



Nan Hua Primary School
Primary 3 Science
Term 1 Weighted Assessment 2023

Marks	
Section A:	/8
Section B:	/7
Total:	/15

Name: _____ ()

Class: Primary 3/ _____

Date: _____

Duration: 25 minutes

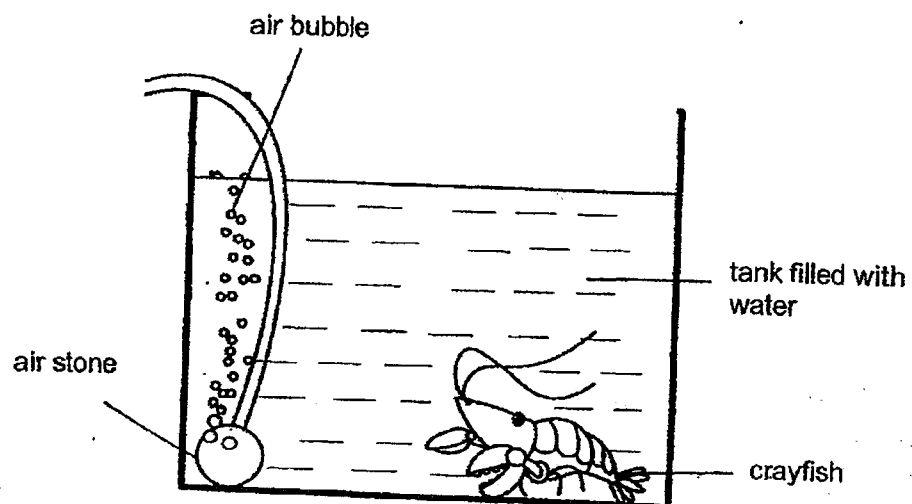
Parent's Signature _____

Answer all questions

Section A: (4 x 2 marks = 8 marks)

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

- 1 The diagram below shows a crayfish in an aquarium tank.



What else must be given to the crayfish so that it can survive?

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

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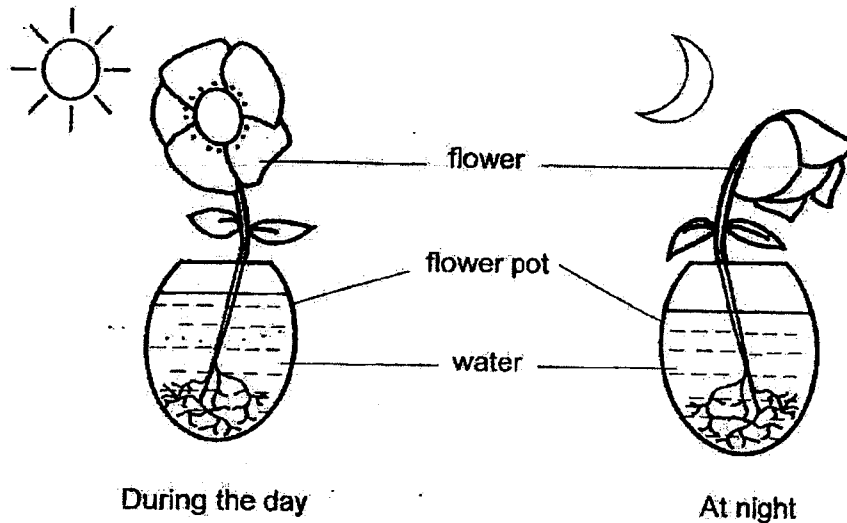
2 Which of the following statement(s) about flowering and non-flowering plants is/are true?

- A A non-flowering plant does not bear flowers.
- B A non-flowering plant can make its own food.
- C A flowering plant can bear fruits.

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

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3 Study the flower below.



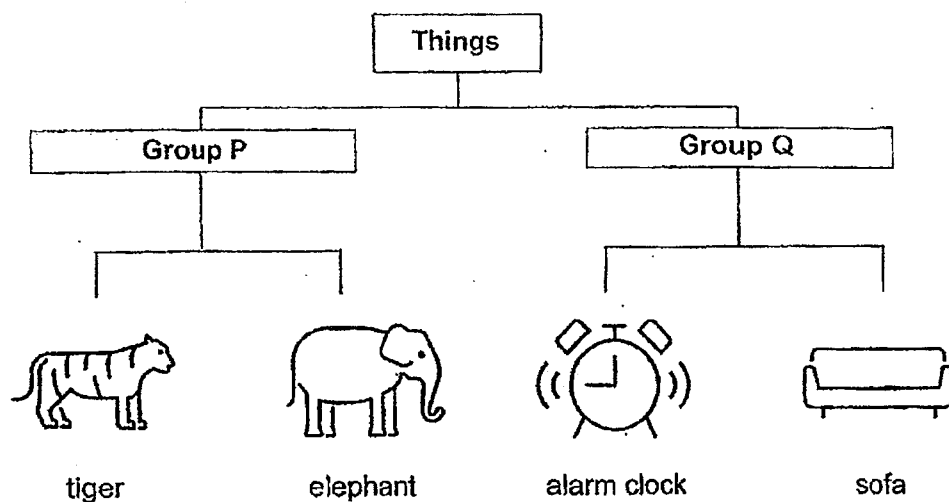
Based on the diagram above, which characteristic is shown by the flower during the day and at night?

