can stay under on sunny or rainy days.



Susan carried out some tests to find out if a material is suitable for making the canopy of the tent.

- Test A: Is the material waterproof?
Test B: Does the material float or sink in water?
Test C: Does light pass through the material?
Test D: Is the material smooth or rough to the touch?

Which two tests are important in deciding the suitability of the material in making the canopy of the tent?

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

()



HENRY PARK PRIMARY SCHOOL
FIRST SEMESTRAL ASSESSMENT 2017
PRIMARY 3
SCIENCE
SECTION B & C (40 MARKS)

INSTRUCTIONS TO CANDIDATES

1. Do not turn over this page until you are told to do so.
2. Follow all instructions carefully.
3. Answer all questions.

Name: _____ ()

Class: Primary 3 ()

Date: 12 May 2017

Total Time for Sections A, B and C : 1 h 30 min

Marks for Section B: _____

Marks for Section C: _____

Section B: Structured Questions (16 marks)

Write your answers to questions 21 – 28 in the spaces provided.

21. Ben picked up some things from his school garden.

He put them into two groups based on their similarities. He put one group in container P and the other group in container Q. He placed some food and water in both containers.

He observed them for two weeks and recorded his findings in the table below.

	Container P	Container Q
A	Moved by itself most of the time.	No movement at all.
B	Curled up when touched.	Did not respond when touched.
C	Food and water became lesser.	Food and water were untouched.
D	Grew bigger after 2 weeks.	Remained the same.

What do you think are in the containers?

[2]

Use the words, "living things" or "non-living things", to fill in the blanks below correctly.

Container P : _____

Container Q : _____

22. James is a newborn baby. The table below shows his height for a period of five months. His height was measured and recorded on the last day of each month.

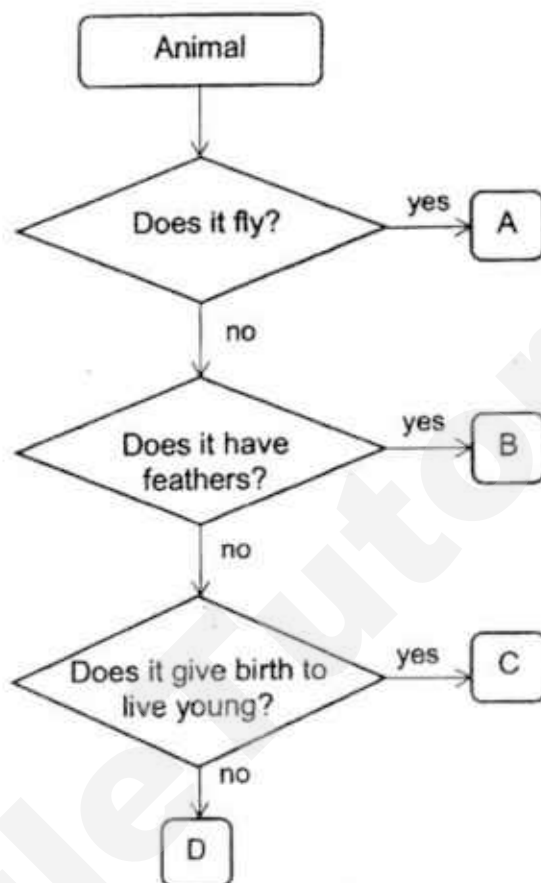
Month	Height (cm)
February	48
March	48
April	53
May	55
June	61

Based on the information given above, put a tick (✓) next to the statement(s) that is/are correct.

[2]





	Statements	Tick (✓)
a)	James' height did not increase during the first 2 months.	
b)	James' height increased during the last 3 months.	
c)	James' height did not increase in May.	
d)	James' height increases the least in June.	

23. Study the flowchart below.

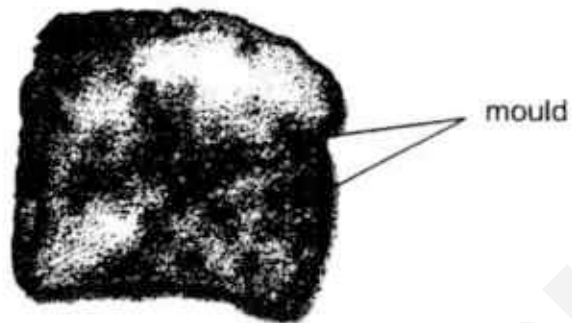


The table below shows four animals.

Fill in the boxes below correctly with the letters A, B, C and D from the flowchart above. [2]

			
Whale	Frog	Cassowary	Housefly

24. A slice of bread was placed by the kitchen for a few weeks. Some mould was seen growing on it after a week.

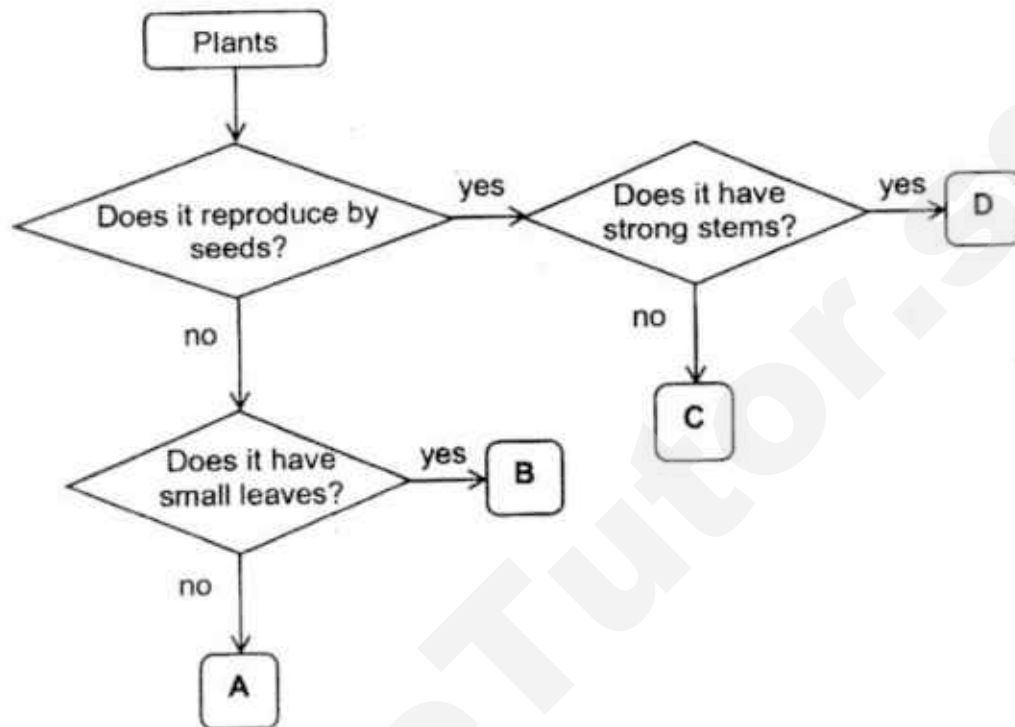


Based on the information given above, put a tick (✓) next to the statement(s) that is/are correct about the bread mould.

[2]

	Statements	Tick (✓)
(a)	It is a non-flowering plant.	
(b)	It reproduces from spores.	
(c)	It gets its food from the slice of bread.	

25. The flowchart below shows the characteristics of plants in groups A, B, C and D.



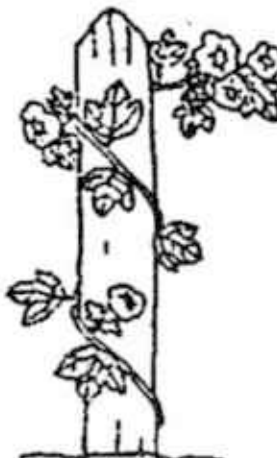
The diagrams below show plants S and T. Write in the boxes below which group (A, B, C or D) can these two plants be put in.

[2]

Plant S



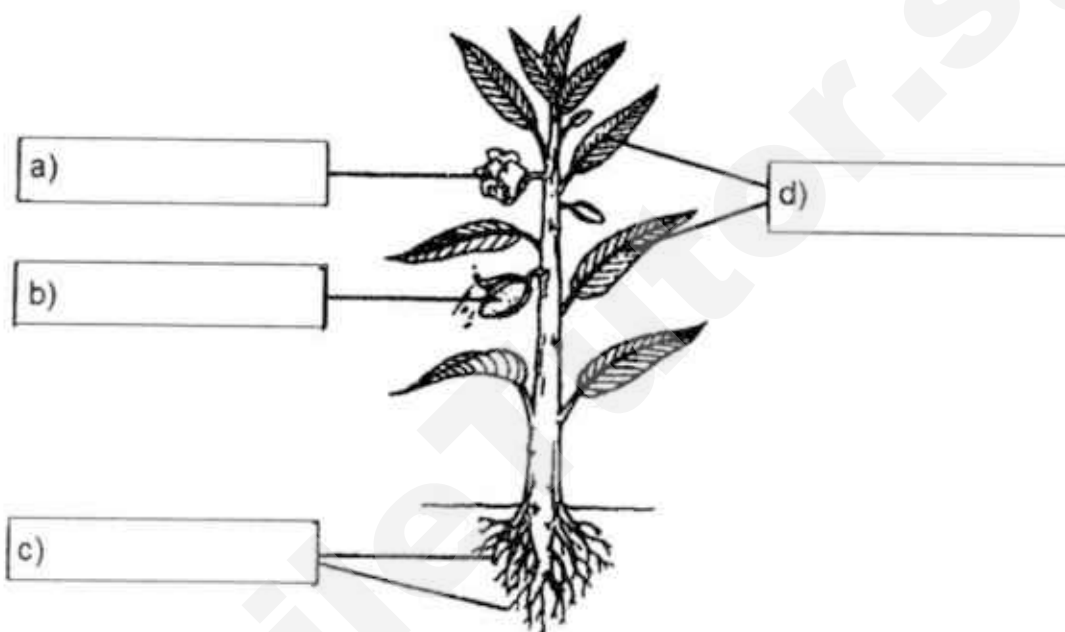
Plant T



26. Label the parts of the plant using the helping words given.

[2]

Fruit	Roots	Flower
Leaves	Stem	

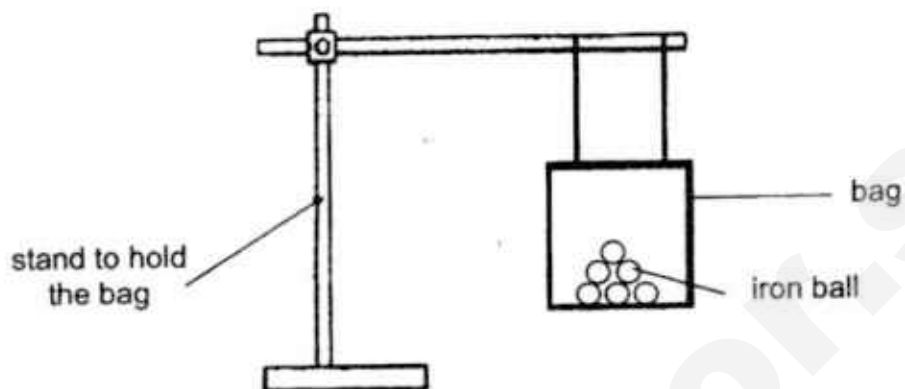


27. For each of the following statements, write 'T' for true or 'F' for false in the correct boxes.

[2]

	Statements	Write T or F
a)	Non-flowering plants reproduce by spores.	
b)	Flowering plants bear fruits.	
c)	Plants cannot make their own food.	
d)	Only flowering plants have roots and stems.	

28. Mdm Lee set up the experiment shown below to find out the strength of bags made of different materials. She added similar iron balls into bag A until the bag broke.



She repeated the experiment using bags B and C which were made of different materials. She recorded her observation in the table below.

Bag	Number of iron balls added before the bag broke
A	25
B	13
C	19

- a) Which bag, A, B or C, is the strongest?

[1]

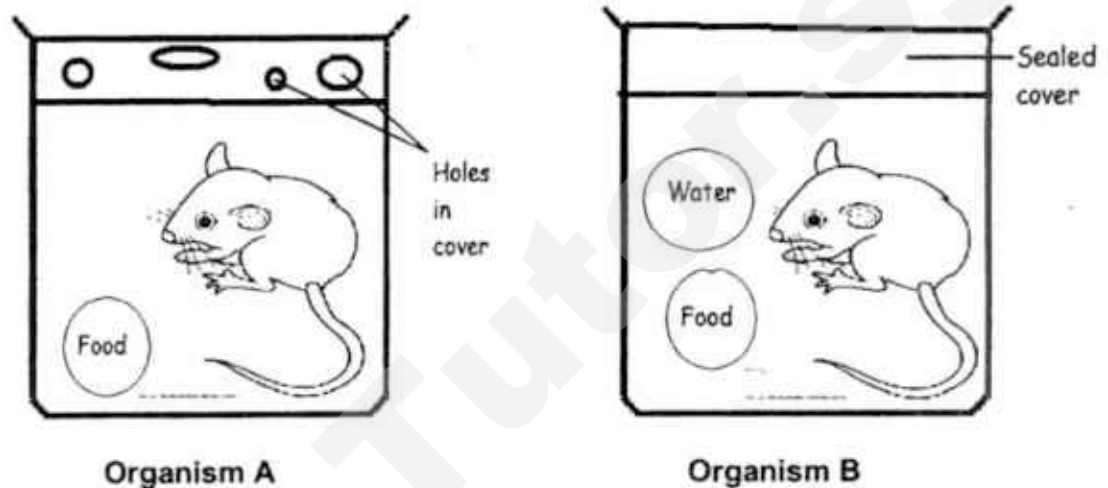
- b) Which bag, B or C, is strong enough to hold 16 iron balls?

[1]

Section C (24 marks)

Write your answers to questions 29 to 36 in the spaces given.

29. Observe the organisms A and B in the diagrams below.



Only one organism was alive after two days.

- a) Which organism, A or B, was still alive after two days? [1]

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

- c) State one **other** characteristic of living things. [1]

30. The diagram below shows two animals, A and B, which are not drawn to scale.



Animal A



Animal B

- a) Based only on the pictures above, state two differences between animals A and B. (*Do not compare their sizes.*) [2]

Difference 1:

Difference 2:

- b) Which animal group does animal B belong to? [1]

31. Jimmy put some fish into a tank filled with water and some water plants. He fed the fish every day. He kept a record of the number of fish over a period of 12 days as shown in the table below.

Day	Number of fish
1	8
4	11
8	10
12	14

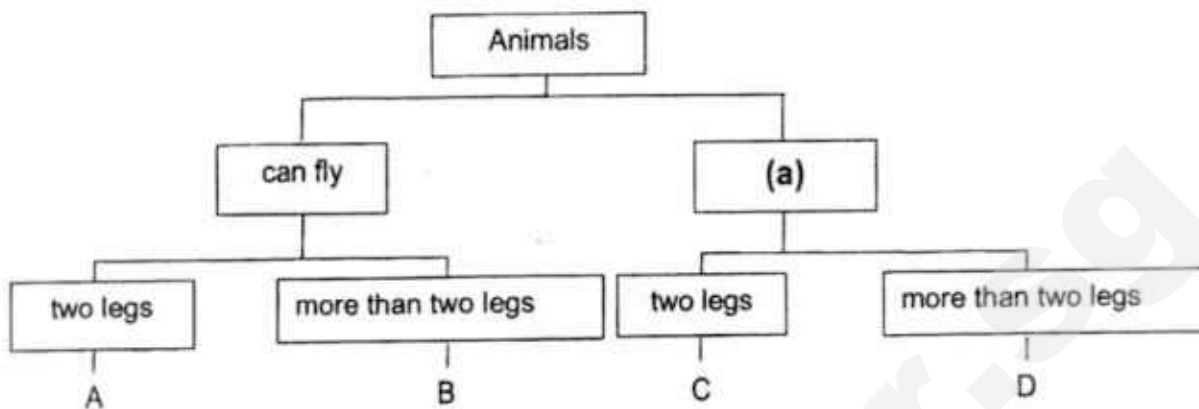
- a) How have the number of fish changed during the first four days?
Give a reason for this observation.

[2]

- b) State one characteristic of living things that can be observed from the table above.

[1]

32. Study the classification table shown below.



a) Give a suitable heading for (a) in the table above. [1]

b) Jane saw animal K in her garden and recorded her observations in her science journal.

Animal K can fly.
Animal K has six legs.

Which group, A, B, C or D does animal K belong to? [1]

c) Study the diagram of animal E below.



Animal E

Explain why animal E **cannot** be placed in any group in the classification table shown above. [1]

33. Study the table below.

Characteristics	Group			
	W	X	Y	Z
Bears fruit	No	Yes	No	Yes
Grows in water	No	Yes	Yes	No



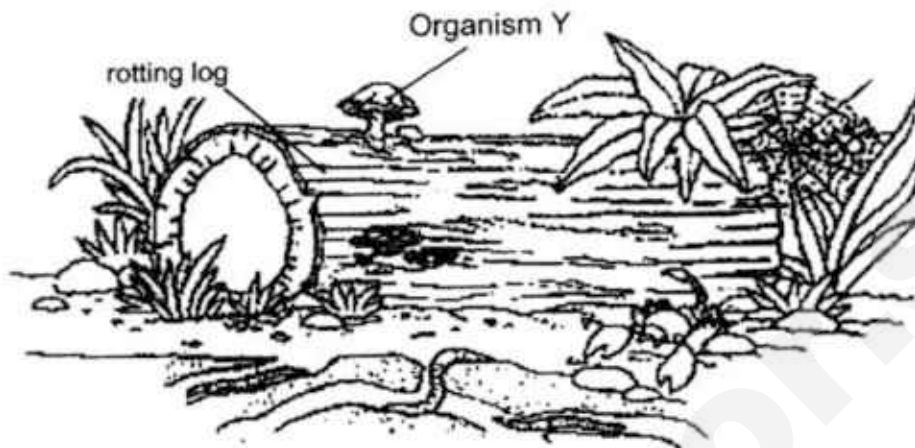
Plant F

- a) Which group will you put plant F in? [1]

Group _____

- b) If plant G belongs to group Z, how does it reproduce?
Give a reason for your answer. [2]

34. Primary three pupils were asked to observe organism Y growing on a rotting tree trunk as shown below.



Group 1 wrote the following two statements in their science logbook.

Statement 1: Organism Y can make its own food.

Statement 2: Organism Y reproduces by seeds.

Ms Quek, their science teacher commented that the two statements were wrong.

Rewrite the statements describing how organism Y obtain food and reproduce. [2]

Statement 1: _____

Statement 2: _____

35. The table below shows some properties of three types of materials.

Property	Material S	Material T	Material U
waterproof	Yes	Yes	No
allows light to pass through	Yes	No	Yes
able to float	Yes	Yes	No

a) Based on the table above, state 2 differences between materials S and U. [2]

Difference (1)	
Difference (2)	

b) The diagram below shows a pair of swimming goggles.

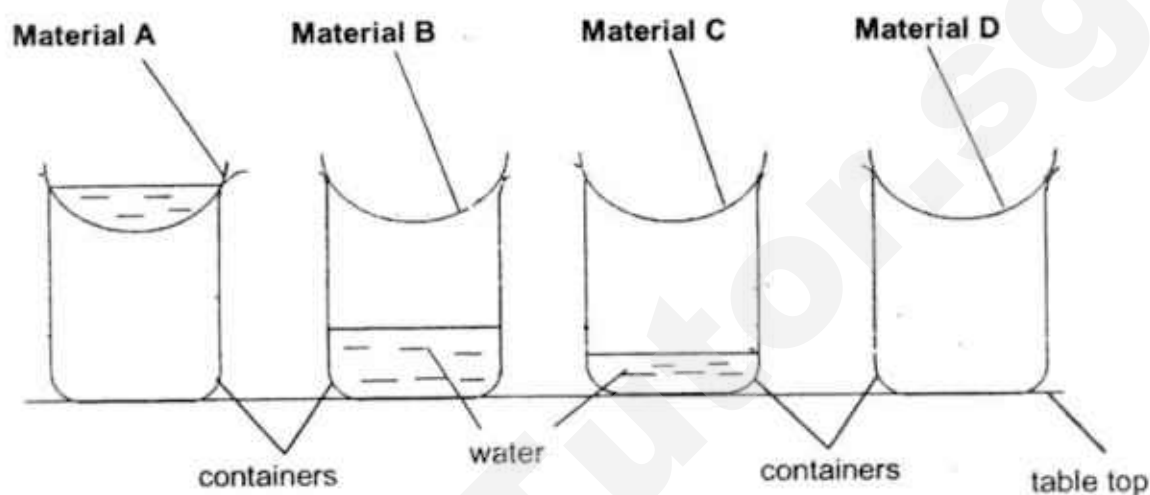


Which materials, S, T or U, is most suitable for making the lens of the swimming goggles shown above? [2]

Give a reason for your answer using the information from the table above.

36. Mary placed four different types of materials, A, B, C and D, over four containers as shown in the diagram below.

She then poured an equal amount of water onto each material. Water that flowed through the materials are collected in the containers.



	Amount of water poured (ml)	Amount of water on material (ml)	Amount of water collected in the container (ml)
A	50	50	0
B	50	0	40
C	50	0	20
D	50	0	0

- a) Which material, A, B, C or D is suitable for making raincoats? [1]

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

- c) Material D is more suitable than material C for making a bath towel. Give a reason for this. [1]

End of Paper

ANSWER KEY

YEAR : 2017
 LEVEL : PRIMARY 3
 SCHOOL : HENRY PARK PRIMARY SCHOOL
 SUBJECT : SCIENCE
 TERM : SA1

SECTION A

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

SECTION B

Q21. P: Living things

Q: Non-living things

Q22. a) and b)

Q23. Whale: C; Frog D; Cassowary: B; Housefly: A

Q24. b) and c)

Q25. S → D; T → C

Q26a) flower

b) fruit

c) roots

d) leaves

Q27. a) T b) T c) F

d) F

Q28a) Bag A

b) Bag C is enough to hold 16 iron balls.

SECTION C

Q29a) Organism

b) It has air and food.

c) Living things respond to changes.

Q30a) Animal A has wings but animal B does not have wings.

AND

Animal A has a pair of feelers but animal B does not.

b) It belongs to the amphibians group.

Q31a) Yes. The number of fishes increases as shown above as it reproduces.

b) Living things reproduce.

Q32a) Cannot fly

b) B

c) It has zero legs

Q33a) Group W

b) It reproduces by seeds. Plants which bear fruit reproduce by seeds.

Q34. Organism Y feeds on the rotting log for food.

Organism Y reproduces by spores.

Q35a) 1: S is waterproof but U is not waterproof.

2: S is able to float but U is not able to float.

b) S. Swimming goggles need to be waterproof and must allow light to pass through.

Q36a) A

b) It is waterproof.

c) D absorbs to most amount of water.

2
En 2

SmileTutor.sg



MARIS STELLA HIGH SCHOOL (PRIMARY)

SEMESTRAL ASSESSMENT 1

SCIENCE

8 MAY 2017

BOOKLET A

NAME: _____ ()

CLASS: Primary 3 ()

15 Questions

30 Marks

Total Time for Booklets A & B: 1 hour

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

FOLLOW ALL INSTRUCTIONS CAREFULLY.

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 oval (1, 2, 3 or 4) on the Optical Answer Sheet (OAS). Questions 1 to 15 carry 2 marks each.

(30 marks)

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

- (1) They grow bigger in size over time.
- (2) They give birth to their young alive.
- (3) They only need food and water to survive.
- (4) They move from place to place by themselves.

2 The picture below shows a man shouting in pain when his hand touched a hot stove.



The observation made above shows that living things _____.

- (1) will die
- (2) can reproduce
- (3) respond to changes around them
- (4) need air, food and water to survive

3 Which of the following statements are true for all birds?

- A They can fly.
- B They lay eggs.
- C They have feathers.
- D They suckle their young.

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

4 The pictures below show three organisms.



Organism A



Organism B

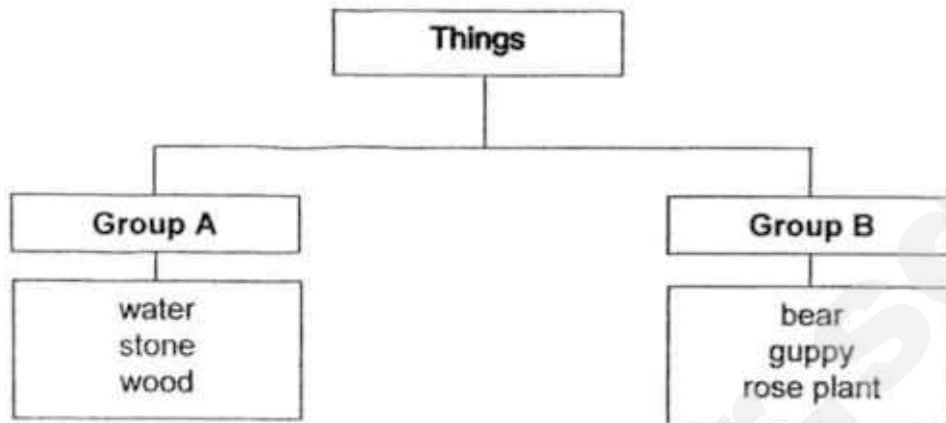


Organism C

Which of the following is true about the three organisms?

	Organism A	Organism B	Organism C
(1)	Makes its own food	Depends on others for food	Reproduces by seeds
(2)	Reproduces by spores	Reproduces by seeds	Makes its own food
(3)	Reproduces by seeds	Makes its own food	Reproduces by spores
(4)	Depends on others for food	Reproduces by spores	Makes its own food

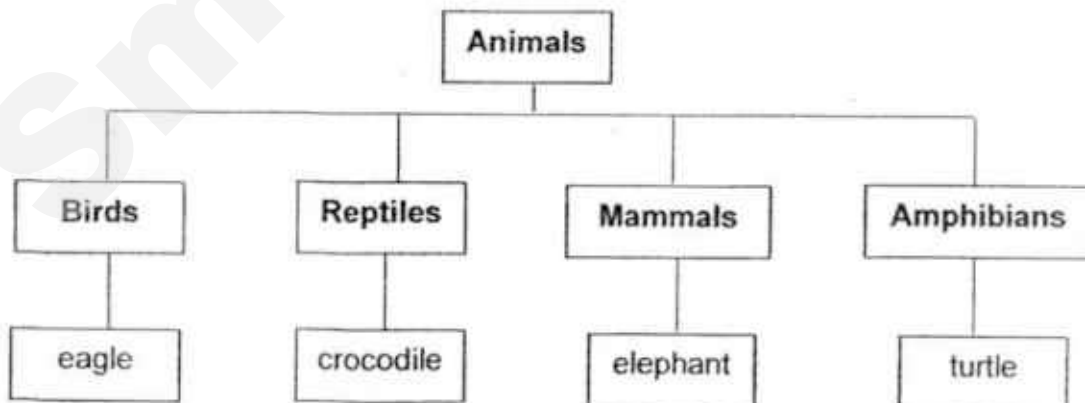
- 5 Study the classification chart below.



Which of the following can be placed correctly into groups A and B?

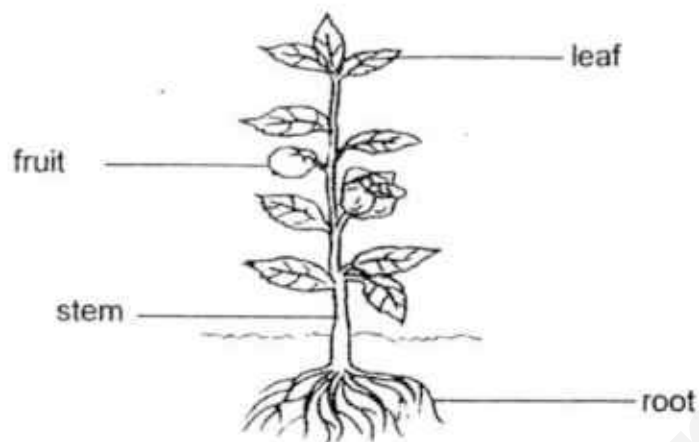
	Group A	Group B
(1)	dog	bag
(2)	yeast	caterpillar
(3)	doll	mould
(4)	wool	car

- 6 Which animal is wrongly placed in the classification chart below?



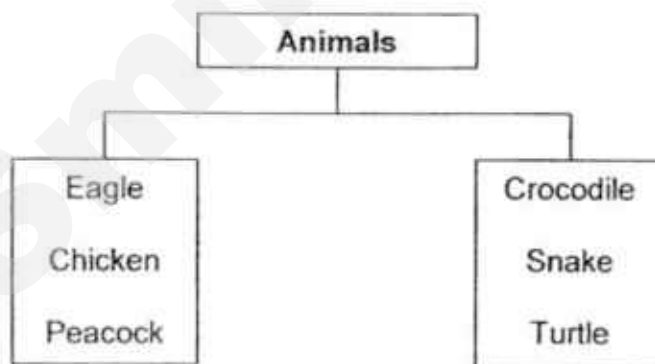
- (1) eagle
- (2) crocodile
- (3) elephant
- (4) turtle

- 7 Study the diagram of the plant below.



Which of the plant part is not found in all plants?

- (1) fruit
 - (2) leaf
 - (3) root
 - (4) stem
- 8 Study the classification chart below.



These animals are classified according to _____.

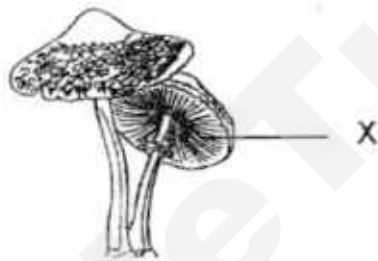
- (1) how they move
- (2) their number of legs
- (3) how they reproduce
- (4) their body covering

9 Which of the following statements are true about bacteria?

- A Bacteria are all harmful.
- B Bacteria need air to survive.
- C Bacteria cannot move by themselves.
- D Bacteria respond to changes around them.

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

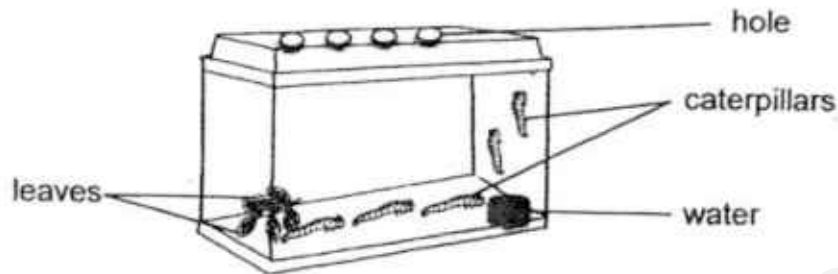
10 Study the diagram of a mushroom below.



What is the function of the part labelled X?

- (1) To make food for the mushroom
- (2) To contain spores for reproduction
- (3) To provide support for the mushroom
- (4) To protect the mushroom from its surrounding

- 11 Nathan placed 5 caterpillars in a container to conduct an experiment as shown below. He did not add or remove any caterpillars throughout the experiment.



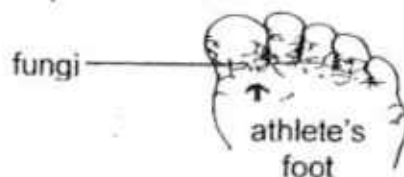
He recorded his observations in the table below.

Day	Number of caterpillars	Number of butterflies
1	5	0
15	5	0
30	0	5

Based only on the results, which of the characteristics of living things does this experiment show?

- (1) Living things can die.
- (2) Living things can grow.
- (3) Living things can move by themselves.
- (4) Living things respond to changes around them.

- 12 Mr Low has an infection known as athlete's foot. It happens when fungi grow on the feet as shown in the picture below.



The doctor advised him to keep his feet dry so that the fungi cannot grow.

Which of the following characteristic of fungi did the doctor use to advise Mr. Low?

- (1) Fungi needs air to grow.
- (2) Fungi feed on dead matter.
- (3) Fungi needs water to grow.
- (4) Fungi can respond to changes around them.

- 13 The table below shows two groups of organisms.

Group X	Group Y
Balsam Hibiscus Sunflower	Moss Bird's Nest Fern Stag Horn's Fern

Which of the following shows the correct headings for groups X and Y?

	Group X	Group Y
(1)	Need air	Do not need air
(2)	Non-flowering plants	Flowering plants
(3)	Reproduce from seeds	Reproduce from spores
(4)	Can make its own food	Cannot make its own food

- 14 Julian spotted Animal A and Animal B in the field as shown in the diagram below.



Animal A



Animal B

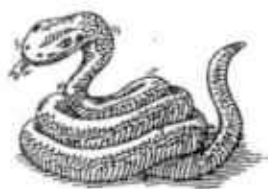
He concluded that Animal B is an insect but Animal A is not.

Which of the following characteristic(s) of the two organisms helped him to conclude that only Animal B is an insect?

- A Number of legs
- B Number of body parts
- C Needs air, food and water to survive

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

- 15 Eric had to classify the three animals shown.



snake

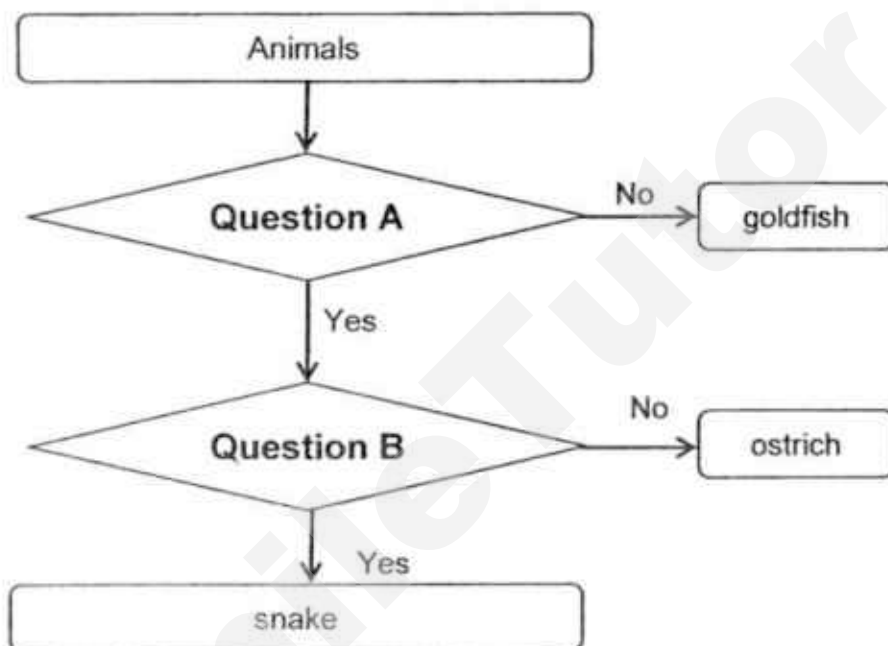


ostrich



goldfish

He classified them with the help of the flowchart below.



Which of the following is correct?

	Question A	Question B
(1)	Does it lay eggs?	Does it live on land?
(2)	Does it live on land?	Does it have scales?
(3)	Does it have scales?	Does it lay eggs?
(4)	Does it lay eggs?	Does it have scales?

End of Booklet A



MARIS STELLA HIGH SCHOOL (PRIMARY)

SEMESTRAL ASSESSMENT 1

SCIENCE

8 MAY 2017

BOOKLET B

NAME: _____ ()

CLASS: Primary 3 ()

6 Questions

20 Marks

Total Time for Booklets A & B: 1 hour

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 16 to 21, 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)**

16 Look at the pictures of two animals, A and B, below.



Animal A



Animal B

(a) Based on the pictures above, state one similarity between animals A and B. **[1]**

(b) Compare animals A and B in terms of where they live. **[1]**

(c) Which animal groups do animals A and B belong to? **[1]**

Animal	Animal Group
A	
B	

	3
--	---

- 17 Mark bought 10 guppies from the pet shop and kept them in a fish tank. He fed them daily and observed the number of guppies in the fish tank over 3 months. In the 3 months, he did not add or remove any live guppies from the fish tank. His observation is shown in the table below.

Month	Number of guppies
January	10
February	30
March	25

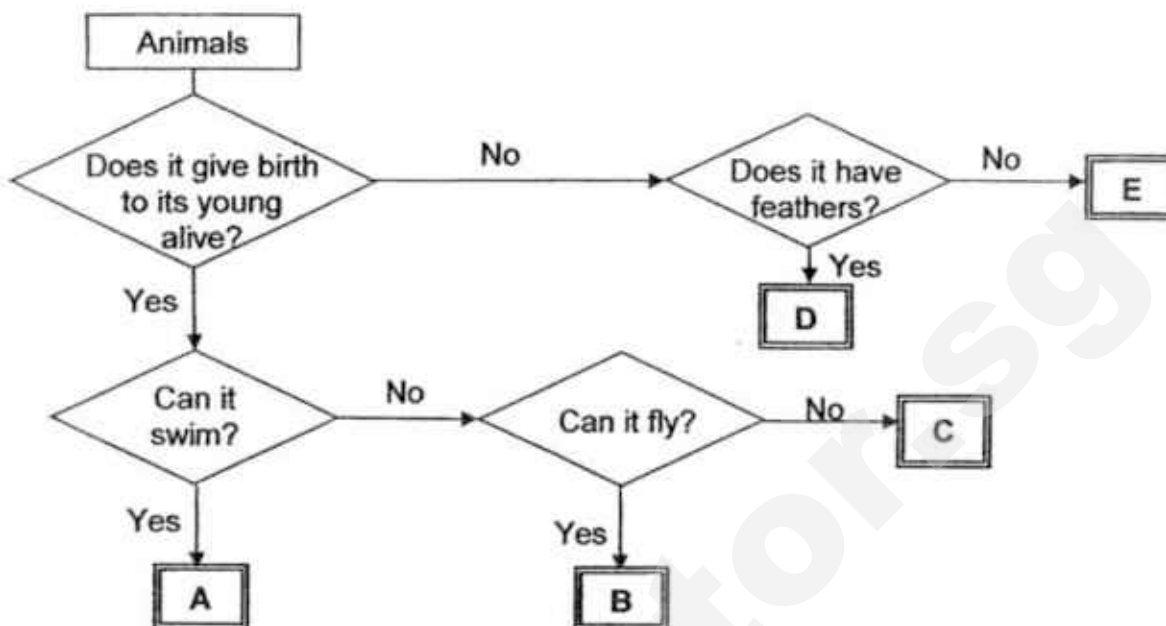
- (a) What happened to the number of guppies in the fish tank from January to February? [1]

- (b) State two characteristics of living things based on Mark's observation. [2]

(i)

(ii)

18 Study the flow chart below.

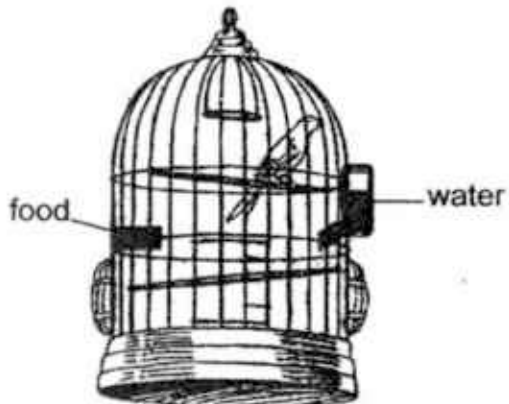


(a) Based on the flowchart above, state one difference between animals A and E. [1]

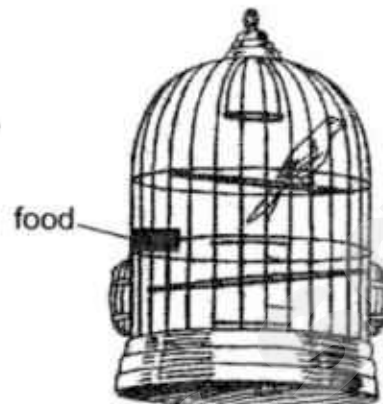
(b) Based on the flowchart above, state two similarities between animals B and C. [2]

(c) Based on the flowchart above, describe Animal D. [1]

19 Owen placed two birds, A and B, in two cages, as shown in the diagrams below.



Bird A



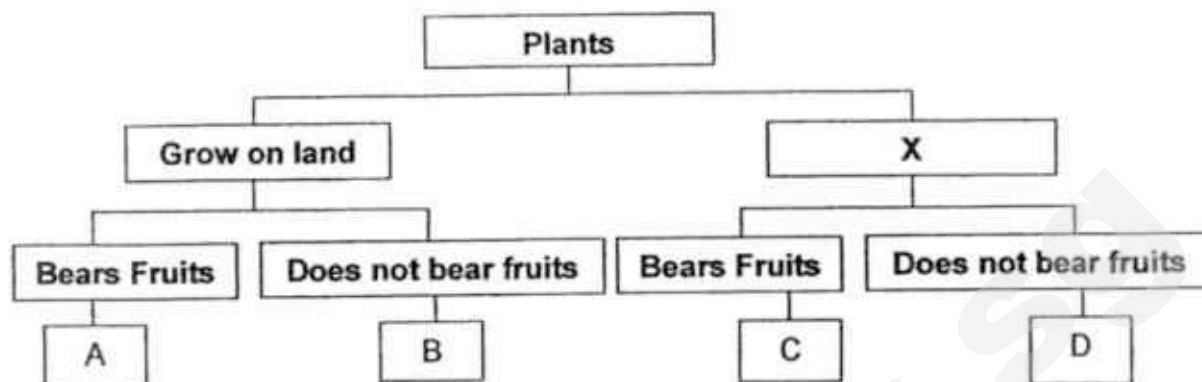
Bird B

(a) Which bird, A or B, will survive longer? [1]

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

(c) What characteristic of living things does this experiment show? [1]

20 Study the classification chart below.



(a) What could heading X be? [1]

(b) State one similarity between plants A and B. [1]

The picture below shows the water lily plant.

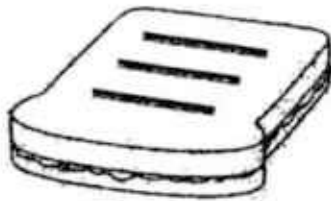


Water lily

(c) Which plant, A, B, C or D, could the water lily be? [1]

(d) Can the toadstool be any of the plants above? Give a reason for your answer. [1]

- 21 Caden had two cheese sandwiches, A and B. He toasted only sandwich A and left both sandwiches on the kitchen table for a week. After one week, he found mould growing on one of the sandwiches.



Sandwich A
(Toasted)



Sandwich B
(Not toasted)

- (a) Which sandwich, A or B, did he most likely find mould growing on? [1]

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

- (c) State the conditions needed for mould to grow. [1]

	3
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EXAM PAPER 2017

LEVEL : PRIMARY 3
SCHOOL : Maris Stella High School (Primary)
SUBJECT : SCIENCE
TERM : SA1

Booklet A

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

Booklet B

- Q16 (a) Both has four legs.
 (b) Animal A lives on land but Animal B lives on land and in water.
 (c) **A: Mammals B: Amphibians**
- Q17 (a) The number of guppies increased.
 (b)(i) Living things reproduce.
 (ii) Living things die.
- Q18 (a) Animal A gives birth to young alive but E cannot.
 (b) Both B and C cannot swim.
 (c) Animal D does not give birth to young alive and has feathers.
- Q19 (a) Bird A.
 (b) Birds need water to live. Bird A has water but Bird B does not have water.
 (c) Living things need water to survive.
- Q20 (a) Grow in water.
 (b) Both A and B grows on land.
 (c) Plant C.
 (d) No. Because toadstool is not a plant, it is a fungi.
- Q21 (a) Sandwich B.
 (b) Sandwich B would have mould growing on it because it has warmth, water and oxygen so mould can grow on Sandwich B.
 (c) Warmth, water and oxygen.

END

SmileTutor.sg

METHODIST GIRLS' SCHOOL

Founded in 1887



MID -YEAR EXAMINATION 2017
PRIMARY 3
SCIENCE

BOOKLET A

Total Time for Booklets A and B: 1 hour 15 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 : 9 May 2017

This booklet consists of 13 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]

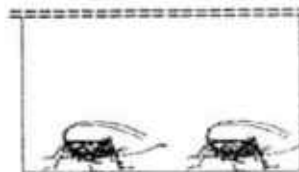
1. Which one of the following observations is matched correctly to the characteristic of living things?

	Observation	Characteristic
(1)	A frog lays eggs.	Living things can grow.
(2)	A caterpillar changes into a butterfly.	Living things need air, food and water.
(3)	A boy moved his foot away from a sharp object he stepped on.	Living things can reproduce.
(4)	A monkey swings from trees to trees.	Living things can move by themselves.

2. Bee Li wanted to find out if animals can survive without food. She kept two similar animals in two different tanks as shown below.



Container A



Container B

Which of the following variables should be kept the same for the both tanks in order for the test to be fair?

- A Amount of air
- B Size of the animals
- C Amount of food given to the animals
- D Amount of water given to the animals

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

3. Study the characteristics of A, B, C and D as shown below.

	Respond to changes	Move from place to place	Reproduce	Make its own food
A	√			
B	√	√	√	
C	√	√		
D	√		√	√

Which one of the following statements is **true**?

- (1) A is a bacteria.
 - (2) B and D are living things
 - (3) D depends on other living things for food
 - (4) B and C are alive as they can move from place to place
4. The table below provides information about 4 different living things, Q, R, S and T.

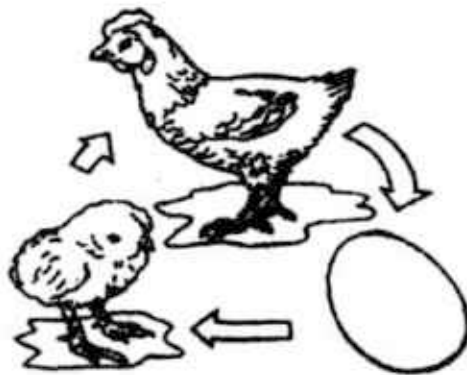
Living things	Does it make food?	Does it reproduce by spores?
Q	Yes	Yes
R	No	Yes
S	No	No
T	Yes	No

Which one of the living things, Q, R, S or T best represents the organism shown below?



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

5. Study the diagram below.



The diagram above shows that living things can _____.

- A die
 - B grow
 - C breathe
 - D reproduce
- (1) B only
(2) B and D
(3) A, B and C only
(4) A, B, C and D
6. Alan was moving house. He packed some belongings into boxes and sealed them two weeks before he moved. While unpacking, he discovered that a pot of plants that was kept in one of the boxes had died. Which of the following explains what had happened?
- A The plant did not move.
 - B It was too warm in the box.
 - C The plant did not receive water.
 - D The plant did not have enough air.
- (1) A and D only
(2) B and C only
(3) C and D only
(4) B, C and D only

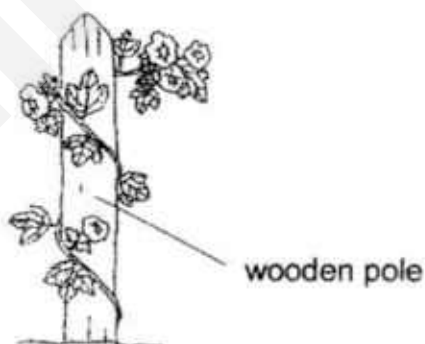
7. Sally carried out an experiment to find out if plants need water to grow. She used two similar pots, X and Y, for her experiment. The variables for her experiment are shown in the table below.

Pot	Amount of water (ml)	Number of hours in the sun daily
X	100	5
Y	?	?

Which one of the following options is correct if Sally was to conduct a fair experiment?

	Pot Y	
	Amount of water (ml)	Number of hours in the sun daily
	A	B
(1)	100	5
(2)	100	3
(3)	0	5
(4)	0	3

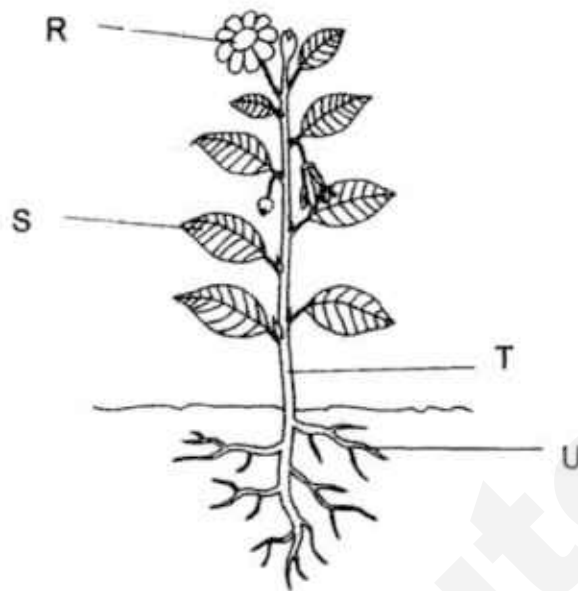
8. The plant below uses the wooden pole for support to grow.



Which one of the following statements best explains the reason for doing so?

- (1) Fruits would have space to grow.
- (2) The flowers would attract more insects.
- (3) The roots would be able to absorb more water.
- (4) The leaves would be able to get enough sunlight.

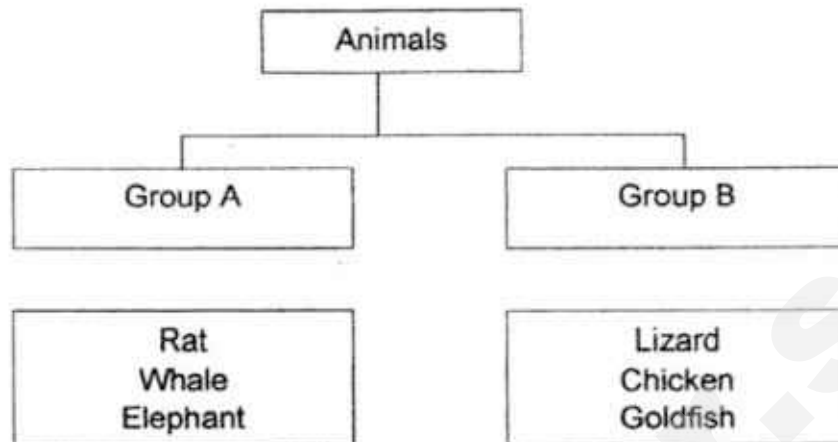
9. The different parts of a plant are labelled R, S, T and U as shown below.



Which one of the following options is correct?

	R	S	T	U
(1)	Flower	Leaf	Stem	Root
(2)	Leaf	Stem	Flower	Root
(3)	Flower	Leaf	Root	Stem
(4)	Root	Flower	Stem	Leaf

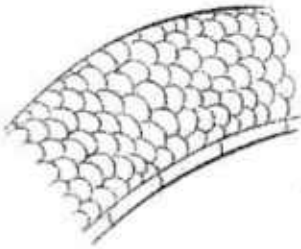
10. The classification diagram below shows two groups of animals.



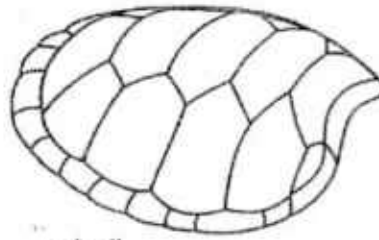
Which one of the following options correctly describes the animals in each group?

	Group A	Group B
(1)	Animals that live on land	Animals that live in water
(2)	Animal eaters	Plant eaters
(3)	Animals that give birth to their young	Animals that lay eggs
(4)	Animals covered with hair	Animals covered with scales

11. The outer covering of some animals are shown below.



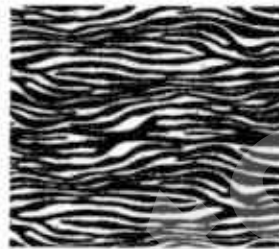
scales



shell



feathers

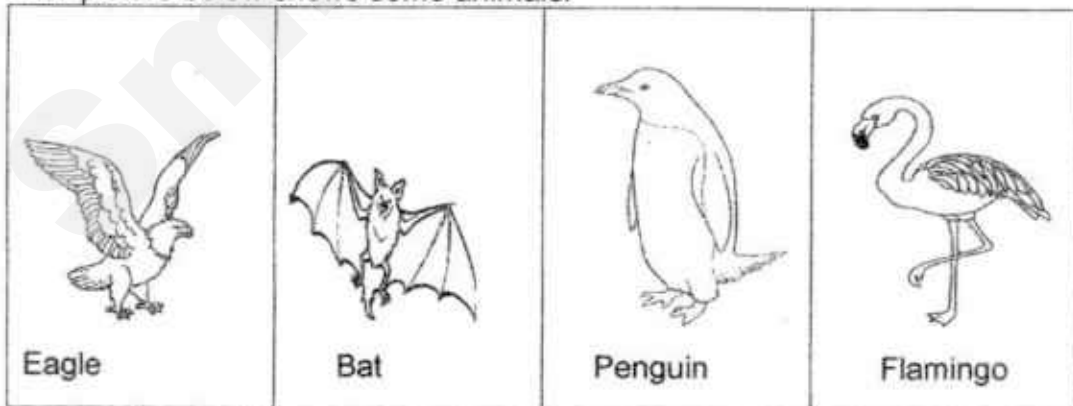


hair

Which one of the following statements describes the functions of the outer coverings of the animals?

- (1) They help the animals to fly.
- (2) They help to keep the animals warm.
- (3) They help the animals hide from their enemies.
- (4) They help to protect the soft bodies of the animals.

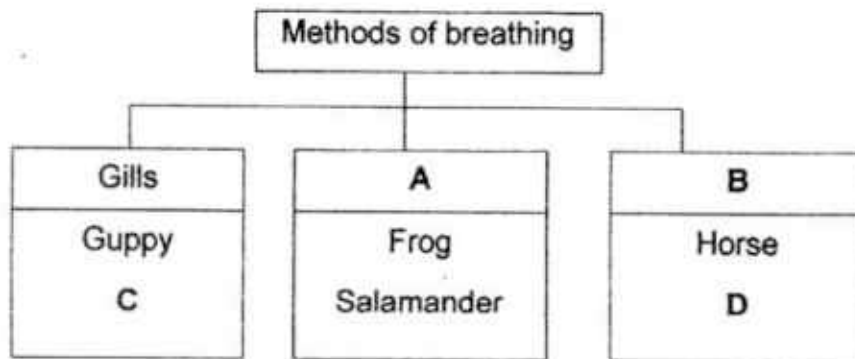
12. The picture below shows some animals.



Which one of the animals **does not** belong to the same group as the rest?

- (1) Bat
- (2) Eagle
- (3) Penguin
- (4) Flamingo

13. Study the classification diagram below.



Which one of the following options is correct?

	A	B	C	D
(1)	Lungs	Moist skin	Goldfish	Dolphin
(2)	Lungs	Moist skin	Dolphin	Whale
(3)	Moist skin	Lungs	Dolphin	Goldfish
(4)	Moist skin	Lungs	Goldfish	Whale

14. Which of the following statements about fungi are incorrect?

- A Fungi need sunlight to make food.
- B A mushroom has a cap, gills and stalk.
- C Mould gets its food from where it grows.
- D Fungi cannot respond to changes in their surroundings.

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

15. Li Yan and Meena classified these organisms into two groups as shown below.

Li Yan's classification:

Group X	Group Y
Bird's nest fern Mushroom	Orchid Ixora

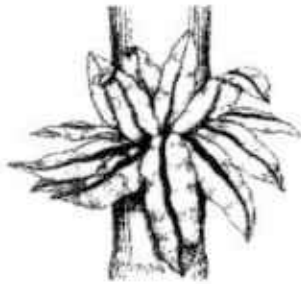
Meena's classification:

Group R	Group S
Mushroom	Orchid Ixora Bird's nest fern

Which one of the following options show how they have grouped the organisms?

	Li Yan		Meena	
	Group X	Group Y	Group R	Group S
(1)	Can make their own food	Cannot make their own food	Non-flowering Plants	Flowering Plants
(2)	Non-flowering Plants	Flowering Plants	Plants	Fungi
(3)	Reproduces by spores	Reproduces by seeds	Cannot make their own food	Can make their own food
(4)	Fungi	Plants	Non-flowering Plants	Flowering Plants

16. Study the two organisms as shown below.



Bird's nest fern



Shiitake Mushroom

Which of the following statements about both the organisms is/are incorrect?

- A They have gills.
- B They reproduce from spores.
- C They cannot make their own food.

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

17. May got wet in the rain while returning home from work. She left her wet leather handbag in the cupboard quickly and forgot about it. A month later, She decided to use it and took it out from the cupboard. She took out the bag and saw some powdery patches growing on her bag.



powdery patches

What could the powdery patches be?

- (1) Dirt
- (2) Fern
- (3) Mould
- (4) Bacteria

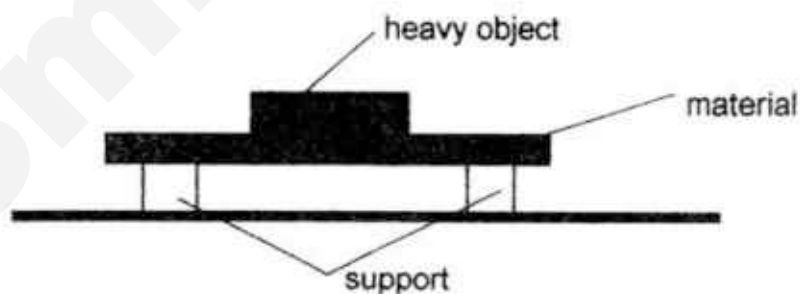
18. Study the table below.

Properties	Object A	Object B	Object C
Breaks into pieces when dropped	Yes	No	Yes
Can be seen through	No	No	Yes
Is waterproof	Yes	No	Yes

Which one of the following can these three objects be?

	Object A	Object B	Object C
(1)	Ceramic tile	Metal ruler	Clear glass bottle
(2)	Ceramic tile	Paper bag	Clear glass bottle
(3)	Clear glass bottle	Paper bag	Ceramic tile
(4)	Clear glass bottle	Plastic bottle	Paper bag

19. Leo carries out an experiment to test the flexibility of three types of materials shown in the diagram below. A heavy object is used to bend the materials. The more the material bends, the more flexible it is.

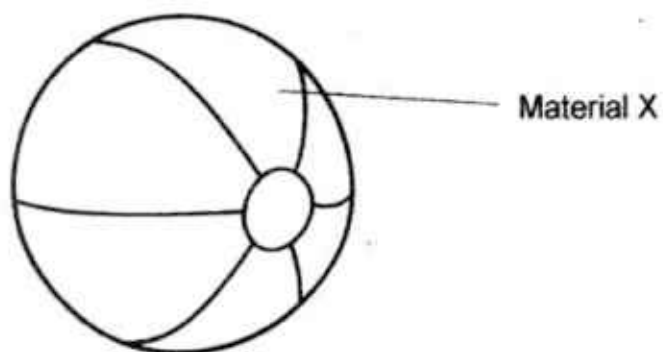


Which of the following should be kept the same to ensure a fair experiment?

- A Types of materials
- B Mass of heavy object
- C Sizes of materials

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

20. The picture shows a beach ball made of material X.



Which of the following properties of material X are taken into consideration to make the beach ball?

- A: Flexible
- B: Waterproof
- C: Can float on water
- D: Can allow light to pass through

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

End of Booklet A

METHODIST GIRLS' SCHOOL

Founded in 1887



MID-YEAR EXAMINATION 2017 PRIMARY 3 SCIENCE BOOKLET B

Total Time for Booklets A and B: 1 hour 15 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 : 9 May 2017

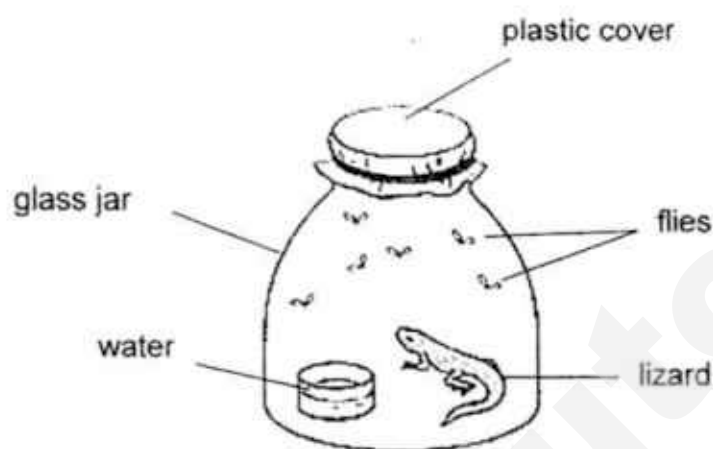
Booklet A	40
Booklet B	20
Total	60
Parent's Signature	

This booklet consists of 2 printed pages including this 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]

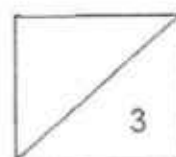
21. Study the set-up below.



(a) What will likely happen to the lizard after a week? [1]

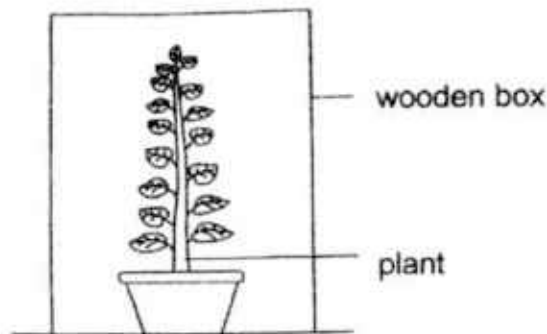
(b) Explain your answer in (a) clearly. [1]

(c) What change should be made to the set-up so that the lizard is able to survive longer without escaping from the glass jar? [1]

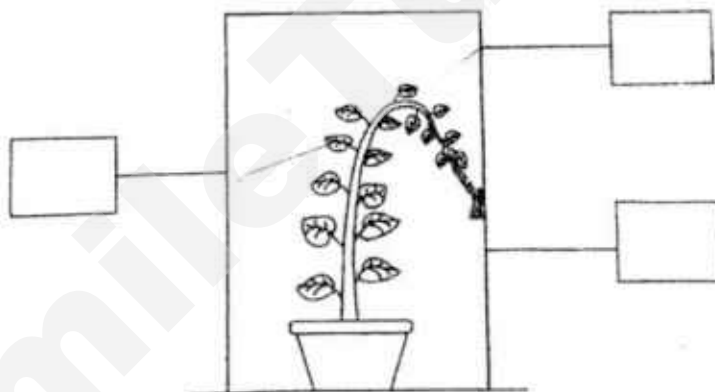


(Go on to the next page)

22. Leena wanted to find out how light affected the growth of a plant. She took a plant, watered it and then covered the plant with a wooden box as shown below.

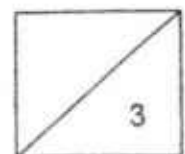


- (a) Leena made a hole in the wooden box. After a few days, she observed that the plant grew towards one side. In the diagram below, put a tick (✓) in the box where the hole has been cut. [1]



- (b) Besides movement and growth, what does this experiment show about the characteristic of a living thing? [1]

- (c) Besides light, name two other conditions that this plant needs in order to stay alive. [1]

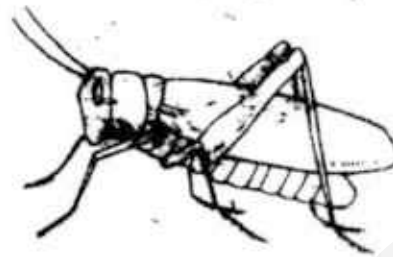


(Go on to the next page)

23. The two animals below are found in the garden.



Lizard



Grasshopper

(a) How do these two animals reproduce? [1]

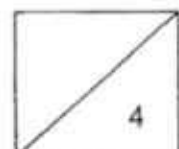
(b) Do they belong to the same animal group? Give a reason for your answer. [1]

24. The classification table below shows how some animals, R, S, T and U are grouped.

Animals			
Feed young with milk		Do not feed young with milk	
Can swim	Cannot swim	Can swim	Cannot swim
R	S	T	U

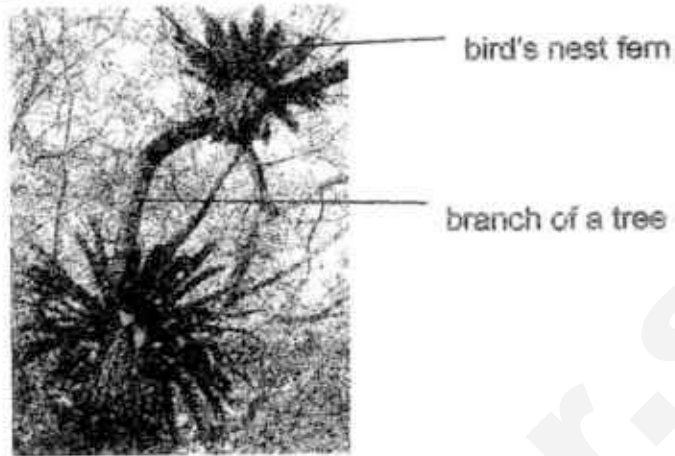
(a) From the table, in which group of animals would animals R and S belong to? [1]

(b) List one use of the body covering of the animals, R, S, T and U. [1]



(Go on to the next page)

25. While playing in the school field, Joy saw many bird's nest ferns growing on the tree branches as shown in the diagram below.



- (a) How did the bird's nest fern get onto the tree branch?

[1]

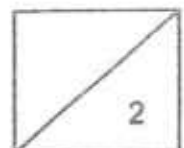
Joy came across Plant X as shown below.



Rose plant

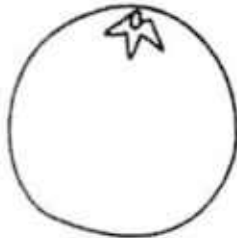
- (b) Does Plant X reproduce in the same way as the Bird's nest fern?
Explain your answer.

[1]



(Go on to the next page)

26. Devi wanted to find out how the amount of water affects the rate at which mould grew on an orange. She carried out an experiment using four oranges. She sprinkled them with different amounts of water. She then left the oranges on the table as shown below.



Orange A
(No water)



Orange B
(2 drops of water)



Orange C
(5 drops of water)

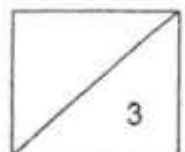


Orange D
(10 drops of water)

- (a) Which orange, A, B, C or D would have the most amount of mould growing on it after a week? Explain your answer. [1]

- (b) How could Devi be sure of her results? [1]

- (c) Where did the mould get its food from? [1]



(Go on to the next page)

27. A group of students carried out an experiment on 3 different materials, X, Y and Z. The results were recorded in the table shown below.

Properties	Material X	Material Y	Material Z
Is it flexible?	No	No	Yes
Is it waterproof?	Yes	Yes	No
Does it float on water?	No	No	No
Does it break easily?	Yes	No	No

- (a) Based on the results given, which material would you use to make a t-shirt?
Give a reason why this material is suitable. [1]

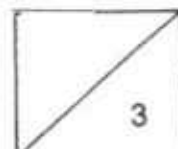
- (b) Which material is not suitable to make a toy for a one- year-old child?
Explain your answer. [1]

- (c) This picture below shows a water hose.



water hose

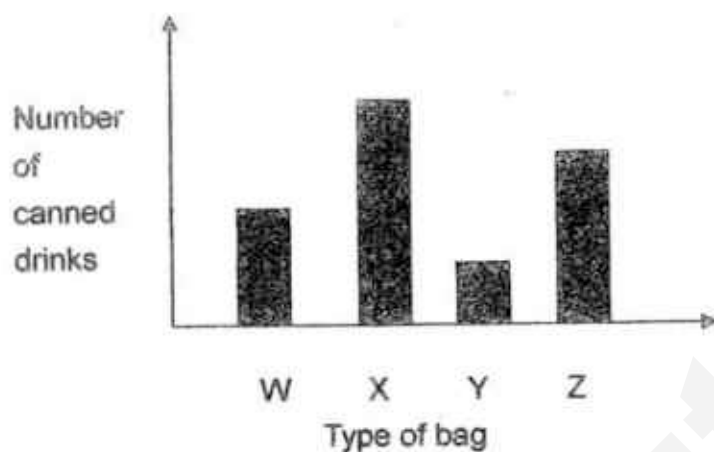
- Is Material Y suitable to make the water hose?
Give a reason for your answer. [1]



(Go on to the next page)

28. Sheila has four bags, W, X, Y and Z. She wanted to find out which bag is the strongest. She filled the bags with canned drinks, one at a time.

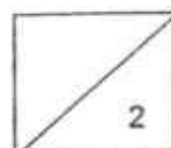
The bar graph below shows the greatest number of canned drinks that each bag could hold just before it broke.



- (a) How would Sheila know which type of bag is the strongest from the experiment? [1]

- (b) What must be kept different for the bags used in this experiment? [1]

End of Booklet B



EXAM PAPER 2017

LEVEL : PRIMARY 3
 SCHOOL : MGS
 SUBJECT : SCIENCE
 TERM : SA1

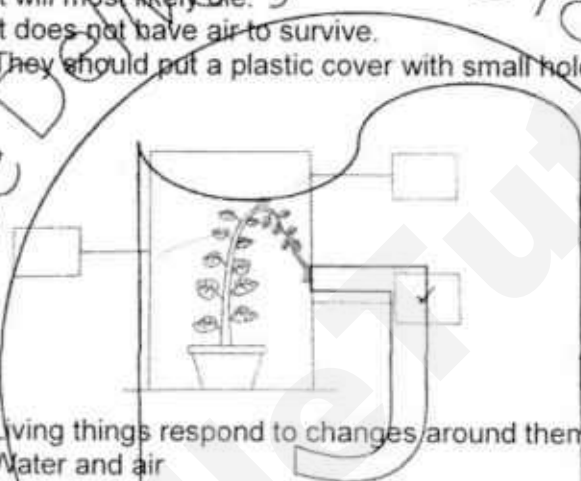
Booklet A

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

Booklet B

- Q21 (a) It will most likely die.
 (b) It does not have air to survive.
 (c) They should put a plastic cover with small holes so the lizard cannot escape.

Q22 (a)



- (b) Living things respond to changes around them.
 (c) Water and air
- Q23 (a) These two animals reproduce by laying eggs.
 (b) No. Grasshopper is an insect but a lizard is a reptile.
- Q24 (a) Mammals
 (b) To protect them from injuries.
- Q25 (a) The spores got blown onto the tree branches by the wind.
 (b) No. Plant X reproduce by seeds while Bird's nest fern reproduces by spores.
- Q26 (a) Orange D. The most amount of water was sprinkled on it.
 (b) She should repeat the experiment.
 (c) From the orange
- Q27 (a) Material Z. A t-shirt is flexible to fit the person who is wearing it.
 (b) Material X. Material X is hard and it breaks easily so it won't be dangerous for a small child.
 (c) No. Material Y is not flexible so it is not easy to use.
- Q28 (a) The bag that would hold the most number of canned drinks without tearing.
 (b) The material should be kept different.

END

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NAN HUA PRIMARY SCHOOL
SEMESTRAL ASSESSMENT 1 – 2017
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 : 8 May 2017

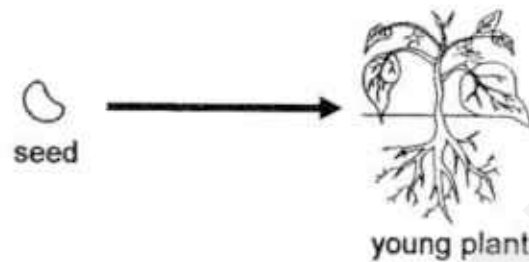
Parent's signature: _____

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. Which one of the following shows that living things need air, food and water to survive?

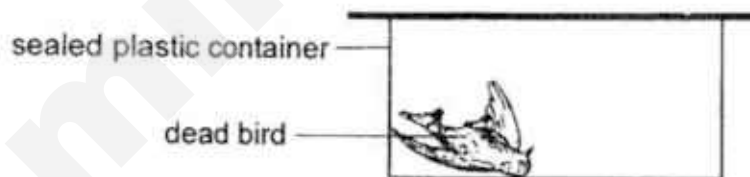
(1)



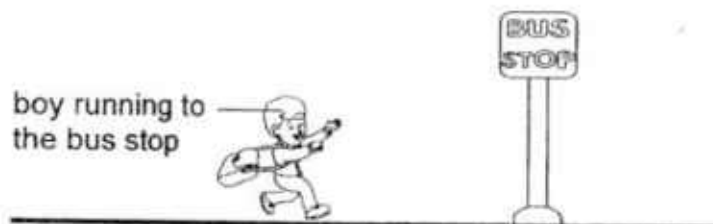
(2)



(3)



(4)



2. Lion is an animal-eater. The picture below shows a lion chasing a deer.









What characteristic(s) of living things does the above action show?

- A Living things can grow.
- B Living things can move.
- C Living things can reproduce.
- D Living things respond to changes.

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

3. Study the classification table below.

Group X	Group Y	Group Z
 Fish	 Book	 Plant
 Dog	 Computer	 Toadstool

Which one of the following statements is correct?

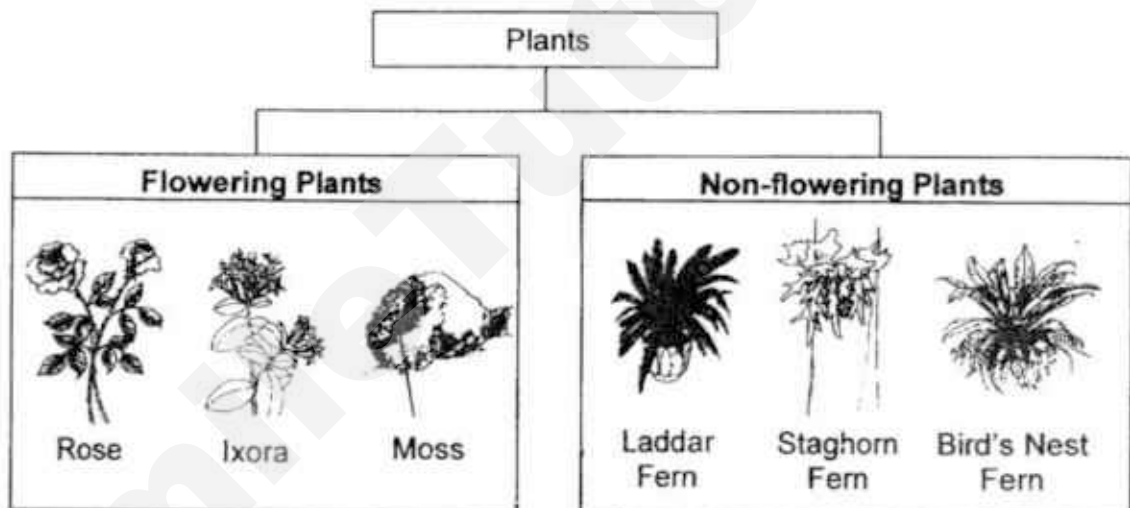
- (1) The things in Group Y and Group Z cannot grow.
- (2) The things in Group X and Group Z need air, food and water.
- (3) The things in Group X and Group Y can move by themselves.
- (4) The things in Group Y and Group Z respond slowly to changes.

4. Wilson observed an animal at the zoo and took down some notes about the animal as follows.

It has four legs.
It reproduces by laying eggs.
It has scales as its outer covering.

The animal above belongs to the _____ group.

- (1) Fish
 - (2) Reptile
 - (3) Mammal
 - (4) Amphibian
5. Study the classification chart below carefully.



Which of the plant(s) above has been classified **wrongly**?

- (1) Moss
- (2) Ixora
- (3) Laddar Fern
- (4) Staghorn Fern

6. The pictures below show the bread mould and grass.

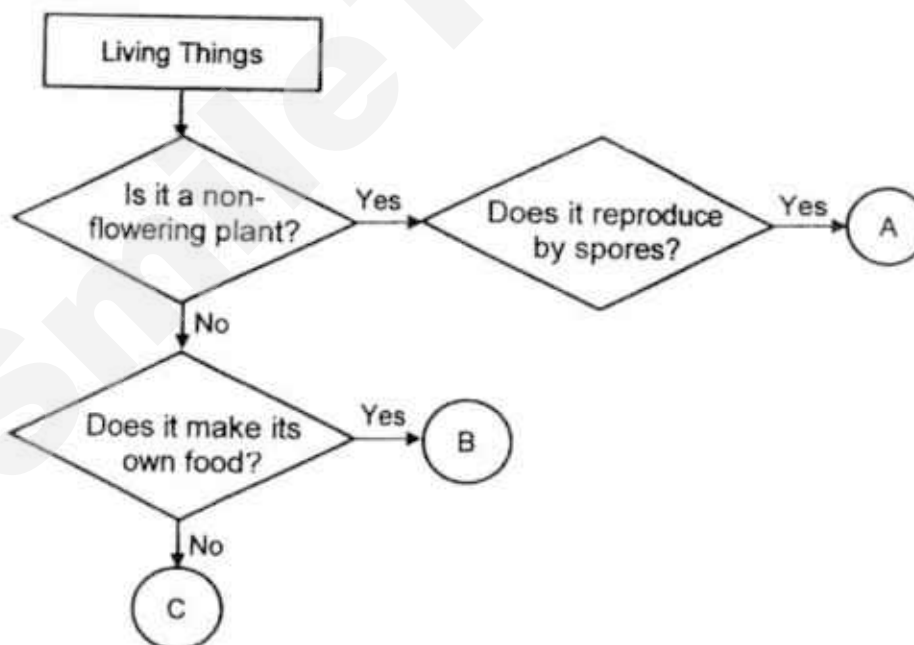


How are the bread mould and grass similar?

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

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

7. The flow chart below shows the characteristics of living things A, B and C.



What could A, B and C be?

	A	B	C
(1)	Sunflower	Mushroom	Fern
(2)	Fern	Mushroom	Horse
(3)	Mushroom	Sunflower	Fern
(4)	Fern	Sunflower	Horse

8. Which one of the following objects is made of a material that is flexible and absorbs water?

(1)



Rubber ball

(2)



Wooden ruler

(3)







Cotton socks

(4)



Plastic chopsticks

9. Study the table below.

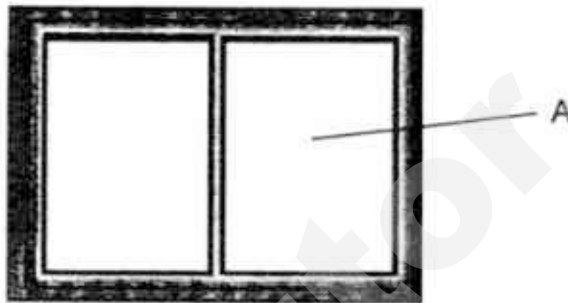
Group P		Group Q	
			
Glass cup	Ceramic pot	Plastic spoon	Metal needle

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

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

10. Study the table below.

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



Which one of the materials is most suitable for making part A of the window to prevent the rain from entering the house?

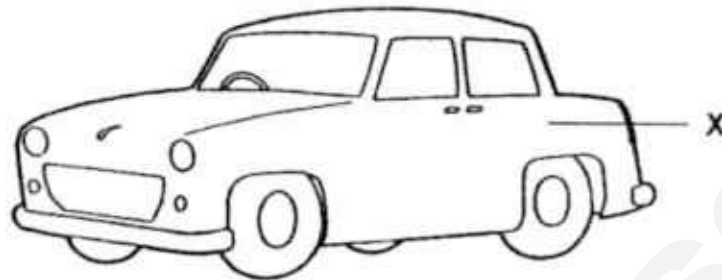
- (1) Material W
- (2) Material X
- (3) Material Y
- (4) Material Z

11. Spectacle lens are mostly made of clear plastic because plastic _____

- A is light
- B does not break easily
- C allows most light to pass through

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

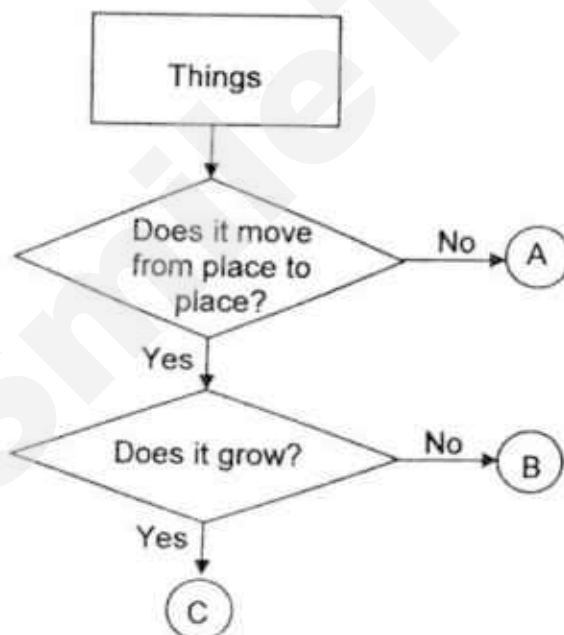
12. Study the picture of the car below.



Which material is best used for making part X of the car?

