Test: Primary 5 Science (Term 3) - Catholic High

Points: 28 points

Name: _____ **Score:** _____

Date: _____

Signature: _____

Select multiple choice answers with a cross or tick:

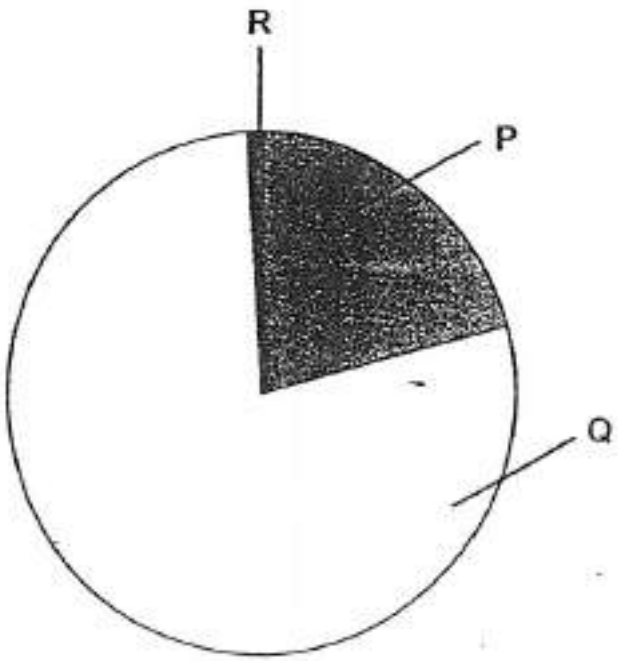
- ○ Only select one answer
- ☐ Can select multiple answers

Question 1 of 26

Primary 5 Science (Term 3) 2 pts

For each question, four options are given. One of them is the correct answer. Make your choice (A, B, C or D) and choose the correct answer. (11 x 2 marks)

The amount of different gases in the air is shown in the chart below.



Which of the following statements are correct?

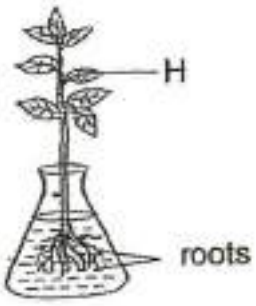
A Plants take in gas Q during photosynthesis.
B Plants produce gas P during photosynthesis.
C Animals only remove gas R during breathing.
D Animals take in gases P, Q and R during breathing.

- **A)** A and B only
- **B)** A and C only
- **C)** B and D only
- **D)** B, C and D only

Question 2 of 26

Primary 5 Science (Term 3) 2 pts

Study the diagram below.



What is the direction in which food and water are being transported between leaf H and the roots?

A)

Directions for transport for water	Direction for transport of food
downwards	downwards

B)

Directions for transport for water	Direction for transport of food
downwards	upwards and downwards

C)

Directions for transport for water	Direction for transport of food
upwards	upwards

D)

Directions for transport for water	Direction for transport of food
upwards	upwards and downwards

Question 3 of 26

Primary 5 Science (Term 3) 2 pts

Which of the following is/are the function(s) of leaves?

A Trap sunlight
B Take in Water
C Carry out photosynthesis
D Allow the exchange of gases to take place

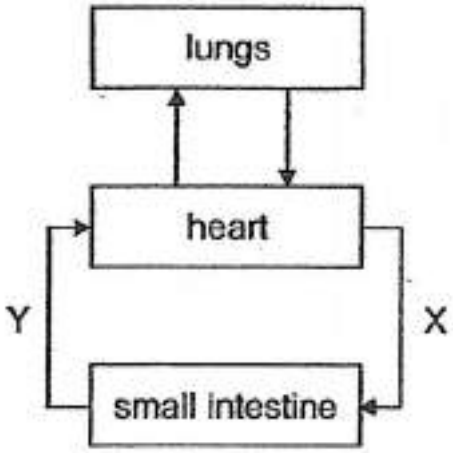
A) A only

B) B and C only

C) A, C and D only

D) B, C and D only

The diagram below shows how blood flows in certain parts of the body a few hours after a meal.



Which one of the following shows the amount of oxygen and digested food in Y when compared to X?