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

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- 4 The diagrams below show four different things.



Which of the following does **not** show the correct headings for group P and Q?

	Group P	Group Q
(1)	can grow	cannot grow
(2)	can reproduce	cannot reproduce
(3)	can make sound	cannot make sound
(4)	can respond to changes	cannot respond to changes

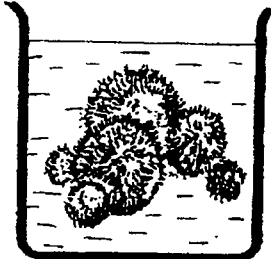

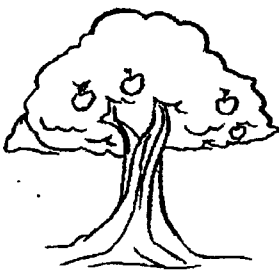
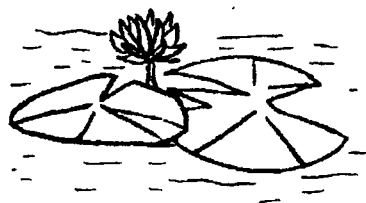
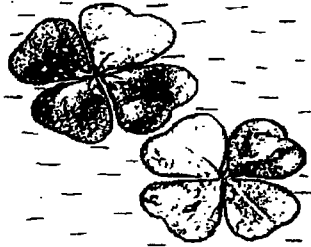

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Section B: Structured questions (7m)

For questions 5 to 6, write your answers in the space provided. The number of marks available is shown in brackets [] at the end of each question or part question.

- 5 Study the classification table.

Non-flowering plants	Flowering plants
 aquarium moss	 rose
 apple tree	 water lily
 water clover (fern)	 hibiscus

- (a) Tom noticed that the apple tree has been wrongly classified in the table above. Explain why.

[1]

(Go on to the next page)

- (b) Tom found a bird's nest fern growing on a nearby tree.
Tick (✓) the correct box below that Tom should place the bird's nest fern. [1]

☐

Non-flowering plant

☐

Flowering plant

- (c) Tom regrouped the living thing as shown in the table below.

Plants	
Group G	Group H
aquarium moss	rose
water lily	apple tree
water clover (fern)	hibiscus

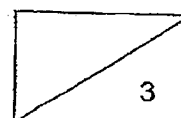
Suggest suitable headings for groups G and H.

[1]

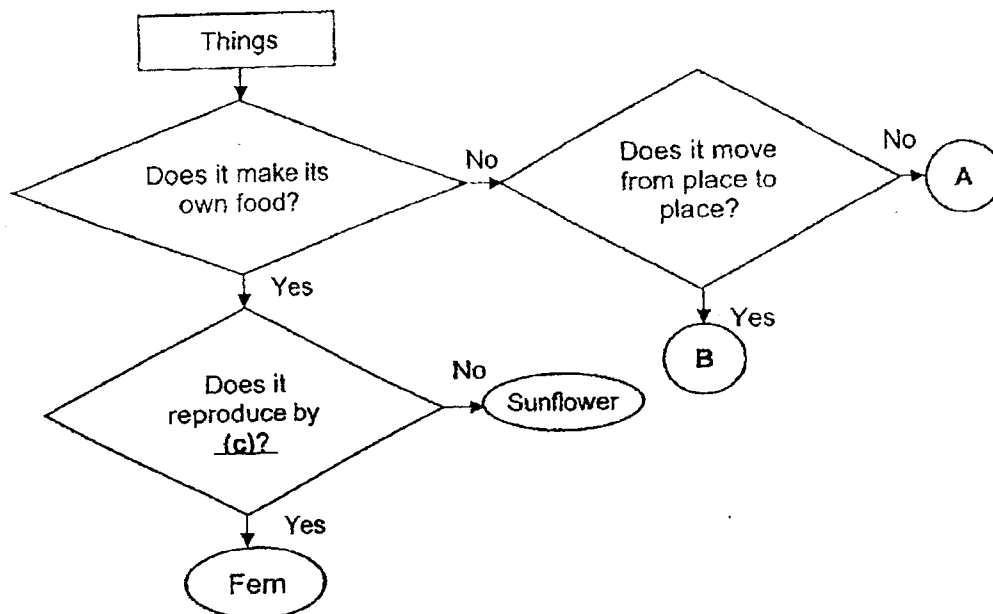
Group G: _____

Group H: _____

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6 Study the chart below.



(a) Match the things to the correct group.

[1]

duck •

• A

rock •

• B

(b) State a difference between A and B.

[1]

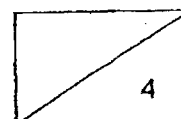
(c) Suggest what (c) can be as shown in the chart above.

[1]

(d) Based on the chart above, list one similar characteristic of the fern and the sunflower.

