# METHODIST GIRLS' SCHOOL Founded in 1887



# PRIMARY 4 **SCIENCE WEIGHTED ASSESSMENT 1**

Total Time for Paper: 40 min

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 4	-
Date :	
	44
Parent's signature:	

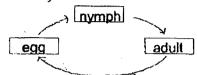
Section A	14
Section B	11
Total	25

This paper consists of 8 printed pages including this page.

### Section A

For each question from 1 to 7, four options are given. One of them is the correct answer. Make your choice (1, 2, 3 or 4) and write in the bracket provided. [14 marks]

1 The diagram shows the life cycle of an animal.



Which animal is likely to have the life cycle as shown above?

- (1) frog
- (2) chicken
- (3) butterfly
- (4) grasshopper

Which animal has the pupa stage in its life cycle?

- (1) frog
- (2) chicken
- (3) cockroach
- (4) mealworm beetle

3 Jason prepared four set-ups, J, K, L and M as shown in the table below.

Set-up	Type of seed	Number of seeds	Temperature (°C)	Time taken for roots to appear (days)
J	Seed W	10	40	8
Κ	Seed X	5	30	5
L	Seed W	10	30	7
M	Seed X	10	20	6

He wants to find out if temperature affects how fast the seeds grow. Which two set-ups should he use?

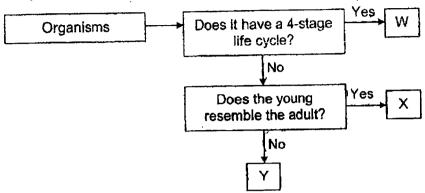
(1)	 9	nd	K
111	 - 22	ıw	

- (2) J and L
- (3) K and L
- (4) K and M

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4 Study the flow chart below.



Which of the following represents organisms W, X and Y?

W	X	Y.	ļ
butterfly	frog	cockreach	]
	cockroach	frog	]
ladybird beetle	cockroach	mosquito	
ladybird beetle	grasshopper	mosquito	]( )
	butterfly butterfly ladybird beetle	butterfly cockroach ladybird beetle cockroach	butterfly cockroach frog ladybird beetle cockroach mosquito

5 The table below shows the characteristics of animals A and B.

	Ani	mal
Characteristics	Α	В
Has a pupal stage	No	Yes
Has wings in adult stage	No	Yes
Gives birth to young alive	Yes	No

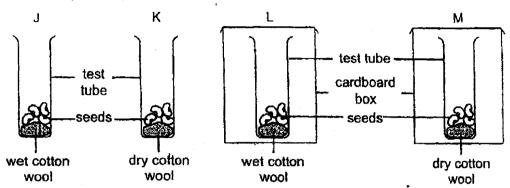
Based on the table above, which one of the following statements is correct?

- (1) Both animals can fly at their young stage.
- (2) The young of A looks different from the adult.
- (3) Animal A gives birth to young alive while animal B lays eggs.
- (4) Animal A has 4 stages in its life cycle while animal B has 3 stages in its life

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6 Four set-ups were placed in a room near the window as shown below.



In which of the set-ups will the seeds not grow into young plants?

- (1) K and M
- (2) Land M
- (3) J, K and M
- (4) K, L and M

7 The diagrams below show the life cycles of two different animals, S and T.



Both animals S and T have \_\_\_\_\_

- A three stages in their life cycle.
- B young that look like the adults.
- C young that moults several time.
- D adults that have wings and can fly.
- (1) A only
- (2) B only
- (3) B and D only
- (4) C and D only

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The d	iagram below shows the life cycle of a frog.
	Frog
(a)	Which two characteristics of living things are shown in the life cycle of the frog?
(i)	
(ii)	
	•
(p)	State one difference between the number of stages in the life cycles of a frog and a butterfly.  [1]
(c)	State one similarity between the life cycles of a frog and a butterfly.
	<u> </u>
(d)	Explain why it is important for the frog to lay many eggs.

Salim wanted to find out how the temperature of the surroundings affects the growth plants. He set up three containers with similar plants. He planted them in equal amounts of soil and water them with the same amount of water daily as shown below.

Plant

Set-up A

Set-up B

Set-up C

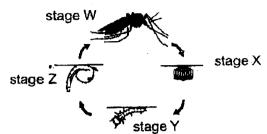
30°C

		~~ ~	30 C
He recorded	his observations after	1 week as shown in the	table below.

Set-up	A	В	С
Temperature of the surroundings (°C)	20	25	30
Height of plant at the start (cm)	5	5	5
Height of plant at the end (cm)	9	16	23

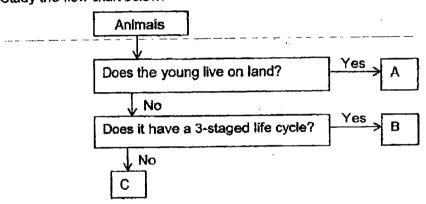
State the variable Salim should ch	and and exponentiality.
State how the height of the plant of surrounding increased.	changed when the temperature of ti
-	
Which temperature is the least sui your answer based on Salim's ob	itable for the growth of the plants? E servations.

10 Study the life cycle of a mosquito below.



(a)	Name stage Z of the life cycle of the mosquito.	[1]
	Stage Z:	

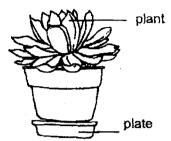
Study the flow chart below.



- (b) Which letter A, B or C represents the mosquito? [1]
- (c) State two characteristics of the mosquito at stage Y that help it to grow into stage Z. [1]

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The Aedes mosquito spreaddengue fever in humans. Water is often collected on the plates of flower pots.



d) Based on the life cycle of a mosquito, explain why it is important to e			
the water collected in the plate.	[1]		

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SCHOOL :

**METHODIST GIRLS' SCHOOL** 

LEVEL

PRIMARY 4

SUBJECT:

SCIENCE 2023 WA 1

**CONTACT:** 

# <u>WA1</u>

# **SECTION A**

	102	Q3 <b>4</b>	1941	<b>1</b> 053	<b>0</b> 6:	Q7/j	1	
4	4	2	2	3	1	1		

## **SECTION B**

Q8)	b) c)	(i) Living things change and grow (ii) Living things reproduce The life cycle of a frog has 3 stages while that of a butterfly has 4 stages Both life cycles start with the egg stage Laying many eggs increase the chance of survival and development into adult stage
Q9)	b)	Temperature of the surroundings As the temperature of the surroundings increases, the height of the plant increases 20 degrees is the least suitable temperature for the growth of the plants, as the height of the plant at 20 degrees was the shortest.
Q10)	a) b) c) d)	Stage Z: Pupa C The mosquito at stage Y eats a lot and molts several times