



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 : _____

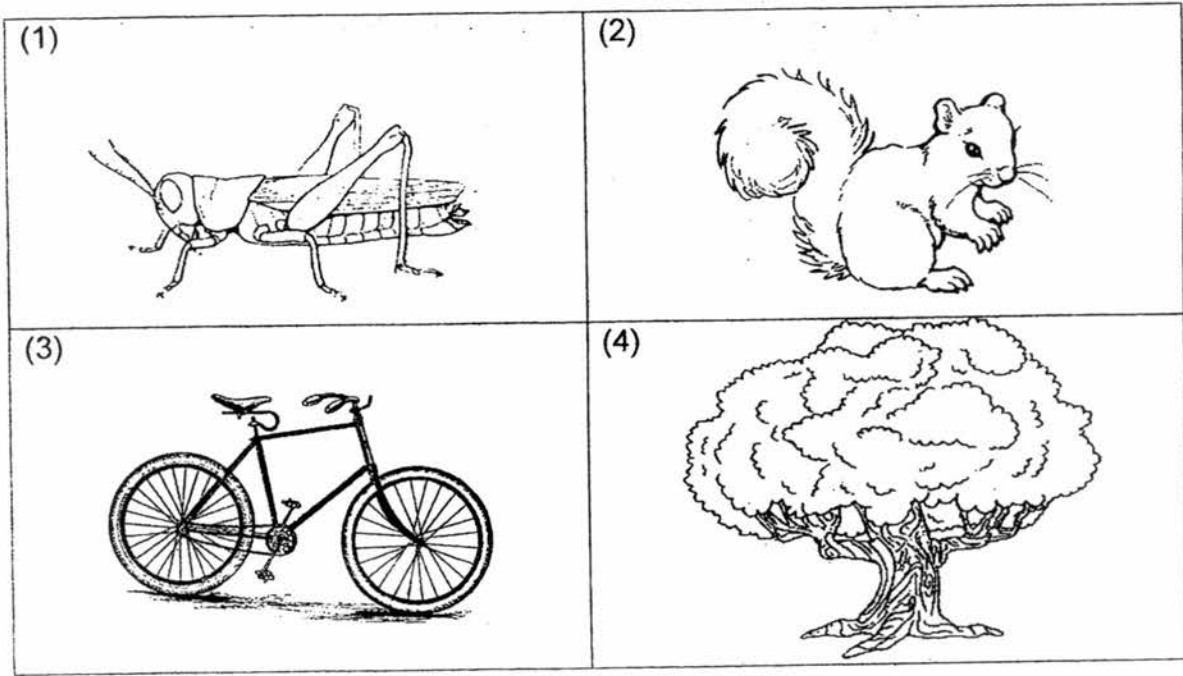
Date : _____

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.

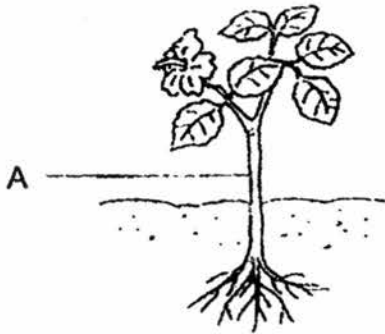
Which one of the following groups of animals has the above three characteristics?

- (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.