- (1) Metal
- (2) Glass
- (3) Rubber
- (4) Ceramic

13. Study the flow chart below.



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

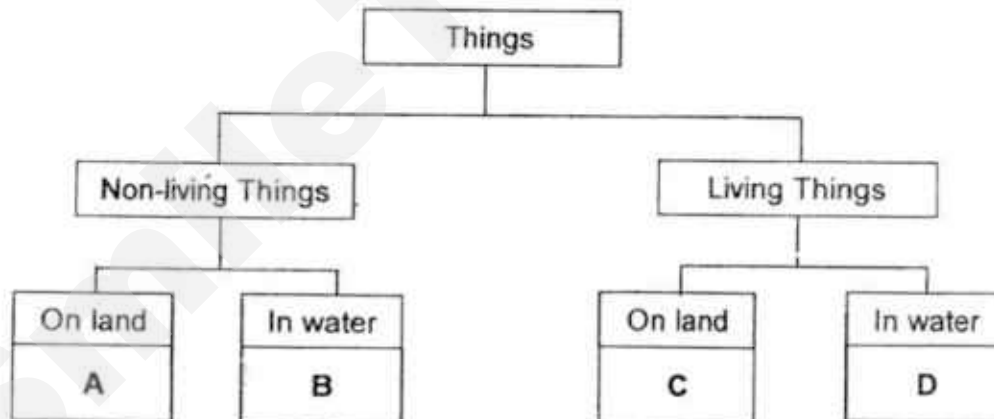
	A	B	C
(1)	tree	train	cow
(2)	building	tree	monkey
(3)	cow	building	monkey
(4)	train	cow	building

14. Kelly put three things, W, X and Y, into three containers. She put 30 g of food and some water into each container. She recorded the mass of the food at the end of 2 days in the table below.

Things	Mass of food at the start of the experiment (g)	Mass of food at the end of the experiment (g)
W	30	10
X	30	30
Y	30	30

Based on the results above, which one of the following statements is most likely true?

- (1) W is a living thing.
 - (2) W, X and Y are living things.
 - (3) W and X are non-living things.
 - (4) W, X and Y are non-living things.
15. Study the classification table below.



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

	A	B	C	D
(1)	bicycle	whale	tiger	ship
(2)	tiger	ship	bicycle	whale
(3)	whale	bicycle	ship	tiger
(4)	bicycle	ship	tiger	whale







16. The table below shows characteristics of four animals, W, X, Y and Z. A tick (✓) shows that the animal has that characteristic.

Characteristic	W	X	Y	Z
Has 6 legs.		✓		
Feed their young with milk.	✓			
Reproduce by laying eggs.		✓	✓	✓
Has scales as an outer covering.			✓	

Which animal is most likely a mammal?

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

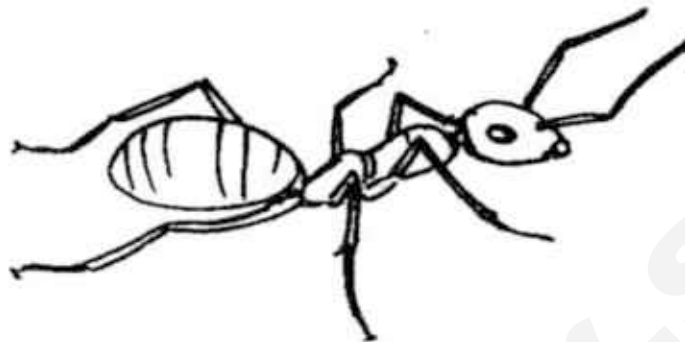
17. Study the table below carefully.

Group G	Group H
 Mushroom  Bracket fungus  Bread mould	 Bird's Nest Fern  Hibiscus  Coconut Tree

Which of the following are suitable headings for Group G and Group H?

	G	H
(1)	Reproduce by spores	Reproduce by seeds
(2)	Non-flowering plants	Flowering plants
(3)	Micro-organisms	Not micro-organisms
(4)	Fungi	Plants

18. Limin, Nathan and Oscar observed the animal below.



After their observations, they made the following statements.

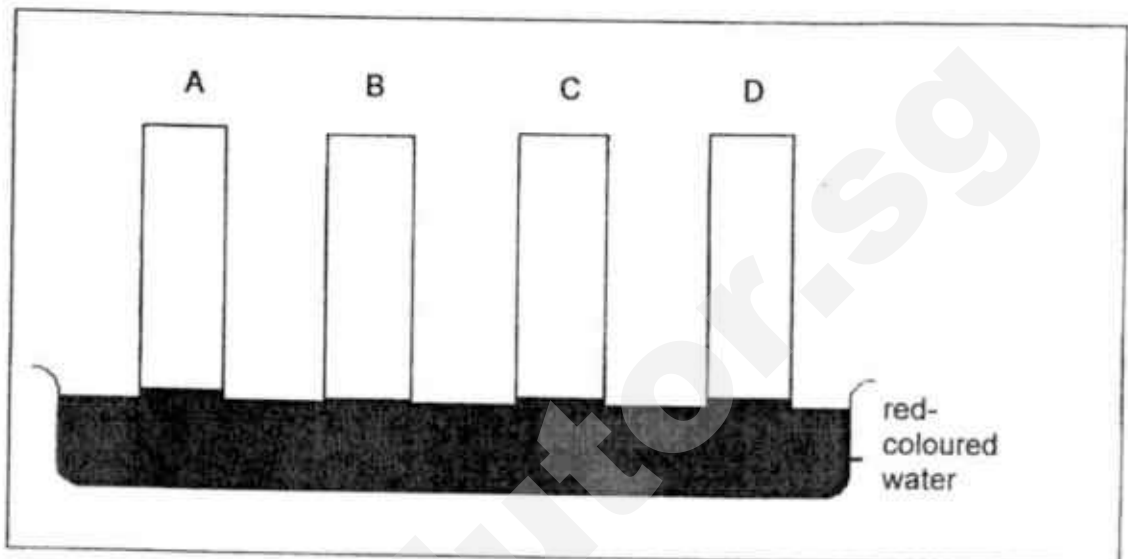
- Limin : The animal is not an insect because it has more than six legs.
Nathan : The animal is an insect because it has three body parts.
Oscar : The animal is a micro-organism because it is very small.

Whose statement is correct?

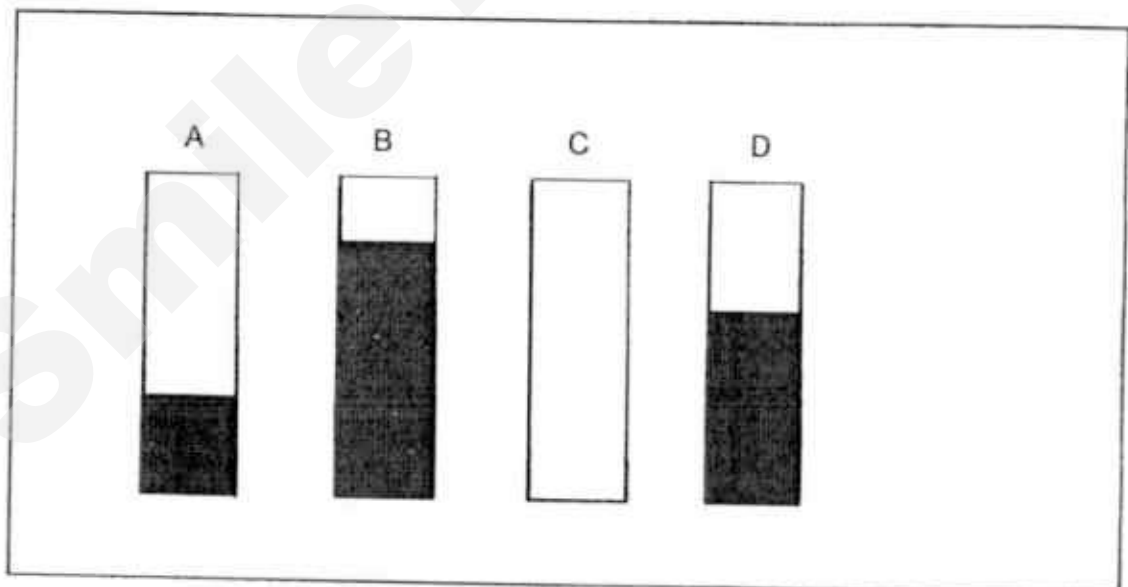
- (1) Limin only
- (2) Nathan only
- (3) Limin and Oscar only
- (4) Nathan and Oscar only

19. David sets up an experiment to find out which material could absorb the most amount of water.

Four materials, A, B, C and D, were dipped into a basin of red-coloured water as shown below.



After half an hour, David removed the strips from the basin of red-coloured water and the results were shown below.



Based on his results, which one of the materials is most suitable for making a raincoat to prevent people from getting wet?

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

20. The handle, lid and base of the pot in the diagram below are made of three different materials.



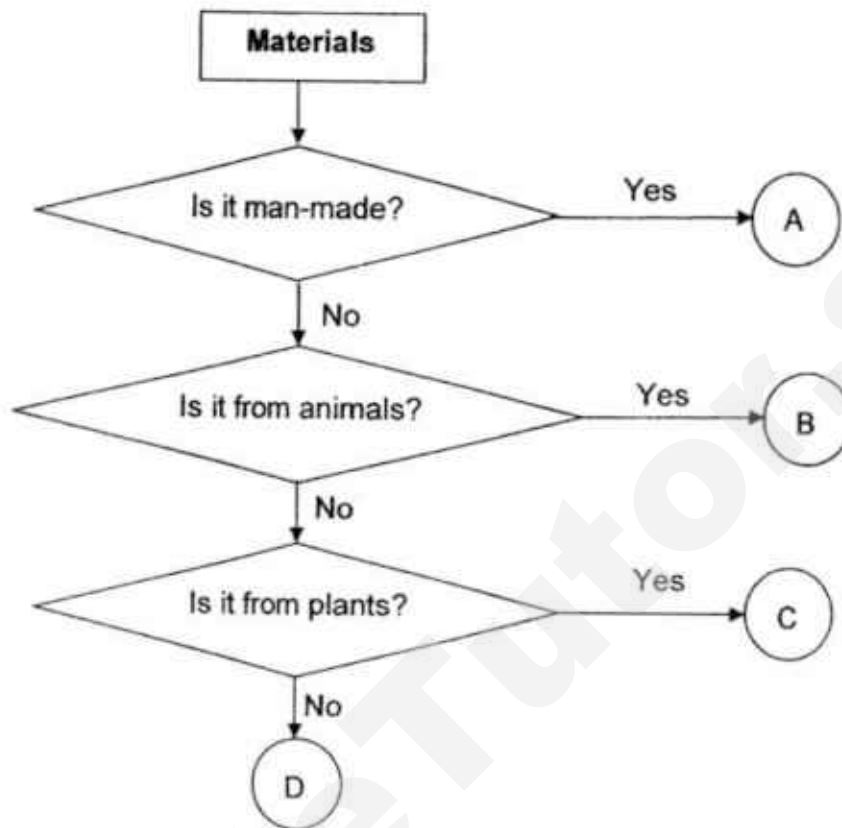
The table below shows the characteristics of materials P, Q, R and S. A tick (✓) shows the characteristic that the material has.

Characteristics	P	Q	R	S
Strong		✓		✓
Flexible	✓		✓	✓
Waterproof	✓	✓		✓

Which one of the materials is the most suitable for making the handle of the pot?

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

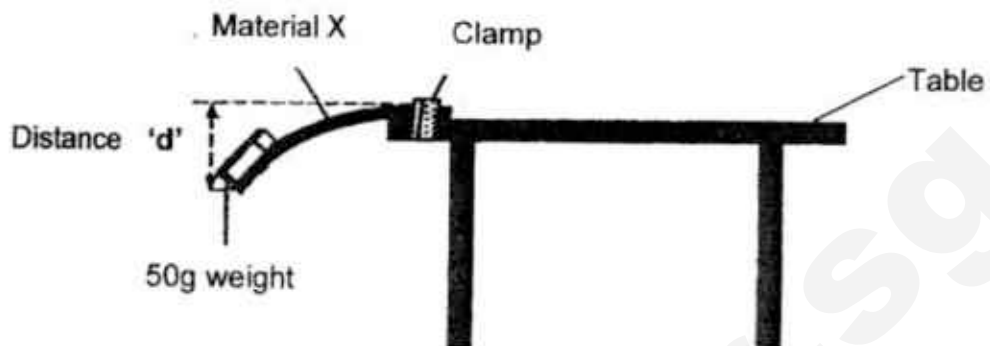
21. Study the flow chart below.



Which one of the letters best represents iron?

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

22. Hannah conducted an investigation as shown in the diagram below.

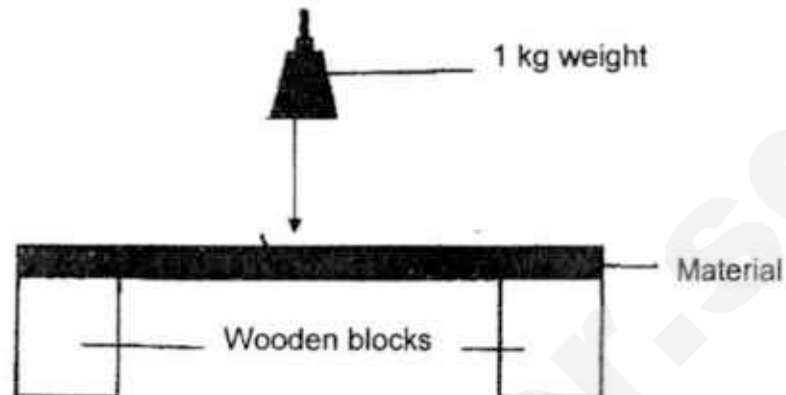


She clamped a strip of material X to the edge of the table and taped a 50 g weight to the end of the strip. As a result, material X bent as shown above. She measured the distance 'd', which was how far the material bent. Using the same 50 g weight, she repeated her investigation with materials Y and Z.

What property of materials X, Y and Z was she trying to test?

- (1) Strength
- (2) Flexibility
- (3) Transparency
- (4) Ability to sink in water

23. John wanted to test the strength of four materials, A, B, C and D, of the same thickness. He placed a 1 kg weight onto each of them and kept increasing the weight by 1 kg each time until each material breaks.



He recorded the number of 1 kg weight placed on each material before it broke in the table below.

Material	Number of 1 kg weight
A	31
B	18
C	20
D	26

From the results above, which material is the strongest?

- (1) A
 - (2) B
 - (3) C
 - (4) D
24. Samuel put the following objects into a basin of water to find out if each of them will float or sink.

- A A nail
- B A marble
- C A styrofoam cup
- D A ping pong ball

Which one of the following is the likely results?

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



NAN HUA PRIMARY SCHOOL
SEMESTRAL ASSESSMENT 1 – 2017
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 : 8 May 2017

Parent's Signature: _____

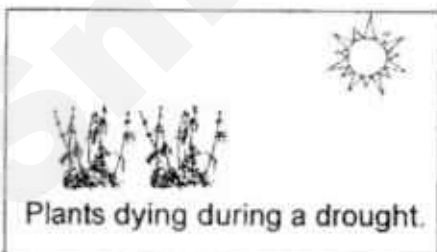
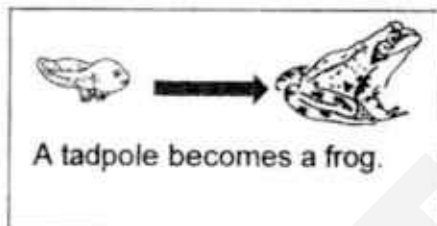
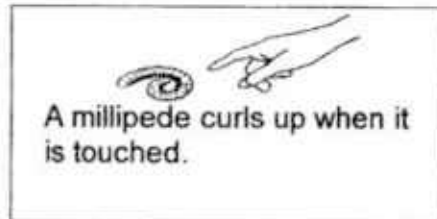
Section B: (32 marks)

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. Match the pictures to the correct characteristics of living things.

[2]



- Living things can reproduce.

- Living things respond to changes.

- Living things need water to survive.

- Living things can grow.

Score	2
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26. Study the pictures below.



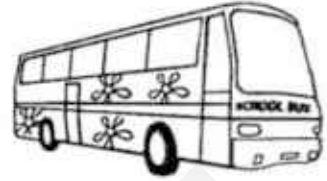
Robot



Tree

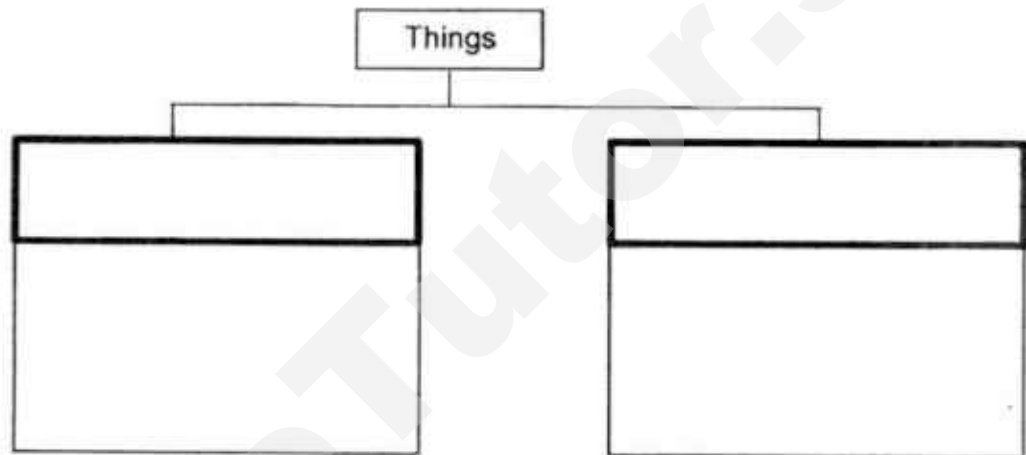


Cockroach



School bus

- (a) Classify the things above into two groups and give a suitable heading for each group. [2]



- (b) Describe how plants and fungi obtain food. [2]

Score	4
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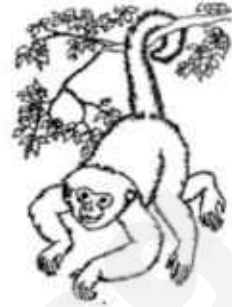
27. Study the pictures of the three animals below.



X



Y



Z

- (a) Based on what you can observe from the pictures, which one of the above animals, X, Y or Z, does not belong to the same group? Give a reason for your answer. (Do not mention the animal group.) [1]

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

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

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

Objects			
Group W	Group X	Group Y	Group Z
Dress	Eraser	Key	Book
Face towel	Car tyre	Nail	Cupboard

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

Group	Materials
W	
X	
Y	
Z	

- (b) State **two** important properties of the material that made it suitable for making the objects in Group Y. [2]

Score	4
-------	---

29. Dave carried out an experiment to test the properties of three different materials, P, Q and R.

After carrying out the tests on the materials, Dave recorded his observations in the table below.

Material	Is it strong?	Is it flexible?	Can it float?	Is it waterproof?
P	Yes	No	No	Yes
Q	No	Yes	Yes	Yes
R	No	Yes	No	No

- (a) Based on the table above, state one difference between Material Q and R. [1]

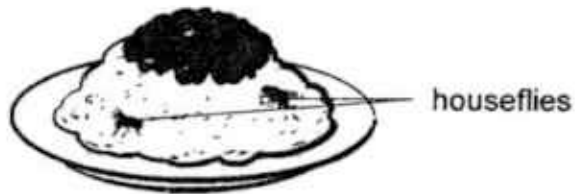
- (b) Match the following objects to the most suitable materials, P, Q or R from the table above. Each letter can only be used once. [1]

(i) Iron nail : _____

(ii) Tissue paper : _____

Score	<div style="border: 1px solid black; width: 100px; height: 100px; position: relative;"><div style="position: absolute; top: 0; right: 0; text-align: center;">2</div></div>
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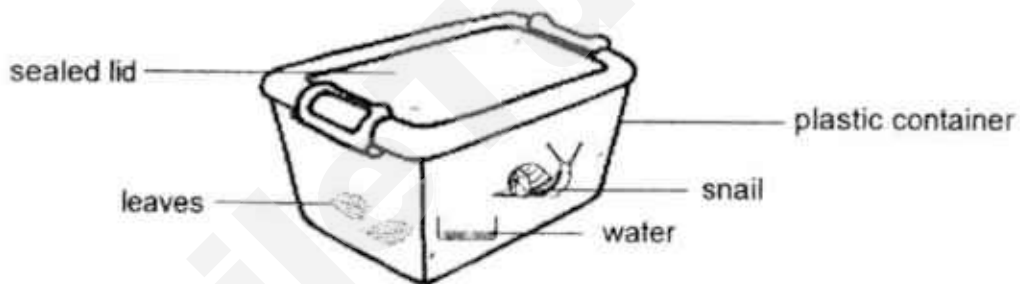
30. Peter observed that some houseflies had landed on his plate of food.



- (a) When he swing his hand over the food, the houseflies flew away.
List two characteristics of living things shown by the houseflies when it flew away. [2]

- (i) _____
(ii) _____

Jun Jie caught a snail and keep it in a container as shown below.

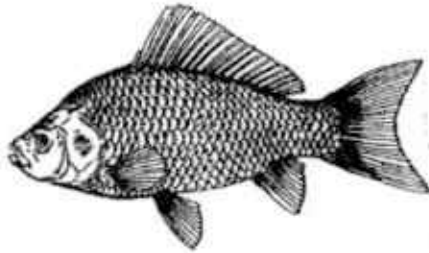


- (b) When he came home from school the next day, he realized that the snail in the container had died. Explain why the snail died. [1]

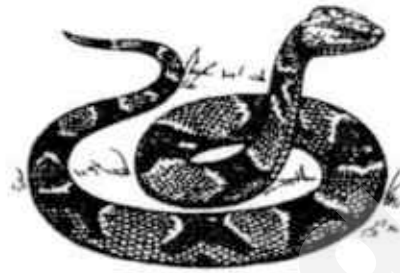
- (c) Without changing the container, what should Jun Jie do to keep his snail alive? [1]

Score	
	4

31. Study the two animals below.



Animal A



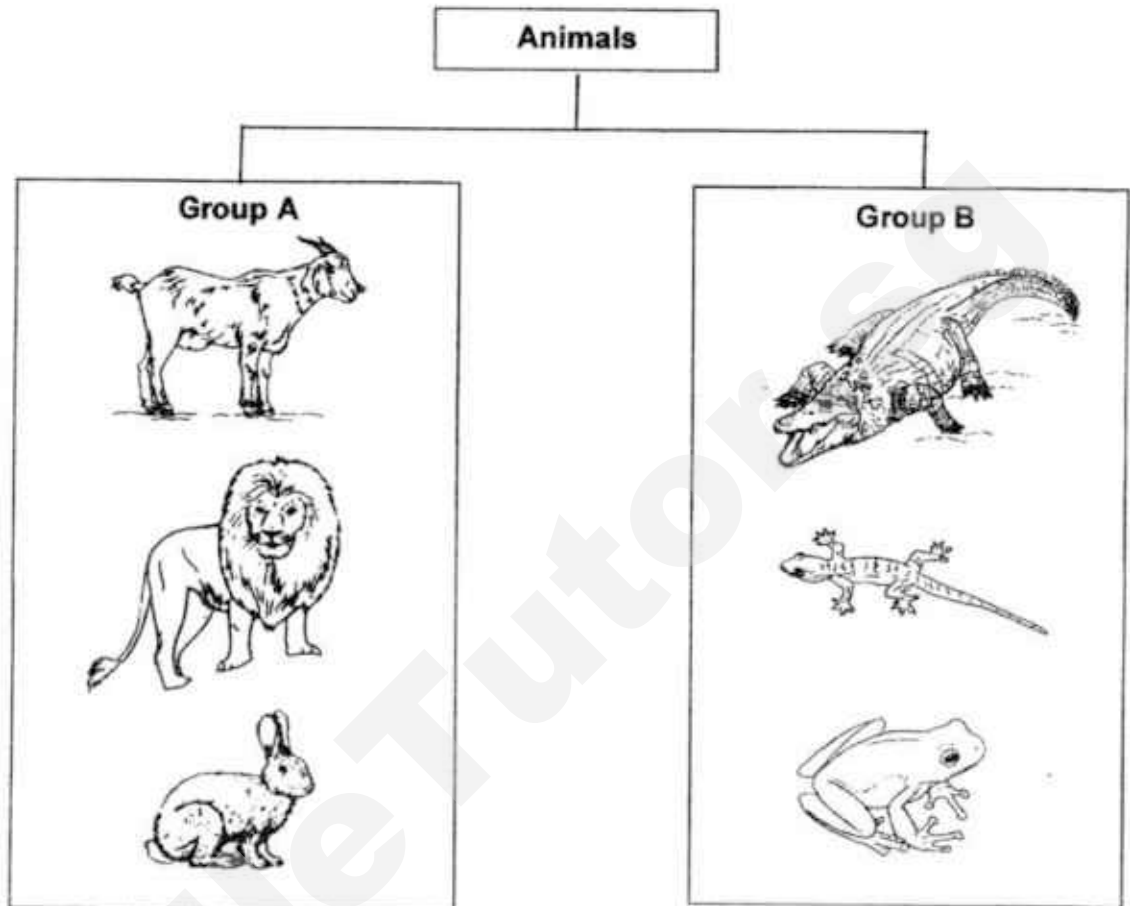
Animal B

- (a) Based on what you can observe from the pictures, state one similarity between the two animals. (Do not mention their shape, size or colour.) [1]

- (b) Based on what you can observe from the pictures, state one difference between the two animals. (Do not mention their shape, size or colour.) [1]

- (c) How do Animal A and Animal B reproduce? [1]

32. The classification chart below shows how some animals are grouped.

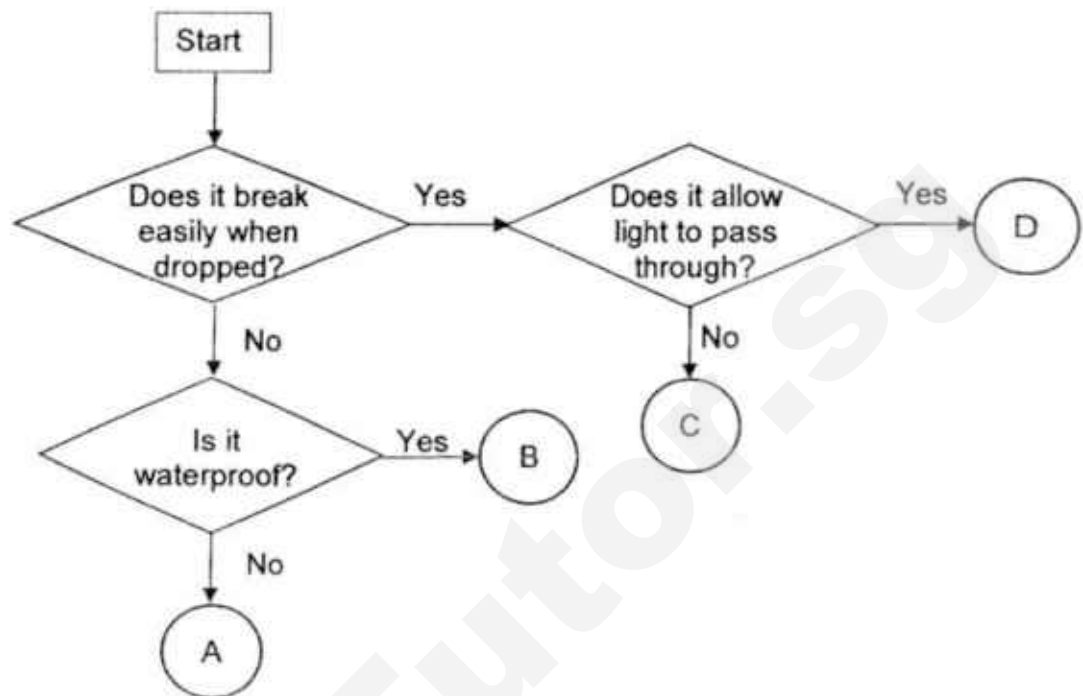


- (a) Based on what you can observe from the pictures above, state one physical characteristic that the animals in Group A and Group B have in common. [1]

- (b) State one difference between the animals in Group A and the animals in Group B. [1]

Score	2
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33. Study the flow chart below carefully.

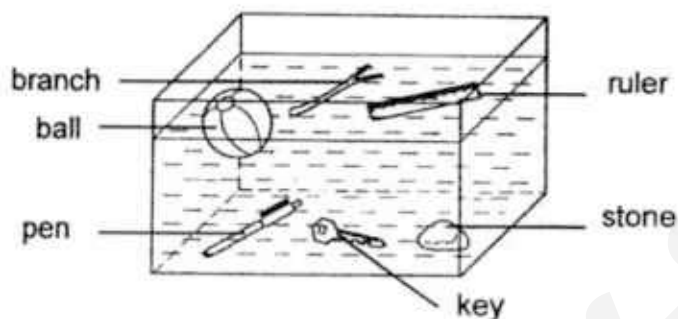


(a) Based on the flow chart above, state two properties of object B. [2]

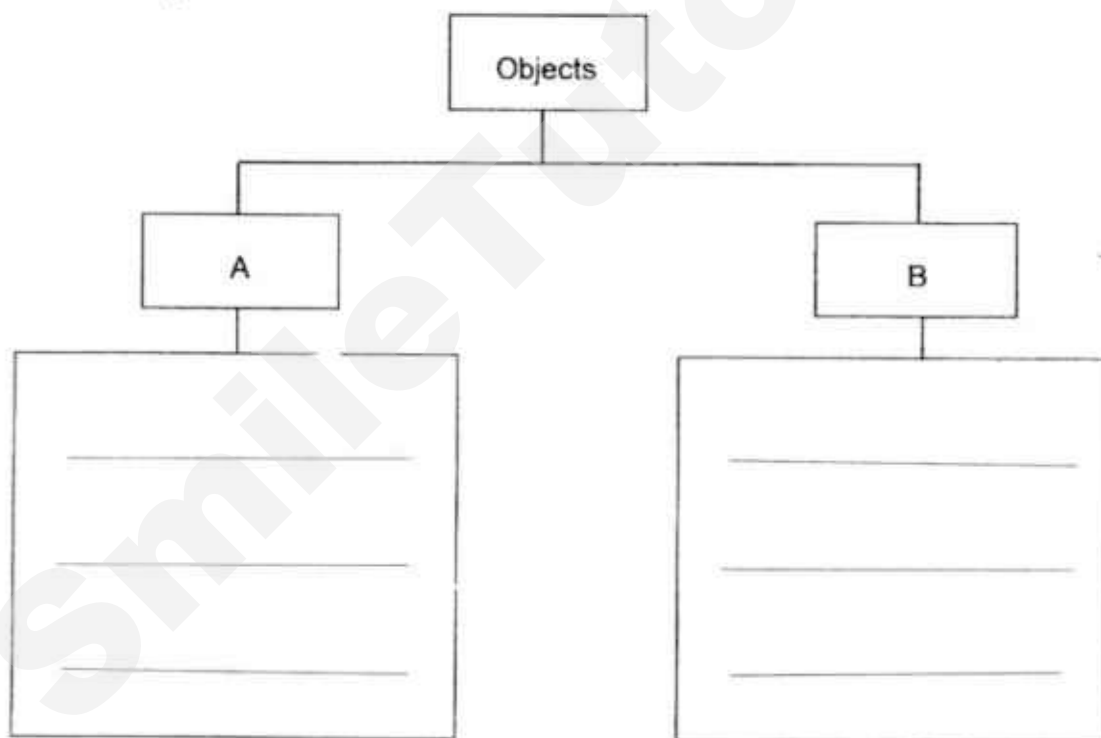
(b) Based on the flow chart above, state one difference between object A and object D. [1]

(c) What material can object C be made of? [1]

34. Six objects were placed at the bottom of a tank of water at the start of an experiment. The diagram below shows the positions of the objects after some time.



- (a) Based on the above experiment, classify the six objects into two groups in the table provided below. [2]



- (b) Give a suitable heading for A and B. [1]

Heading for A: _____

Heading for B: _____

~ End of Paper ~

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

ANSWER KEY

YEAR : 2017
 LEVEL : PRIMARY 3
 SCHOOL : NAN HUA PRIMARY SCHOOL
 SUBJECT : SCIENCE
 TERM : SA1

SECTION A (24 x2marks)

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

SECTION B (32 marks)

Q25.



- Living things can reproduce.
- Living things respond to changes.
- Living things need water to survive.
- Living things can grow.

Q26.a) Living things: Cockroach, Tree
 Non-living things: Robot, School bus

b) Plants obtain food through photosynthesis while fungi obtain food from the thing it grows on.

Q27.a) Animal Y. It has feathers as a outer covering while Animal X and Z have hair as a outer covering.

b) Mammals

c) It has hair on its body and feeds its young with milk from their suckles.

Q28.a) W: Fabric X: Rubber Y: Metal Z: Wood

b) It is stiff and strong.

Q29.a) Material Q is waterproof but Material R is not.

b)i) P ii) R

Q30.a)i) Living things can move by themselves.

ii) Living things respond to changes.

b)The lids is sealed , no air can enter the plastic container. Without air ,
living things will die, thus the snail would suffocate and die.

c)He should drill holes into the sealed lead for air to go in.

Q31,a) They both have scales as outer covering.

b) Animal A have fins but Animal B do not have fins.

c)They reproduce by laying eggs.

Q32.a) The animals in Group A ad B both have four legs.

b) The animal in Group A give birth to their young alive while the animals
in Group B lay eggs.

Q33.a) It does not break easily when dropped and it is waterproof

b) Object break easily when dropped but Object A does not break easily
when dropped.

c) Ceramic

Q34.a) A: Pen , Key , Stone

B: Ball , Branch , Ruler

b)Heading for A: Sink in water

Heading for B: Float in water

THE END

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Pei Chun Public School
Semestral Assessment 1 – 2017
Science
Primary 3

Name : _____ () Date : 9 May 2017

Class : Pri. 3 ()

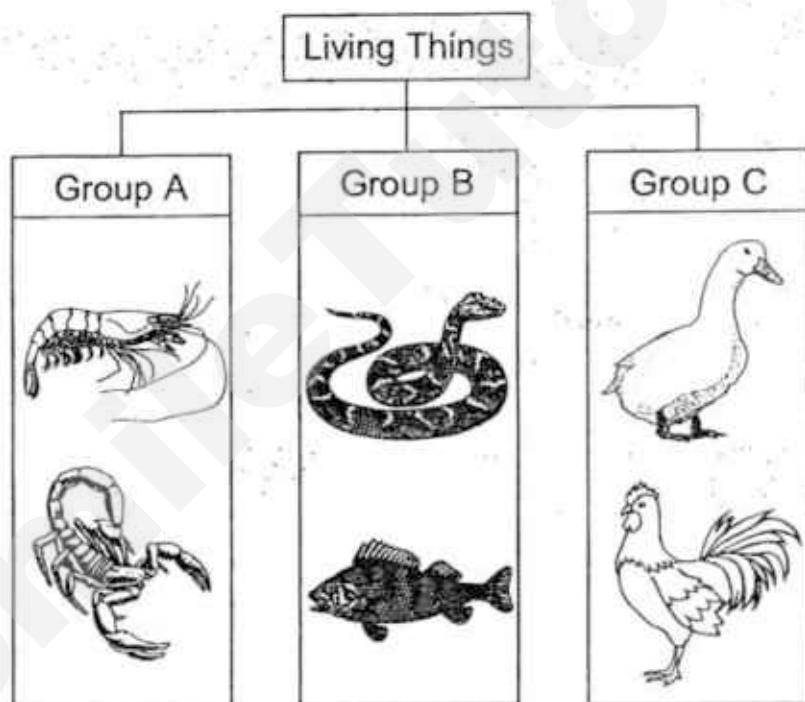
Science Teacher : _____

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.

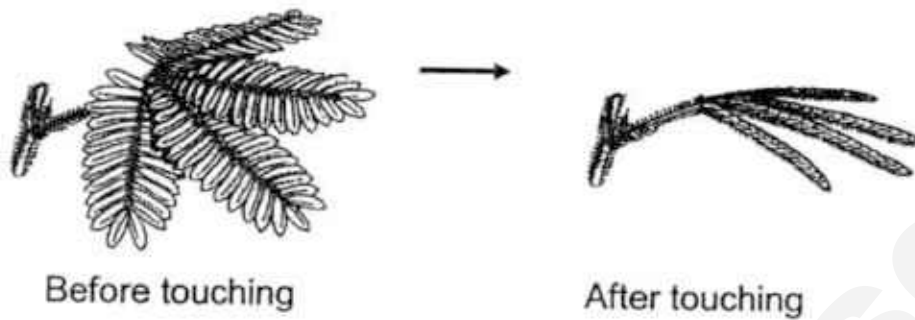
1. Study the classification chart below.



The living things are classified according to _____.

- (1) the food they eat
- (2) the way they move
- (3) the places they live in
- (4) their outer body covering

2. The diagram below shows what happened when Sean touched a plant.



From his observation, Sean could conclude that the plant is a living thing because it could _____.

- (1) grow
 - (2) breathe
 - (3) respond
 - (4) reproduce
3. Which of the following animals is not a bird?

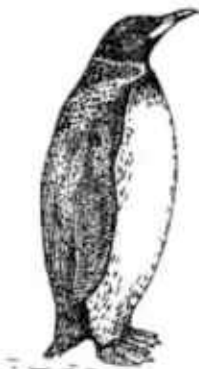
(1)



(2)







(3)



(4)



4. The table below shows how some flowers can be grouped.

	Flower has five petals	Flower does not have five petals
Flowers are grouped together on the stem	group E 	group F 
Flowers are spread out along the stem	group G 	group H 

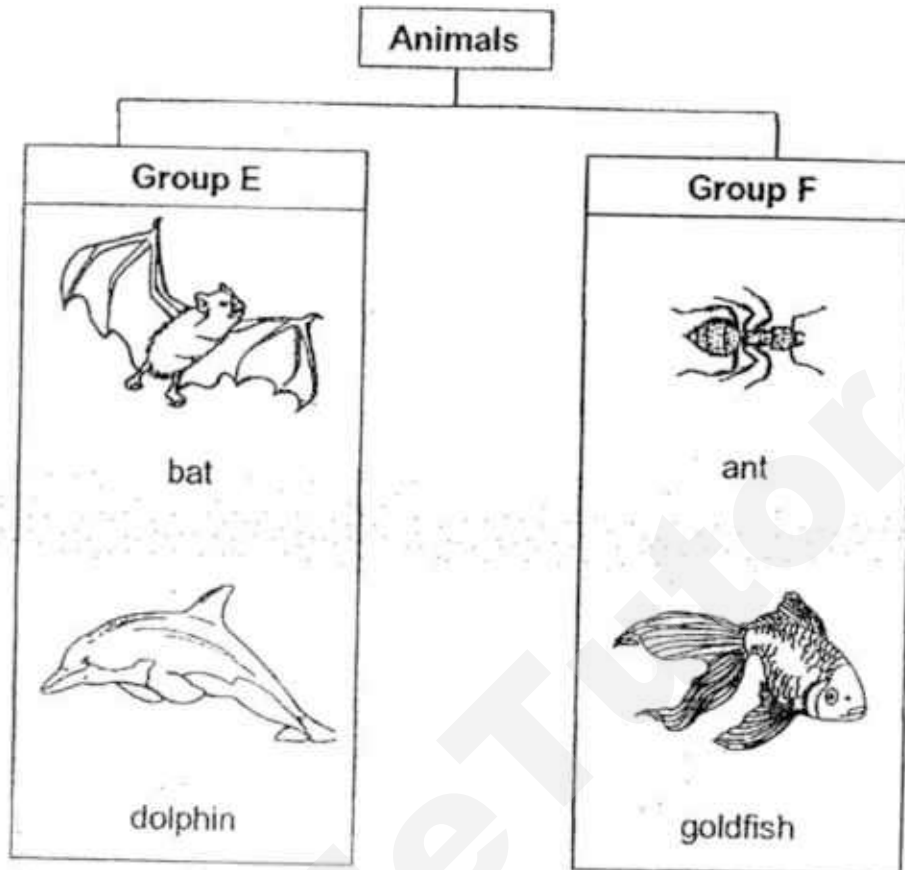
The diagram below shows the flowers of a plant.



Which group of flowers do they belong to?

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

5. Study the table below.



The animals are grouped according to _____.

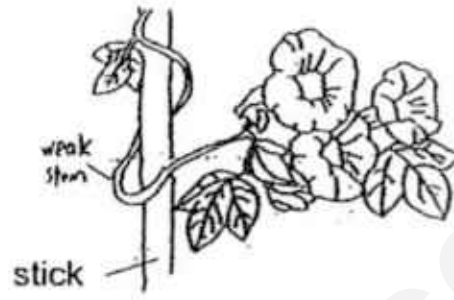
- (1) how they reproduce
- (2) how they move about
- (3) their outer body coverings
- (4) the number of legs they have

()

6. 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

()

7. Dan read about animal W in a magazine.

- It lays eggs.
- It can live on land and in water.
- It breathes through its moist skin when it is underwater.

Which of the following groups does animal W belong to?

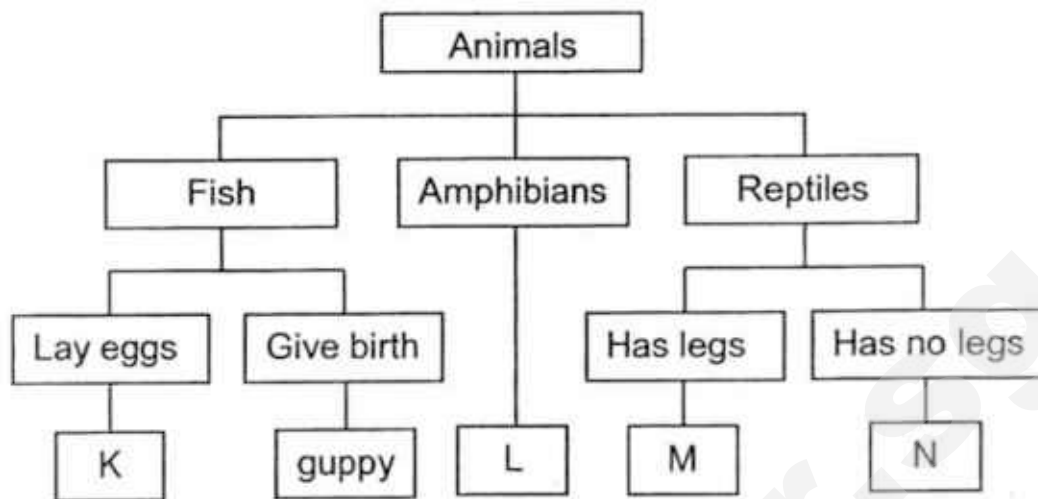
- (1) fish
- (2) reptile
- (3) mammal
- (4) amphibian

8. Which of the following characteristics are found in insects, but not in other animals?

- A : They have wings.
- B : They have a pair of feelers.
- C : They have three body parts.
- D : They have three pairs of legs.

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

9. Study the classification diagram.



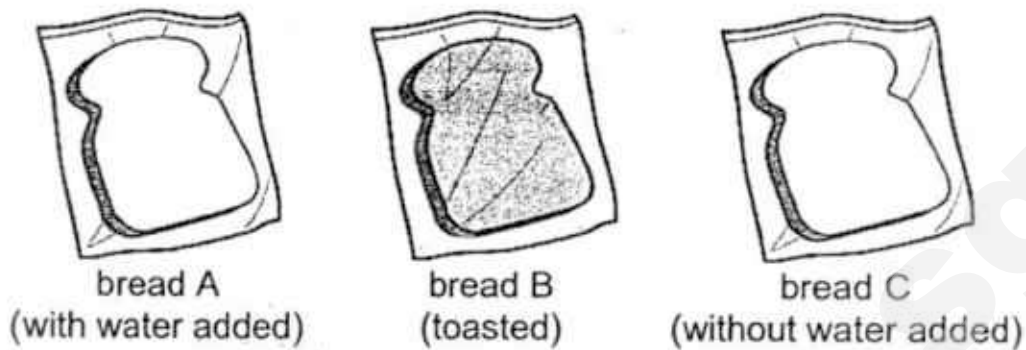
The diagram below shows a snake.



Which of the following represents a snake in the classification diagram?

- (1) K
- (2) L
- (3) M
- (4) N

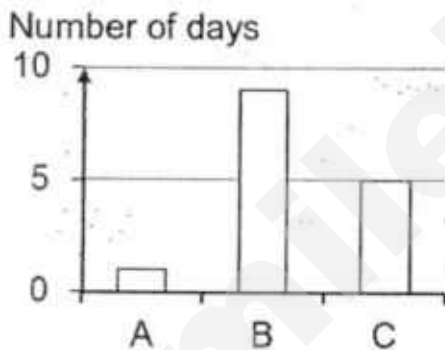
10. Aini had three similar slices of white bread. She added a few drops of water to bread A and toasted bread B. She placed the three slices of bread side by side in a classroom.



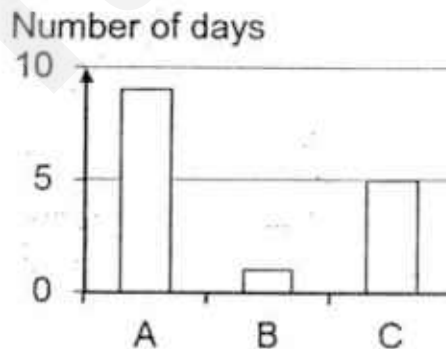
She observed the bread over ten days and recorded the number of days taken for mould to start growing on each slice of bread.

Which of the graphs most likely shows the results of her experiment?

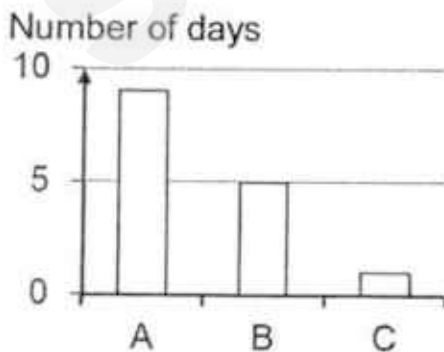
(1)



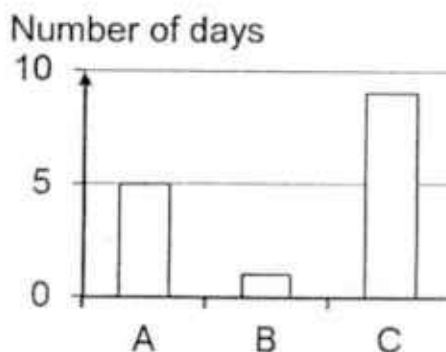
(2)



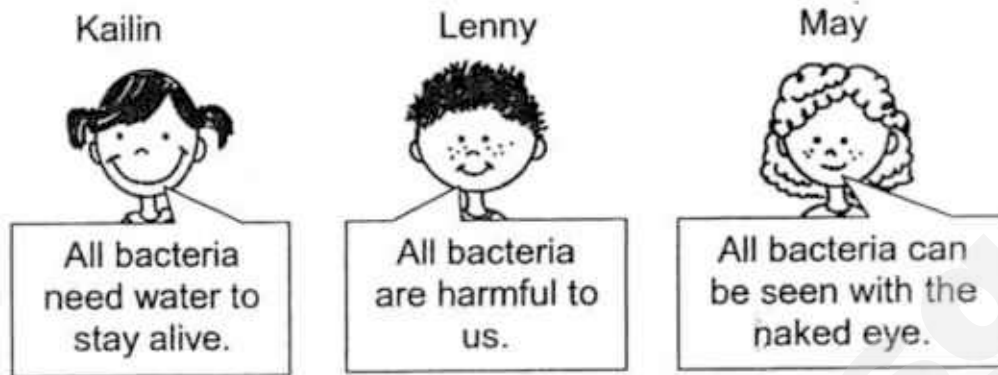
(3)



(4)

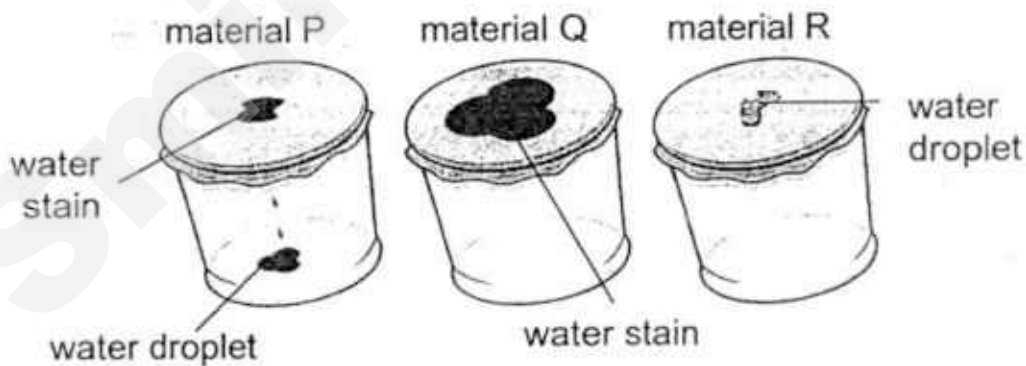


11. Each of the three pupils made a statement about bacteria.



Which of the pupils is/are correct?

- (1) Kailin only
 - (2) Kailin and May only
 - (3) Lenny and May only
 - (4) All of them
12. Zhiming conducted an experiment on three materials, P, Q and R. He added five drops of water on each material and the diagram below shows what happened after the water was added. When water was absorbed by the material, a water stain was formed on it,



Based on his observations, which of the materials is/are waterproof?

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

13. The table below shows the properties of objects K, L, M and N.

Objects	Breaks easily when dropped	Allows light to pass through it
K	Yes	Yes
L	Yes	No
M	No	Yes
N	No	No

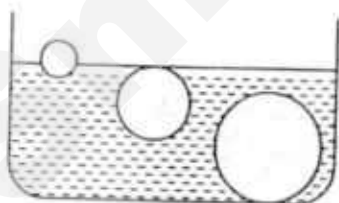
Which of the following objects is most likely to be a ceramic vase?

- (1) K
- (2) L
- (3) M
- (4) N

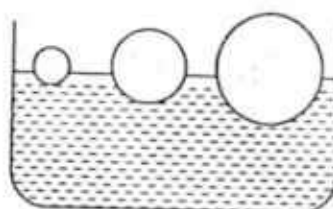
14. Justin had three solid balls of different sizes. The balls were made of the same material. He placed the balls in a tank of water.

Which of the following shows the possible positions of balls in the water?

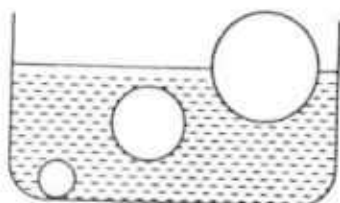
(1)



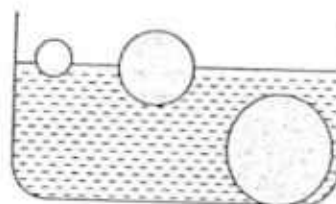
(2)



(3)



(4)



15. Bala classified four objects into two different groups according to whether they are flexible.

Objects	
Group A	Group B
wooden pencil steel ruler	rubber band paper towel

Which of the following objects are correctly classified?

	Group A	Group B
(1)	plastic chopstick	cotton shoe lace
(2)	plastic bag	glass rod
(3)	glass rod	plastic chopstick
(4)	plastic bag	cotton shoelace

End of Section A

Pei Chun Public School
Semestral Assessment 1 – 2017
Science
Primary 3

Name : _____ ()

Class : Pri. 3 ()

Date : 9 May 2017

Time : 50 min

Science Teacher : _____

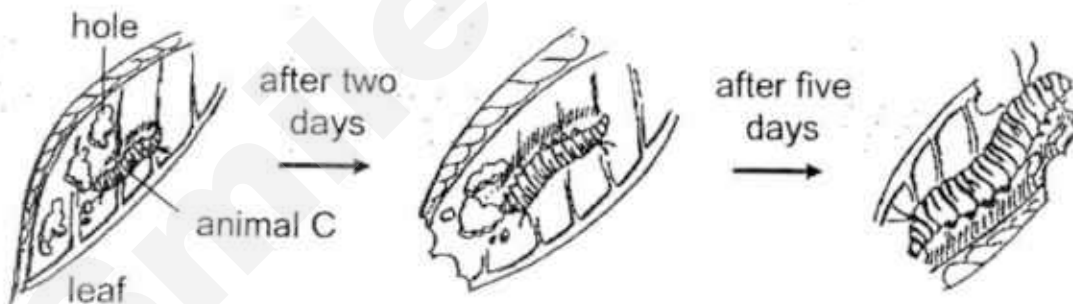
Parent's signature: _____

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. Raja found animal C on a plant. He observed how animal C changed over a few days. He also observed that new holes appeared on the leaves on the plant each day.



- a) Fill in each blank with a suitable word.

Based on his observations, Raja can conclude that animal C is a living thing because

it can _____ and it needs _____
to stay alive. [2]

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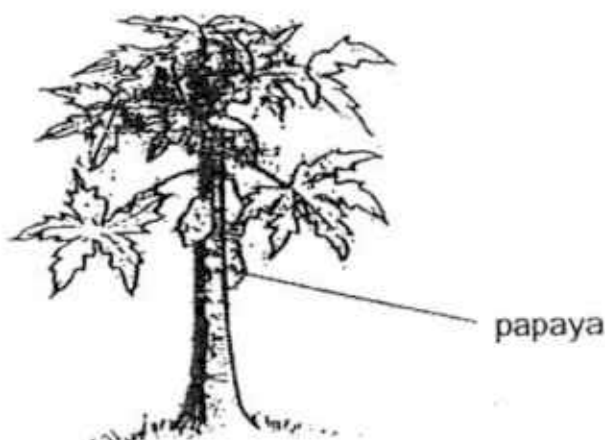
17. The table below shows the characteristics of three plants, plant K, plant L and plant M. A tick (✓) indicates that the characteristic is shown by the plant.

	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'

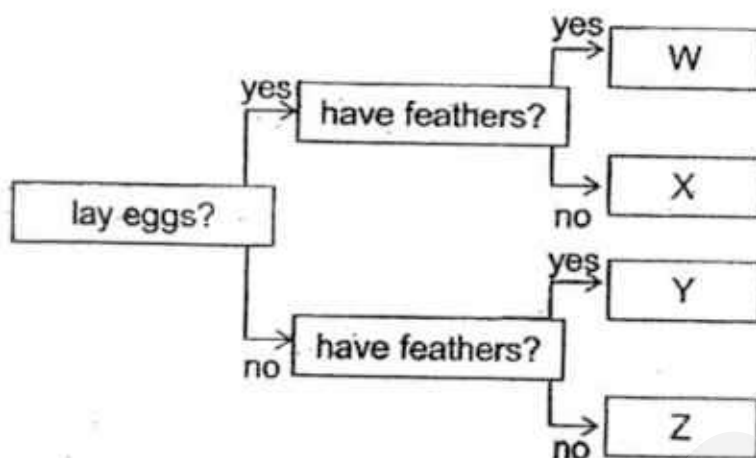
Statement	True	False
(i) Both plant K and plant L are flowering plants.		
(ii) Plant M has fruits.		
(iii) Plant L is a moss plant.		
(iv) Plant L does not have leaves		

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


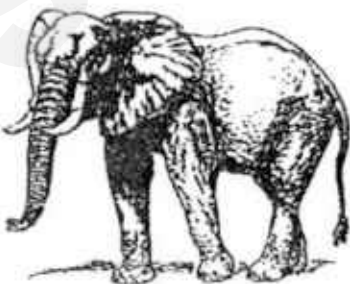


Which of the following plant, K, L or M, is this plant most likely to be?

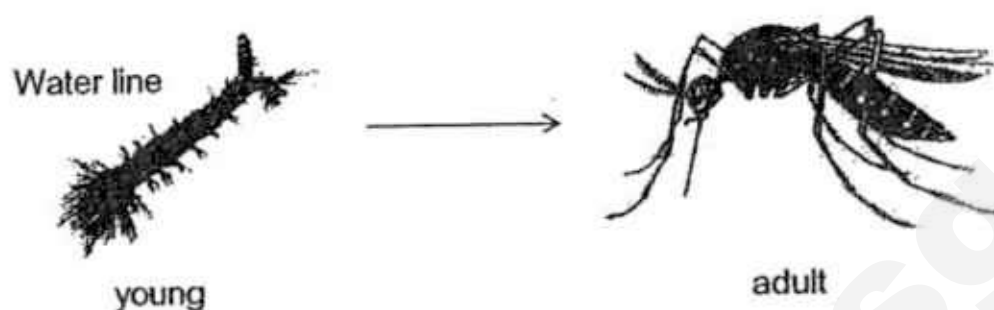
18. Animals W, X, Y and Z are classified as shown.



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

Animal	Letter
a)  ostrich	
b)  elephant	

19. 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.

- b) The adult is classified as an insect.

Give **two** characteristics that show that the adult belongs to this group.

Characteristic 1: _____

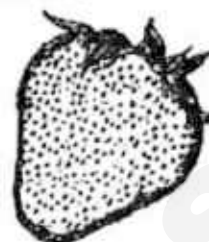
Characteristic 2: _____

20. Amitra carried out an experiment to find out if mould would grow faster in warm places. She placed two similar strawberries, A and B, in different places. The diagrams below show what she observed after five days.

At the start of the experiment



strawberry A
(placed in a warm classroom cupboard)



strawberry B
(placed in the refrigerator)

After five days



strawberry A
(placed in a warm classroom cupboard)

mould



strawberry B
(placed in the refrigerator)

- a) Based on her results, Amitra said that mould would grow faster in warm places. Is she correct? Circle your answer. [1]

Yes / No / Cannot tell

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

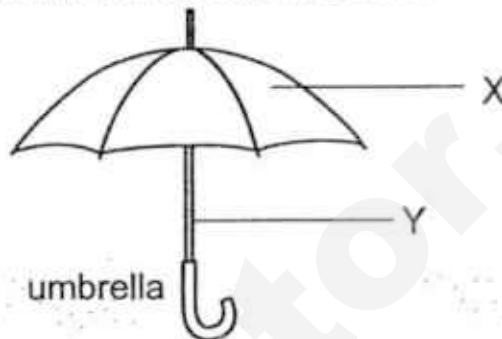
- c) Which group of living things does mould belong to? [1]

SCORE	
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21. Devi conducted some tests on four materials and the table below shows her findings.

Material	A	B	C	D
Is it flexible?	no	yes	no	no
Is it strong?	yes	yes	yes	no
Is it waterproof?	no	yes	yes	yes

Devi wants to make an umbrella as shown below.



- a) Is material A suitable for making part X of the umbrella?
Explain your answer.

[1]

- b) Devi wants to choose a material that is most suitable for part Y of the umbrella.

- i) Which material, **B or C**, is more suitable for making part Y?
Give a reason for your answer.

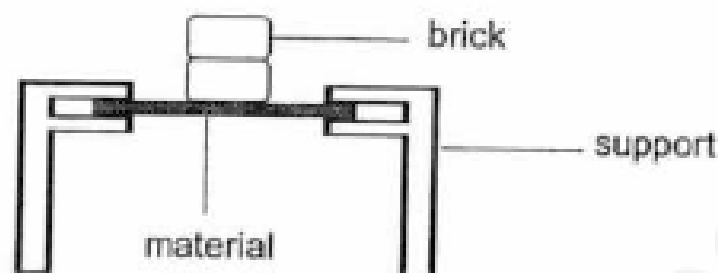
[1]

- ii) Which material, **C or D**, is more suitable for making part Y?
Give a reason for your answer.

[1]

SCORE	
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22. Ming Zhe had four strips made of different materials, W, X, Y and Z. He conducted an experiment as shown below. He placed bricks on each strip, one brick at a time, until the strip broke.



The table below shows the results of his experiment.

Material	W	X	Y	Z
Maximum number of bricks the strip can hold without breaking	7	2	10	4

- a) Which property of the material was he trying to test? [1]

- b) Ming Zhe wanted to make a bench as shown below.



Which material, W, X, Y or Z, is most suitable for making the bench? [1]

- c) Give a reason for your answer. [1]

End of Section B

Set by : Mr Bernard Chu and Mdm Ong Bok Hoon
Vetted by: P3 Science teachers

SCORE	
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EXAM PAPER 2017

LEVEL : PRIMARY 3
SCHOOL : PEI CHUN PUBLIC SCHOOL
SUBJECT : SCIENCE
TERM : SA1

SECTION A

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

SECTION B

Q16 (a) Grow, food

Q17 a) i) False ii) True iii) True iv) False

b) I think it is Plant K

Q18 (a) W

(b) Z

Q19 (a) Living things can grow.

(b) It has three body parts (1)

It has three pairs of legs (2)

Q20 (a) Yes

(b) There was more mould on strawberry A.

(c) Fungi

Q21 (a) No. Material A is not flexible and not waterproof.

(b) (i) Material C. Material C is not flexible but material B is flexible.

(ii) Material C. Material C is strong but material D is not strong.

Q22 (a) Strength

(b) Material Y

(c) Material Y is the strongest.

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SEMESTRAL ASSESSMENT (1) 2017

Section A	36
Section B	24
Your score out of 60 marks	
Parent's signature	

Name : _____ Index No: _____ Class: P3 _____

9 May 2017

SCIENCE

Attn: 1h 15min

SECTION A (18 x 2 marks)

For each question from 1 to 18, four options are given.

One of them is the correct answer. Make your choice (1, 2, 3 or 4).

Shade the correct oval (1, 2, 3 or 4) on the Optical Answer Sheet (OAS) provided.

1. The following diagrams show different things, not drawn to scale.
Which one of the following groups of things can reproduce?

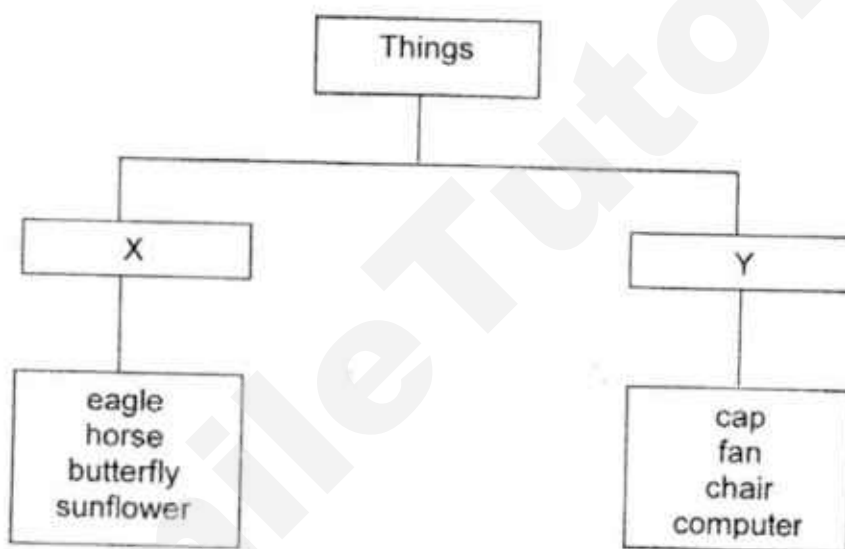
Group A	Group B	Group C

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

2. Which one of the following shows that living things grow?

- (1) Mrs Tan gave birth to a baby girl.
- (2) The boy drank a glass of milk this morning.
- (3) The girl screamed when she saw a cockroach.
- (4) Peter could not fit into his T-shirt which he wore last year.

3. Some things are classified into 2 groups, X and Y, as shown below.



Which one of the following is the correct sub-headings for Group X and Y?

	Group X	Group Y
(1)	Can fly	Cannot fly
(2)	Cannot grow	Can grow
(3)	Cannot reproduce	Can reproduce
(4)	Can respond to changes	Cannot respond to changes

4. Olivia caught a frog and placed it in a jar. She covered the jar with a lid. A few hours later, she found the frog dead.



What could she conclude from her observation above about living things?

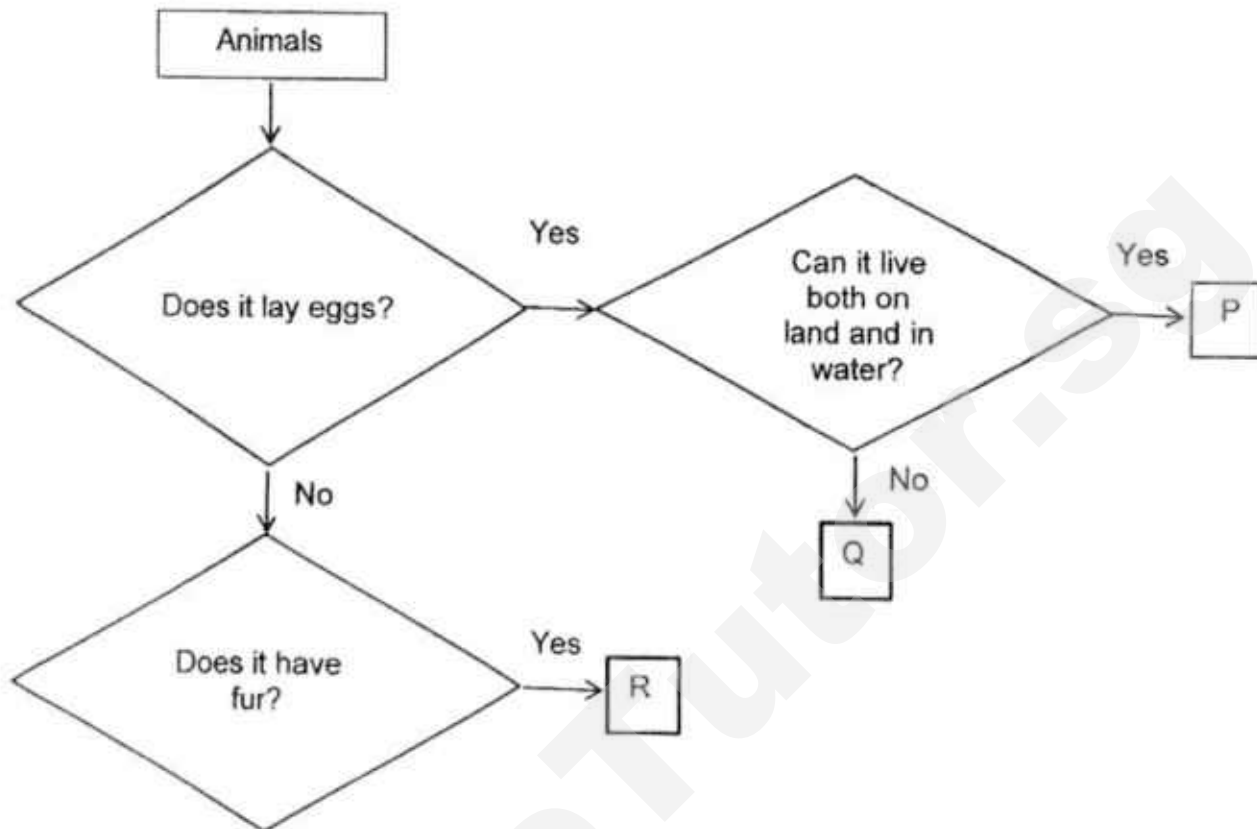
- (1) They grow.
 - (2) They reproduce.
 - (3) They need air to survive.
 - (4) They respond to changes around them.
5. Florence compared two animals, X and Y, and recorded her observations in the table below.

Animal X	Animal Y
<ul style="list-style-type: none"> • give birth to live young • has a pair of wings • has two legs • has hairs on body 	<ul style="list-style-type: none"> • lay eggs • has a pair of wings • has two legs • has feathers on body

Which animal groups do animals X and Y belong to?

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





6. Animal P, Q and R have the following characteristics listed as shown below.



Which of the following correctly shows the animal groups that animals P, Q and R should be classified in?

	P	Q	R
(1)	Fish	Insect	Bird
(2)	Amphibian	Reptile	Bird
(3)	Amphibian	Insect	Mammal
(4)	Fish	Reptile	Mammal

7. Some animals are grouped according to their similarities as shown in the table below. They are not drawn to scale.

Group X	Group Y
 <p>Iguana</p>	 <p>Butterfly</p>
 <p>Squirrel</p>	 <p>Frog</p>

Based on your observation only, how are the animals in the above classified?

	Group X	Group Y
(1)	Has fur	Has no fur
(2)	Has tail	Has no tail
(3)	Has no wings	Has wings
(4)	Has no feelers	Has feelers

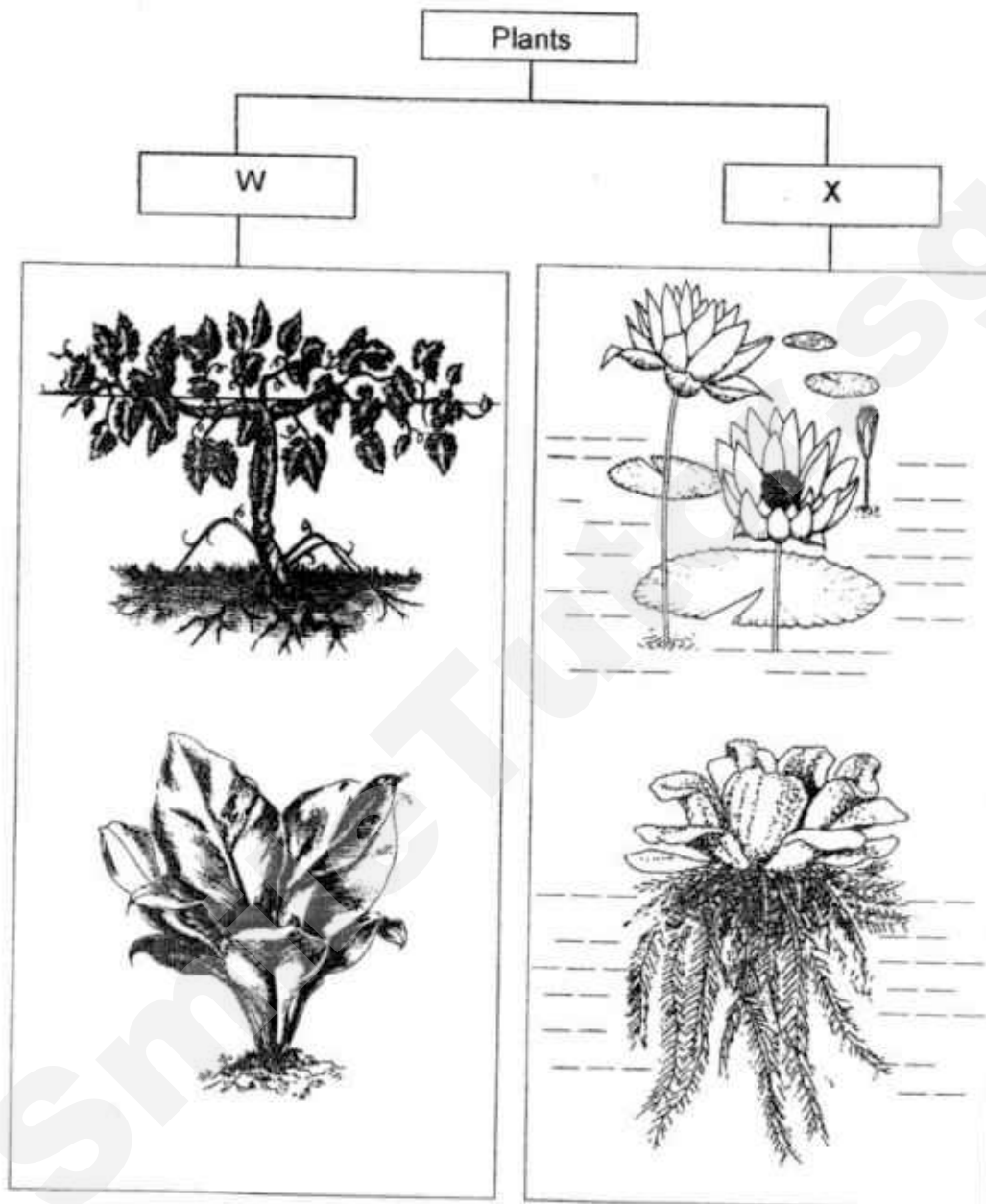
8. The table below shows the characteristics of animals, A, B, C and D.
A tick (✓) shows the presence of the characteristic.

Characteristics	A	B	C	D
Does it live in water?	✓			✓
Does it have wings?		✓		
Does it have feelers?			✓	✓
Does it has 3 body parts?			✓	

Which of the following animal(s) is/ are insect(s)?

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

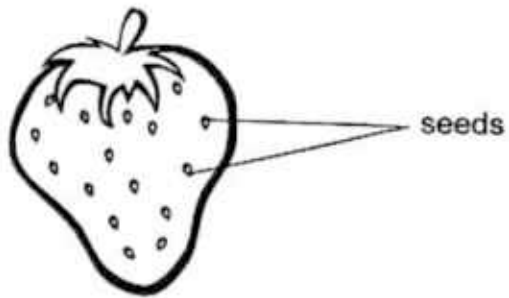
9. Some plants are grouped as shown in the table below. The plants are not drawn to scale.



Based on the information above, how are the plants grouped?

	Group W	Group X
(1)	Land plants	Water plants
(2)	Bears fruits	Does not bear fruits
(3)	Flowering plants	Non-flowering plants
(4)	Reproduce by seeds	Reproduce by spores

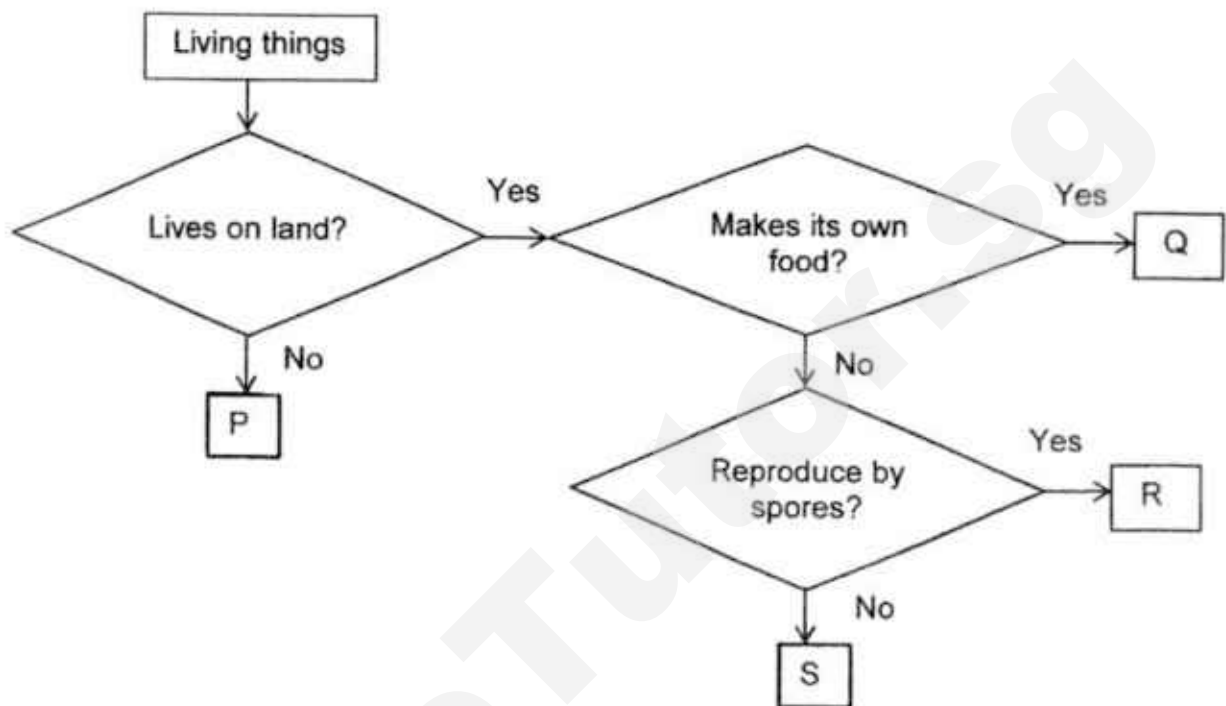
10. This plant part was found from Plant A.



Based on the information above, which one of the following is most likely to be correct?

- (1) It grows in water.
- (2) It has a large trunk.
- (3) It is a flowering plant.
- (4) It is a non-flowering plant.

11. Study the flow chart below.



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

	P	Q	R	S
(1)	Hibiscus	Toadstool	Cat	Watermelon
(2)	Orchid	Toadstool	Horse	Pineapple
(3)	Water lily	Rose	Bird's nest fern	Toadstool
(4)	Water hyacinth	Rose	Toadstool	Cat

12. Tina recorded the following observations that she made on a living thing, W.

- It reproduces
- It can only be seen under a microscope
- It comes in different shapes and sizes

Based on the information, which of the following best represents W?

- (1) Fungi
- (2) Bacteria
- (3) Flowering plant
- (4) Non-flowering plant

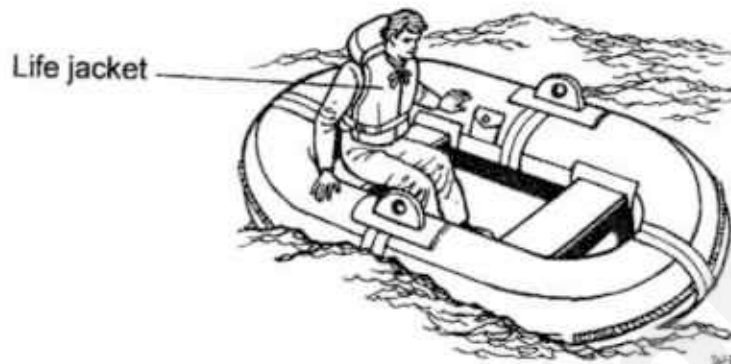
13. A pupil wrote down the similarities between fungi and bacteria. Which of the following statement(s) is/are **correct**?

	Similarities
A	They are micro-organisms.
B	They reproduce by seeds.
C	They feed on living things, dead or alive.

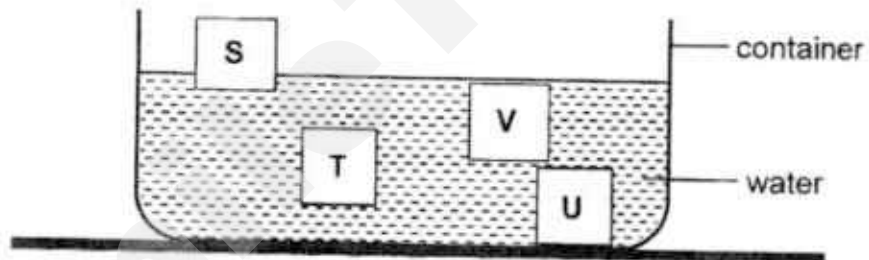
- (1) A only
- (2) C only
- (3) A and B only
- (4) A, B and C

For questions 14 and 15, refer to the diagram given below.

Tom has 4 cubes, S, T, U and V, made of different materials. He wanted to find out which material is more suitable for making a life jacket as shown in the diagram below.



He set up an experiment using the cubes as shown below.



14. Based on the observation above, what property of the materials was Tom trying to find out?

- (1) Strength
- (2) Flexibility
- (3) Degree of transparency
- (4) Ability to float or sink

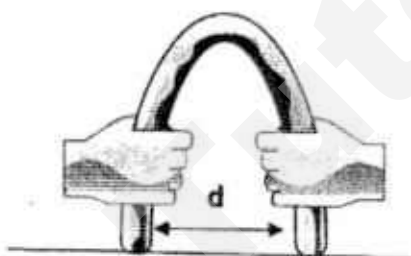
Continue on next page

Continued from previous page

15. Based on the results shown on the previous page, material of which cube, S, T, U or V, is most suitable for making the life jacket?

- (1) S
- (2) T
- (3) U
- (4) V

16. Pauline conducted an experiment as shown below.



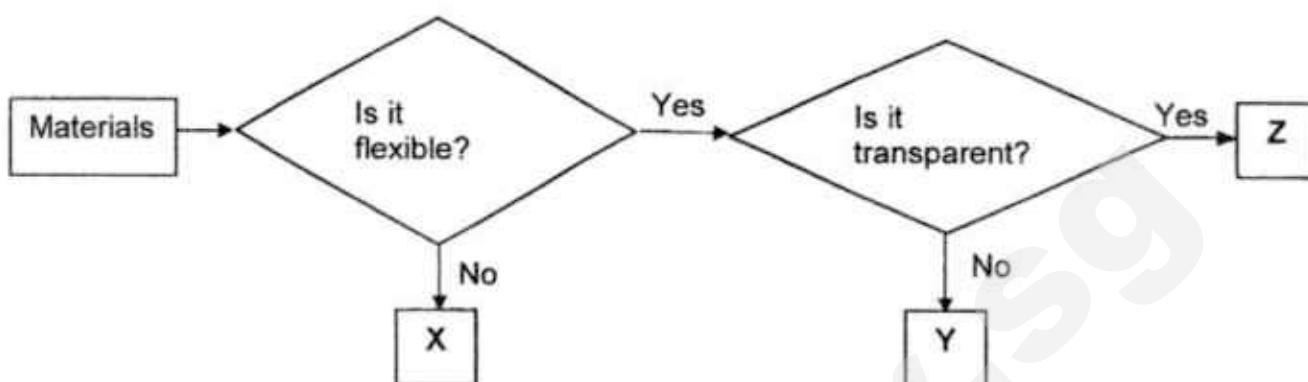
She bent bars made of different materials, P, Q, R and S, and measured the maximum distance, d , each material bent before it broke. She recorded the results as shown in the table below.

Material	Distance d (cm)
P	7
Q	2
R	5
S	9

Which of the following statements is correct?

- (1) Material S is the most flexible.
- (2) Material Q is the most flexible.
- (3) Material R is less flexible than material P.
- (4) Material P is more flexible than material Q.

