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_____

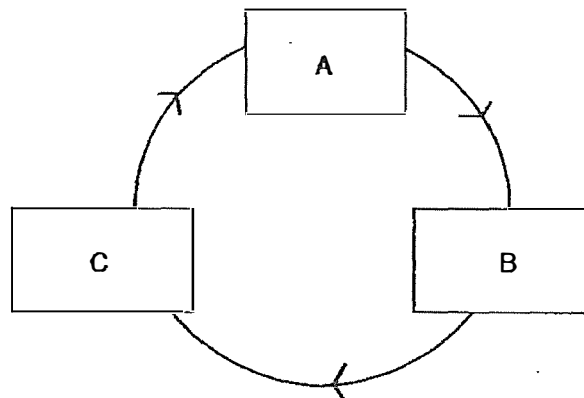Date: _____

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.

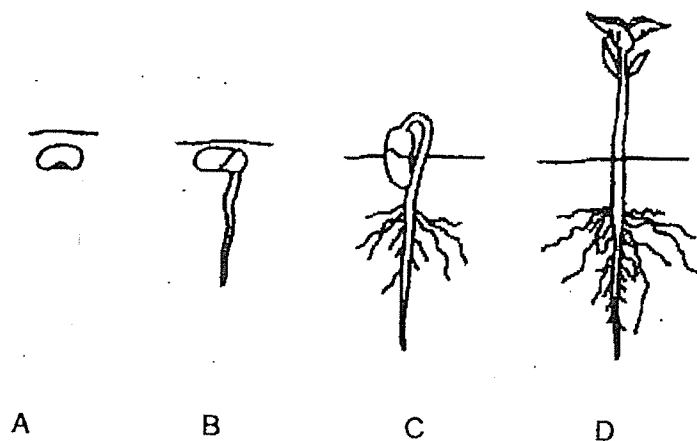1   The diagram below shows the life cycle of an insect which includes stages A, B and C.

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

( )

(Go on to the next page)

This booklet consists of 7 printed pages.

2   The diagram below shows the growth of a plant.

A   B   C   D

At which stage is the plant able to make food?

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

(   )

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.

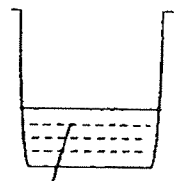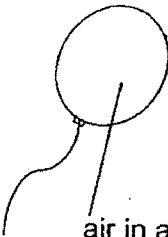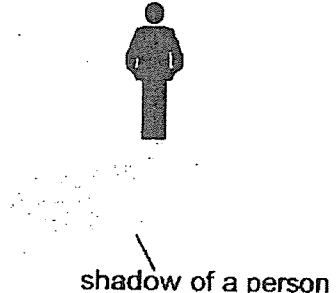David: It does not feed on anything at the stage.

Which of the students are correct?

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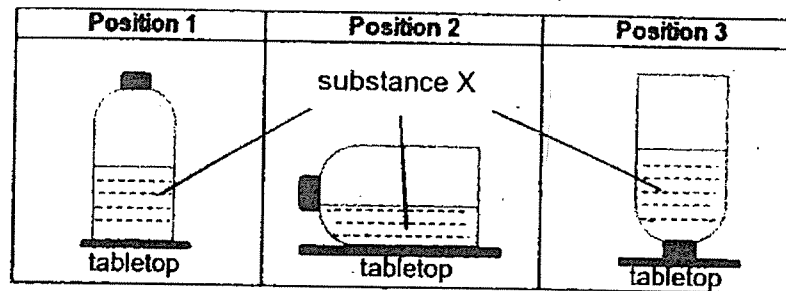(4)   Collin and David

(   )

4 Which of the following is not a matter?

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

( )

