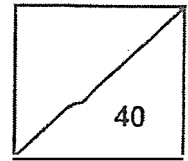


Red Swastika School  
Primary 5 Science 2023  
Class Test 1



Name: \_\_\_\_\_ (     )     Parent's Signature: \_\_\_\_\_

Class: Pr. 5 \_\_\_\_\_

Date: \_\_\_\_\_

Total time for Section A and B: 50 minutes

**Section A: Multiple-Choice Questions (14 x 2 = 28 marks)**

Choose the most suitable answer and shade its number in the OAS provided.

1. Which of the following correctly shows the functions of a stem?

- A: make food for the plant
- B: absorb water and mineral salts
- C: support the leaves to receive more sunlight
- D: transport food and water to other parts of the plant

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

2. The diagram below shows the plant transport system. The arrows represent substances being transported.



Which of the following correctly represents the arrows and parts Y and Z?

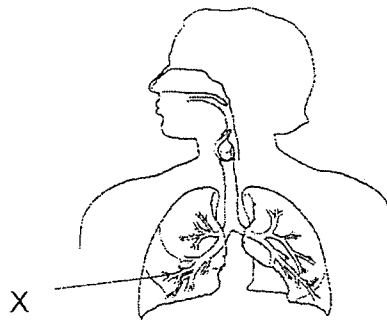
	→	←	Part Y	Part Z
(1)	water ✓	food	root	leaf
(2)	water ✓	food	leaf	root
(3)	food ✗	water	leaf	root
(4)	food ✗	water	root	leaf

3. Which of the Following materials are transported by the human circulatory system?

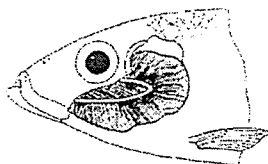
- A water
- B oxygen
- C digested food
- D carbon dioxide

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

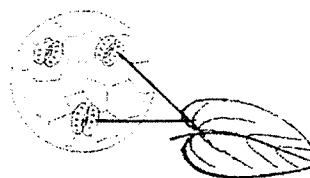
4. The following diagram shows the respiratory system of a human.



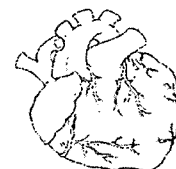
Which of the Following performs a similar function to part X?



A: fish gills



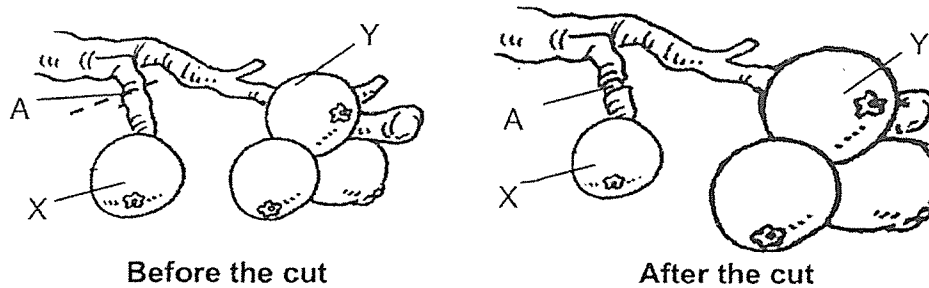
B: tiny openings on a leaf



C: human heart

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

5. The diagram below shows some fruits growing on a plant. The fruit stores water and food made by the leaves. Kiara made a cut at part A of the plant as shown below. After two weeks, she noticed that fruit X did not grow as big as fruit Y.



Which of the following shows the tubes left at part A after the cut?