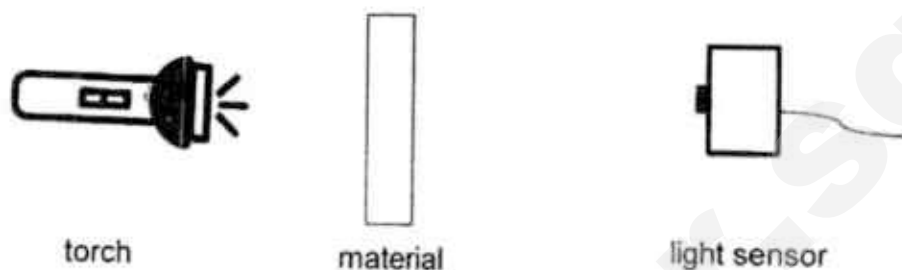
17. Study the flow chart below.



Which of the following best represents objects made by materials X, Y and Z?

	X	Y	Z
(1)	leather jacket	metal cup	clear plastic sheet
(2)	metal cup	wooden pole	leather jacket
(3)	wooden pole	leather jacket	clear plastic sheet
(4)	clear plastic sheet	metal cup	wooden pole

18. Annie conducted an experiment to find out the amount of light (measured in Lux) that passed through four different materials using a light sensor. Her results are shown in the table below.



Material	Amount of light that passed through it (Lux)
A	10
B	280
C	620
D	0

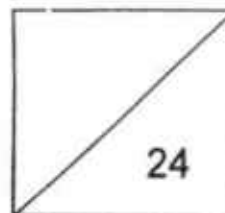
Annie wanted to block out all the light in her bedroom.

Which one of the following materials, A, B, C or D, is most suitable to make into curtains for Annie's bedroom?

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

Name; _____ ()

Class: P 3 ()



SECTION B (24 marks)

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

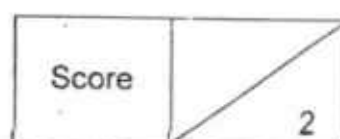
The number of marks available is shown in brackets [] at the end of each question or part question.

19. Susan observed an object, A, for some time and recorded its characteristics below.

- can sing
- can walk on its own
- does not need air, food and water
- cannot reproduce.

Susan concluded that object A is a living thing. Do you agree with her?
Give 2 reasons for your answer.

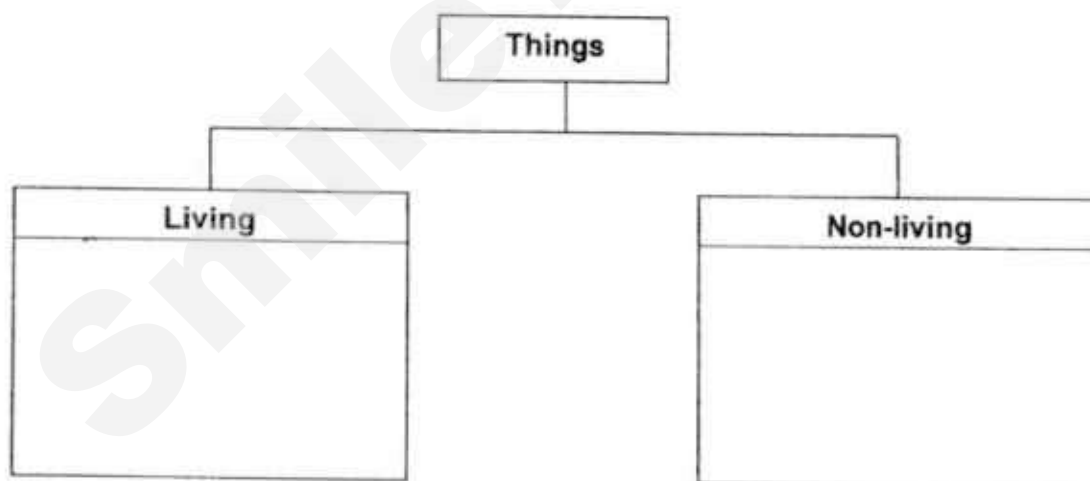
[2]



20. Lily labelled some living and non-living things as A, B, C and D as shown in the diagram below.

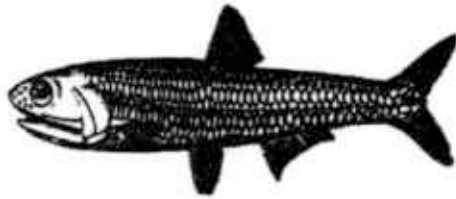


In the classification table below, group the things by writing A, B, C and D in the correct box. [2]



Score	2
-------	---

21. Study Animals X and Y as shown in the diagrams below.



Animal X



Animal Y

Based on your observations, state two different observable physical characteristics between Animal X and Animal Y.

(Do not compare sizes, colours, body shapes and patterns)

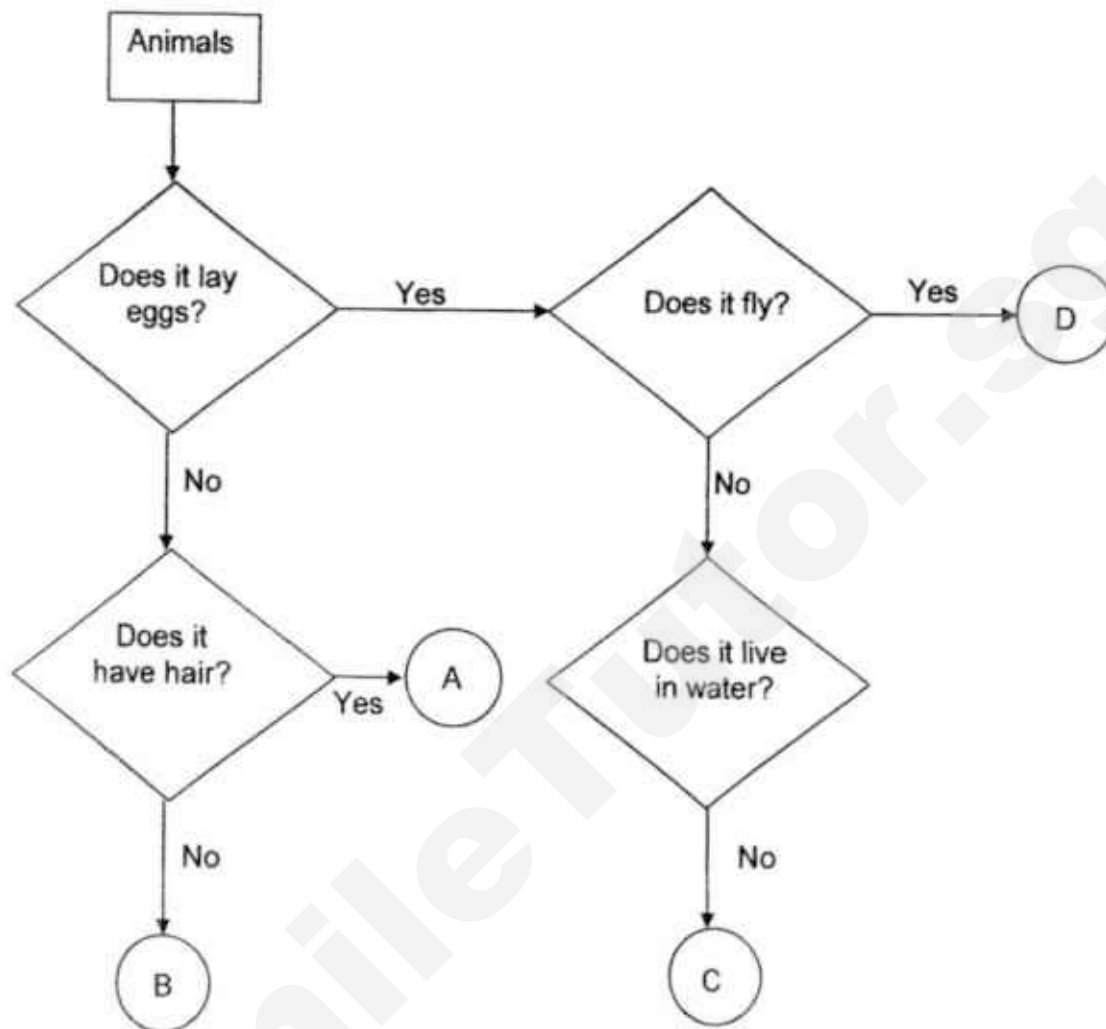
[2]

Difference 1	
Difference 2	

Score	2
-------	---

2017 P3 Science SA 1

22. The flow chart below shows how four animals, A, B, C and D, are grouped.

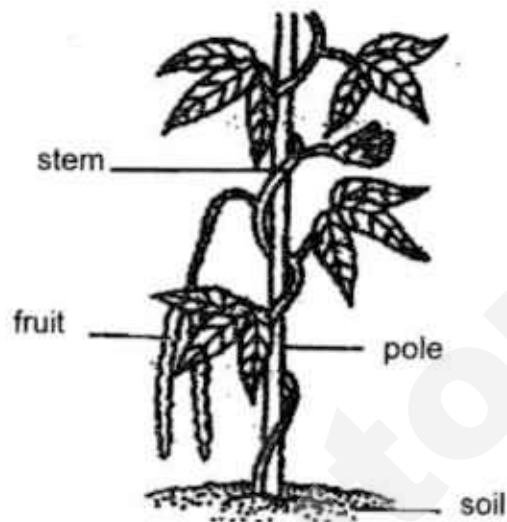


Based on the information above, state two characteristics of animal D. [2]

Characteristic 1	<hr/> <hr/>
Characteristic 2	<hr/> <hr/>

Score	2
-------	---

23. Study the diagram below carefully.



Read the following statements about the plant above.

Put a tick (✓) against each statement in the boxes below to show if it is true or false.

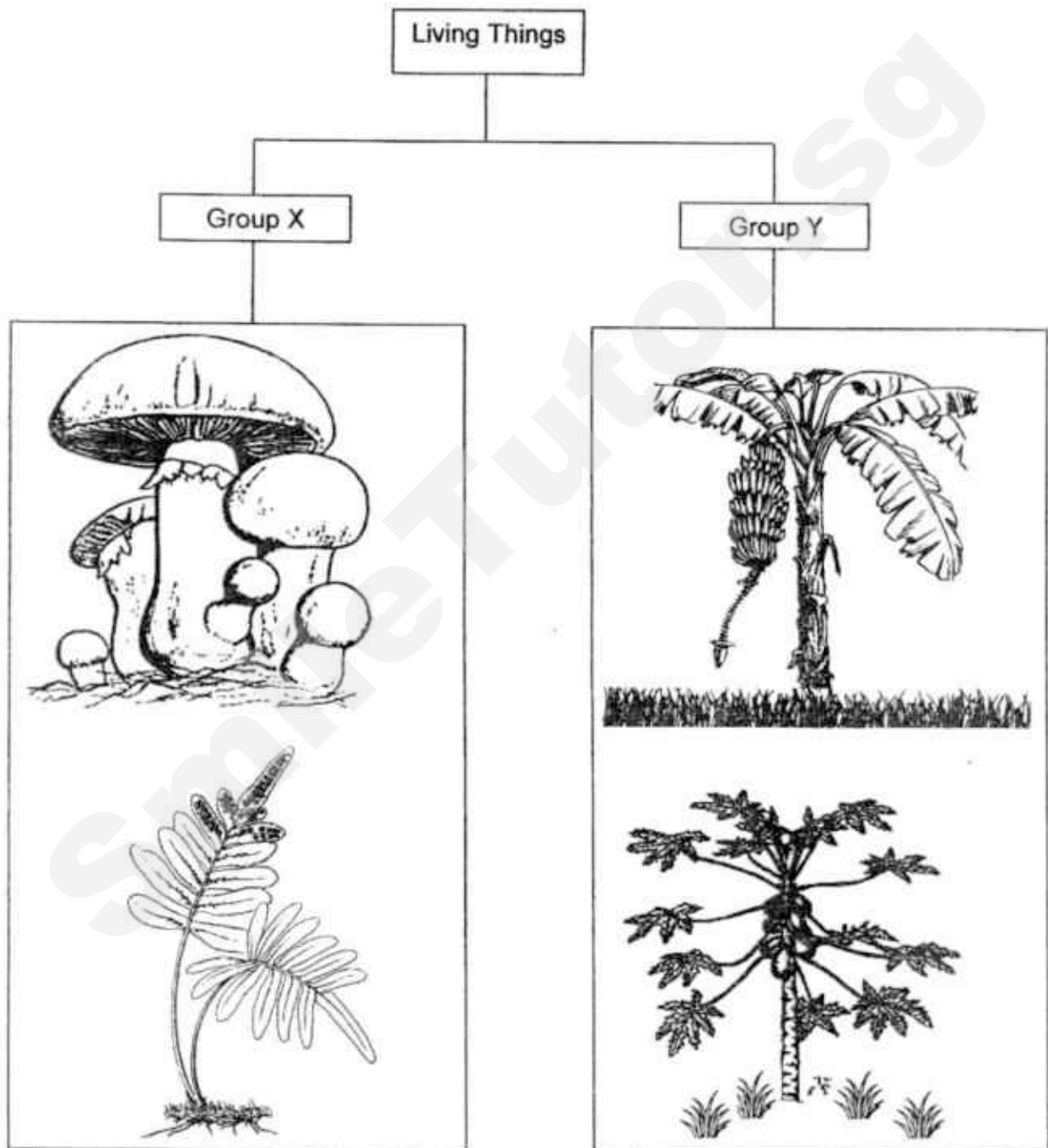
[2]

	Statements	True	False
(a)	This plant is a water plant.		
(b)	This plant has a weak stem.		
(c)	This plant reproduces by seeds.		
(d)	This plant is a non-flowering plant.		

Score	2
-------	---

For questions 24(a) and 24(b), refer to the diagrams below.

24. Study the living things that have been classified under Group X and Y as shown in the diagrams below.



Continue on next page

Continued from previous page

- (a) Based on your observations on the living things in the classification table, state two similar observable physical characteristics between the living things in Group Y.

[2]

Similarity 1	<hr/> <hr/> <hr/>
Similarity 2	<hr/> <hr/> <hr/>

- (b) Write a suitable sub-heading each for X and Y.

[1]

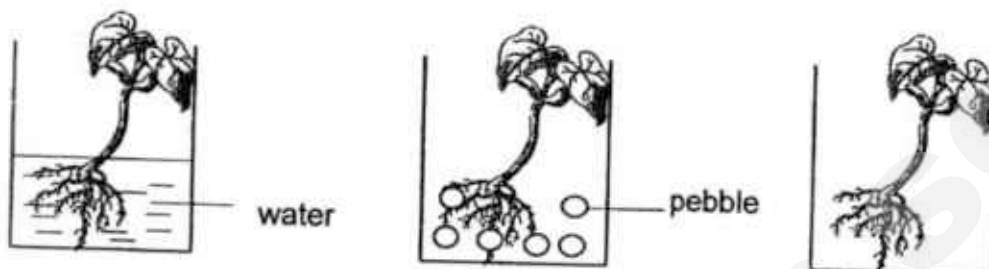
X: _____

Y: _____

Score	<hr/> <hr/> <hr/>
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2017 P3 Science SA 1

25. Jenny conducted an experiment as set up below. She placed three identical plants in beakers near an open window as shown below.



- (a) What would happen to Plant B and C after one week? [1]

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

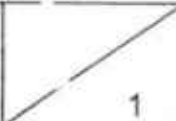
Score	2
-------	---

26. During a Science lesson, 3 students made the following statements about fungi.

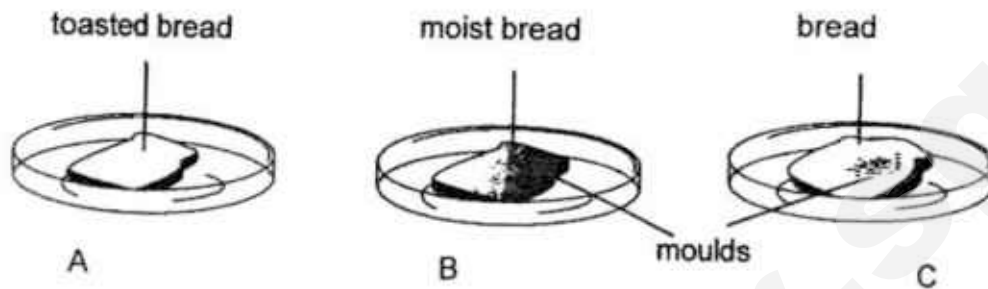
Peter: All fungi are harmful.
Tom : Fungi are non-living things.
John : Fungi can reproduce by spores.

Who made the correct statement about fungi?

[1]

Score	
-------	---

27. Mimi placed three identical slices of bread, A, B, and C under different conditions and recorded her observations after a week as shown below.



- (a) Arrange the breads A, B and C in order, starting with the one that has moulds appearing first. [1]

- (b) Based on her observations, state **ONE** condition present that encourages the growth of bread moulds. [1]

Score	2
-------	---

28. The table below shows the properties of materials A, B and C. A tick (✓) shows that the property is present.

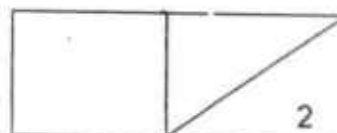
Property Material	Flexibility	Absorbs water	Allows light to pass through
A	✓	✓	
B		✓	✓
C	✓		✓

- (a) Based on the information above, state the properties of Material B. [1]

The diagram below shows a camping tent.

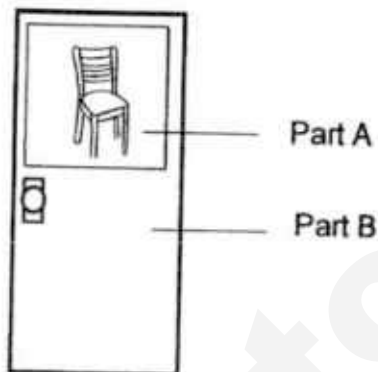


- (b) John chose material A to make into a camping tent to ensure he could be protected from wet weather during an outdoor camp. Do you agree with his choice? Explain your answer. [1]



29. A chair was placed behind the door. Jennifer could see the chair clearly when she looked through Part A of the door.

Front view

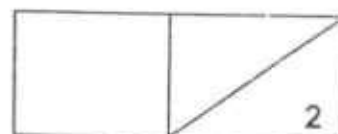


- (a) Name a suitable material which Part A is made of.
Explain your answer.

[1]

- (b) Jenny could not see the chair at all when she tried to look through Part B of the door. Name a suitable material which Part B is made of.
Explain your answer.

[1]



30. John had three bags made of different materials.

He added 1-kg objects, one at a time, into Bag A until it started to break. He repeated the experiment with Bags B and C and recorded the results in the table below.

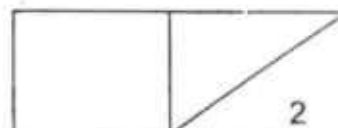
Bag	Greatest number of weights the bag can hold without breaking
A	3
B	1
C	5

- (a) Name the property of material that John is testing in his experiment. [1]

- (b) John chose Bag A to carry an object weighing 4kg.
Did he make the right choice? Give a reason for your answer.

[1]

The End of Paper



ANSWER KEY

YEAR : 2017
LEVEL : PRIMARY 3
SCHOOL : RAFFLES GIRLS' PRIMARY SCHOOL
SUBJECT : SCIENCE
TERM : SA1

SECTION A (18 x2marks)

Q 1	Q 2	Q 3	Q 4	Q 5	Q 6	Q 7	Q 8	Q 9	Q 10
3	4	4	3	3	3	2	1	1	3
Q 11	Q 12	Q 13	Q 14	Q 15	Q 16	Q 17	Q 18		
4	2	2	4	1	2	3	4		

SECTION B (24 marks)

Q19. I do not agree with her because it does not need air , food and water and cannot reproduce.

Q20. Living things: B, D Non-living things: A, C

Q21. Difference 1 : Animal X has scales but Animal Y has feathers.
Difference 2: Animal Y has wings but Animal X does not.

Q22. Characteristic 1: It lays eggs.
Characteristic 2: It flies.

Q23.a) False b) True c) True d) False

Q24.a) Similarity 1: They both have a strong stem
Similarity 2: They both bear fruits

b) X: Reproduces by seed Y: Reproduces by spores

Q25.a) They will die.

b) They did not have any water.

Q26. John

Q27.a) B , C , A

b)Water

Q28.a) It absorbs water and allows light to pass through.

b) I do not agree with his choice as the material used will absorb water.

Q29.a) Glass . It is transparent

b)Metal. It is opaque

Q30.a) Strength

b) No . The bag will tear as it can only hold a maximum of 3 kg objects.

THE END

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SINGAPORE CHINESE GIRLS' SCHOOL (PRIMARY)

FIRST SEMESTRAL ASSESSMENT 2017

NAME: _____ ()

DATE: 4 MAY 2017

CLASS: PRIMARY 3 SY / C / G / SE / P

Parent's Signature:

SCIENCE
BOOKLET A

15 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.

Part I (30 marks)

For each question from 1 to 30, 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. Peter observed the following object for a week.



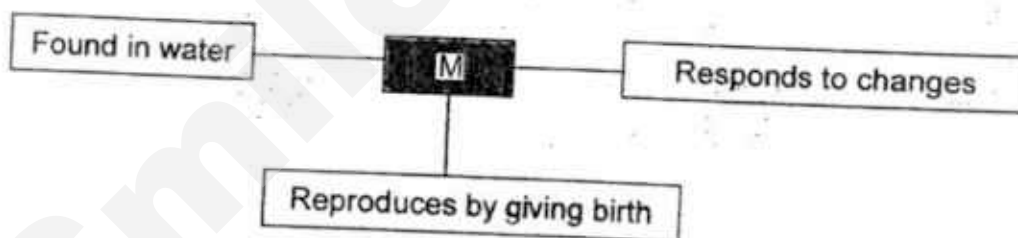
Which of the following observations tell him that the object is a **non-living** thing?

- A: It wags its tail.
B: It does not take in water.
C: It has 2 eyes and four legs.

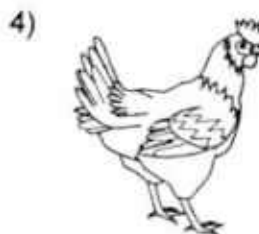
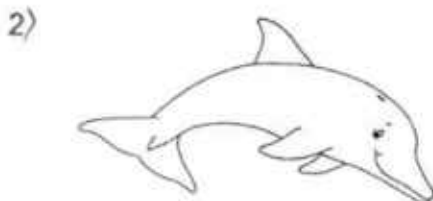
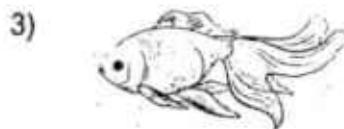
- 1) B only
2) C only

- 3) A and C only
4) B and C only

2. Study the information below about Object M.



Which of the following could Object M be?



3. Look at the 2 groups of things below.



How are the things in Group A different from those in Group B?

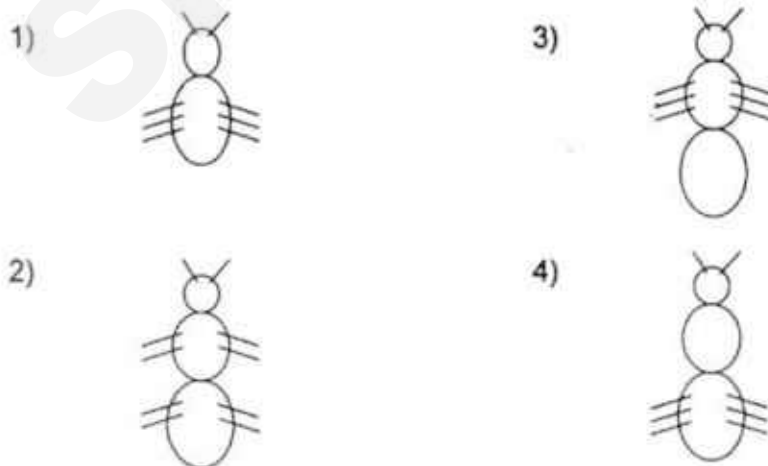
	Group A	Group B
A:	Not alive	Alive
B:	Respond to changes	Does not respond to changes
C:	Cannot reproduce	Can reproduce
D:	Do not need air, food and water	Need air, food and water

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

4. Which one of the following pairs of animals has similar outer coverings?

- | | |
|-----------------------|-----------------------|
| 1) Ostrich and pigeon | 3) Turtle and eagle |
| 2) Guppy and whale | 4) Toad and crocodile |

5. Betty did 4 sketches of insects. Which of the following is the correct sketch?



6. Study the table below.

Animal	Number of legs		Methods of reproduction	
	2	4	Lays eggs	Gives birth
X	✓		✓	
Y		✓		✓

What outer body coverings do Animals X and Y most likely have?

	Animal X	Animal Y
1)	Feathers	Shell
2)	Feathers	Hair
3)	Shell	Hair
4)	Shell	Feathers

7. Linda asks the following questions about an animal.
Which of the following questions will help her identify an amphibian?

- 1) Does it give birth to young alive?
- 2) How many legs does it have?
- 3) Does it breathe through lungs?
- 4) Can it breathe both on land and in water?

8. Sandy classified some animals into 2 groups, K and M.

Group K	Group M
Goldfish	Butterfly
Dolphin	Tiger
Prawn	Sheep

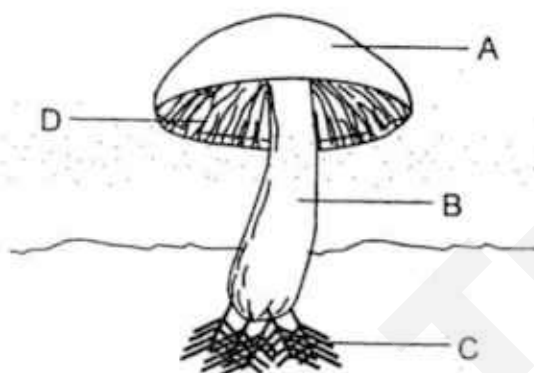
Which of the following pairs can be classified under Groups K and M correctly?

	Group K	Group M
1)	Lion	Grasshopper
2)	Anteater	Penguin
3)	Shark	Beetle
4)	Ostrich	Guppy

9. Which of the following are true about ferns?

- A) They can make food.
 - B) They do not bear fruits.
 - C) They reproduce by spores.
 - D) They grow in dark and damp places.
- 1) A, B and C only 3) B, C and D only
2) A, C and D only 4) A, B, C and D

10. Look at the fungus shown below.



Which of the following contains the spores of the fungus?

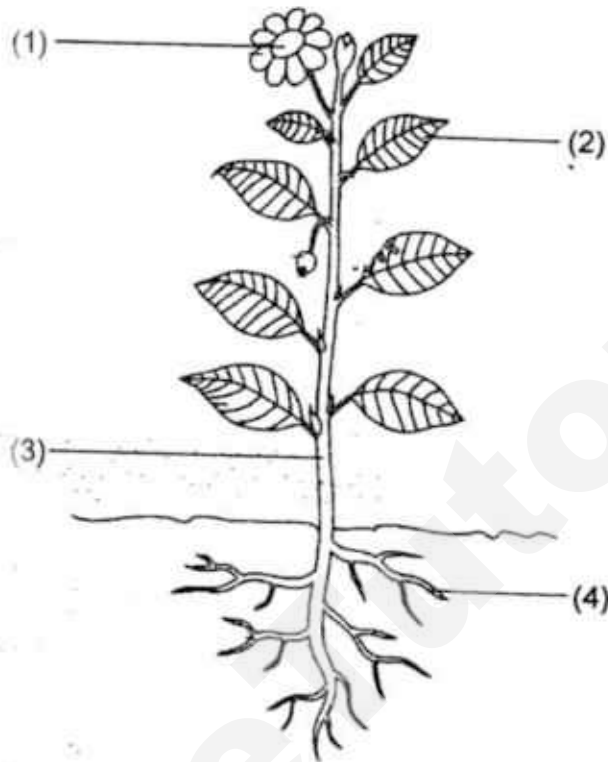
- 1) A 3) C
2) B 4) D

11. Which of the following would fungi feed on?

- A) Tree bark
 - B) Leather boots
 - C) Slice of cake
 - D) Dead chicken
- 1) D only 3) A, B and C only
2) C and D only 4) A, B, C and D

12. Look at the picture of a plant below.

Which part, 1, 2, 3 or 4 will become a fruit?



13. Some materials have been classified in the table below.

Group W	Group X	Group Y
Glass Clay Sand	Cotton Rubber Wood	Leather Milk R

Which of the following could R be?

- | | |
|---------|------------|
| 1) Silk | 3) Paper |
| 2) Iron | 4) Plastic |

14. The picture below shows a pair of swimming goggles.



What are S and T likely to be made of?

	S	T
1)	Paper	Rubber
2)	Plastic	Rubber
3)	Glass	Metal
4)	Rubber	Plastic

15. Observe the picture of the car below.



Which material is the most suitable for making Part A of the car?

Materials	Properties		
	Floats on water	Breakable	Allows light to pass through
(1)		✓	✓
(2)		✓	
(3)	✓		
(4)	✓	✓	

End of Booklet A

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SINGAPORE CHINESE GIRLS' SCHOOL (PRIMARY)

FIRST SEMESTRAL ASSESSMENT 2017

NAME: _____ ()

DATE: 4 MAY 2017

CLASS: PRIMARY 3 SY / C / G / SE / P

Parent's Signature: _____

SCIENCE
BOOKLET B

	Total Actual Marks	Total Possible Marks
Booklet A		30
Booklet B		20
Total		50

7 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.

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Name: _____ ()

Date: 4 MAY 2017

Class: Primary 3 SY / C / G / SE / P

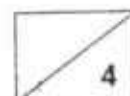
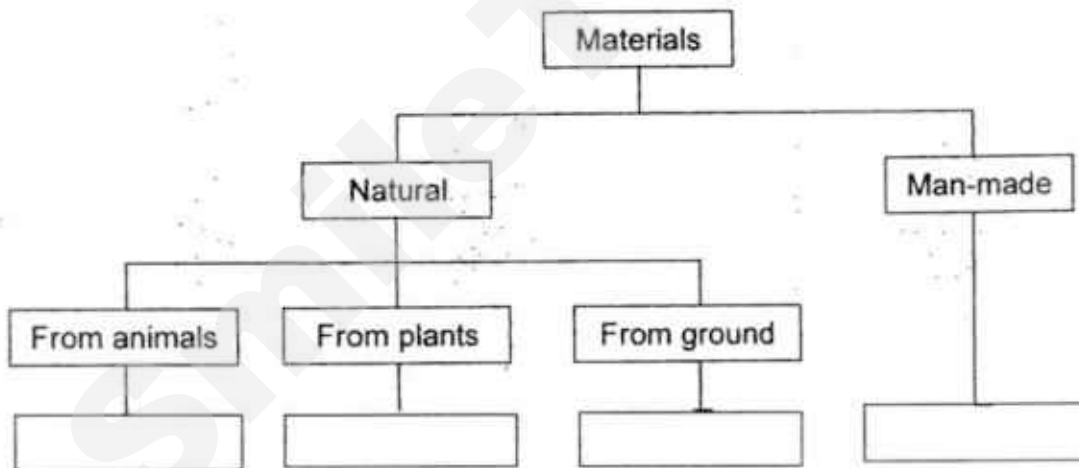
Part II (20 marks)

Answer all the following questions.

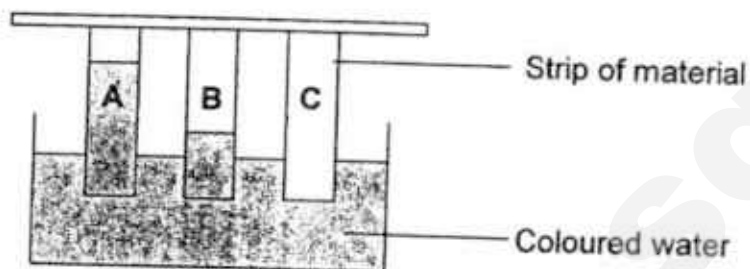
16. Look at the materials listed in the box below.

Gold	Wool
Paper	Plastic

Classify these materials into the correct group in the classification chart shown below. [4]



17. Kris has 3 different materials, A, B and C. She cuts a strip of equal size from each material and places one end of each strip into a container of coloured water. The diagram below shows the results after 20 minutes.



- a) Which material absorbed the most water?

[1]

- b) Which material, A, B or C, is the most suitable for making Part Z of the umbrella?

[1]

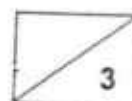


- c) Study the picture below.



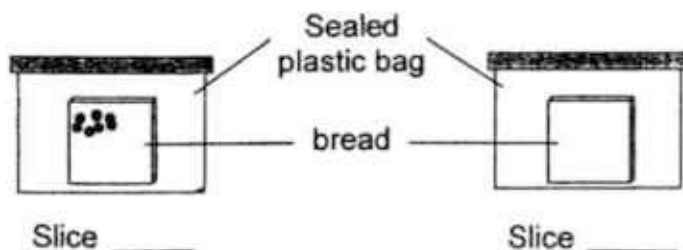
Explain why Material C is the best choice for making part F?

[1]



18. Cindy cut 2 slices of bread from the same loaf. Slice A is toasted while Slice B is sprinkled with water. They are then placed in a sealed plastic bag and put on a table for 5 days.

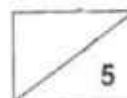
Below are the results which Cindy observed after 5 days.



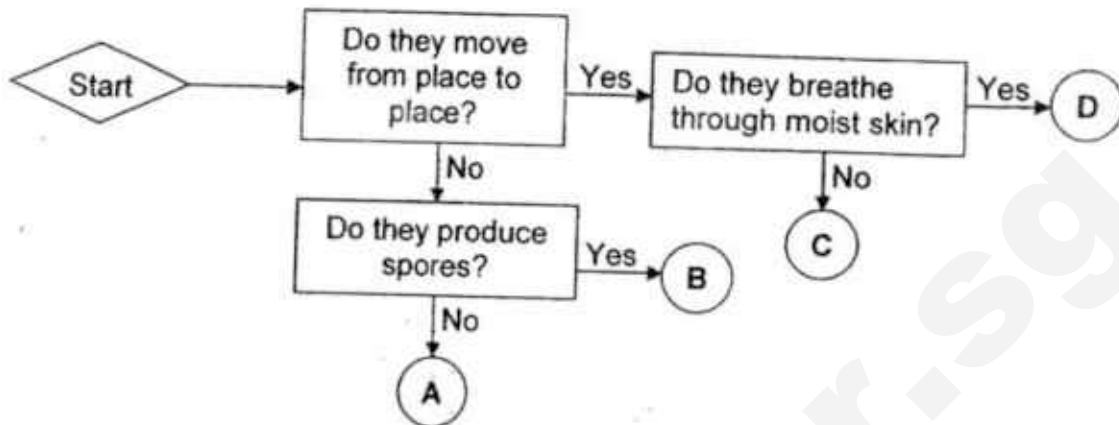
- a) Label the above diagrams 'A' and 'B' to identify which piece of bread was toasted and which was sprinkled with water. [1]
- b) What are the black dots which Cindy observed? [1]
- _____
- c) State what else Cindy can do to prevent the black dots from appearing on the bread after 5 days. [1]
- _____

19. Read the following statements about Bacteria. Tick 'True' for true statements and 'False' for false statements. [2]

	Statements	True	False
a)	All bacteria cause disease.		
b)	Bacteria can be observed using a microscope.		
c)	Bacteria can only be found on land.		
d)	Bacteria need air, food and water to survive.		



20. Study the flowchart below carefully.



a) Based on the above chart, describe the characteristics of living thing C. [1]

b) Based on the above chart, state a difference between living things A and B. [1]

c) Based on the above chart, fill in the boxes by writing A, B, C and D for each of the living things below. [2]

Rose plant	
Grasshopper	
Moss	
Frog	





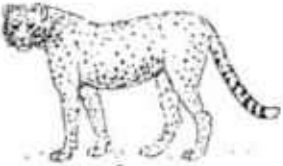

21. Isa was shown the 2 objects below. He then wrote what he found out about the objects below.



However, what he wrote had some missing words. Help to complete it with suitable words. [2]

Both objects are non-living things. However, the wooden bench was made from things that were _____ while the computer was made from things that were _____.

22. Circle the correct method of breathing for each animal. [2]

<p>a)</p> 	<p>c)</p> 
<p>gills / lungs / skin</p>	<p>gills / lungs / skin</p>
<p>b)</p> 	<p>d)</p> 
<p>gills / lungs / skin</p>	<p>gills / lungs / skin</p>

End of Booklet B

B - 7



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EXAM PAPER 2017

LEVEL : PRIMARY 3
SCHOOL : SCGS
SUBJECT : SCIENCE
TERM : SA1

Booklet A

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

Booklet B

- Q16 Wool, Paper, Gold, Plastic.
- Q17 (a) Material A
(b) Material C
(c) Material C is waterproof
- Q18 (a) B, A
(b) Bread mould
(c) She can put the bread in the fridge.
- Q19 (a) False
(b) True
(c) False
(d) True
- Q20 (a) C can move place to place and does not breathe through moist skin.
(b) B can produce spores but A cannot produce spores.
(c) A, C, B, D
- Q21. once alive, never alive
- Q22a) lungs b) lungs c) gills d) lungs

END

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PRIMARY 3 MID-YEAR EXAMINATION 2017

Name : _____

Date: 8 May 2017

Class : Primary 3 ()

Duration: 1 hour

Marks: _____ / 28

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.

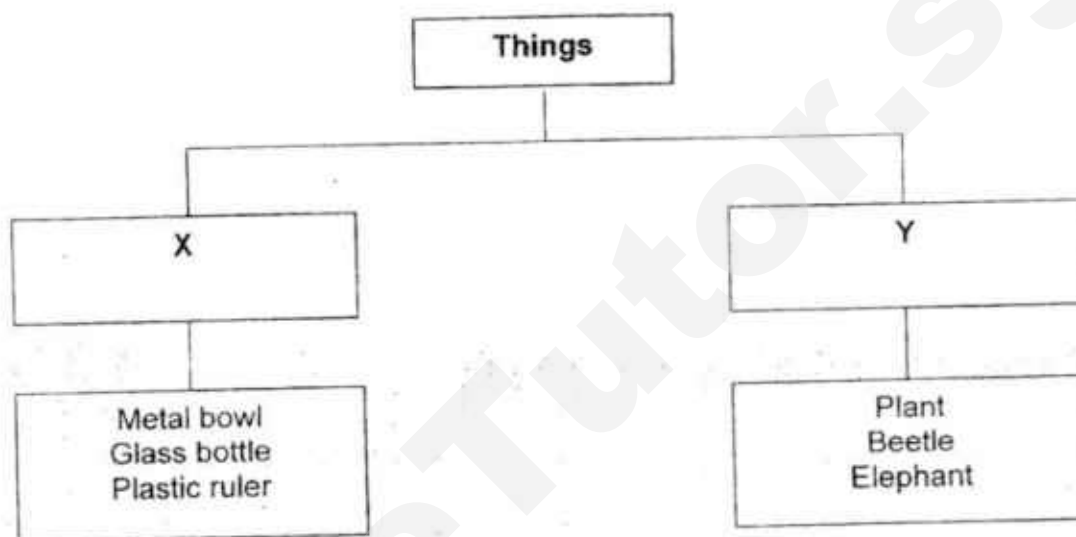
Answer all questions.

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

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.

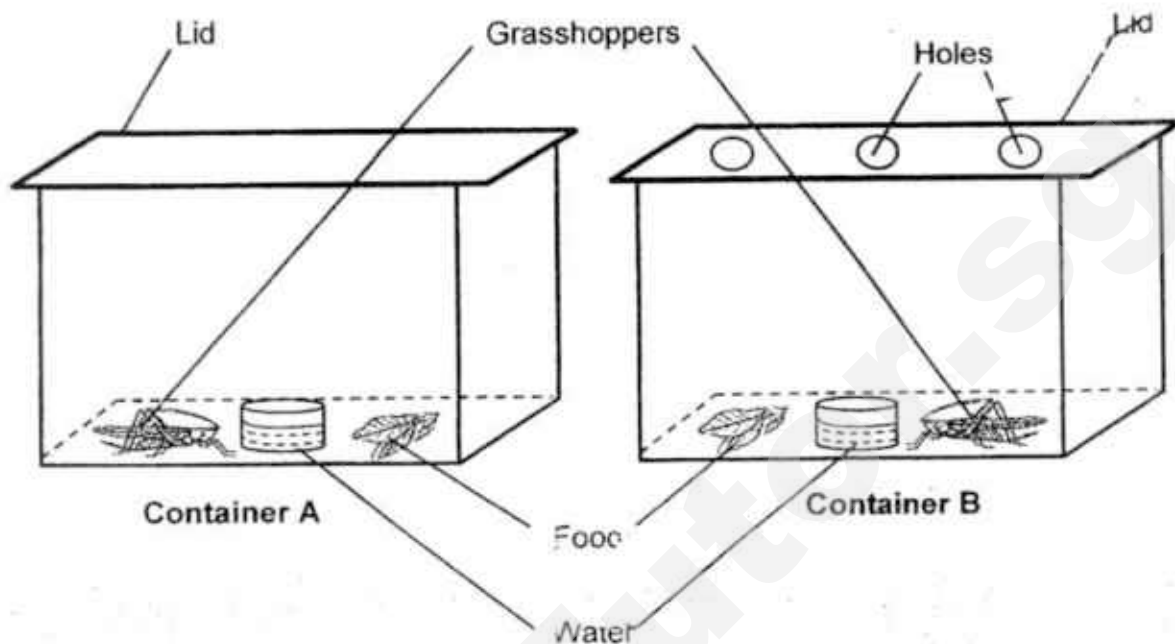
- 1 The diagram below shows how some things are classified based on the characteristics, X and Y.



Which of the following correctly describes the characteristics, X and Y?

	X	Y
(1)	Can grow	Cannot grow
(2)	Cannot reproduce	Can reproduce
(3)	Cannot make its own food	Can make its own food
(4)	Can respond to changes in the environment	Cannot respond to changes in the environment

2. Mei Ling placed 2 grasshoppers in 2 different glass containers as shown in the diagram below.



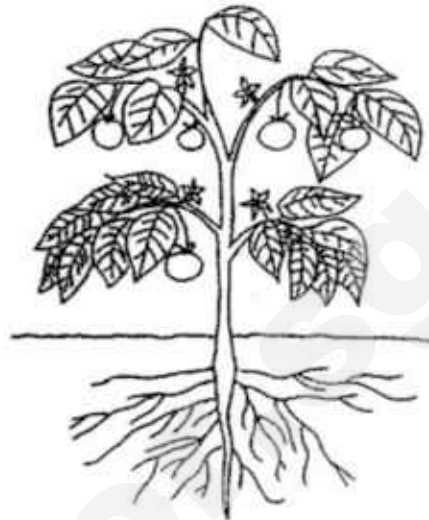
After 3 days, Mei Ling discovered that the grasshopper in Container A had died while the grasshopper in Container B was still alive. What does this experiment show about living things?

- (1) Living things need air to survive.
 - (2) Living things need food to survive.
 - (3) Living things need light to survive.
 - (4) Living things need water to survive.
3. Which of the following statements about flowering plants is true?
- (1) All flowering plants live on land.
 - (2) Flowering plants do not bear fruits.
 - (3) Flowering plants reproduce by seeds.
 - (4) Flowering plants reproduce by spores.

4. Below are Organism X and Organism Y.



Organism X

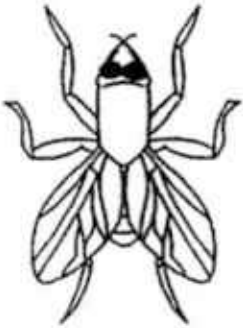
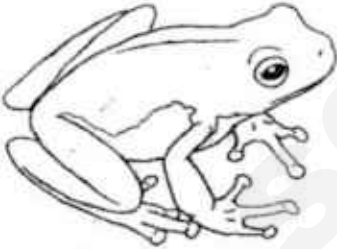

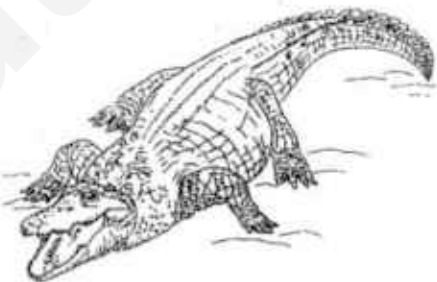


Organism Y

Which of the following statements describes Organism X and Organism Y?

- (1) Both can make food.
- (2) Both reproduce by spores.
- (3) Both need water to survive.
- (4) Both need sunlight to make food.

5. Tom classified some animals into 2 groups as shown below.

Group A	Group B
	
	

Which characteristic did Tom use to classify the animals?

- (1) Number of legs
- (2) Number of wings
- (3) Presence of eyes
- (4) Presence of beak

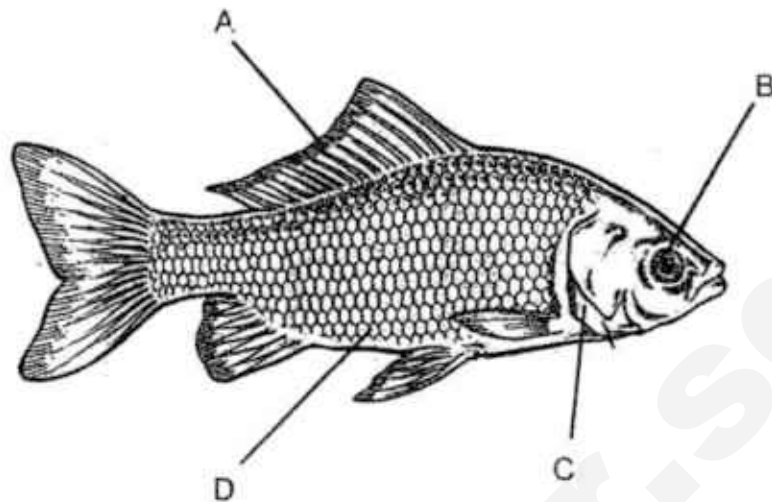
6. Some characteristics of Animal X, Animal Y and Animal Z are listed in the table below.

Characteristics	Animal X	Animal Y	Animal Z
Breathes through gills		✓	
Has scales as outer covering		✓	
Gives birth to young alive			✓
Has moist skin	✓		
Lays eggs	✓	✓	
Has hair on its body			✓

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

	Animal X	Animal Y	Animal Z
(1)	Frog	Dog	Crocodile
(2)	Goldfish	Crocodile	Dog
(3)	Dog	Goldfish	Frog
(4)	Frog	Goldfish	Dog

7. Look at the picture below.



Based on the picture above, which labelled part allows the fish to breathe?

- (1) A
 - (2) B
 - (3) C
 - (4) D
8. Look at the picture of a snake below.



Based on the picture above, which of the following statements is definitely true?


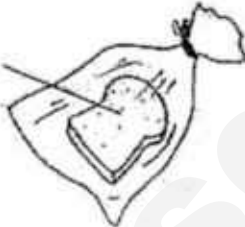

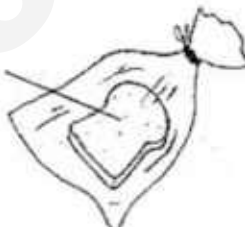
- (1) It has scales.
- (2) It breathes through gills.
- (3) It gives birth to its young
- (4) It feeds its young with milk.

9. Which of the following statements about bacteria are true?

- A: Bacteria can be harmful.
- B: Bacteria are non-living things.
- C: Bacteria are micro-organisms.
- D: Bacteria can be found in our bodies.

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

10. Siti put 4 slices of bread in identical plastic bags as shown below.

Set-up A	Set-up B
<p>Dry bread</p>  <p>Put in a Refrigerator</p>	<p>Wet bread</p>  <p>Put in a Refrigerator</p>
Set-up C	Set-up D
<p>Dry bread</p>  <p>Put in a Wooden Cupboard</p>	<p>Wet bread</p>  <p>Put in a Wooden Cupboard</p>

Which set-up would be the first to have fungi growing on its bread?

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

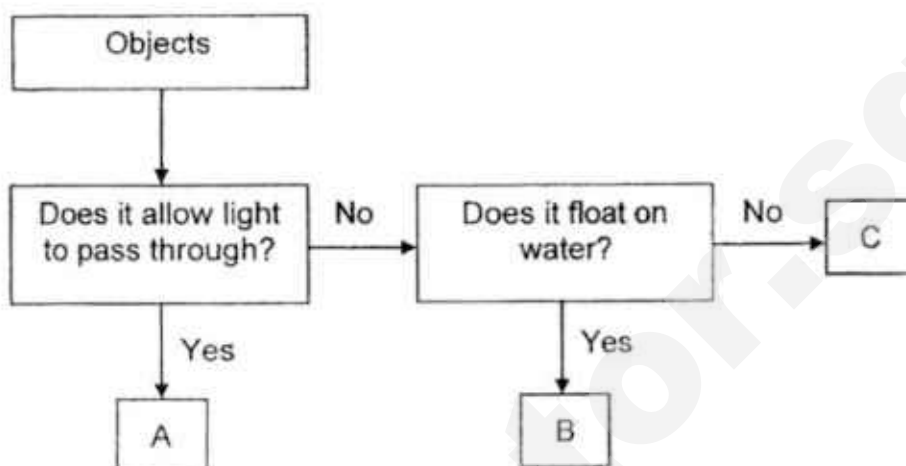
11. The drawing below shows a pair of spectacles and a shoe.



Which materials are most suitable to make the parts W, X, Y and Z?

	W	X	Y	Z
(1)	Metal	Metal	Rubber	Fabric
(2)	Plastic	Metal	Fabric	Rubber
(3)	Metal	Plastic	Fabric	Rubber
(4)	Plastic	Metal	Rubber	Fabric

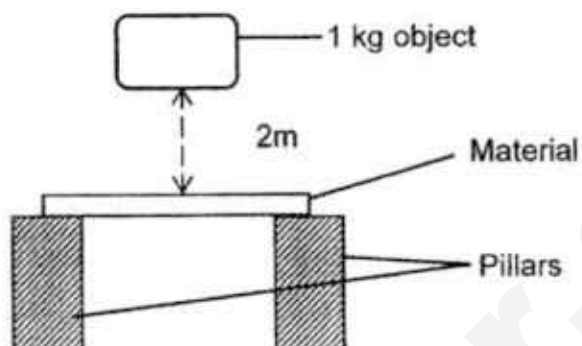
12. Study the flow chart below. A, B and C represent objects made of different materials.



Which of the following shows what A, B and C most likely represent?

	A	B	C
(1)	Magnifying glass	Metal Coin	Rubber band
(2)	Rubber band	Wooden chopsticks	Metal Coin
(3)	Metal Coin	Rubber band	Magnifying glass
(4)	Glass window	Wooden chopsticks	Metal Coin

13. Kumar wanted to compare the strength of four materials, R, S, T and U. He dropped a 1kg object from a height of 2m onto the material as shown below. The materials were of the same size, thickness and shape.



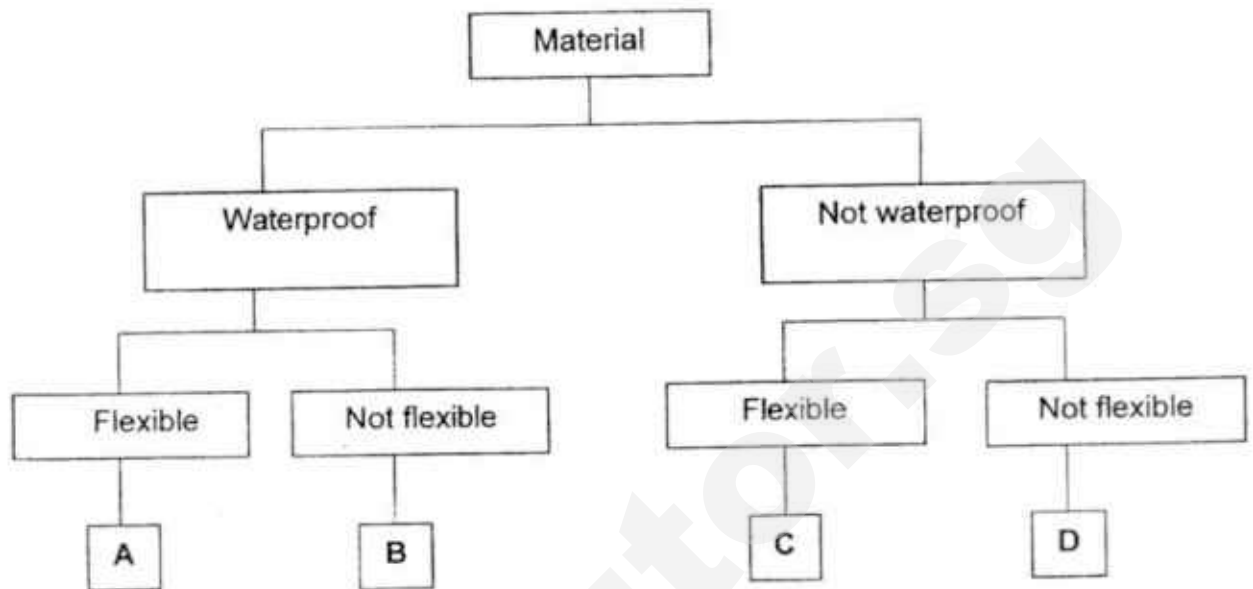
He noted the number of times the 1kg object was dropped before the material broke. His results are shown below.

Material	Number of times the 1kg object was dropped before the material broke
R	40
S	25
T	55
U	18

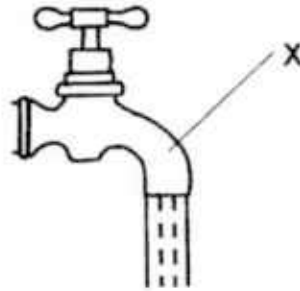
Based on the results above, which of the following conclusions is correct?

- (1) Material T is the weakest material.
- (2) Material U is the strongest material.
- (3) Material T is weaker than Material S.
- (4) Material R is stronger than Material U.

14. Study the classification chart below. A, B, C and D are materials.



Based on the classification chart given, which material, A, B, C or D is most suitable for making part X of the tap shown below?



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

– End of Booklet A –



PRIMARY 3 MID-YEAR EXAMINATION 2017

Name _____

Date: 8 May 2017

Class : Primary 3 ()

Duration: 1 hour

Marks: _____ / 2

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.

Write your answers in this booklet.

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Section B (22 marks)

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

15. Study the things below.



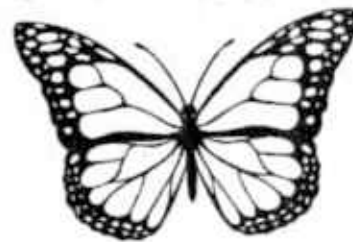
Ruler



Teddy Bear



Dead Leaves



Butterfly

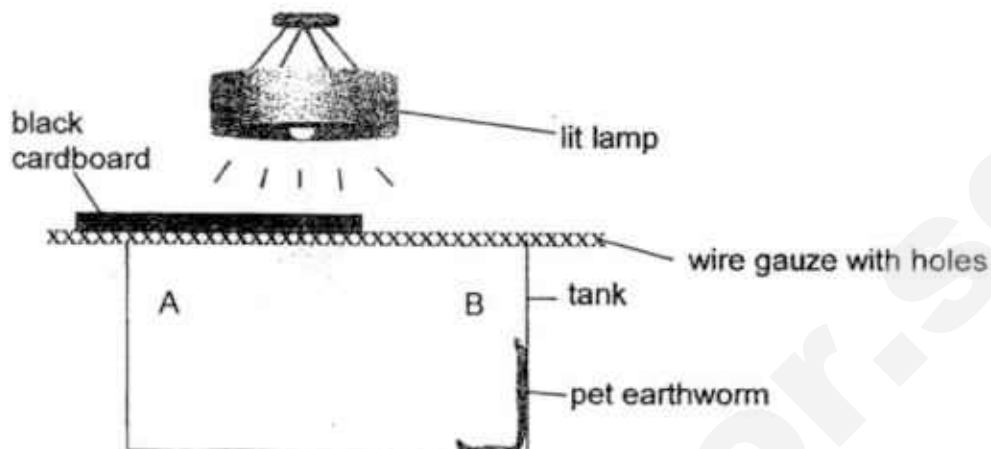
(a) Which of the above is a living thing?

(1m)

(b) Give a reason for your choice in (a).

(1m)

16. Mark conducted the following experiment on his pet earthworm. He set up a tank as shown below.

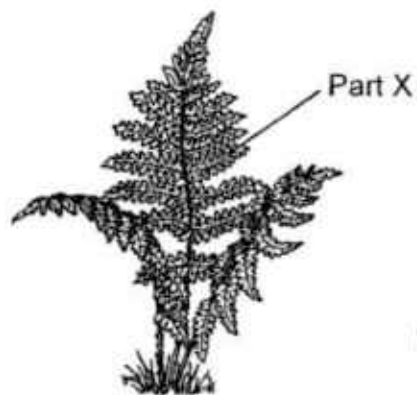


He placed his earthworm on side B of the tank and shone light over the earthworm. He observed the behaviour of his pet earthworm for five minutes. The earthworm moved towards side A, the covered side of the tank. He did the experiment 10 times. Each time, the earthworm moved towards side A.

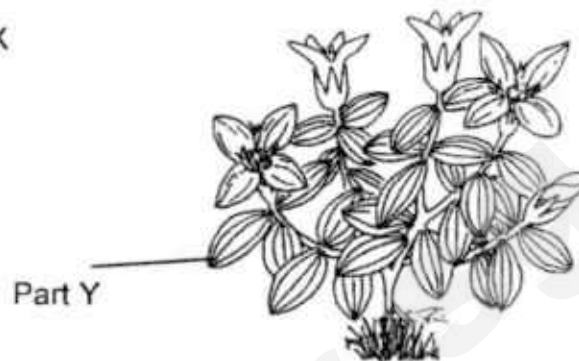
- (a) Mark then slid the black cardboard over to side B. Predict what his earthworm would do. (1m)

- (b) State a characteristic of living things shown in this experiment. (1m)

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



Plant A

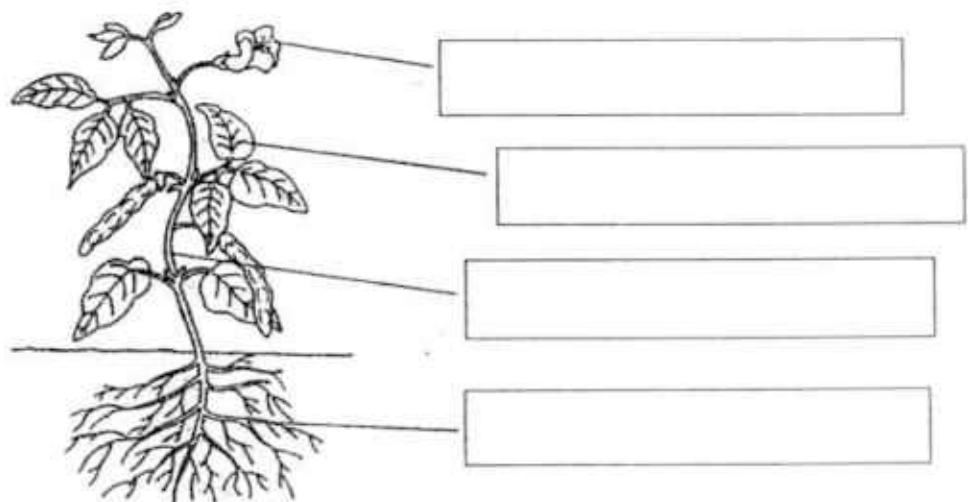


Plant B

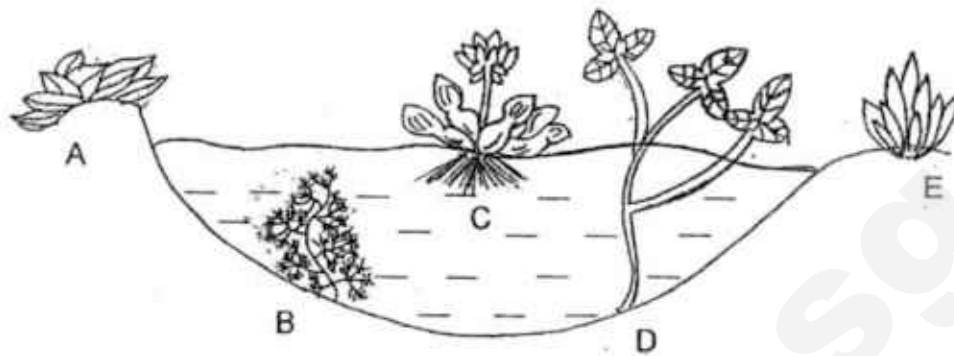
- (a) State one function of Part X and Part Y of the plants above. (1m)

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

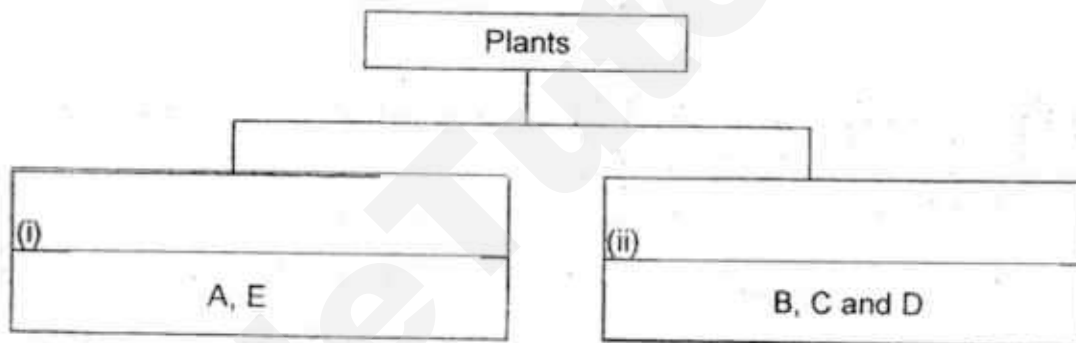
18. Name the plant parts marked A, B, C and D in the diagram below. (2m)



19. Study the diagram of some plants in a pond as shown below.

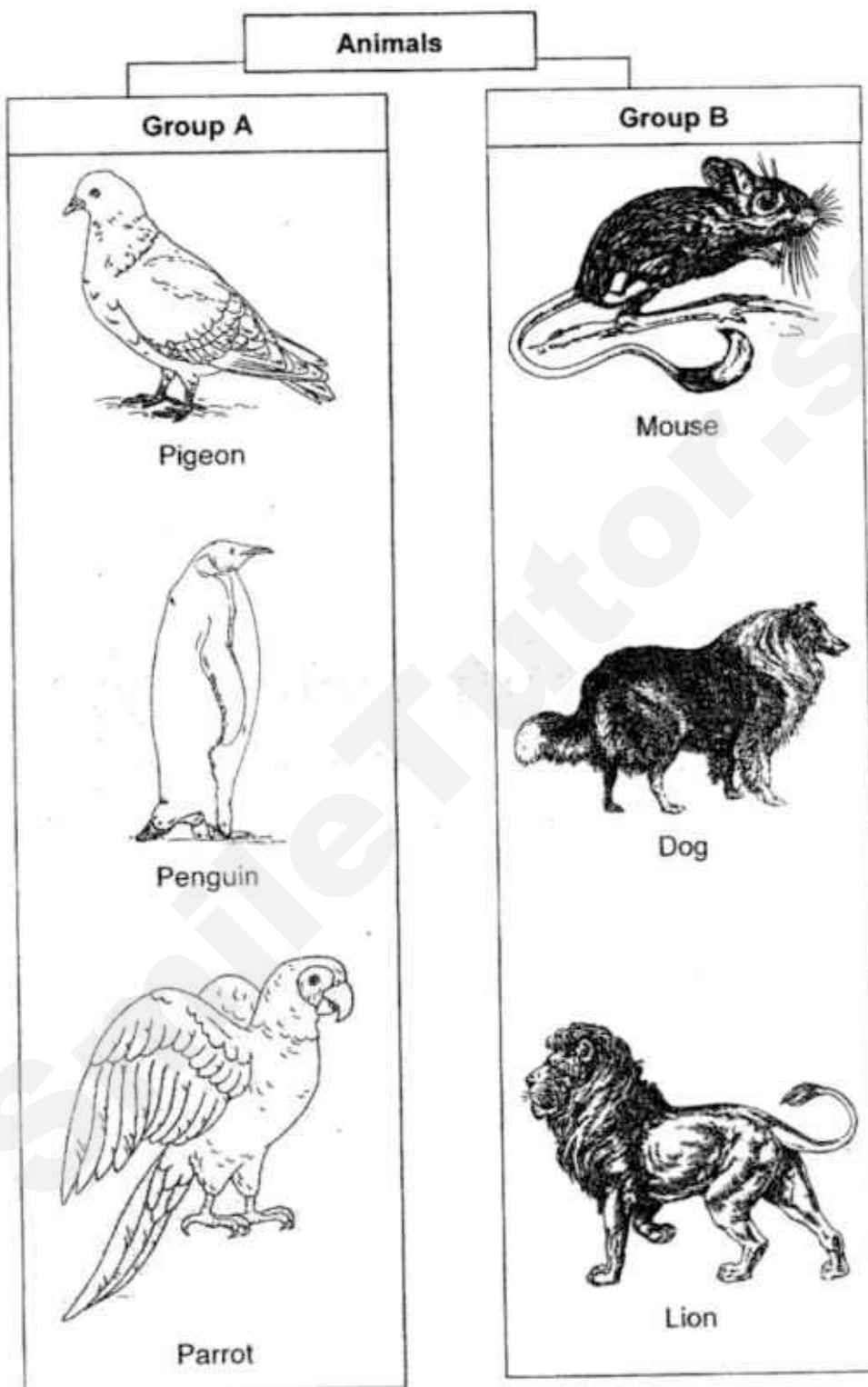


- (a) In the table below, the plants have been classified according to where they live. Give the headings (i) and (ii) of the two groups of plants in the boxes provided. (1m)



- (b) Can a Papaya Tree be grouped together with the plants B, C and D? Explain your answer. (1m)

20 Danny classified six animals into two groups as shown below.



- (a) State two differences in the characteristics of the animals in Group A and Group B. (2m)

Difference 1: _____

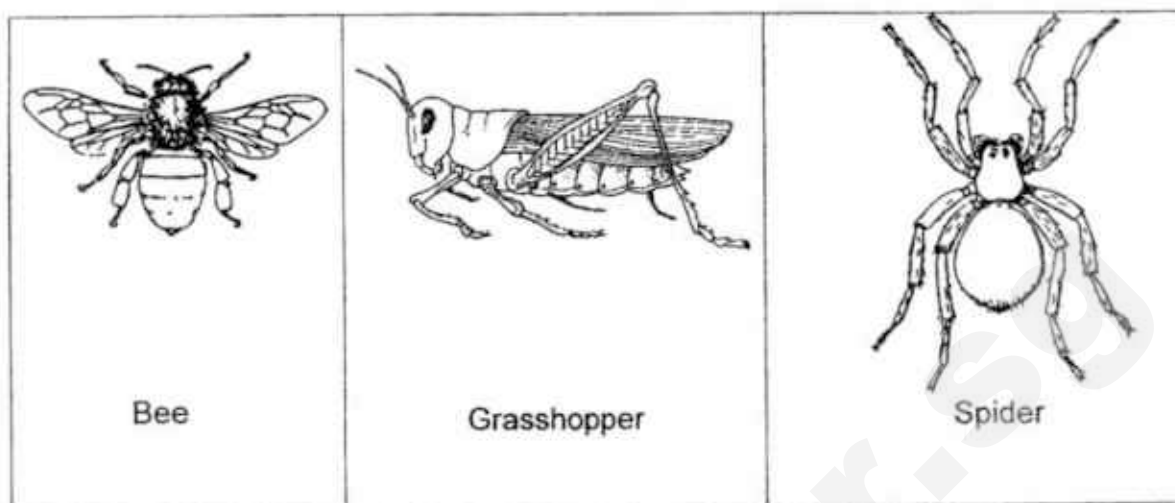
Difference 2: _____

- (b) The picture below shows an ostrich.



In Group A or Group B should Danny place the ostrich in? Based on the observable characteristics of the ostrich, give a reason for your answer. (1m)

21. Study the animals below.



(a) Which of the animals shown above is not an insect? (1m)

(b) Based on the diagrams above, give two reasons why it is not an insect. (2m)

Reason 1: _____

Reason 2: _____

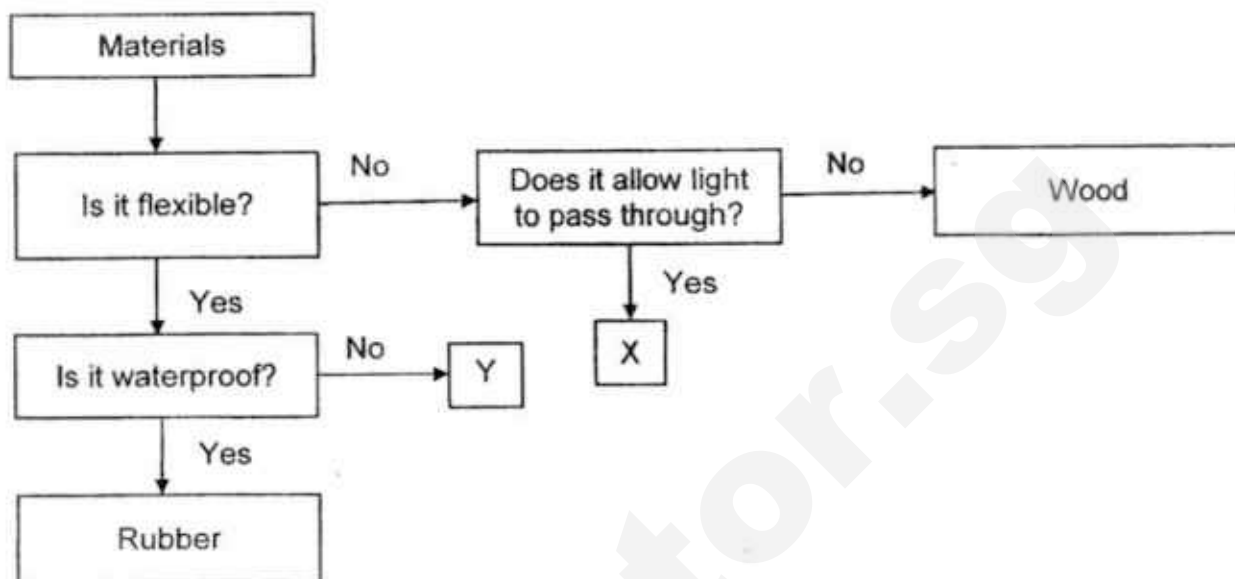
22. Xuan Xuan conducted an experiment to find out how water affected the growth of fungi. She put different amounts of water on three pieces of leather. She then observed the amount of fungi growing on them. The table below shows her observation.

Amount of water (ml)	Amount of fungi
2	small patch
4	medium patch
6	large patch

- (a) What happened to the amount of fungi when more water was added onto the leather? (1m)

- (b) Besides air and water, state another condition needed for the fungi to grow on the leather (1m)

23. Study the flowchart below. X and Y are materials.



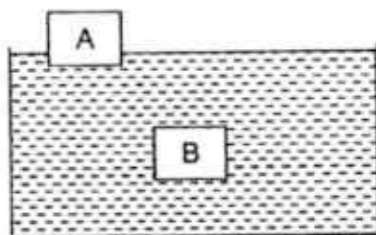
- (a) Based on the flowchart above, state all the characteristics of Material Y.

(1m)

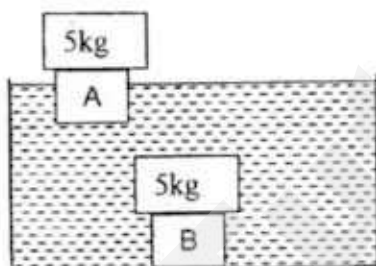
- (b) Give the name of the material that can be represented by X.

(1m)

24. Nura wants to choose a suitable material to make a swimming float. After dropping Materials A and B into a tank of water, her observation is as shown below.



When she places a 5 kg weight on each material, she observes what happens as shown below.



- (a) Nura concludes that Materials A and B are suitable for making swimming floats. Do you agree with her? Give a reason for your answer. (1m)

- (b) State another property a material must have in order to be used to make a swimming float. (1m)

– End of Paper –

EXAM PAPER 2017

LEVEL : PRIMARY 3
SCHOOL : TAO NAN PRIMARY SCHOOL
SUBJECT : SCIENCE
TERM : MID-YEAR EXAM

BOOKLET A**Section A**

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

BOOKLET B**Section B**

- Q15. (a) The butterfly is a living thing.
(b) It can respond to changes.
- Q16. (a) The earthworm would move to side B.
(b) Living things can respond to changes.
- Q17. (a) Part X and Part Y takes in air so the plant can make its own food.
(b) Plant B is a flowering plant where as plant A is not.
- Q18. A. flower
B. leave
C. stem
D. roots
- Q19. (a) (i) lives on land
(ii) lives in water
(b) No. A papaya tree only grows on land if it take in too much water it would die.

Qn	Suggested Answer/Answers	Reflection
15	(a) A butterfly. (b) A butterfly can reproduce but the dead leaves, ruler and teddy bear cannot.	<input checked="" type="checkbox"/> I compared
16	(a) The earthworm will move to side B. (b) Living things respond to changes.	
17	(a) Both parts make food for the plants. (b) Plant A is a non-flowering plant but Plant B is a flowering plant.	<input checked="" type="checkbox"/> I compared
18	A: Flower C: Stem B: Leaf D: Root	
19	(a) (i) land plants (ii) water plants (b) No. The papaya tree is a land plant but Plants B, C and D are water plants.	
20	(a) Difference 1: Animals in Group A have feathers while animals in Group B have hairs. Difference 2: Animals in Group A have beaks while the animals in Group B do not have/have mouths (b) Group A. The ostrich has wings just like the animals in Group A.	<input checked="" type="checkbox"/> I compared clearly <input checked="" type="checkbox"/> I compared clearly <input checked="" type="checkbox"/> I compared

Q20. (a) Difference 1: The animals in Group A has feathers but the animals in group B have hair.

Difference 2: The animals in Group A has wings but the animals in Group B does not.

(b) Group A. It has a beak and feathers like all the other animals in Group A.

Q21. (a) The spider is not an insect.

(b) Reason 1: It has eight legs and insect only has 6 legs.

Reason 2: It only has 2 body parts and insects has 3 body parts.

Q22. (a) The fungi grows even more.

(b) Fungi also need a warm environment.

Q23. (a) It is flexible but not waterproof.

(b) It could be glass.

Q24. (a) I do not agree with her. Material B sinks to the bottom of the fish tank when she adds a five kg weight into it. The person using it will drown.

(b) It must be waterproof.

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AI TONG SCHOOL

2017 END-OF-YEAR EXAMINATION PRIMARY THREE SCIENCE

DURATION: 1 hour

DATE: 31 OCTOBER 2017

INSTRUCTIONS

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

Name : _____ ()

Class : Primary 3 _____

Parent's Signature : _____

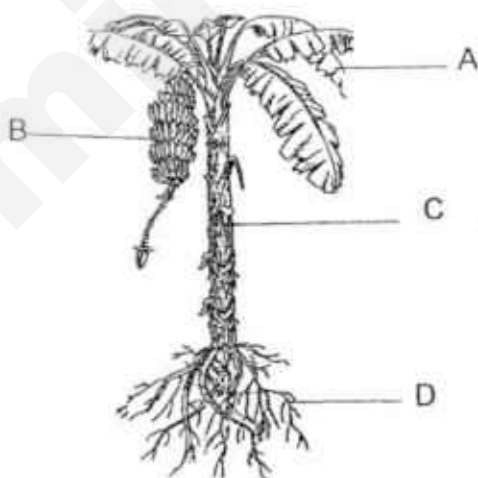
Date : _____

Booklet A	30
Booklet B	20
Total	50
Project Work	10
Total	60

Section A (15 x 2 marks)

For each question from 1 to 15, four options are given. One of them is the correct answer. Make your choice and shade the correct oval (1, 2, 3 or 4) on the Optical Answer Sheet.

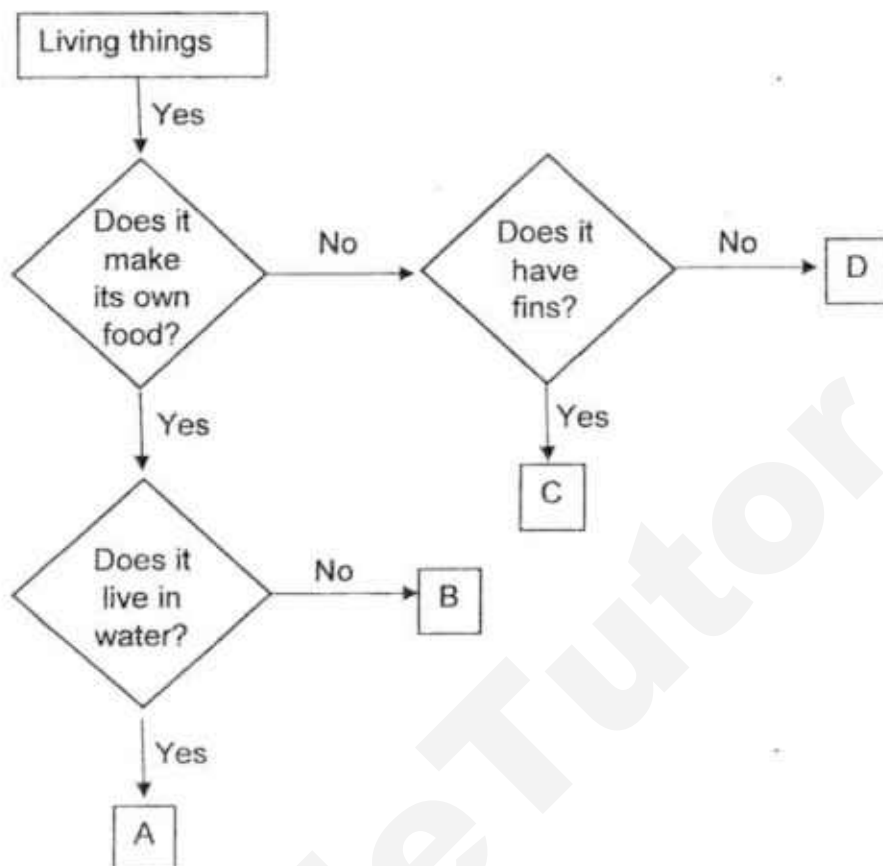
1. Which of the following is true about both fungi and bacteria?
 - (1) Both reproduce by spores.
 - (2) Both make their own food.
 - (3) Both can be useful or harmful to us.
 - (4) Both cannot be seen under a microscope.
2. Which of the following is not an example of a living thing responding to changes around them?
 - (1) A bird lays eggs in a nest.
 - (2) A snail hides itself in the shell when touch.
 - (3) A dog barks when a stranger approaches it.
 - (4) A plant grows toward the direction of the sunlight.
3. The diagram below shows a plant.



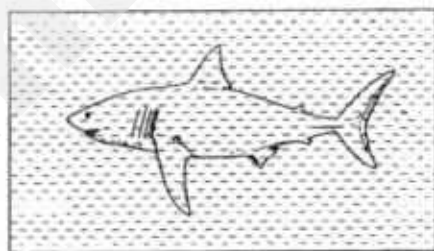
Which part of the plant tells you that it is a flowering plant?

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

4. Study the chart below.



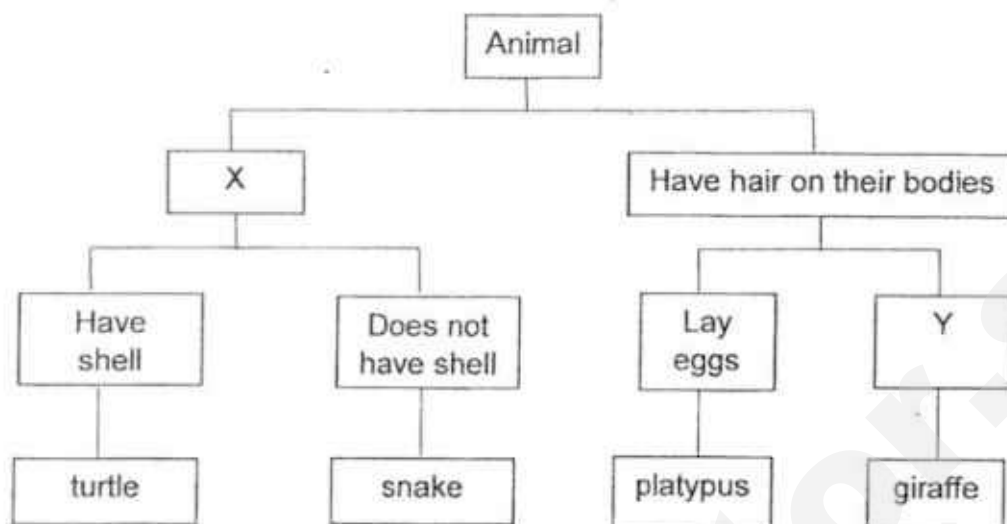
The diagram below shows living thing P.



Based on the chart above, which of the following correctly represents living thing P?