[1]

~ End of Paper ~





Nan Hua Primary School
Primary 3 Science
Term 2 Weighted Assessment 2023

Marks	
Section A:	/10
Section B:	/10
Total:	/20

Name: _____ ()

Class: Primary 3/_____

Date: _____

Duration: 30 minutes

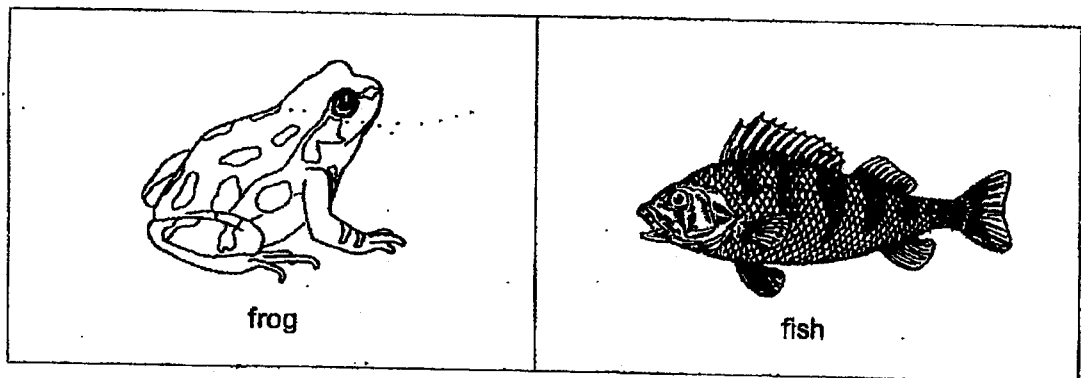
Parent's Signature _____

Answer all questions.

Section A: (5 x 2 marks = 10marks)

For each question from 1 to 5, four options are given. One of them is the correct answer. Make your choice (1, 2, 3 or 4) and write your answer in the brackets provided.

1 The diagrams below show two animals.



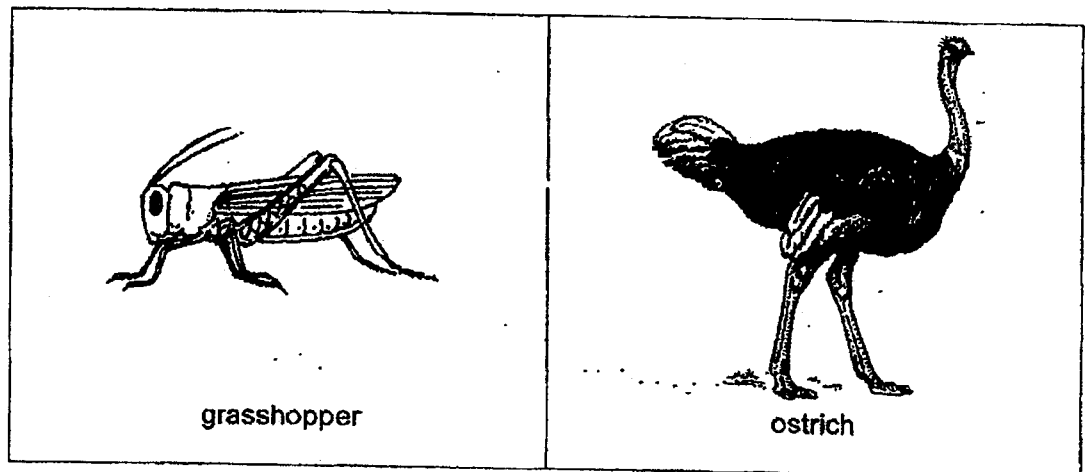
How are the animals similar?

- (1) lay eggs
- (2) have scales
- (3) can live on land and in water
- (4) have moist skin as outer covering

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- 2 The table below shows the characteristics of four animals, P, Q, R and S.

Animal	Number of legs				Have feelers	Have wings
	2	4	6	8		
P	✓					✓
Q		✓				
R					✓	✓
S				✓		

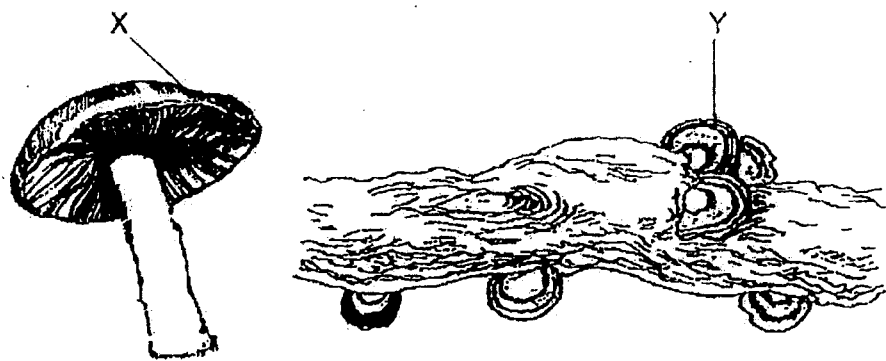


Which animal, P, Q, R or S, correctly shows what the grasshopper and the ostrich could be?

	Grasshopper	Ostrich
(1)	P	R
(2)	Q	S
(3)	R	P
(4)	S	Q

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- 3 Look at the diagrams shown below carefully.