A)

Oxygen	Digested Food
less	less

B)

Oxygen	Digested Food
less	more

C)

Oxygen	Digested Food
more	less

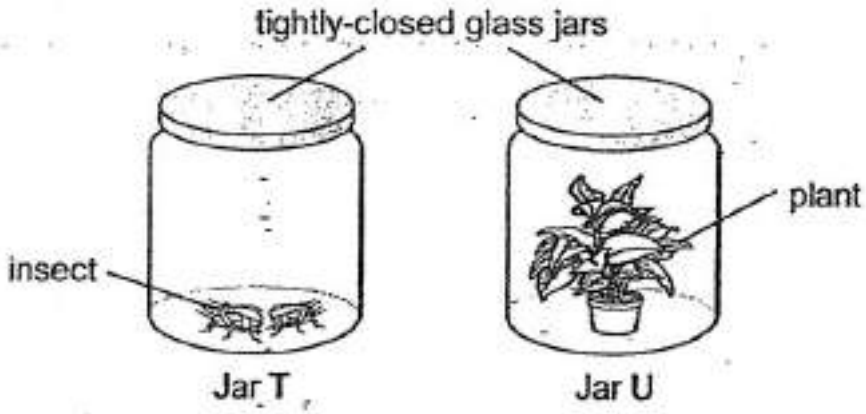
D)

Oxygen	Digested Food
more	more

Question 5 of 26

Primary 5 Science (Term 3) 2 pts

Study the set-up below.



The two glass jars, T and U, were placed in the dark for six hours. What would happen to the amount of oxygen in both jars after six hours?

A)

Jar T	Jar U
increased	increased

B)

Jar T	Jar U
increased	decreased

C)

Jar T	Jar U
decreased	increased

D)

Jar T	Jar U
decreased	decreased

Question 6 of 26

Primary 5 Science (Term 3) 2 pts

Which of the following statements about the heart are correct?

A The heart is made up of muscles.
B The heart stops pumping when we are asleep.
C The heart pumps blood to all parts of the body.
D The heart helps the body to take in oxygen and remove carbon dioxide.

A) A and C only

B) A and D only

C) B and C only

D) B and D only

Question 7 of 26

Primary 5 Science (Term 3) 2 pts

Which of the following are transported in the blood?

A Water
B Oxygen
C Digested Food
D Carbon Dioxide
E Waste Materials

A) B and D only

B) A, B and C only

C) A, D and E only

D) A, B, C, D and E

Question 8 of 26

Primary 5 Science (Term 3) 2 pts

Which one of the following correctly describes the functions of the parts of the human respiratory system?

A)

Nose	Windpipe	Lungs
allows air to enter and leave the body	transports air to and from the lungs	exchange of gases takes place

B)

Nose	Windpipe	Lungs
transports air to and from the lungs	exchange of gases takes place	allow air to enter and leave the body

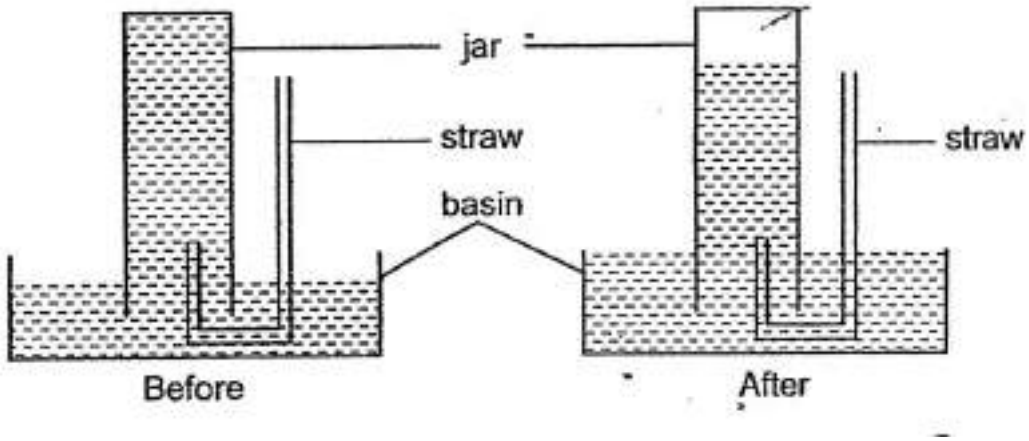
C)

Nose	Windpipe	Lungs
exchanges of gases takes place	transports air to and from the lungs	allow air to leave the body only

D)

Nose	Windpipe	Lungs
allows air to leave the body only	transports air to and from the lungs	exchange of gases takes place

