



Nan Hua Primary School
Primary 5 Science
Term 1 Weighted Assessment 2021

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

Name: _____ ()

Class: Primary 5/ _____

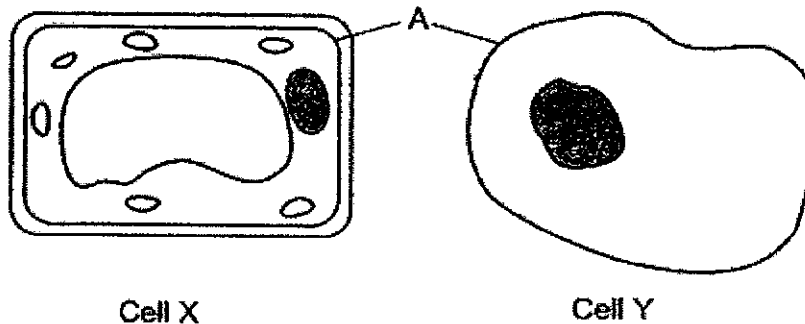
Date: _____

Duration: 30 minutes

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 bracket provided.

- 1 The diagram below shows two cells, X and Y.



Cell X

Cell Y

Which of the following correctly shows the type of cell, X and Y, and the function of part A in both cells?

	X	Y	function of part A
(1)	Animal	Plant	controls the movement of substances in and out of the cell
(2)	Animal	Plant	gives the cell its shape
(3)	Plant	Animal	controls the movement of substances in and out of the cell
(4)	Plant	Animal	gives the cell its shape

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- 2 The diagram below shows how substances, X and Y, are transported through the different parts of the plant, E and F.



Key:

————→ direction of flow of substance X

←----- direction of flow of substance Y

What do E, F, X and Y represent?

	E	F	substance(s) X	substance(s) Y
(1)	stem	leaf	water	food
(2)	stem	leaf	food	water
(3)	leaf	stem	water	food
(4)	leaf	stem	food	water

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- 3 Three adults were trapped in a lift for an hour and there was no exchange of air from outside. Which of the following graphs shows the correct change in the composition of air in the lift?

Key:

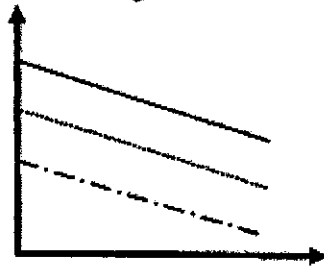
— nitrogen

..... oxygen

- - - carbon dioxide

(1)

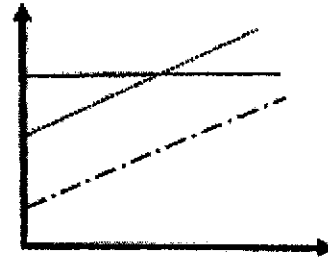
Amount of gas



Time (mins)

(2)

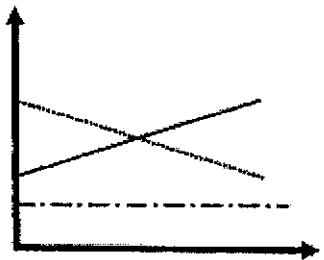
Amount of gas



Time (mins)

(3)

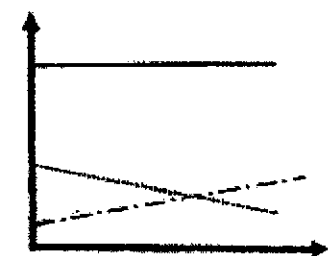
Amount of gas



Time (mins)

(4)

Amount of gas

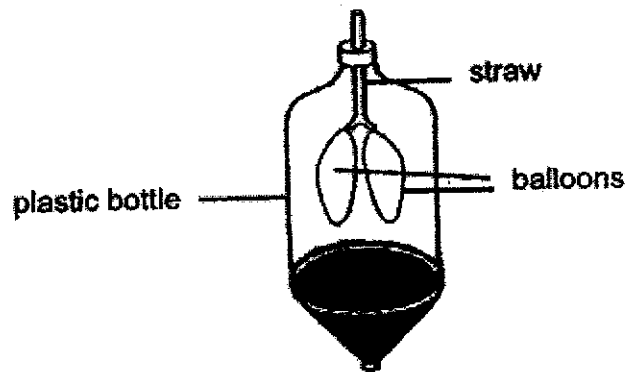


Time (mins)

()

4

The diagram below shows a human respiratory model.