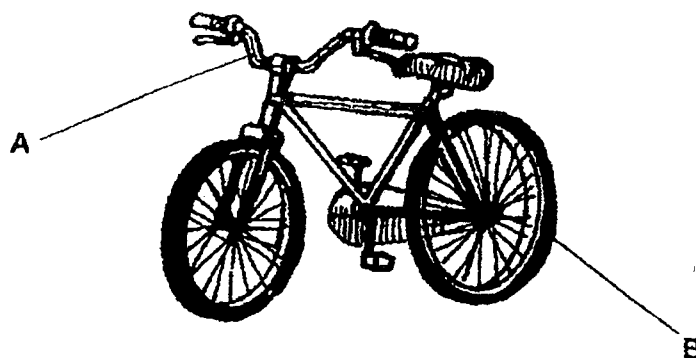
Which of the following statements about the two living things, X and Y, are true?

- A They reproduce by spores.
- B They can make their own food.
- C They can move freely by themselves.
- D They get nutrients from the things they live on.

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

- ()

- 4 The diagram below shows a picture of a bicycle.

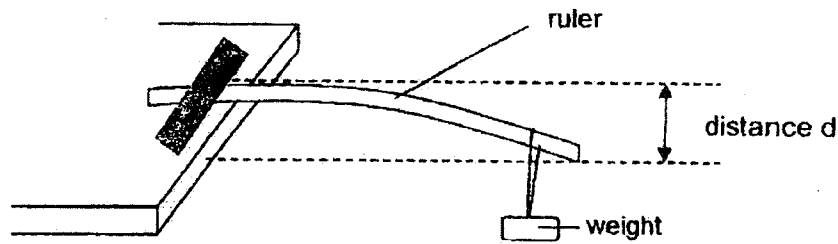


What materials are parts labelled A and B most likely made of?

	A	B
(1)	plastic	metal
(2)	glass	plastic
(2)	ceramic	rubber
(4)	metal	rubber

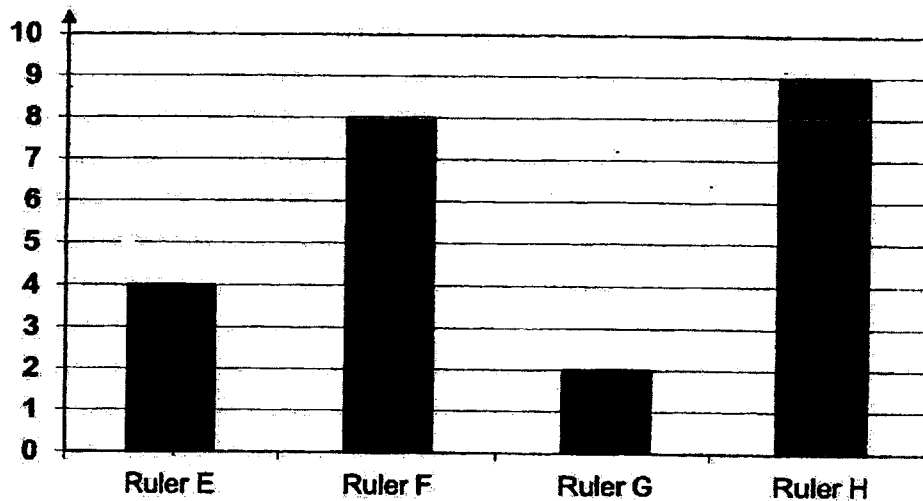
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- 5 Faizal conducted an experiment using four rulers made of different materials, E, F, G and H. He fixed one end of each ruler to a table and hung a weight on the other end.



He then measured the distance d bent by each ruler and recorded his results in a graph shown below.

Distance d (cm)



Based on the results in the graph above, which of the following statements is true?

- (1) Ruler E is the most flexible.
- (2) Ruler H is the least flexible.
- (3) Ruler F is more flexible than ruler E.
- (4) Ruler E bends 3 cm more than ruler G.

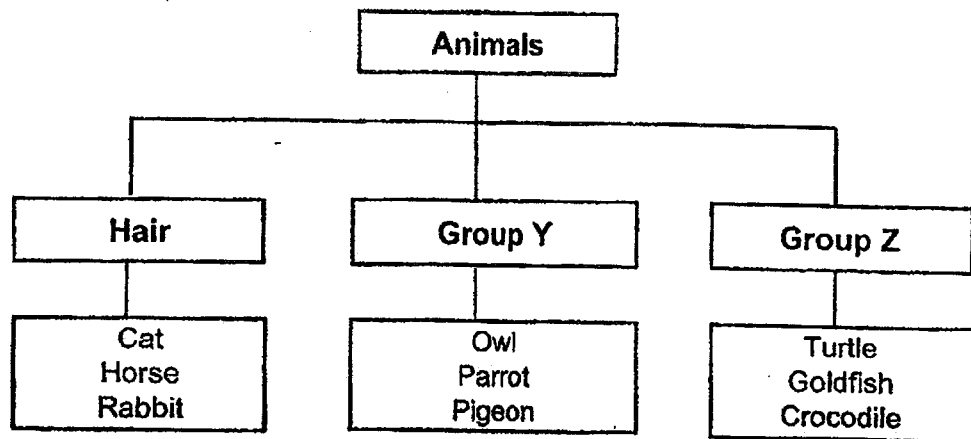
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Section B: Structured questions (10m)

For questions 6 to 8, write your answers in the space provided. The number of marks available is shown in brackets [] at the end of each question or part question.