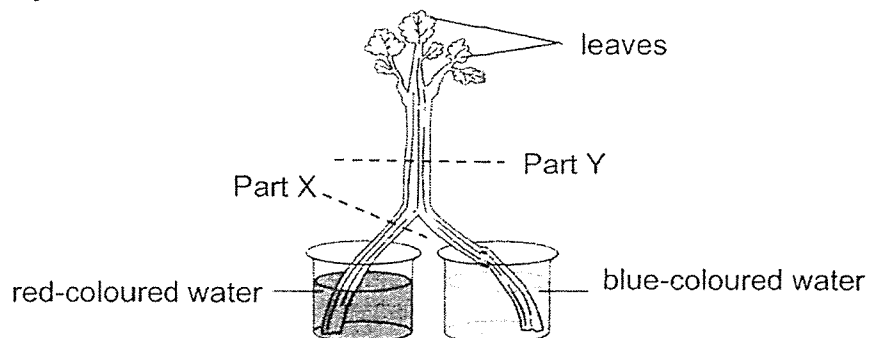
	Water-carrying tube	Food-carrying tube
(1)	✓	X
(2)	X	✓
(3)	✓	✓
(4)	X	X

Key

✓ : Yes

X : No

6. Xue Le cut the stem of a celery and placed it in two containers. One container had red-coloured water and the other had blue-coloured water as shown in the diagram below. She left the celery stalk in the containers for three days.

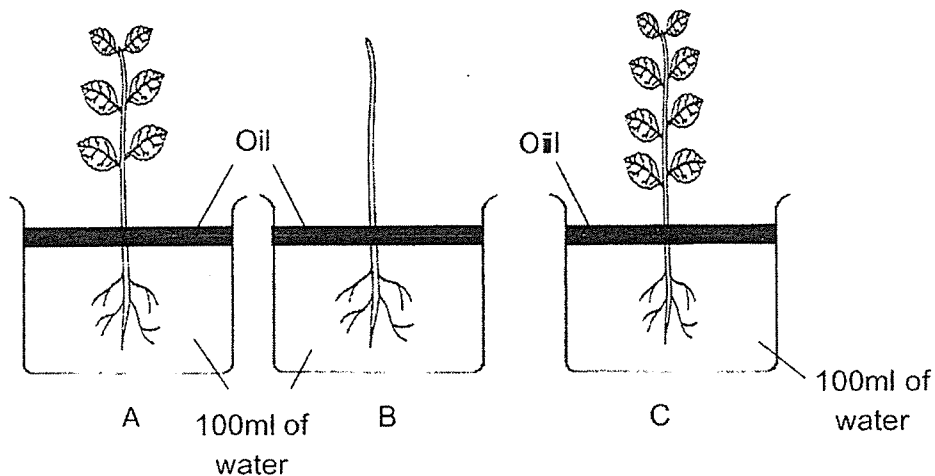


After three days, a cut was made at parts X and Y.

Which of the following correctly shows the colour at parts X and Y?

	Part X	Part Y
(1)	blue only	blue and red
(2)	red only	blue and red
(3)	red only	blue only
(4)	blue and red	red only

7. The same type of plant was placed into containers, A, B, and C as shown below. Each container was filled with 100ml of water. The set-ups were placed next to a window for three days.



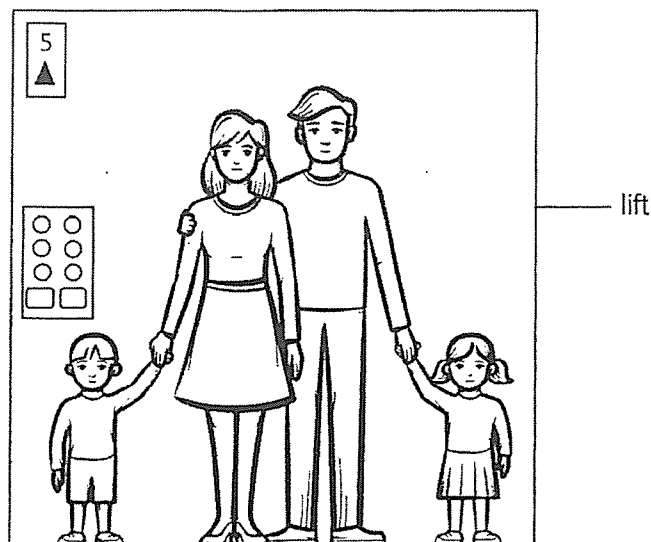
The following table shows the amount of water left in each container at the end of the three days.

Container	Amount of water left (ml)
A	80
B	100
C	50

Which of the following conclusions can be made from this experiment?