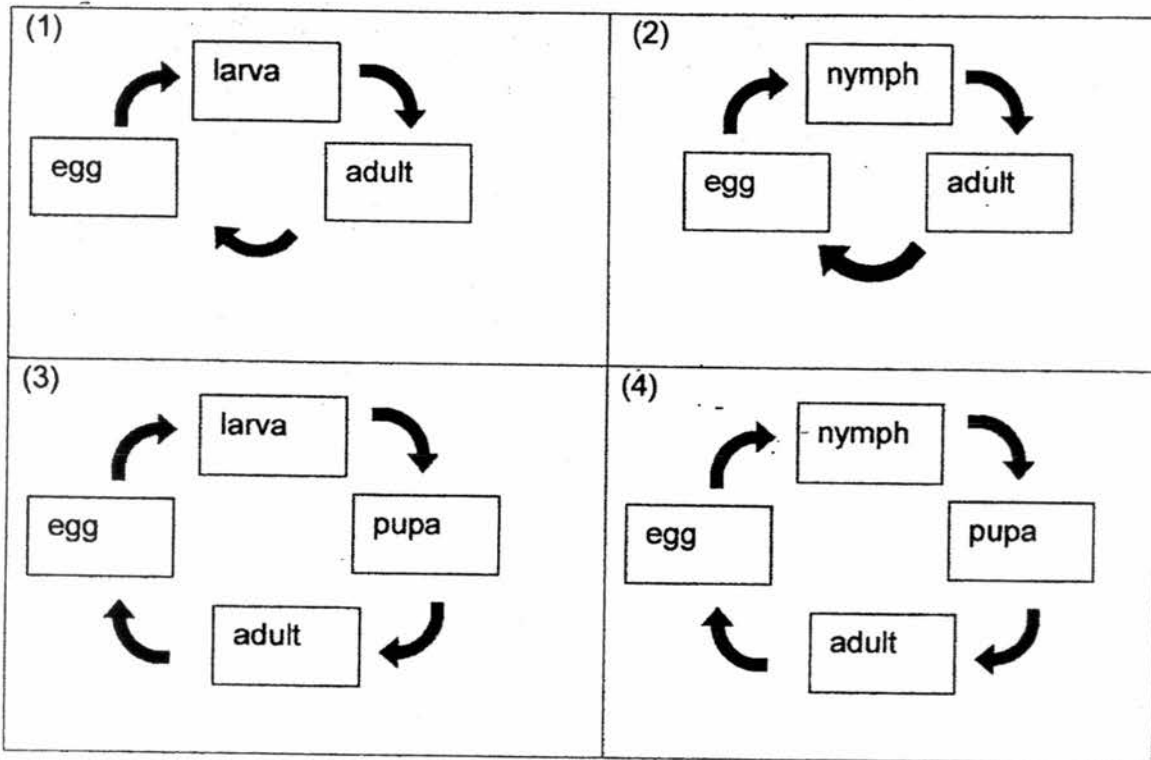
4. The diagram below shows a plant with one part labelled A.



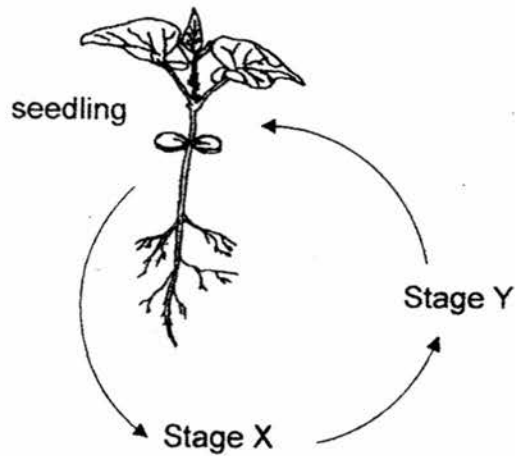
What is the function of Part A?

- (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?



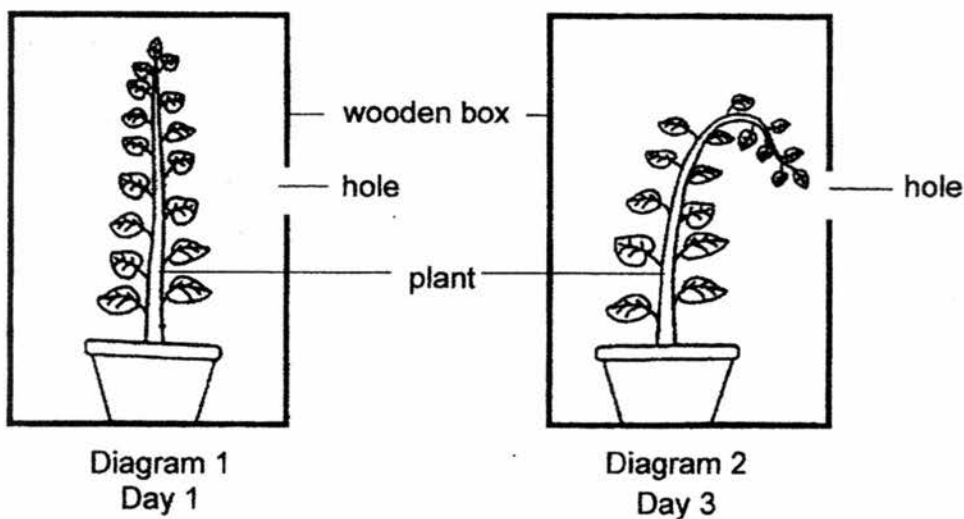
6. The diagram below shows the life cycle of a flowering plant.