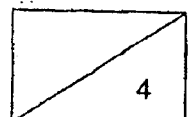
- 6 The animals below have been classified into three different groups.



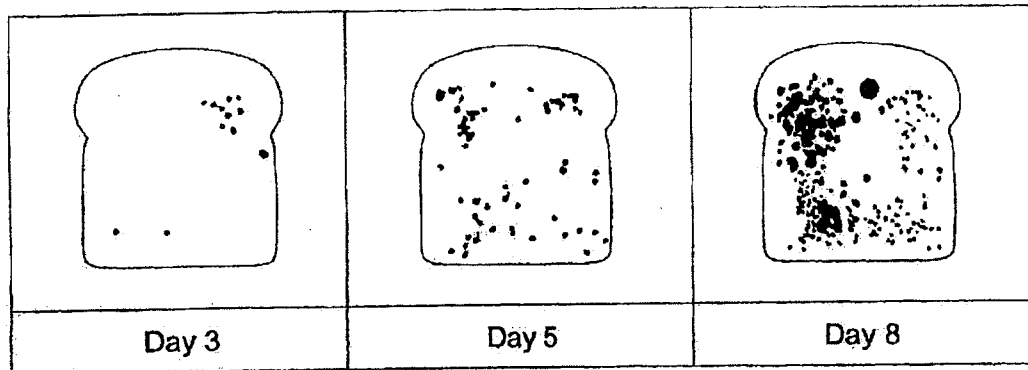
- (a) How are the above animals grouped? [1]

- (b) State one similarity between the animals in group Y and group Z in the way they reproduce. [1]

- (c) Ravi wanted to classify a penguin into group Z. Do you agree with him? Explain your answer. [2]



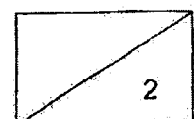
- 7 Amy left a slice of moist bread in the kitchen. After three days, mould was observed growing on it. The pictures below show the amount of mould growing on the bread over a period of eight days.



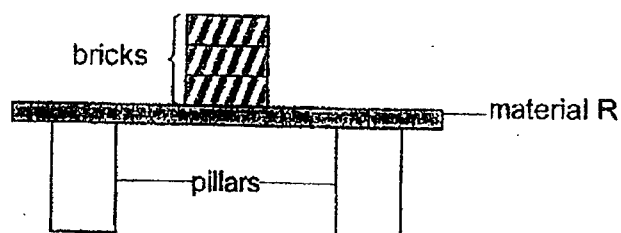
- (a) What do you notice about the growth of mould from day 5 to day 8? [1]

- (b) Amy prepared another piece of bread which was toasted. She noticed that it did not have any mould on day 3. Give a reason for her observation. [1]

(Go on to the next page)



- 8 Benjamin carried out an experiment as shown in the diagram below. He placed material R over two pillars. Next, he stacked bricks, one at a time, on the material until it broke.



He repeated this experiment using different materials, S, T and U. The results were recorded in the table below. The materials are of the same size.

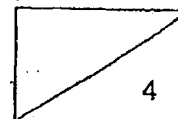
Material	Maximum number of bricks it can support
R	3
S	7
T	5
U	8

- (a) What property of the materials was Benjamin trying to find out through this experiment? [1]

- (b) Which material, R, S, T or U, is the strongest? [1]

- (c) Which material, R, S, T or U, is the least suitable to make a bookshelf? Explain your answer. [2]

End of Paper



1. The first part of the paper is devoted to a general discussion of the problem of the existence of solutions of the system of equations (1) and (2) under the assumption that the functions f and g are continuous and satisfy the Lipschitz condition.



Nan Hua Primary School
Primary 3 Science
Term 3 Weighted Assessment 2023

Marks	
Section A:	/10
Section B:	/10
Total:	/20

Name: _____ ()

Class: Primary 3/ _____

Date: _____

Duration: 30 minutes

Parent's Signature _____

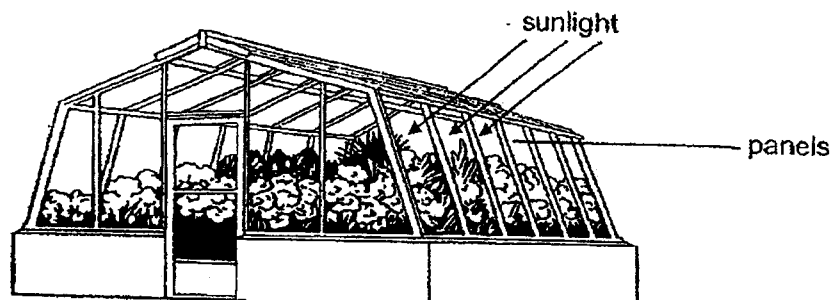
Answer all questions.

