

## Nan Hua Primary School Primary 5 Science Term 1 Weighted Assessment 2024

Name:	(	1
Class: Primary 5/	1	•
Date:		
Duration: 30 minutes		

Mark	5
Section A:	/ 10
Section B:	/ 10
Total:	/ 20

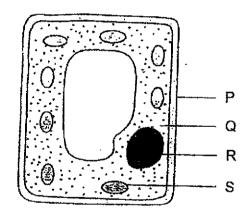
Parent's Signature

## 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 bracket provided.

1 The diagram below shows a plant cell.

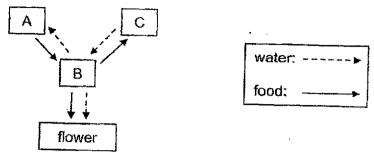


Which of the following statements is correct?

- (1) R is not found in animal cells.
- (2) P is also found in animal cells.
- (3) S absorbs sunlight to make food for the cell.
- (4) Q controls the movement of substances moving in and out of the cell.

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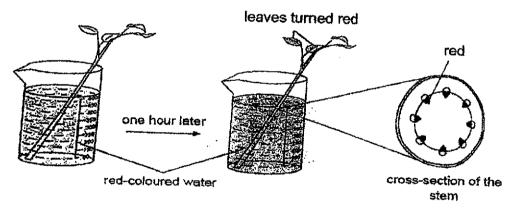
2 The diagram below shows how food and water are transported in a plant. The arrows represent the movement of food and water. A, B and C are different parts of the plant.



Which of the following shows the plant parts, A, B and C, correctly?

	A	В	С
(1)	leaf	root	stem
(2)	leaf	stem	root
(3)	root	stem	leaf
(4)	stem	leaf	root

3 Nicole placed a plant, with its roots removed, in a container of red-coloured water. After an hour, she cuts the section of the stem.



Nicole observed that the leaves and parts of the cross-section of the stem turned red. Based on her observations, which of the following statements is correct?

- (1) The leaves turned red because they made food.
- (2) The stem has tubes that transported food downwards.
- (3) The parts of the stem that turned red are the chloroplasts.
- (4) The stem has tubes that transported the red-coloured water upwards.

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4 Ahmad wrote down some differences between the air that is taken in and given out by a human.

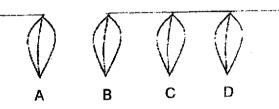
	Air taken in	Air given out
A	Less warm	Warmer
В	More oxygen	Less oxygen
С	Less water vapour	More water vapour
D	More carbon dioxide	Less carbon dioxide

Which of his comparisons are correct?

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

Jenny set up an experiment using four similar leaves, A, B, C and D. These leaves have more openings, known as stomata, on their bottom surfaces than on their top surfaces. Leaves lose water through their stomata.

Jenny coated some surfaces of the leaves with a thick layer of oil that did not drip. She recorded the mass of each leaf. Then, she hung them up in an open area as shown below.



Description         oil on top surface         no oil oil on top and bottom surfaces         oil on top and bottom surfaces         oil on top and bottom surfaces	Leaf	Α	В	С	D
	<u></u>	_ '	no oil		

After a few hours, Jenny measured the mass of each leaf again, and the loss of mass was calculated. Which of the following correctly shows the loss of mass in the leaves from the smallest to the greatest?

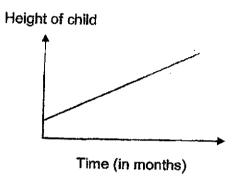
	Smallest loss of	mass	→ Grea	itest loss of mass
(1)	С	D	Α ·	В
(2)	С	A	D	В
(3)	A	D	В	С
(4)	D	В	Α	С

Total score for Section A 10

## Section B: Structured questions (10 marks)

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.

The graph below shows the height of a child over a period of six months.



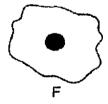
(a) Tick ( $\sqrt{\ }$ ) the statement below that best correctly explains the trend in the graph.

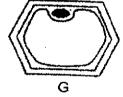
The child's body cells grew bigger.

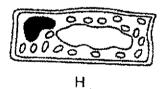
The child's body cells grew longer.

The child's body cells increased in number.

(b) Study the three different cells, F, G and H.







(i) State a part of the cell that is found in all three cells.

[1]

[1]

(ii) Is cell G found in an animal cell or plant cell? Give a reason for your answer. [1]

Score 3

Jona	athan cut and removed parts of the stem of a plant as shown in the diagram below.	
	Cut 1: both food-carrying and water-carrying tubes are removed  Part A part B fruit X	
(a)	Which part(s) of the plant, A and/or B, will die after some time?	[1]
(b)	Over time, fruit X grew larger compared to other fruits found on the tree.  Cut 2: only food-carrying tubes are removed  fruit X  part C of the plant	
	Explain why fruit X was larger than the other fruits found on the tree.	[2]
		<u>.                                    </u>
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	[Go on to the nex	t page
	5 Score	3

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3	(a)	State the function of the human respiratory system. Include in your answer the gases involved:  [1]
	(b)	Janet conducted an experiment to measure the amount of oxygen present in the water of her fish tank at different temperatures.
		Her results are shown in the graph below.
		Janet observed some fish in the tank. She noted that when the temperature of the water in the fish tank increased, the rate at which the fish's gill covers opened and closed increased.
		Using the results of the experiment, explain this observation. [2]
	(c)	Describe how the fish obtains oxygen when the water passes through its gills. [1]
		End of Paper
		Score 4

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YEAR : 2024

LEVEL: PRIMARY 5

SCHOOL: NAN HUA PRIMARY SCHOOL

SUBJECT: SCIENCE

TERM : TERM 1 WEIGHTED ASSESSMENT

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Q6	a)	✓ The child's body cells increased in number.
	b)	(i) Nucleus
		(ii) Cell G is found in a plant cell. Plant cells have cell walls but animal cells don't, Cell G has a cell wall. So it is found in a plant cell.
Q7	a)	Part A.
	b)	Water still could be reached to Fruit X from the roots to the stem, the leaves made food, but the food could not reach because of the cut made it impossible to the rest of the other fruits causing Fruit X to be bigger than the other fruits.
Q8	a)	The human respiratory system takin in air with more oxygen and breathes out air with more carbon dioxide.
	b)	When the temperature of the water increases, the amount of oxygen in the water decreases. The fish gill covers opened and closed faster because there is less oxygen in the tank, as the fish needs to take in oxygen faster, the gills is where gaseous exchange takes place, so it has to open and close faster to get more oxygen.
	c)	Water containing dissolved oxygen would pass through the fish gills. The blood in the gills absorb the dissolved oxygen and the remaining water would pass through its gills.