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

Position 1	Position 2	Position 3
	substance X	
tabletop	tabletop	tabletop

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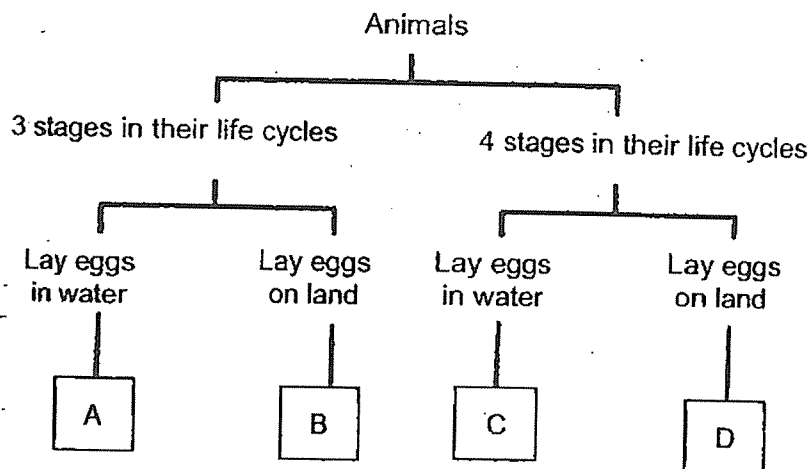 (2) A and B only
  (3) A and C only
  (4) A, B and C

( )

Total score for Section A	10

(Go on to the next page)

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.

Animals

3 stages in their life cycles   4 stages in their life cycles

Lay eggs in water   Lay eggs on land   Lay eggs in water   Lay eggs on land

A   B   C   D

(a)   State one similarity between animals A and C.   [1]

_____

_____

(b)   State one difference between animals B and D.   [1]
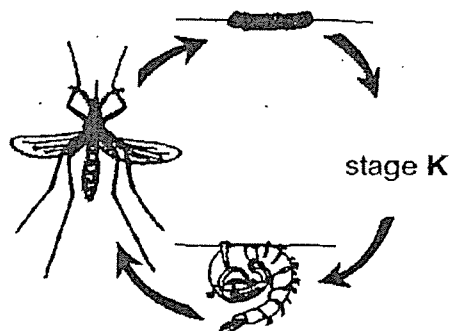
_____

_____

(c)   Fill in the table below correctly with the letters A, B, C or D to represent the following animals.   [1]
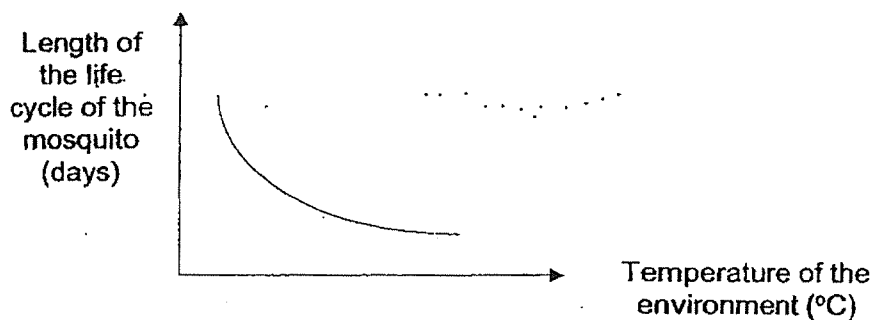
A beetle	A frog

Score   3

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7   Study the life cycle of a mosquito shown below.

stage **K**

(a)   Identify stage **K**.   [1]

_____

Study the graph below.

Length of
the life
cycle of the
mosquito
(days)

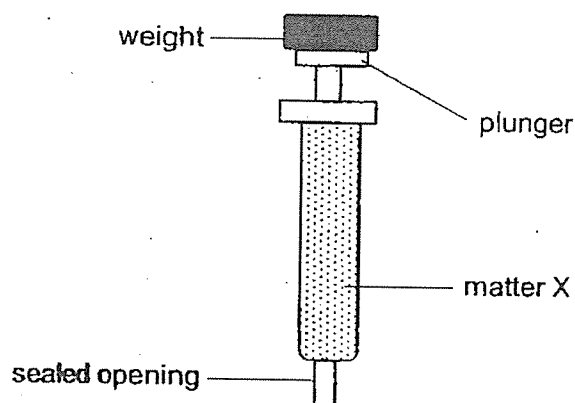Temperature of the
environment (°C)

(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	
	3

6

(Go on to the next page)

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 (cm³)
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

7

Score	

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

SECTION A

Q 1	Q2	Q3	Q4	Q5
2	4	4	3	3

SECTION B

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