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

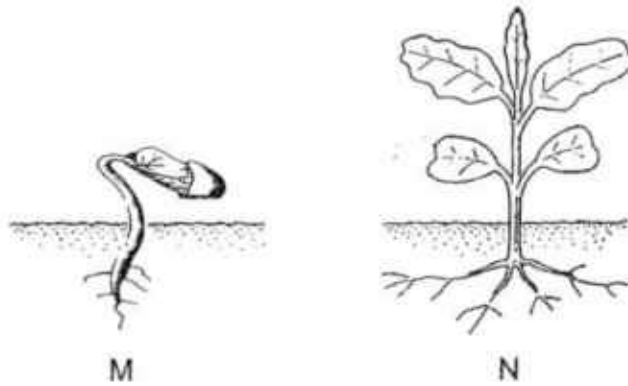
5. Study the classification chart below.



Which one of the following best represents X and Y?

	X	Y
(1)	Have dry skin covered with scales	Give birth to young
(2)	Have feathers on their bodies	Live on land
(3)	Have bodies divided into 3 parts	Breathe through their moist skin
(4)	Have a hard outer covering	Does not have shell for protection

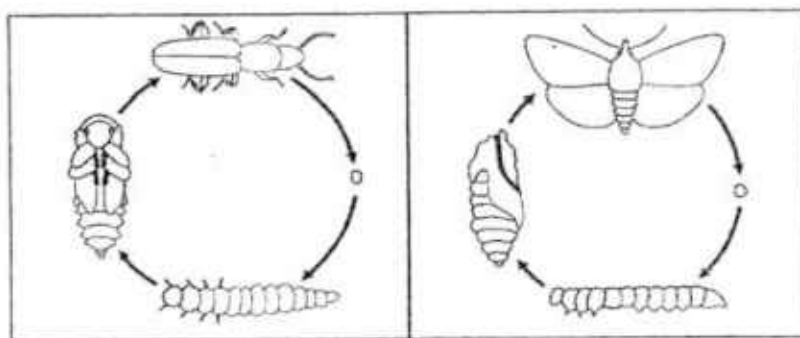
6. The diagram below shows two different stages, M and N, in the life cycle of a plant.



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

- (1) The plant has roots in both stages.
- (2) The plant makes food in both stages.
- (3) The plant does not take in water at stage M.
- (4) The plant only needs food to grow at stage N.

7. The diagram below shows the life cycle of living things P and Q.



Life cycle of living thing P

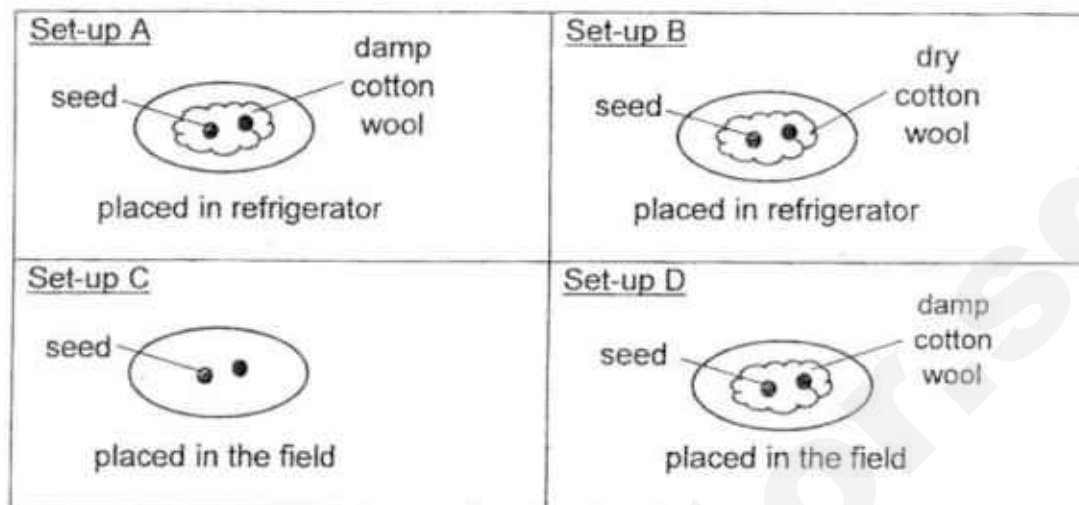
Life cycle of living thing Q

Based on the diagram above, which of the following correctly states the similarities between the life cycles of P and Q?

- A Their young look like their adults.
- B They have 4 stages in their life cycles
- C Both life cycles have the nymph stage.
- D Their eggs take the same amount of time to hatch after they are laid.

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

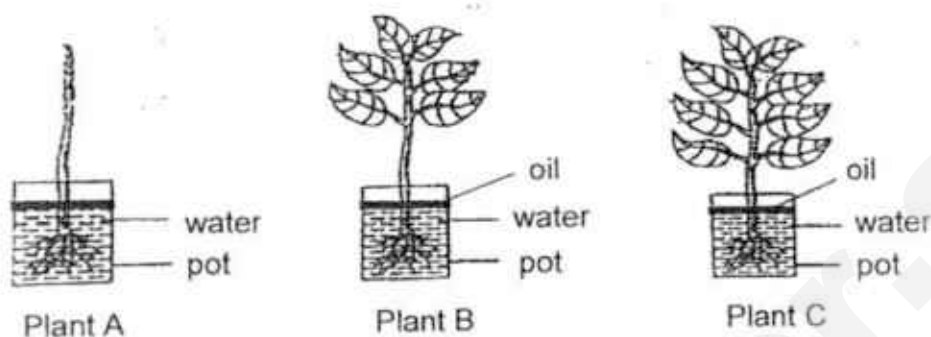
8. Fredric wanted to find out if temperature affects the germination of seeds.



Which two set-ups should he use?

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

9. Ahmad conducted an experiment with three similar plants, A, B and C. He cut off all the leaves from plant A and only some leaves from plant B. No leaves were cut from plant C.



Ahmad then placed each plant in a pot containing 500 ml of water. The plants were placed at the same location. A layer of oil was added to prevent water loss to the surrounding air.

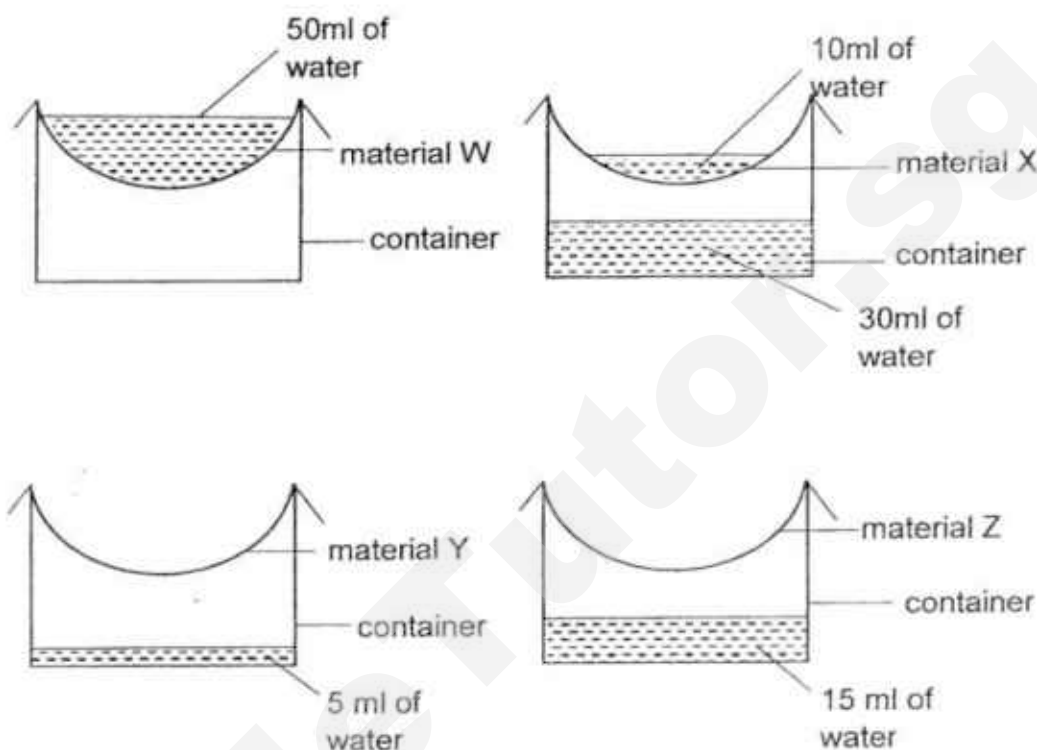
After ten hours, he recorded the volume of water left in each pot.

Plant	Volume of water left in the pot after ten hours (ml)
A	500
B	300
C	200

What was the aim of the experiment?

- (1) To find out if the roots of a plant absorb water.
- (2) To find out if the stem of a plant transports water
- (3) To find out if the type of plant affects the volume of water taken in by the plant.
- (4) To find out if the number of leaves affects the volume of water taken in by the plant.

10. Jimmy carried out an experiment with four sheets of different materials, W, X, Y and Z. The materials are of the same size. He put each sheet over a container as shown below and poured 50 ml of water onto each of them. Five minutes later, he observed the following.

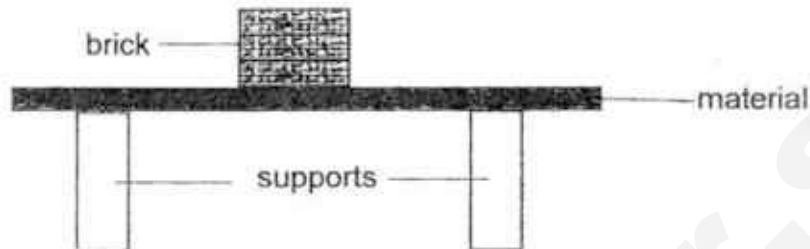


Based on the results of his experiment, which material is most suitable for making part L of a camping tent.



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

11. Roy carried out an experiment using four different materials, E, F, G and H. Material E was first placed over two supports as shown in the diagram below. Bricks, weighing 1kg each, were then stacked on material E, one at a time, until it broke.



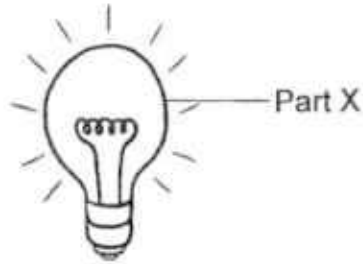
He recorded the number of bricks needed to break material E in the table below and repeated his experiment with materials F, G and H.

Material	Number of bricks needed to break the material
E	2
F	6
G	3
H	10

Based on the information above, which materials should Roy choose if he wanted to make a box that would be able to hold a weight of 5kg?

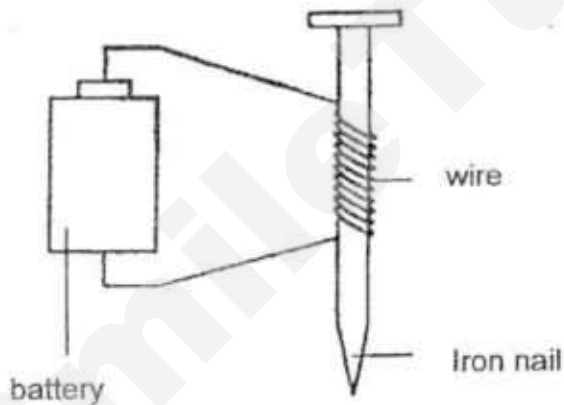
- (1) E and G only
- (2) F and H only
- (3) E, G and H only
- (4) E, F, G and H

12. Part X of a light bulb is usually made of **glass**. What is the most important physical property the material used to make part X must have?



The material must _____.

- (1) float on water
 - (2) be broken easily
 - (3) allow light to pass through
 - (4) be able to bend without breaking
13. The set-up below shows how a magnetic material can be **made** into an electromagnet.

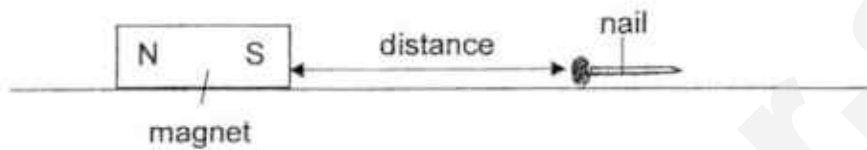


Which of the following methods would make the electromagnet stronger?

- (1) Add more batteries to the circuit.
- (2) Increase the size of the iron nail.
- (3) Hit the magnetic material with a hammer a few times.
- (4) Decrease the number of coils of wire around the iron nail.

14. Judy wanted to compare the magnetic strength of four different bar magnets, A, B, C and D. She placed magnet A and a nail on the table 10cm apart from each other. She then slowly moved the magnet closer to the nail until it could attract the nail.

She recorded the distance moved by the magnet in the table below and repeated the experiment with magnets B, C and D.



Magnet	A	B	C	D
Distance moved by the magnet (cm)	6	8	2	4

Based on the above results, arrange the magnets according to their magnetic strength, starting with the weakest magnet.

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

15. Tim had three objects, W, X, and Y. He wanted to find out if they were magnets. He brought a bar magnet close to both ends of each object and recorded his observations below.



	W	X	Y
Observations	Both ends did not get attracted to or repelled by the bar magnet.	One end was attracted to the magnet. The other end was repelled by the bar magnet.	Both ends were attracted to the bar magnet.

Based on the above observations, which one of the following could objects W, X and Y be?

	Object W	Object X	Object Y
(1)	wooden ruler	steel spoon	magnet
(2)	magnet	steel spoon	wooden ruler
(3)	steel spoon	magnet	wooden ruler
(4)	wooden ruler	magnet	steel spoon

END OF SECTION A

Name: _____

Class: 3 _____

EOY 2017

Section B: 20 marks

Read the questions carefully and write down your answers in the spaces provided.

16. Lucas was forgetful and left a piece of bread in a plastic bag in his school bag for a week. When he remembered about it, he observed that there were some black spots on the piece of bread which were not there previously. His teacher told him that the bread had turned bad and should not be eaten.



Diagram 1

- (a) What are the black spots found on the bread?

[1]

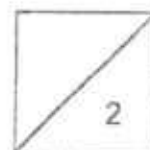
Lucas decided to keep the bread for another week to observe what would happen to it. The diagram below shows the bread after a week.



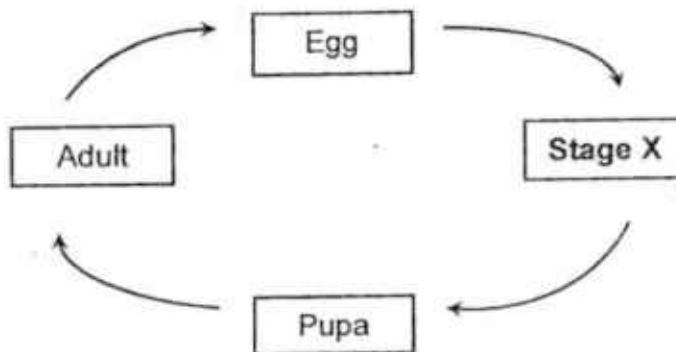
Diagram 2

- (b) Comparing diagrams 1 and 2, what characteristic of living things is shown?

[1]



17. The diagram below shows the stages in the life cycle of a mosquito.



- (a) Name stage X.

[1]

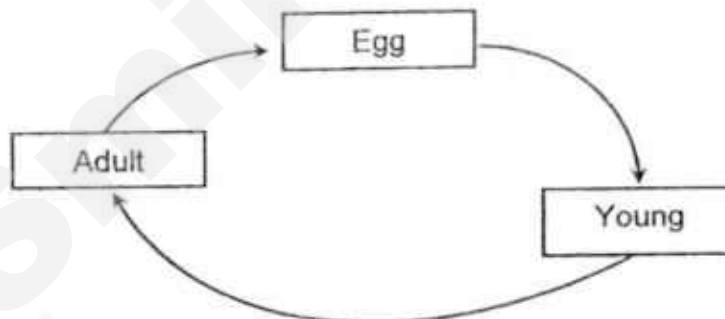
Stage X: _____

- (b) State the physical characteristic that the adult mosquito has that allows the adult mosquito to move in a different way from its young.

[1]

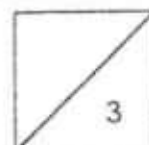
The adult mosquito has _____ which its young does not have.

- (c) The diagram below shows the life cycle of a chicken.

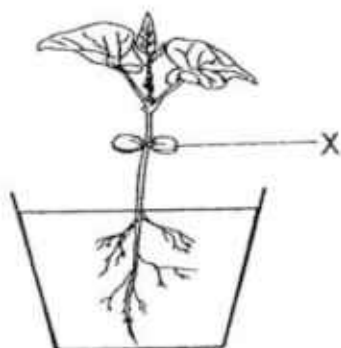


State one difference between the life cycle of a chicken and the life cycle of a mosquito.

[1]



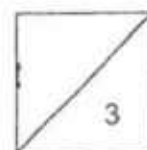
18. Mr Ng planted one bean seed in a pot of soil and placed it near the window. He watered the soil daily. The diagram below shows the seedling after one week.



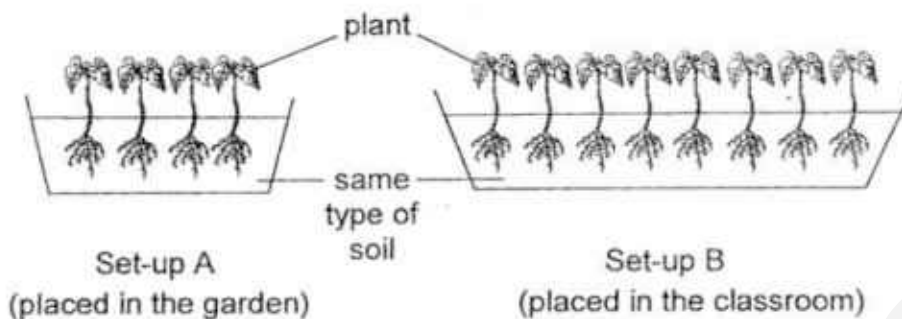
- (a) What is the name of part X of the seedling? [1]

- (b) What is the function of part X of the seedling? [1]

- (c) If Mr Ng now removes part X from the seedling, will the seedling continue to grow? Explain your answer. [1]



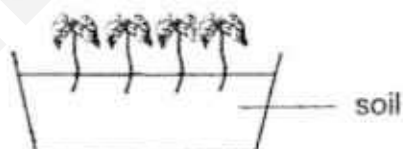
19. Adam set up the following experiment to find out if the amount of soil affects the growth of the plants. The same amount of water was given to the plants daily.



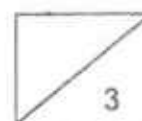
- a) Adam's experiment is not a fair one.
Which two changes can he make to set-up B to make it a fair test? [2]

Change	Tick (✓) the correct answer
Remove four plants.	
Change the type of soil.	
Use a larger container.	
Place the set-up in the school field.	
Place the set-up in the garden	

Adam had another set of plants similar to set-up A. He made the following changes to the plants in this set-up as shown in the diagram below.



- (b) Although Adam also watered these plants daily, all the plants withered after a few days. Explain why. [1]



20. Jay Jay conducted some tests on materials P, Q and R. The results of the tests are shown in the table below. A tick (✓) indicates that the material has the property.

Property	P	Q	R
Allows most light to pass through		✓	
Floats on water	✓	✓	✓
Flexible	✓		
Waterproof	✓	✓	

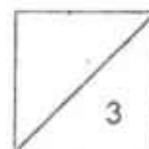
- (a) Based on the results table above, state two properties of material R. [2]

- (b) The diagram below shows a watch with part Z labelled.

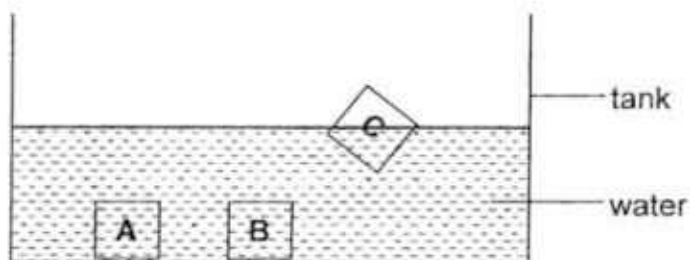


Based on the results table above, which material, P, Q or R, is most suitable to make Part Z? Explain your answer.

[1]



21. Nicole puts three objects of the same size, A, B and C, into a tank of water as shown below.

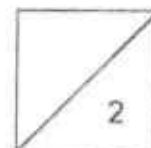


- a) Based on the results above, can Nicole conclude that objects A and B are made of the same material? Give a reason for your answer. [1]

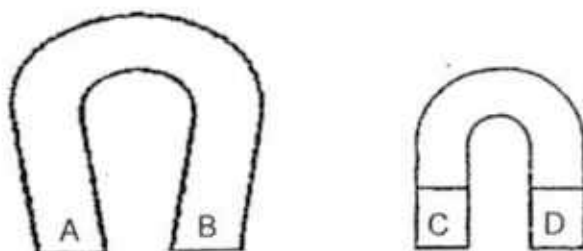
- b) The diagram below shows a girl swimming with a float.



Based on the results above, which material, A, B or C, is most suitable for making the float? Give a reason for your answer. [1]



- 22 Mary had a horseshoe magnet and a u-shaped magnet. She labelled parts of both magnets as shown in the diagram below.



She dipped both the magnets into a container of iron nails and counted the number of nails attracted to parts A, B, C and D of the magnets. She then recorded the results in the table below.

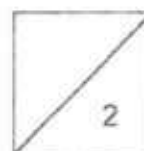
Parts	Number of iron nails attracted
A	6
B	5
C	12
D	10

- (a) Fill in the blank below with a suitable word. [1]

Parts A and B are called the _____ of the horseshoe magnet.

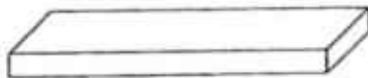
- (b) Based on the results table above, what can Mary conclude about the difference in strength between the horseshoe magnet and the u-shaped magnet? [1]

Question 22 continues on the next page.



Question 22 continues.

Mary was given a metal bar as shown below.

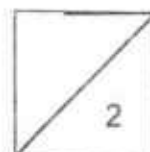


metal bar

- (c) What could Mary do to find out if the metal bar is made of a magnetic material? [1]

- (d) What would she observe when she carries out the step in (c) if the metal bar is really made of a magnetic material? [1]

End of Paper



ANSWER KEY

YEAR : 2017
 LEVEL : PRIMARY 3
 SCHOOL : AI TONG
 SUBJECT : SCIENCE
 TERM : SA2

Booklet A

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

Booklet B

16	(a)	Bread mould.
	(b)	Living things reproduce.
17	(a)	Stage X: Larva
	(b)	The adult mosquito has <u>wings</u> which its young does not have.
	(c)	The chicken has 3 stages in its life cycle but the mosquito has 4 stages in its life cycle.
18	(a)	Seed leaf (Seed leaf)
	(b)	Part X provides food for the seedling.
	(c)	Yes. The plant has leaves to make its own food.
19	(a)	Remove four plants ✓ Place the set-up in the garden ✓
	(b)	The plants have no roots to absorb water from the soil.

20	(a)	Material R is not flexible and can float on water.
	(b)	Material R. It is flexible but the rest are not.
21	(a)	No. There is more than one material which can sink in water.
	(b)	Material C. It is the only material that can float on the water.
22	(a)	Parts A and B are called the poles of the horseshoe magnet.
	(b)	U-shaped magnet is stronger.
	(c)	Mary should use a magnet and bring it near to the metal bar.
	(d)	The metal bar would be attracted and move towards the magnet.

End

SmileTutor.sg



SEMESTRAL ASSESSMENT 2 (2017)

PRIMARY 3

SCIENCE

BOOKLET A

Thursday

2 November 2017

1 hr 30 min

Name: _____ () Class: 3.()

INSTRUCTIONS TO PUPILS





- 1 Do not turn over the pages until you are told to do so.
- 2 Follow all instructions carefully.
- 3 There are 25 questions in this booklet.
- 4 Answer ALL questions.
- 5 Shade your answers in the Optical Answer Sheet (OAS) provided.

This question paper consists of 13 printed pages (inclusive of cover page).

Booklet A (50 marks)

For each question from 1 to 25, four options are given. One of them is the correct answer. Make your choice (1, 2, 3 or 4). Shade your answer on the Optical Answer Sheet. (25 x 2 marks)

1. Which of the following characteristics is true for all living things?
- (1) They can make their own food.
 - (2) They give birth to their young alive.
 - (3) They need air, food and water to survive.
 - (4) They can move from place to place by themselves.
2. Which of the following statement(s) show(s) that living things respond to changes around them?

A: A boy drinking water.	
B: A lioness giving birth to cubs.	
C: A leaf of the Mimosa plant closing when touched.	<div style="display: flex; justify-content: space-around;"> <div>Before </div> <div>After </div> </div>

- (1) A only
 - (2) C only
 - (3) A and B only
 - (4) B and C only
3. Which of the following statements does not show that Tom's puppy is a living thing?
- (1) It eats meat.
 - (2) It drinks water.
 - (3) It has four legs.
 - (4) It barks at strangers.

4. John grouped the following things into two groups.

A	B
Ball	Table
Snake	Spider
Fish	Bird
Ant	Cat

Which of the following things is classified incorrectly?

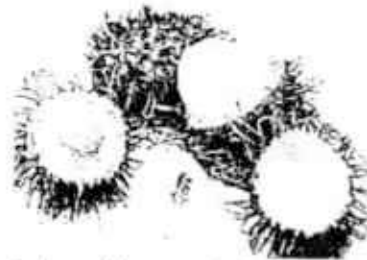
- (1) Ant
- (2) Bird
- (3) Cat
- (4) Fish

5. Study the pictures of two fruits below

Longan



Rambutan



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

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

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

6. Which of the following is not a plant?

(1)



Fern

(2)



Moss on a tree trunk

(3)







Water lily

(4)



Mould on orange

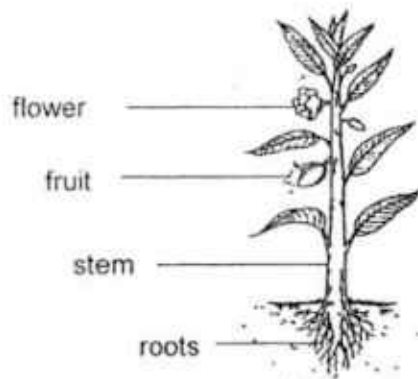
7. The table below shows how some plants with flowers have been classified.

Group A		Group B	
			
Ixora	Hydrangea	Hibiscus	Rose

Which one of the following are suitable headings for the above groups?

	Group A	Group B
(1)	Plants that bear fruits	Plants that do not bear fruits
(2)	Plants that have weak stems	Plants that have strong stems
(3)	Flowers that are brightly-coloured	Flowers that are dull-coloured
(4)	Flowers that grow in clusters	Flowers that grow singly

8. The diagram below shows a plant from a garden near Sam's house.

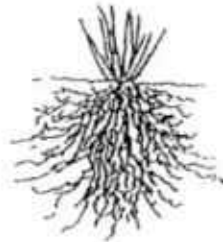


Which part of the plant allows it to get the maximum amount of sunlight to make food?

- (1) Fruit
 - (2) Stem
 - (3) Roots
 - (4) Flower
9. The pictures below show the roots of Plant G and Plant H.



Plant G



Plant H

Plant H has more roots than Plant G. Thus, the roots of Plant H can

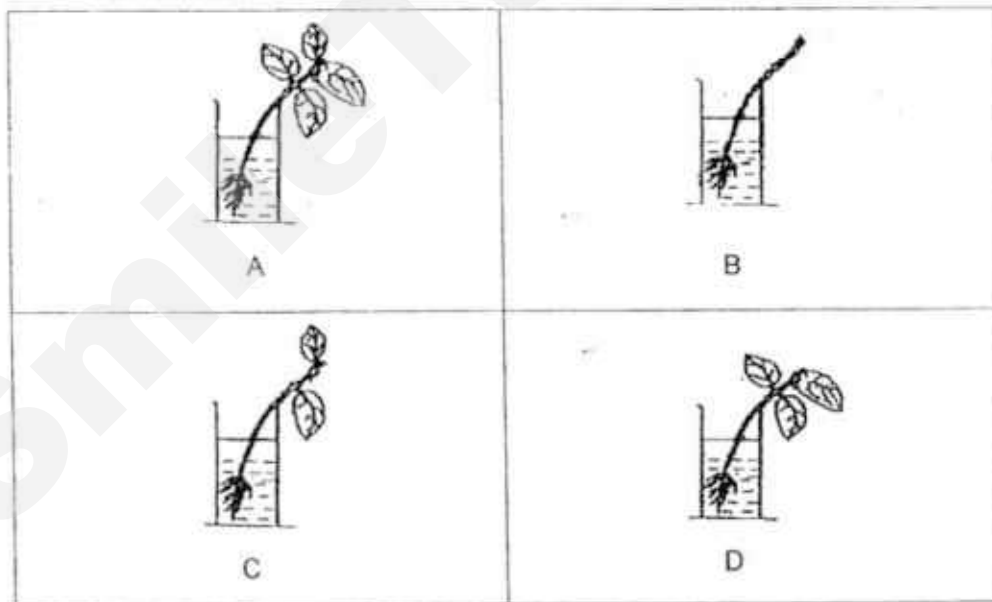
- (1) trap more sunlight
- (2) hold the plant more upright
- (3) absorb more water from the soil
- (4) transport more water to other parts of the plant

10. The table below provides information on three living things A, B and C. A tick (✓) shows that the living thing has the characteristic.

Characteristics	A	B	C
Has fruits	✓		
Has leaves	✓	✓	
Reproduce by spores		✓	✓

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

- (1) A only
 - (2) B only
 - (3) C only
 - (4) A, B and C
11. Four plants, A, B, C and D, of the same height, 7 cm, were placed in four identical beakers, with the same amount of water, at the same location as shown below.



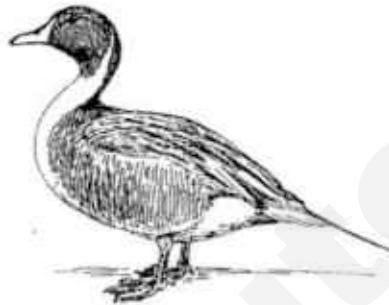
Arrange these plants according to their water level in the beakers, from the most to the least amount of water, at the end of 3 days.

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

12. Which one of the following is not a characteristic of all insects?

- (1) Lays eggs
- (2) Have wings
- (3) Have six legs
- (4) A pair of feelers

13. The table below shows the characteristics of 4 animals, A, B, C and D. A tick (✓) shows that the animal has that characteristic. Which animal, A, B, C or D, best represents the animal shown below?



Duck

	Animal	Has legs	Reproduce by laying eggs	Has 3 body parts	Has feathers
(1)	A	✓	✓		
(2)	B	✓	✓		✓
(3)	C	✓	✓	✓	
(4)	D		✓		

14. Darren discovered an unknown animal in his school eco-garden. He made the following observations:

- Its body is covered with slimy skin.
- It breathes through its skin in water.
- It can live both on land and in water.
- It reproduces by laying eggs in water.

Which of the following groups does this animal belong to?

- (1) Fish
- (2) Insects
- (3) Reptiles
- (4) Amphibians

15. Three students, Dan, Eric and Ian studied the classification table below.

Have wings	Have scales	Have hair	Have moist skin
Penguin	Snake	Bat	Frog
Cockroach	Clown fish	Monkey	Salamander

They then made the following statements based on the table:

Dan: The penguin and cockroach can fly.

Eric: The animals are grouped according to their body covering.

Ian: The animals can also be classified based on where they live.

Who made the correct statement(s)?

- (1) Ian only
- (2) Eric only
- (3) Dan and Ian only
- (4) Dan and Eric only

16. The table below gives some information on three organisms, F, G and H. A tick (✓) shows that the organism has the characteristic.

Characteristic	Organism		
	F	G	H
Has scales		✓	
Reproduces by spores	✓		✓
Can make its own food			✓
Can live on land and in water		✓	

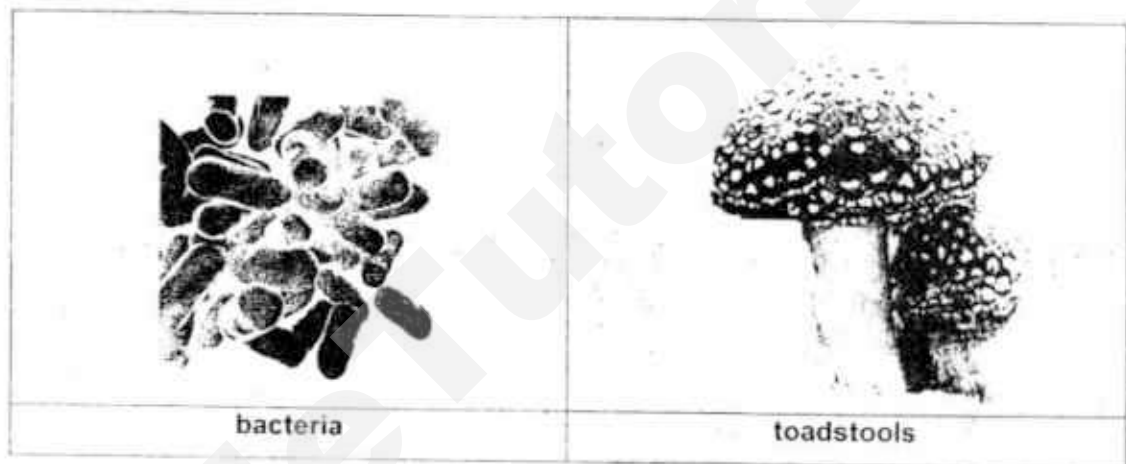
Which of the following is the correct group that organisms F, G and H belong to?

	F	G	H
(1)	Bacteria	Fungi	Fern
(2)	Fern	Fish	Fungi
(3)	Fish	Bacteria	Reptile
(4)	Fungi	Reptile	Fern

17. Timothy wants to conduct an experiment on bread mould. He wants to find out if amount of water affects the growth of bread mould. Which variables should he keep the same to conduct a fair experiment?

	Location	Size of bread	Type of bread	Amount of water
(1)	✓	✓	✓	
(2)	✓	✓		✓
(3)	✓		✓	✓
(4)		✓	✓	✓

18. The diagrams below show bacteria and toadstools.



Which of the following is their common characteristic?

- (1) They are micro-organisms.
- (2) They reproduce from seeds.
- (3) They can make their own food.
- (4) They feed on living things which may be dead or alive.

19. Study the diagram below.



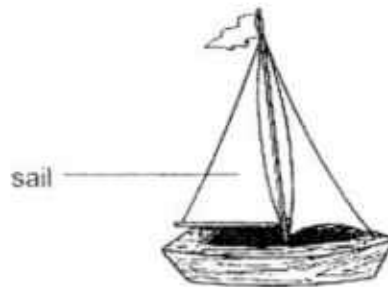
anti-slip spectacle
ear hook

Anti-slip spectacle ear hooks are commonly used to prevent spectacles from slipping down. For the spectacle ear hook to be effective for its use, it must be made of a material that is _____.

- A light
- B flexible
- C colourful
- D waterproof

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

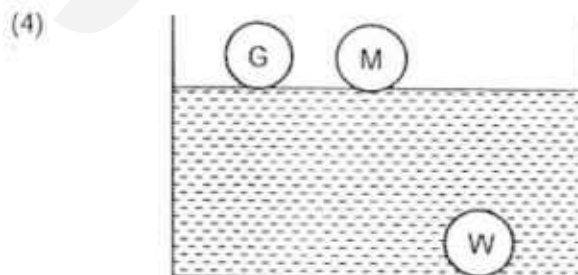
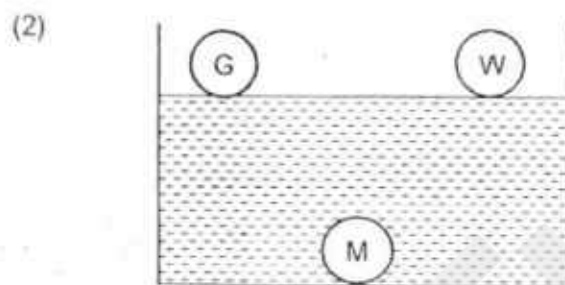
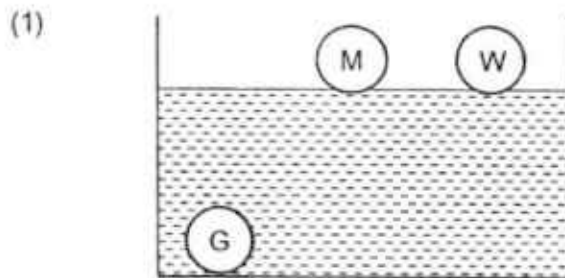
20. A group of primary 3 students wanted to investigate the best material to make the sail of a boat. They used 4 different materials for the sail and placed the sailboats along the starting line. They recorded the time taken for each sailboat to reach the finish line.



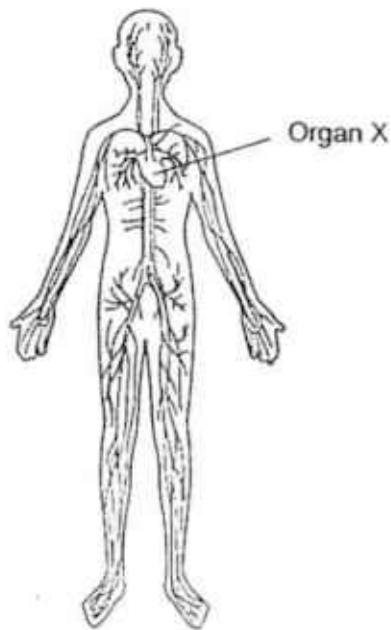
Based on the results, which is the best material used to make the sail?

	Material used for sail	Time taken to reach the finishing line
(1)	paper	60
(2)	plastic	25
(3)	cloth	35
(4)	aluminium foil	40

21. Sam placed 3 balls, each made of glass (G), metal (M) and wood (W), in a container of water. None of the balls are hollow. Which of the following diagrams shows the positions of the 3 balls correctly?



22. The diagram below shows a human body system.



Organ X is the (a) _____ and is part of the (b) _____ system.

	(a)	(b)
(1)	heart	circulatory
(2)	lungs	skeletal
(3)	gullet	respiratory
(4)	stomach	digestive

23. Three friends, Alex, Brian and Casper stated the functions of the various human body systems.

Alex: It allows the bones to move.

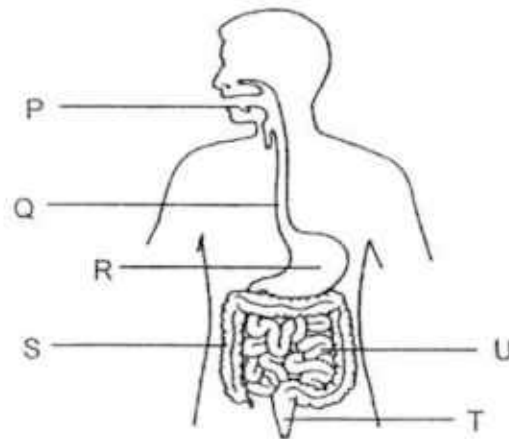
Brian: It gives the body shape and supports the body.

Casper: It transports oxygen and digested food to all parts of the body.

Which of the following systems correctly matches the functions stated by Alex, Brian and Casper?

	Alex	Brian	Casper
(1)	Circulatory	Muscular	Skeletal
(2)	Circulatory	Skeletal	Muscular
(3)	Muscular	Circulatory	Skeletal
(4)	Muscular	Skeletal	Circulatory

Study the diagram below and answer questions 24 and 25.



24. In which of the following parts of the digestive system are digestive juices produced?
- (1) P, Q and R only
 - (2) P, R and U only
 - (3) Q, R and S only
 - (4) Q, S and U only
25. Which of the following shows the correct sequence until digestion of food is completed?
- (1) P, Q, R, S
 - (2) P, Q, R, U
 - (3) P, Q, R, S, U, T
 - (4) P, Q, R, U, S, T

End of Booklet A

Anglo-Chinese School (Junior)



SEMESTRAL ASSESSMENT 2 (2017)

PRIMARY 3

SCIENCE

BOOKLET B

Thursday

2 November 2017

1 hr 30 min

Name: _____ () Class: 3.() Parent's Signature: _____

INSTRUCTIONS TO PUPILS

- 1 Do not turn over the pages until you are told to do so.
- 2 Follow all instructions carefully.
- 3 There are 13 questions in this booklet.
- 4 Answer ALL questions.
- 5 The marks are given in the brackets [] at the end of each question or part question.

Booklet	Possible Marks	Marks Obtained
A	50	
B	40	
PBA	10	
Total	100	

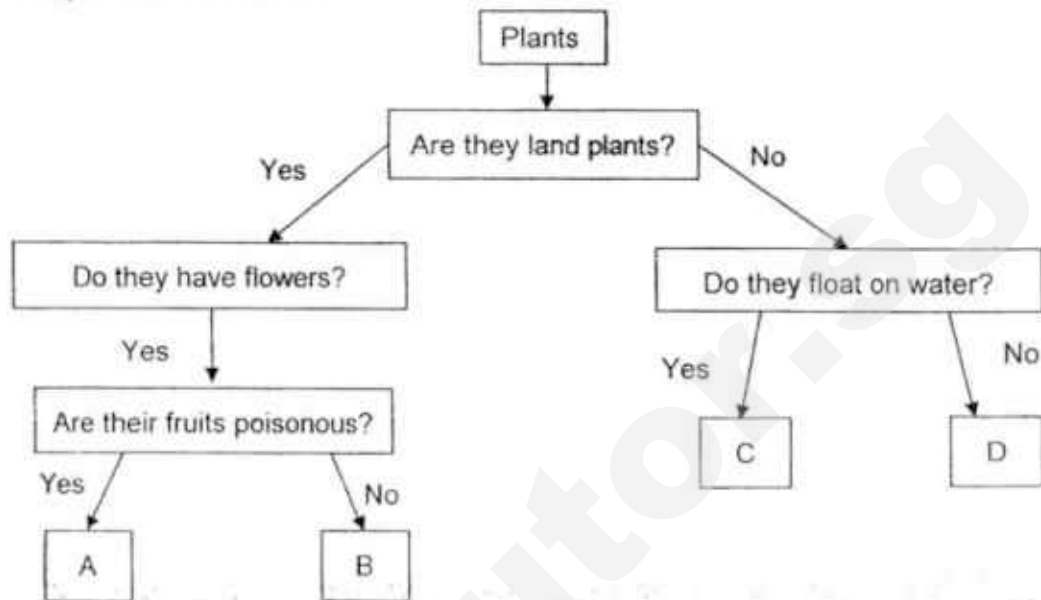
This question paper consists of 14 printed pages (inclusive of cover page).

Booklet B (40 marks)

For questions 26 to 38, write your answers in this booklet.

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

26. Study the flowchart below.



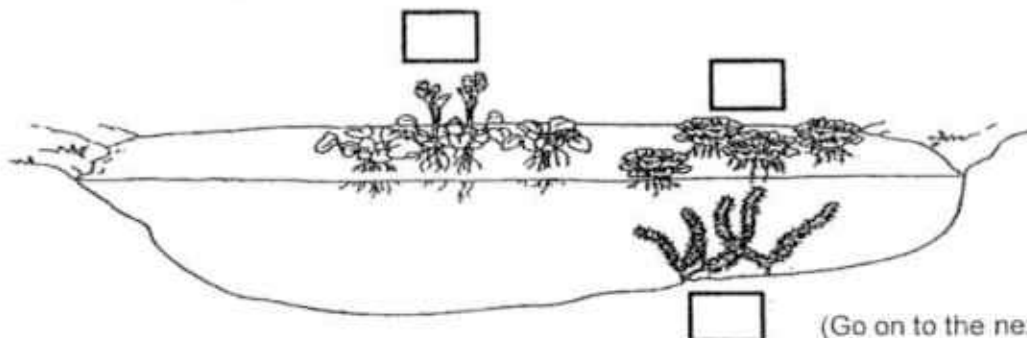
(a) Based on the flowchart, state two similarities between Plant A and Plant B. [1]

1) _____

2) _____

(b) Based on the flowchart, state a difference between Plant B and Plant D. [1]

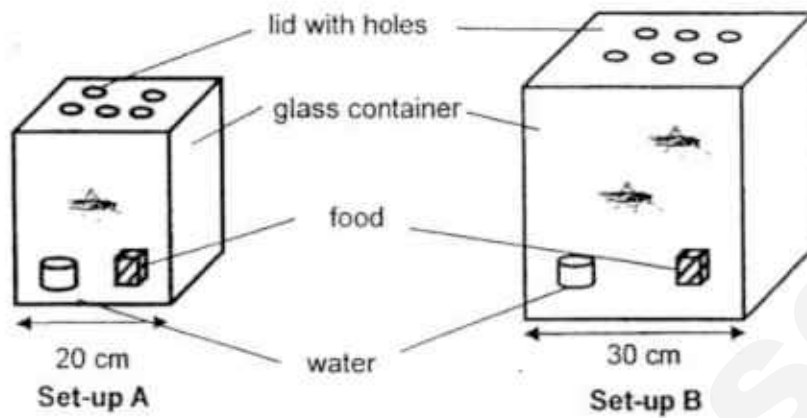
(c) Which of the following plants can most likely be Plant C? Place a tick (✓) in the correct box(es) provided. [1]



(Go on to the next page)

SCORE	
	3

27. Siti set up the following experiment as shown below. She wanted to find out if the size of the glass container affects the growth of the grasshopper.



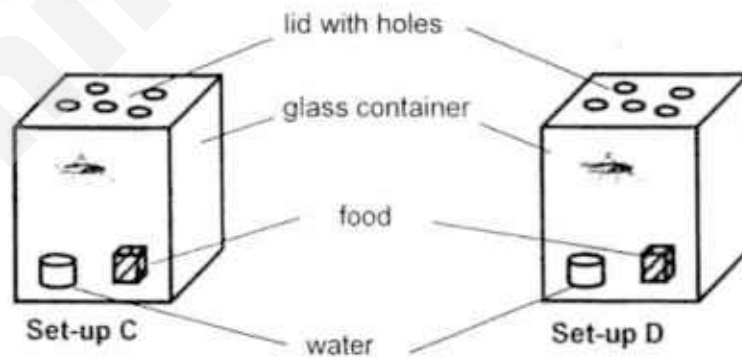
Siti's mother told her that her experiment was not fair.

- (a) Write down 2 things that Siti should do to Set-up B to ensure that the experiment is fair.

[2]

- 1) _____
- 2) _____

- (b) Siti wanted to find out if the grasshopper can survive without air based on the set-ups below.



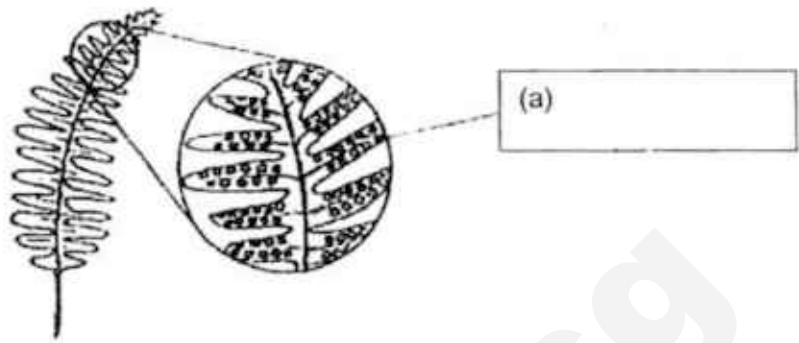
Suggest one change she would need to make to Set-up D to test her aim.

[1]

(Go on to the next page)

SCORE	
	3

28. Alice found a fern near her school and observed the underside of its leaves as shown in the diagram below.



- (a) Label the part above in the box provided. [1]

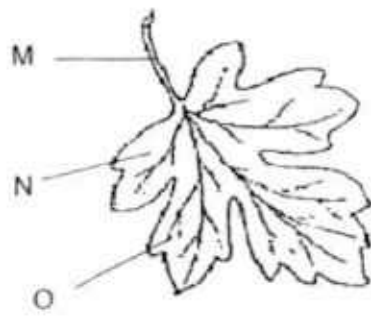
- (b) Alice pointed out that fern can be grouped under fungi. Do you agree with her? Give a reason for your answer. [1]

- (c) Alice's mother told her that the fern is a non-flowering plant. Besides not having flowers, how can Alice tell that fern is a non-flowering plant? [1]

(Go on to the next page)

SCORE	
	3

29. The diagrams below show the leaf from a plant.



Topside of leaf



Underside of leaf

- (a) Identify parts M, N, O and P.

[2]

M: _____

N: _____

O: _____

P: _____

- (b) State two functions of a leaf.

[1]

1) _____

2) _____

(Go on to the next page)

SCORE	
	3

30. Study Plants S and T below.



Plant S



Plant T

(a) What is the function of Part X?

[1]

(b) Based on your observation of the plants above, state a similarity and difference between the plants. (Do not compare size)

[2]

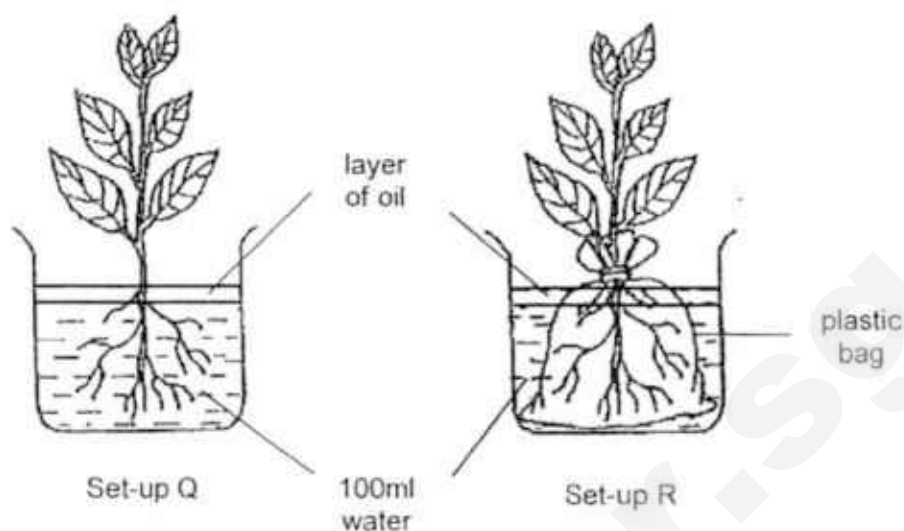
Similarity:

Difference:

(Go on to the next page)

SCORE	
	3

31. Roger placed two similar plants in identical beakers, each containing 100ml of water, near his window, as shown below.



Roger observed the volume of water in both set-ups for 2 days. The results were recorded in the table as shown below.

Set-up	Volume of water	
	Day 1	Day 2
Q	100ml	90ml
R	100ml	?

- (a) Predict the volume of water left in Set-up R on Day 2. [1]

 ml

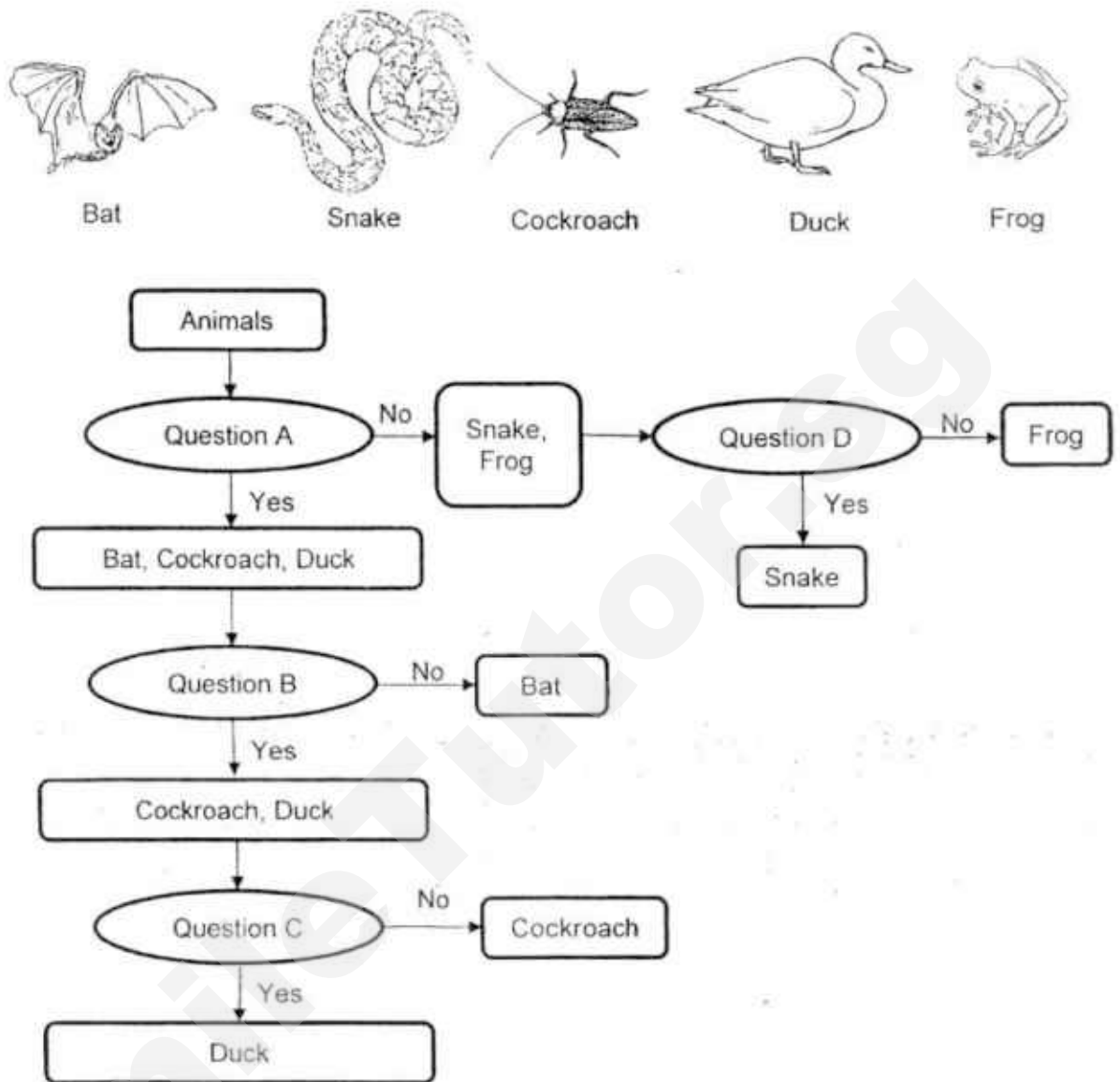
- (b) What is the aim of Roger's experiment? [1]

- (c) What do you think will happen to the plant in Set-up R after a few days? Explain your answer. [1]

(Go on to the next page)

SCORE	
	3

32. Selena classified the five animals in the flowchart shown below.



- (a) Match the questions below correctly to Questions A, B, C and D in the flowchart. Write the letters A, B, C and D in the boxes to match them. [2]

Question	Letter
Does it lay eggs?	
Does it have wings?	
Does it have scales?	
Does it have feathers?	

- (b) What animal groups do the following animals belong to? [1]

Snake: _____

Frog: _____

(Go on to the next page)

SCORE	3
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33. Study the two animals that came into John's classroom occasionally from the Eco-garden. Animals X and Y are not drawn to scale.



Animal X



Animal Y

- (a) Based on your observation of the pictures above only, state two physical differences between Animal X and Animal Y. [2]
(Do not compare their sizes or movement.)

- b) Based on your observation, which animal group does Animal Y belong to? [1]
Give a reason for your answer.

(Go on to the next page)

SCORE	<div>3</div>
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34. Isaac came across a big and tall tree at the corner of the park near his house. The tree was partly in the shade and partly in the sun. He also saw some mushrooms growing at the sides of the tree. He decided to record his observations in the table.

Conditions at the different parts of the tree	Number of mushrooms growing on:		
	Day 1	Day 2	Day 3
Shady and dry	2	4	7
Shady and moist	4	10	18
Sunny and dry	0	1	3
Sunny and moist	1	3	6

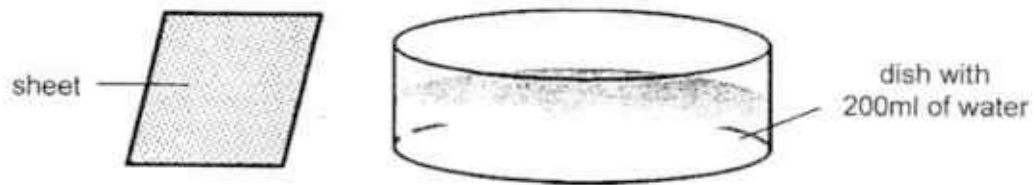
- (a) Based on Isaac's observations, under which conditions did the mushrooms reproduce the fastest? [1]

- (b) Fungi can be useful or harmful to us. Give an example of a fungus that is harmful to us. Give a reason why it is harmful. [2]

(Go on to the next page)

SCORE	3
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35. Ethan used the set-up as shown below to investigate a certain property of materials.



In his investigation in class, he used 4 sheets made of different materials, A, B, C and D. He submerged each sheet in 4 identical dishes of 200ml of water.

Material	Amount of water left in each dish after removing the sheet (ml)
A	150
B	200
C	80
D	120

- (a) Name the property of materials Ethan was trying to investigate. [1]

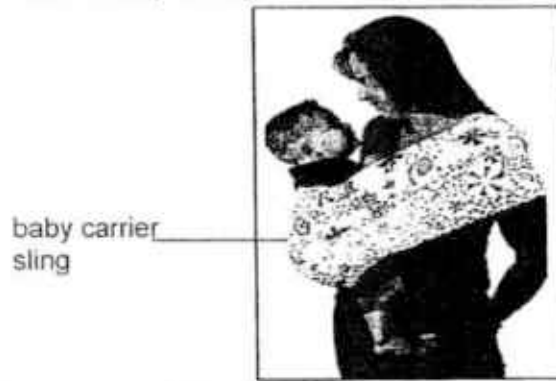
- (b) Based on his results, which material, A, B, C or D is most suitable for making a towel? Explain your answer based on the results of his investigation. [1]

- (c) State 2 other variables that Ethan should keep the same to ensure he carries out a fair test. [1]

(Go on to the next page)

SCORE	3
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36. Mrs Tay wanted to make a baby carrier sling as shown below. A baby carrier sling is used by an adult to carry a baby in various positions.



Before deciding on a material to use, she experimented with four materials and placed bags of sand on them. The table below shows the total weight of sand each material can hold before it started to tear.

Materials	Total weight of sand (kg) the sling could hold before it tore
G	13
H	5
K	8
L	20

- (a) What was the aim of Mrs Tay's experiment?

[1]

- (b) Based on the table above, order the materials, G, H, K and L, based on the weight they could hold before tearing. Start with the material that could hold the least weight to the most weight.

[1]

Least weight held → Most weight held

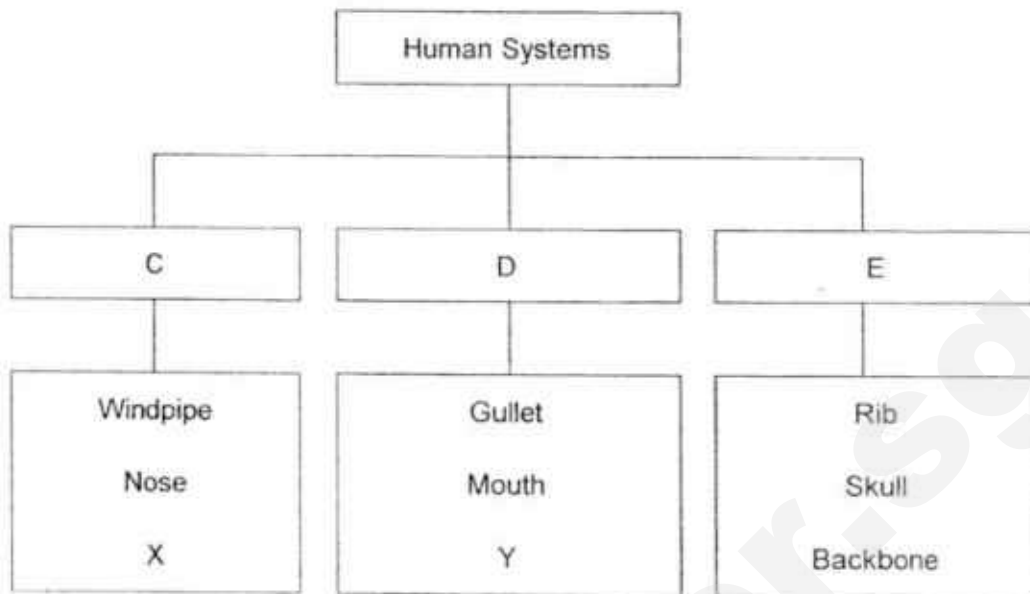
- (c) Which material, G, H, K or L is the most suitable for making the sling? Explain your answer based on the property of the material that Mrs Tay was testing.

[1]

(Go on to the next page)

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37.



(a) What are systems C and D?

[1]

C: _____

D: _____

(b) What can X and Y be?

[1]

X: _____

Y: _____

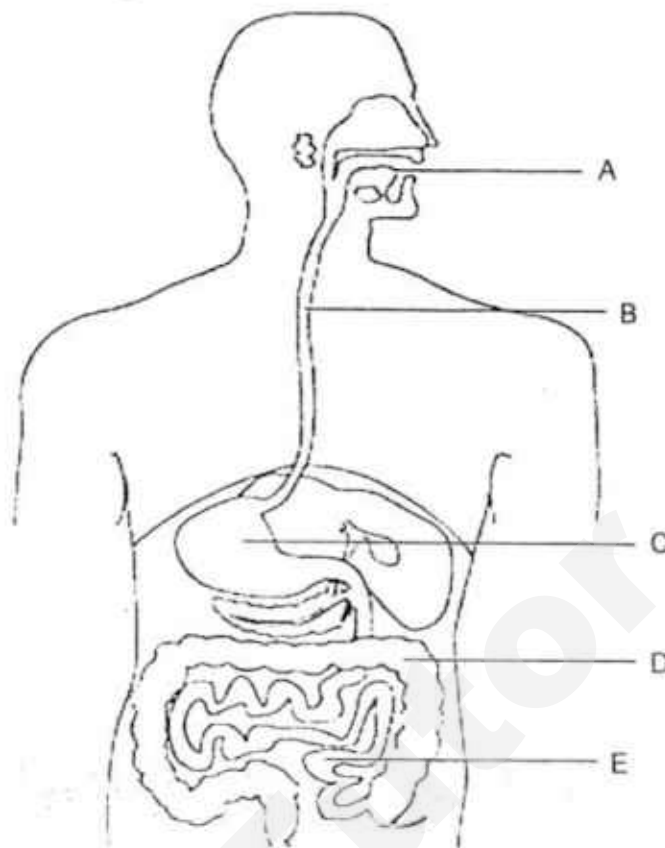
(c) What is the main function of the parts in group E?

[1]

(Go on to the next page)

SCORE	
	3

38. The diagram below shows parts of the digestive system of a human body.



- (a) Name the substance in the mouth that mixes with the food that is chewed. [1]

- (b) State a similarity at parts C and E. [1]

- (c) State the major function of part D. [1]

- (d) Where is digestion completed? What happens to digested food after that? [1]

End of paper

SCORE	
	4

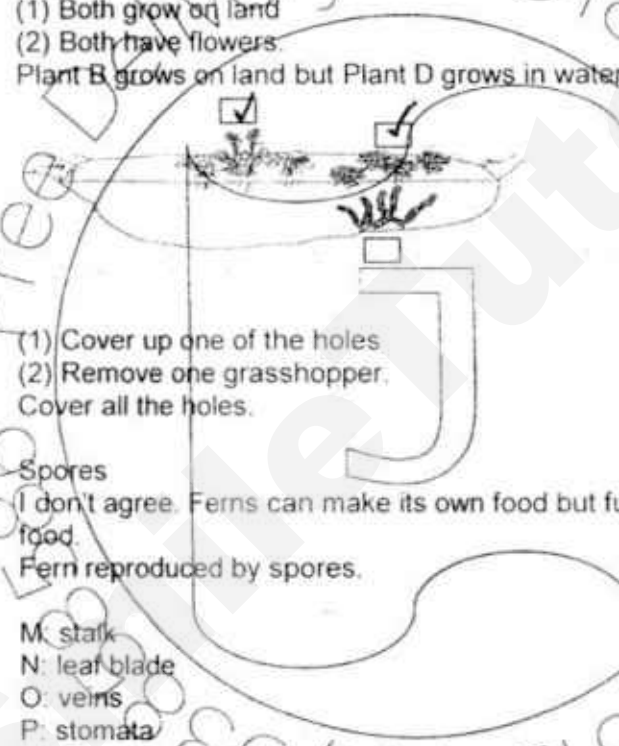
EXAM PAPER 2017

LEVEL : PRIMARY 3
 SCHOOL : ACS (Junior)
 SUBJECT : SCIENCE
 TERM : SA2

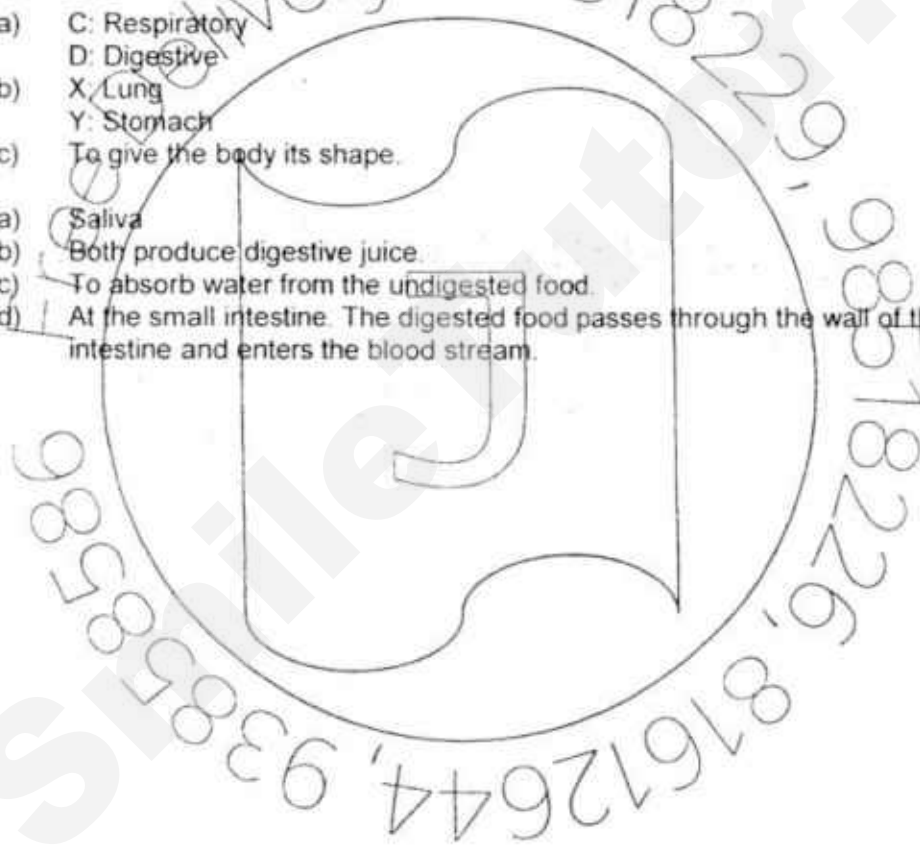
Booklet A

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

Booklet B

- Q26 (a) (1) Both grow on land
 (2) Both have flowers.
 (b) Plant B grows on land but Plant D grows in water.
 (c) 
- Q27 (a) (1) Cover up one of the holes
 (2) Remove one grasshopper.
 (b) Cover all the holes.
- Q28 (a) Spores
 (b) I don't agree. Ferns can make its own food but fungi cannot make its own food.
 (c) Fern reproduced by spores.
- Q29 (a) M: stalk
 N: leaf blade
 O: veins
 P: stomata
 (b) (1) To make most of the plant food.
 (2) To breathe air in and out so that the plant can take in carbon dioxide.
- Q30 (a) To hold up the leaves up so that they can get plenty sunlight and air.
 (b) Similarity: Both have flowers.
 Difference: Plant S has a weak stem while Plant T has a strong stem.
- Q31 (a) 100ml
 (b) To find out if plants need water to survive.
 (c) It will wilt and die because it has no water.
- Q32 (a) B, A, D, C
 (b) Reptile
 Amphibians

- Q33 (a) Animals X has 6 legs but Animal Y does not.
Animal X has wings but Animal Y does not.
(b) Reptile. It is covered with scales.
- Q34 (a) Shady and moist.
(b) Toadstools. They are poisonous.
- Q35 (a) Absorption
(b) Material C. The amount of water left in the dish was the least.
(c) The size of the material and the time taken the material is submerged in the water.
- Q36 (a) To find out which material is the strongest.
(b) H, K, G, L
(c) Material L. It can hold the most weight of the sand before it tore thus it is the strongest material.
- Q37 (a) C: Respiratory
D: Digestive
(b) X: Lung
Y: Stomach
(c) To give the body its shape.
- Q38 (a) Saliva
(b) Both produce digestive juice.
(c) To absorb water from the undigested food.
(d) At the small intestine. The digested food passes through the wall of the small intestine and enters the blood stream.



SmileTutor.sg



CATHOLIC HIGH SCHOOL
SEMESTRAL ASSESSMENT TWO (2017)
PRIMARY THREE
SCIENCE
BOOKLET A

Name: _____ ()

Class: Primary 3 - _____

Date: 1 Nov 2017

24 questions

48 marks

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.

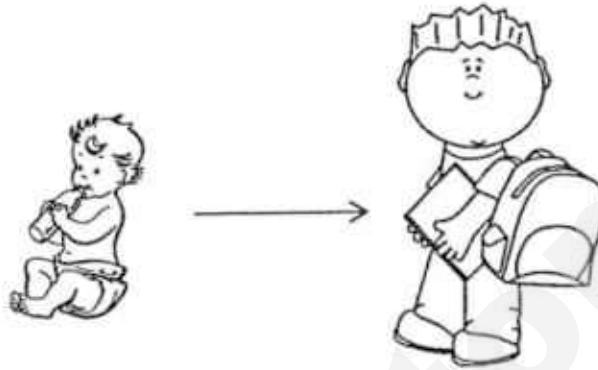
Shade your answers in the Optical Answer Sheet (OAS) provided.

This booklet consists of 15 printed pages, excluding the cover page.

Booklet A (24 × 2 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 your answer on the Optical Answer Sheet. (48 marks)

- 1 The diagram below shows a baby becoming a young boy.



Which of the following statements refer to the same characteristic as the diagram above?

- A A cow eats grass.
- B A caterpillar grows into a butterfly.
- C A papaya seed grows into a papaya tree.
- D A mouse runs away when a cat chases it.

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

- 2 Look at the pictures below.



a real dog



a toy dog

Which one of the following statements is correct?

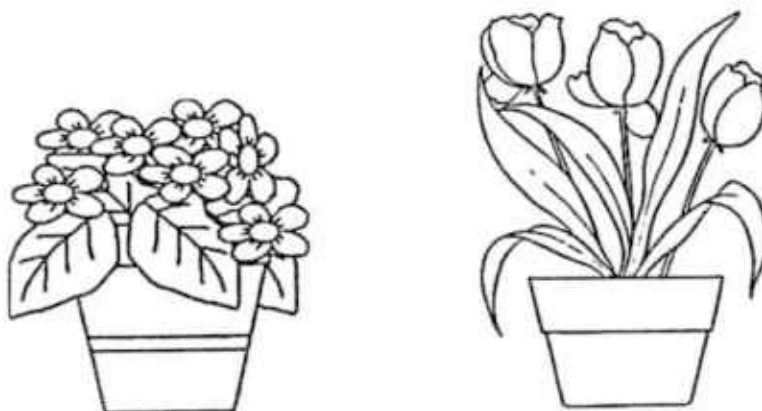
- (1) Both are living things as they can move.
 - (2) A toy dog is a living thing as it can bark.
 - (3) A toy dog is a non-living thing as it cannot reproduce.
 - (4) Both are non-living things as they cannot make their own food.
- 3 Sarah observed four different types of plants, A, B, C and D, for a period of three months. She kept records of her observations in the table below.

Months	Number of flowers			
	Plant A	Plant B	Plant C	Plant D
January	15	1	0	0
February	20	0	0	0
March	18	0	0	10

What type of plants could A, B, C and D be?

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

- 4 The pictures below show two different types of plants.



Which of the following are common characteristics of both plants?

- A Both are land plants.
- B Both are water plants.
- C Both are flowering plants.
- D Both are non-flowering plants

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

- 5 The living thing shown below is _____.



- (1) a fish
- (2) a reptile
- (3) a mammal
- (4) an amphibian

- 6 Four pupils made the following statements about classification of animals.

Adam	Some mammals live on land.
Bernard	Fish are the only animals with scales.
Candice	Birds are the only animals with feathers.
Diana	Amphibians breathe through their lungs when underwater.

Which pupils were correct?

- (1) Adam and Diana only
 - (2) Adam and Candice only
 - (3) Bernard and Diana only
 - (4) Bernard and Candice only
- 7 The diagram below shows two living things.



mushrooms



magnified picture of yeasts

What do the two living things have in common?

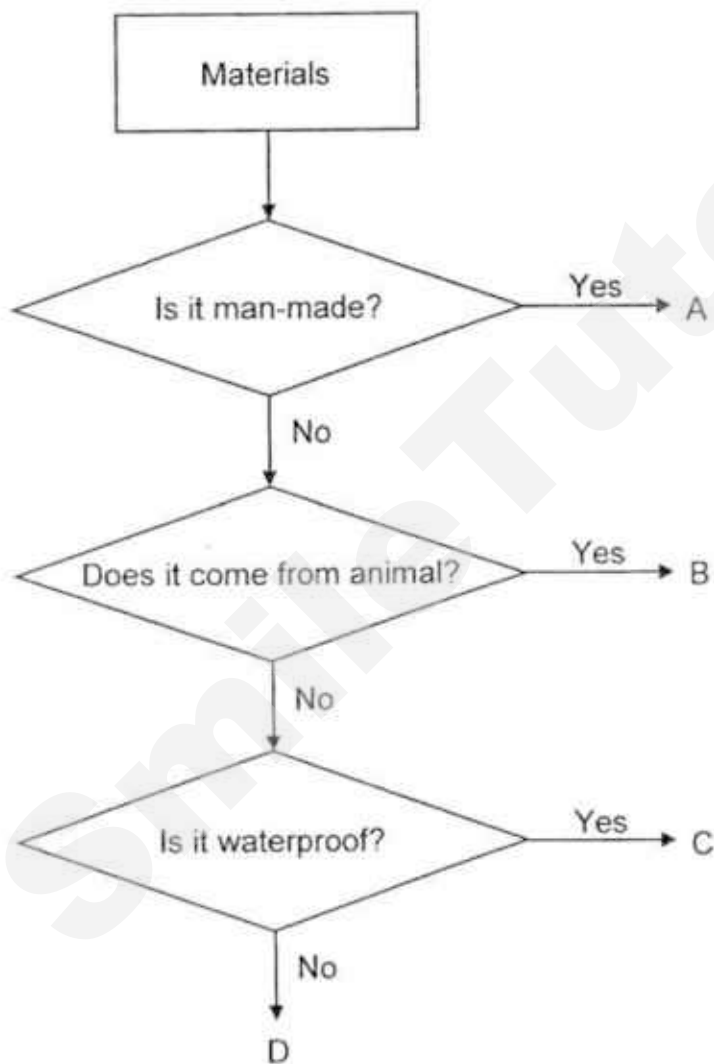
- A Both can reproduce.
- B Both are a type of fungi.
- C Both can make their own food.
- D Both do not need air, water and food to stay alive.

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

8 Bacteria are considered living things because they _____.

- (1) are small
- (2) can reproduce
- (3) can be found everywhere
- (4) can be useful and harmful to us

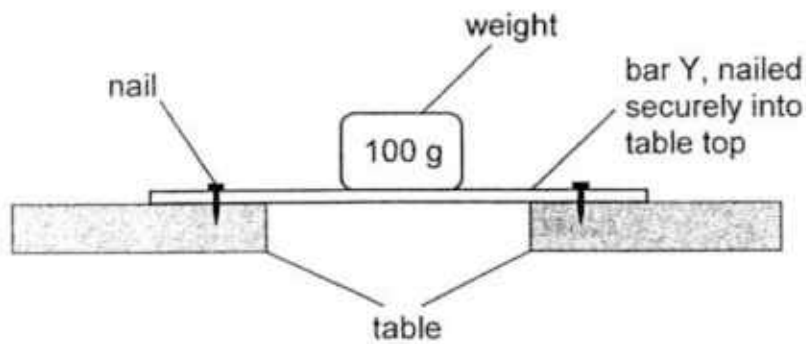
9 Study the chart below.



Which letter, A, B, C or D, in the chart above represents the material used to make a cotton T-shirt?

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

- 10 Justin set up an experiment as shown in the diagram below.



He kept on adding the weights to the centre of bar Y until the bar broke.
What was Justin trying to find out in the experiment?

- (1) To find out the strength of the material of the bar.
 - (2) To find out the transparency of the material of the bar.
 - (3) To find out whether the material of the bar is magnetic.
 - (4) To find out whether the material of the bar is waterproof.
- 11 Young children are usually given plastic bowls rather than glass bowls when eating.



plastic bowl



glass bowl

Which of the following properties of plastic make it a more suitable material for young children to use than glass?

- A It is light.
 - B It floats on water.
 - C It does not break easily.
 - D It does not allow light to pass through.
- (1) A and B only
 - (2) A and C only
 - (3) B and D only
 - (4) C and D only

- 12 The diagram below shows a boy kicking a soccer ball.



Which of the body systems is/are at work when he is kicking?

- A skeletal system
- B muscular system
- C circulatory system
- D respiratory system

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

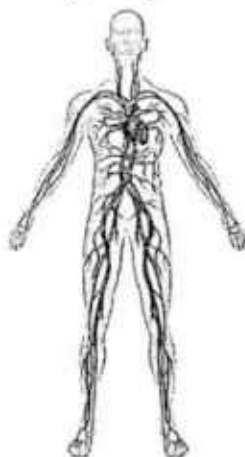
- 13 Two organ systems, K and L, found in the human body are described below:

K	L
It gives our body shape.	It removes solid waste materials from our body.
It protects the organs in our body.	It breaks down the food we eat into substances that our body can use.

Which of the following identifies correctly the organ systems, K and L, in the human body?

	K	L
(1)	skeletal system	digestive system
(2)	digestive system	respiratory system
(3)	muscular system	skeletal system
(4)	respiratory system	muscular system

14 The diagram below shows an organ system.

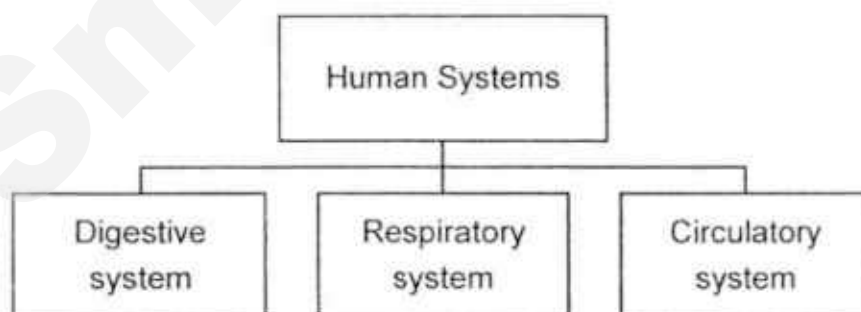


Which of the following are carried in the blood in this system?

- A water
- B oxygen
- C digested food
- D carbon dioxide

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

15 Study the diagram below.



Which of the following parts are correctly matched to the systems?

	Digestive system	Respiratory system	Circulatory system
(1)	gullet	lungs	heart
(2)	windpipe	muscles	mouth
(3)	stomach	nose	backbone
(4)	rib	small intestine	anus

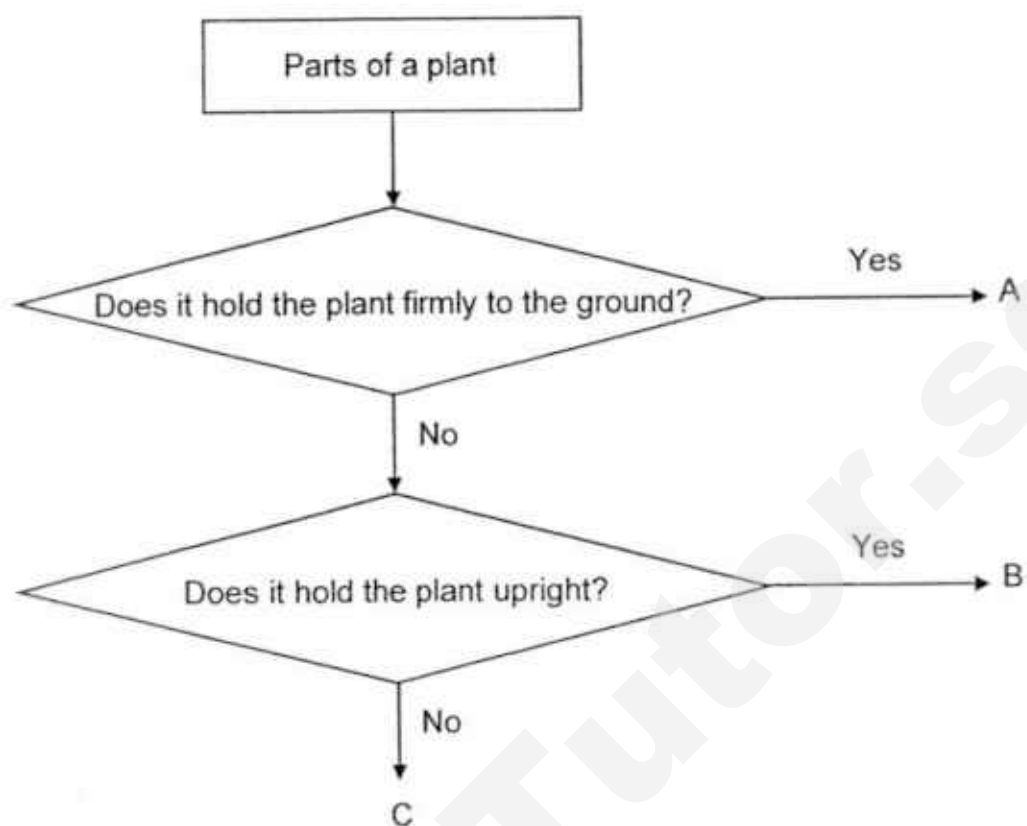
- 16 During a thunderstorm, trees can sometimes be struck down by lightning.