Section A: (5 x 2 marks = 10marks)

For each question from 1 to 5, four options are given. One of them is the correct answer.

Make your choice (1, 2, 3 or 4) and write your answer in the brackets provided.

- 1 The diagram below shows a greenhouse used to grow plants during cold seasons.

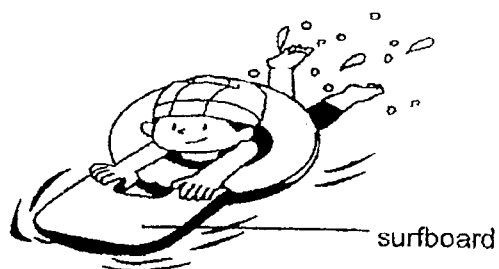


What is the property of the material used to make the panels to allow sunlight to reach the plants inside the greenhouse?

- (1) strength
- (2) waterproof
- (3) transparency
- (4) ability to float on water

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- 2 John wanted to swim with his friends. He needs a surfboard to help him swim.



The table below shows the properties of four different materials, W, X, Y and Z.

Materials	Waterproof	Transparent	Able to float
W	✓		✓
X	✓	✓	
Y	✓		
Z		✓	✓

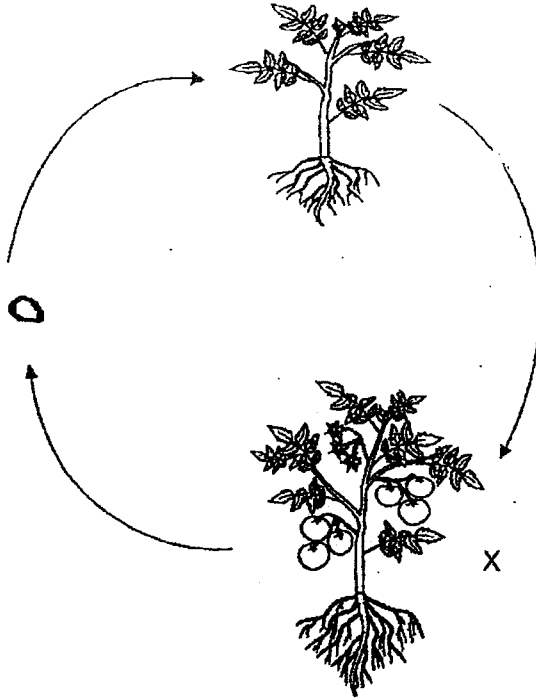
Key
✓ : yes

Which material is most suitable for making a surfboard?

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

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- 3 The diagram shows the life cycle of a plant.

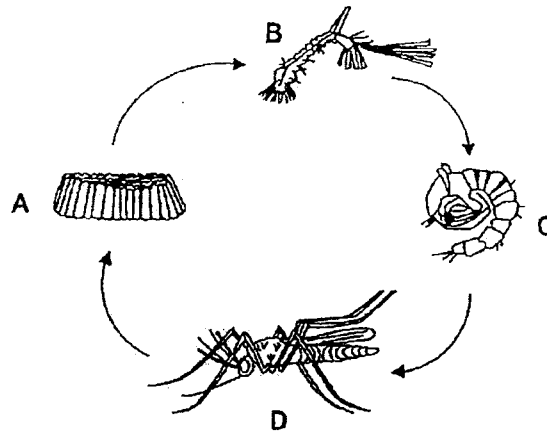


What is the stage marked X?

- (1) fruit
- (2) seed
- (3) adult plant
- (4) young plant

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- 4 The diagram below shows the life cycle of a mosquito.



Life cycle of a mosquito

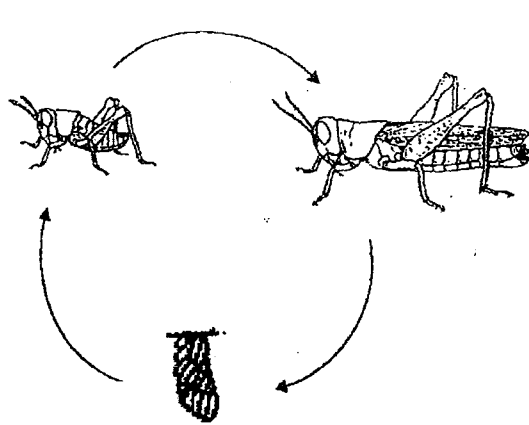
Jenny wanted to prevent mosquitoes from breeding, so she sprayed oil onto the possible breeding grounds to reduce the number of mosquitoes.

In which of the following stages of the life cycle of the mosquito, A to D, would spraying oil onto the breeding grounds reduce the number of mosquitoes?