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

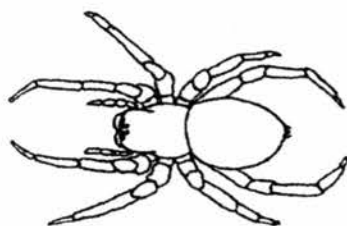
	Stage X	Stage Y
(1)	adult plant	seed
(2)	egg	adult plant
(3)	adult plant	egg
(4)	seed	adult plant

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.



Animal P

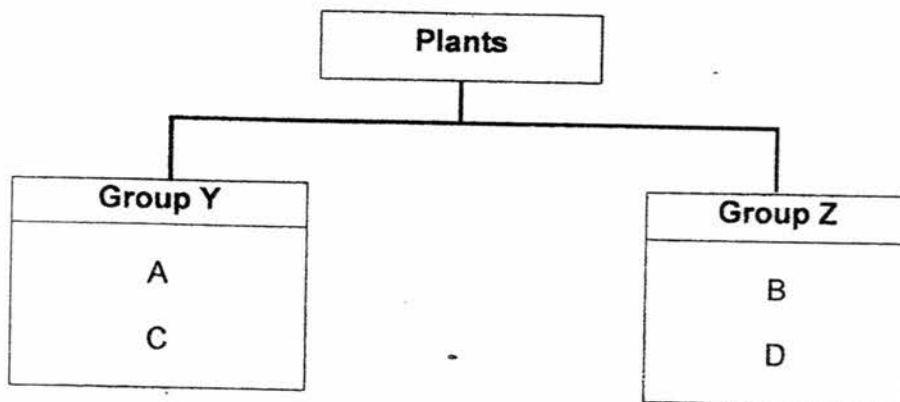
Which one of the following characteristics about Animal P tells her that it is **NOT** an insect?

- (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		✓	✓	

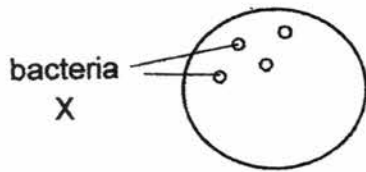
Using the information above, Lily drew the following classification diagram to classify them.



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

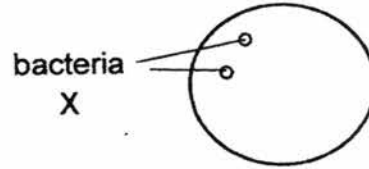
	Group Y	Group Z
(1)	Ferns	Fungi
(2)	Fungi	Flowering plants
(3)	Land plants	Water plants
(4)	Non-flowering plants	Flowering plants

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.



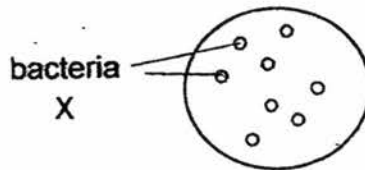
Dish A

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



Dish B

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



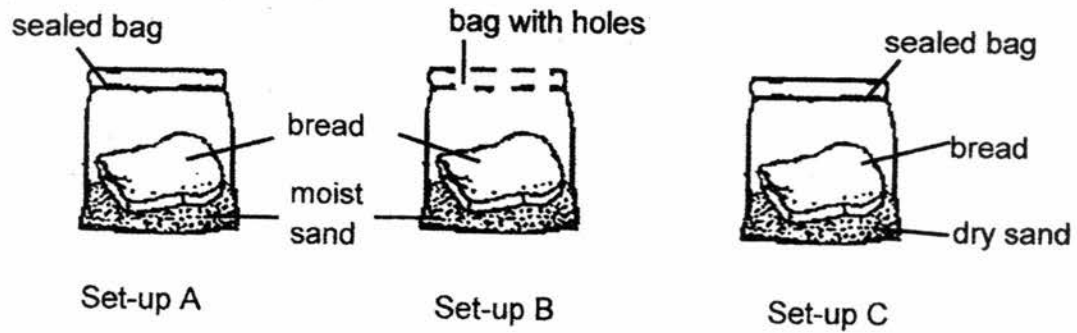
Dish C

- 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.