When this happens, the stem will not be able to _____.

- (1) make food
- (2) get sunlight
- (3) absorb water and minerals
- (4) support the leaves and branches

17 Study the chart below.



Which of the following identifies correctly the parts, A, B and C, of a plant?

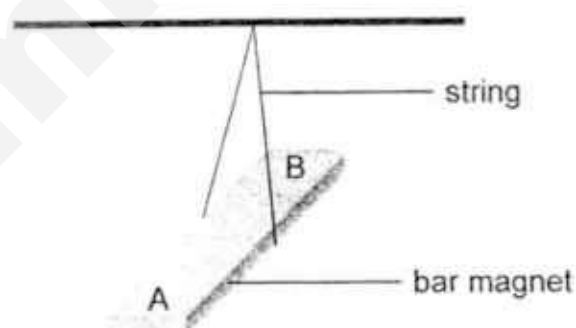
	A	B	C
(1)	stem	root	leaf
(2)	stem	leaf	root
(3)	root	stem	leaf
(4)	root	leaf	stem

- 18 Kenneth carried out an experiment on 4 similar potted plants, A, B, C and D. For each plant, he removed some plant parts. Then he placed all the 4 potted plants in his garden and watered them daily with the same amount of water. A cross (X) in the box indicates the plant part that was removed as shown in the table below.

	Plants			
	A	B	C	D
root		X		
fruit	X	X	X	
flower	X			X

Which potted plant would most likely die first?

- (1) plant A
 - (2) plant B
 - (3) plant C
 - (4) plant D
- 19 Ali pushed a freely suspended bar magnet a little and let it swing until it came to rest. In which direction would the bar magnet point to when it came to a rest?



Which of the following represents A and B?

	A	B
(1)	east	west
(2)	west	north
(3)	south	east
(4)	north	south

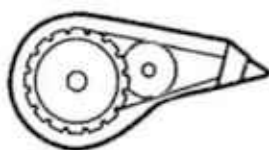
20 Which one of the following does not make use of magnet to work?

(1)



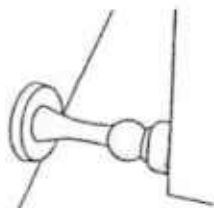
compass

(2)



correction tape

(3)



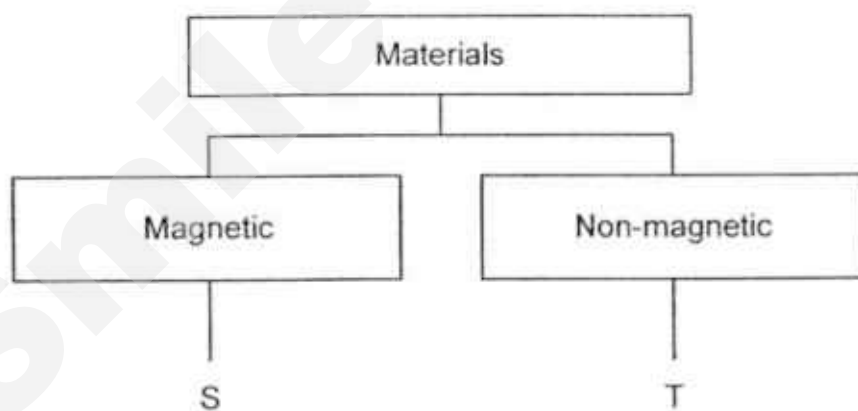
doorstopper

(4)



refrigerator door

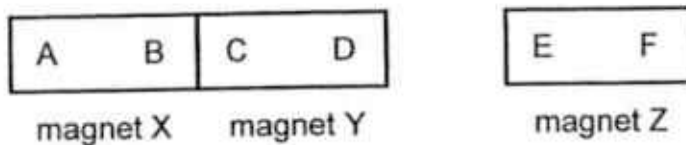
21 The chart below shows how materials, S and T, are classified.



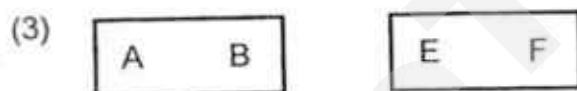
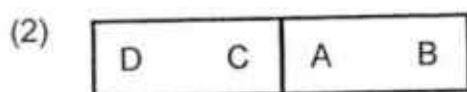
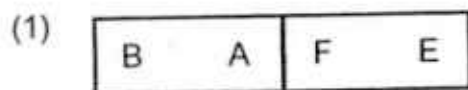
Which of the following represents S and T?

	S	T
(1)	iron	steel
(2)	iron	copper
(3)	aluminium	copper
(4)	aluminium	plastic

- 22 Three magnets, X, Y and Z, are placed near each other. Magnet X and magnet Y attracted each other but magnet Y and magnet Z repelled each other.

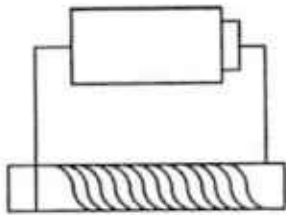


Which one of the following is a possible arrangement?

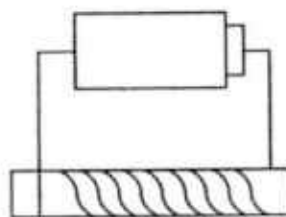


- 23 Krishna coiled a length of wire around an iron rod and connected it to a battery. Which one of the following electromagnets is the strongest?

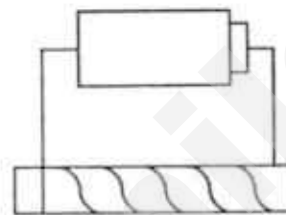
(1)



(2)



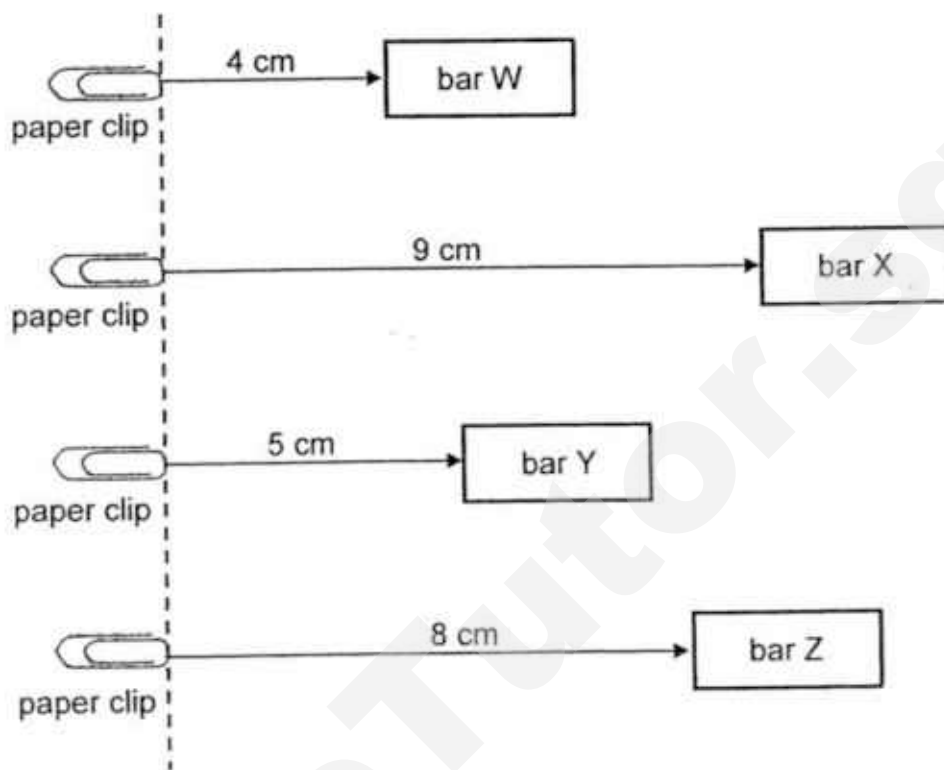
(3)



(4)



- 24 Lincoln magnetised four identical iron bars, W, X, Y and Z, using the stroking method. He observed that the iron bars attracted the paper clip at different distances.



Which iron bar was stroked the most number of times?

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

End of Booklet A



CATHOLIC HIGH SCHOOL
SEMESTRAL ASSESSMENT TWO (2017)
PRIMARY THREE
SCIENCE
BOOKLET B

Name: _____ ()

Class: Primary 3 - _____

Date: 1 Nov 2017

Parent's Signature: _____

Booklet A	48
Booklet B	32
Total	80

10 questions

32 marks

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.

Write your answers in this booklet.

This booklet consists of 13 printed pages, excluding the cover page.

Booklet B (32 marks)

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 Jordan classified some animals into the table below.

Animal	Body covering	Number of legs
J	moist skin	4
K	hard outer covering	6
L	scales	4
M	hard outer covering	8

He then grouped the animals as shown below.

Group W
animal J animal L

- (a) Based on the above grouping, what characteristic did Jordan use to classify the animals in Group W? [1]

Group W: _____

(Go on to the next page)

SCORE	1
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Continue from question 25

- (b) Jordan found another way of classifying the animals as shown:

Group Y
animal K animal M

Which characteristic did he use?

Group Y: _____

[1]

- (c) Which animal, J, K, L or M, represents the animal shown?

[1]

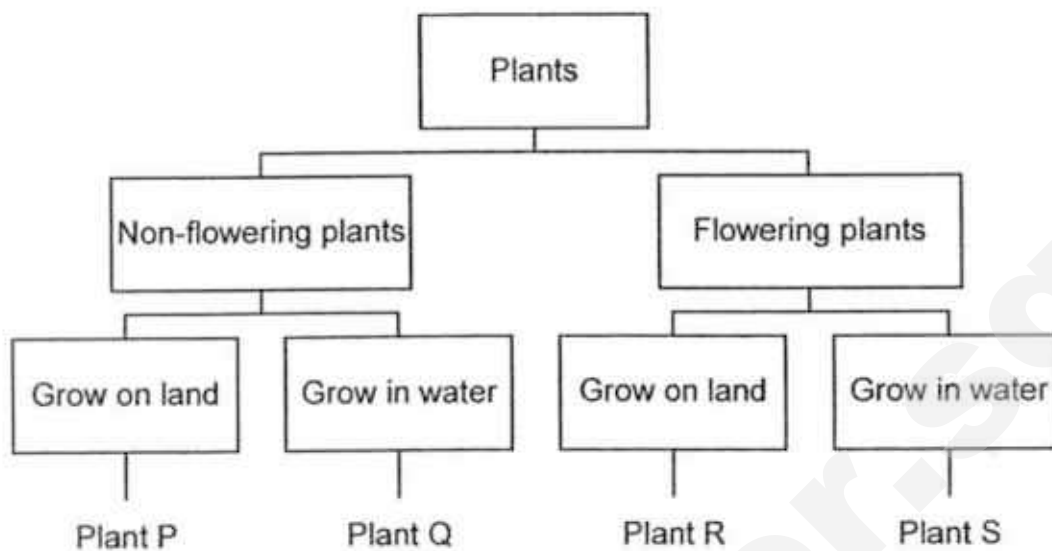


crocodile

(Go on to the next page)

SCORE	2
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26 Study the diagram below.



(a) What are the characteristics of plant R? [1]

(b) Based on the diagram above, which land plant(s) reproduce(s) by spores? [1]

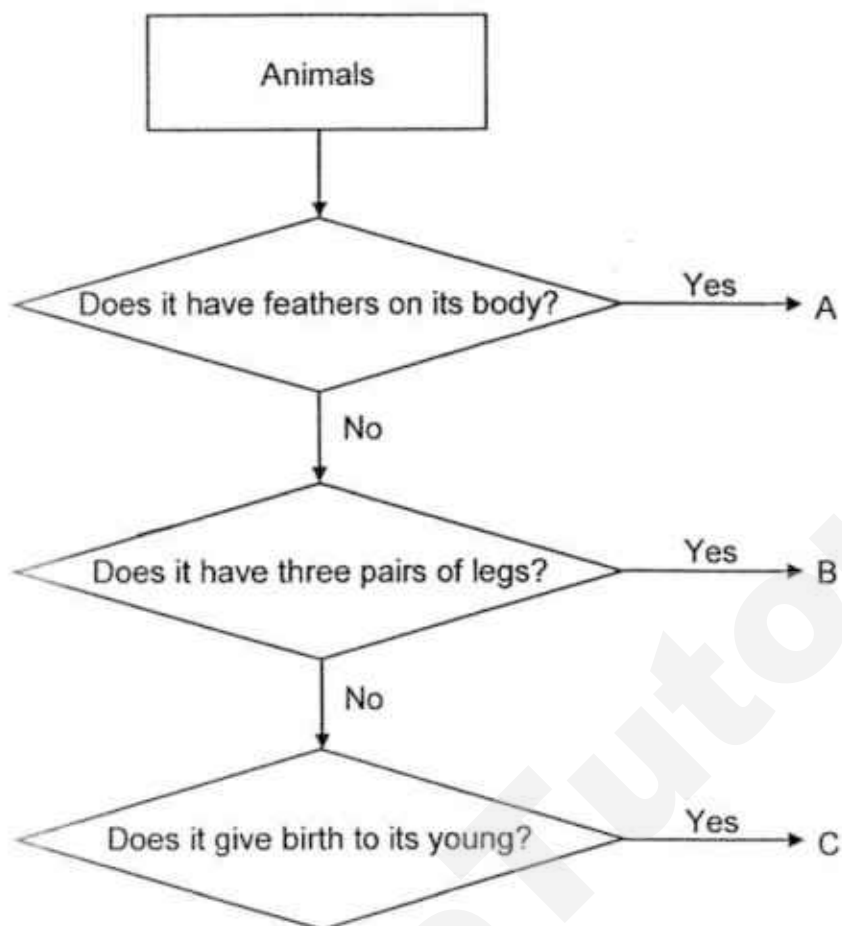
(c) Which plant, P, Q, R or S, represents the water lily as shown below? [1]



(Go on to the next page)

SCORE	3
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27 Study the chart below.



Which of the following animals do A, B and C represent?

[3]



bat



chicken



snake



grasshopper

A: _____

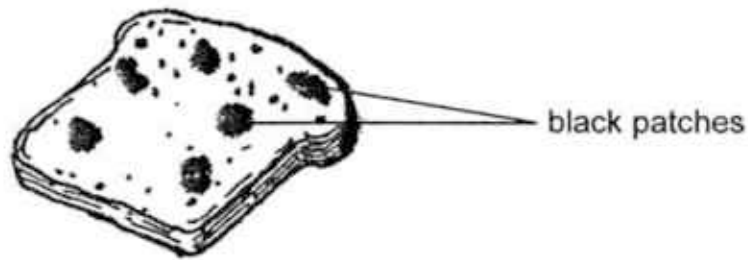
B: _____

C: _____

(Go on to the next page)

SCORE	3
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- 28 Zhi Wen sprinkled some drops of water on a slice of bread. He then placed it on the dining table. After 2 weeks, he observed black patches growing on the bread.



- (a) What do you think are the black patches? [1]

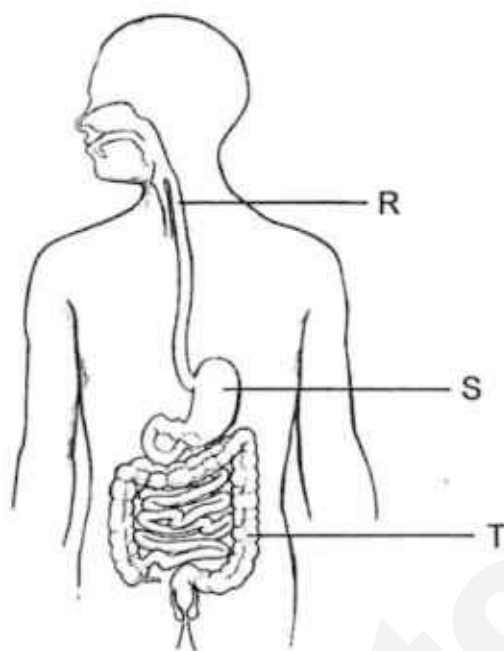
- (b) Why do the black patches grow on the bread? [1]

- (c) Where do the black patches get their food? [1]

(Go on to the next page)

SCORE	3
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29 The diagram below shows the human digestive system.



(a) Name the parts, R and S.

[1]

R: _____

S: _____

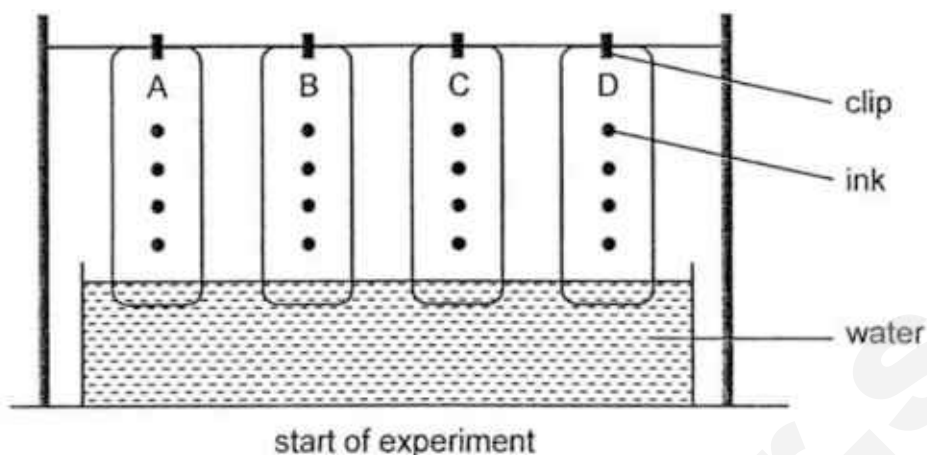
(b) What is the function of part T?

[1]

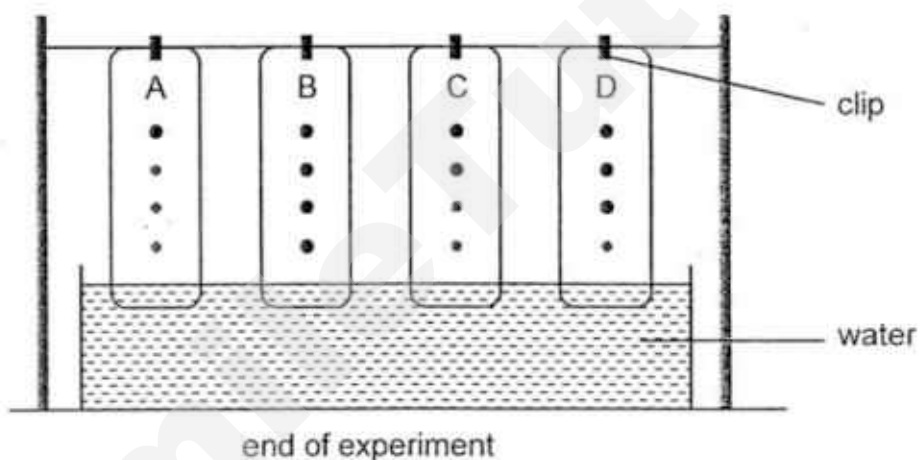
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SCORE	2
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- 30 Amanda carried out an experiment as shown in the set-up below. Each material, A, B, C and D, used in the experiment was of the same length, width and thickness. The ink was dotted at equal intervals.



After a few minutes, Amanda observed that the dots of ink disappeared as the materials came into contact with water.



- (a) What property of the material is Amanda comparing?

[1]

(Go on to the next page)

SCORE	1
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Continue from question 30

- (b) The picture below shows an umbrella.



- (i) Based on the results above, which material, A, B, C or D, is most suitable for making the part labelled X? [1]

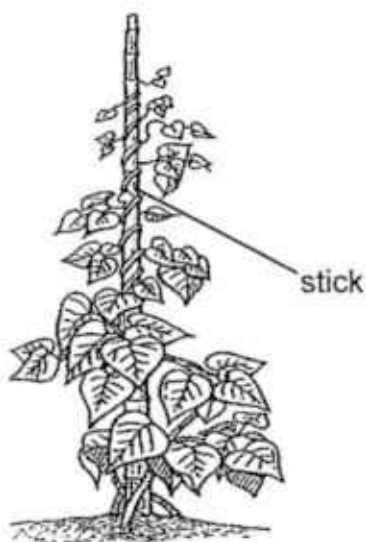
- (ii) Explain your answer in (i). [1]

- (c) What property must the material used to make the part labelled Y have? [1]

(Go on to the next page)

SCORE	3
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31 Omar used a stick to support and hold up a plant as shown below.



- (a) The stick is carrying out the function of a plant part. Name the plant part. [1]

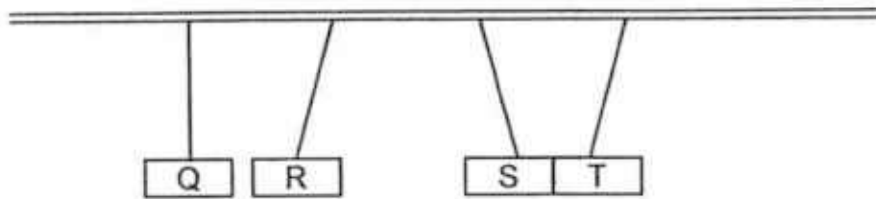
- (b) Complete the table below with the correct parts of the plant. [1]

Description	Part
Absorb water and minerals from the soil	
Allow taking in and giving out of gases	

(Go on to the next page)

SCORE	2
-------	---

32 Four metal bars, Q, R, S and T, are hung from a string as shown below.



(a) Which of the bars is/are made of copper?

[1]

(b) Which of the bars is/are definitely magnets?

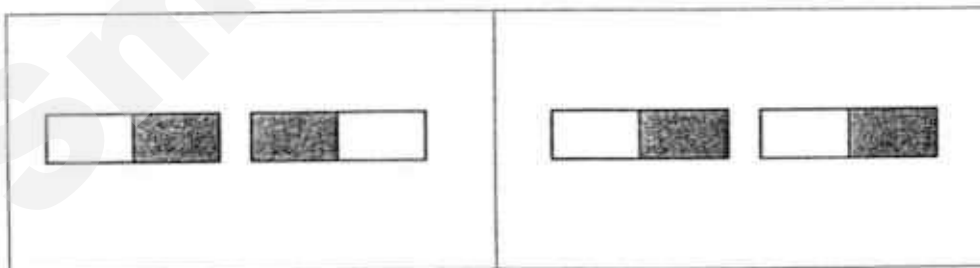
[1]

(c) Explain your answer in (b).

[1]

(d) Draw arrows in the diagrams below to show how the magnets interact.

[1]



(Go on to the next page)

SCORE	4
-------	---

- 33 Winston carried out an experiment to find out how the number of strokes applied on an iron nail by a magnet affects the number of iron pins it would attract. He recorded the results in the table shown below.

Iron nail	Number of iron pins attracted
A	8
B	5
C	14
D	11

- (a) Tick (✓) the variable(s) that was/were kept unchanged in his experiment.

[1]

Variables	Tick (✓)
size of iron nail	
size of iron pins	
number of strokes	

- (b) Based on the results above, which iron nail, A, B, C or D, has become the strongest magnet?

[1]

- (c) Explain your answer in (b).

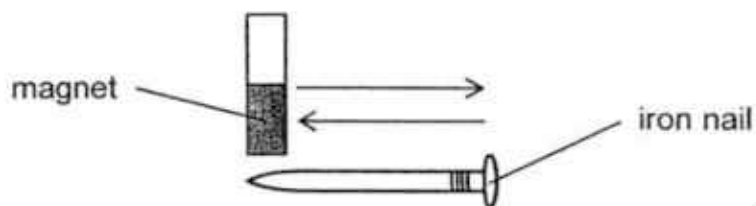
[1]

(Go on to the next page)

SCORE	3
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Continue from question 33

Winston tried to magnetise an iron nail using the stroking method as shown below.



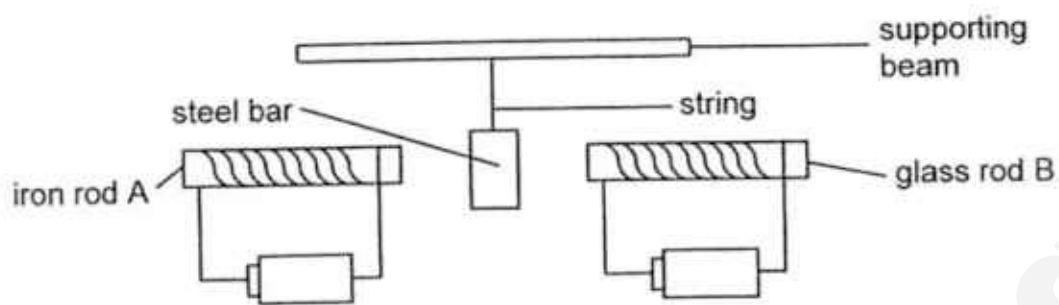
(d) Give a reason why the iron nail could not be magnetised.

[1]

(Go on to the next page)

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

- 34 Xiaoling set up an experiment as shown below. The iron rod A and glass rod B were of the same size. The battery used were of the same strength.



- (a) What would Xiaoling observe about the steel bar? [1]

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

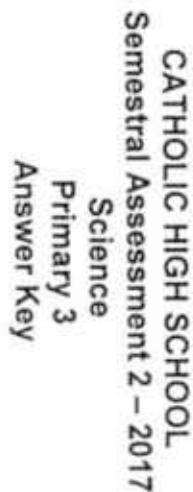
- (c) Suggest two ways how Xiaoling can increase the strength of an electromagnet. [2]

(i)

(ii)

End of Booklet B

SCORE	4
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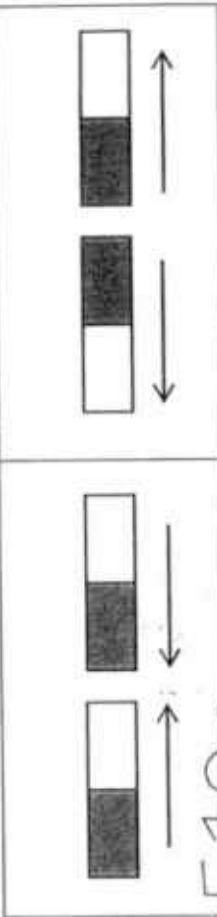
Qn	Ans	Qn	Ans	Qn	Ans	Qn	Ans	Qn	Ans	Qn	Ans	Qn	Ans
1	3	4	1	7	1	10	1	13	1	16	4	19	4
2	3	5	4	8	2	11	2	14	4	17	3	20	2
3	3	6	2	9	4	12	4	15	1	18	2	21	2

1. Award full mark for correct ideal/concept. Accept answers which are conceptually correct and relevant in the context of the questions.
 - Pupils' responses that show evidence of understanding of relevant concepts and mastery of skills should be carefully evaluated and awarded due credit. Answers that deviate from the mark scheme but demonstrate the right understanding should be accepted.
2. Do not award any mark if the answer expresses a wrong ideal/concept.
3. Partial ($\frac{1}{2}$) mark to be awarded only if specified in the mark scheme.
4. If more points are given, award marks for correct parts and then deduct $\frac{1}{2}$ mark for each wrong ideal/concept.

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28	Concept: <i>Mould needs water, warmth to grow</i>		
a	mould / fungi <u>Other acceptable answer</u> bread mould	[1]	
b	There is moisture/water on the bread [$\frac{1}{2}$] and mould needs moisture to grow / mould grows where there is moisture [$\frac{1}{2}$] <u>Other acceptable answer</u> bread was sprinkled with some water [$\frac{1}{4}$] water increases the growth of mould [$\frac{1}{2}$] mould grows better when there is moisture [$\frac{1}{4}$]	[1]	
c	They get their food from the bread they grow on.	[1]	
29	Concept: <i>Identify and describe the organs in the human digestive system</i>		
a	R: gullet S: stomach	[1] $\frac{1}{2}$ m each	
b	The large intestine/Part T removes water from the undigested food. <u>Other acceptable answer</u> Water is absorb from the undigested food at large intestine/Part T.	[1]	Into the bloodstream / to all parts of the body (deduct $\frac{1}{2}$ m) Absorb/remove water [0] <no mention of source>

30	Concept: Compare physical properties of material based on waterproof		
a	Whether the material is waterproof. <u>Other acceptable answer</u> The material's ability to absorb (water) / absorbency To see which material absorbs the most water Waterproofness / absorbness <u>Partial answer</u> Paper absorb water [$\frac{1}{2}$]	[1]	
30b	(i) Material B (ii) None of the dots of ink on material B disappeared [$\frac{1}{2}$] showing that it is waterproof / Part X must be waterproof to keep oneself dry if it rains / did not absorb any water in the experiment [$\frac{1}{2}$]	[1] [1]	dependent on (i)
c	strong / stiff / waterproof / does not break easily	[1]	Strength [0]

31	Concept: Identify the different parts of the plants and state their functions.								
a	stem	[1]							
b	<table border="1"><thead><tr><th>Description</th><th>Part</th></tr></thead><tbody><tr><td>Absorb water and minerals from the soil</td><td>root(s)</td></tr><tr><td>Allow taking in and giving out of gases</td><td>leaf/leaves</td></tr></tbody></table>	Description	Part	Absorb water and minerals from the soil	root(s)	Allow taking in and giving out of gases	leaf/leaves	1/2m each	
Description	Part								
Absorb water and minerals from the soil	root(s)								
Allow taking in and giving out of gases	leaf/leaves								
32	<p>Other acceptable answer Stomata / leave / leafs [1/2]</p> <p>Concept: Recognise that a magnet can exert a push or pull</p>								
a	Q	[1]	Deduct 1/2m for additional answer.						
b	R and S	[1] 1/2m each	Deduct 1/2m for additional answer.						
c	The like poles of magnets R and S are facing each other [1/2], so they repel [1/2].	[1] 1/2m each	dependent on (b)						
d									

33	Concept: Make a magnet by the 'Stroke method'										
a	<table><tr><td>Variables</td><td>Tick (✓)</td></tr><tr><td>size of iron nail</td><td></td></tr><tr><td>size of iron pins</td><td></td></tr><tr><td>number of strokes</td><td></td></tr></table>	Variables	Tick (✓)	size of iron nail		size of iron pins		number of strokes		[1] ½m each	
Variables	Tick (✓)										
size of iron nail											
size of iron pins											
number of strokes											
b	Iron nail C	[1]									
c	It attracted the most number of iron pins. 	[1]									
d	The iron nail was stroked back and forth. OR The iron nail was not stroked in the same direction. <u>Other acceptable answer</u> The iron nail was stroked side to side / left and right / 2 ways / different directions / both directions The iron nail was not stroked in one direction.	[1] <									

34	Concept: Make a magnet by electrical method		
a	The steel bar would be attracted to iron rod (A). OR The steel bar would move towards iron rod (A).	[1]	
b	The iron rod / steel was made of magnetic material [½] and was magnetised [½].	[1]	The glass rod was made of non-magnetic material [½] and cannot be magnetised [½]. (Above is acceptable only if Part A is written as the steel bar would not be attracted to glass rod)
c	(i) Increase the number of coils of wire around the (iron) rod / electromagnet. (ii) Increase the number of batteries (connected to the iron rod). Partial answer Increase the number of coils of wire / add more wire [½] <no mention of iron rod>	[2] 1m each	Increase the number of coils of wire around the objects / magnetic objects / bar [0]

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Name: _____ ()

Class: Primary 3 _____

CHIJ ST NICHOLAS GIRLS' SCHOOL



Primary 3 Semestral Assessment 2 SCIENCE

BOOKLET A

27 October 2017

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

24 questions
48 marks

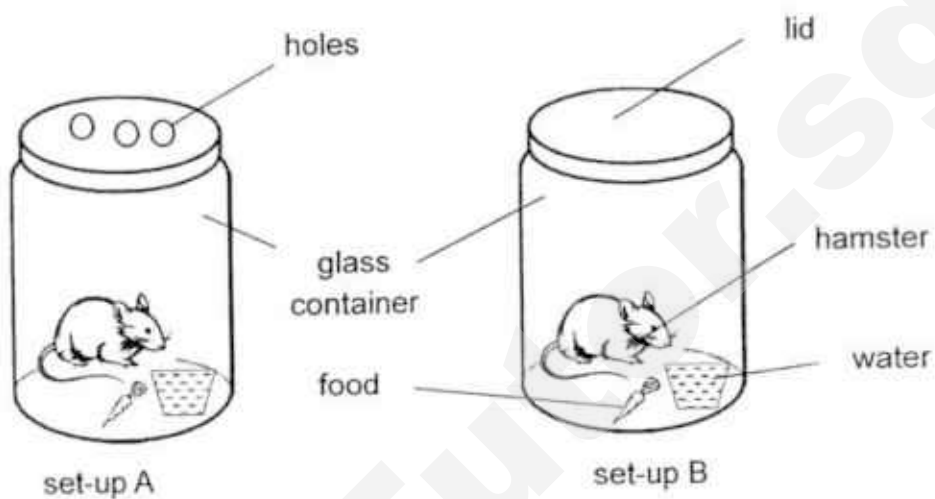
Do not open this booklet until you are told to do so.
Follow all instructions carefully.
Answer all questions.

This paper consists of 18 printed pages.

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. Mary conducted an experiment using set-ups A and B.



Mary is trying to find out if the hamster needs _____ to survive.

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

2. Which of the following organ systems work together to help us bend our fingers?

- A Skeletal system
- B Digestive system
- C Muscular system
- D Respiratory system

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

3. What are the differences between a bird and a fish?

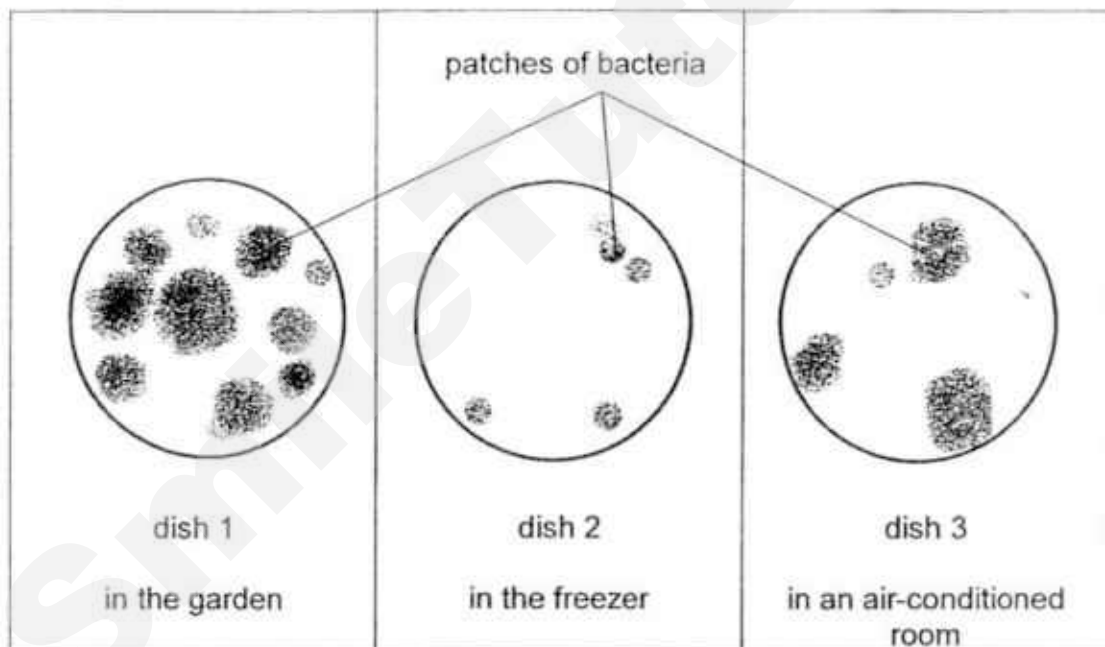
- A They live in different places.
- B They have different outer coverings.
- C They have different breathing methods.
- D They have different reproduction methods.

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

4. Which one of the following is the function of the gullet?

- (1) It digests food.
- (2) It absorbs all the waste in our food.
- (3) It allows the stomach to digest food better.
- (4) It allows food to move from the mouth to the stomach.

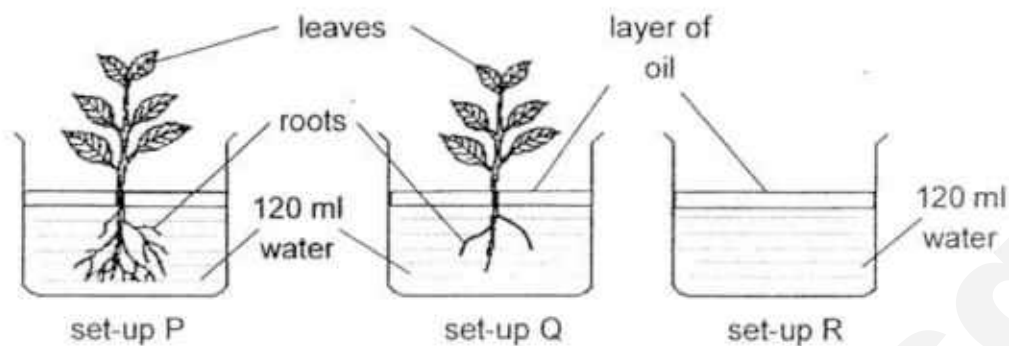
5. Jack conducted an experiment to find out if the amount of warmth affects the growth of bacteria. Bacteria was grown in three identical dishes and placed in three different places. The diagram below shows the amount of bacteria after five days.



Based on the results shown above, what can be concluded from the experiment?

- (1) Bacteria are harmful to us.
- (2) Bacteria cannot make their own food.
- (3) Cooler conditions increase bacteria growth.
- (4) Warmer conditions increase bacteria growth.

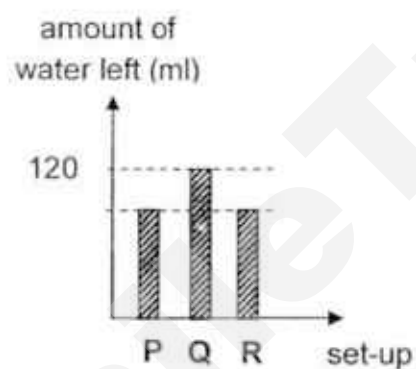
6. Emily set up the experiment as shown below.



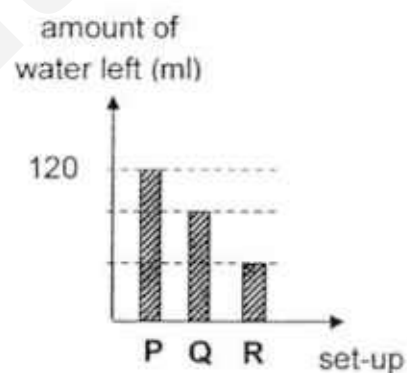
She left the set-ups near a window for three days.

Which one of the following graphs shows the correct amount of water left in each set-up after three days?

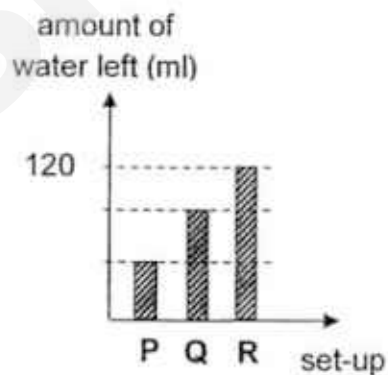
(1)



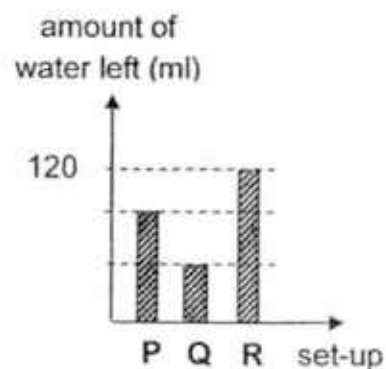
(2)



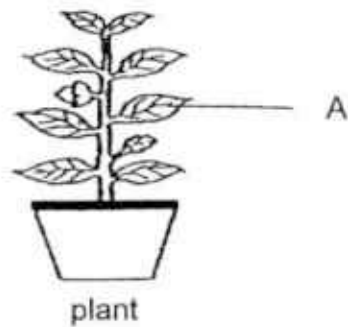
(3)



(4)



7. The diagram below shows a plant.



Which one of the following is a function of part A?

- (1) It helps the plant to take in air.
- (2) It helps the plant to grow straight up.
- (3) It helps the plant to absorb more minerals.
- (4) It helps the plant to absorb more rainwater.

8. Lynn observed four organisms A, B, C and D during an excursion to the zoo. She recorded her observations in the table shown below. A tick (✓) shows that the organism has the characteristic.

Characteristic	Organisms			
	A	B	C	D
Lays eggs		✓	✓	✓
Has scales				✓
Breathes through lungs	✓		✓	✓

Which one of the above organisms best represents a reptile?

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

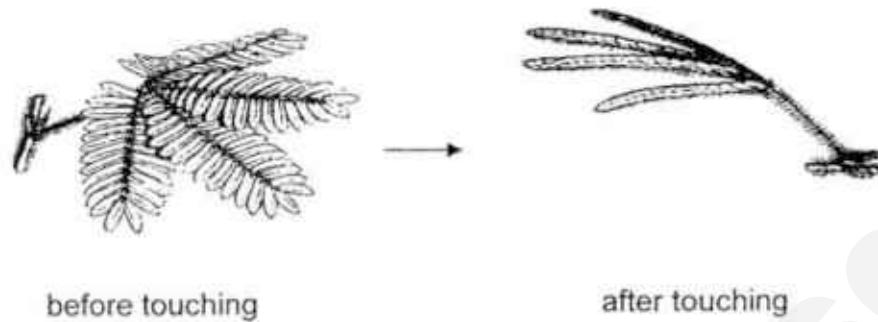
9. Study the classification table below.

Group A	Group B
Mango	Moss
Papaya	Mushroom
Hibiscus	Bird's nest fern

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

	Group A	Group B
(1)	Bear flowers	Do not bear flowers
(2)	Grow on land	Grow in water
(3)	Do not have seeds	Have many seeds
(4)	Can make their own food	Cannot make their own food

10. The diagram below shows a mimosa plant closing its leaves when it is touched.



Based on the diagram, which one of the following characteristics of living things does the mimosa plant show?

- (1) Living things can grow.
- (2) Living things can reproduce.
- (3) Living things need food to survive.
- (4) Living things can respond to changes.

11. The diagram below shows animal X.



animal X

Based only on what is observable, which one of the following statements best describes animal X?

- (1) It is an insect as it lays eggs.
- (2) It is not an insect as it does not have wings.
- (3) It is an insect as it has three body parts and six legs.
- (4) It is not an insect as it does not have three body parts.

12. Which of the following describe the function(s) of the stem?

- A Supports the plant
- B Absorbs water and minerals
- C Holds the plant firmly to the soil

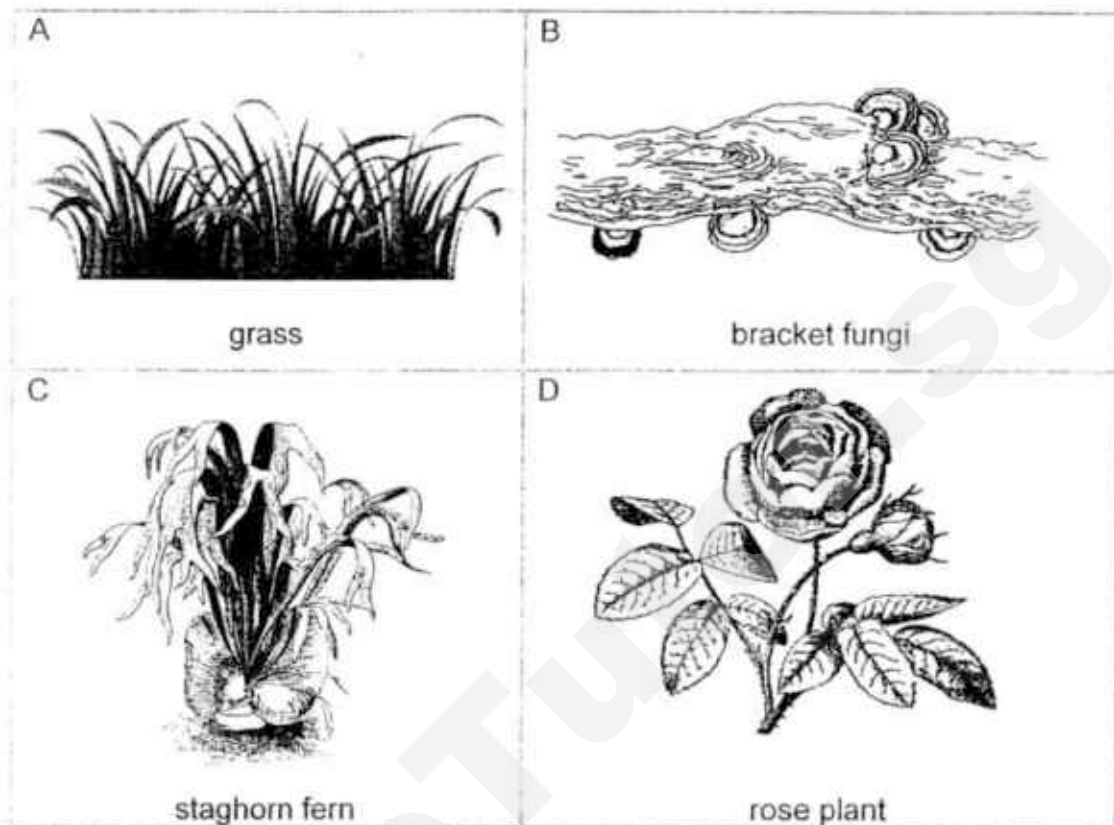
- (1) A only
- (2) B only
- (3) A and C only
- (4) B and C only

13. Which one of the following organisms is grouped **wrongly**?

Group S	Group T
frog	mosquito
salamander	ant
newt	scorpion

- (1) frog
- (2) scorpion
- (3) mosquito
- (4) salamander

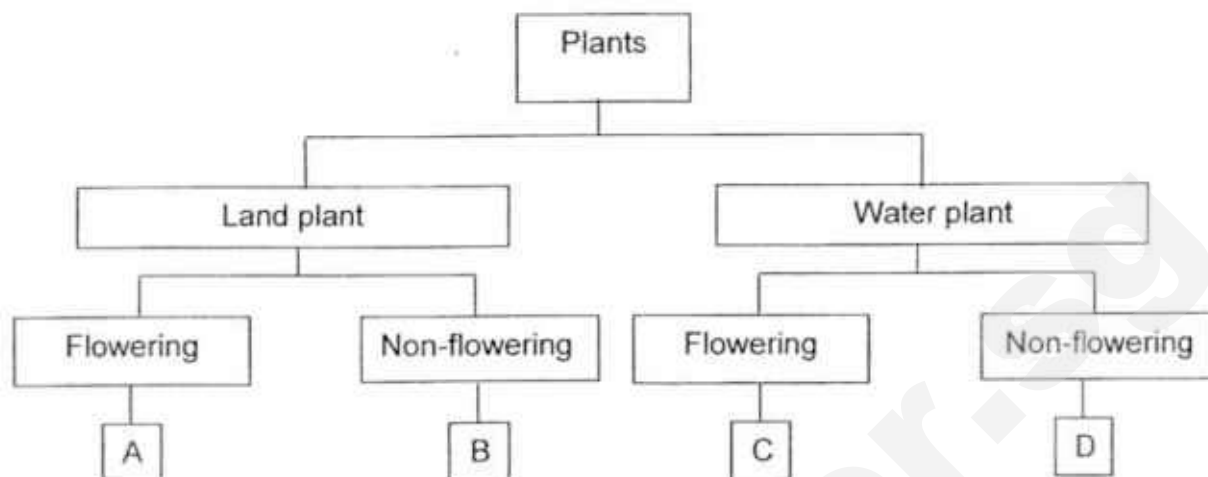
14. The diagram below shows four organisms.



Which of the above organisms reproduce by spores?

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

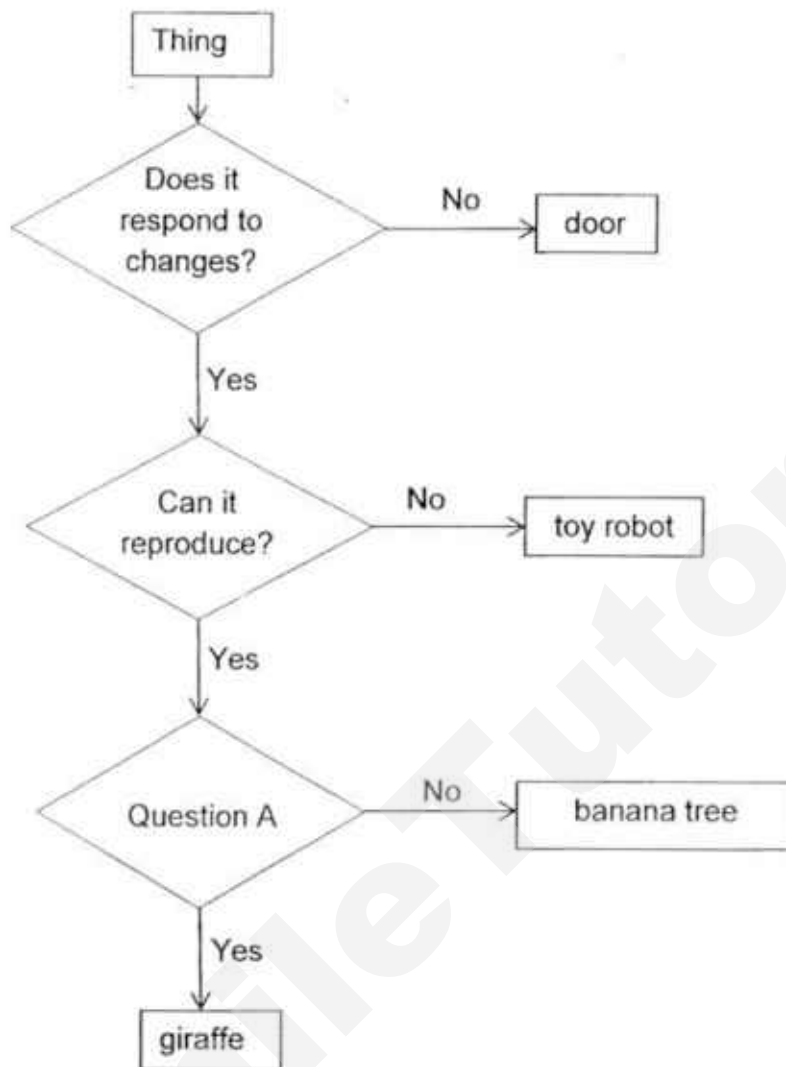
15. Study the classification table below.



Which one of the following A, B, C or D best describes a dragon scale fern?

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

16. Study the flow chart shown below.



Which one of the following is most likely to be Question A?

- (1) Does it grow?
- (2) Does it make its own food?
- (3) Does it move around by itself?
- (4) Does it need air, food and water?

17. The diagram below shows a plastic toilet door.



plastic toilet door

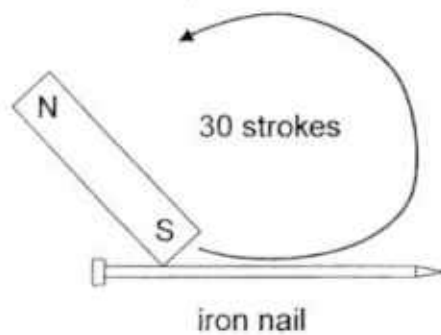
Which of the following properties of plastic should we consider when making the door as shown in the diagram above?

- A Plastic is strong.
- B Plastic is flexible.
- C Plastic is waterproof.
- D Plastic can float or sink in water.

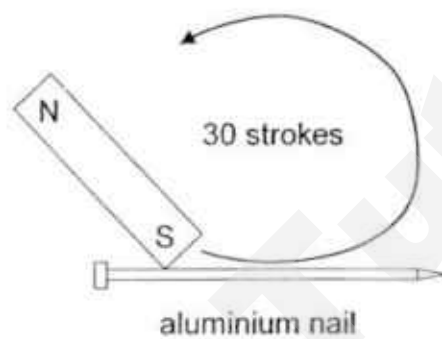
- (1) A and C only
- (2) A and D only
- (3) B and C only
- (4) B and D only

18. Which one of the following set-ups should Sue use to make the nail a temporary magnet so that she can attract the most number of steel clips?

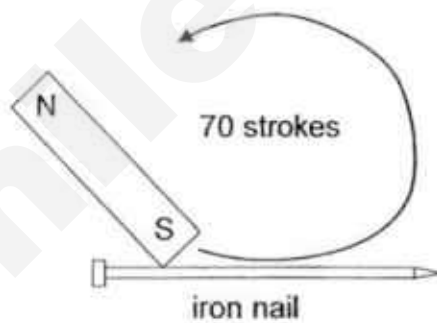
(1)



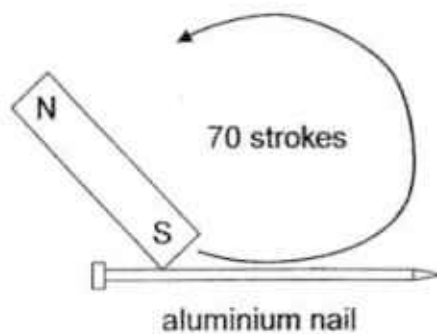
(2)



(3)



(4)



19. The properties of three objects are shown in the table below.

Properties	Objects		
	metal spoon	inflated balloon	leather belt
X	No	Yes	No
transparent	No	No	No
strong	Yes	No	Yes

Which one of the following best represents property X?

- (1) Stiff
- (2) Flexible
- (3) Waterproof
- (4) Ability to float

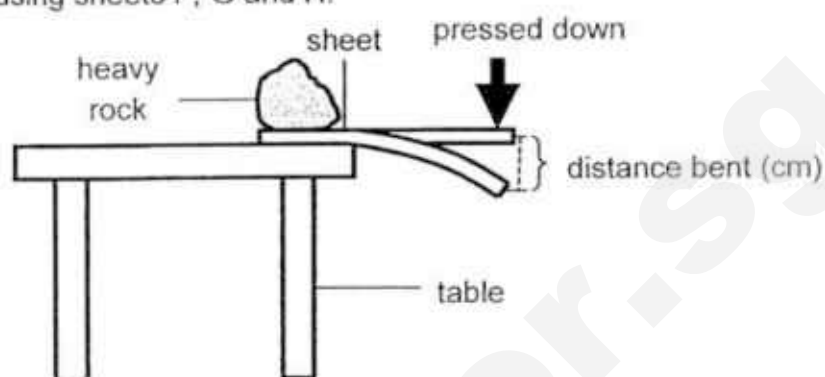
20. Which one of the following materials does not come from plants?

- (1) Wool
- (2) Wood
- (3) Cotton
- (4) Rubber

21. Which one of the following statements is true of magnets?

- (1) All metals are attracted to magnets.
- (2) Like poles of magnets can repel each other.
- (3) Two magnets will always attract each other.
- (4) Larger magnets have greater magnetic pull than smaller magnets.

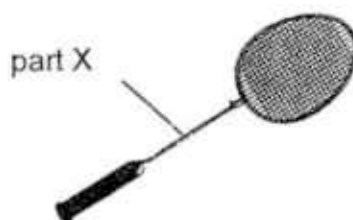
22. David set up an experiment to find out the flexibility of four sheets E, F, G and H which are made of different materials. He placed sheet E on the side of a table and placed a heavy rock on the sheet to hold it down firmly as shown below. Then, he pressed down on the sheet slowly until it broke. He repeated the experiment using sheets F, G and H.



He recorded the results in the table below.

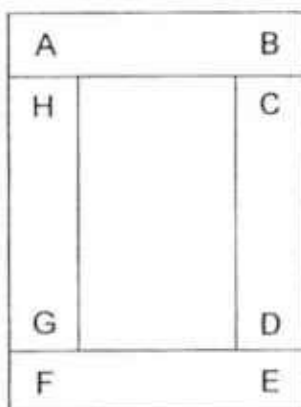
Sheet	Greatest distance bent before breaking (cm)
E	1
F	10
G	8
H	5

Based only on the results in the table above, which one of the sheets E, F, G or H is most suitable for making part X of the badminton racket shown below?



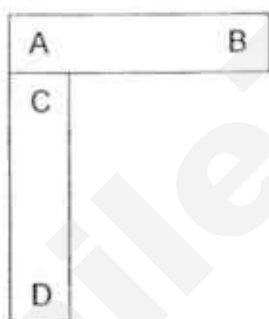
- (1) E
- (2) F
- (3) G
- (4) H

23. The diagram below shows four bar magnets with their ends marked A to H. The magnets can be arranged as shown below.

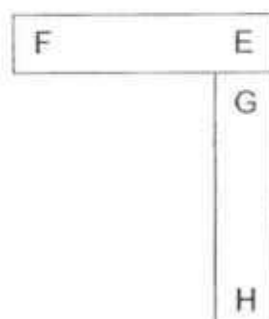


Which one of the following diagrams shows a possible arrangement of two of the magnets?

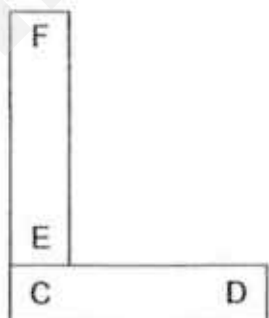
(1)



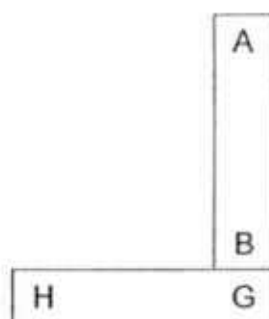
(2)



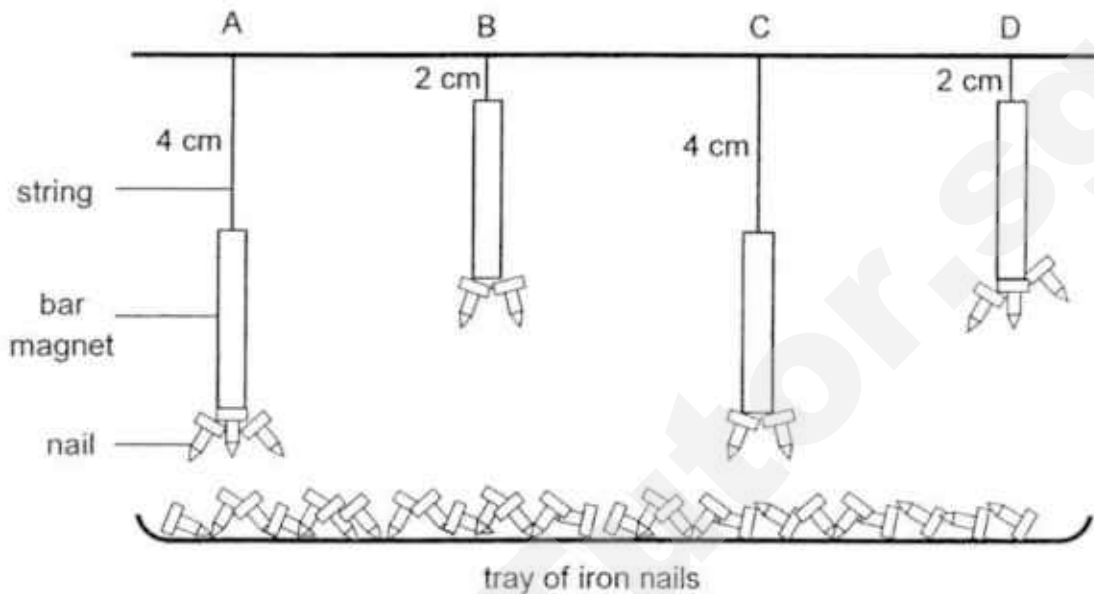
(3)



(4)



24. Jan suspended four identical bar magnets from the ceiling using strings at positions A, B, C and D. She placed a tray of iron nails below the magnets as shown below. It was observed that some nails were attracted to the magnets.



Based only on the results of the experiment above, which magnet has the **weakest** magnetic pull?

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

END OF BOOKLET A

Name : _____ ()

Class : Primary 3 _____

CHIJ ST NICHOLAS GIRLS' SCHOOL



Primary 3 Semestral Assessment 2 SCIENCE

BOOKLET B

27 October 2017

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.

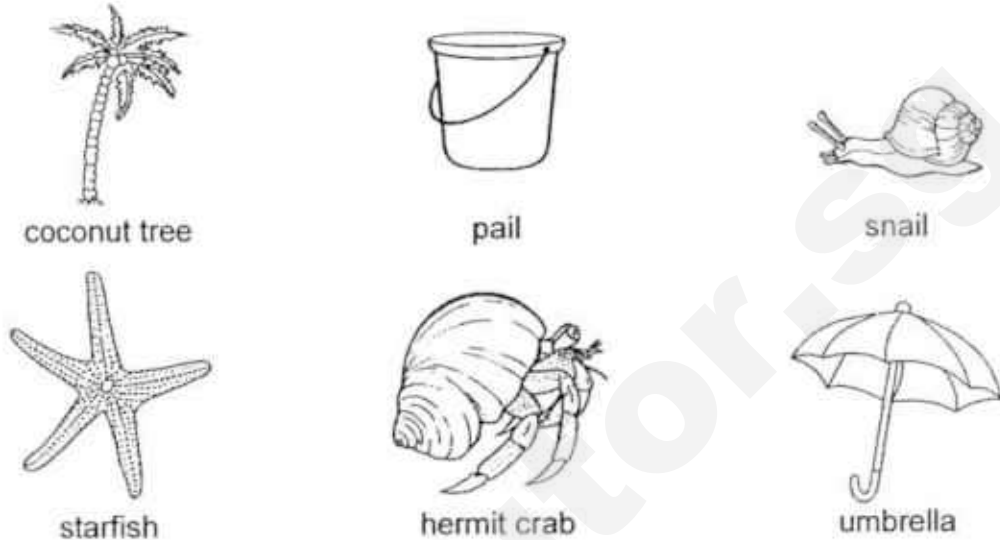
Booklet A	48
Booklet B	32
Total	80

Parent's Signature/Date

Section B (32 marks)

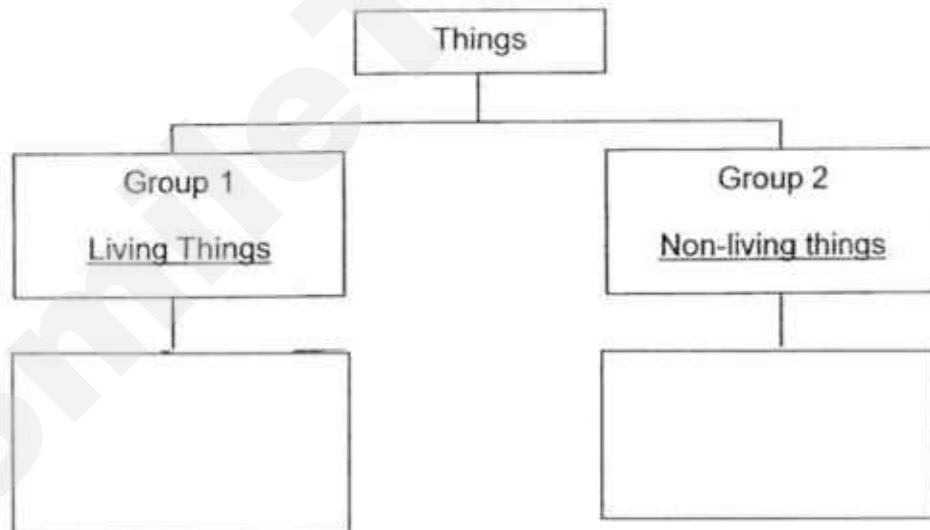
For questions 25 to 34, write your answers in this booklet. The number of marks available is shown in the brackets [] at the end of each question or part question.

25. Justin found the following things on the beach.



(a) Classify the things above based on the headings as shown below.

[2]

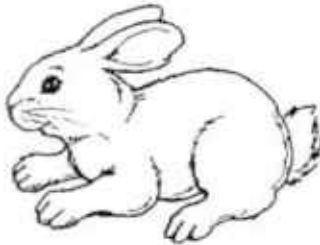


(b) Justin saw a man paddling a boat in the sea. He said that the boat belonged to Group 1 as it could move. Do you agree with him? Give a reason for your answer.

[1]



26. The diagram below shows two animals, P and Q.



P



Q

- (a) Based only on what is observable in the diagram above, which animal group does Q belong to? State two characteristics of the animal group to support your answer. [2]

- (b) State one difference in the reproduction method of P and Q. [1]



27. Study the table below. A tick (✓) shows that the living thing has the characteristic.

Characteristic	Living things		
	X	Y	Z
Needs air, food and water	✓	✓	✓
Moves from place to place	✓		
Has fruits		✓	

(a) Based on the table above, give a specific example of living thing X and Z. [2]

X:

Z: _____

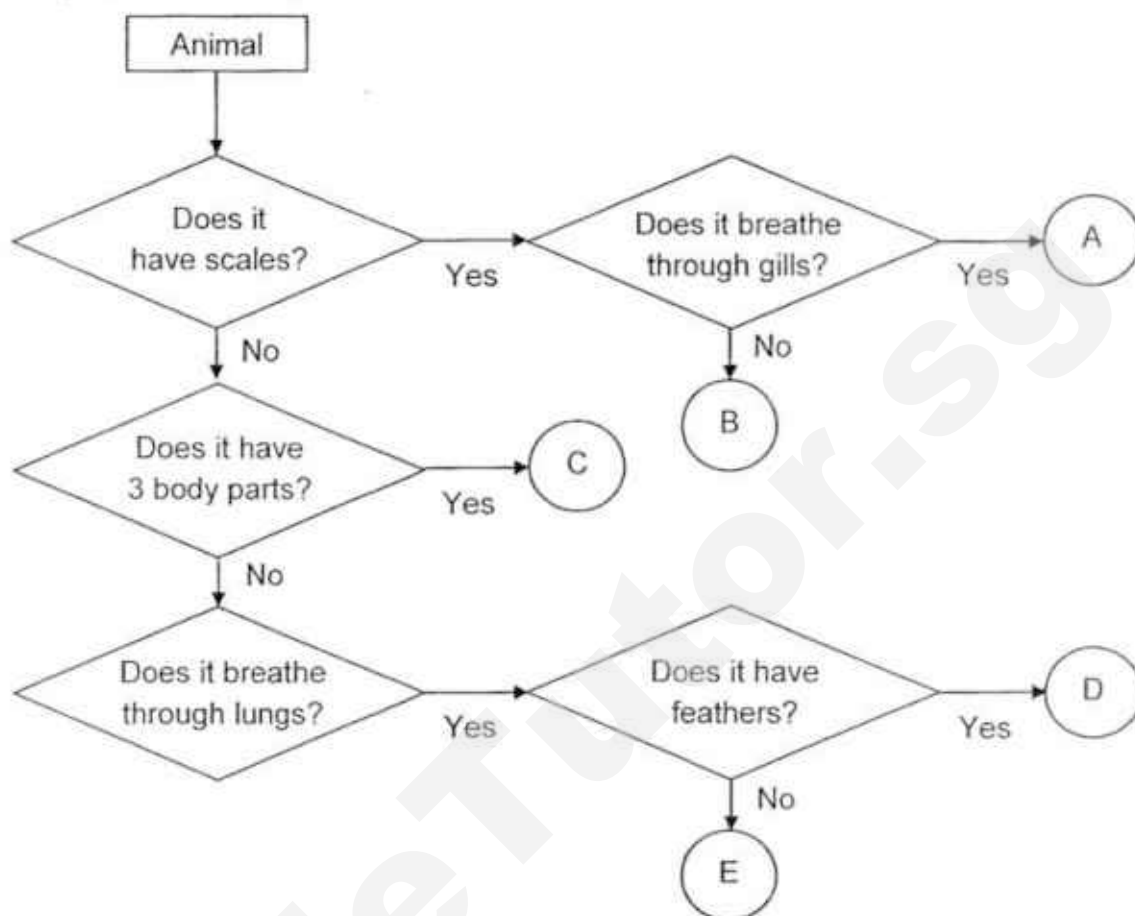
The diagram below shows a rose plant.



(b) Based on the table, in which group X, Y or Z would you place the rose plant?
Give a reason for your answer. [1]



28. Study the flow chart below.



(a) Based on the flow chart above, state two similarities between D and E. [2]

(b) Based on the flow chart above, state one difference between A and B. [1]

(c) Based on the flow chart above, which letter A, B, C, D or E would best represent the animal below? [1]

Ostrich: _____



29. A book was placed in a cupboard for a long time. The diagram below shows some grey patches growing on the cover of the book when it was taken out of the cupboard.



- (a) What could these grey patches be? [1]

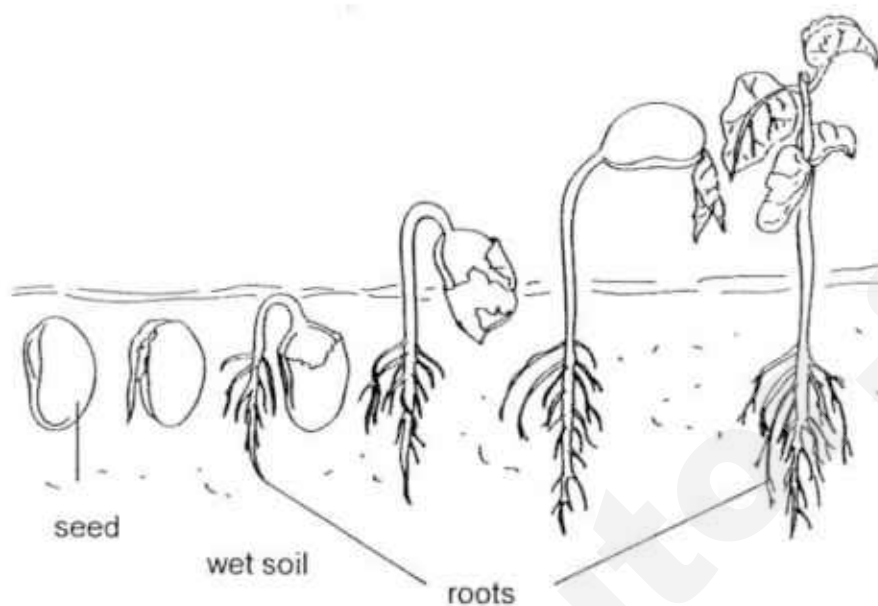
- (b) State one possible action that can be done to reduce or slow down the growth of these grey patches. Give an explanation for your answer. [2]

Action: _____

Explanation: _____



30. The diagram below shows the growth of a seed to an adult plant.



- (a) State why the roots of the plant grow downwards to the wet soil as shown in the diagram. [1]

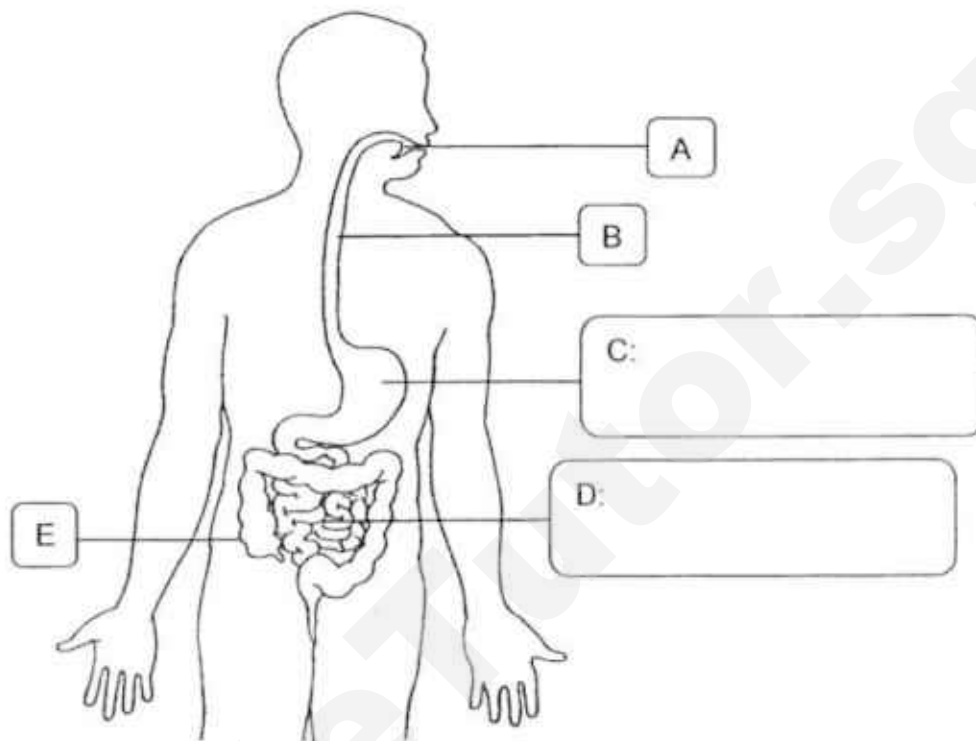
- (b) State one characteristic of living things shown by the diagram above. [1]



31. The diagram below shows the human digestive system.

(a) Label parts C and D in the boxes below.

[1]



(b) State what happens to the digested food in organ D.

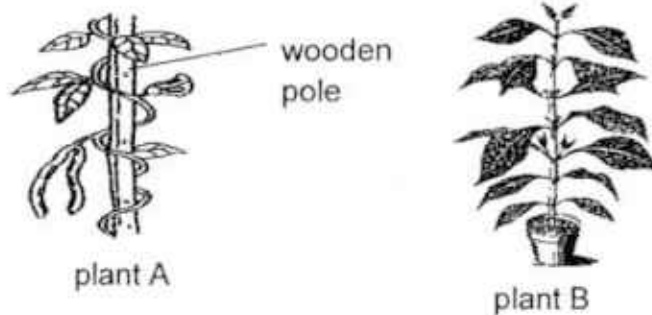
[1]

(c) Based on the diagram above, state the parts A, B, C, D and/or E where digestion of food takes place.

[1]



32. Rhea found two plants in her school garden as shown below.



- (a) State one difference between the stems of plant A and plant B. [1]

- (b) When the wooden pole was taken away, plant A was found to be growing unhealthily. Give a reason for this observation. [1]

Rhea also found some fungi growing on a dead log in the school garden.

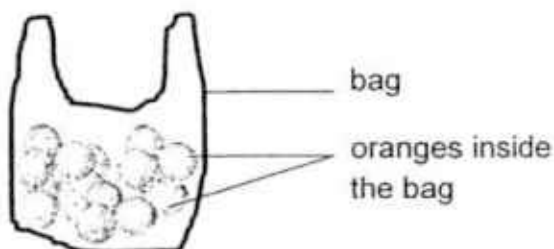


- (c) State how fungi obtain their food. [1]

- (d) Rhea wanted to bring the fungi home for her mother to cook. Do you think it is a good idea? Give a reason for your answer. [1]



33. Timmy conducted an experiment using four bags made of different types of materials W, X, Y and Z. He filled bag W with oranges, one orange at a time, until the bag broke. He repeated the experiment using bags X, Y and Z.



He recorded his results in the table below.

Bag	Greatest number of oranges the bag can hold before breaking
W	30
X	45
Y	60
Z	80

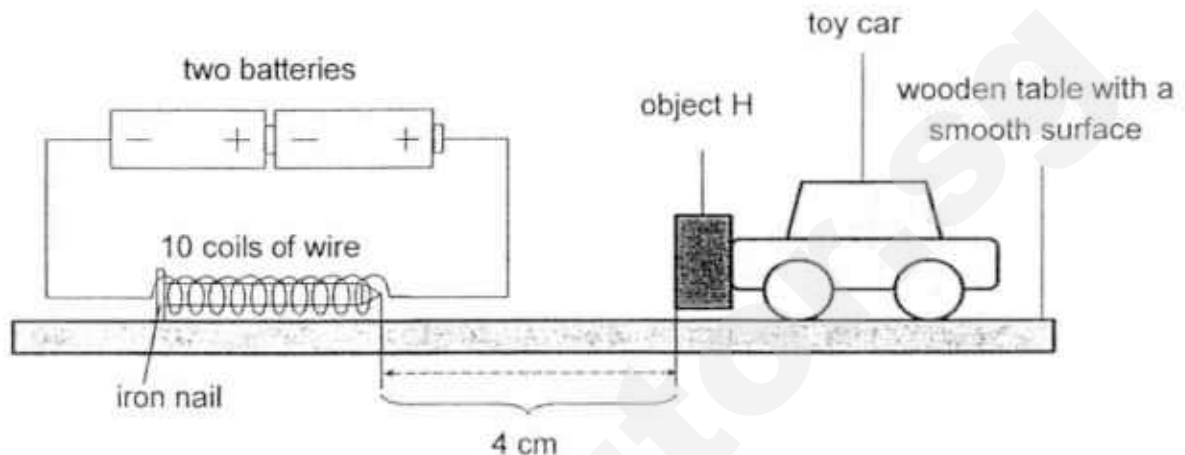
- (a) State the property of the material that is being tested in this experiment. [1]

- (b) Based only on the results of the above experiment, which bag W, X, Y or Z can carry 75 oranges? [1]

- (c) Give a reason to support your answer in (b). [1]



34. Moana conducted an experiment using the electromagnet shown below. Two batteries and a wire coiled 10 times around an iron nail were used. An object H, was attached to a toy car. The toy car was first placed 4 cm away from the iron nail. It was then observed that the toy car moved away from the iron nail.



- (a) Is object H a magnet or a magnetic object? [1]

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

- (c) State two ways to increase the magnetic strength of the electromagnet. [2]

1: _____

2: _____

END OF BOOKLET B



ANSWER KEY

YEAR : 2017
 LEVEL : PRIMARY 3
 SCHOOL : CHIJ ST NICHOLAS GIRLS'
 SUBJECT : SCIENCE
 TERM : SA2

Booklet A

Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8
1	1	3	4	4	5	1	4
Q9	Q10	Q11	Q12	Q13	Q14	Q15	Q16
1	4	3	1	2	3	2	3
Q17	Q18	Q19	Q20	Q21	Q22	Q23	Q24
1	3	4	1	2	1	4	3

Booklet B

25	(a)	<div style="display: flex; justify-content: space-around;"> <div style="border: 1px solid black; padding: 5px; text-align: center;"> Group 1 <u>Living Things</u> snail hermit crab starfish coconut tree </div> <div style="border: 1px solid black; padding: 5px; text-align: center;"> Group 2 <u>Non-living things</u> umbrella pail </div> </div>
	(b)	No, as the man is making the boat move by paddling it.
26	(a)	Q belongs to fish as it has scales and fins.
	(b)	P is a mammal and it give birth to young alive but Q is a fish so it lay eggs.
27	(a)	X: dolphin Z: fern
	(b)	Y as it has flowers which can later develop into fruits under suitable conditions.

28	(a)	Both does not have 3 body parts and they both breathe through lungs.
	(b)	A breathe through gills but B does not breathe through gills.
	(c)	Ostrich: <u>D</u>
29	(a)	Mould
	(b)	Action: <u>Silica gel.</u> Explanation: <u>To reduce/limit warmth/moisture thus reducing/slowing down mould growth.</u>
30	(a)	It can absorb water and mineral salts for the plant to make food.
	(b)	Living things can grow.
31	(a)	C: <u>stomach</u> D: <u>small intestine</u>
	(b)	Digested food is absorb into the box.
	(c)	A, C and D
32	(a)	Plant A coil around the wooden pole as its stem is weak but plant B has a strong stem.
	(b)	Plant A needs support to trap sunlight to make food.
	(c)	Fungi get their food by growing on living things dead or alive.
	(d)	No as it could be harmful.
33	(a)	Strength
	(b)	Z
	(c)	Z can hold 80 oranges and it is enough to hold 75 oranges.
34	(a)	A magnet.
	(b)	They like pole of both magnets are facing each other directly thus they repel.
	(c)	1: add more batteries. 2: coil more wire to the iron nail.