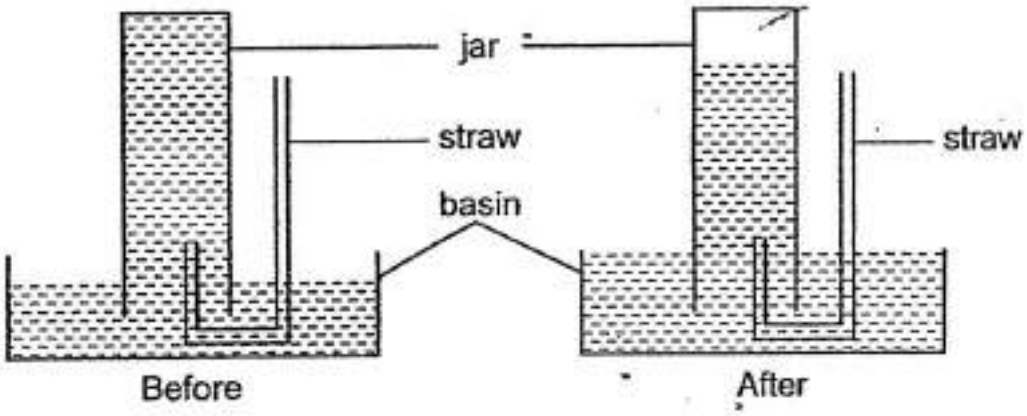
Joseph wanted to measure his lung capacity. He inverted a jar into a basin of water. When the jar was completely filled with water, he took a deep breath and blew into the jar using a straw.



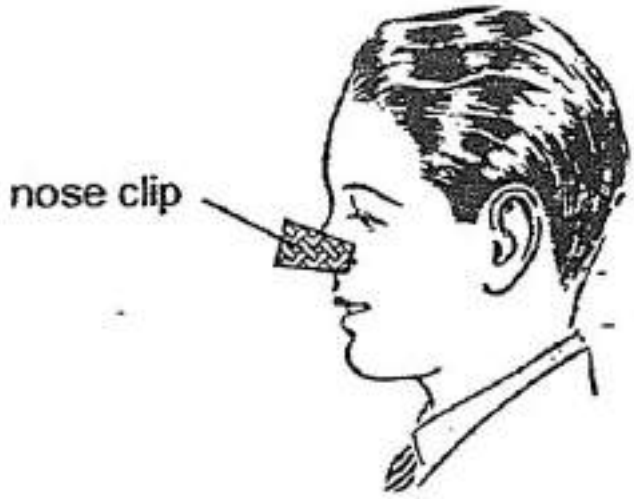
Which one of the following will indicate the capacity of his lungs?

- **A)** The volume of air in the jar.
- **B)** The volume of air in the straw.
- **C)** The volume of water in the jar.
- **D)** The volume of water in the basin of water.

Joseph wanted to measure his lung capacity. He inverted a jar into a basin of water. When the jar was completely filled with water, he took a deep breath and blew into the jar using a straw.



During the test, Joseph used a nose clip on his nose.



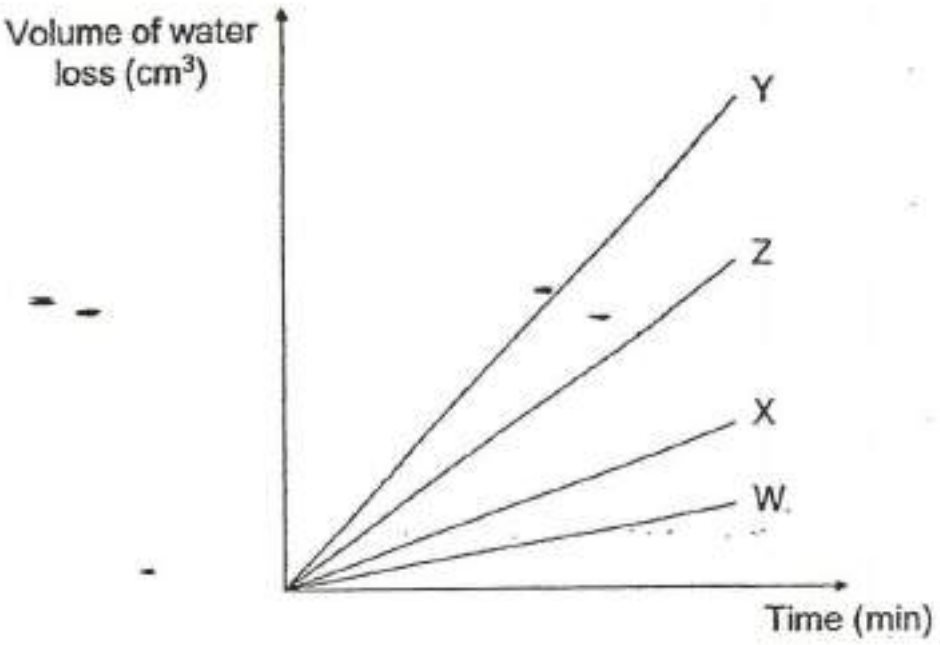
What was the function of the nose clip?