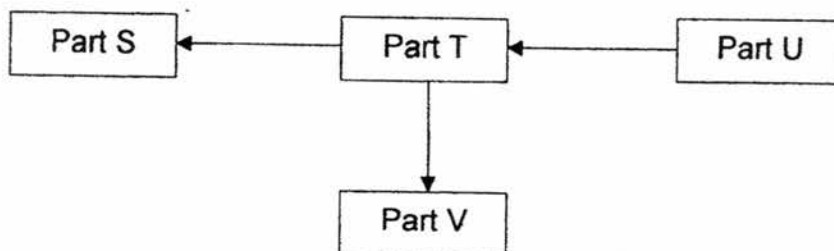
11. John carried out an experiment using set-ups A, B and C as shown below. Identical slices of bread were placed in each bag.



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

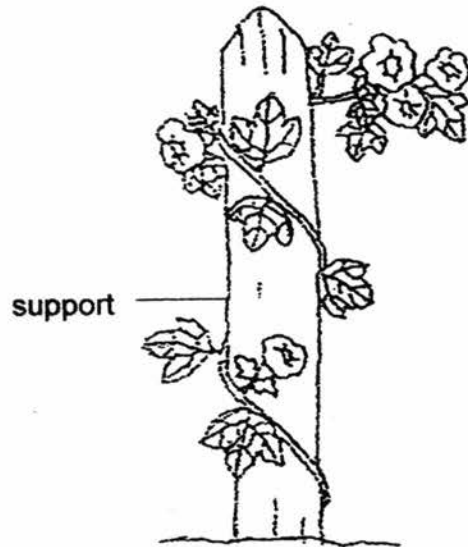
12. The arrows in the diagram below shows how water moves in a plant.



Which plant part represents the roots?

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

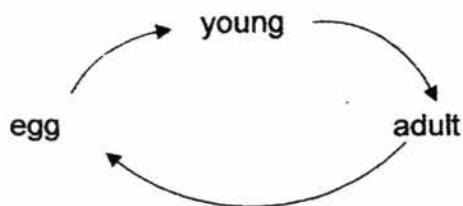
13. The diagram below shows a plant with a weak stem.



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: _____

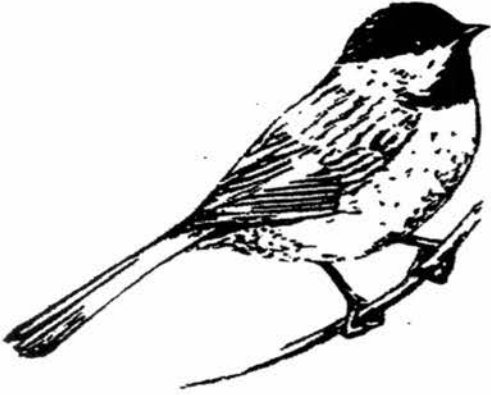
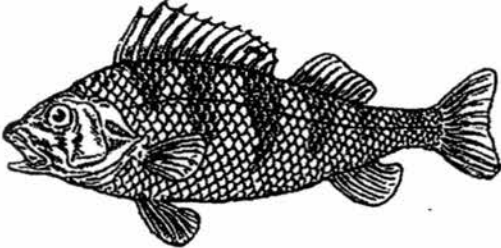
Mid-Year 2017