- (1) The number of leaves on the plant does not affect the amount of water taken in by the plant.
- (2) As the number of leaves in the plant increases, the amount of water taken in by the plant increases.
- (3) As the number of leaves in the plant increases, the amount of water taken in by the plant decreases.
- (4) As the number of roots in the container increases, the amount of water taken in by the plant increases.

8. A family was stuck in a lift that broke down. There was no window in the lift so no fresh air could enter the lift and no air could escape.



Which of the following shows the change in the amount of gas in the lift after 5 minutes?

	Nitrogen	Oxygen	Carbon dioxide	Water vapour
(1)	no change	decrease	increase	increase
(2)	no change	increase	decrease	no change
(3)	increase	decrease	increase	increase
(4)	decrease	increase	decrease	no change

9. Which of the following statements about the plant transport system and the human circulatory system are correct?

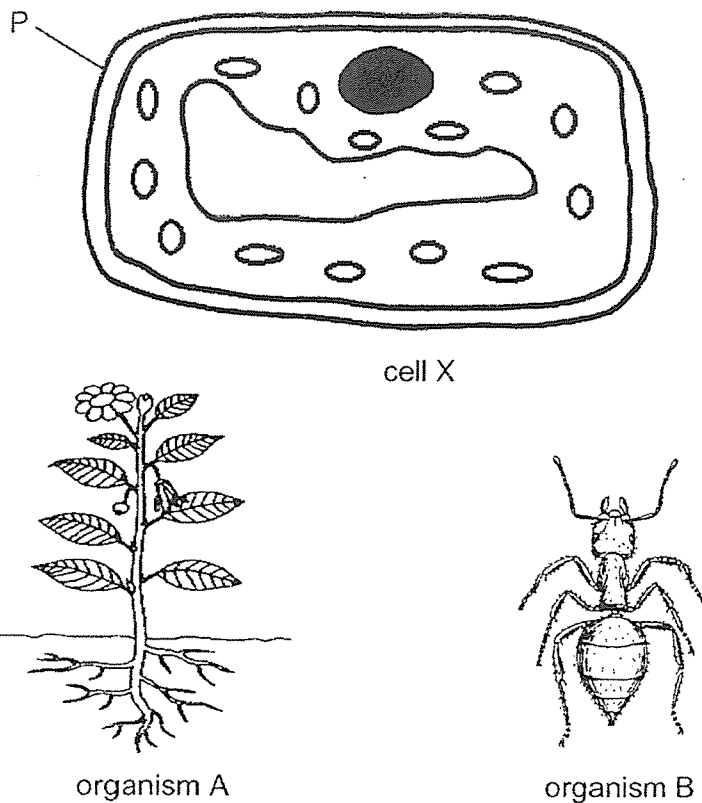
	Plant transport system	Human circulatory system
(1)	Oxygen is taken in through the roots.	Oxygen is taken in through the nose.
(2)	Water enters the plant through the leaves.	Water enters the body through the mouth.
(3)	Only food is transported to different parts of the plant.	Oxygen, digested food and water are transported around the body.
(4)	Substances are carried in water-carrying and food-carrying tubes.	Substances are carried in the blood vessels.

10. Which of the following is/are part(s) of an animal cell?

- A: nucleus  
B: cytoplasm  
C: cell membrane

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

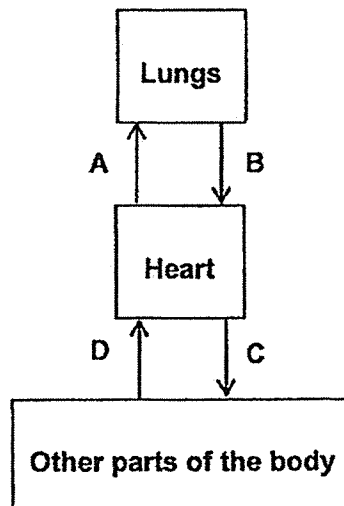
11. The diagrams below show cell X, organism A and organism B.



Which organism(s), A or B, does cell X belong to and what is the function of part P?