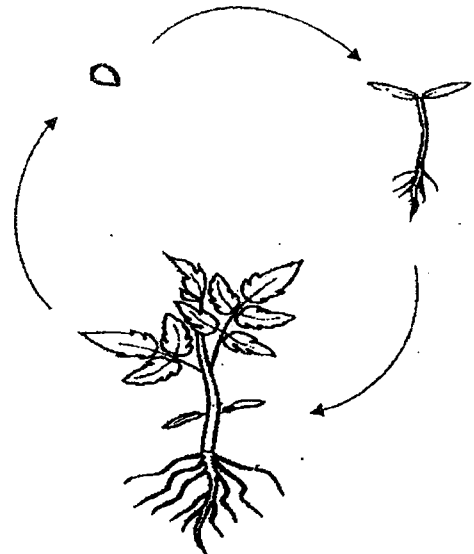
- (1) A and C
- (2) B and C
- (3) B and D
- (4) C and D

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- 5 The diagrams below show the life cycles of a grasshopper and a plant.



Life cycle of a grasshopper



Life cycle of a plant

Mandy observed the above life cycles and made four statements. Which of the statements are correct?

- A Both the grasshopper and the plant grow.
- B Both the life cycles must start with an egg stage.
- C Both the grasshopper and the plant have three life cycles each.
- D Both the young of the grasshopper and the young of the plant look like the adults.

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

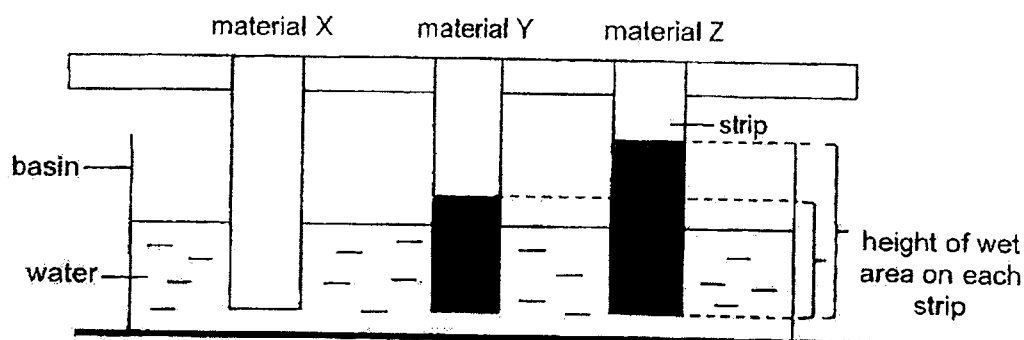
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Score	
	10

Section B: Structured questions (10m)

For questions 6 to 8, write your answers in the space provided. The number of marks available is shown in brackets [] at the end of each question or part question.

- 6 Jessica placed three strips of different materials, X, Y and Z, in a basin of water as shown below. She observed that part of strips Y and Z had turned wet.



She removed the strips from the basin of water and measured the height of the water level on the strips after 10 minutes and recorded the results as shown below.

material	height of water level (cm)	
	0 min	10 min
X	0	0
Y	0	4
Z	0	7

- (a) Material X is used to make raincoat.

Suggest a suitable material for X.

[1]

(b) The diagram below shows a mop.



Based on Jessica's findings, which material, X, Y or Z is the most suitable for making part M of the mop? Explain your answer. [2]

(c) Part M is also flexible.

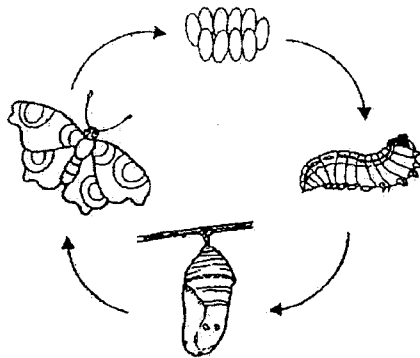
Suggest a suitable material for part M.

[1]

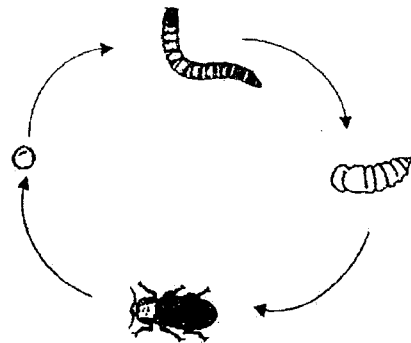
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Score	
	4

- 7 The diagrams below show the life cycles of a butterfly and a beetle.