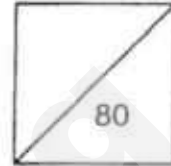
End

SmileTutor.sg



**HENRY PARK PRIMARY SCHOOL
2017 SEMESTRAL EXAMINATION 2
SCIENCE
PRIMARY 3**

Duration of Paper: 1 h 30 min



Name: _____ ()

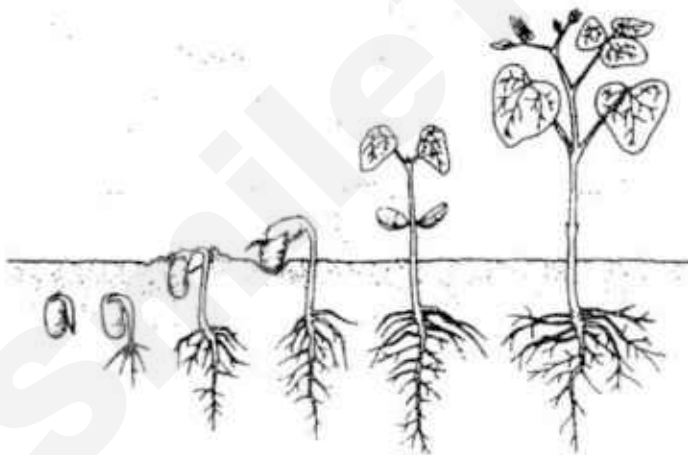
Parent's Signature _____

Class: Primary 3 _____

Section A: Multiple-Choice Questions (20 X 2 = 40 marks)

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 (1, 2, 3 or 4) on the **Optical Answer Sheet**.

1. The diagram below shows the different stages of a young plant's life cycle.



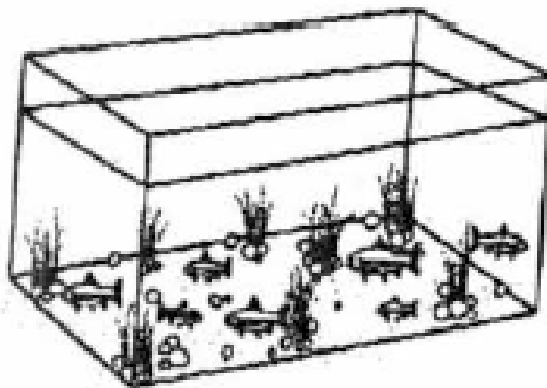
What do these stages in the plant life cycle show?

- (1) Living things can die.
- (2) Living things can grow.
- (3) Living things can respond.
- (4) Living things can move on their own.

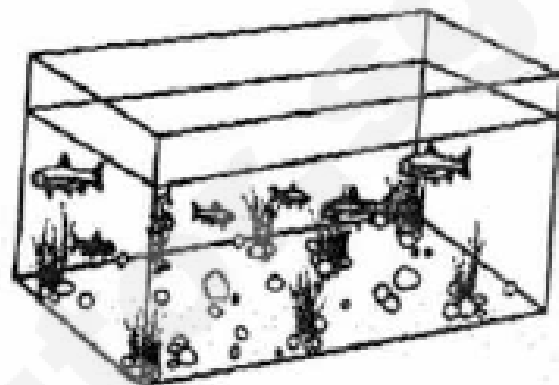
()

2. Richard cleaned and changed the water in his fish tank every day. He fed his fish every day to ensure that they have enough food.

On the first day, the fish swam around in the water. However, by the sixth day, Richard found his fish swimming closer to the surface of the water even after they had eaten.



Day 1



Day 6

Which one of the following statements is the most likely reason why Richard's fish swam closer to the surface of the water?

- (1) The fish needed sunlight.
- (2) The fish were looking for food.
- (3) The water nearer to the surface of the water has more air.
- (4) The water nearer to the surface of the water is warmer.

()

3. Mrs Yee saw an organism. She identified it as a reptile.

Which one of the following helped Mrs Yee to identify the organism as a reptile?

- (1) It lays eggs.
- (2) It lives in water.
- (3) It has dry scales.
- (4) It feeds on other animals.

()

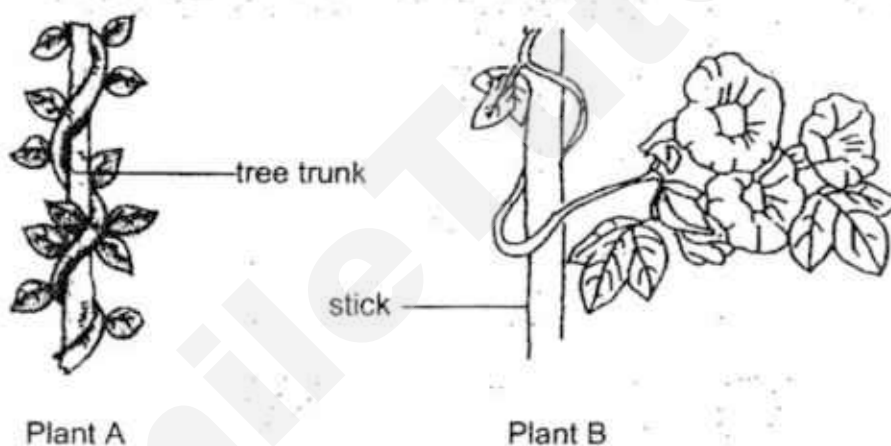
4. Which of the following characteristic(s) is/are found in birds, but **not** in other animals?

A: They lay eggs.
B: They have wings.
C: They have feathers on their bodies.

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

()

5. The diagrams below show two plants, A and B.

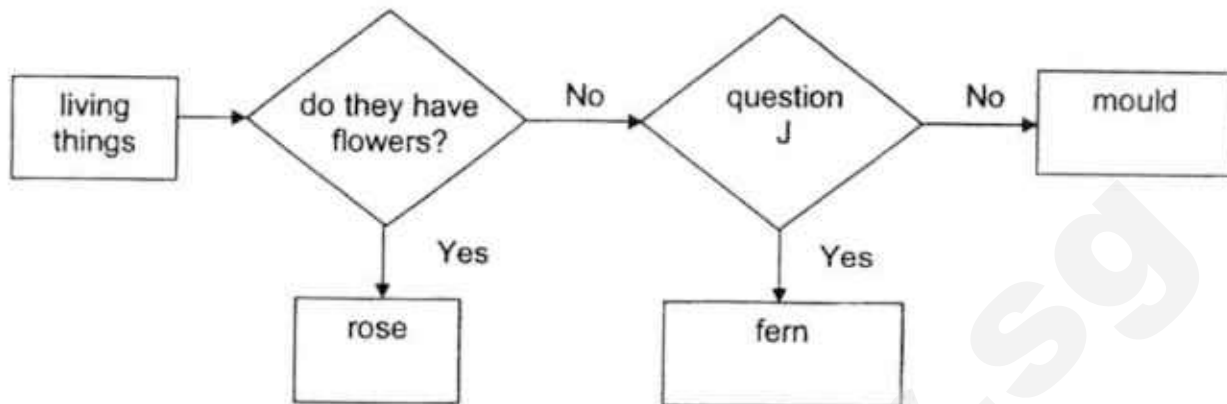


Which one of the statements about plants A and B is correct?

- (1) A has a weak stem but B does not have a weak stem.
(2) A uses its leaves while B uses its flowers to climb up the support.
(3) Both A and B cannot use their leaves to make their own food.
(4) Both A and B use their stems to climb up the support to get sunlight.

()

6. Study the flowchart below.

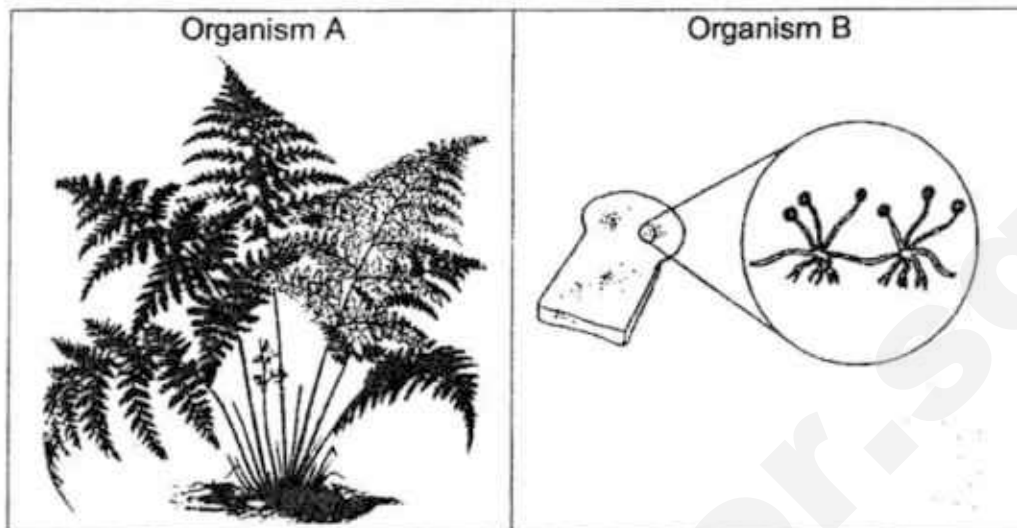


Which one of the following best represents question J?

- (1) Do they bear fruits?
- (2) Do they make food?
- (3) Do they have seeds?
- (4) Do they have spores?

()

7. The diagrams below show two organisms, A and B.



Some pupils made the following statements about organisms A and B.

- Pupil P: A and B are plants.
Pupil Q: A and B feed on other living things.
Pupil R: A and B reproduce from spores.

Which of the following pupil(s) gave the correct statement(s)?

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

()

8. Mrs Tan went to the supermarket and bought some groceries. She wanted to ensure that she could carry them home in a bag that has the following properties:

- it is waterproof
- it does not tear easily
- it can be easily folded

Which of the following materials should Mrs Tan's bag be made of?

- (1) Glass
- (2) Paper
- (3) Fabric
- (4) Plastic

()

9. Which of the following objects are made from materials that came from plants?

- A: rubber ball
B: paper bag
C: metal ruler

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

()

10. Four objects made of different materials, W, X, Y and Z, are dropped into a container of water. All the objects are of the same size and shape.

The table below shows the properties of the four different materials.

A tick (✓) indicates that the material has the property.

	Ability to float	Waterproof	Flexible	Strong
W		✓	✓	✓
X	✓		✓	
Y	✓	✓		✓
Z	✓	✓		

Which material is the **most** suitable for making part G of the sail boat shown below?



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

()

11. The diagram below shows what happened to the leaf of a plant after a period of time.



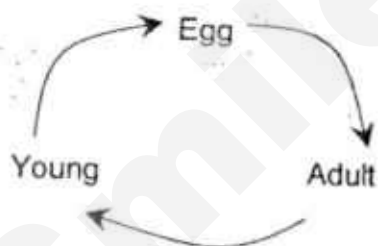
The change in the leaf was caused by a butterfly during a stage in its life cycle.
Which stage is it?

- (1) egg
- (2) larva
- (3) pupa
- (4) adult

()

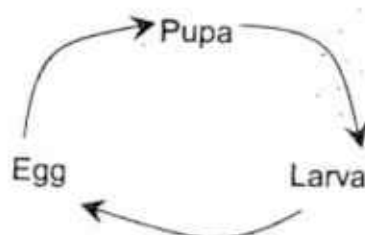
12. Alice was asked to draw and label the life cycle of an animal that has 3 stages.
She drew 4 different life cycles as shown below.
Which one of the life cycles is correct?

(1)



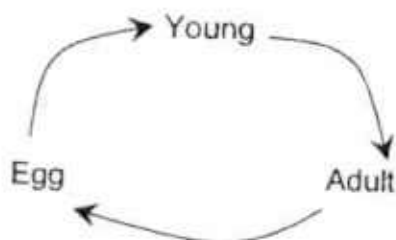
Life Cycle A

(2)



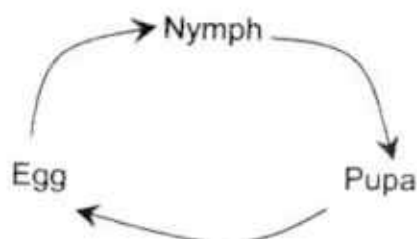
Life Cycle B

(3)



Life Cycle C

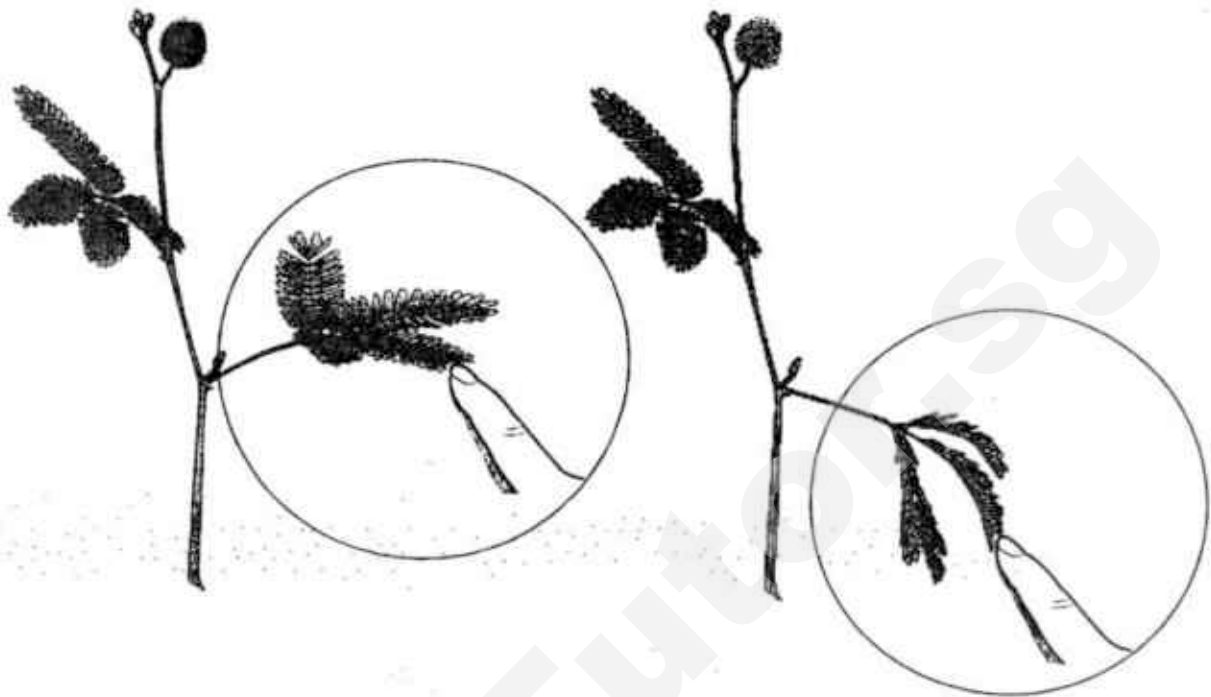
(4)



Life Cycle D

()

13. The leaves of plant M close when touched as shown in the diagrams below.





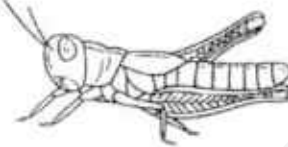
leaves of plant M are open

leaves of plant M are closed

This tells us that plant M is a living thing because it can _____.

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

14. Which of the following animals have young that looks like the adult?

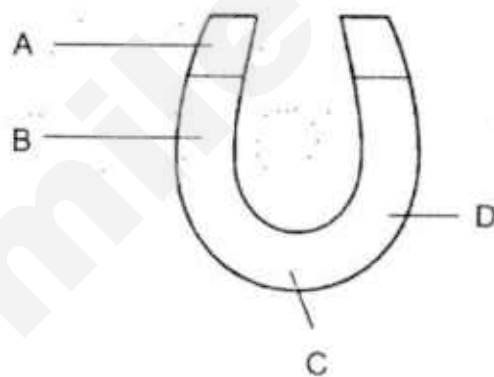
A	B	C
		
Butterfly	Chicken	Grasshopper

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

()

15. The diagram below shows a horse-shoe magnet.

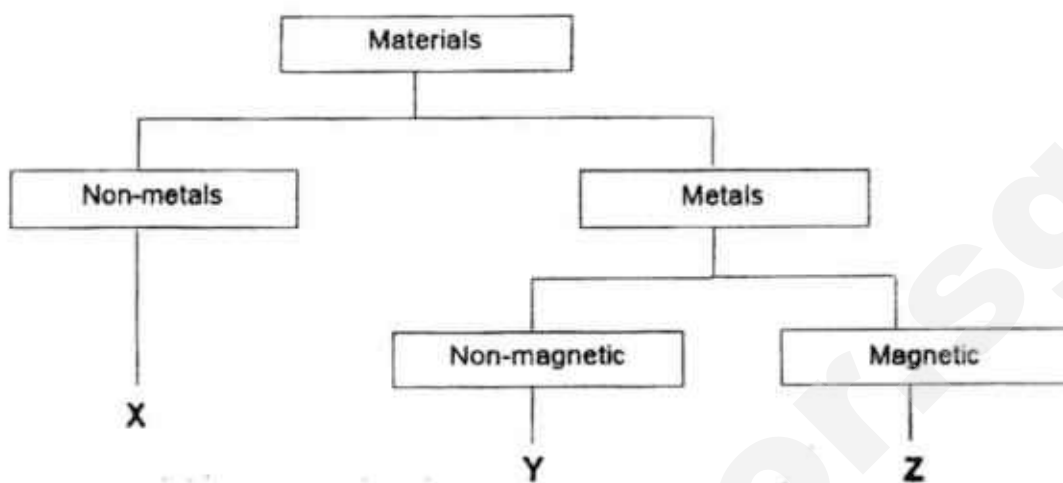
If the magnet is placed in a box of paper clips, which part of the magnet, A, B, C or D will attract the most number of paper clips?



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

()

16. Study the classification chart below.



Based on the information given, which of the following is correct?

	X	Y	Z
(1)	copper	aluminium	iron
(2)	paper	copper	aluminium
(3)	rubber	gold	steel
(4)	cotton	steel	copper

17. Annie carried out an experiment on three objects with a magnet. She wanted to find out how the objects would respond when both the poles of the magnet are placed near them. Below are her results.

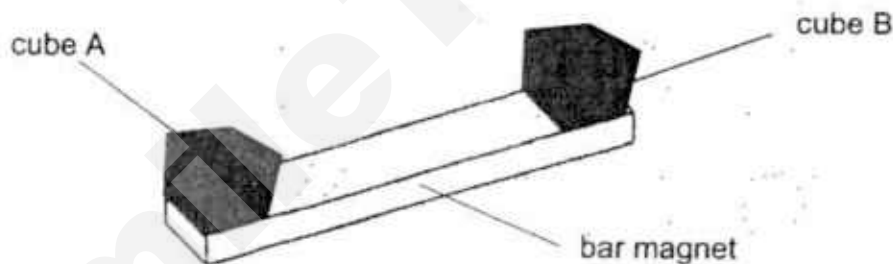
Object	Moved towards the magnet	Pushed away by the magnet
A	✓	✗
B	✗	✗
C	✓	✓

(✓ - Yes ✗ - No)

What could objects A, B and C be?

	A	B	C
(1)	magnet	ice cream stick	iron pin
(2)	iron pin	magnet	handkerchief
(3)	iron pin	ice cream stick	magnet
(4)	ice cream stick	iron pin	magnet

18. Ben placed two cubes, A and B, on a bar magnet as shown below.



Ben then lifted up the bar magnet. He observed that cube A remained attached to the bar magnet but cube B immediately dropped off.

Ben wrote down some possible conclusions from his experiment.

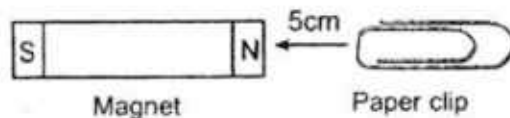
Which of the following conclusion(s) is/are possible?

- A: Cube A is magnetic.
- B: Cube B repels the bar magnet.
- C: Cube B is made of a non-magnetic material.

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

()

19. Betty brought a magnet near a metal paper clip. She observed that the paper clip was attracted to the magnet when it was still 5 cm away.

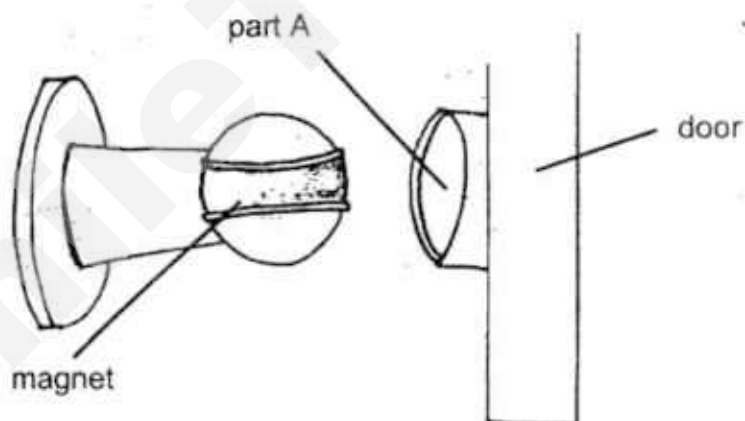


Based on her observation, which one of the following conclusions can Betty make?

- (1) Magnetic force can act at a distance.
- (2) The North pole of a magnet is the strongest.
- (3) The paper clip is made of a non-magnetic material.
- (4) Only the North pole of a magnet can attract a magnetic object at a distance.

()

20. The diagram below shows a doorstopper.



Part A is made of a magnetic material.

Which of the following statements below best explains how a door stopper keeps a door open?

- (1) The magnet repels part A.
- (2) The magnet attracts part A.
- (3) Part A is made from aluminium.
- (4) The magnet needs electricity to attract part A.

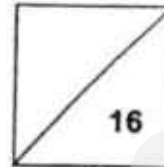
()

End of Booklet A

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SCIENCE
PRIMARY 3

Name: _____ ()

Class: Primary 3 _____



Section B: 8 Structured Questions (16 marks)

For questions 21 to 28, write your answers in the space given.





21. Four pupils answered the following question.

How are bacteria and ferns similar?

The diagrams below show their answers.

Put a tick (✓) in the box against the **correct** statement(s).

[2]

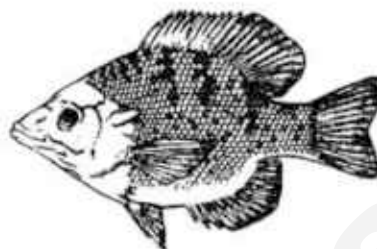
<div data-bbox="194 1061 435 1249">They are fungi.</div>	<div data-bbox="467 1061 708 1249">They can reproduce.</div>	<div data-bbox="746 1061 997 1265">They cannot die.</div>	<div data-bbox="1023 1061 1289 1265">They need food.</div>
			
<div data-bbox="264 1552 363 1637"><input type="checkbox"/></div>	<div data-bbox="523 1547 622 1632"><input type="checkbox"/></div>	<div data-bbox="791 1552 890 1637"><input type="checkbox"/></div>	<div data-bbox="1062 1552 1161 1637"><input type="checkbox"/></div>

22. The diagrams below show two animals, P and Q.

[2]



Animal P



Animal Q

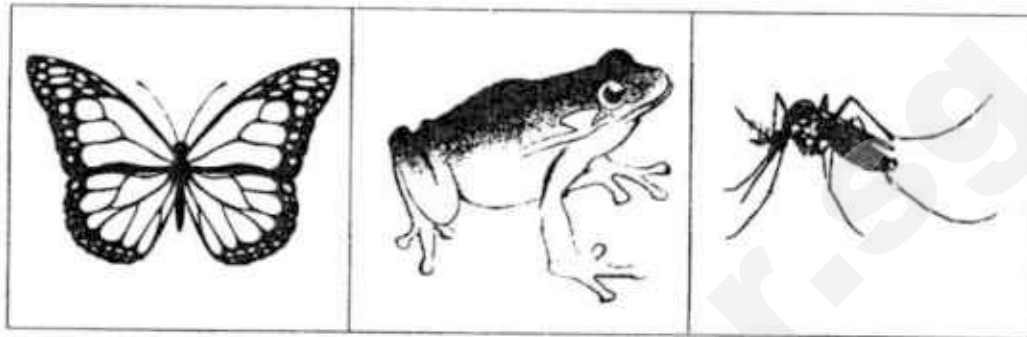
Complete the table below using the correct words.

	Animal P	Animal Q
Animal Group		Fish
Outer covering	Hair	

23. The diagram below shows the young and adult of some animals.

Draw lines to match the young with the correct adult.

[2]

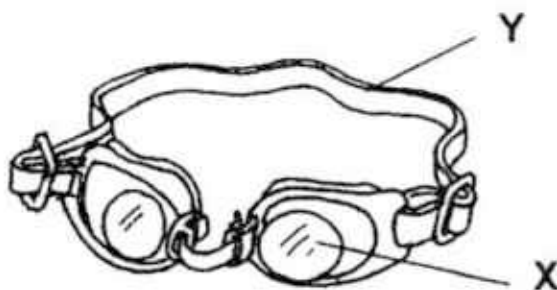


24. Write True (T) or False (F) in the correct boxes in the table below.

[2]

Statement	T / F
a) All bacteria are useful to humans.	
b) Yeast is a type of fungi.	
c) Some types of fungi can be eaten.	
d) Fungi reproduce by seeds.	

25. The picture below shows a pair of swimming goggles.



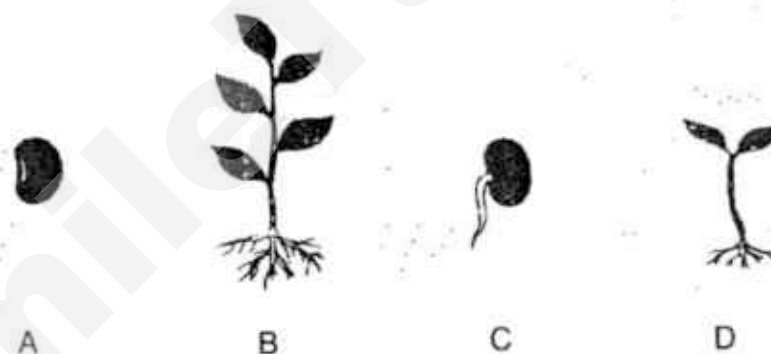
What materials are the parts X and Y made of?
Name a suitable material for each part.

[2]

Part X is made of _____

Part Y is made of _____

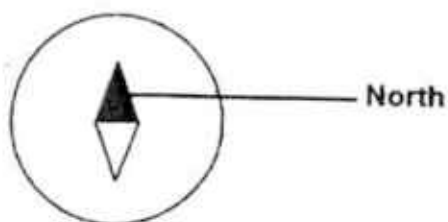
26. Study the diagram below.



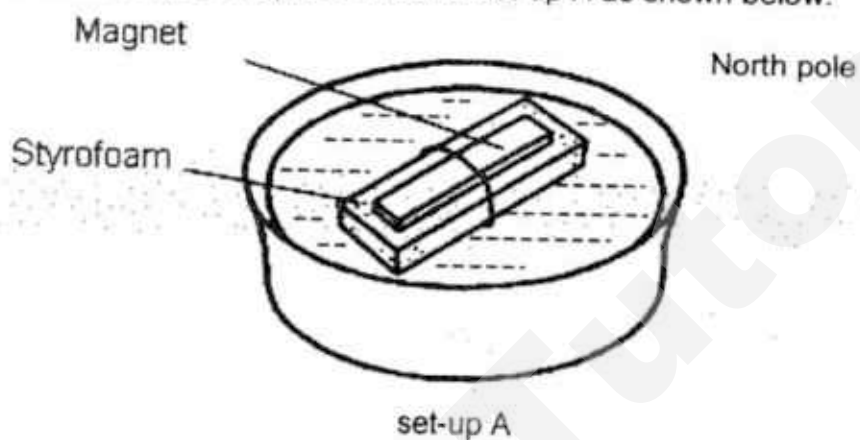
At which stages of the life cycle does the seedling make its own food?

[2]

27. The diagram below shows a compass.



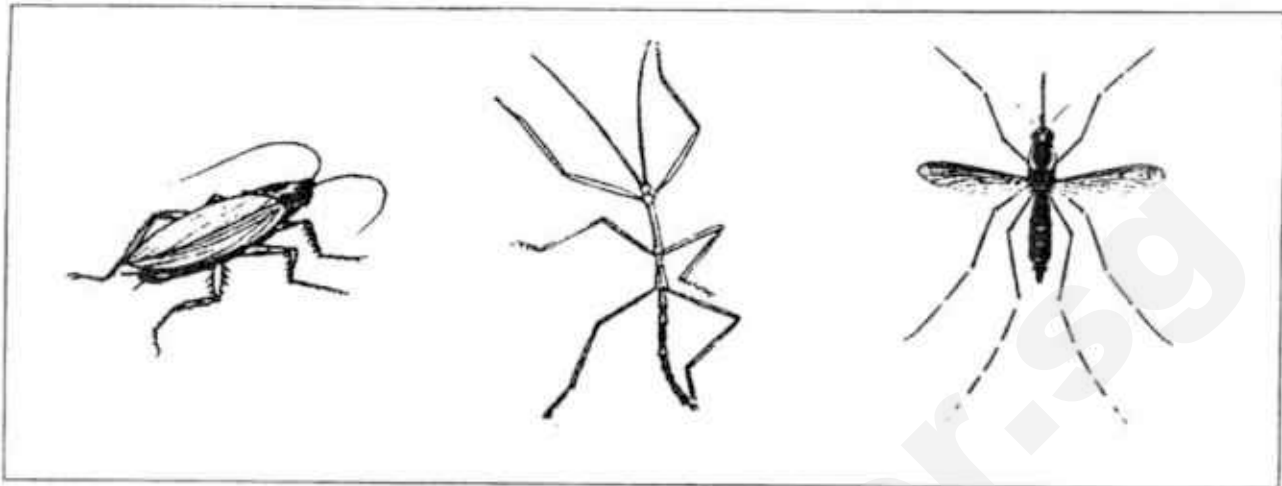
A similar compass is placed near a Set-up A as shown below.



- (a) Put a tick (✓) in the correct box, for the compass that shows the direction of the compass needle correctly. [1]





- (b) Name a metal that is **not** magnetic. [1]

28. Study the 3 animals classified together below.

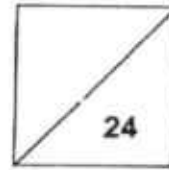


Which of the following animals can be placed in the group shown above? [2]

Put a tick (✓) in the correct boxes provided below.

			
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

HENRY PARK PRIMARY SCHOOL
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SCIENCE
PRIMARY 3



Name: _____ () Class: Primary 3 _____

Section C: 8 Open-Ended Questions (24 marks)

For each question from 29 to 36, write your answers in the spaces given.

29. Ferlicia found **animals M** and **N** in the forest. She did not know which animal group they belonged to. Both animals were at their adult stage.

After observing the animals for a few days, she recorded her observations in the table below. A tick (✓) means that the animal has the characteristics.

Characteristics	Animal	
	M	N
Does it have three body parts?		✓
Does it have moist skin?	✓	
Does it lay its eggs in water?	✓	
Does it have 3 pairs of legs?		✓

- a) Using the information given, which animal group does animal M most likely belong to? Explain your answer.

[1]

- b) Name **another** characteristic of animal M.

[1]

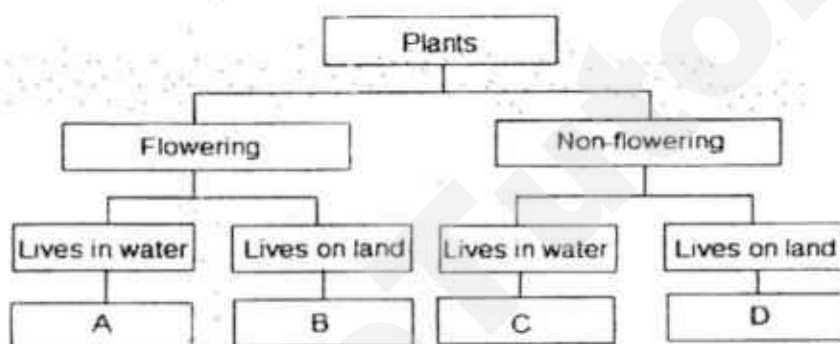
- c) Using the information given, explain why animal N **cannot** be a reptile.

[1]

30. Peter observed four different plants and recorded the data in the table below. A tick (✓) means the characteristic was observed.

Plant	Characteristics observed		
	Lives on land	Lives in water	Has spores
W	✓		
X		✓	✓
Y		✓	
Z	✓		✓

The chart below shows how some plants are classified into groups A, B, C and D.



- (a) Which plant, W, X, Y or Z, can be placed in group B?
Explain your answer using the information given.

[2]



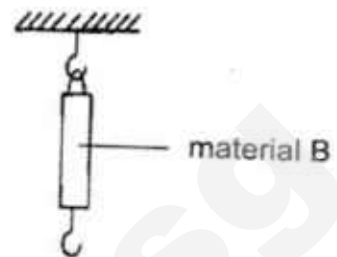
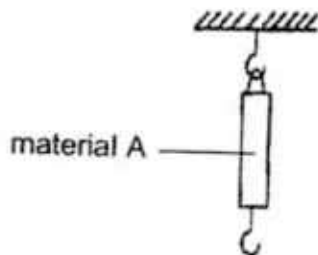
plant M

Peter observed plant M, shown above.

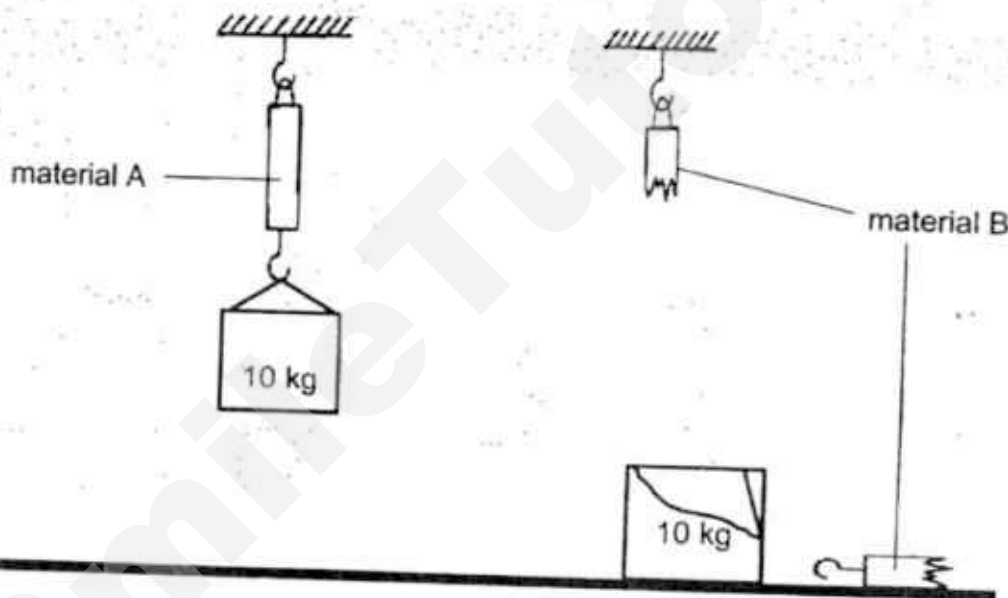
- (b) Which group, A, B, C or D, would Peter classify plant M under?

[1]

31. Josh hung strips of materials, A and B, as shown in the set-up below. Both strips were of the same size and thickness.



Two boxes of the same mass were hung from the strips. The diagram below shows what happened after the boxes were hung.



- a) Based on the experiment, what can Josh **conclude** about the strength of material B? Give a reason for your answer.

[2]

Question 31 continues on the next page

Question 31 continues on this page

Josh was taking a walk in a park. He noticed a hole near the footpath and wanted to cover it so that no one would fall into it.



- b) Which material, A or B, would be **more** suitable to cover the hole so that people can walk on it?

[1]

32. Mark wanted to make raincoats for his children.

He carried a few tests on materials, A, B and C and recorded their characteristics in the table below.

Materials	Property		
	Waterproof	Strong	Flexible
A		✓	✓
B	✓	✓	
C	✓		✓

- a) Which material is the **most** suitable for making raincoats?

[1]

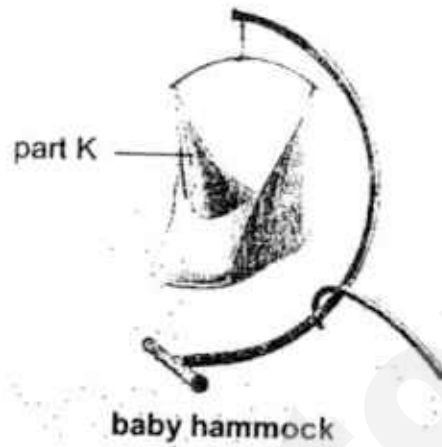
- b) Based on the information given, explain why the material identified in part (a) is **most** suitable for making raincoats.

[1]

Question 32 continues on the next page

Question 32 continues on this page

Muthu wanted to make a baby hammock.



- c) Based on the information given, which material (A, B or C) will be **most** suitable for making a part K of the baby hammock?

i) Material : _____

[1]

ii) Explain your answer in (i).

[1]

33. Some pupils observed the life cycle of insect X.
The table below shows what they observed at each stage of growth in the life cycle.

Date	Development at each stage	Amount of food taken
13 July	Eggs were laid in water.	0 g
17 July	?	50 g
26 July	Pupae were seen.	0 g
1 August	Pupae became adult insects.	47 g

Based on the information given, answer the following questions.

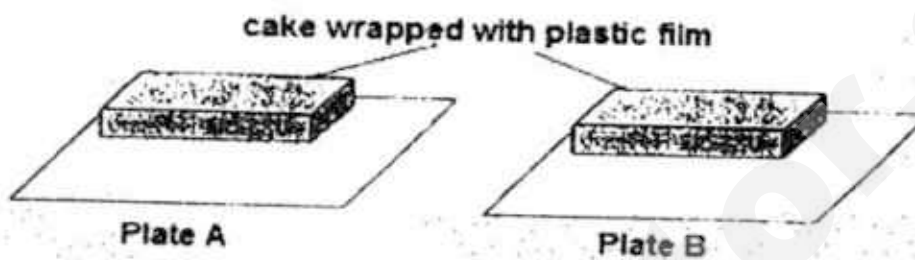
- a) How many stages are there in the life cycle of insect X? [1]

- b) What has happened to insect X on 17th July? [1]

- c) On 26th July, insect X did not take in any food.
Explain why. [1]

34. Ali baked a cake. He left the cake on the table to cool down. Then, he cut the cake into two parts and put each part on plates, A and B. The table shows what he did to both parts of the cake.

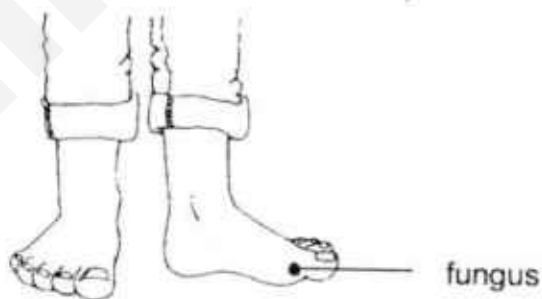
Plate A	The cake was wrapped in a plastic film.
Plate B	The cake was moistened with water, then wrapped with a plastic film.



- a) On which plate would mould first appear on the cake?
Give a reason for your answer.

[1]

Andy had a medical condition in which fungus grew on his foot, as shown below.

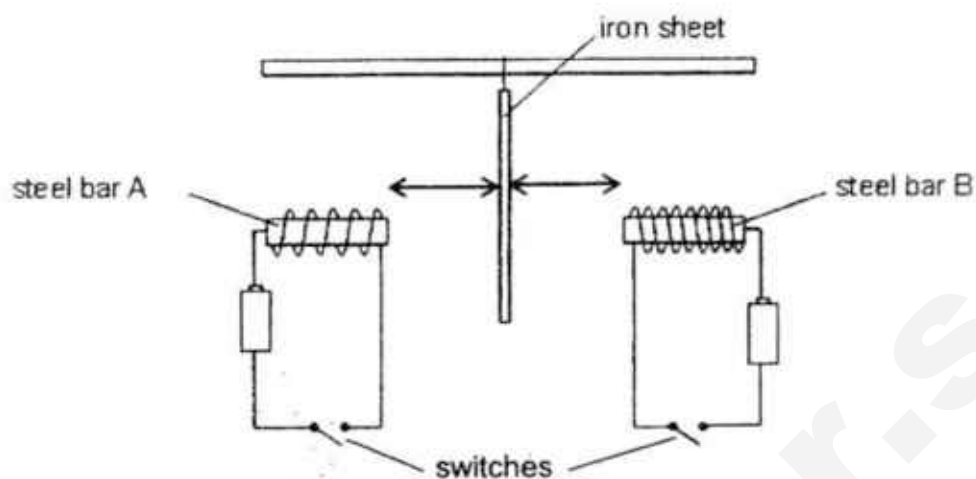


The doctor advised Andy to wear slippers to school instead of shoes and socks to **reduce** the fungus growing on his foot.

- b) Based on the experiment above, explain how wearing shoes and socks will lead to **more** fungus growing on Andy's foot.

[1]

35. David carried out an experiment using the set-up below.

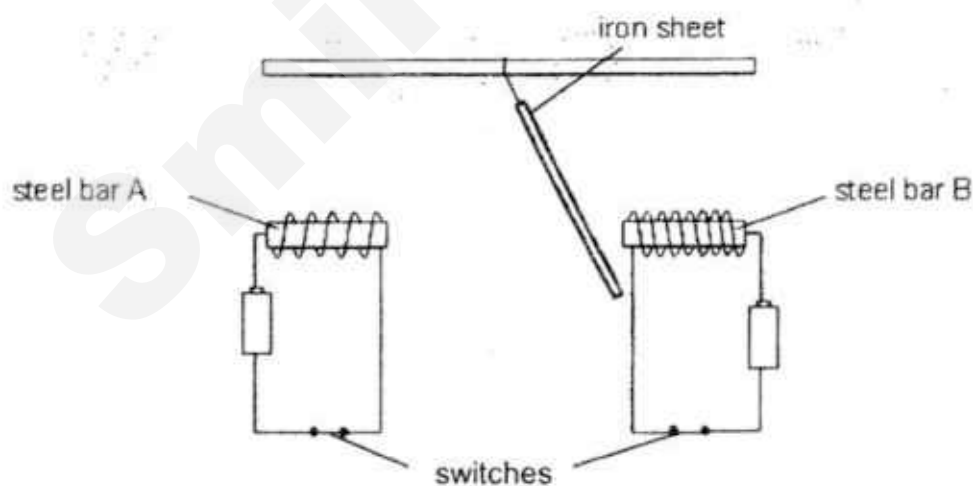


An iron sheet was hung freely at an equal distance from steel bars, A and B that were connected in two different circuits with identical batteries.

- a) Based on the set-up above, what do you think steel bars A and B would become if David closes the switches?

[1]

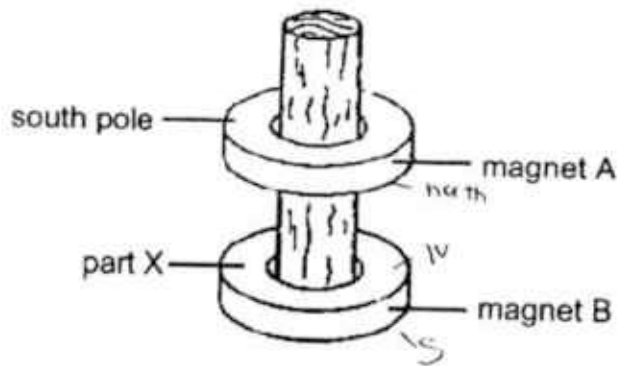
David closed both the switches. The result is shown in the diagram below.



- b) Explain why the iron sheet moved towards steel bar B.

[2]

36. Ellie observed the set-up shown below.



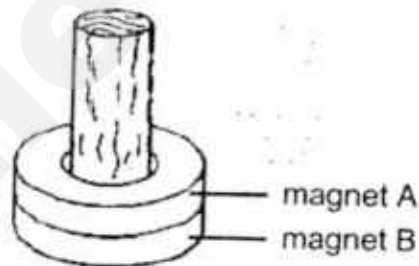
- a) Explain why magnet A was able to remain above magnet B without touching it.

[1]

- b) Name the pole for part X.

[1]

Ellie did something to magnet A and the result is shown in the diagram below.



- c) What could Ellie have done to magnet A?

[1]

End of Paper

ANSWER KEY

YEAR : 2017
 LEVEL : PRIMARY 3
 SCHOOL : HENRY PARK PRIMARY SCHOOL
 SUBJECT : SCIENCE
 TERM : SA2


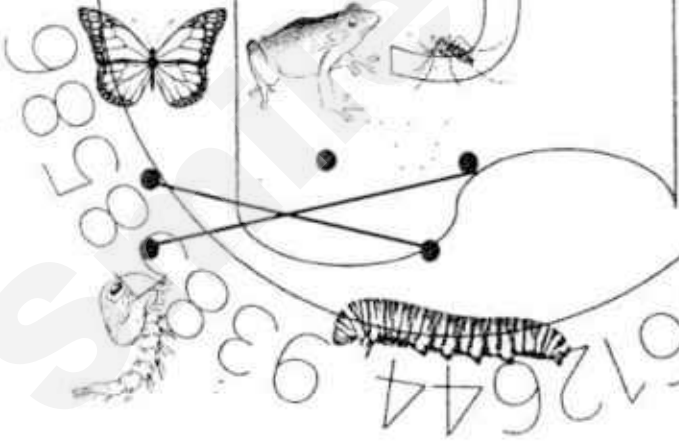

SECTION A

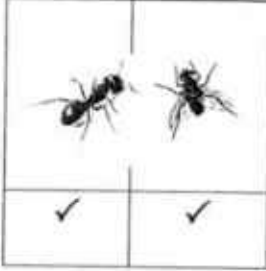
Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9	Q10
2	3	3	1	4	2	2	4	1	1
Q11	Q12	Q13	Q14	Q15	Q16	Q17	Q18	Q19	Q20
2	3	4	3	1	3	3	3	4	2

(35)	(a) The (steel) rods have become electromagnets/temporary magnets.
	(b) Steel bar B is a stronger (electromagnet/ magnet) as it has more iron coils around it.
(36)	Concept: Like Poles of magnets repel
	(a) Magnet A was repelling Magnet B as their like poles faced each other
	(b) North
	(c) She flipped the magnet (to the other side) / turn it the other side.

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Ans Key – Section B

(21)	
(22)	<p>Animal P: Mammal (s) Animal Q: Scales</p>
(23)	
(24)	<p>a) F b) T c) T d) F</p>
(25)	<p>Part X : plastic Part Y : Rubber</p>
(26)	<p>B and D / seedling and adult</p>
(27)	<p>(a)</p> 

	(b) Aluminium / Copper / Gold / Silver / Zinc / Brass	
(28)		

Ans Key: Section C

(29)	<p>(a) Amphibian. It has moist skin. [1]</p> <p>(b) Lives on both on land and in water.</p> <p>(c) It has 3 body parts and 3 pairs of legs while reptiles do not have. [1]</p>
(30)	<p>(a) W. As it does not reproduce by spores and lives on land. [1]</p> <p>(b) A. [1]</p>
(31)	<p>(a) Material B is weaker than material A and Material B broke first after the 10kg box was hung from it.</p> <p>(b) A</p>
(32)	<p>(a)i) Material C</p> <p>(b) Raincoats must be waterproof and flexible</p> <p>(c)i) A (ii) A baby hammock must be strong and flexible to rock the baby and with stand its weight hence material A should be used to make a baby hammock.</p>
(33)	<p>Concept: Life Cycle Stages of growth</p> <p>(a) 4 stages</p> <p>(b) Eggs had hatched into larvae</p> <p>(c) It is at the pupae stage where the pupae is developing into an adult insect.</p>
(34)	<p>Concept: conditions for Fungi growth</p> <p>(a) Plate B as the cake had moisture.</p> <p>Cause and Effect</p> <p>(b) Wearing socks and shoes would cause the feet to perspire /sweat hence more fungus grow on feet that are wrapped up.</p>

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MARIS STELLA HIGH SCHOOL (PRIMARY)

SEMESTRAL ASSESSMENT 2

SCIENCE

31 OCTOBER 2017

BOOKLET A

NAME: _____ ()

CLASS: Primary 3 ()

24 Questions

48 Marks

Total Time for Booklets A & B: 1 h 30 min

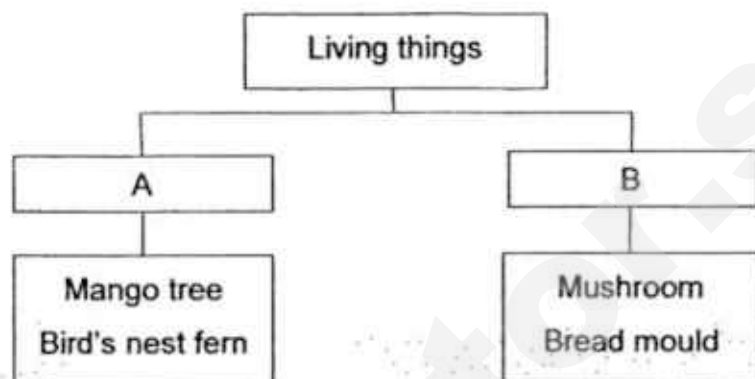
DO NOT OPEN THIS BOOKLET UNTIL YOU ARE TOLD TO DO SO.

FOLLOW ALL INSTRUCTIONS CAREFULLY.

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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 classification chart below.



Which of the following shows the correct headings for groups A and B?

	A	B
(1)	Flowering plants	Non-flowering plants
(2)	Plants	Fungi
(3)	Non-flowering plants	Flowering plants
(4)	Fungi	Plants

2 An animal has the following characteristics.

- Gives birth
- Has hair as outer-covering

What could this animal be?

- (1) bird
- (2) insect
- (3) mammal
- (4) amphibian

- 3 Sarah made some observations of an adult animal and listed them down.

- It lays eggs.
- It has two legs.
- It does not have fins and gills.
- It does not produce milk to feed its young.

Which of the following statements are definitely true?

- A The animal is a reptile.
- B The animal is not a fish.
- C The animal is a mammal.
- D The animal is not an insect.

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

- 4 Sean wants to find out if animals P and Q are insects.



Animal P



Animal Q

What should he do to find out?

- A Measure the body length.
- B Count the number of legs.
- C Check if the animal has wings.
- D Count the number of body parts.

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

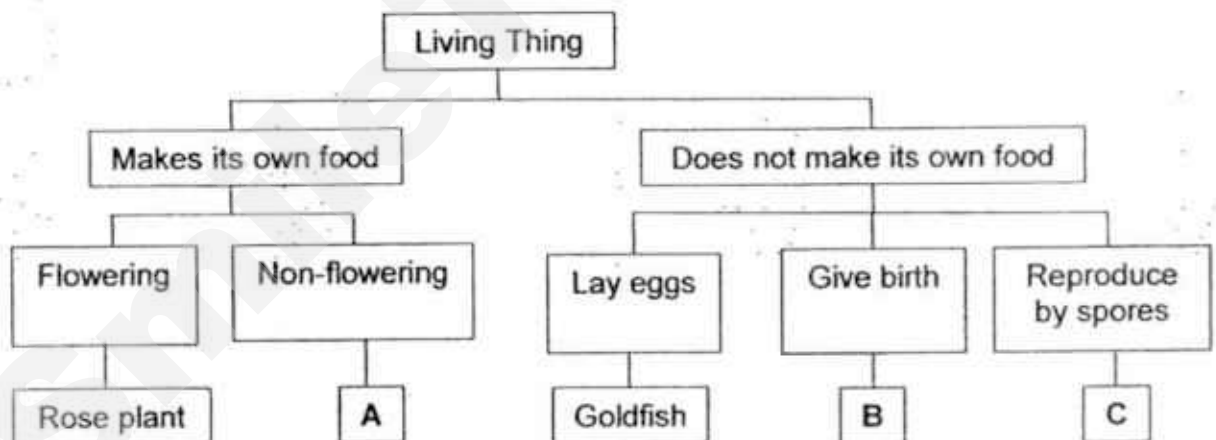
- 5 Study the classification table below.

Group X	Group Y
duck	cup
yeast	pencil
water	book
crocodile	toy car

Which of the following has been grouped **wrongly**?

- (1) Cup
- (2) Book
- (3) Water
- (4) Yeast

- 6 Study the classification chart below.



Which one of the following correctly shows 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

7 Four students made some comments about bacteria.

Alan: Bacteria are all harmful to human beings.

Bala: Bacteria need air, food and water to survive.

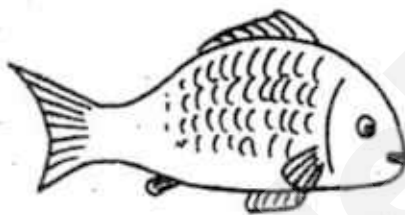
Carl: Bacteria cannot be seen with our naked eyes.

Dave: Bacteria do not respond to changes around them.

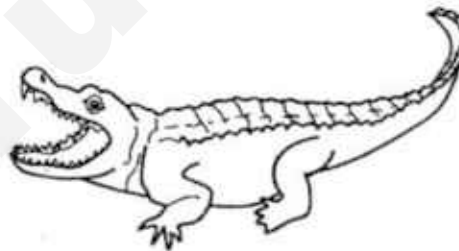
Who made correct statements about bacteria?

- (1) Alan and Bala only
- (2) Alan and Dave only
- (3) Bala and Carl only
- (4) Bala and Dave only

8 What is the similarity between a fish and a reptile?



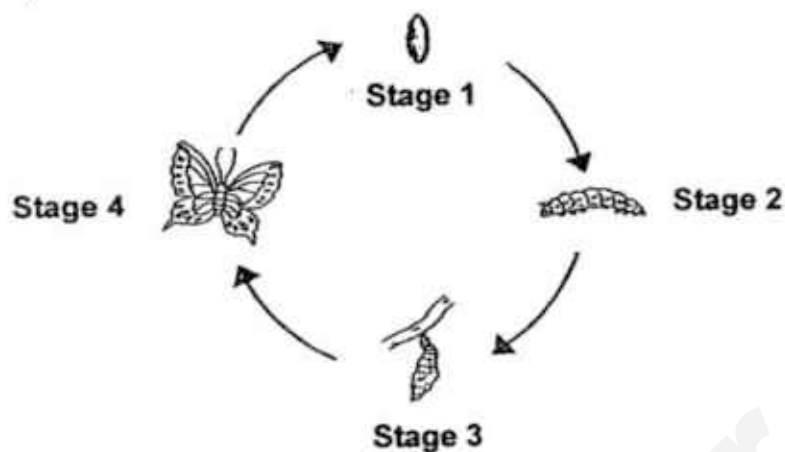
Fish



Reptile

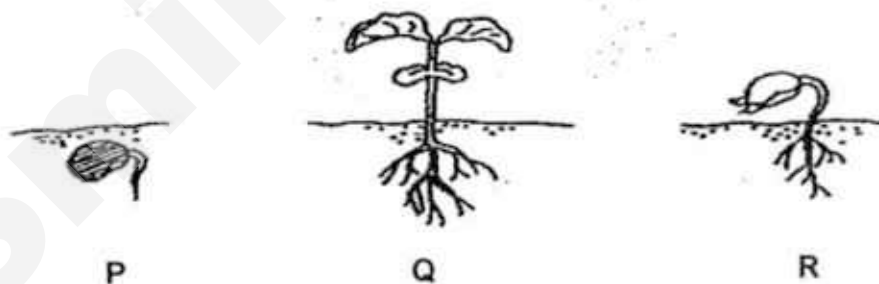
- (1) Both have fins.
- (2) Both breathe using gills.
- (3) Both give birth to their young alive.
- (4) Both have scales as their outer-covering.

- 9 The diagram below shows the life cycle of a butterfly.



At which stage(s) of the life cycle of the butterfly is there little or no movement?

- (1) Stage 3 only
 - (2) Stages 1 and 2 only
 - (3) Stages 1 and 3 only
 - (4) Stages 2 and 4 only
- 10 The pictures below shows the different stages of the growth of a flowering plant.



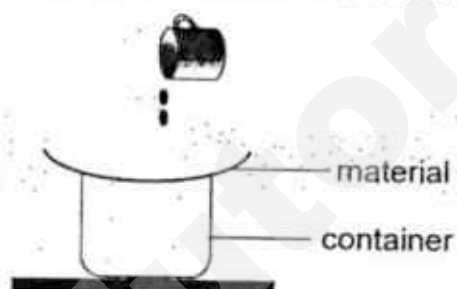
Which one of the following shows the correct order of a seed germinating and growing into a young plant.

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

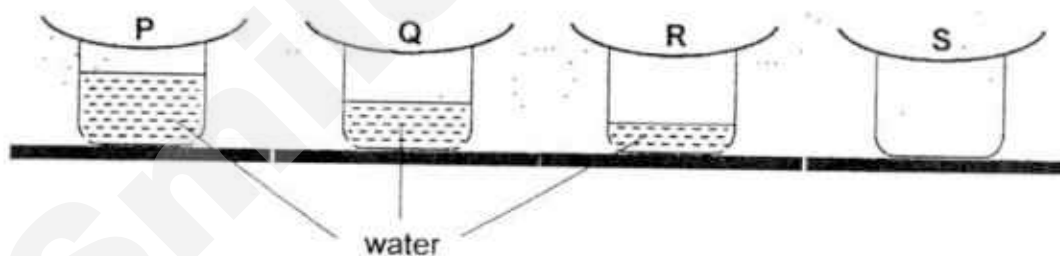
- 11 Johnny conducted an experiment to find out which materials, P, Q, R or S, is the most suitable for making Part X of an umbrella.



He poured 60 ml of water over each of the materials as shown below.



The diagrams below show the amount of water collected in each of the set-ups after 1 minute.

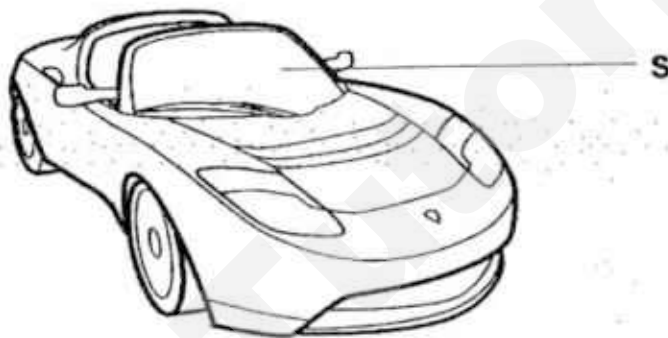


Based on his results, which material is most suitable for making part X of the umbrella?

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

- 12 The table below shows the properties of 4 materials, A, B, C and D.

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

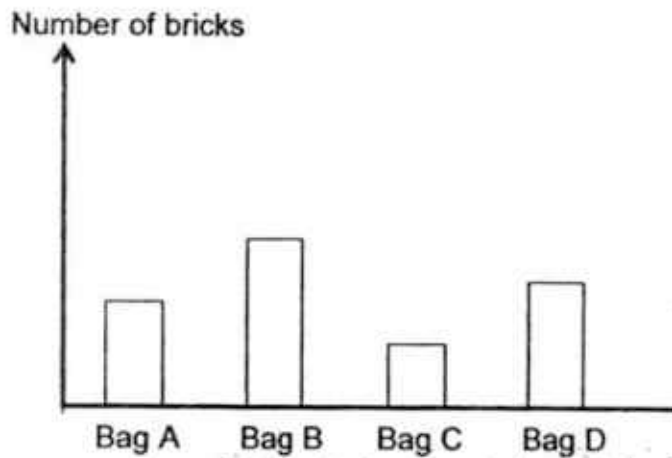


Based on the information given in the table above, which material is most suitable for making Part S of the car?

- (1) Material A
 - (2) Material B
 - (3) Material C
 - (4) Material D
- 13 Which of the following shows the correct order when food moves through the human digestive system?

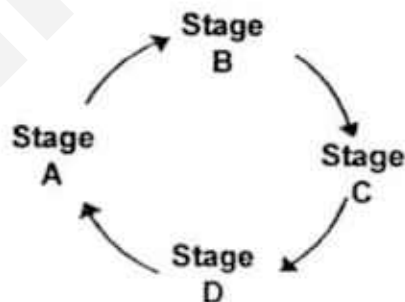
- (1) Stomach → Small intestine → Large intestine
- (2) Stomach → Large intestine → Small intestine
- (3) Large intestine → Small intestine → Stomach
- (4) Small intestine → Stomach → Large intestine

- 14 The graph below shows the most number of bricks that four different bags, A, B, C and D, could hold before breaking.



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

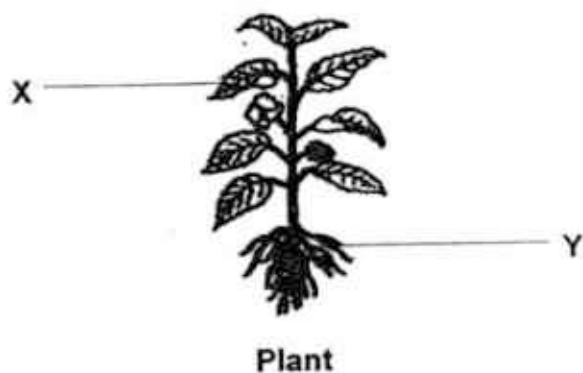
- (1) Bag B is weaker than Bag D.
 - (2) Bag A is stronger than Bag C.
 - (3) Bag A is more flexible than Bag D.
 - (4) Bag B will sink but Bag C will float.
- 15 The life cycle of mosquito is shown below.



If stage C represents the adult mosquito, what would stage A represent?

- (1) Egg
- (2) Pupa
- (3) Larva
- (4) Nymph

- 16 Study the picture of the plant below.



Which of the following correctly identifies the functions of X and Y?

	X	Y
(1)	Makes food for the plant	Supports the branches and leaves
(2)	Makes food for the plant	Absorbs water from the soil
(3)	Supports the branches and leaves	Absorbs water from the soil
(4)	Absorbs water from the soil	Makes food for the plant

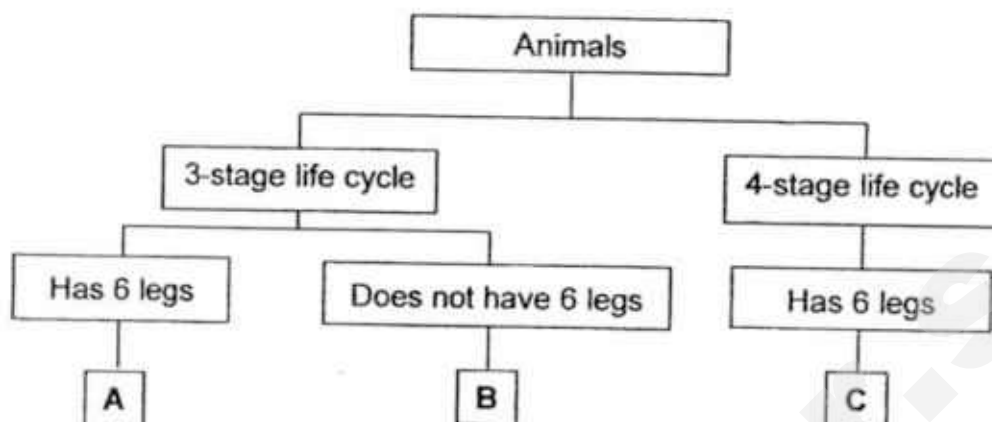
- 17 The table below provides information on the life cycle of four animals, E, F, G and H. A tick (✓) shows that it has the characteristics.

	E	F	G	H
Moults during one of the stages	✓	✓		✓
Young looks like its adult		✓	✓	
Has a four stage life cycle	✓		✓	

Which one of the following animals is most likely a butterfly?

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

- 18 Study the classification chart below.



Which of the following best represents A, B and C?

	A	B	C
(1)	grasshopper	frog	mosquito
(2)	human	beetle	butterfly
(3)	frog	butterfly	mosquito
(4)	beetle	human	grasshopper

- 19 Sandy spotted a slug in the Science garden and noticed that it does not have a fixed body shape.



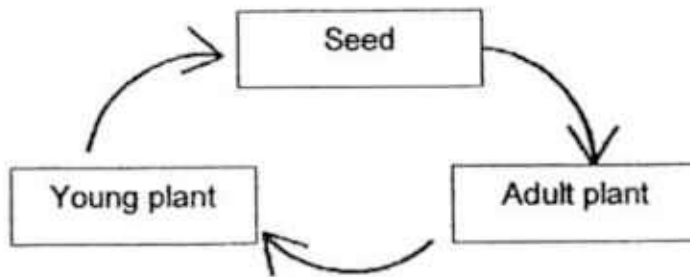
slug

Based on her observation, which of the following body system does the slug not have?

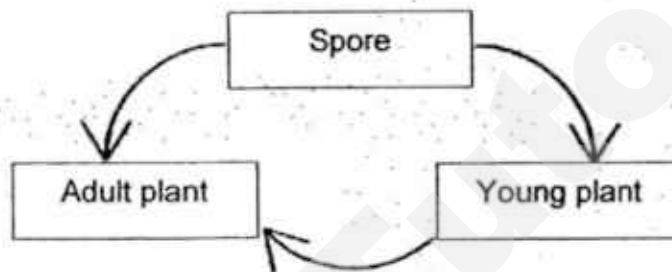
- (1) Skeletal system
- (2) Muscular system
- (3) Digestive system
- (4) Circulatory system

20 Which one of the following correctly shows the life cycle of a flowering plant?

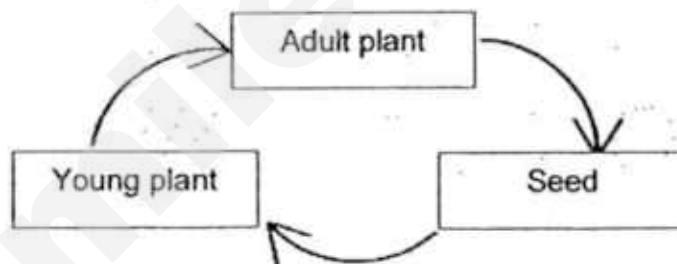
(1)



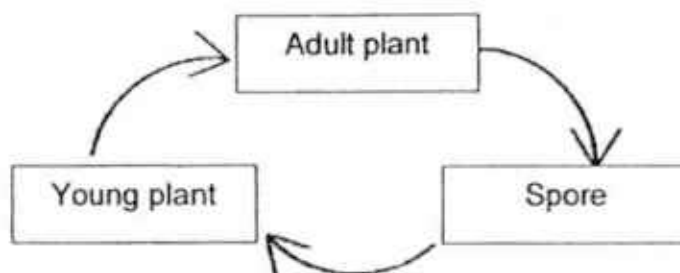
(2)



(3)



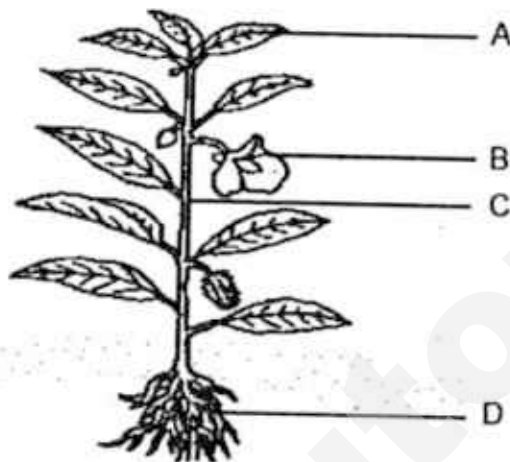
(4)



21 Ali and Peter commented on the plant shown below.

Ali : It provides support for the plant.

Peter : It holds the leaves up so that they can get sunlight.



Which part, A, B, C or D, of the plant are they referring to?

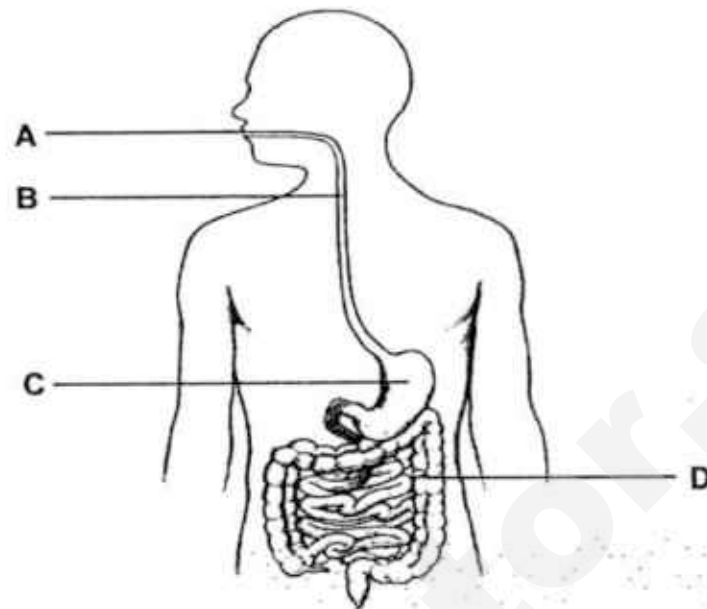
- (1) A
- (2) B
- (3) C
- (4) D

22 Which of the following statements about the stomach are true?

- A The stomach produces digestive juices.
- B Food is completely digested in the stomach.
- C The stomach churns and breaks down food.
- D Digested food moves from the stomach to the small intestine.

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

- 23 The diagram below shows the human digestive system.



Part _____ is where digestion begins.

- (1) A
 - (2) B
 - (3) C
 - (4) D
- 24 Which one of the following parts of the digestive system does **NOT** match its function?

	Parts	Function
(1)	Gullet	Moves food down into the stomach
(2)	Mouth	Breaks down food into smaller pieces
(3)	Stomach	Mixes food with digestive juices
(4)	Large intestine	Absorbs digested food into the blood

- End of Booklet A-

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MARIS STELLA HIGH SCHOOL (PRIMARY)

SEMESTRAL ASSESSMENT 2

SCIENCE

31 OCTOBER 2017

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

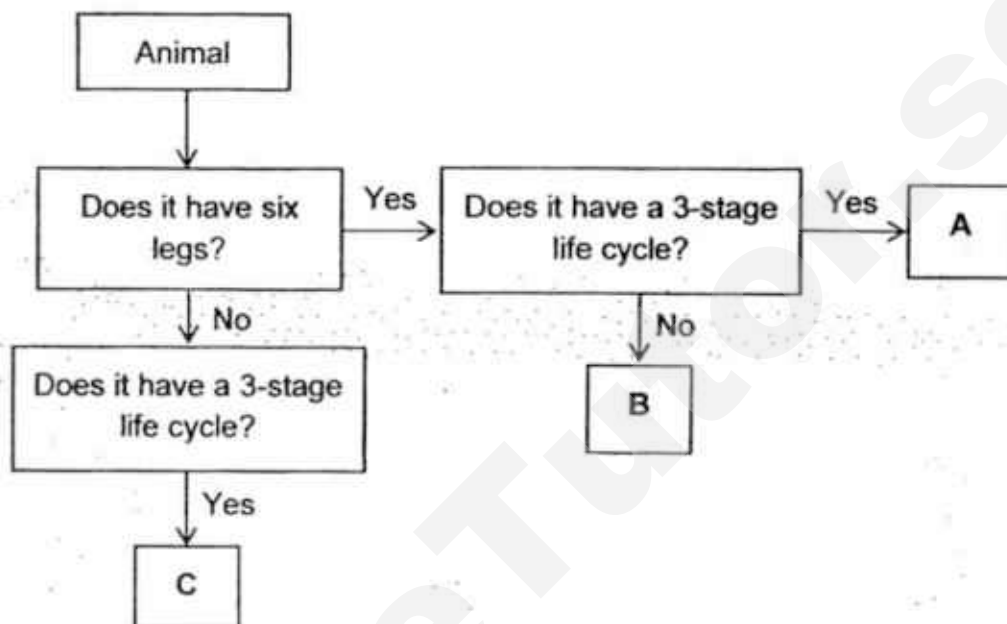
TOTAL: _____ / 80

PARENT'S SIGNATURE: _____

For questions 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 The flowchart below describes three different animals, A, B and C.



- (a) State the characteristics of animal B.

[1]

- (b) Based on the flowchart, state one similarity and one difference between animals A and C.

[2]

Similarity: _____

Difference: _____

26 Study the table below and use the information to answer the questions below.

	Has scales	Has legs	Can swim	Breathe through gills	Lays Eggs
Animal X	✓		✓	✓	✓
Animal Y		✓	✓		✓

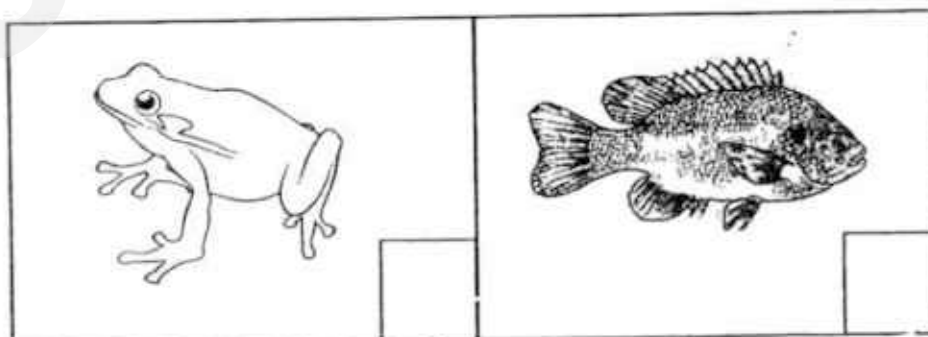
(a) State the similarities between animals X and Y.

[1]

(b) In terms of breathing method, how are animals X and Y different?

[1]

(c) Match animals X and Y to the animals below by writing 'X' or 'Y' in each box. [1]



	3
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- 27 Billy 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.

Description	Material			
	P	Q	R	S
Bends easily without breaking	No	Yes	No	Yes
Allows water to pass through	No	No	No	No
Floats on water	Yes	No	No	No

- (a) State a property that is the same among materials P, Q, R and S. [1]

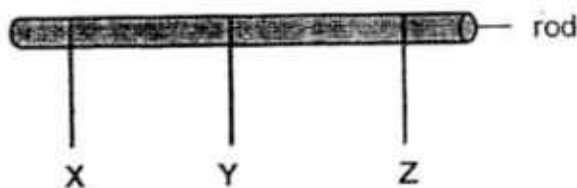
- (b) A swimming board is used to help beginners to stay afloat.



- (i) Which material, P, Q, R or S, is the most suitable for making the swimming board? [1]

- (ii) Explain your choice in (i). [2]

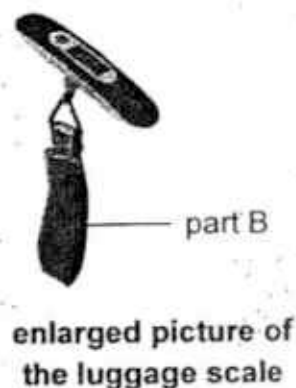
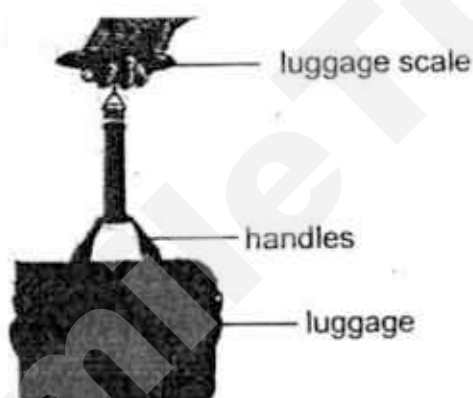
- 28 Doreen tied 3 different strings, X, Y and Z, onto a rod as shown below. She hung 100 g cubes onto each string, one at a time, until the strings broke.



The table below shows the results of her experiment.

String	Number of cubes added till the string broke
X	4
Y	7
Z	3

The picture shows a luggage scale being used. It measures the weight of the luggage. Part B is a strap that loops around the handles of the luggage.



- (a) Which string, X, Y or Z, is most suitable to make part B of the luggage scale? [1]

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

- (c) Other than the property tested by Doreen, state another important property of the string that makes it suitable to make part B of the luggage scale. [1]

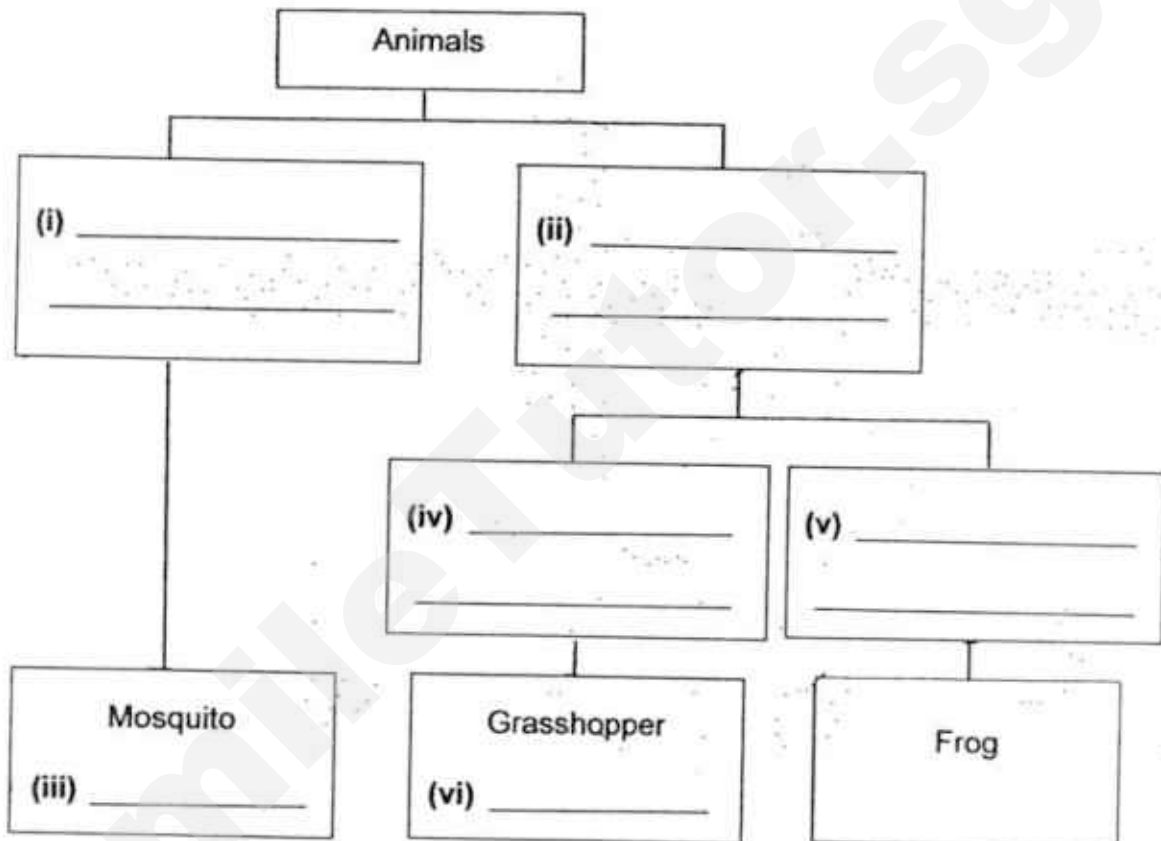
	3
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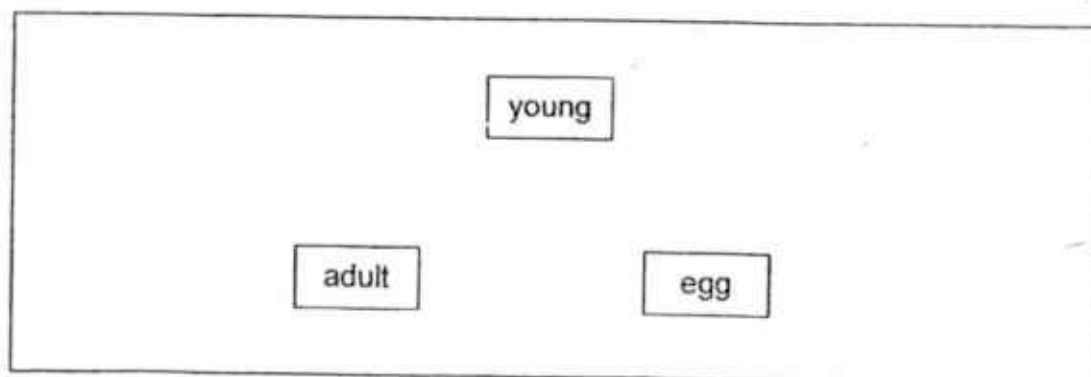
29 June classified some animals based on their life cycles.