	Organism(s)	Function of P
(1)	A only	gives the cell its shape
(2)	B only	controls the activities in the cell
(3)	A and B	gives the cell its shape
(4)	A and B	controls the activities in the cell

12. The diagram below shows how blood flows through our body.

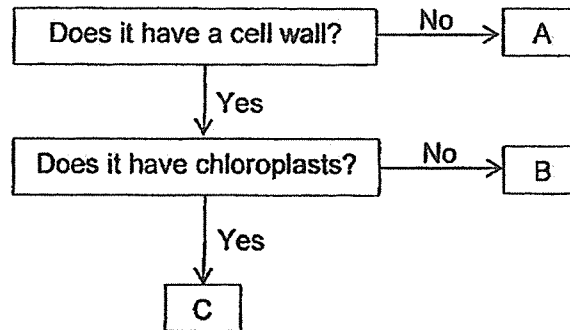


Which one of the following statements is incorrect?

- (1) The blood at A contains less oxygen than the blood at C.
- (2) The blood at B contains more oxygen than the blood at D.
- (3) The blood at A contains less carbon dioxide than the blood at B.
- (4) The blood at D contains more carbon dioxide than the blood at C.



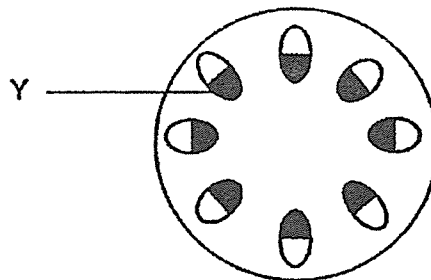
13. Study the flow chart below.



Which of the following best represents A, B, and C?

	A	B	C
(1)	skin cell	root cell	leaf cell
(2)	root cell	leaf cell	skin cell
(3)	leaf cell	skin cell	root cell
(4)	skin cell	leaf cell	root cell

14. George placed a plant in a beaker of blue-coloured water. After two days, he cut the stem of the plant. The cross section of the stem is shown below.

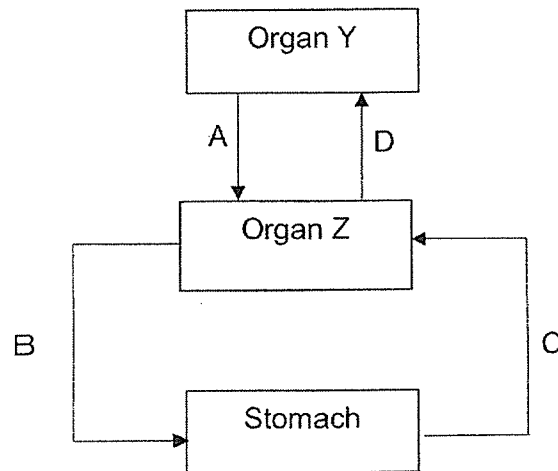


Why did tube Y of the stem turn blue?

- (1) It transports food from the roots to all parts of the plant.
- (2) It transports water from the roots to all parts of the plant.
- (3) It transports food from the leaves to all parts of the plant.
- (4) It transports water from the leaves to all parts of the plant.

**Section B: Open-ended Questions (3 Questions: 12 marks)**

15. The diagram below shows the circulation of blood carrying oxygen to different parts of the body. The arrows (A,B,C and D) represent the blood vessels in the human body.

