



Nan Hua Primary School
Primary 4 Science
Term 2 Weighted Assessment 2023

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

Name: _____ ()

Class: Primary 4S _____

Date: _____

Duration: 30 minutes

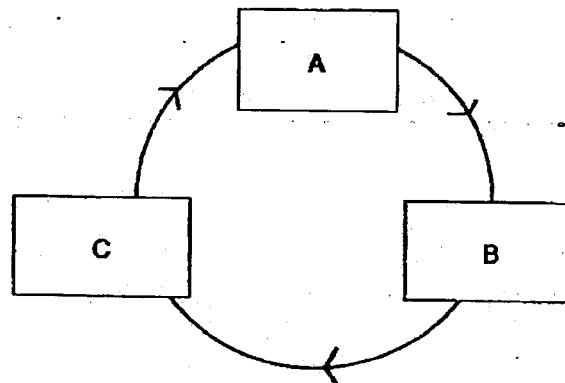
Parent's Signature _____

Answer all questions.

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

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 the life cycle of an insect which includes stages A, B and C.

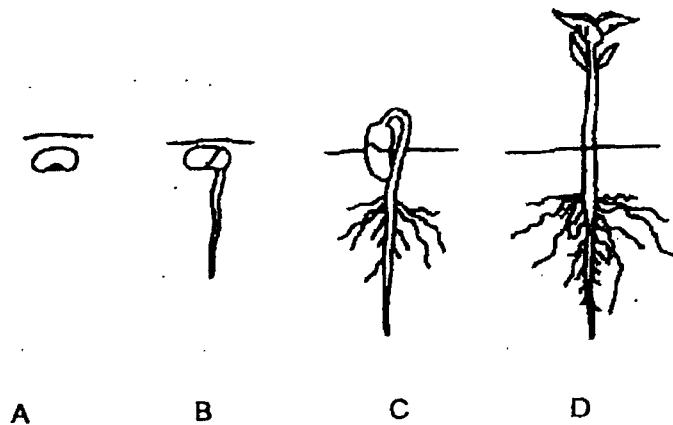


Which one of the following represents stages A, B and C?

	A	B	C
(1)	Egg	Adult	Nymph
(2)	Adult	Egg	Nymph
(3)	Adult	Nymph	Egg
(4)	Nymph	Egg	Adult

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- 2 The diagram below shows the growth of a plant.



At which stage is the plant able to make food?

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

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- 3 The four statements below are made by four students about the pupa of an insect.

Amy: It does not breathe at this stage.
Billy: It moves around to look for food.
Collin: It is developing into an adult.
David: It does not feed on anything at the stage.

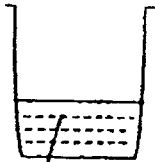
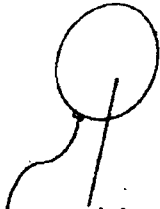


Which of the students are correct?

- (1) Amy and Billy
- (2) Amy and Collin
- (3) Billy and Collin
- (4) Collin and David

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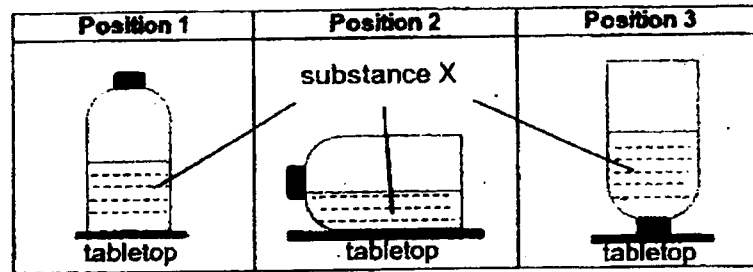
4 Which of the following is not a matter?

(1)	 <p>water in a beaker</p>	(2)	 <p>air in a balloon</p>
(3)	 <p>shadow of a person</p>	(4)	 <p>petals of a flower</p>

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- 5 The diagram below shows a container with substance X placed in three different positions as shown below.



Based on the diagram, what can you conclude about substance X?

- A: X occupies space
B: X can be compressed
C: X takes the shape of the container

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

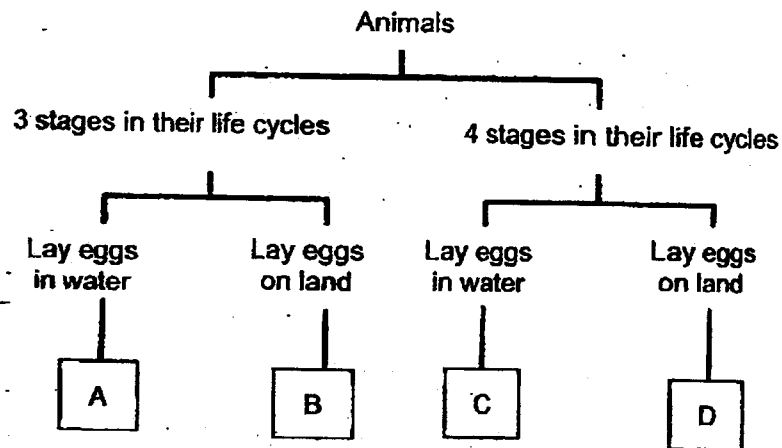
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Total score for Section A	10
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Section B: Structured questions (10m)

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 Study the chart shown below.