- **A)** To prevent water from entering his nose.
- **B)** To prevent air from escaping through his nose.
- **C)** To prevent too much air from entering his nose.
- **D)** To prevent water from escaping through his nose.

An experiment was conducted using four similar leaves W, X, Y and Z on the same plant. Different surfaces of the leaves were coated with oil as shown in the table below.

Leaf	Coated with oil	
	Upper surface	Lower surface
W	yes	yes
X	yes	no
Y	no	no
Z	no	yes

The plant was ~~palced~~ placed under bright sunlight for two hours. The volume of water loss from each leaf was measured and plotted in the graph below.



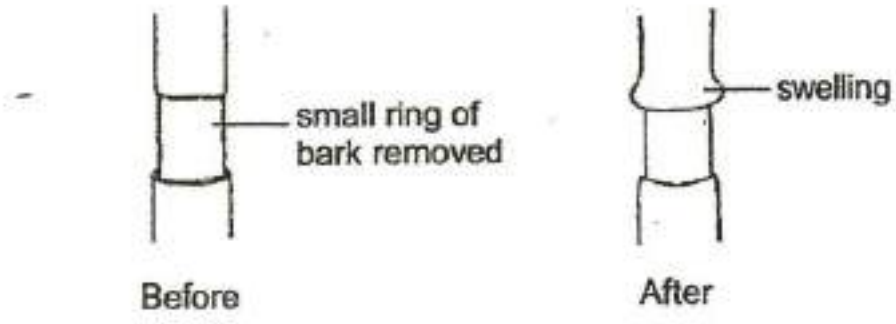
What can you conclude about the stomata on the leaves of this plant?

- **A)** More stomata are found on the lower surfaces.
- **B)** More stomata are found on the upper surfaces.
- **C)** No stomata are found on both the upper and lower surfaces.
- **D)** Equal number of stomata are found on both the upper and lower surfaces.

Question 12 of 26

Primary 5 Science (Term 3) 0 pts

Gayatri removed a small ring of bark from a plant growing in an open field. The ring of bark that was removed contained some food-carrying tubes. The water-carrying tubes were not removed. After a few days, a swelling was seen above the ring.



Give a reason for the swelling above the ring. (1 mark)

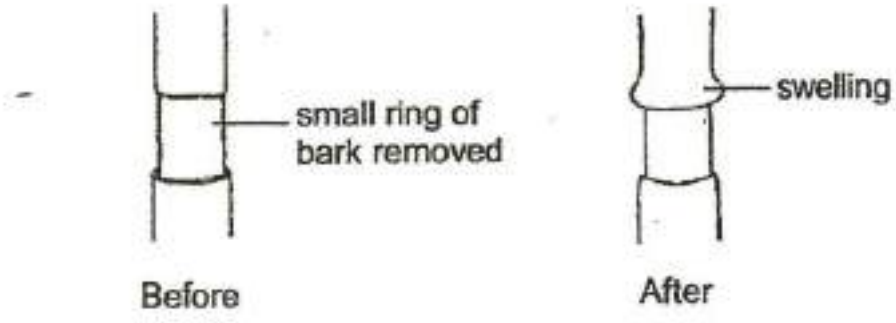
This question is designed for extended answers that parent/ teacher will have to assign and guide child to attempt after the test has been completed.

Grading: This question type is not graded on this system and will not affect the final score as it was designed in such a way that it requires manual assistance.

Question 13 of 26

Primary 5 Science (Term 3) 1 pt

Gayatri removed a small ring of bark from a plant growing in an open field. The ring of bark that was removed contained some food-carrying tubes. The water-carrying tubes were not removed. After a few days, a swelling was seen above the ring.



Besides water, what other substance does water-carrying tubes carry? (1 mark)

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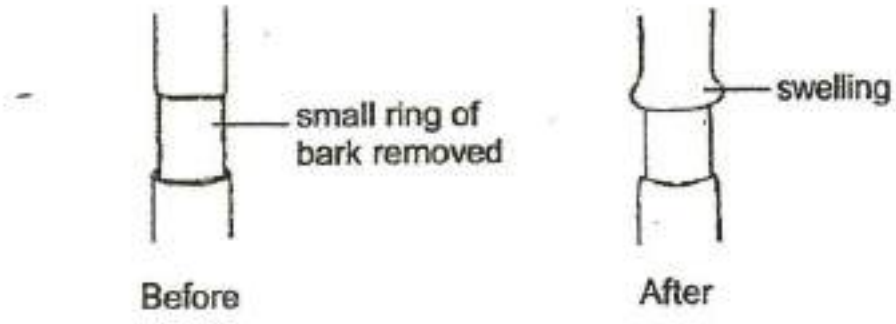