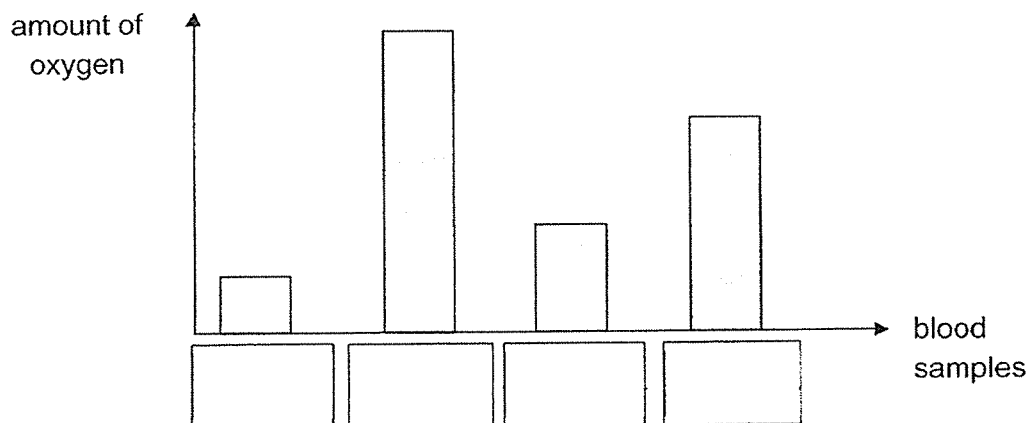


- (a) Name the organs that represent Y and Z. (2m)

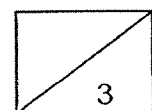
Y: \_\_\_\_\_

Z: \_\_\_\_\_

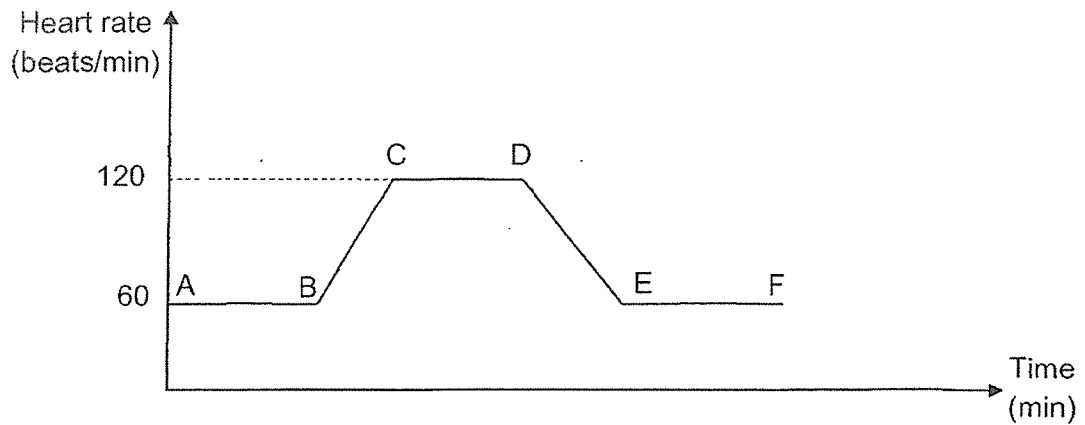
Blood samples were taken from the blood vessels above. The amount of oxygen in each blood sample was measured and recorded in the graph below.



- (b) Fill in the blanks in the graph above with the letters A, B, C or D to show which blood vessel the blood samples were taken from. (1m)



15. The table below shows Mika's heart rate before, during and after exercising.



- (c) At which point A, B, C, D, E or F did Mika start exercising? Explain your answer. (2m)