The table shows parts of the respiratory system represented by different parts of the model and their respective functions.

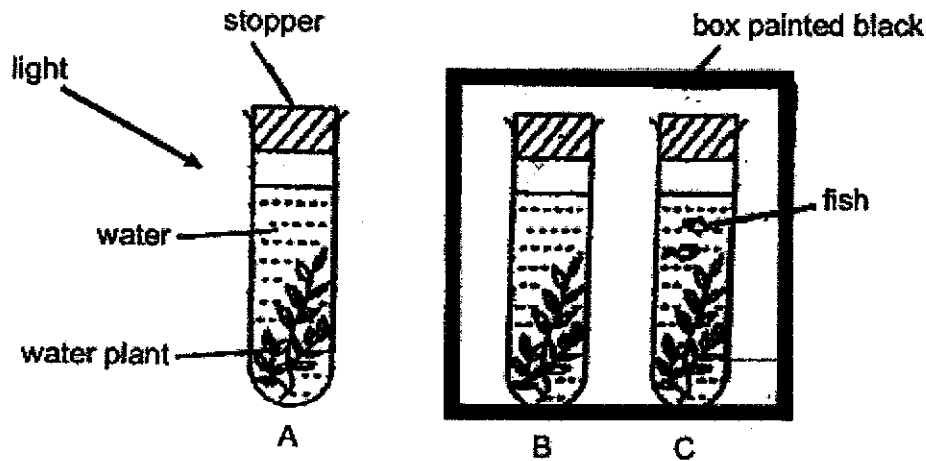
	parts of the model	parts of the respiratory system	functions
A	balloons	lungs	to transport oxygen to all parts of the body
B	plastic bottle	nose	to take in oxygen and remove carbon dioxide from the body
C	straw	windpipe	to transport air to and from the lungs

Which of the following is/are correct ?

- (1) C only
- (2) A and B only
- (3) A and C only
- (4) All the above

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- 5 Sherwin conducted an experiment in a bright room with three set-ups, A, B and C, as shown below. The amount of carbon dioxide in the water in each set-up was 30 units at the start of the experiment.



Which of the following correctly shows the amount of carbon dioxide in the three set-ups after a few hours?

Amount of carbon dioxide in the water after a few hours (units)			
	Set-up A	Set-up B	Set-up C
(1)	20	70	50
(2)	20	50	70
(3)	50	30	70
(4)	70	50	30

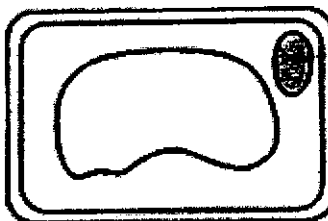
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Total marks for section A	10 / 10
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Section B: Structured questions (10m)

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 The diagram below shows cell Q which is taken from a part of a plant.



cell Q

Two students observed cell Q using a microscope and made the following statements.

Student A : Cell Q is likely taken from the root of the plant.

Student B : Cell Q is likely taken from the leaf of the plant.