Explain what would happen to the plant if the water-carrying tubes were removed. (2 marks)

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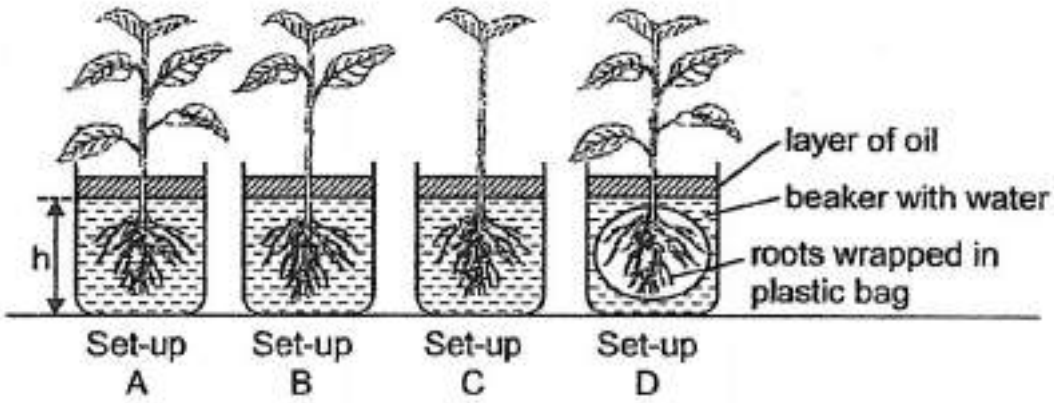
Jordan placed four similar plants in identical beakers. Each beaker contains an equal amount of water as shown below. The four set-ups A, B, C and D were placed near a window for a day.



He then recorded the amount of water left in each beaker at the end of the experiment.

Complete the table below to show the correct results of the experiment. [1]

h (cm)	Set-up
18	
14	
20	
16	

1. [ ]	18	A.	Set-up D
2. [ ]	14	B.	Set-up C
3. [ ]	20	C.	Set-up B
4. [ ]	16	D.	Set-up A

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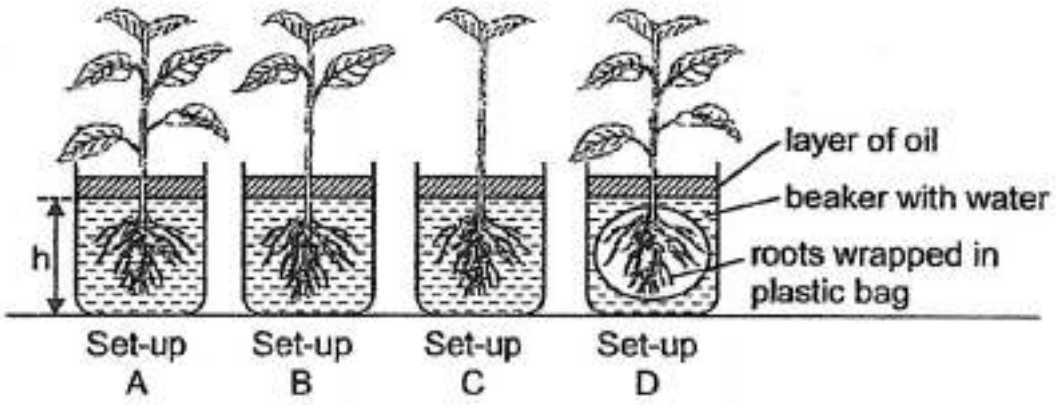

He then recorded the amount of water left in each beaker at the end of the experiment.

What is the purpose of the layer of oil in this experiment? (1 mark)

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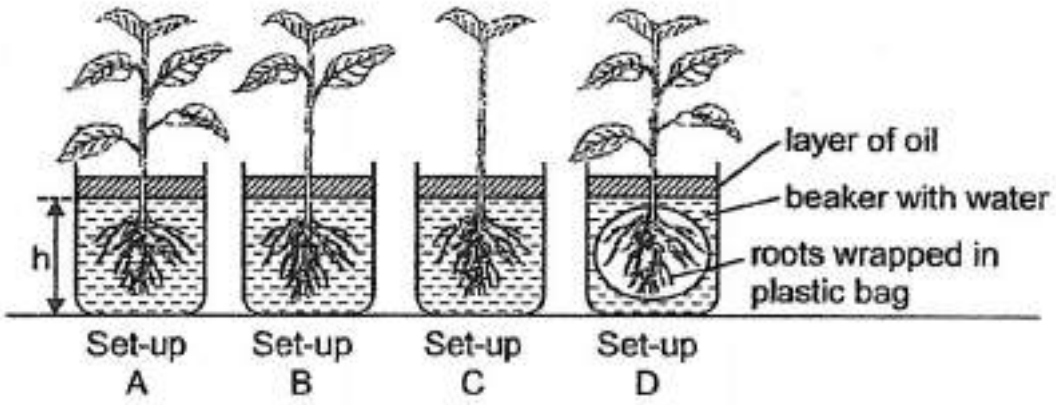
Question 17 of 26