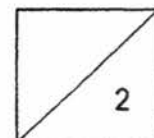
Class: Pri 3 _____

Section B: 20 Marks

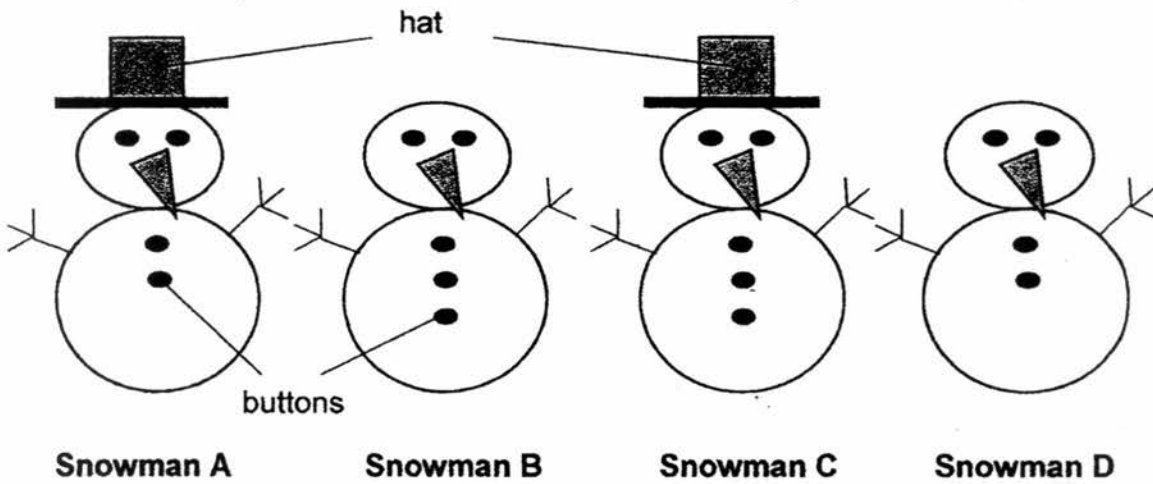
Read the questions carefully and write your answers in the spaces provided.

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

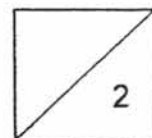
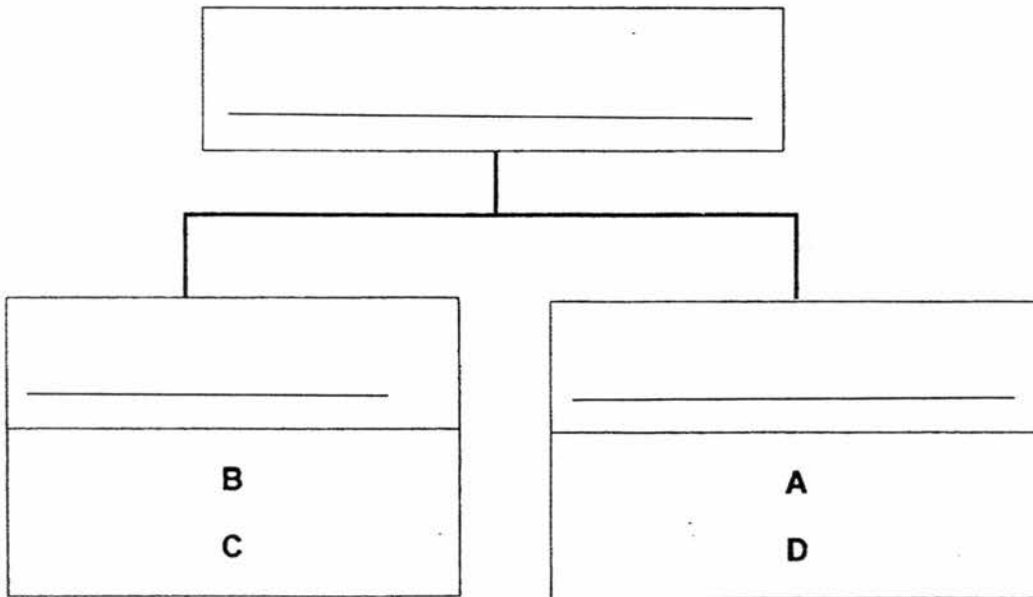
	Animal	Type of outer covering
(a)		
(b)		



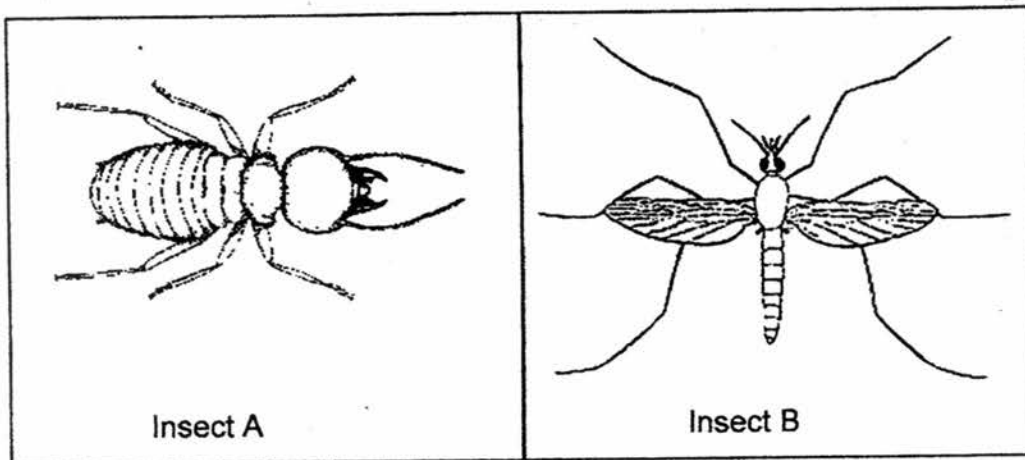
17. The pictures below show four snowmen, A, B, C and D



