Nan Hua Primary School
Primary 5 Science
Term 1 Weighted Assessment 2023

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

Name: _____ ( )

Class: Primary 5/_____

Date: _____

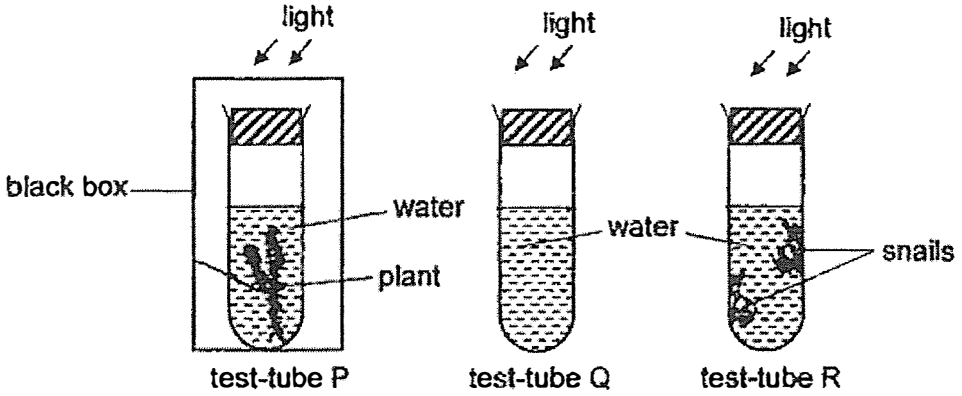
Duration: 30 minutes

_____
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 bracket provided.

1 Sarah set up three test-tubes as shown in the diagram. The test-tubes were left near the window.



Which of the following correctly describes the change in the amount of carbon dioxide in the water after two hours?

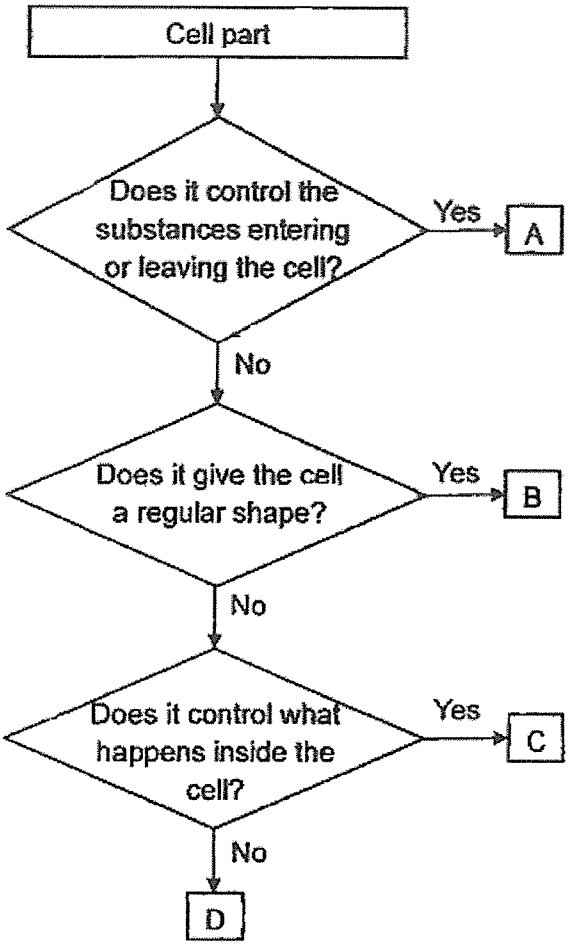
	Change in the amount of carbon dioxide in the water		
	test-tube P	**test-tube Q**	**test-tube R**
(1)	increases	decreases	stay the same
(2)	increases	stay the same	increases
(3)	decreases	stay the same	decreases
(4)	decreases	increases	stay the same

( )

This booklet consists of 7 printed pages.

[Go on to the next page]

2 The flow chart below shows the functions of cell parts, A, B, C and D.



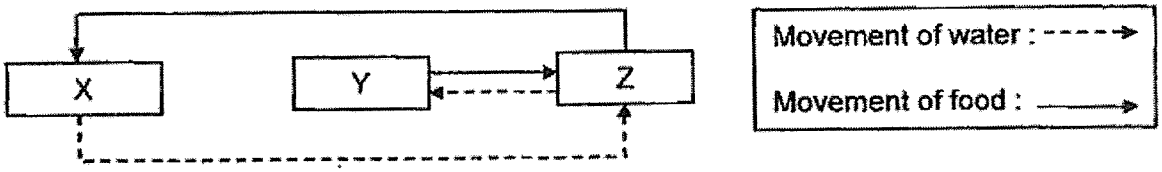
Based on the flow chart, which cell parts are found in animal cells?