Primary 5 Science (Term 3) 2 pts

Jordan placed four similar plants in identical beakers. Each beaker contains an equal amount of water as shown below. The four set-ups A, B, C and D were placed near a window for a day.



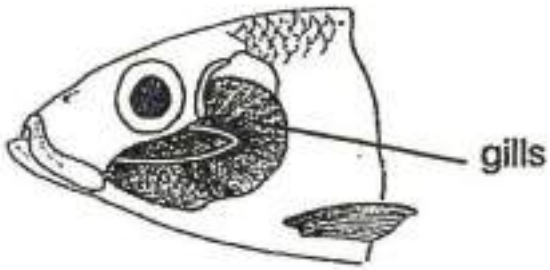
He then recorded the amount of water left in each beaker at the end of the experiment.

Which two set-ups should be compared to show that the roofs of the plant absorb water? Give a reason for your answer.

Question 18 of 26

Primary 5 Science (Term 3) 0 pts

Zhi Wen observed the gills of a fish using a magnifying glass.



The gills have many folds. How does this help the fish in the process of taking in oxygen? (1 mark)

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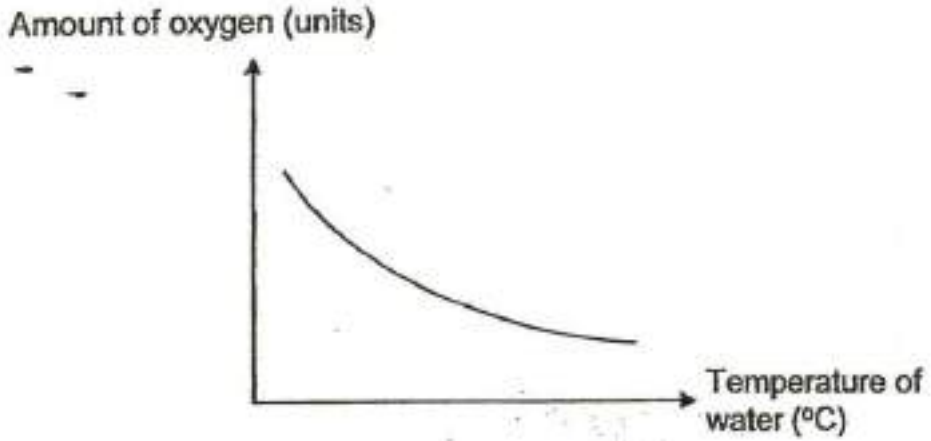
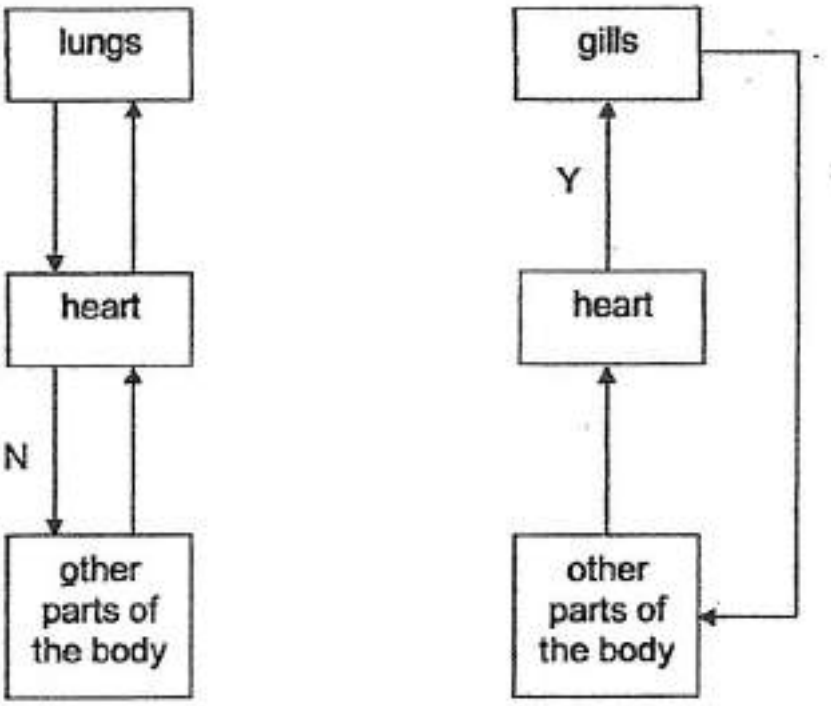
Zhi Wen observed the gills of a fish using a magnifying glass.