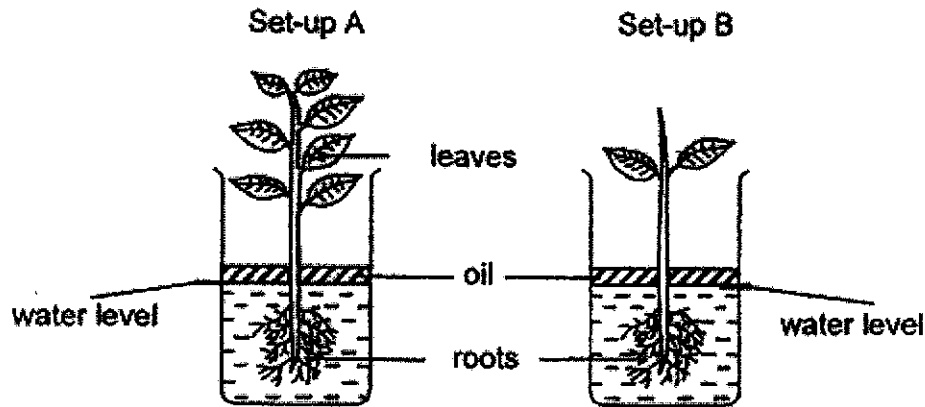
Which student made the correct statement? Explain why.

[2]

Score	2
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- 7 Daniel set up an experiment as shown below to find out whether the amount of water taken in by a plant is affected by its number of leaves.

He placed 2 similar plants with different number of leaves near a window and marked the water level of each set-up at the start of the experiment.



After several days, he found out that the water level in set-up A was lower than the water level in set-up B.

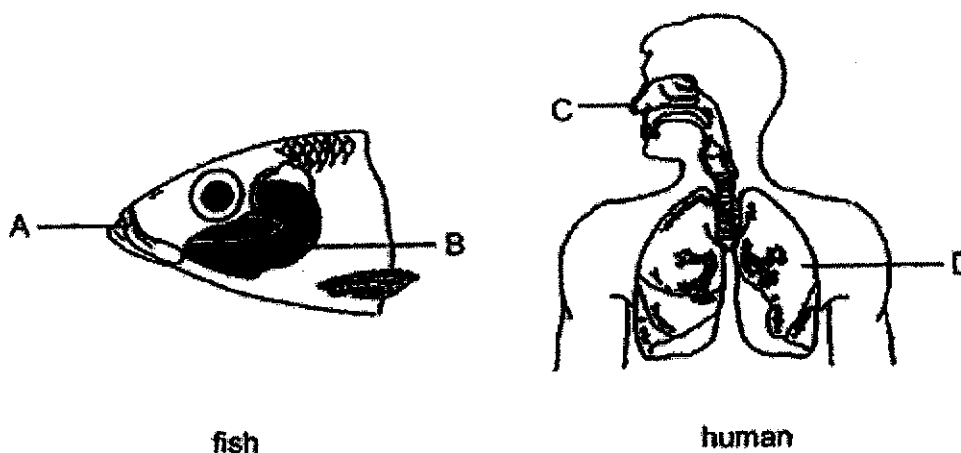
- (a) State the changed variable in Daniel's experiment. [1]

- (b) Why was the water level lower in set-up A than set-up B? [1]

- (c) Explain clearly why oil was added to the surface of the water. [2]

Score	4
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- 8 The diagrams below show the different parts in the respiratory systems of a fish and a human.



- (a) At which part, A, B, C or D, does gaseous exchange take place in a fish and human? [2]

Fish : _____

Human : _____

- (b) Explain clearly how the fish gets oxygen for its survival. [2]

Score	4
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End of Paper

SCHOOL : NAN HUA PRIMARY SCHOOL
LEVEL : PRIMARY 5
SUBJECT : SCIENCE
TERM : 2021 TERM 1

SECTION A

Q 1	Q2	Q3	Q4	Q5
3	1	4	1	2

6) Students A. Root cell does not make food/photosynthesize. Hence it does not contain chloroplast.

7)a) The amount of leaves.

b) The plant in set-up A have more leaves, the roots have to take in more water to all parts of the plants, therefore the water level in set-up is lower than set-up B.

c) The oil is to prevent loss of water in the beaker through evaporation and to ensure that the decrease in the amount of water is only due to the plant taking in water.

8)a) Fish : part B

Human: part D

b) The fish opens its mouth to get oxygen in the water. The water then goes to the gills. The gills would absorb oxygen in the water and the numerous air sacs connected to blood vessels bring the dissolved oxygen to the rest of body.