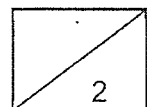
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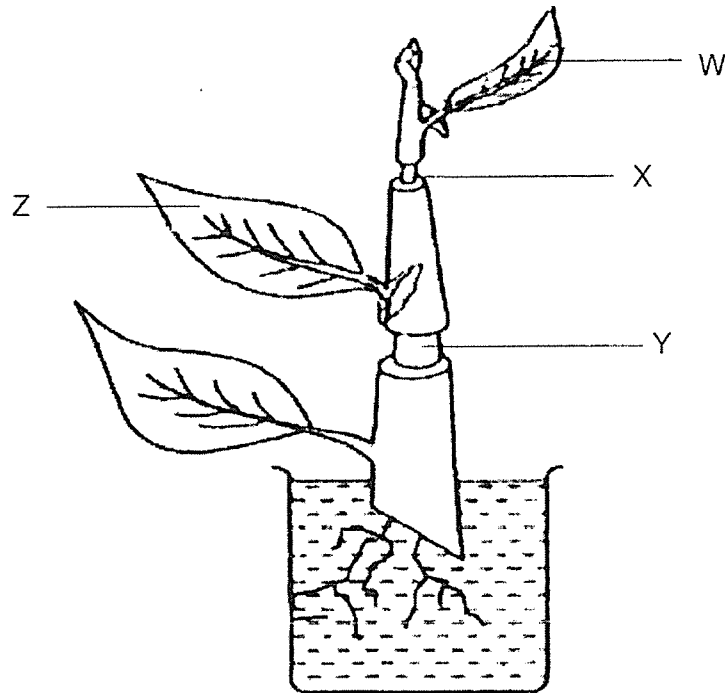
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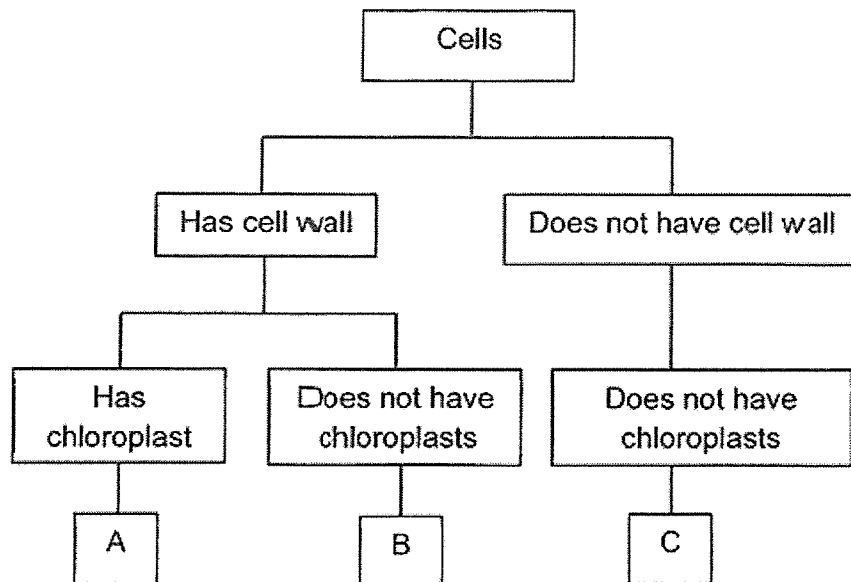


16. A plant was placed in a beaker of water. Two rings were cut off at parts X and Y. Both the food-carrying tube and the water-carrying tube were removed from part X. Only food-carrying tube was removed from part Y.



- (a) State one function of the leaves of the plant. (1m)
- \_\_\_\_\_
- (b) Jiangshan observed the plant. After a few days, she noticed that leaf W wilted but leaf Z continued to grow. Explain this observation. (2m)
- \_\_\_\_\_
- \_\_\_\_\_
- \_\_\_\_\_

17. Study the flow chart carefully.



(a) What is the function of a chloroplast? (1m)

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(b) State a difference between cell A and cell B. (1m)

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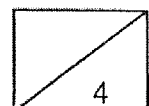
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(c) Which of the cells (A, B or C) best represents the following? (2m)

Cheek cell: \_\_\_\_\_

Root cell: \_\_\_\_\_

**End of Paper.**  
**Please check your answers.**





SCHOOL : RED SWASTIKA PRIMARY SCHOOL  
 LEVEL : PRIMARY 5  
 SUBJECT : SCIENCE  
 TERM : CLASS TEST 1

Q 1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9	Q10
3	1	4	3	1	2	2	1	4	4
Q11	Q12	Q13	Q14						
1	3	1	2						

Q15)	<p>a)Y: Lungs Z: Heart</p> <p>b)D, A, C, B</p> <p>c)B. Her heart rate increased. Her heart needs to pump blood faster to transport more oxygen and digested food to all parts of the body so that she can respire more to provide her body with energy needed when exercising.</p>
Q16)	<p>a) The leaves make food for the plant.</p> <p>b) No water could be transported to leaf w when the water-carrying tubes at X was removed, hence leaf W cannot make food. No food from the other leaves could be transported to leaf W as the food-carrying tube was removed too.</p>
Q17)	<p>a) The chloroplast, contains chlorophyll, that traps light to make food for the P during photosynthesis.</p> <p>b) Cell A has chloroplasts but Cell B does not.</p> <p>c) C B</p>