He then conducted an experiment to find out if temperature affects the amount of oxygen present in the water of his fish tank.
His results are shown in the graph below.



He observed that the breathing rate of his fishes in the tank increased as the temperature of the water in the fish tank increased.
Based on the results of the experiment, explain this observation. [2]

The diagrams below show the circulatory systems of a human and a fish. The arrows represent the blood vessels that carry blood around the body.



Circulatory system of a human

Circulatory system of a fish

State one difference between the flow of blood in a human and in a fish.
(1 mark)

This question is designed for extended answers that parent/ teacher will have to assign and guide child to attempt after the test has been completed.

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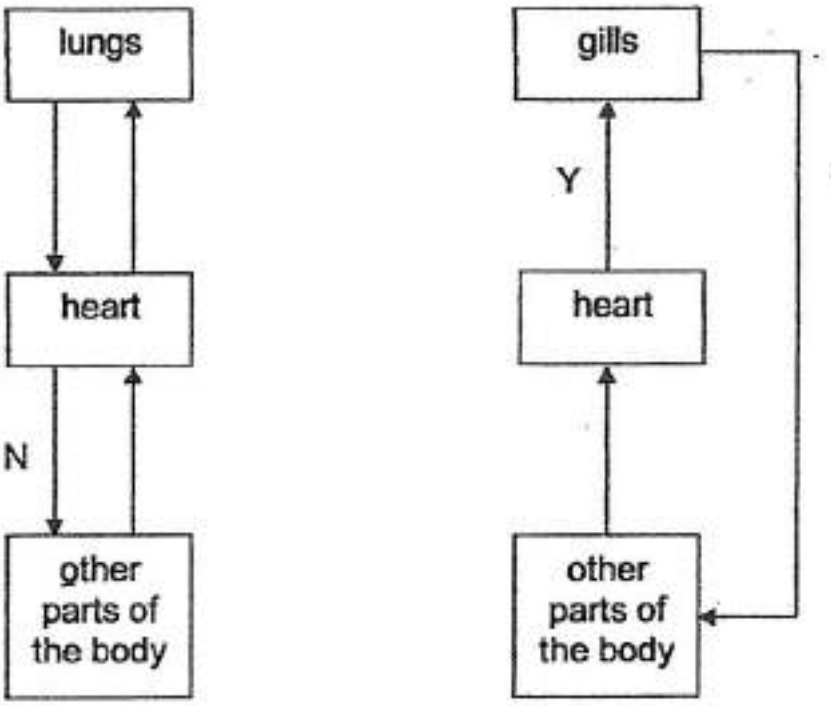

Circulatory system of a human

Circulatory system of a fish

State one difference between the gases found in the blood flowing at N and Y.
(1 mark)