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]

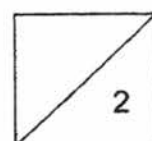


18. The diagram below shows two insects A and B.



- (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]

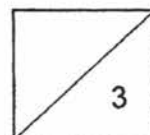
All the living things in group Y are able to _____

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

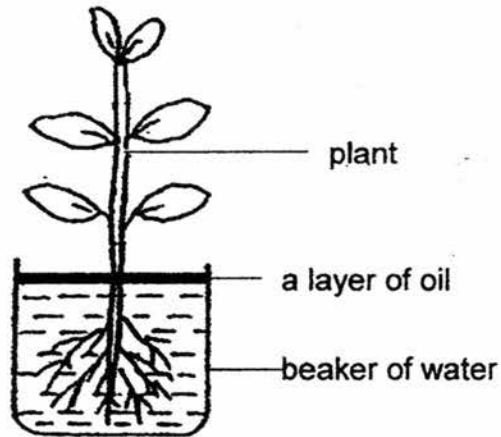
[2]

P: _____

Q: _____

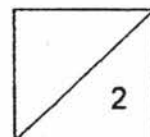


20. Wendy set up an experiment as shown below. The layer of oil stops water in the beaker from escaping into the surrounding air.

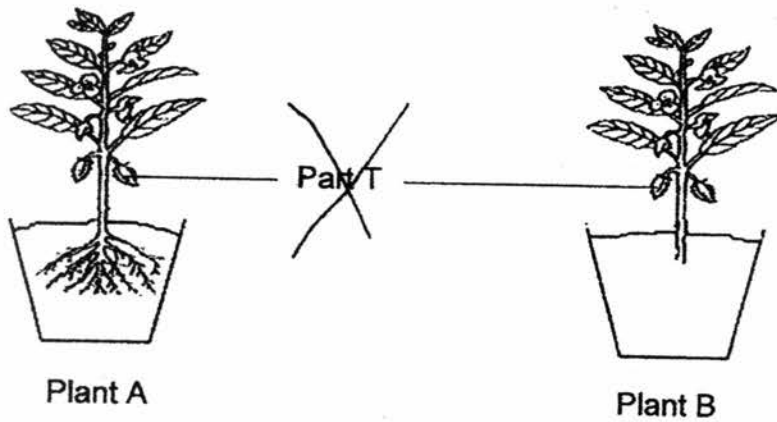


(a) After one week, will the level of water in the beaker increase, decrease or remain the same? [1]

(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.

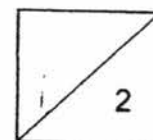


He placed a powerful fan at equal distance away from both plants and switched the fan on.

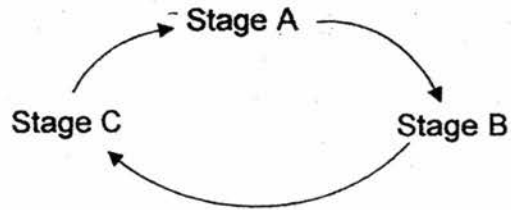
(a) Which plant, A or B, will be blown out of the pot of soil first? [1]

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?