(a) Complete the classification chart below using the helping words provided. [3]

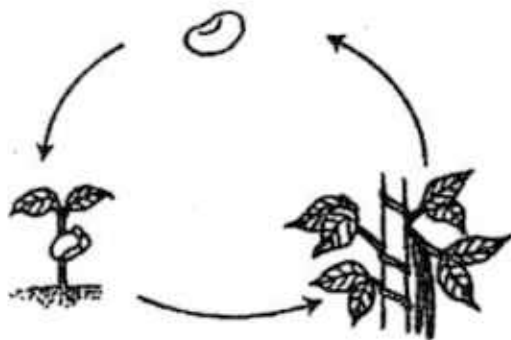
3-stage life cycle	young looks like its adult	cockroach
4-stage life cycle	young does not look like its adult	beetle



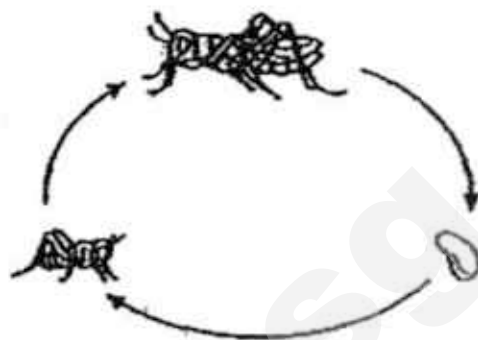
(b) Draw arrows (→) in the diagram below to complete the life cycle of an animal with a 3-stage life cycle. [1]



30 Study the life cycles shown below carefully.



Life cycle of plant X



Life cycle of animal Z

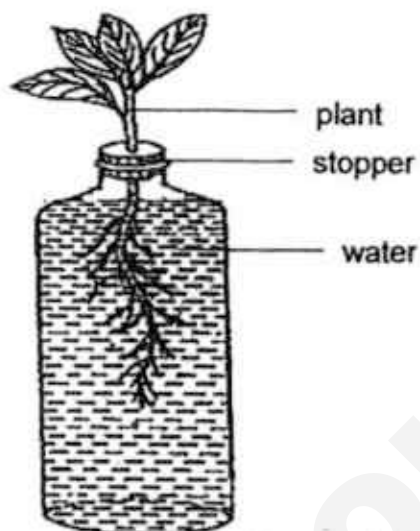
- (a) State one similarity between the life cycles of plant X and animal Z. [1]

- (b) State two characteristics of living things that can be observed from both the life cycles shown above. [2]

Characteristic 1:

Characteristic 2:

- 31 John conducted an experiment as shown below.



He observed the set-up 4 days later.

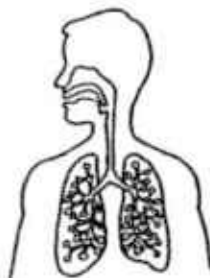
- (a) Will the the amount of water increase, decrease or remain the same after 4 days? [1]

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

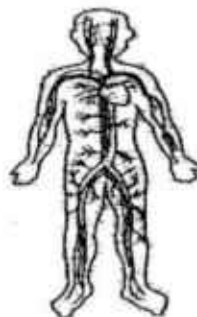
32 The following diagram shows 4 different human systems, A, B, C and D.



System A



System B



System C



System D

(a) Put a tick (✓) in the appropriate boxes

[2]

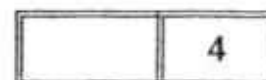
	Statements	True	False
(i)	System A keeps the body upright.		
(ii)	System B breaks down food into simpler substances.		
(iii)	Systems A and D work together to help us to move around.		
(iv)	System C transports digested food and other substances around our body.		

(b) Identify systems B and D.

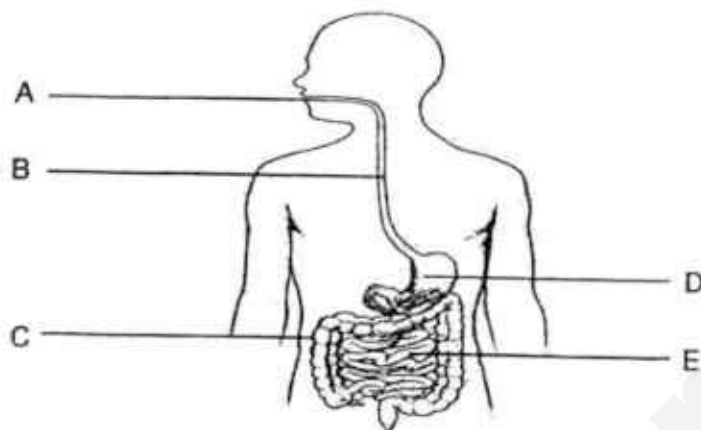
[2]

System B: _____

System D: _____



- 33 The diagram below shows the human digestive system.



- (a) Which part(s), A, B, C, D, and E, do(es) not produce digestive juices? [1]

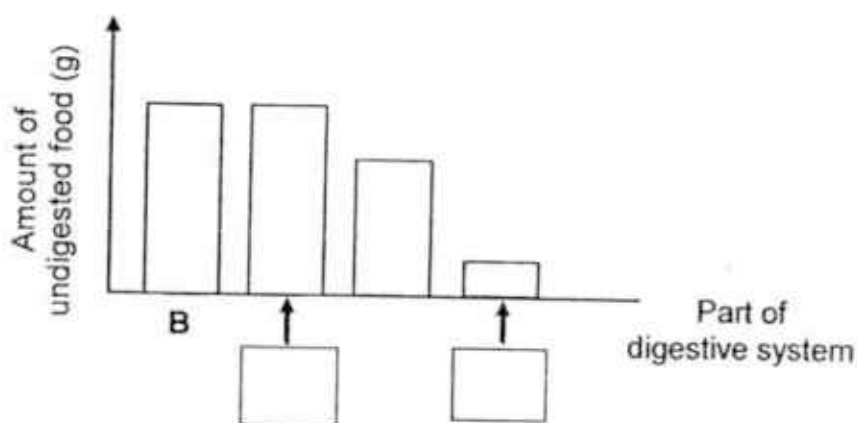
- (b) State the substances that are absorbed at C and E. [1]

Substance absorbed at C: _____

Substance absorbed at E: _____

- (c) The bar graph below shows the amount of undigested food entering different parts of the digestive system.

Write A, C, D or E in the boxes to show which parts of the digestive system the graph represents. [1]

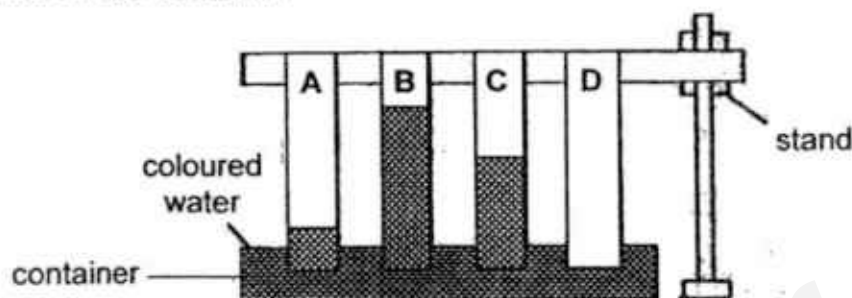


	3
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(Go on to the next page)

- 34 Josh placed 4 different materials of equal size, length and thickness into a container of coloured water.

The diagram below shows what he observed 1 minute after the materials were placed in the container.

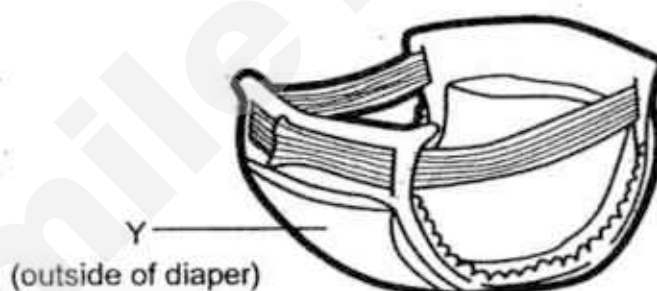


- (a) Arrange materials A, B, C and D, starting from the most absorbent.

[1]



The picture below shows a diaper. Part Y is the outside of the diaper which prevents urine from leaking out.



- (b) Which material, A, B, C or D, is the most suitable for making part Y?

[1]

- (c) Give a reason for your answer in (b).

[1]

-End of Booklet B-



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EXAM PAPER 2017

LEVEL : PRIMARY 3
SCHOOL : Maris Stella High School (Primary)
SUBJECT : SCIENCE
TERM : SA2

Booklet A

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

Booklet B

- Q25 (a) Animal B has six legs and does not have a three-stage life cycle.
 (b) Similarity: Both Animal A and C have a three-stage life cycle.
 Difference: Animal A has six legs but Animal C does not.
- Q26 (a) Both X and Y can swim and lay eggs.
 (b) Animal X breathe through gills but Animal Y does not.
 (c) X
- Q27 (a) All P, Q, R and S are absorbent.
 (b) (i) Material P
 (ii) P is the only that can float.
- Q28 (a) String Y.
 (b) String Y is the strongest of the three strings.
 (c) The string also needs to be flexible.
- Q29 (a) (i) 4 stage life cycle.
 (ii) 3 stage life cycle.
 (iii) Beetle
 (iv) Young look like it's adult.
 (v) Young does not look like it's adult.
 (vi) Cockroach
 (b) scan
- Q30 (a) Both has a three-stage life cycle.
 (b) Characteristic 1: Living things grow.
 Characteristic 2: Living things reproduce.
- Q31 (a) The amount of water will decrease.
 (b) The roots take in the water to make food.
- Q32 (a) (i) True
 (ii) False
 (iii) True
 (iv) True
 (b) System B: Respiratory system
 System D: Muscular system

- Q33 (a) B and C.
(b) Substance absorbed at C: Water.
Substance absorbed at E: Digested food.
(c) D, C
- Q34 (a) B, C, A, D
(b) Material D
(c) Material B absorbs the most water.

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METHODIST GIRLS' SCHOOL

Founded in 1887



END-OF-YEAR EXAMINATION 2017
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 : 31 October 2017

This booklet consists of 20 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).

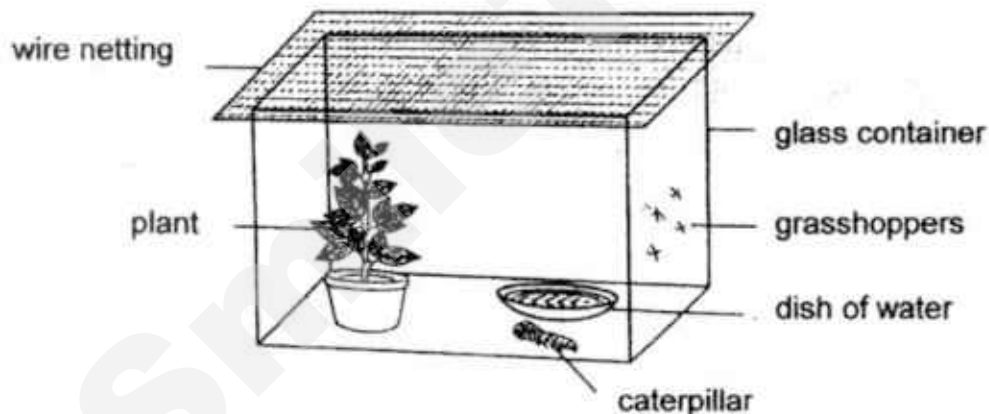
[56 marks]

1 Which of the following shows the characteristics of living things?

- A Water flowing in the river.
- B A giraffe gives birth to its young alive.
- C A balloon becomes bigger when it is blown.
- D A kitten changing its appearance and size over time.

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

2 A caterpillar was put into a glass container with some grasshoppers and a pot of green plant as shown below.



At the end of eight hours what is most likely to happen to the number of insects and green leaves?

	Number of grasshoppers	Number of leaves
(1)	Remains unchanged	Decreases
(2)	Decreases	Remains unchanged
(3)	Remains unchanged	Remains unchanged
(4)	Decreases	Decreases

- 3 John had four similar plants, A, B, C and D in four identical pots. He placed each pot of plant under a different set of conditions as shown below. A tick (✓) shows the presence of the condition.

Plants	Conditions			
	Air	Sunlight	Water	Mineral salts
A		✓	✓	✓
B	✓	✓	✓	
C	✓	✓		✓
D	✓		✓	✓

Which one of the following sets of plants would not be able to survive for two weeks?

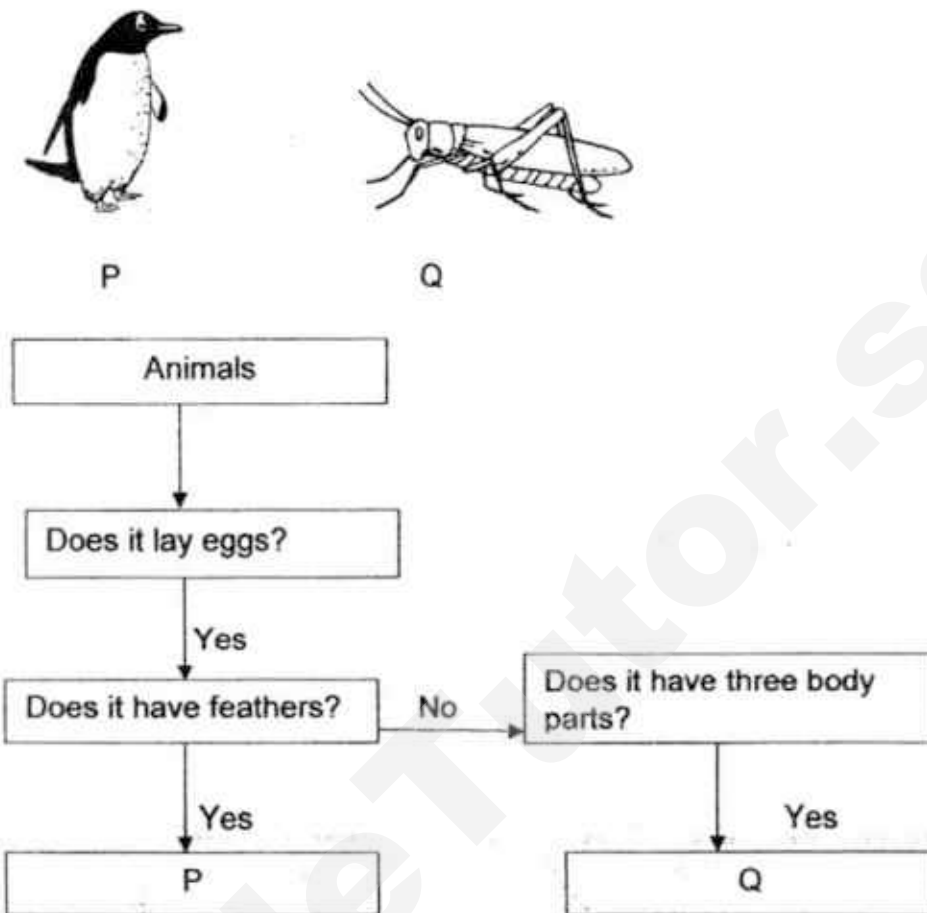
- (1) A, B and C only
 - (2) A, B and D only
 - (3) A, C and D only
 - (4) B, C and D only
- 4 Observe the flowers of plants W, X, Y and Z as shown below.



Which one of the following shows the correct classification of plants based on their similar characteristics of flowers?

	Flower in a single stalk	Flower in a bunch
(1)	W and X	Z and Y
(2)	W and Y	Z and X
(3)	W and Z	X and Y
(4)	W, Z and X	Y only

5 Jenny classified the two animals, P and Q, as shown below.



What is the similar characteristic between animals P and Q?

- (1) They can fly.
- (2) They lay eggs.
- (3) They have feathers.
- (4) They have three body parts.

6 Which one of the following correctly shows the part of the animal that helps it to move?

	Animals	Part of the animal that helps it to move
(1)	bee	wings
(2)	clownfish	gills
(3)	earthworm	skin
(4)	duck	beak

7 Which of the following statements about bacteria are not true?

- A Bacteria can be harmful or useful.
- B All bacteria can make their own food.
- C Bacteria can be seen by the naked eye.
- D Bacteria can only be found in very cold places.

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

8 Betty wants to find out if the amount of water given to four identical plants would affect their growth. She has four set-ups as shown below.



150 ml of water
in the shade

Set-up A



50 ml of water
in the shade

Set-up B



150 ml of water
in the Sun

Set-up C



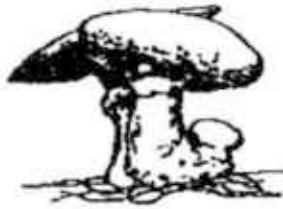
50 ml of water
in the Sun

Set-up D

Which two set-ups should Betty use to ensure a fair test?

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

9 The diagrams below show three organisms.



mushroom



bird nest's fern



bracket fungus

What do these organisms have in common?

- A They reproduce by spores.
- B They can make their own food.
- C They are non-flowering plants.
- D They get their food from where they grow.

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

10 Three students, Ahmad, Chee Meng and Bala each made statements about a plant part and its function as shown in the table below.

Student	Plant part	Function
Ahmad	stem	Supports the branches and leaves of the plant.
Chee Meng	root	Transports water and mineral salts throughout the plant.
Bala	leaf	Helps in the making of food for the plant.

Whose statement(s) about the function of a plant part is/are wrong?

- (1) Chee Meng only
- (2) Ahmad and Bala
- (3) Bala and Chee Meng
- (4) Ahmad and Chee Meng

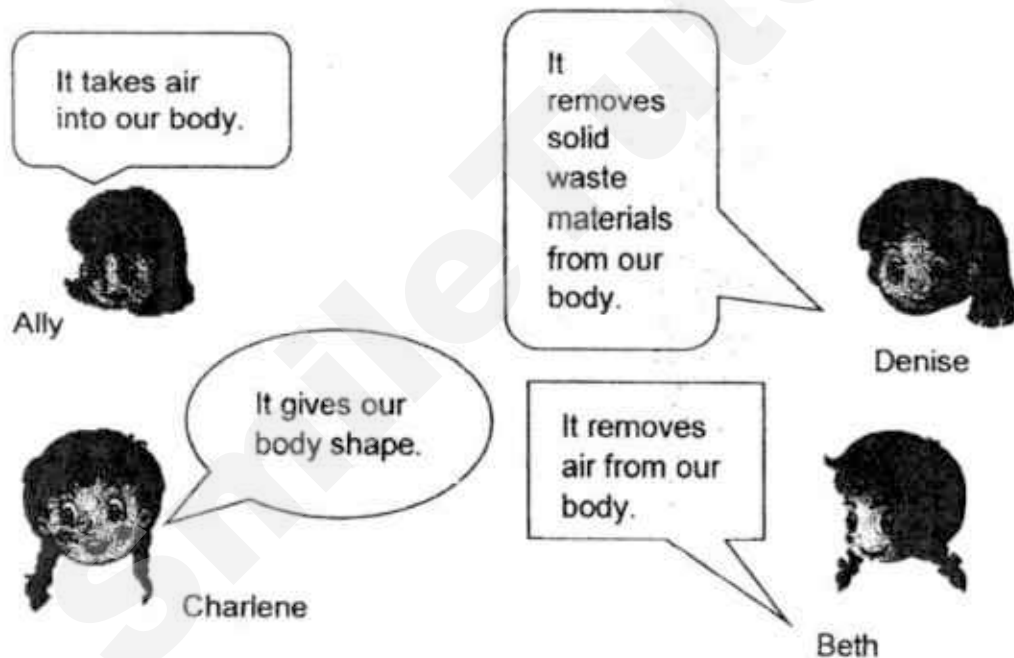
- 11 Devi wanted to conduct an experiment to find out if plants can take in water without roots.

Which of the following variables should she keep the same in order for the experiment to be fair?

- A Type of plant
- B Amount of water
- C Number of leaves
- D Presence of roots

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

- 12 Four children, Ally, Beth, Charlene and Denise each made a statement about the human body systems.



Which two children are talking about the same system?

- (1) Ally and Beth
- (2) Ally and Denise
- (3) Charlene and Beth
- (4) Charlene and Denise

- 13 Study the information given in the table shown below.

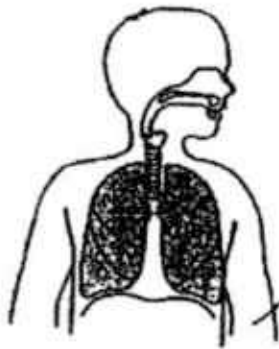
Parts of the digestive system	Functions
A	Pushes the chewed food down into the stomach
B	Passes out the waste materials
C	Allows the digested food to be absorbed
D	Absorbs liquid from the undigested food

Which of the following correctly identify parts A, B, C and D of the digestive system?

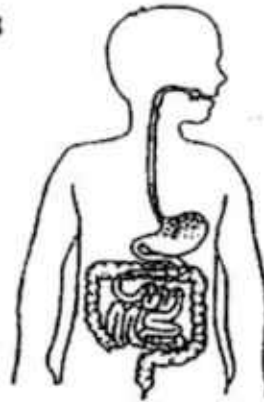
	A	B	C	D
(1)	Gullet	Mouth	Small intestine	Large intestine
(2)	Gullet	Anus	Small intestine	Large intestine
(3)	Mouth	Anus	Small intestine	Large intestine
(4)	Tongue	Mouth	Large Intestine	Small intestine

14 The diagrams below show four different body systems.

A



B



C



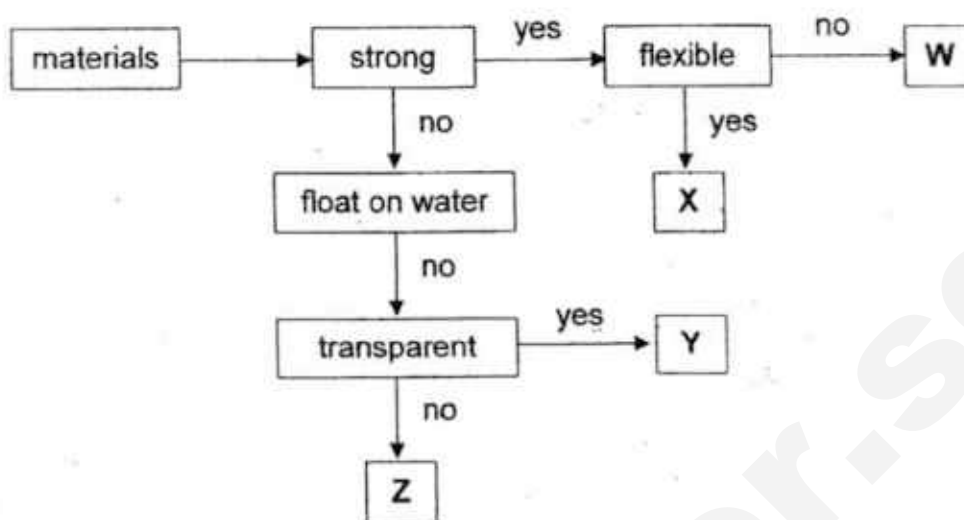
D



Jim was doing pull-up at a fitness corner on a sunny day. He realised that his heart was beating very fast. Which two body systems above caused Jim to feel this way?

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



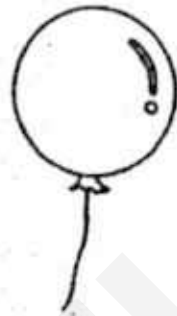

- 15 The flow chart below shows the properties of four materials, W, X, Y and Z.



What could be the four materials W, X, Y and Z?

	W	X	Y	Z
(1)	wood	clear glass	plastic	rubber
(2)	clear glass	plastic	wood	fabric
(3)	metal	rubber	clear glass	fabric
(4)	metal	clear glass	wood	rubber

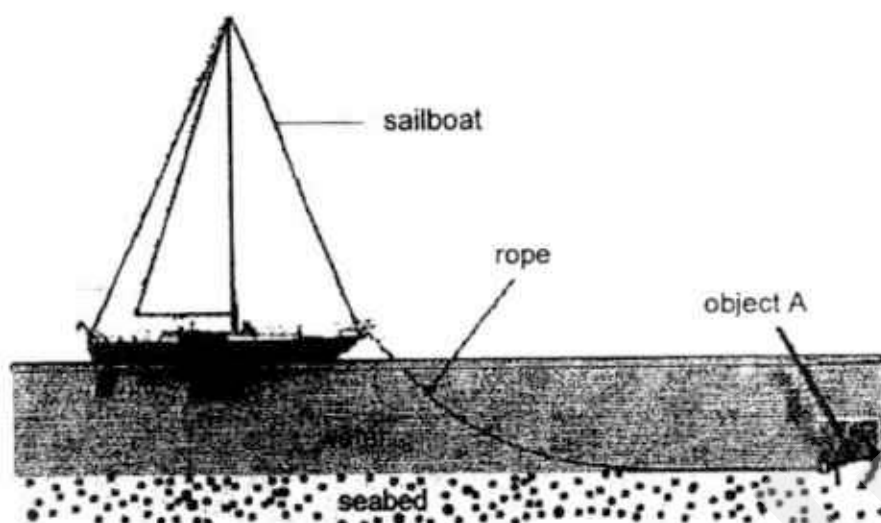
- 16 Four objects are classified into two groups as shown below.

Group A	Group B
 paper cup	 glass
 balloon	 sewing needle

The objects are grouped according to _____.

- (1) how flexible they are
- (2) whether they are waterproof
- (3) whether light can pass through
- (4) what materials they are made of

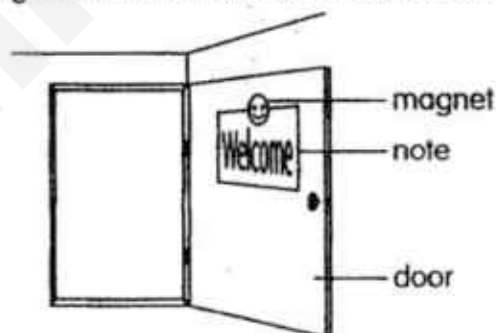
- 17 The picture shows a sailboat anchored in the seabed.



Which of the following shows the most suitable material used and its property to make object A?

	material	property
(1)	metal	strong
(2)	wood	waterproof
(3)	plastic	transparent
(4)	rubber	stiff

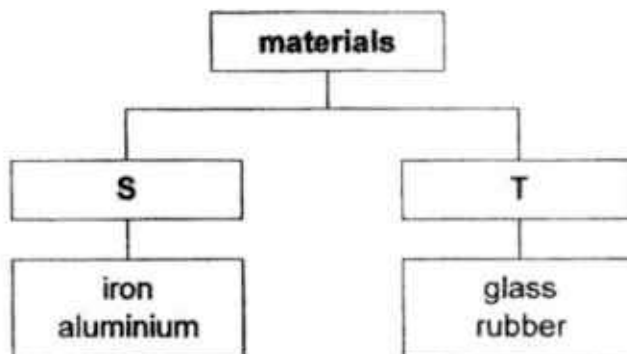
- 18 Jadine uses a magnet to hold a note on a door as shown below.



What could be the materials used to make the magnet and the door?

	magnet	door
(1)	iron	copper
(2)	steel	iron
(3)	clay	steel
(4)	aluminium	wood

- 19 The chart below shows the classification of some materials into group S and group T.



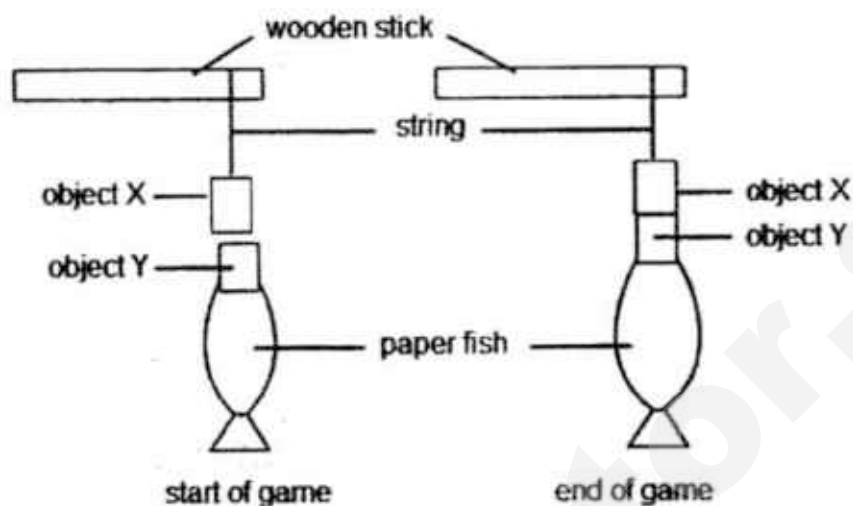
What are the most appropriate headings for group S and group T?

	S	T
(1)	metal	non-metal
(2)	magnetic	non-magnetic
(3)	sinks in water	floats in water
(4)	not transparent	transparent

- 20 Faisal was given a rod to test if it was a magnet. He could test the rod by bringing it near _____.

- (1) some plastic cups to see if there was any interaction
- (2) another similar rod to see if they were attracted together
- (3) a freely suspended magnet to see if the magnet repelled the rod
- (4) a freely suspended magnet to see if the magnet attracted the rod

- 21 Ali played a game as shown in the diagram below. The aim of the game is to make use of object X to pick up object Y, which is attached to a paper fish.

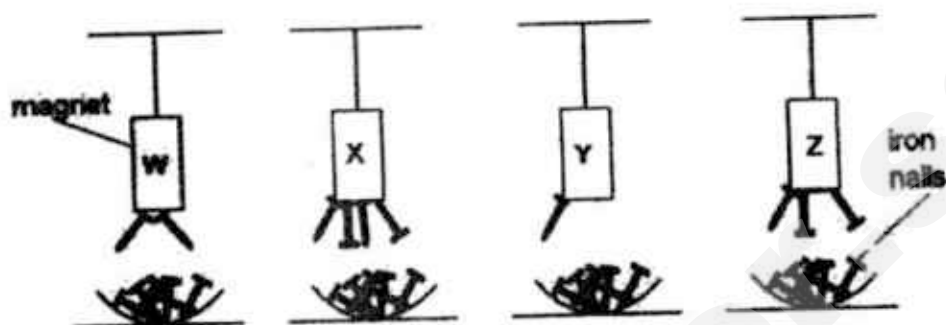


Which of the following could represent objects X and Y?

	object X	object Y
A	copper block	steel block
B	magnet	iron block
C	magnet	magnet

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

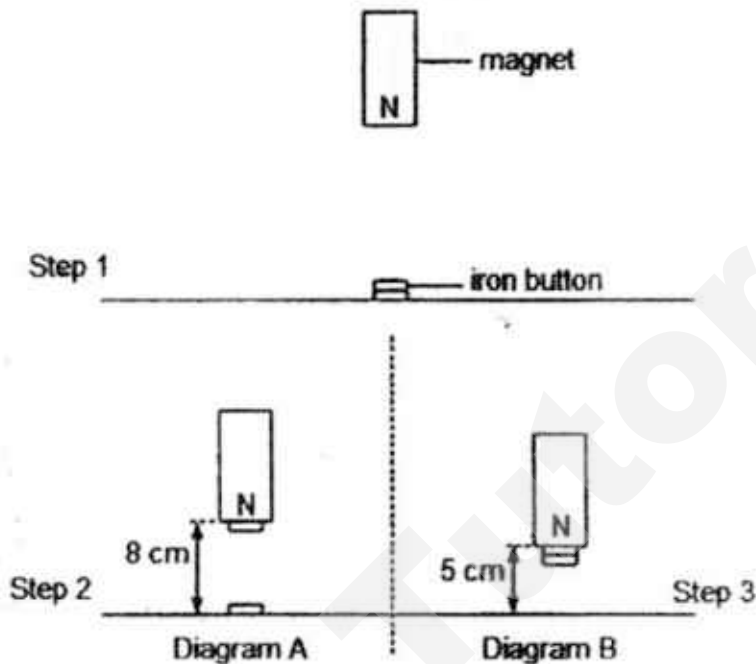
- 22 Four different magnets, W, X, Y and Z were each hung from strings of equal length. A tray with the same number of iron nails was placed at equal distance below each magnet. It was observed that a different number of iron nails was attracted as shown below.



Based on the observation above, which one of the options is correct?

	weakest magnet	strongest magnet
(1)	X	Y
(2)	W	X
(3)	Y	Z
(4)	Y	X

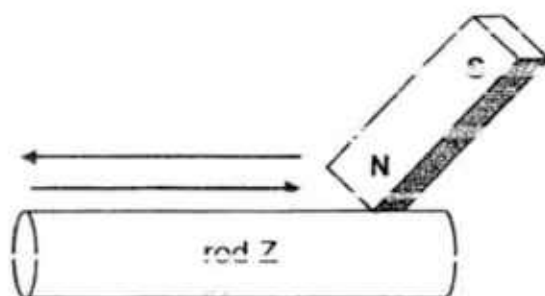
- 23 Ahmad set up an experiment in Step 1 as shown below to find out how many iron buttons a magnet can attract over different distances. Diagram A and Diagram B in Step 2 and Step 3 show the results of the experiment respectively.



What could Ahmad conclude from this experiment?

- (1) The magnet has no effect on the iron button.
- (2) The magnet can attract less iron buttons when it is nearer to them.
- (3) The magnet can attract more iron buttons when it is nearer to them.
- (4) The magnet is stronger when it is 8 cm away from the iron buttons.

- 24 Devi was trying to turn rod Z into a magnet by using the stroking method. She used a bar magnet with its north-pole in contact with rod Z as shown below. The directions of the stroking movements are represented by the two arrows.



She was unable to use this method to turn rod Z into a magnet. Which two of the following statements could be the possible explanations?

- A Rod Z is not a magnetic material
 - B The bar magnet must be the same size as rod Z.
 - C Devi should stroke rod Z with the south-pole instead.
 - D The bar magnet stroked rod Z in more than one direction.
- (1) A and D
 (2) A and C
 (3) B and D
 (4) C and D

- 25 Ling Ling placed an iron nail on a flat sheet of cardboard and held a magnet under the sheet as shown in the diagram.



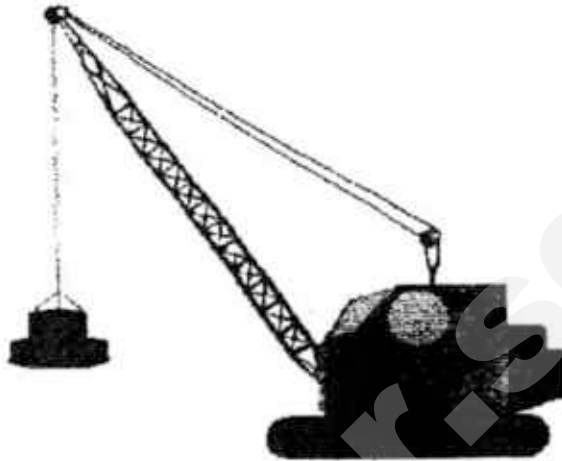
What would be observed if Ling Ling moved the magnet along the cardboard?

- (1) The magnet would bend the iron nail.
- (2) The magnet would repel the iron nail.
- (3) The iron nail would move with the magnet.
- (4) The iron nail remained in the same position.

- 26 Two objects, X and Y, are shown in the pictures below. Both objects made use of magnets to function. [The pictures are not drawn to scale.]



Object X



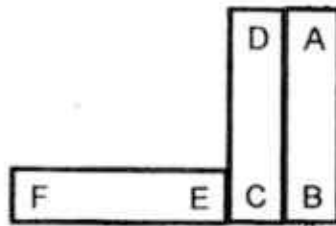
Object Y

In what ways are the magnets used in Objects X and Y different?

	X	Y
A	Ring shaped	Rod shaped
B	Shows direction	Lifts scrap iron
C	Strong magnetism	Weak magnetism
D	Permanent magnet	Temporary magnet

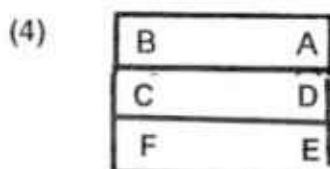
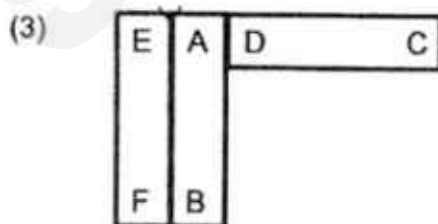
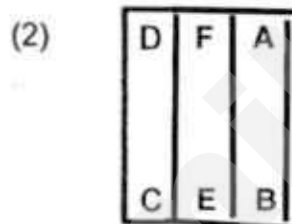
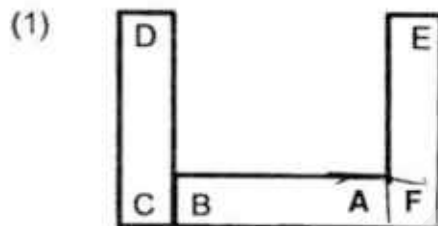
- (1) A and B only
- (2) B and C only
- (3) B and D only
- (4) C and D only

- 27 Wayne arranged three bar magnets together as shown below.

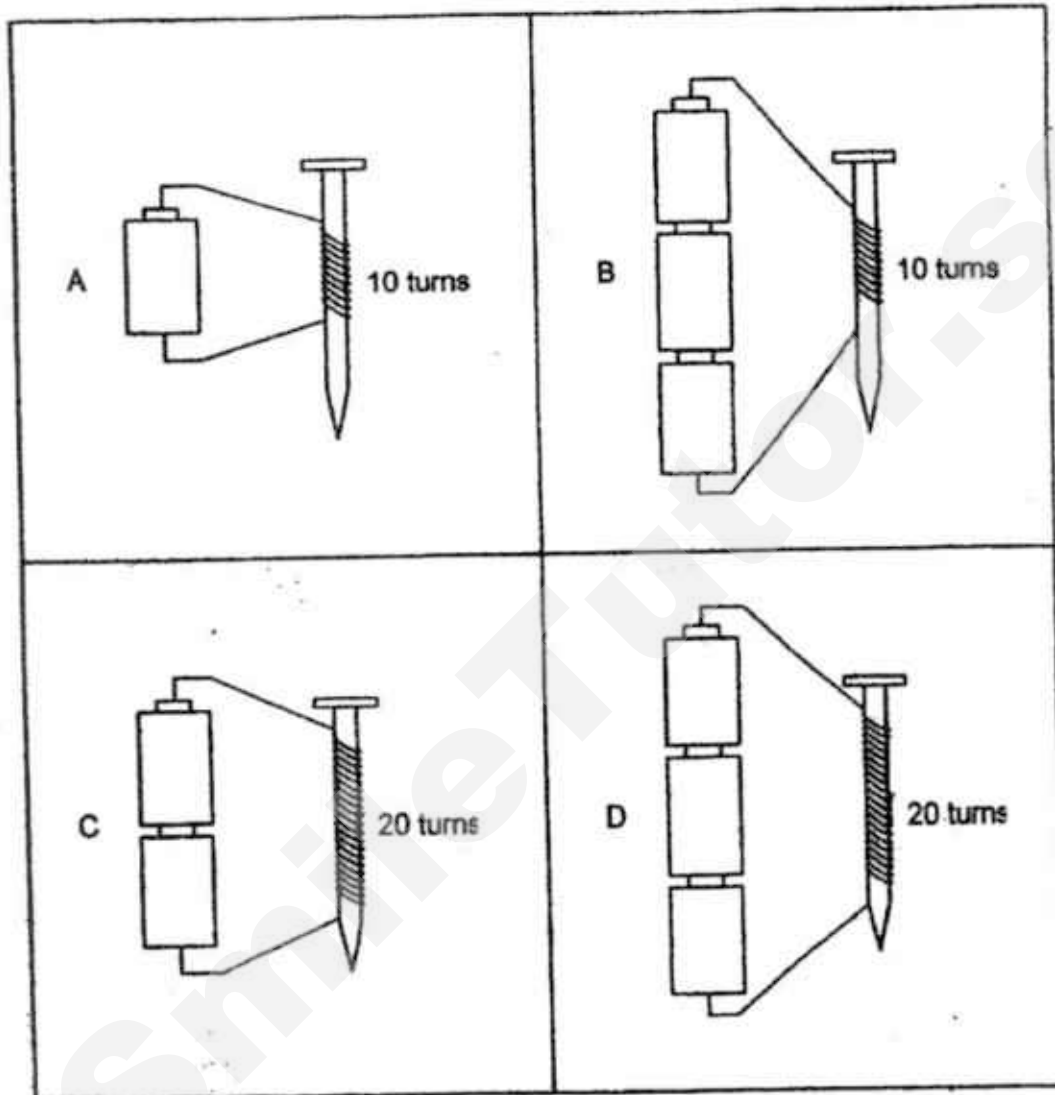


Later, he rearranged the magnets.

Which one of the following arrangements of the magnets is possible?



- 28 Gopal wanted to find out if the number of batteries affects the strength of the electromagnet. He prepared four set-ups as shown below.



Which two set-ups, A, B, C and D, should Gopal use to conduct a fair test?

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

For questions 29 to 40, 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 Salmah observed animals P, Q and R as shown below.



P



Q



R

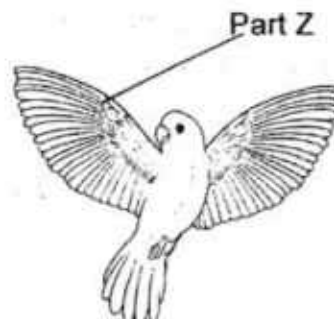
- (a) Which animal is not classified in the same group of living things as the other two animals? Give a reason for your answer.

[1]

Study animals S and T as shown below.



Animal S



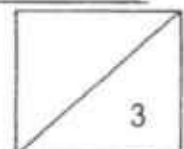
Animal T

- (b) What is the similarity between the function of part Y and Z of both animals S and T?

[1]

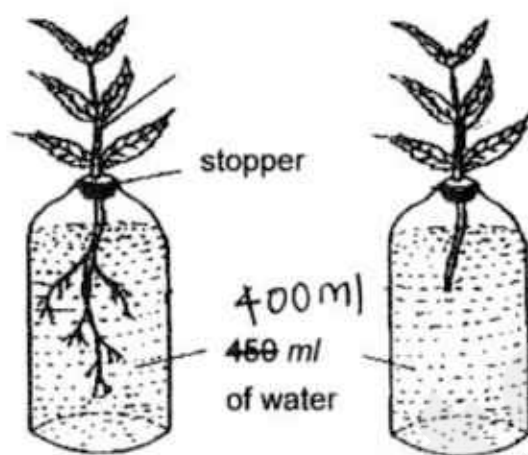
- (c) How do both animals S and T reproduce?

[1]



(Go on to the next page)

- 30 Peggy carried out an experiment using two similar plants. The roots of the plant in Flask B were cut off while the roots of plant in Flask A were not cut. Both Flasks A and B contain the same amount of water. Peggy measured the amount of water left in each flask after seven days.



Beaker flasks	Volume of water at the start of the experiment (ml)	Volume of water at the end of the experiment (ml)
A	400	250
B	400	390

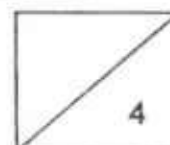
- (a) What was Peggy trying to find out in this experiment? [1]

- (b) What was observed about the amount of water in the two flasks at the end of the experiment? [1]

- (c) What are two other functions of the roots not shown in the experiment? [2]

Function 1: _____

Function 2: _____



(Go on to the next page)

31 Diagram 1 shows the parts of a plant with labels W, V, X, Y and Z. Diagram 2 shows tiny openings that can be found on a plant part.

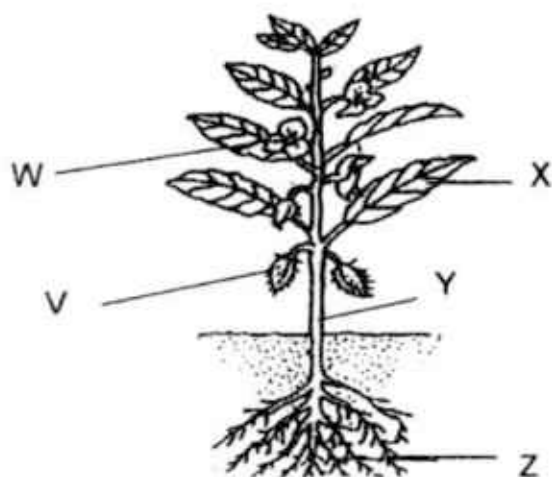


Diagram 1

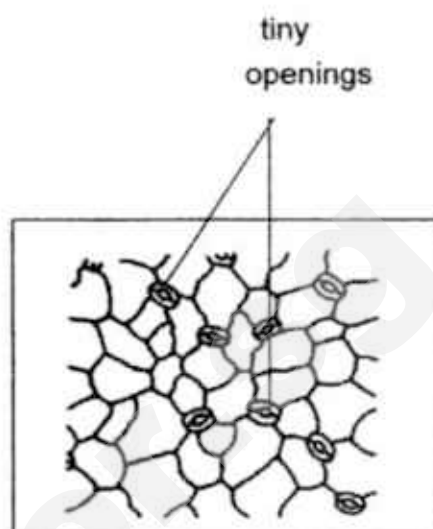
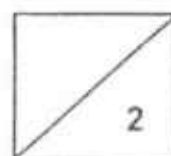


Diagram 2

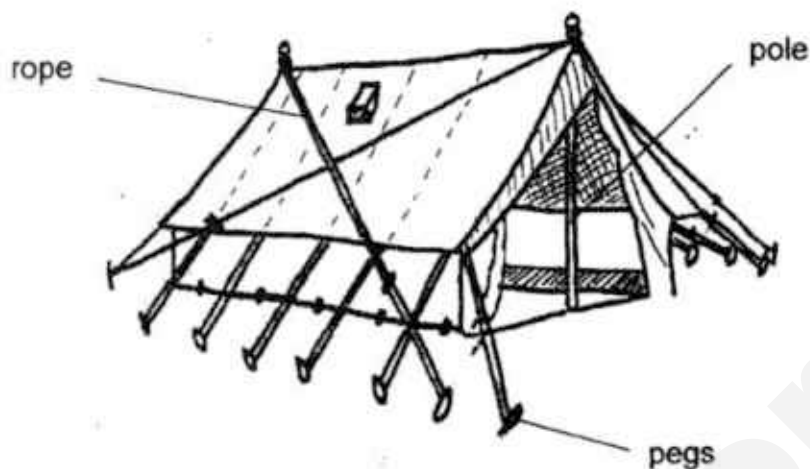
(a) Which part of the plant can the tiny openings be found? [1]

(b) What is the function of the tiny openings? [1]



(Go on to the next page)

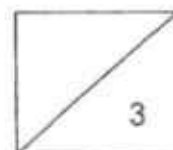
- 32 The picture below shows a tent. The poles, ropes and the pegs hold the tent together. This gives the frame to the tent.



- (a) Name the human body system that serves the same function as the frame of the tent. [1]

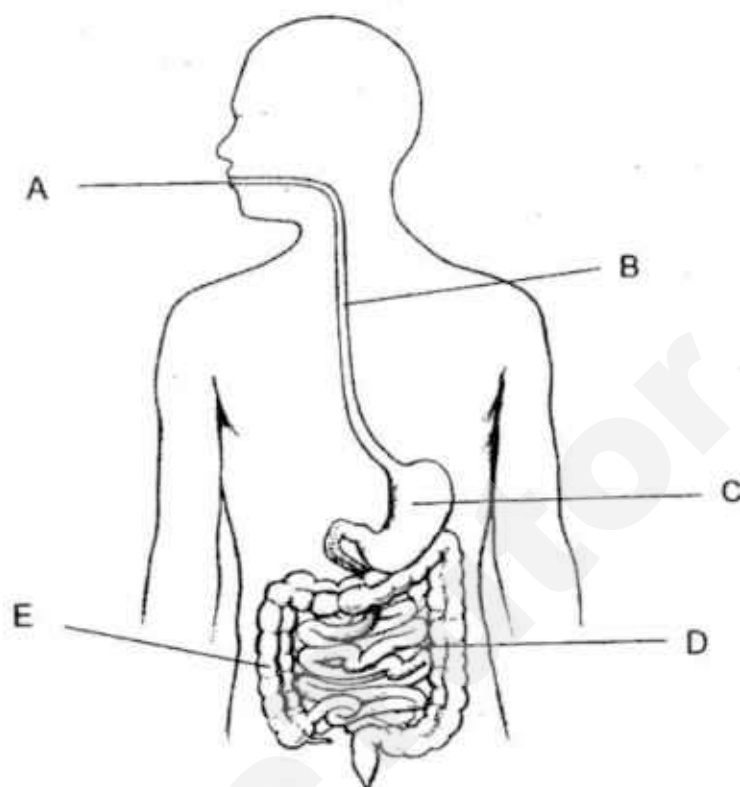
- (b) How is the function of the frame of the tent similar to the human body system you have identified in part (a)? [1]

- (c) What are two important organs that this human body system protects? [1]



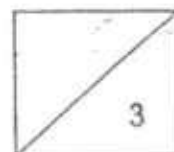
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- 33 The diagram below shows a human body system with its parts labelled A, B, C, D and E.



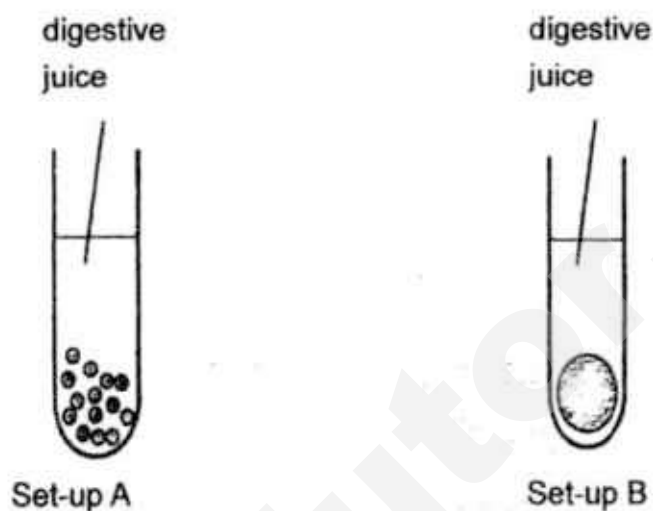
- (a) At which part does digestion begin? Describe what happens to the food at this part. [2]

- (b) What happens at Part C? [1]



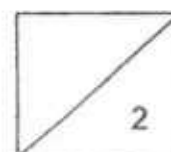
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- 34 Ravi was planning an experiment to find out if breaking food into smaller pieces can help digest food quickly. He used two similar pieces of biscuits and two test tubes containing an equal amount of digestive juice for his set-ups. The piece of biscuit added to set-up A was broken into smaller pieces while the piece added to set-up B was not broken.



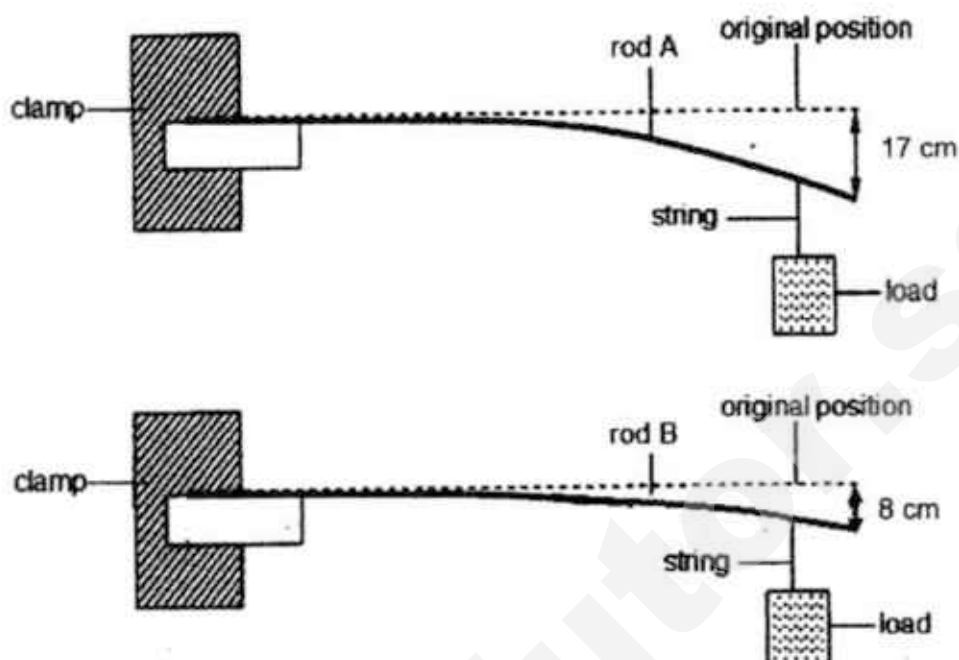
- (a) What difference in results would Ravi observe in the two set-ups at the end of the experiment? [1]

- (b) What is digestion? [1]



(Go on to the next page)

- 35 Jaya set up an experiment using two rods, A and B, of the same thickness. Each rod was fixed to a clamp at one end and a load was hung at the other end.



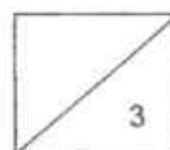
He observed that the two rods bent downwards from its original position at different distances as shown in the diagram.

- (a) Based on Jaya's observation, which rod is more flexible? Give a reason for your answer. [1]

- (b) In this experiment, what are two **other** variables that must be kept the same in order for the experiment to be fair? Tick the box accordingly in the table below. [1]

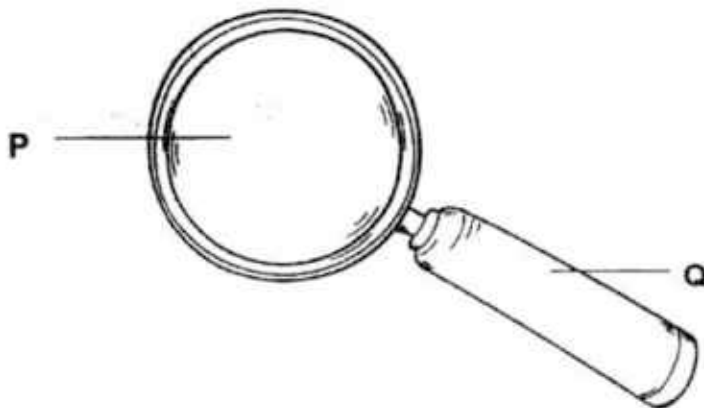
variables	keep the same	change
material of rod	<input type="checkbox"/>	<input type="checkbox"/>
length of rod	<input type="checkbox"/>	<input type="checkbox"/>
mass of load	<input type="checkbox"/>	<input type="checkbox"/>

- (c) What must Jaya do to ensure his results are reliable for this experiment? [1]



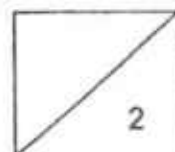
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36 The picture below shows a magnifying glass with parts P and Q.



- (a) What property of material is suitable to make part P of the magnifying glass? Give a reason for your answer. [1]

- (b) Is the material used for making part P suitable to be used for part Q? Explain your answer. [1]



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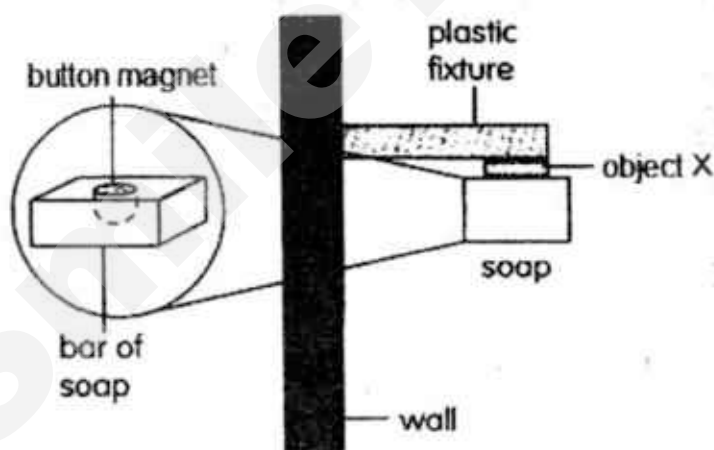
- 37 Becky set up an experiment using a light steel trolley supported by some wooden pipes and a magnet as shown below.



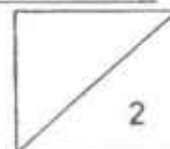
When Becky moved the magnet near to the steel trolley, she observed an interaction between the steel trolley and magnet.

- (a) What interaction would Becky observe between the steel trolley and magnet? [1]

Next, Becky decided to make a 'soap-holder' by inserting a button magnet into a bar of soap and attaching it to a plastic fixture connected to object X and fixed on a wall as shown below.



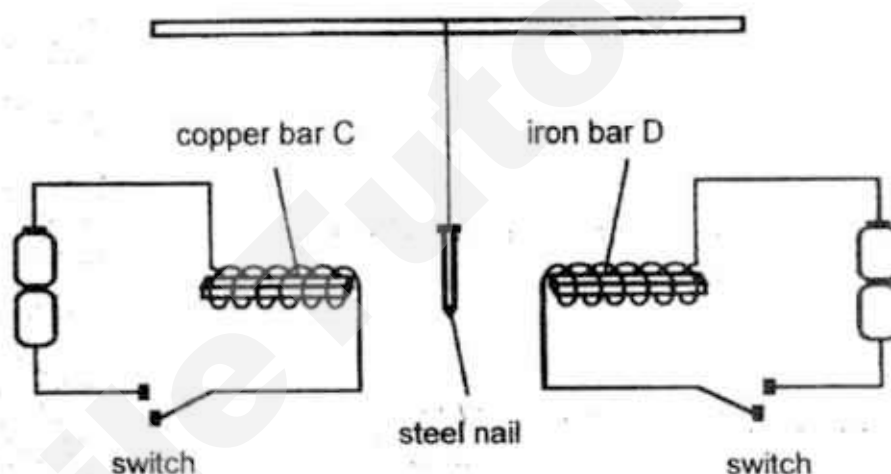
- (b) What property must the material of object X have to ensure the bar of soap is held in place and does not drop? [1]



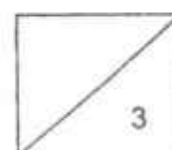
(Go on to the next page)

- (c) Becky replaced object X with a magnet and she observed that the soap dropped immediately and could not be held in place. Suggest a possible reason for Becky's observation. [1]

- 38 Jamal set up an experiment as shown below. A steel nail is freely suspended in the middle, between a copper bar C, and an iron bar D.

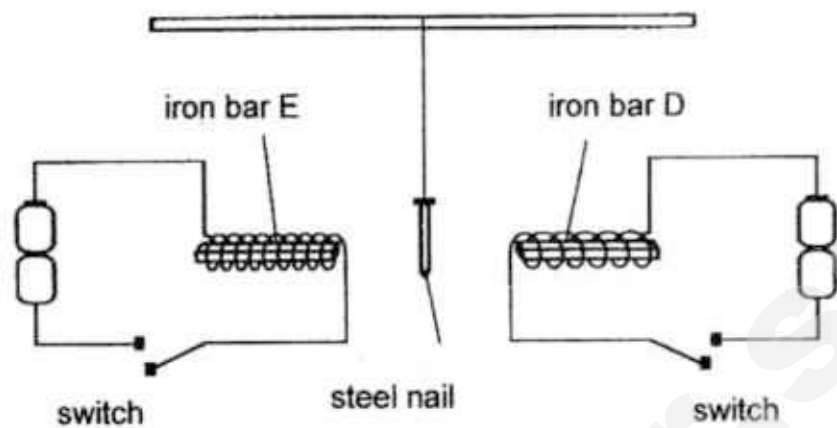


- (a) Jamal observed that the steel nail moved towards iron bar D when both switches were closed at the same time. Give a reason for his observation. [2]

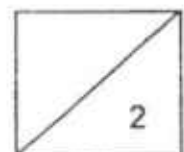


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(b) Next, Jamal had a new set up as shown below.



He observed that the steel nail now moved towards iron bar E when both switches were closed at the same time. Why was there a change in the movement of the steel nail? [2]



(Go on to the next page)

- 39 (a) Diagram 1 below shows a ring magnet lowered onto a tray of steel pins. Diagram 2 shows the bottom view of the magnet.

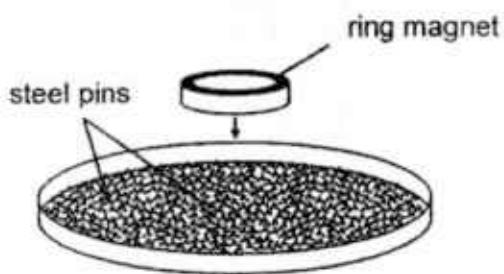


Diagram 1

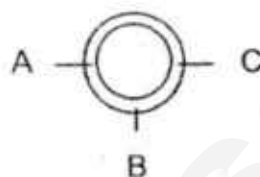


Diagram 2

The same number of steel pins were attracted at positions A, B and C of the ring magnet. Give a reason for this observation.

[1]

- (b) Ting Ting conducted another experiment. She placed a magnet, R, on a table and then moved two similar steel balls, S and T, next to magnet R as shown below.

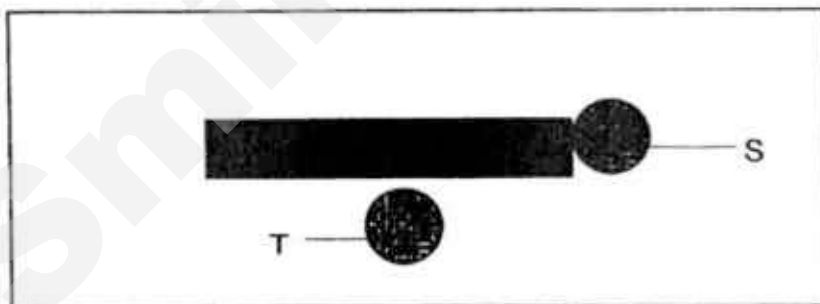
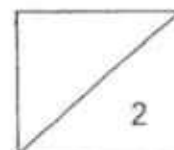


table top

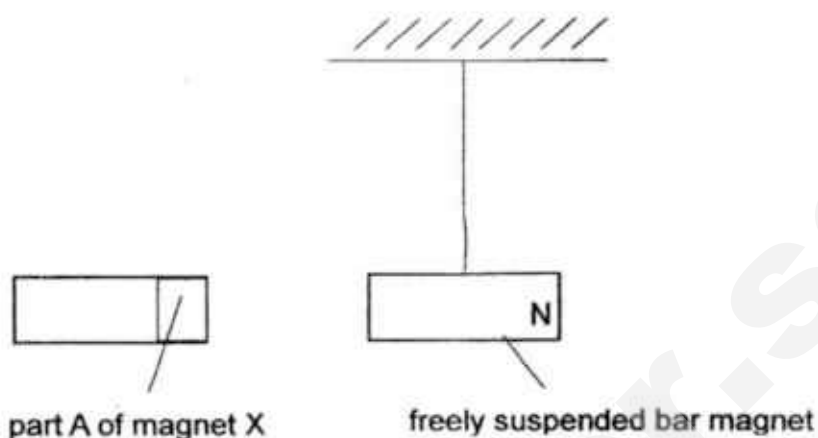
When she lifted up magnet R, ball S remained attached to R but ball T did not. Explain why ball T did not remain attached to magnet R.

[1]



(Go on to the next page)

- 40 A bar magnet is suspended freely from a string as shown in the diagram below. It was observed that the north-pole of the bar magnet is pointing in a certain direction as shown.

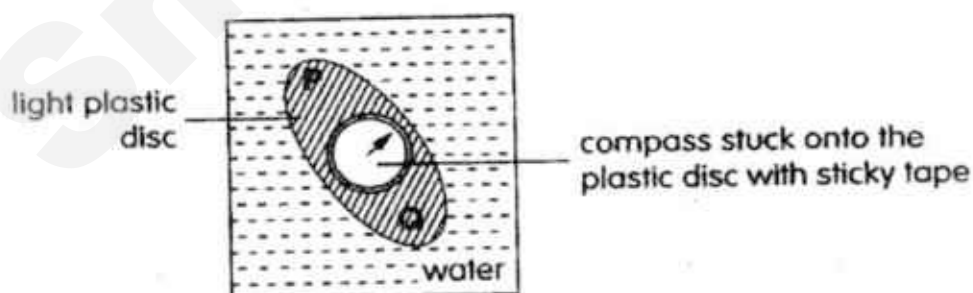


When part A of magnet X was brought near to the freely suspended bar magnet, it was observed that both magnets push each other away.

- (a) What is the likely pole of magnet X at part A? [1]

- (b) Give a reason for this observation [1]

A round compass was fixed onto a piece of light oval-shaped plastic disc and allowed to float on water as shown below. The oval-shaped plastic disc has two markings, P and Q, at each of its ends.



- (c) What would be the new position of the arrow pointer on the compass when the north-pole of a bar magnet is placed near to position Q? [1]

EXAM PAPER 2017

LEVEL : PRIMARY 3
SCHOOL : METHODIST GIRLS' SCHOOL (PRIMARY)
SUBJECT : SCIENCE
TERM : END-OF-YEAR EXAM

BOOKLET A

Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8
2	1	3	3	2	1	2	4
Q9	Q10	Q11	Q12	Q13	Q14	Q15	Q16
1	1	3	1	2	1	3	1
Q17	Q18	Q19	Q20	Q21	Q22	Q23	Q24
1	2	1	3	3	4	3	1
Q25	Q26	Q27	Q28				
3	3	3	4				

BOOKLET B

- Q29. (a) R. It is a mammal.
(b) The part help them to move.
(c) They reproduce by laying eggs.
- Q30. (a) She was trying to find out if the roots of the plant take in the water.
(b) The water left in flask A was less than Flask B.
(c) Function 1: The roots take in mineral salts.
Function 2: It helps to anchor the plant firmly to the ground.
- Q31. (a) Part X
(b) To allows gaseous exchange.

- Q32. (a) Skeletal System
(b) The frame gives shape and provide support for the tent.
(c) brain / heart / lungs
- Q33. (a) Mouth. The teeth chew the food into smaller pieces while saliva soften the food.
(b) Digestion continues at Part C.
- Q34. (a) The biscuit in set-up A is digested faster than the biscuit in set-up B.
(b) Digestion is the breaking down of food into simple substances.
- Q35. (a) Rod A. It bent more than Rod B.
(b)
- | Variable | Keep the same | Change |
|-----------------|-------------------------------------|--------------------------|
| Material of rod | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| Length of rod | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| Mass of rod | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
- (c) He must repeat the experiment a few more times.
- Q36. (a) It is transparent. It allows light to pass through so that you can see through it.
(b) No, it is fragile.
- Q37. (a) They attracted each other.
(b) It has to be magnetic.
(c) Like poles are facing each other so they repel.
- Q38. (a) Iron is magnetic so iron bar D can become electromagnet when the switch was closed.
(b) Iron bar E has more coils of wire around it so it has a stronger magnetism.

- Q39. (a) A, B and C are poles of the ring magnet and they have equal magnetism.
(b) The middle part of magnet R is the weakest so there was not enough magnetism to attract ball T.
- Q40. (a) South pole.
(b) Like poles repel.
(c) Position P



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NAN HUA PRIMARY SCHOOL
SEMESTRAL ASSESSMENT 2 – 2017
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 _____

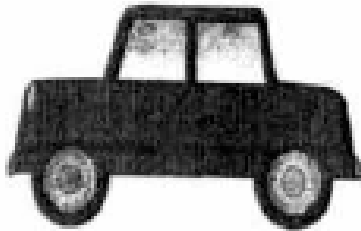
Date : 31 October 2017

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. Mandy saw the following things when she was on her way to school.



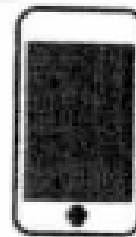
car



cat



house



handphone

Mandy wanted to classify the things into living and non-living things.
Which of the above does not belong to the same group as the others?

- (1) Car
- (2) Cat
- (3) House
- (4) Handphone

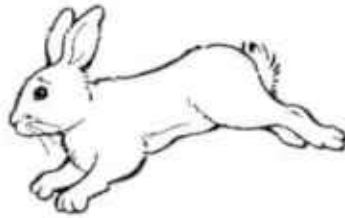
2. The four animals shown in the diagrams below were placed in the same group.



Animal A



Animal B



Animal C

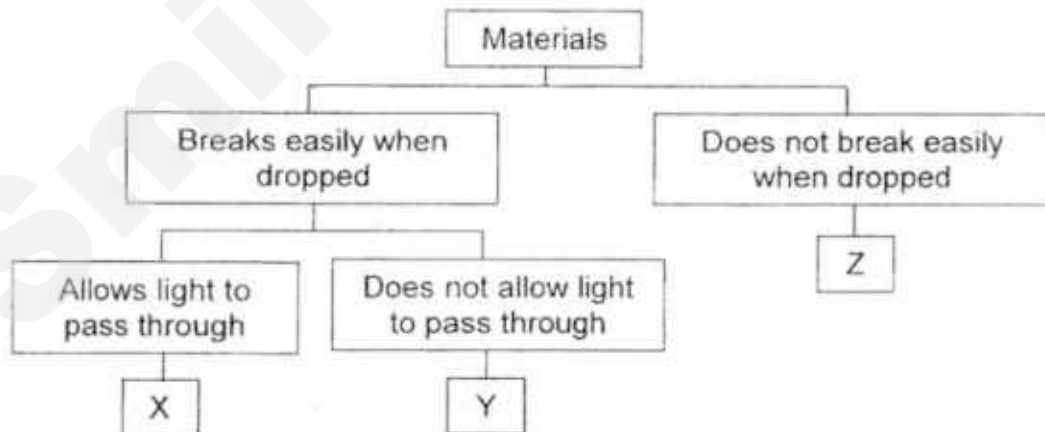


Animal D

The animals belong to the same group because they _____.

- (1) can fly
- (2) live on land
- (3) give birth to young
- (4) have scales as an outer covering

3. Study the classification chart below.



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

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

4. The table below shows the properties of four materials, A, B, C and D. A tick (✓) indicates that the material has that property.

Properties	Materials			
	A	B	C	D
Allows light to pass through	✓	✓		
Flexible			✓	✓
Strong		✓	✓	
Waterproof	✓	✓	✓	

Based on the information above, which material is most suitable for making a raincoat?

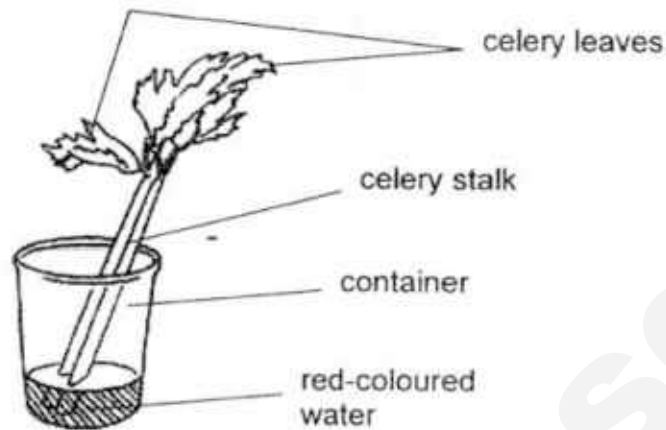
- (1) A
- (2) B
- (3) C
- (4) D

5. Which of the following statement(s) about root is/are **incorrect**?

- A It makes food for the plant.
- B It holds the plant firmly to the ground.
- C It takes in water and minerals for the plant.
- D It holds the leaves and branches up to get as much sunlight as possible.

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

6. Study the diagram below.



A group of children carried out an experiment by putting a stalk of celery into a container of red-coloured water. After a day, the children observed that the celery stalk and its leaves have turned red.

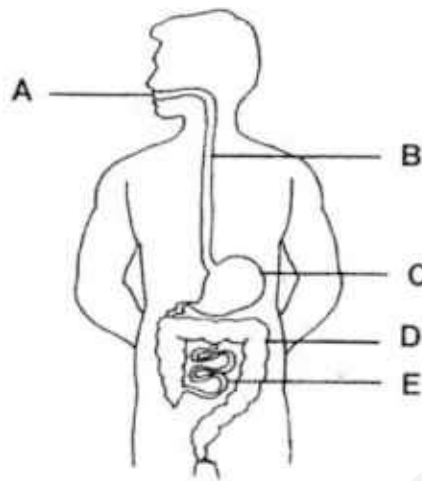
Which of the following statements is true?

- (1) Water does not flow through the stalk and leaves.
- (2) Water is taken in by the stalk and transported to the leaves.
- (3) Water is taken in by the leaves and transported to the stalk.
- (4) Water is taken in by the stalk and leaves directly from the container.

7. Which one of the following systems is **wrongly** matched to its function?

	Human System	Function
(1)	Respiratory System	Helps the body to take in oxygen and remove carbon dioxide.
(2)	Digestive System	Breaks down the food we eat into simple substances.
(3)	Circulatory System	Carries oxygen, digested food and waste materials around the body.
(4)	Muscular System	Protect important organs in the body.

The diagram below shows the human digestive system.
Study the diagram carefully and answer Questions 8 and 9.



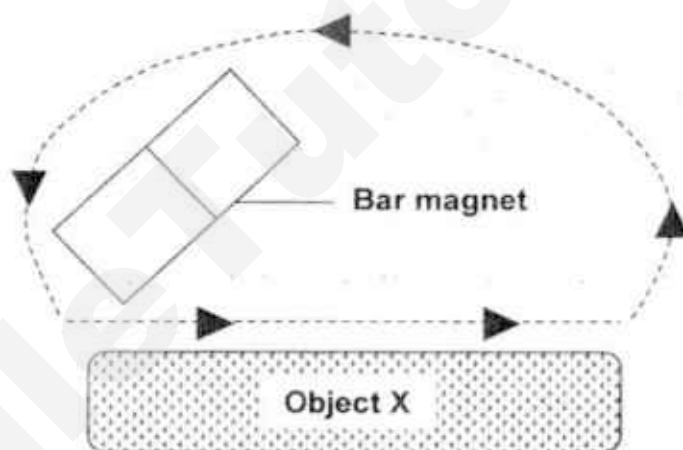
8. Which parts of the digestive system help to digest the food?
- (1) B and D only
 - (2) A, C and E only
 - (3) C, D and E only
 - (4) A, C, D and E only
9. Which parts of the digestive system does absorption takes place?
- (1) D and E only
 - (2) A, B and C only
 - (3) A, C and E only
 - (4) B, C, D and E only
10. Which of the following metals are non-magnetic?
- | | |
|---|-----------|
| A | Iron |
| B | Steel |
| C | Copper |
| D | Aluminium |
- (1) A and B only
 - (2) A and C only
 - (3) B and C only
 - (4) C and D only

11. Four students, Jay, Rene, Melissa and Kee Meng made the following statements about magnets during their Science lesson:

Jay : A magnet can attract all metals.
Rene : Like poles repel, unlike poles attract.
Melissa : Like poles attract, unlike poles repel.
Kee Meng : All metals can be made into magnets.

Which of the following student(s) is/are correct?

- (1) Jay only
 - (2) Rene only
 - (3) Jay and Melissa
 - (4) Rene and Kee Meng
12. Study the diagram below.



During an experiment, Carol used a bar magnet to stroke Object X repeatedly for 30 times. After that, Object X was able to attract some paper clips. Based on the above experiment, which of the following statements is correct?

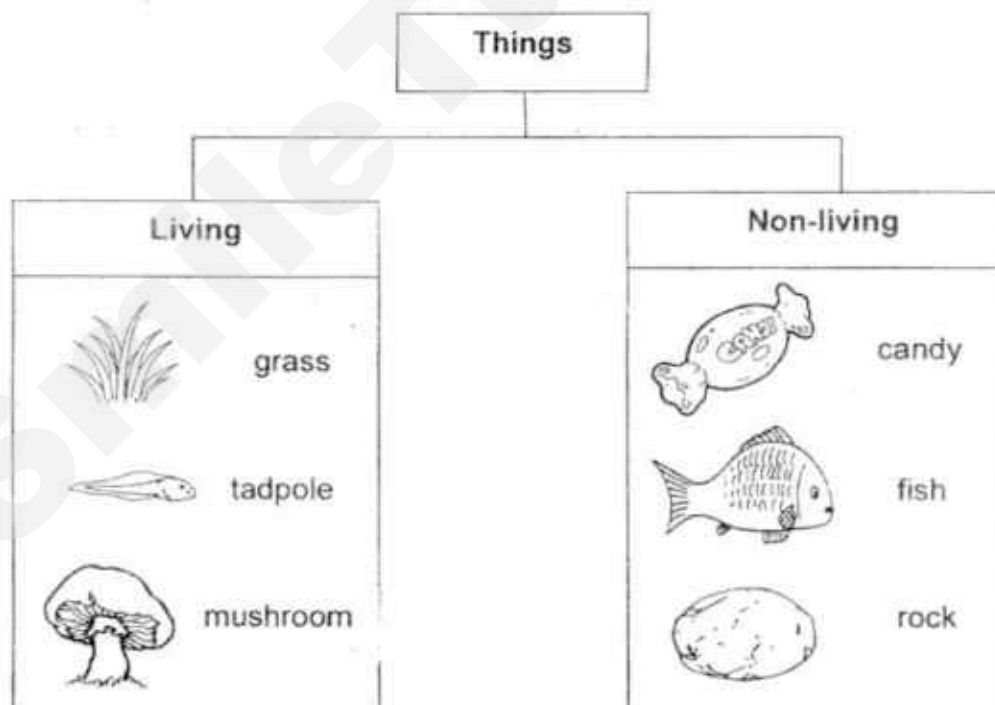
- (1) Object X is a magnetic metal.
- (2) Object X is a non-magnetic metal.
- (3) The magnet lost all its magnetism after it was used to stroke Object X.
- (4) The more times Object X was stroked, the less number of paper clips it could attract.

13. The picture below shows a mimosa plant.



The leaves of a mimosa plant close when they are touched. What characteristic of living things does this show?

- (1) It can grow.
 - (2) It is making food.
 - (3) It can move freely from place to place.
 - (4) It can respond to changes in its surroundings.
14. Study the classification table below.



Which one of the above is wrongly grouped?

- (1) Fish
- (2) Rock
- (3) Candy
- (4) Mushroom

15. Freddy observed an adult animal X and recorded the following information.

- It can fly.
- It has four legs.
- It does not have feathers.
- It gives birth to young alive.

Which group of animal does animal X belong to?

- (1) The animal is a bird.
- (2) The animal is an insect.
- (3) The animal is a mammal.
- (4) The animal is an amphibian.

16. Gladys made some observations about the living things as shown below.



Which one of the following is a similarity between the fern and the moss?

- (1) Both of them are fungi.
 - (2) Both of them cannot make food.
 - (3) Both of them are flowering plants.
 - (4) Both of them are non-flowering plants.
17. The picture below shows a food container that children used to bring their snack to school.



Plastic is suitable for making this food container because _____.

- A plastic is light
- B plastic is waterproof.
- C plastic cannot bend easily
- D plastic allows light to pass through

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

18. Mr Bala and Mr Tan wanted to build a house for their families to stay in. Their friend told them that they should use bricks to build their houses.



brick house

Why is brick a good material for building a house?

- A Brick is strong.
- B Brick is not flexible.
- C Brick sinks in water.
- D Brick is made from clay.

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

19. The table below shows the materials used for making some items and the reasons for choosing those materials. Which reason is **incorrect** in explaining why the material is being used to make the item?

	Items	Materials	Why is the material suitable?
(1)	Shoes	Fabric	It is flexible.
(2)	Plate	Ceramic	It breaks easily.
(3)	Spoon	Metal	It does not bend easily.
(4)	Umbrella	Plastic	It is waterproof.

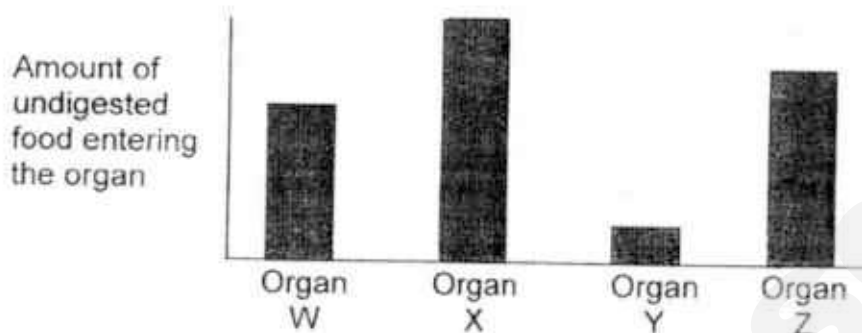
20. Study the diagram below.



Which one of the following functions **cannot** be carried out by the plant in the diagram above?

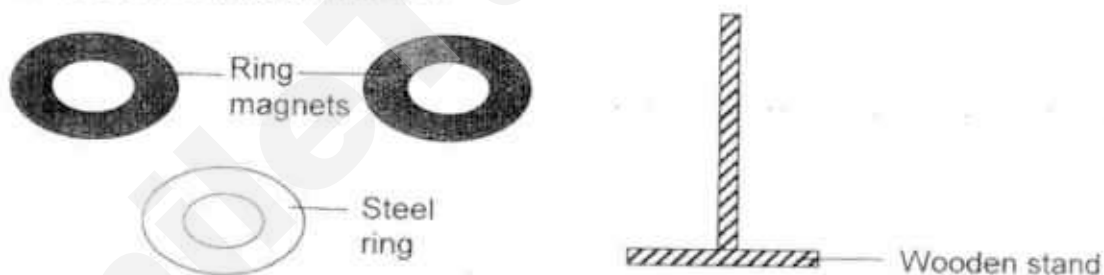
- (1) The plant is not able to make food.
 - (2) The plant is not able to stay upright.
 - (3) The plant is not able to take in water from the soil.
 - (4) The plant is not able to transport food, water and mineral salts to other parts.
21. Kelly likes to play catching with her friends during recess.
Which of the following human systems work together to enable Kelly to run after her friends?
- A Skeletal System
 - B Muscular System
 - C Circulatory System
 - D Respiratory System
- (1) B only
 - (2) A and B only
 - (3) B, C and D only
 - (4) A, B, C and D

22. Peisi just ate a plate of chicken rice during recess. The graph below shows the amount of undigested food entering the mouth, stomach, small intestine and large intestine in her digestive system. The organs are not arranged in order.



Which organ represents the stomach?

- (1) W
 - (2) X
 - (3) Y
 - (4) Z
23. Two ring magnets and a steel ring were stacked on top of one another through the wooden stand shown below.

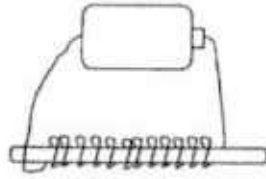


Which one of the following observations is possible?