(a) State one similarity between animals A and C.

[1]

(b) State one difference between animals B and D.

[1]

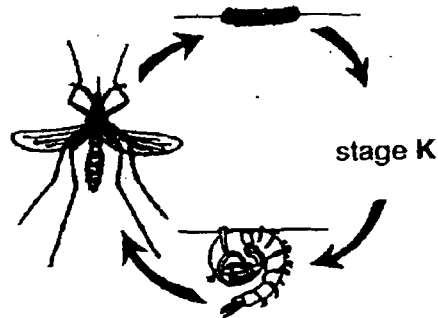
(c) Fill in the table below correctly with the letters A, B, C or D to represent the following animals.

[1]

A beetle	A frog

Score	3
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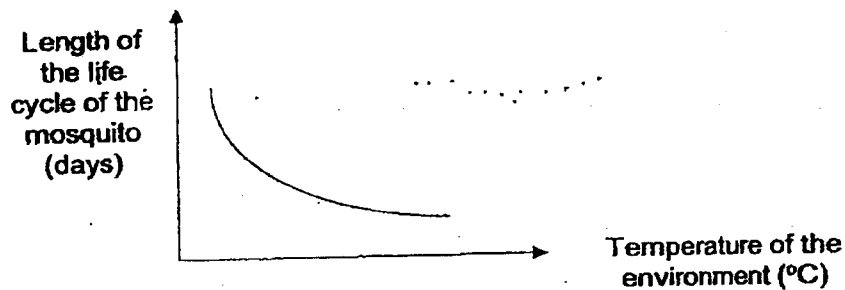
- 7 Study the life cycle of a mosquito shown below.



- (a) Identify stage K.

[1]

Study the graph below.



- (b) Based on the graph, what is the relationship between the temperature of the environment and the length of the life cycle of the mosquito?

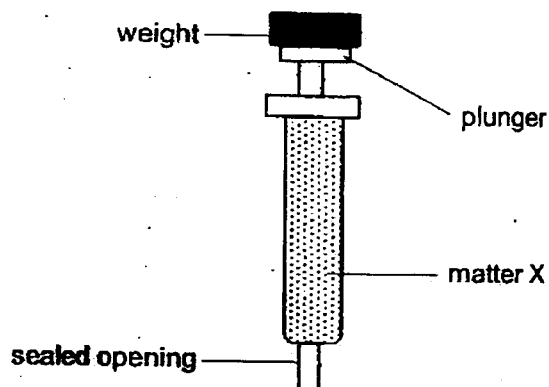
[1]

- (c) Dengue fever is spread by mosquitoes. Based on the graph in part (b), give a reason why the number of cases of dengue fever increases when the temperature of the environment increases.

[1]

Score .	<div style="border: 1px solid black; width: 100px; height: 100px; position: relative;"><div style="position: absolute; top: 0; right: 0; width: 100%; height: 100%; border-left: 1px solid black; border-top: 1px solid black;"></div><div style="position: absolute; bottom: 0; right: 0; width: 20px; height: 20px; text-align: center; line-height: 20;">3</div></div>
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- 8 Jack sealed the opening of a syringe before filling the syringe completely with matter X. He then put weights on the plunger of the syringe.



He recorded the volume of matter X in the table below for every weight he added on the plunger.

Weight added (g)	Volume of matter X (cm ³)
0	100
1	90
2	82
3	75

- (a) State two common properties of all matter.

[2]

- (b) Based on the table above, Jack concluded that matter X is a solid. Do you agree with Jack? Give a reason for your answer.

[1]

- (c) Based on the diagram above, give a reason why Jack needed to seal the opening of the syringe before conducting the experiment.

[1]

End of Paper

Score	
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SCHOOL : NAN HUA PRIMARY SCHOOL
LEVEL : PRIMARY 4
SUBJECT : SCIENCE
TERM : 2023 WA 2

CONTACT :

SECTION A

Q1	Q2	Q3	Q4	Q5
2	4	4	3	3

SECTION B

Q6)	<p>a) Both A and C lay their eggs in water</p> <p>b) Animal B has 3 stages in their life cycle but D has 4 stages in their life cycle.</p> <p>c) Mealworm beetle: D Frog: A</p>
Q7)	<p>a) Larva</p> <p>b) When the temperature of the environment decreases, length of the life cycle of the mosquito increases.</p> <p>c) There will be more adult mosquitos, hence disease spreads at a faster rate</p>
Q8)	<p>a) Matter has mass and takes up space</p> <p>b) No. Solids cannot be compressed but matter X can be compressed.</p> <p>c) If Jack did not seal the opening, matter X can escape into the surrounding environment.</p>