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

( )

[Go on to the next page]

3 The chart below shows how water and food are transported in a plant.
The arrows represent the movement of the two substances.
X, Y and Z are different parts of the plant.

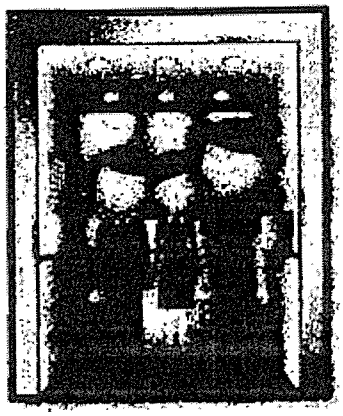


Which of the following shows the plant parts X, Y and Z correctly?

	X	Y	Z
(1)	leaves	stem	roots
(2)	leaves	roots	stem
(3)	roots	leaves	stem
(4)	stem	leaves	roots

( )

4 Three people were trapped in an enclosed lift for half an hour as shown below.
No fresh air could enter the lift.



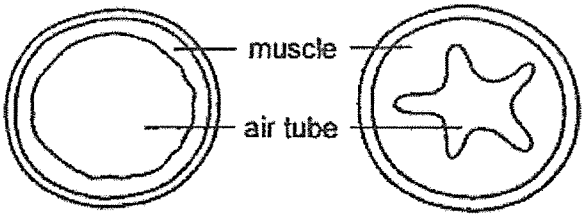
Which of the following shows the changes in the composition of air in the lift after being trapped in the lift for half an hour?

	Changes in composition of air in the lift		
	carbon dioxide	water vapour	oxygen
(1)	decreases	remains the same	increases
(2)	decreases	decreases	increases
(3)	increases	increases	decreases
(4)	increases	remains the same	decreases

( )

[Go on to the next page]

5 The diagram shows what happens to the muscles around a person's air tubes during an asthma attack. This makes breathing difficult and the body gets less oxygen.

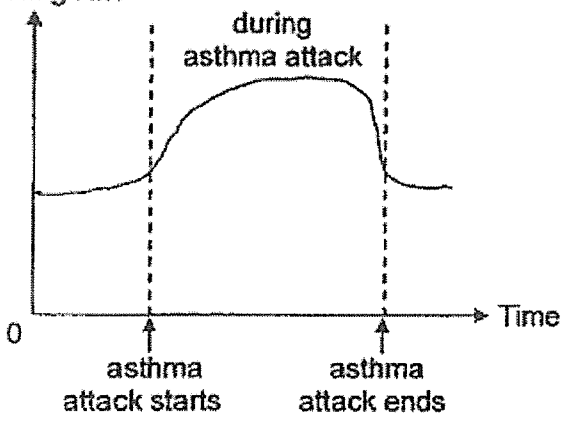


air tube before an asthma attack

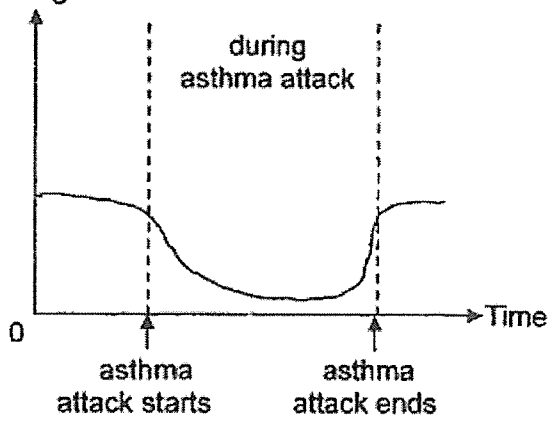
air tube during an asthma attack

Which of the following graphs most likely shows a person's breathing rate before, during and after an asthma attack?