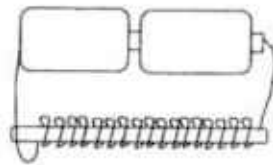
- (1)
- (2)
- (3)
- (4)

24. The set-ups below show the making of a magnet using the electrical method. Which of the following set-ups will attract the most number of paper clips?

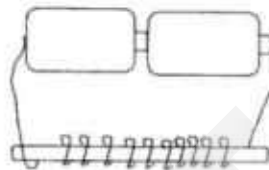
(1)



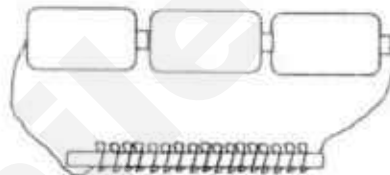
(2)



(3)



(4)





NAN HUA PRIMARY SCHOOL
SEMESTRAL ASSESSMENT 2 – 2017
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 : 31 October 2017

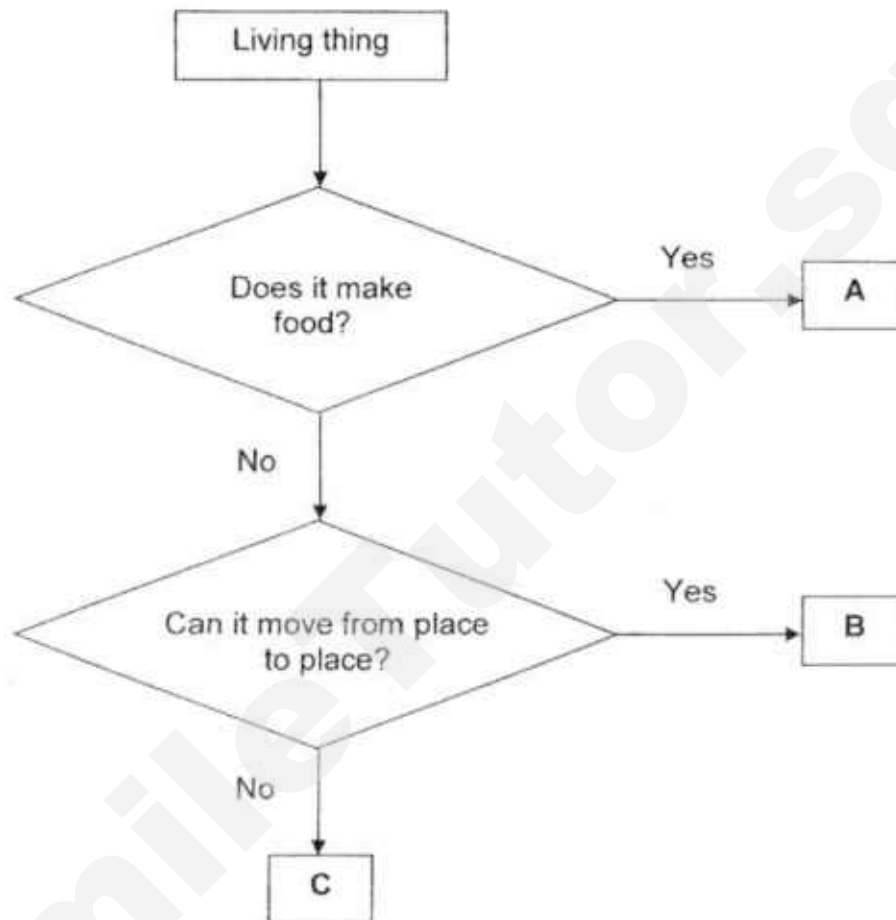
Parent's Signature: _____

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 living things, A, B and C.

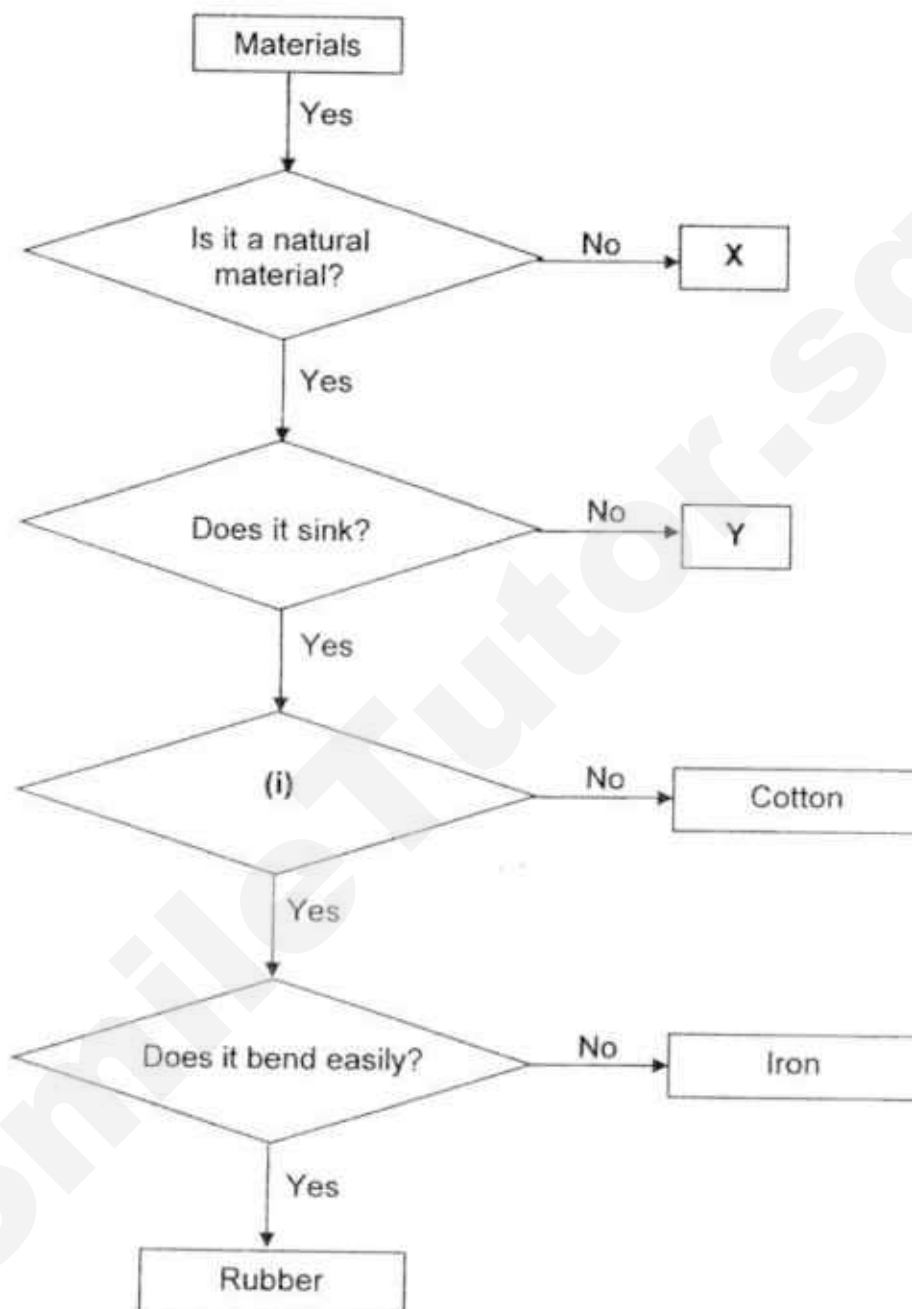


(a) Based on the flowchart above, list two characteristics of living thing B. [2]

(b) Based on the flowchart above, which group of living things does A belong to? [1]

Score	3
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26. Study the flowchart below.



(a) Name materials X and Y.

[1]

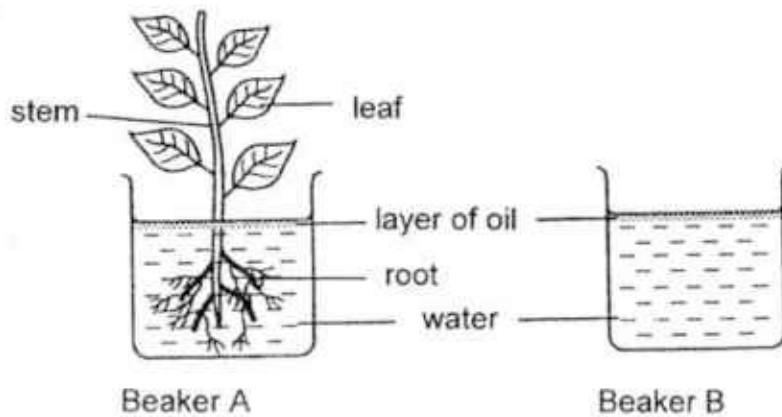
X : _____

Y : _____

(b) Write a suitable question for (i) in the flowchart.

[1]

27. Simon set up an experiment as shown in the diagram below.



- (a) What is the function of the root? [1]

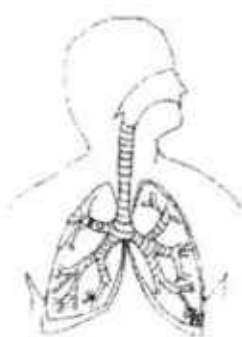
- (b) Describe what would happen to the water level in both Beaker A and Beaker B after a week. [2]

Beaker A: _____

Beaker B: _____

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

28. The diagram below shows three different human systems.



System A



System B

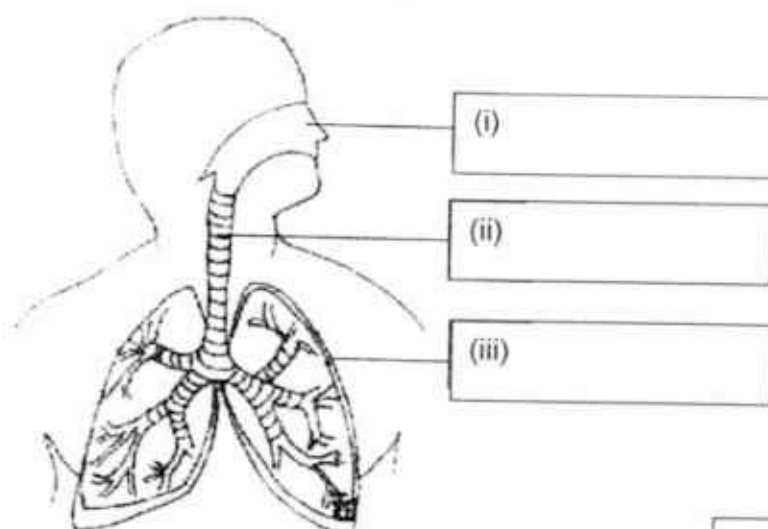


System C

- (a) Match the functions below with the correct human system (A, B or C) as shown above. [1½]

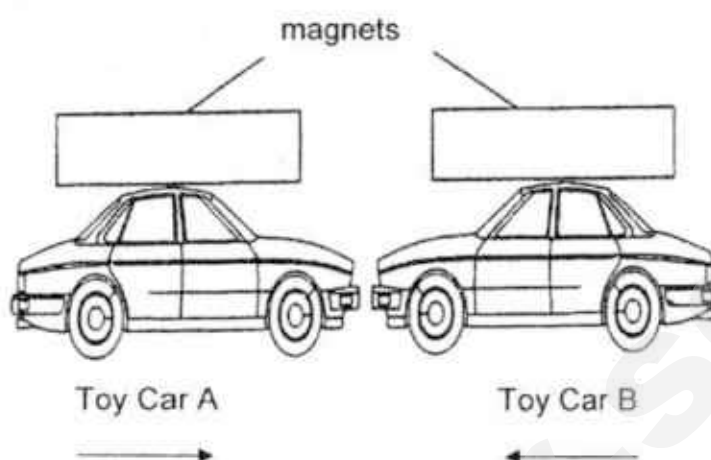
Function	System
Gives the body its shape and protect important organs.	
Transports digested food, oxygen and waste materials around the body.	
Takes in oxygen for the body and removes carbon dioxide from the body.	

- (b) Label the parts of System A in the diagram below. [1½]



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

29. Jade attached a magnet on the roof of each toy car as shown below.

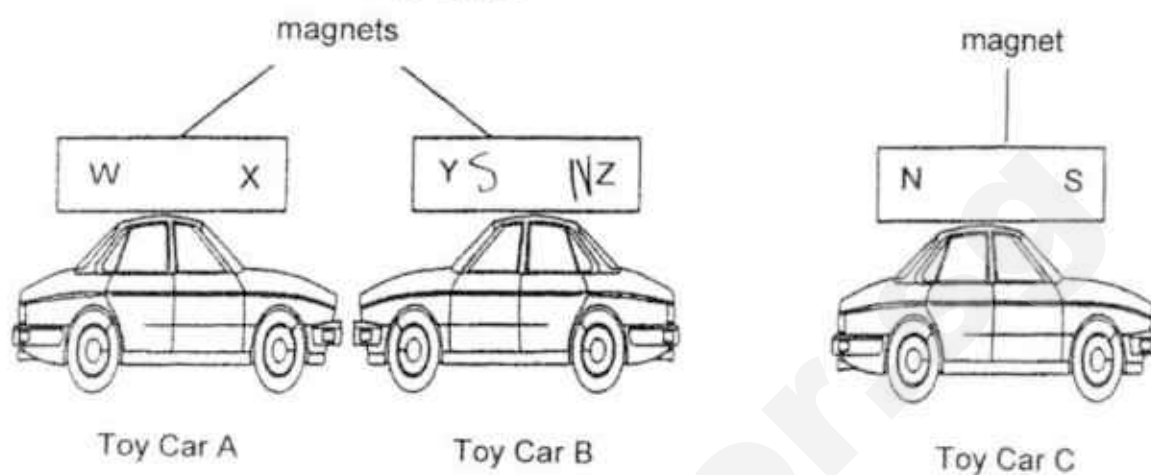


- (a) When Jade brought Toy Car A nearer to Toy Car B, both Toy Car A and Toy Car B came towards each other. Explain why it is so. [1]

- (b) Jade then turned Toy Car B the other way round and the two toy cars moved away from each other. Explain why the two toy cars moved away from each other. [1]

Score	2
-------	---

- (c) Jade took a third car, Car C, with a magnet on its roof. She placed the three cars together and observed that Car C moved away from Car B. At the same time, Car A moved nearer to Car B.



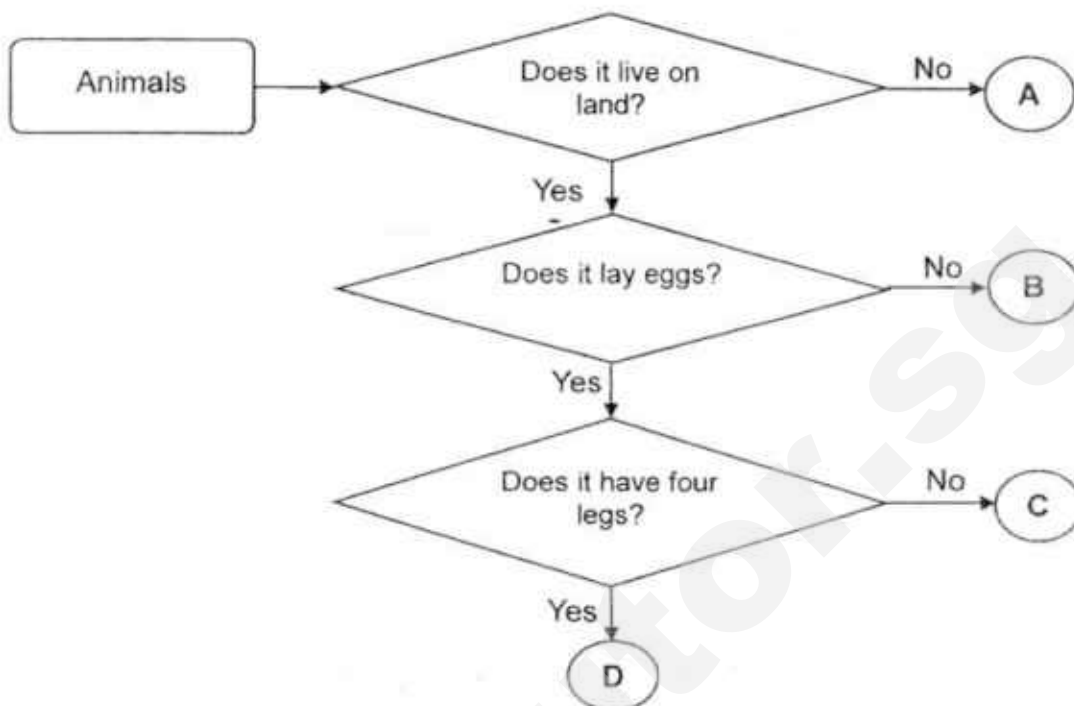
Identify the poles of the magnets.

Write down **North pole** or **South pole** in the blanks provided below.

[2]

- i) W: _____
- ii) X: _____
- iii) Y: _____
- iv) Z: _____

30. Study the flowchart below carefully.



(a) Use the helping words in the box below to fill in each blank.

[2]

mammal	reptile	fish	bird
--------	---------	------	------

According to the flowchart,

- (i) A is most likely a _____
- (ii) B is most likely a _____
- (iii) C is most likely a _____
- (iv) D is most likely a _____

(b) Based only on the flowchart above, state one similarity between Animals B and C.

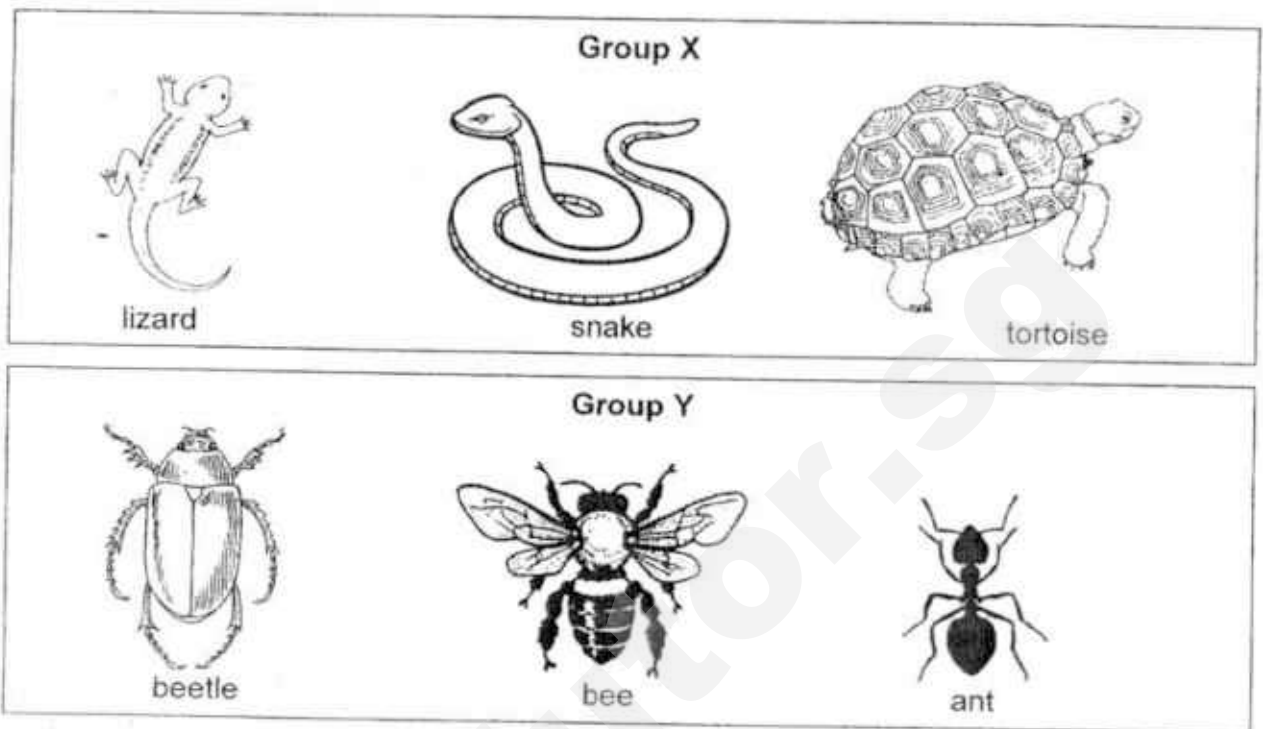
[1]

(c) Based only on the flowchart above, state one difference between Animals C and D.

[1]

Score	4
-------	---

31. Study the two groups of living things shown below.



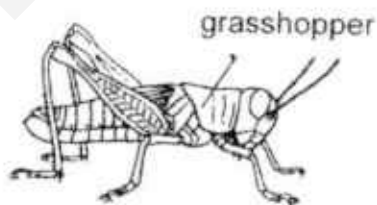
- (a) Give a suitable heading for each of the groups above.

[1]

Group X: _____

Group Y: _____

- (b) Study the picture below.



Which group (X or Y) does the grasshopper belong to?

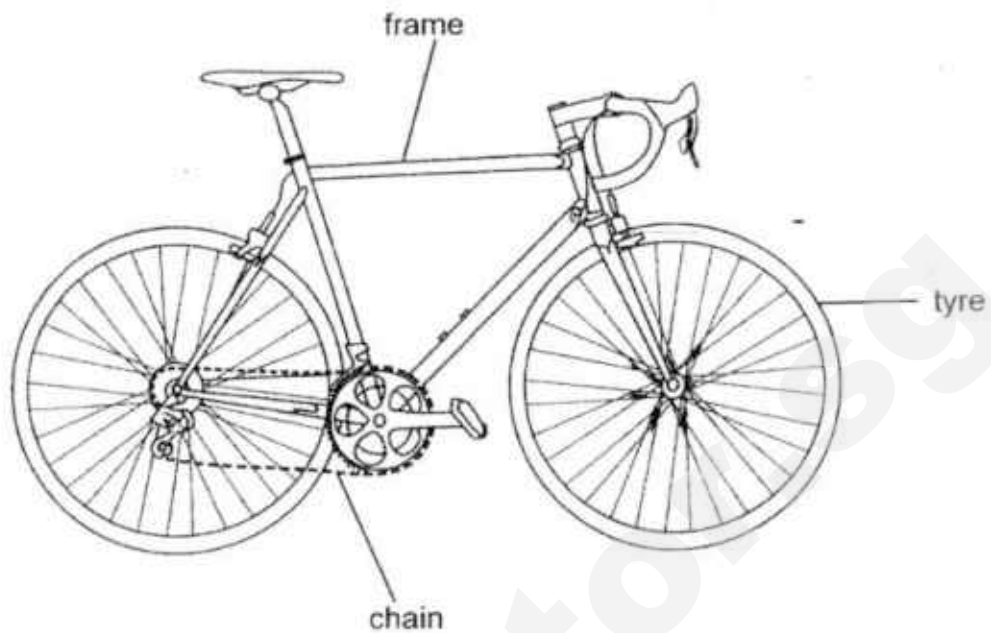
[1]

- (c) State the difference between the outer coverings of the snake and the ant. [1]

- (d) How do the animals in both groups reproduce?

[1]

32. Study the picture of a bicycle below carefully.



- (a) Name a material suitable for making the bicycle frame and the bicycle tyre above. [1]

Bicycle frame : _____

Bicycle tyre : _____

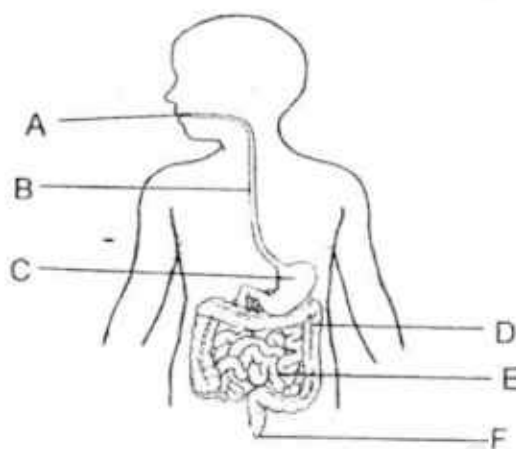
- (b) The bicycle chain is made of metal. State two properties of metal that makes it suitable for making a bicycle chain. [1]

(i) _____

(ii) _____

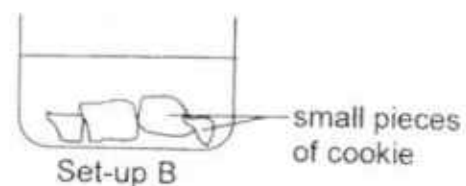
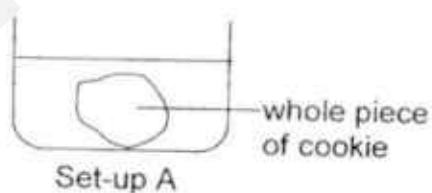
Score	2
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33. The diagram below shows the human digestive system.



- (a) Based on the diagram above, where (A, B, C, D, E or F) does digestion starts and ends? [1]
Digestion starts at _____ and ends at _____
- (b) What is the function of Part B in the diagram above? [1]

- (c) Peter conducted an experiment using the two set-ups below. Set-up A has a whole piece of cookie in a beaker and Set-up B has a similar piece of cookie broken into small pieces inside another beaker. Same amount of digestive juice was added to both set-ups.



In which set-up will the cookie take a shorter time to be digested? Explain your answer. [2]

Score	4
-------	---

34. Xin Pei tested three rods (S, T and U) with a bar magnet, a steel bar and a wooden block.



She brought each end of the rod close to one end of the bar magnet, steel bar and wooden block. Then she used the same end of the rod and brought it close to the opposite end of the three objects. She recorded her results in the table below.

Rod	Bar magnet	Steel bar	Wooden block
S	Attracts both ends.	Did not attract or repel.	Did not attract or repel.
T	Attracts one end and repel the other end.	Attract both ends.	Did not attract or repel.
U	Did not attract or repel.	Did not attract or repel.	Did not attract or repel.

- (a) Based on the table above, which rod (S, T or U) is a magnet? Give a reason for your answer. [2]

- (b) Based on the table above, what material could Rod U be made of? [1]

~ End of paper ~

Score	3
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ANSWER KEY

YEAR : 2017
LEVEL : PRIMARY 3
SCHOOL : NAN HUA PRIMARY SCHOOL
SUBJECT : SCIENCE
TERM : SA2

SECTION A (24 x 2marks)

Q 1	Q 2	Q 3	Q 4	Q 5	Q 6	Q 7	Q 8	Q 9	Q 10
2	3	1	3	2	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
2	1	4	1	3	4	4	2	2	1
Q 21	Q 22	Q 23	Q 24						
4	4	1	4						

SECTION B (32 marks)

Q25.a) B does not make food and can move from place to place.

b) Plants

Q26.a) X: Plastic/Nylon/Glass/Ceramic Y: Wood/Leather

b) Is it waterproof?

Q27.a) The root absorbs water and mineral salts for the plant

b) Beaker A : The water-level will drop
 Beaker B : The water level will stay the same

Q28.a) B,C,A

b) i) Nose ii) Windpipe iii) Lungs

Q29.a) The magnets unlike poles are facing each other, unlike poles attract and thus the two toy cars move towards each other.

b) The like poles of the magnets are facing each other, like-poles repel and thus the two toys move away from each other.

c) i) W: South pole ii) X: North pole iii) South pole iv) Z: North Pole

Q30.a) i) fish ii) mammal iii) bird iv) reptile

b) Animal B and C both live on land

c) Animal D has four legs while animal C does not have four legs.

Q31.a) Group X: Reptile/has scales/does not have six legs
Group Y: Insect/ has exoskeleton/ has six legs

b) Group Y

c) The snake's outer covering is scales while the ant's outer covering is an exoskeleton

d) They reproduce by laying eggs

Q32.a) Bicycle frame: metal

Bicycle tyre: rubber

b)i) It is strong

ii) It does not wear away easily/ waterproof / does not break easily

Q33.a) Digestion starts at A and ends at E

b) It is to transport the food from the mouth to the stomach.

c) Set-up B will take a shorter time. This is because cutting the food into smaller pieces increases the surface area of digestive juices in contact with the food, speeding up digestion.

Q34.a) T, It is the only rod that repels the bar magnet, only like poles of two magnets repel, thus T is a magnet.

b) Plastic

THE END

SmileTutor.sg



NANYANG PRIMARY SCHOOL

PRIMARY 3 SCIENCE

**SEMESTRAL ASSESSMENT 2
2017**

BOOKLET A

**Date : 30th Oct 2017
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 18 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.**




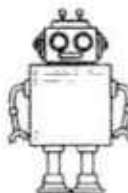


1. The table below shows the characteristics of things A, B and C.

Thing	Can move freely from one place to another	Can reproduce	Can grow
A	✓	X	X
B	✓	✓	✓
C	X	✓	✓

Based on the table above, which one of the following could represent things A, B and C?

	A	B	C
(1)	sunflower plant	shark	toy car
(2)	toy car	shark	sunflower plant
(3)	toy car	sunflower plant	shark
(4)	shark	toy car	sunflower plant

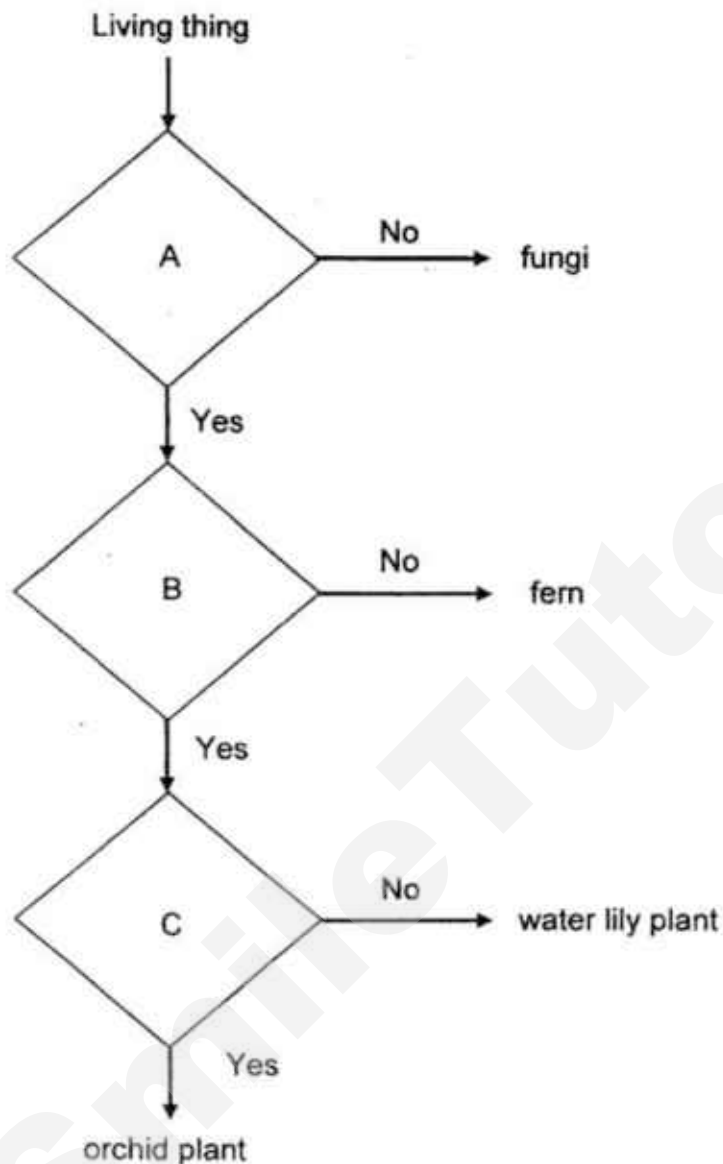
2. Study the two groups of things below.

Group X	Group Y
 Bacteria	 Spectacles
 Crocodile	 Robot
 Bird's Nest Fern	 Camera

Which one of the following descriptions about the things in groups X and Y is **false**?

	Group X	Group Y
(1)	can grow	cannot grow
(2)	can reproduce	cannot reproduce
(3)	can make their own food	cannot make their own food
(4)	can respond to surrounding changes	cannot respond to surrounding changes

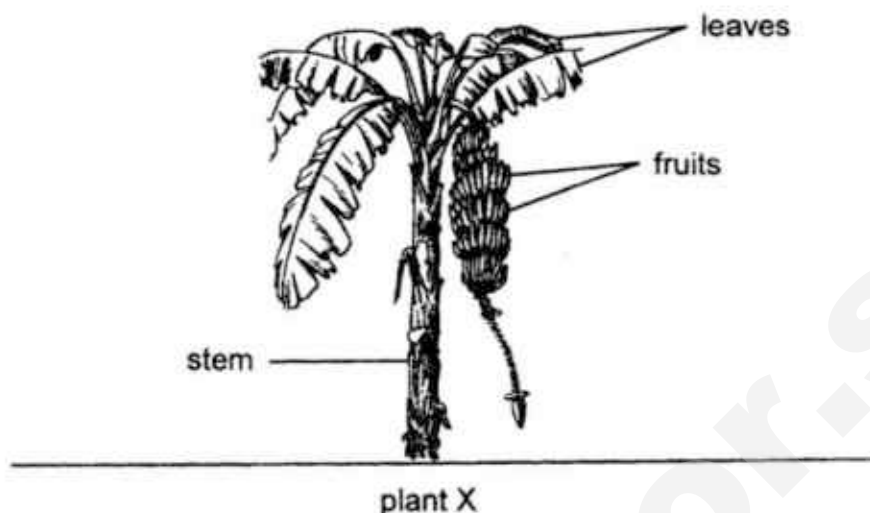
3. Study the flowchart below.



Based on the flowchart above, which one of the following best represents questions A, B and C?

	A	B	C
(1)	Does it reproduce by seeds?	Does it make its own food?	Does it grow in water?
(2)	Does it make its own food?	Does it reproduce by spores?	Does it grow on land?
(3)	Does it reproduce by spores?	Does it make its own food?	Does it grow in water?
(4)	Does it make its own food?	Does it reproduce by seeds?	Does it grow on land?

4. The diagram below shows plant X.



Based only on the diagram above, which one of the following statements about plant X is **true**?

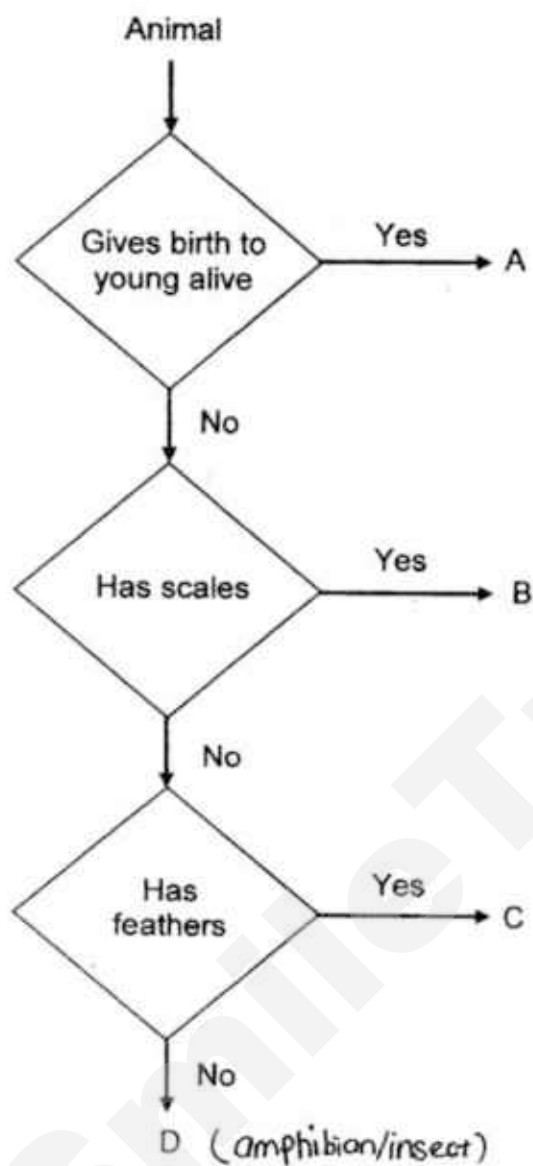
- (1) It is a water plant.
 - (2) It is a flowering plant.
 - (3) It reproduces by spores.
 - (4) It has poisonous leaves.
5. Study the table below. W, X, Y and Z represent the characteristics of animals. A tick (✓) shows that the animal has that characteristic.

	W	X	Y	Z
rabbit		✓		
cockroach	✓		✓	
goldfish			✓	✓
toad			✓	

Which of the following characteristics of animals could W, X, Y and Z represent?

	W	X	Y	Z
(1)	has 6 legs	lays eggs	gives birth to young alive	has moist skin
(2)	lays eggs	has feathers	gives birth to young alive	has scales
(3)	has 6 legs	gives birth to young alive	lays eggs	has scales
(4)	has hard outer covering	gives birth to young alive	lays eggs	has moist skin

6. Study the flowchart below carefully.



Which of the following most likely represents a turtle?

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

7. Study the table below carefully.

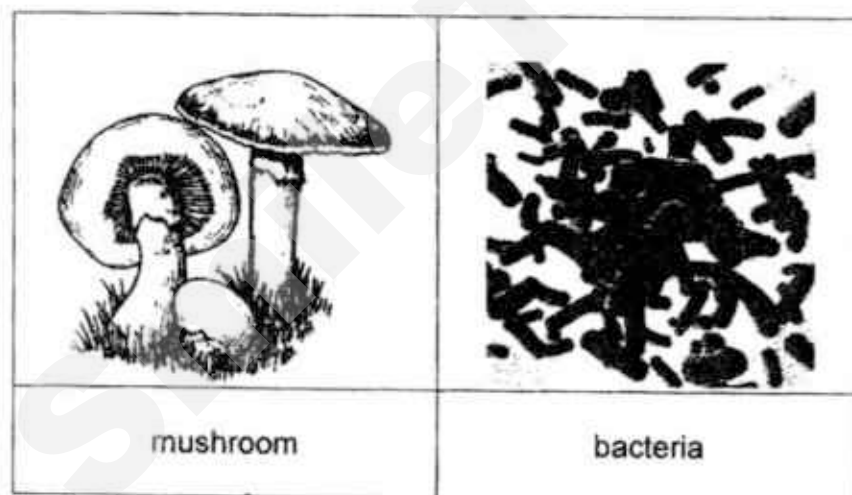
Types of outer covering			
P	Q	R	S
bat dolphin lion	crocodile goldfish lizard	eagle ostrich parrot	frog salamander snake

Bethany classified the animals according to their outer covering. She had classified an animal wrongly.

Which animal was classified **wrongly**?

- (1) bat
- (2) eagle
- (3) snake
- (4) goldfish

8. Study the diagram below.



Which of the following statements about the 2 groups of living things are **true**?

- A Both have gills.
- B Both can reproduce.
- C Both need air, food and water to survive.

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

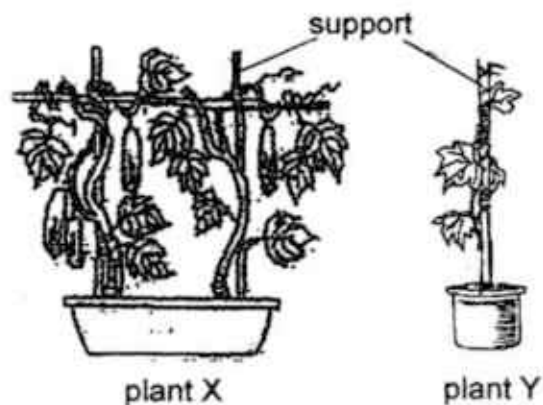
9. Study the chart below.



Which one of the following correctly represents the parts J, K, L and M?

	J	K	L	M
(1)	roots	flower	leaves	stem
(2)	stem	leaves	roots	leaves
(3)	leaves	stem	flower	roots
(4)	roots	leaves	stem	flower

10. The diagram below shows the adult plant X and plant Y.



Based only on the diagram, which of the following statement is **true** for both plants X and Y?

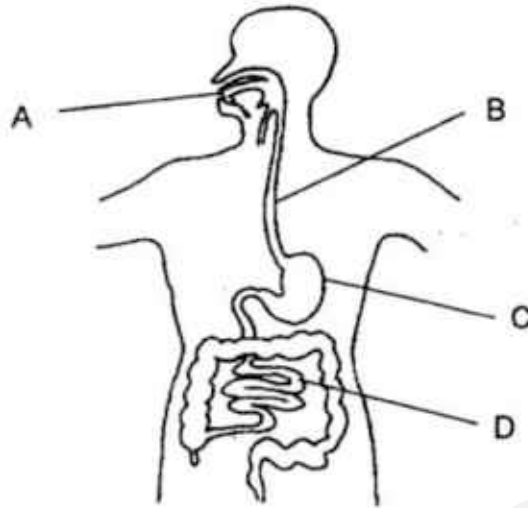
- (1) Both Plants X and Y have leaves, flowers, stems and roots.
 - (2) Plant X reproduces by seeds but Plant Y reproduces by spores.
 - (3) Plant X is a non-flowering plant but Plant Y is a flowering plant.
 - (4) Both Plants X and Y need support to grow upright as they have weak stems.
11. Four children each gave a statement on the function of the large intestine.

Amanda: It completes the digestion of food.
Beatrice: It allows digested food to pass through its walls into the blood.
Cadence: It transports partially digested food to the stomach.
Elizabeth: It removes water from undigested food.

Which one of the following children had made the **correct** statement?

- (1) Amanda
- (2) Beatrice
- (3) Cadence
- (4) Elizabeth

12. The diagram below represents the human digestive system.



Which part of the digestive system **does not** produce digestive juices?

- (1) A
 - (2) B
 - (3) C
 - (4) D
13. The diagram below shows a fish tank that contains some living things.



Ming Teck made the following statements on the fish tank above.

- A It can sink.
- B It is flexible.
- C It is waterproof.
- D It allows light to pass through.

Which of the following properties does the fish tank need in order to keep the living things inside it alive?

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

14. The table below shows some information on the properties of materials D, E, F and G. A tick (✓) indicates that the material has the property.

Material	Flexible	Waterproof	Does not break easily	Allow light to pass through
D	✓	✓	✓	
E		✓		✓
F		✓	✓	
G	✓		✓	✓

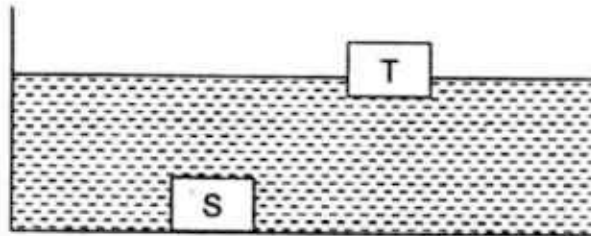
A cooking pot is shown below. The lid allows the user to see if the food is cooked. The handle of the pot allows the user to lift up the lid.



Which one of the following **correctly** represents the materials that are suitable to make the lid and the handle?

	Lid	Handle
(1)	D	E
(2)	E	F
(3)	F	G
(4)	G	D

15. Megan wanted to find out which materials, S or T, can sink in water. The materials were of identical shapes and sizes and placed in a container of water. The diagram below shows the positions of the materials in the container.



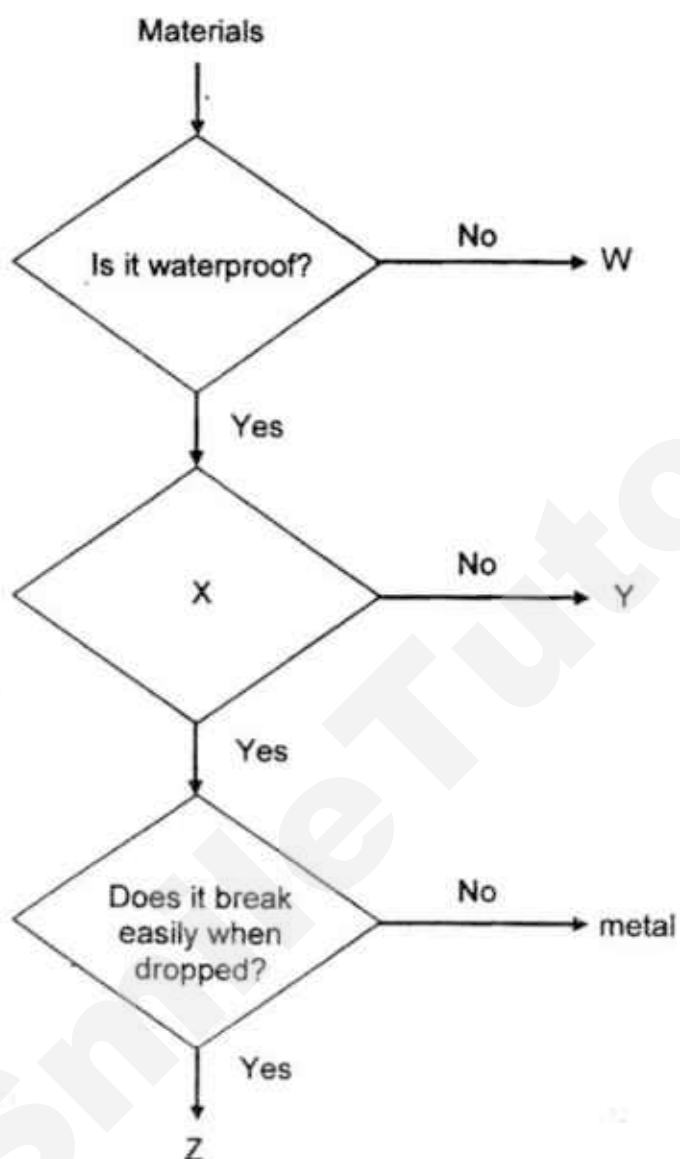
Below are the statements made on the objects.

- A Material T is the strongest.
- B Material T floats but Material S sinks in water.
- C Material S is waterproof but Material T is not.
- D Material S allows light to pass through but Material T does not allow light to pass through.

Which of the above statement(s) is/ are **definitely true**?

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

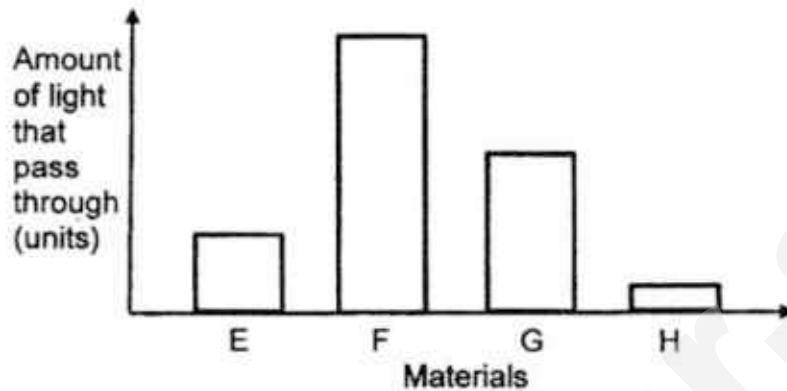
16. Study the chart below.



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

	W	X	Y	Z
(1)	plastic	Does it allow light to pass through?	glass	wood
(2)	fabric	Does it sink in water?	wood	glass
(3)	wood	Does it allow light to pass through?	fabric	paper
(4)	paper	Does it sink in water?	plastic	fabric

17. Sonia wanted to find out the amount of light that can pass through four identical sheets made of different materials, E, F, G and H. She shone light through the materials and recorded the results in the graph below.



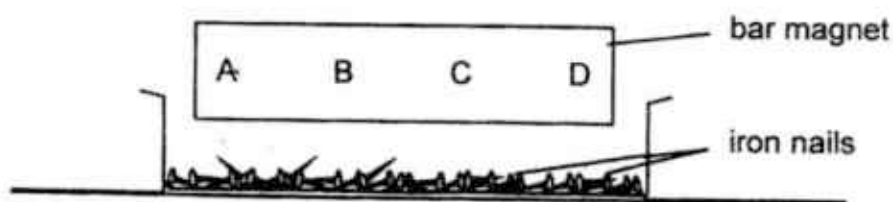
Based on the results of the graph, Sonia made the following statements.

- A Material H is thicker than Material E.
- B Material F allows most light to pass through than
- C Material G allows more light to pass through Material E.
- D Material H allows more light to pass through than Material G.

Based on the information from the graph, which of the statements are true?

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

18. Joshua lowered a bar magnet into a container of iron nails as shown in the diagram below.



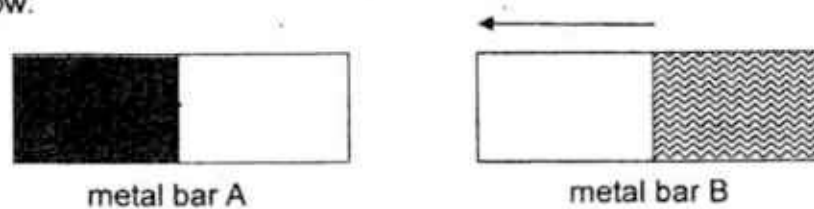
Then, he asked his friends to predict the amount of iron nails which would be attracted to each of the parts marked A, B, C and D. Their predictions are shown in the table below.

	Number of iron nails attracted			
	Part A	Part B	Part C	Part D
Wen Ling	2	3	9	10
Le Fan	1	12	11	3
Yi Tian	11	8	3	2
Zachary	10	3	2	11

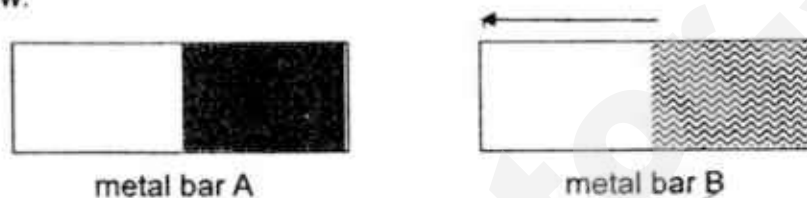
Which one of his friends had made the most likely prediction?

- (1) Wen Ling (2) Le Fan
(3) Yi Tian (4) Zachary

19. Lucas had two metal bars, A and B. He moved bar A towards bar B and observed that bar B moved towards bar A as shown in the diagram below.

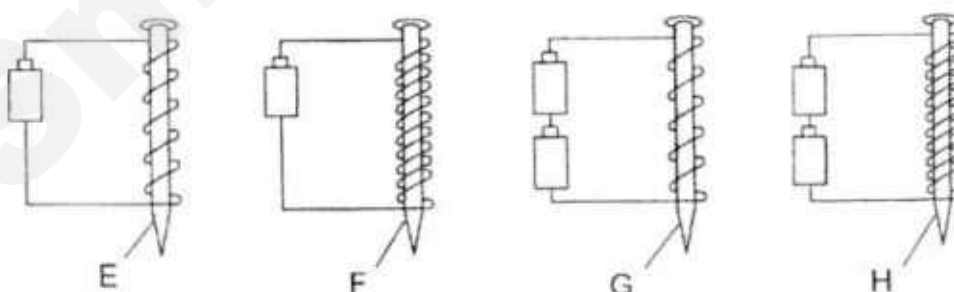


Then, he flipped bar A around and moved it towards bar B again. He observed that bar B moved towards bar A as shown in the diagram below.



Which one of the following is **true** about metal bars A and B?

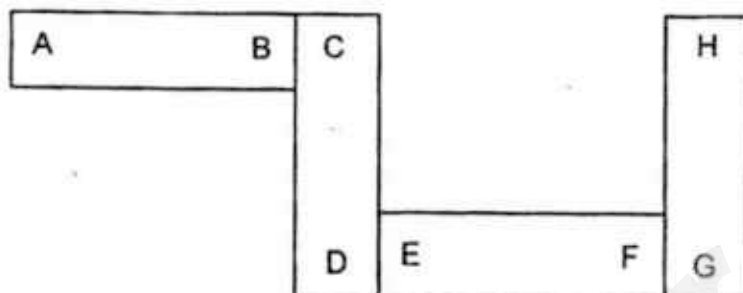
- (1) Both metal bars A and B are magnets.
 - (2) Both metal bars A and B are made of non-magnetic materials.
 - (3) Metal bar A is a magnet while metal bar B is made of magnetic material.
 - (4) Metal bar A is made of non-magnetic material while metal bar B is a magnet.
20. Shane turned 4 identical iron nails, E, F, G and H, into electromagnets using the electrical method as shown below.



Which one of the following correctly identifies the strongest and weakest electromagnets?

	strongest electromagnet	weakest electromagnet
(1)	G	E
(2)	H	G
(3)	F	H
(4)	H	E

21. Kayla labelled the poles of four identical bar magnets as A, B, C, D, E, F, G and H. She arranged the four magnets such that all four magnets were attracted as shown below.



Which one of the following shows the possible arrangement of two of the magnets?

- (1)

A	B	H	G
---	---	---	---
- (2)

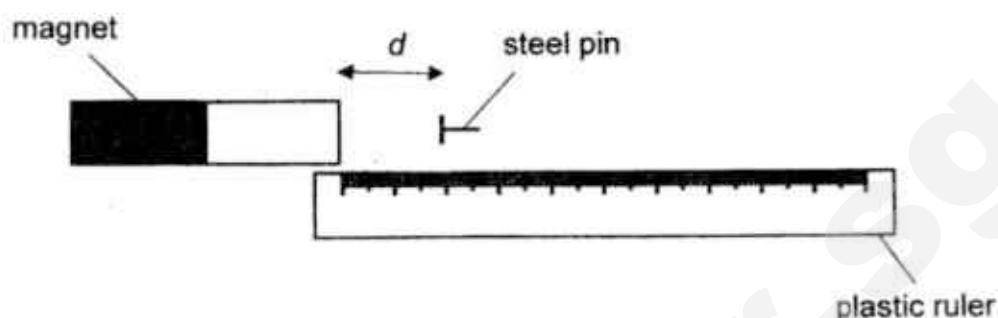
F	E	B	A
---	---	---	---
- (3)

D	C	E	F
---	---	---	---
- (4)

G	H	D	C
---	---	---	---

22. Sophie set up the experiment as shown below to compare the strength of four magnets P, Q, R and S.

She measured the furthest distance, d , required before the magnet attracted the steel pin.



Sophie recorded the results of her experiments in the table below.

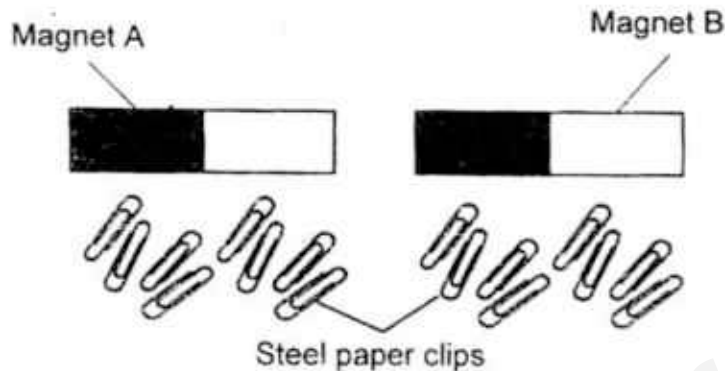
Magnet	Distance between magnet and steel pin (d) in cm before it was attracted
P	3
Q	6
R	4
S	2

Based on her results, which of the following conclusions are correct?

- A Magnet S is the strongest.
- B Magnet P is weaker than Q.
- C Magnet R is stronger than P.
- D Magnet Q is stronger than R but weaker than S.

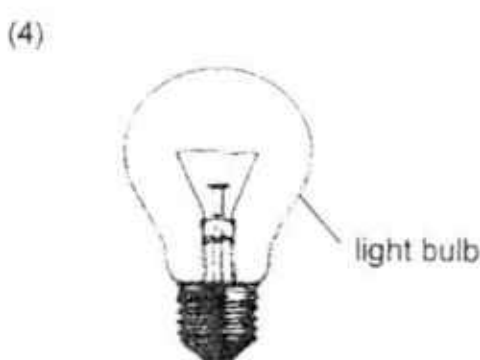
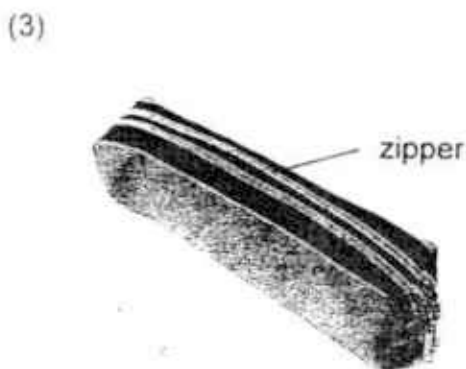
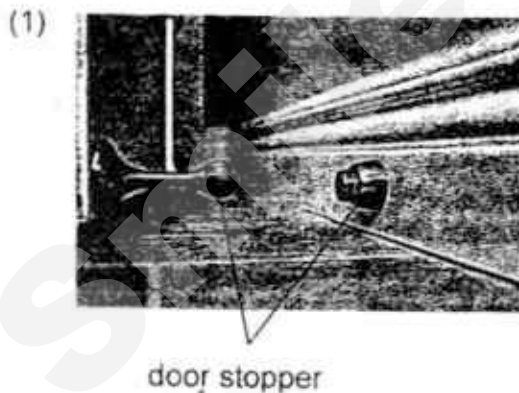
- (1) A and B only
- (2) B and C only
- (3) A, C and D only
- (4) B, C and D only

23. Jiaqi had two identical magnets, A and B, which attracted the same number of steel paper clips. She then dropped magnet A on the floor 30 times.



What would she likely observe if she brought magnets A and B near the same steel paper clips as shown above?

- (1) Magnet A attracted more steel paper clips than magnet B.
 - (2) Magnet A attracted fewer steel paper clips than magnet B.
 - (3) Both magnets A and B did not attract any steel paper clips.
 - (4) Both magnets A and B attracted the same number of steel paper clips.
24. Which one of the following objects makes use of magnets in order to function?





NANYANG PRIMARY SCHOOL

PRIMARY 3 SCIENCE

**SEMESTRAL ASSESSMENT 2
2017**

BOOKLET B

Date : 30th Oct 2017

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 8 November 2017.
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.**

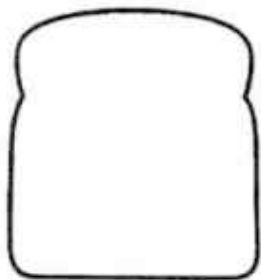
Booklet B consists of 15 printed pages including this cover page.

THIS IS A BLANK PAGE.

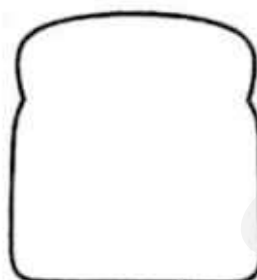
Section B (32 marks)

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

25. Anita had 2 slices of identical bread, A and B.



Bread A (Dry bread)



Bread B (Moist bread)

She then placed bread A and B exposed on the kitchen table for 5 days.

- (a) Which bread, A or B, will most likely have more mould growing on it after 5 days? Explain your answer. [1]

- (b) State another 2 conditions that mould requires to grow on the bread. [1]

(i)

(ii)

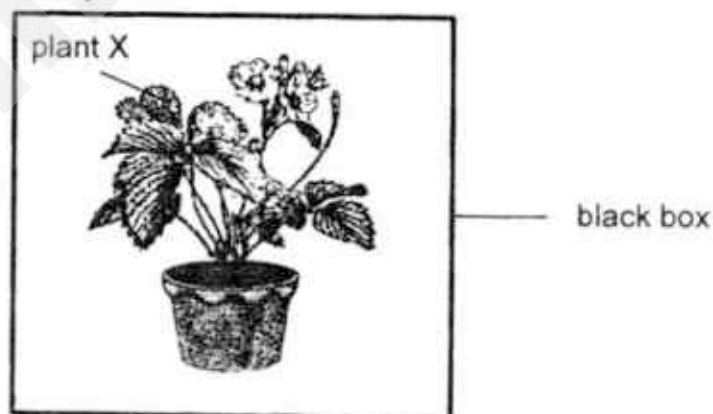
- (c) Anita then said that mould belongs to the group of fungi and all fungi are micro-organisms. Explain why she was wrong. [1]

26. Charlie saw potted plant X in the garden as shown below.



- (a) Based on the diagram above, which group of plants does plant X most likely belong to? Give a reason for your answer. [1]

Charlie then placed a black box over plant X as shown below.



- (b) Two weeks later, Charlie observed that plant X had died. Give a reason why. [1]

(c)

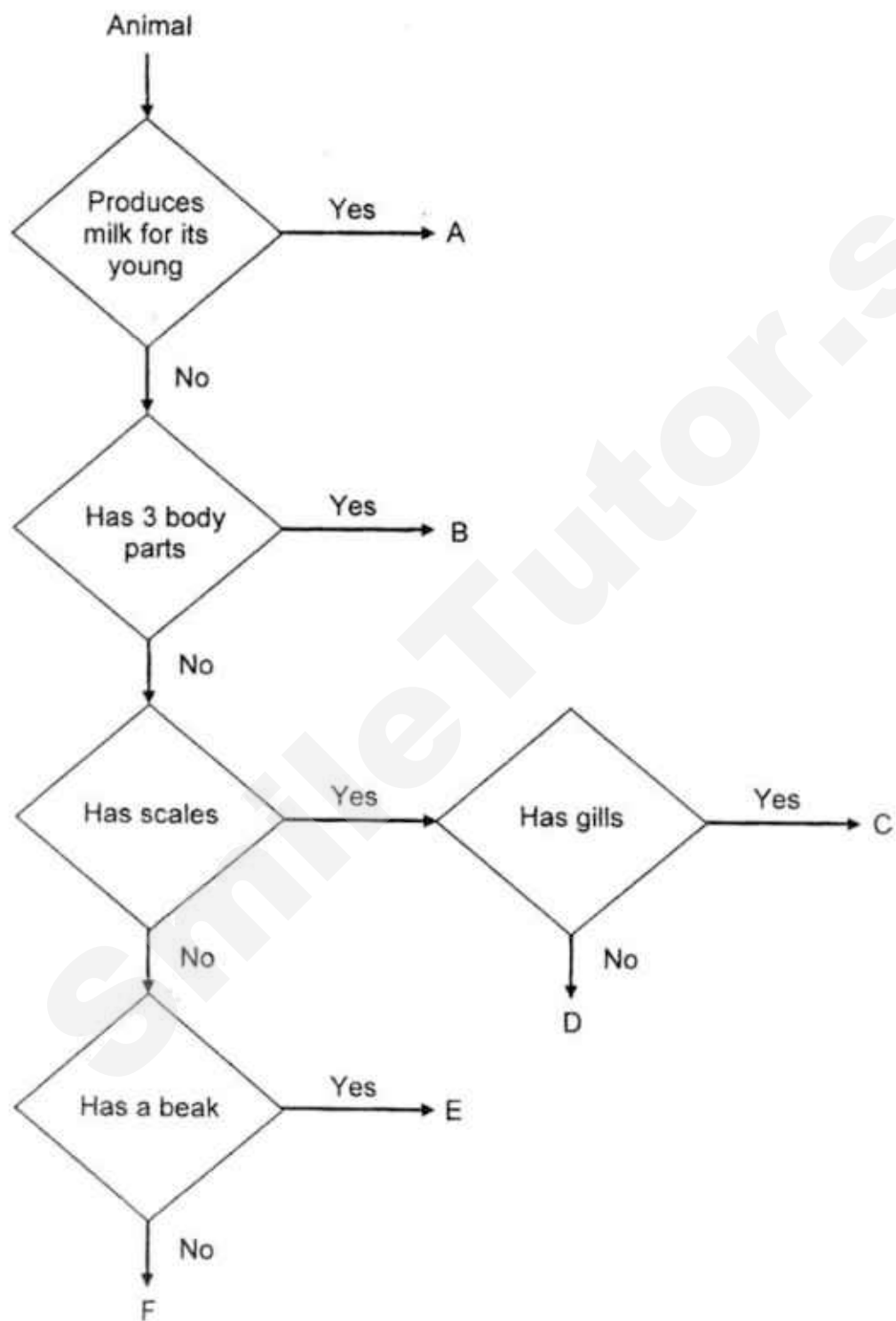
(b)

Charlie then made the following statements about plants.
Put a tick (✓) in the correct box below for each statement.

[2]

	Statements	True	False
(i)	All plants can produce flowers.		
(ii)	All plants can respond to changes around them.		
(iii)	All plants can move freely on their own from one place to another.		
(iv)	All plants are living things and they need air, food and water to survive.		

27. Study the flowchart below carefully.



- (a) State **all** the characteristics of animal B. [1]

- (b) State one difference between animal C and animal D. [1]

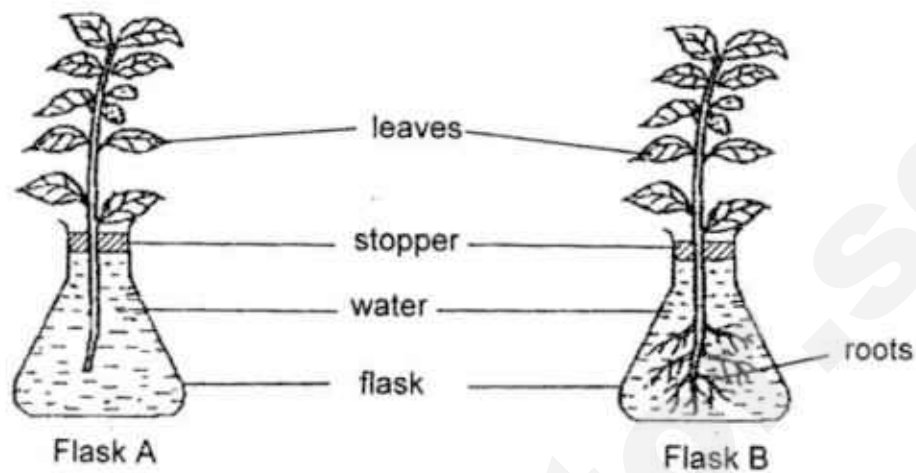
- (c) Which **group** of animals does animal F most likely belong to? [1]

- (d) State an **example** of each of the animals below. [1]
(Do not state the animal group.)

(i) Animal A: _____

(ii) Animal E: _____

28. Rahim conducted an experiment as shown below to find out if the roots of the plant affect the amount of water left in the flask.



He recorded the results of the experiment in the graph.



- (a) Compare and state the amount of water left in both flasks after 5 days. [1]

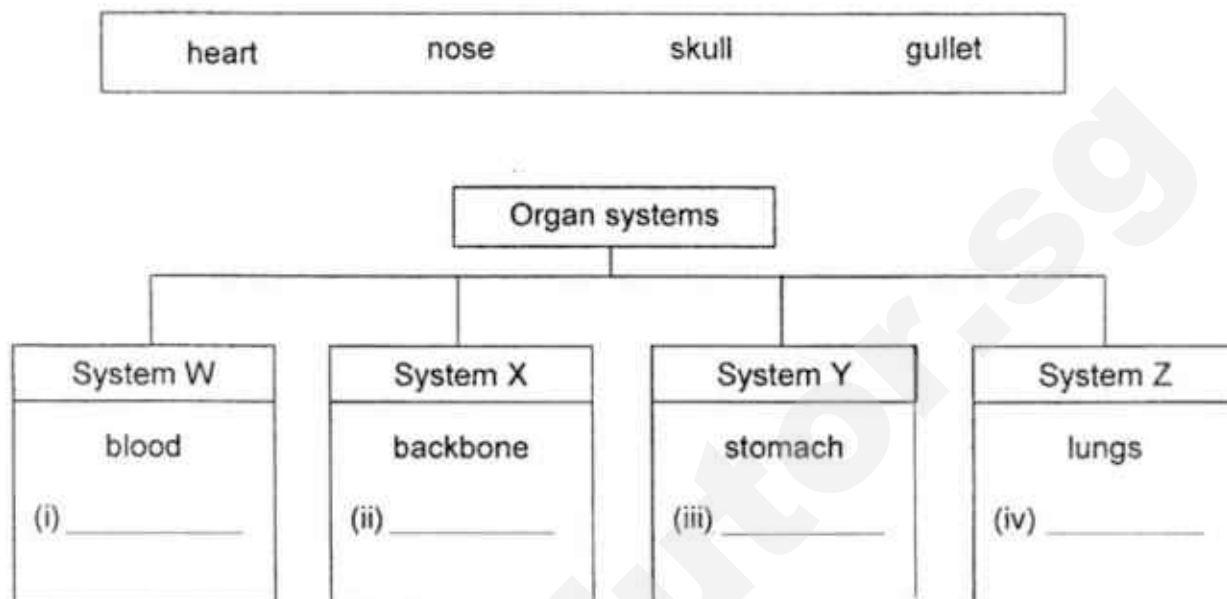
- (b) Give a reason for the observation made in part (a). [1]

- (c) State another function of the roots of a plant. [1]

29. Study the chart below.

(a) Classify the following organs in the chart.

[2]



(b) Identify system Z.

[1]

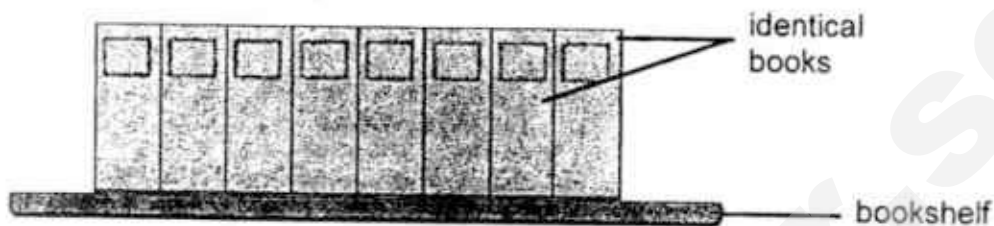
(c) Which system, W, X, Y or Z, works with the muscular system to enable us to bend, stretch and move? [1]

(i) System _____

(ii) State the name of the system you have chosen in part c(i).

30. Mason wanted to find out which one of the four materials A, B, C or D is most suitable to be used to make a bookshelf.

He set up the experiment as shown below. He placed identical books onto the four similar bookshelves made of materials A, B, C and D until the bookshelf broke.

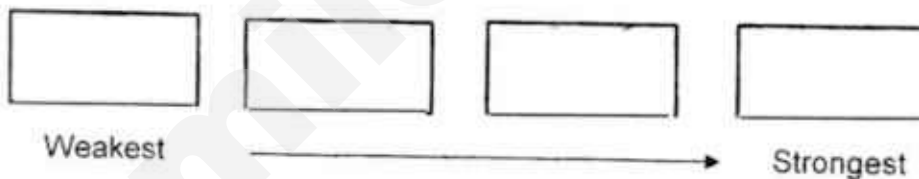


He recorded his observation in the table below.

Material	A	B	C	D
Maximum number of identical books needed to break the shelf	15	29	4	10

- (a) Arrange the materials according to their strength.

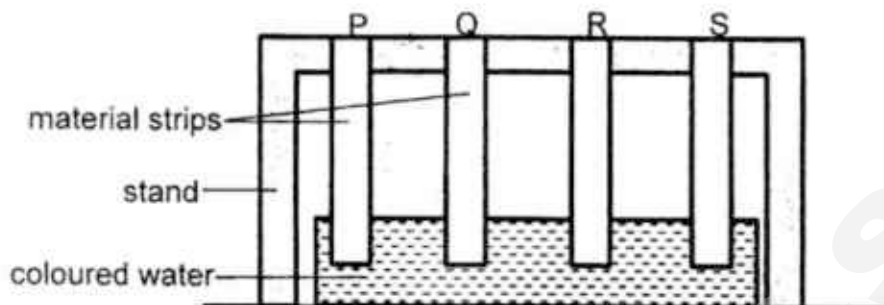
[1]



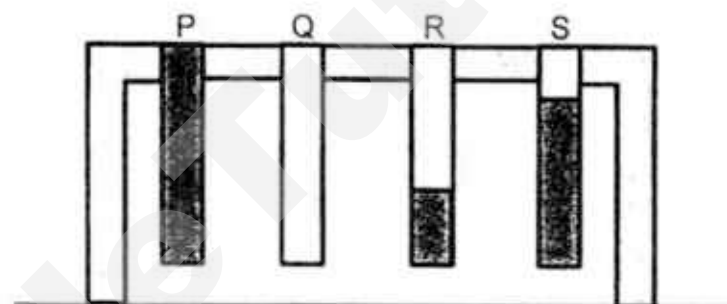
- (b) Based on the observation above, which is the most suitable material to make the bookshelf? Explain your answer.

[1]

31. Alvin set up an experiment to find out which material can absorb the most amount of water. He used four identical strips made of different materials and hung them from a stand. The ends of the strips are dipped into a container of coloured water.



The diagram below shows the result of the experiment after 3 hours. The shaded parts indicate the coloured water being absorbed by the different material strips.



Alvin would like to use one of the materials to make a water bottle.



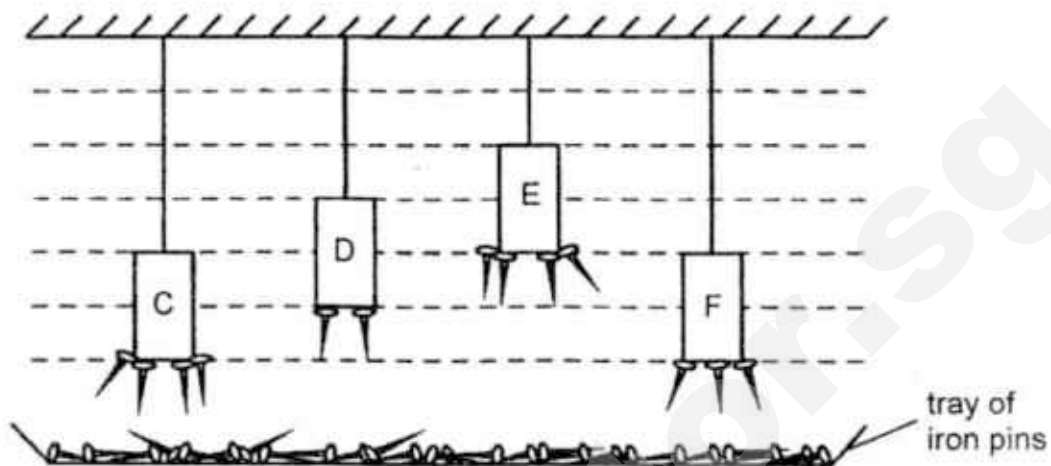
- (a) Based on the results of the experiment, which material should he use to make the water bottle? Explain your answer. [2]

Alvin then studied an image of a tent as shown below.



- (b) Alvin said that Material P was not suitable to make part X of the tent.
Explain why he was correct. [1]

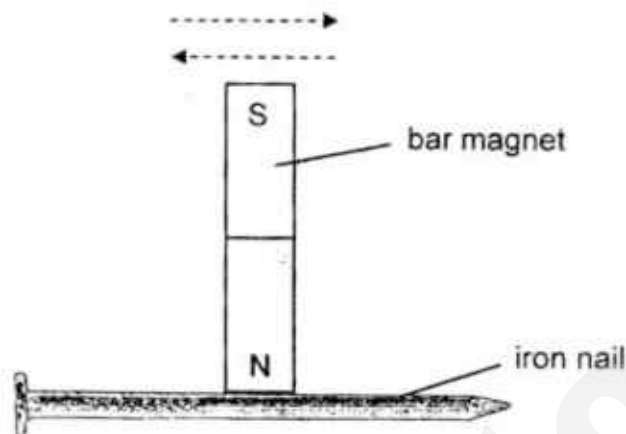
32. Allyshia hung four magnets, C, D, E and F, above a tray of identical iron pins. The diagram below shows the positions of the four magnets and the number of iron pins each magnet had attracted.



Based on Allyshia's results, put a tick (✓) in the correct boxes to show which of the following statements are true, false or not possible to tell. [3]

	Statements	True	False	Not possible to tell
(a)	Magnet C is as strong as magnet E.			
(b)	Magnet F is weaker than magnet C.			
(c)	Magnet D is the weakest.			

33. Kong Yi wanted to magnetise an iron nail by the stroke method. He stroked the iron nail back and forth, in opposite directions, with a bar magnet 30 times as shown in the diagram below.

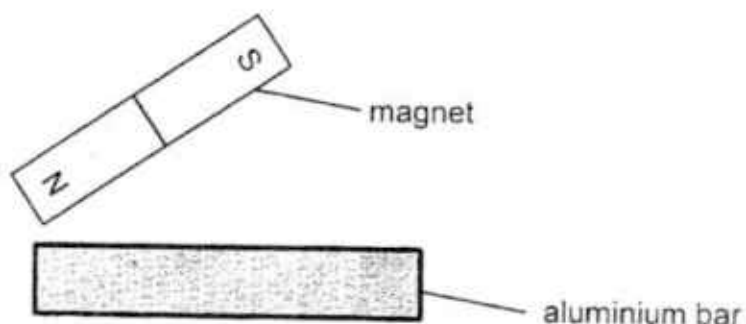


- (a) He noticed that the iron nail was not magnetised. State two things Kong Yi should do to magnetise the iron nail successfully using the stroke method. [2]

- (i) _____

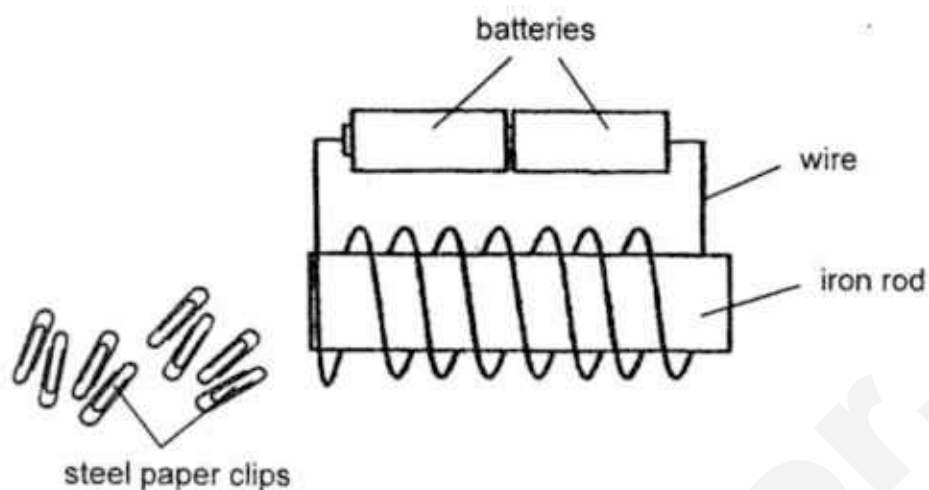
- (ii) _____

Ryan was able to use the stroke method correctly. He wanted to magnetise an aluminium bar using a strong magnet. No matter how many times he stroked the aluminium bar with the magnet, it was unable to pick up any steel pins.



- (b) Give a reason why the aluminium bar was not magnetised. [1]

34. Ethan conducted an experiment as shown below with 2 new batteries, a piece of wire and an iron rod.



When he placed some steel paper clips near the iron rod, he observed that they were attracted to the iron rod.

- (a) Give a reason why the steel paper clips were attracted to the iron rod. [1]

- (b) Other than adding more batteries to the set-up, what else could Ethan do to enable the iron rod to attract **more** steel paper clips? [1]

- (c) What would happen to the steel paper clips if Ethan removed the two batteries from the set-up? [1]

EXAM PAPER 2017

LEVEL : PRIMARY 3
 SCHOOL : NANYANG PRIMARY SCHOOL
 SUBJECT : SCIENCE
 TERM : SA2

Booklet A

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

Booklet B

- Q25 (a) Bread B. Mould needs moisture to grow. Moisture/water is present in bread B.
 (b) (i) Air/food
 (ii) warmth
 (c) Some fungi can be seen with the naked eye.
- Q26 (a) Flowering plant. Plant X produces flowers.
 (b) Plant X has no sunlight/light to make food.
 (c) (i) False
 (ii) True
 (iii) False
 (iv) False
- Q27 (a) Animal B does not produce milk for its young and has 3 body parts.
 (b) Animal C has gills but animal D does not have gills.
 (c) Amphibians
 (d) (i) Lion/Dog/Cat (any mammals)
 (ii) Parrot/Eagle/Pigeon (any bird)
- Q28 (a) The amount of water left in the flask A is more than the amount of water left in Flask B.
 Or
 The amount of water left in the flask B is Less than the amount of water left in Flask A.
 (b) The plant in Flask B has roots so it takes in more water from the flask than the plant without roots in Flask A.
 Or
 The plant in Flask A has no roots so it takes in less water from the flask than the plant with roots in Flask B.
 (c) Roots of the plant hold the plant firmly to the ground.
- Q29 (a) (i) Heart
 (ii) Skull
 (iii) gullet
 (iv) nose
 (b) Respiratory system
 (c) (i) system X
 (ii) skeleton system

- Q30 (a) C, D, A, B
(b) Material B. It is the strongest material so that the bookshelf can hold the most books.
- Q31 (a) Material Q. It's waterproof so that it can store water in the water bottle.
(b) Material P. It's not waterproof and if part X of the tent is made of material P, the rain water will seep through the tent and drench the campers in the tent when it rains.
- Q32 (a) False
(b) True
(c) Not possible to tell
- Q33 (a) (i) He has to stroke the iron nail with the bar magnet in one direction.
(ii) He has to stroke the iron nail with the same pole of the magnet.
(b) Aluminium is a non-magnetic material.
- Q34 (a) The iron rod has turned into an electromagnet/ a temporary magnet has been magnetised.
(b) Increased the number of turns of the same wire around the iron rod.
(c) The steel paper clips will not be attracted to the iron rod.