Life cycle of a butterfly



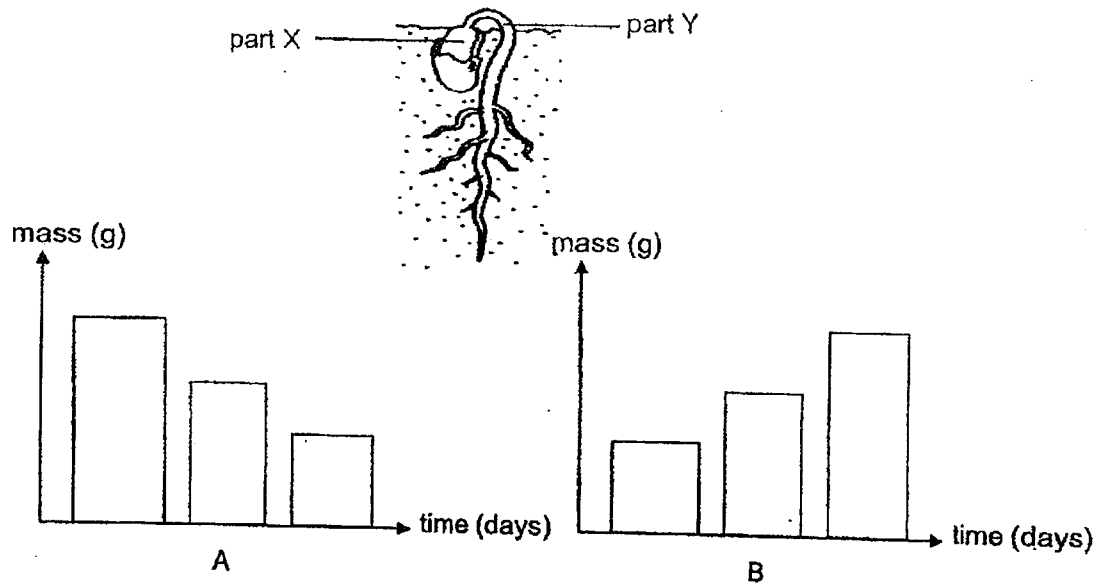
Life cycle of a beetle

- (a) Which group of animals does the two living things belong to? [1]

- (b) State one similarity between the life cycles of the butterfly and the beetle. [1]
(Do not name the stages in the life cycles.)

- (c) The butterfly and beetle lay many eggs at one time.
Explain how laying many eggs at one time is an advantage to both the butterfly and the beetle. [1]

- 8 The diagram below shows a young plant. The graph shows how the mass of two parts of the young plant changes over time.

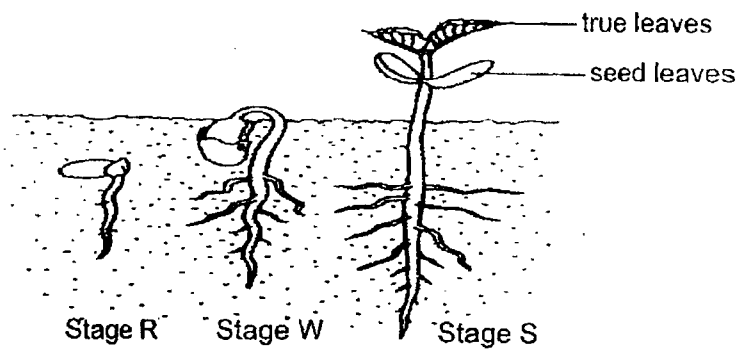


- (a) Which bar graph, A or B, represents part X of the seed?

Explain your answer.

[2]

The diagram shows the different stages of a seedling.



- (b) At which stage (s) will the seed leaf no longer be important to the seedling? Explain your answer. [1]

End of paper

SCHOOL : NAN HUA PRIMARY SCHOOL
LEVEL : PRIMARY 3
SUBJECT : SCIENCE
TERM : 2023 WA1

CONTACT :

SECTION A

Q1	Q2	Q3	Q4
2	4	4	3

SECTION B

Q5a	The apple tree has fruit and fruits develop from flowers.
Q5b	Non-flowering plants
Q5c	Group G: water plants Group H: land plants
Q6a	Duck → B Rock → A
Q6b	A does not move from place to place but B can move from place to place.
Q6c	C can be spores.
Q6d	Both the fern and the sunflower can make its own food.

SCHOOL : NAN HUA PRIMARY SCHOOL
LEVEL : PRIMARY 3
SUBJECT : SCIENCE
TERM : 2023 WA2

CONTACT :

SECTION A

Q1	Q2	Q3	Q4	Q5
1	3	2	4	3

SECTION B

Q6a	They are grouped by outer covering.
Q6b	Both group Y and Z reproduce by laying eggs.
Q6c	No. The turtle, goldfish and crocodile have scales as their outer covering, but the penguin has feathers as its outer covering.
Q7a	The growth of mould increased.
Q7b	The piece of bread which was toasted did not have any mould on day 3 because it did not have any moisture on it.
Q8a	Strength of material.
Q8b	U
Q8c	R. The maximum number of bricks it can support is the least, so R will break the most easily and is least suitable to make a bookshelf.

SCHOOL : NAN HUA PRIMARY SCHOOL
LEVEL : PRIMARY 3
SUBJECT : SCIENCE
TERM : 2023 WA3

CONTACT :

SECTION A

Q1	Q2	Q3	Q4	Q5
3	1	3	1 or 2	2

SECTION B

Q6a	Plastic / rubber
Q6b	Material Z is the most absorbent, so it can absorb the most amount of water easily.
Q6c	Fabric / wool / cotton
Q7a	Insects
Q7b	Both have 4 stages in their life cycles.
Q7c	Laying many eggs at one time has as advantage as some of the eggs will get eaten by other animals.
Q8a	Bar graph A. The mass of part X decreases. Part X is the seed leaf. Food stored in seed leaves is used for growth. Thus, its mass decreases over time.
Q8b	The leaves will help the seedling make its own food in the presence of light. Thus, it does not depend on the seed leaf to provide it with stored food.