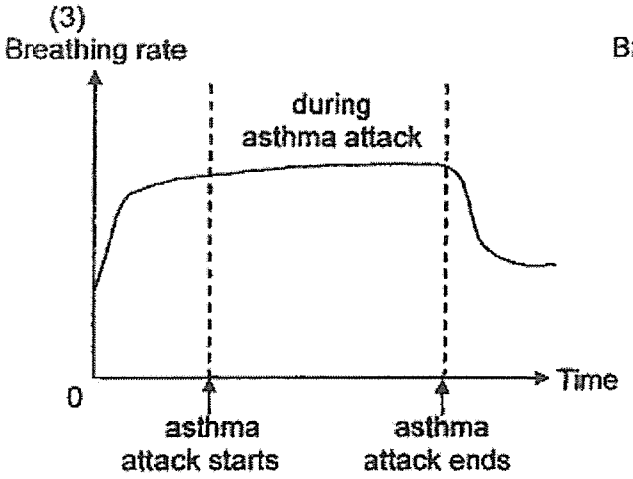
(1)



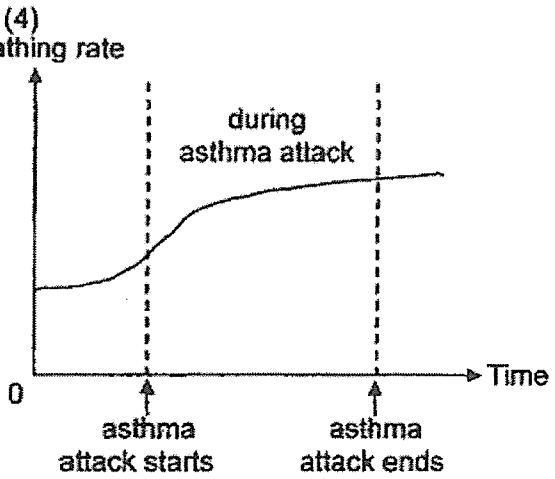
(2)



(3)



(4)



( )

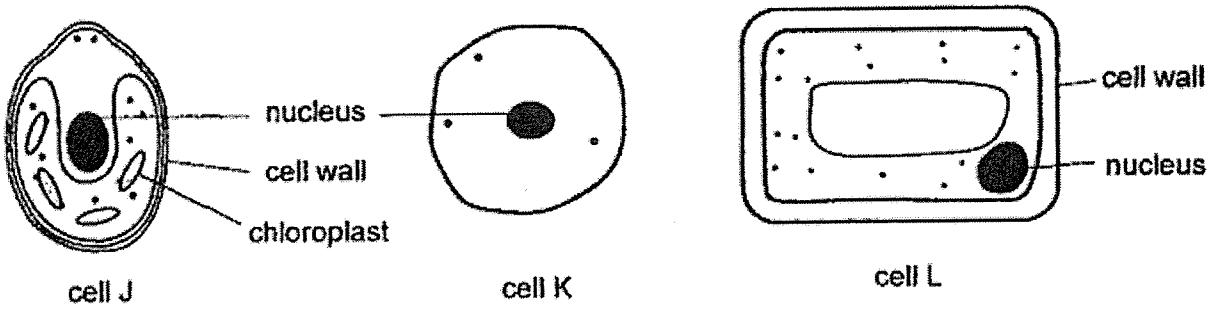
[Go on to the next page]

Total marks for Section A	10

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 diagrams show three cells, cell J, cell K and cell L.



Megan has classified the three cells as shown in the classification table below.

Animal Cell	Plant Cell
cell K	cell J cell L

(a) Suggest two reasons why Megan classified cell J as a plant cell. [1]

_____

_____

(b) Other than the nucleus, name another cell part that is present in all the three cells. [1]

_____

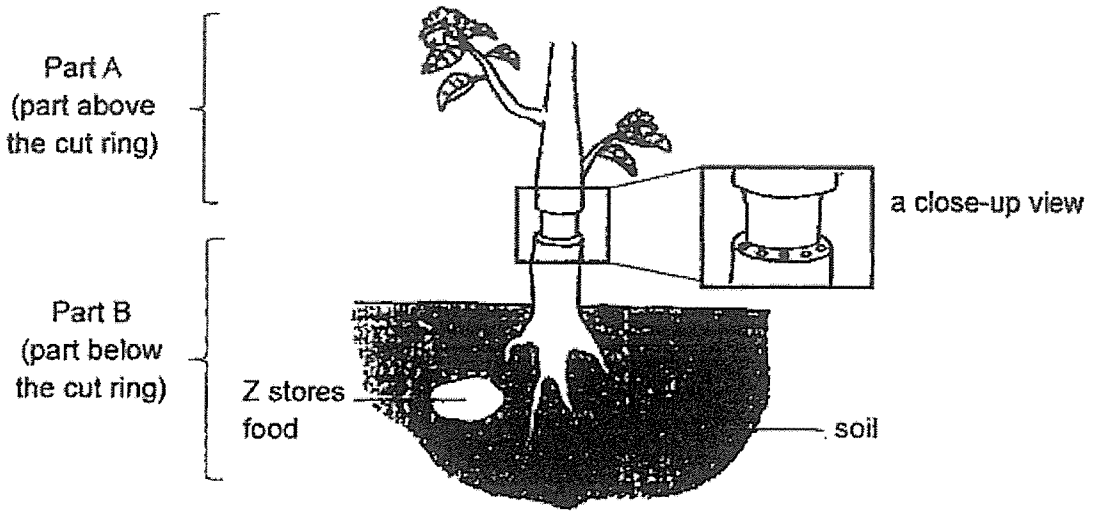
(c) Suggest a part of the plant that cell L could be taken from. [1]