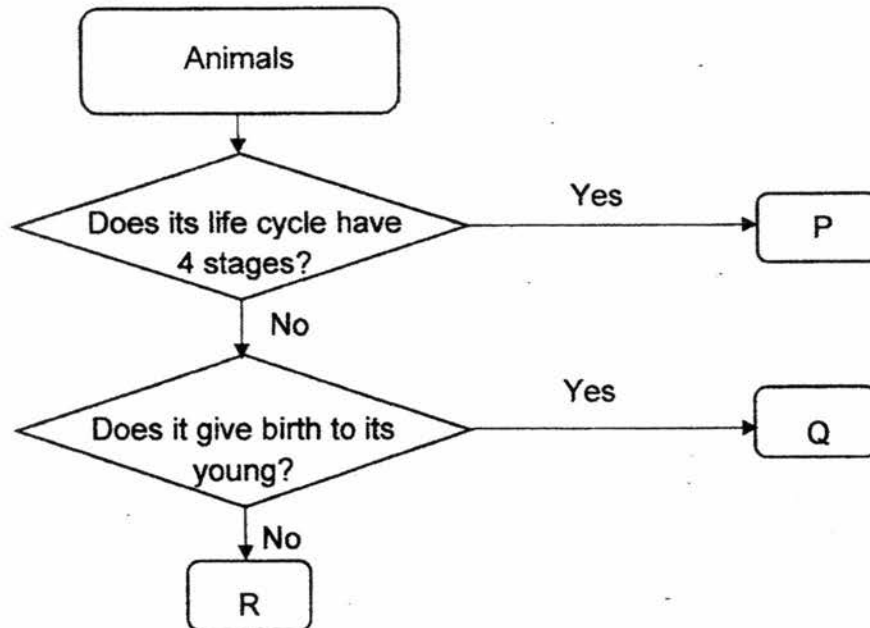
[1]

Stage _____

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

[1]

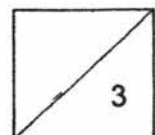
The diagram below shows a flowchart.



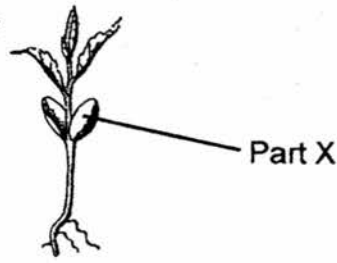
(c) Which animal, P, Q or R, in the flowchart represents Animal Z?

[1]

Animal _____



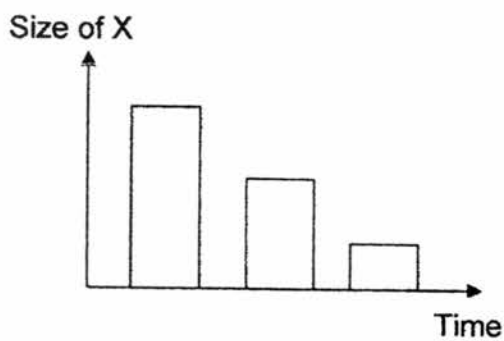
23. The diagram below shows a seedling with Part X labelled.



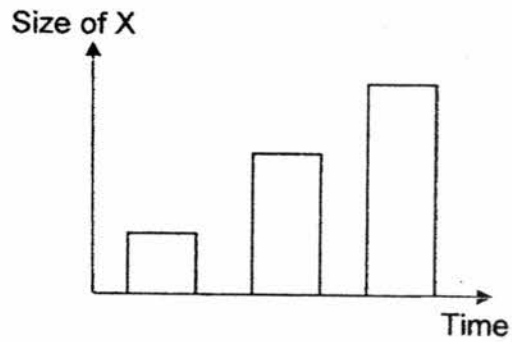
(a) What is the name of Part X? [1]

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

There are two graphs shown below.



Graph 1



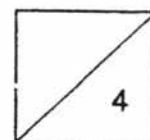
Graph 2

(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

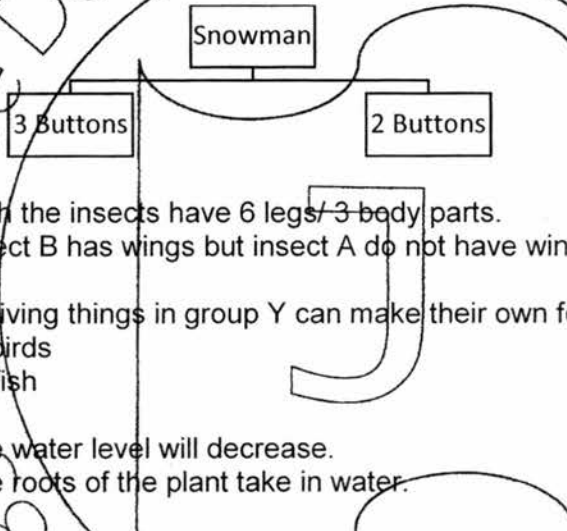
SECTION A

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