_____

[Go on to the next page]

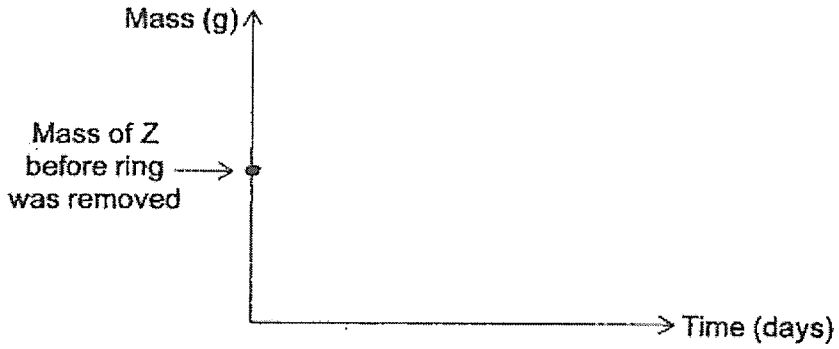
Score	/ 3

7 Tom cut a ring of the stem of a plant as shown below, removing both the food and water-carrying tubes.



He watered the plant daily for one week and observed the growth of Z.

(a) In the graph below, draw a line graph to show the mass of Z after the ring was removed over time. The mass of Z before the ring was removed is shown on the graph. [1]



(b) Explain the change in the mass of Z after the ring was removed. [2]

_____

_____

(c) With reference to the removal of water-carrying tubes, explain why part A of the plant died first compared to part B. [1]

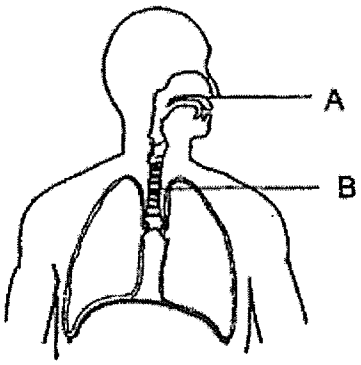
_____

_____

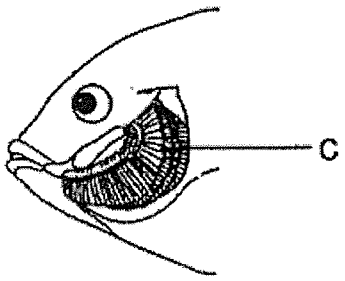
[Go on to the next page]

Score	4

8 The diagram shows the human and fish respiratory systems.



Human respiratory system



Fish respiratory system

(a) Read the statements in the table below. Write "True" or "False" in the boxes to indicate whether the statement is true or false. [1]

	Statement	True / False
(i)	Part A allows air to enter and leave the body.	
(ii)	Part B is where gaseous exchange takes place.	
(iii)	Part C consists of many thin gill filaments.	

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

_____

_____

_____

Score	/ 3

End of Paper

Nan Hua Primary School
Primary Five
Science
Answer Key

Section A

1 (2)

2 (2)

3 (3)

4 (3)

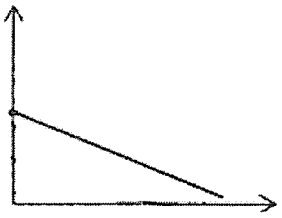
5 (1)

Section B

6a Cell J has chloroplasts and a cell wall.

6b cell membrane or cytoplasm

6c root or stem

7a 

7b The food-carrying tubes were removed. As part B/ Z is below the cut ring, Z could not receive food. Hence, Z mass will decrease as it has used up its stored food to keep Z/ part B alive.

7c Part A could not receive water but the water-carrying tubes in the roots in part B could still take in water.

8a (i) True
(ii) False
(iii) True

8b Water containing (dissolved) oxygen will enter the mouth and pass through the gills/ gill filament. The (dissolved) oxygen in water will then be absorbed into the blood/bloodstream.