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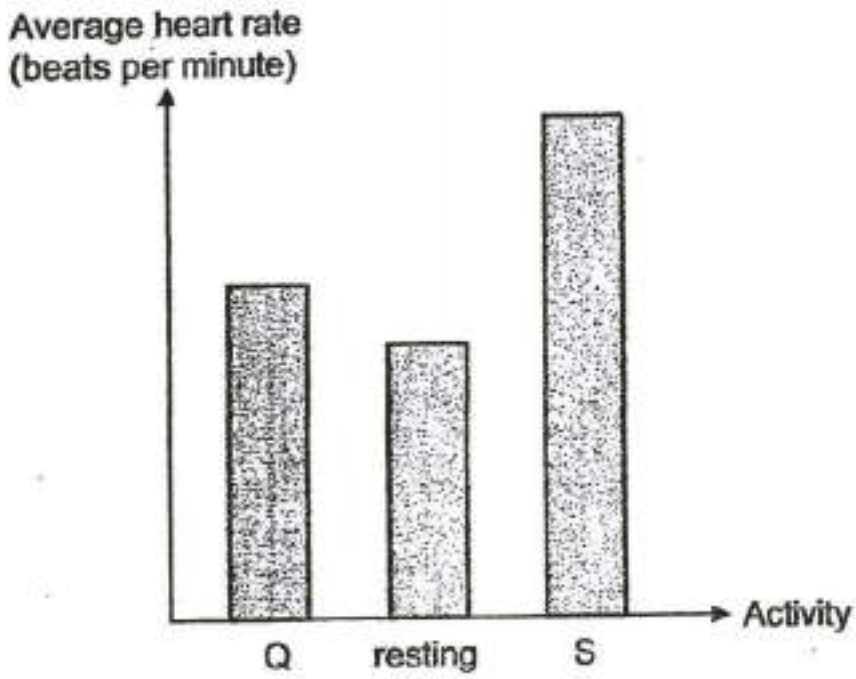
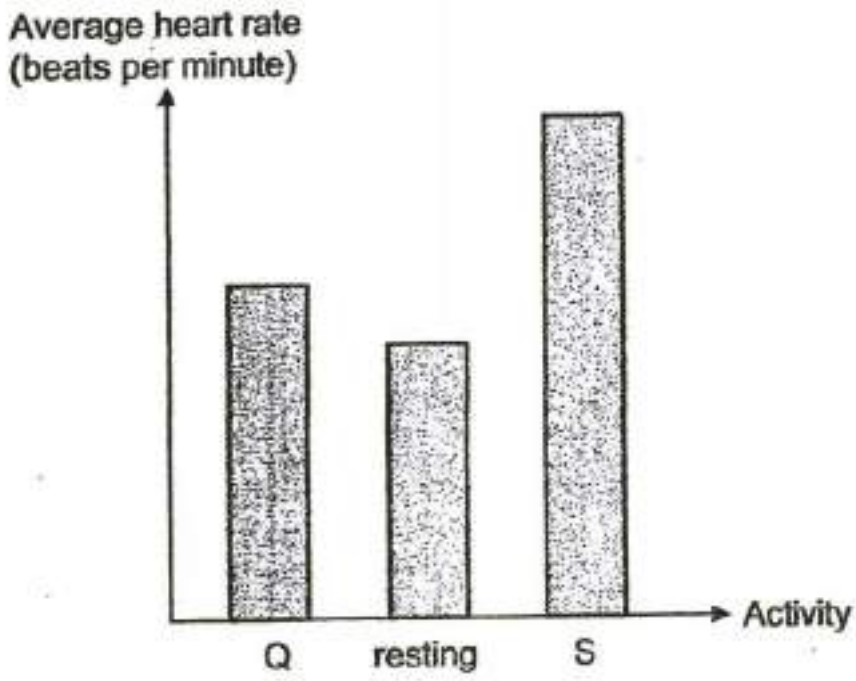
Sally wanted to find out how her average heart rate changed when she engaged in three different activities.
The results are shown below.



Which part of the graph, Q or S, represents the following activity below?

Jumping: _____

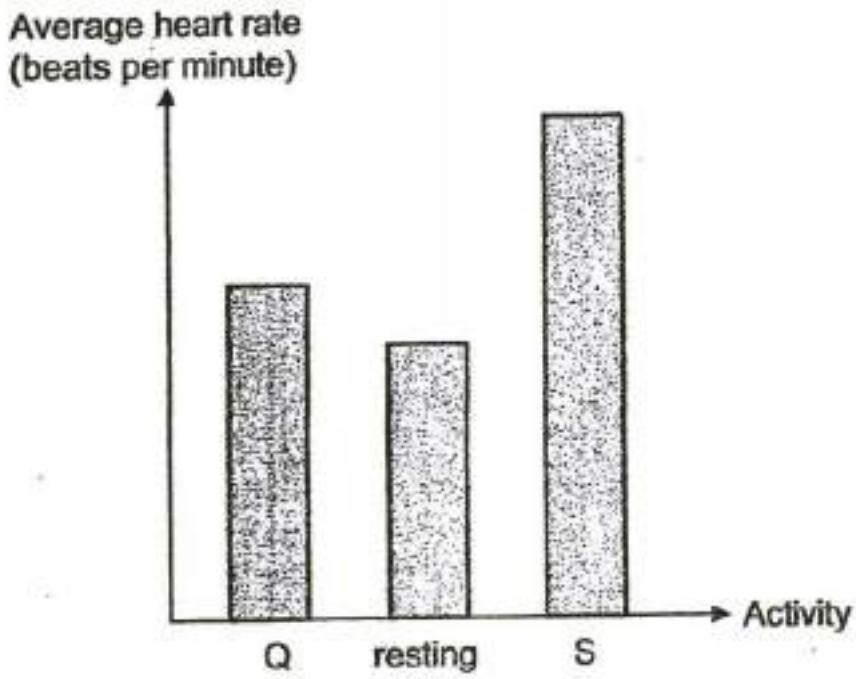
Sally wanted to find out how her average heart rate changed when she engaged in three different activities.
The results are shown below.



Which part of the graph, Q or S, represents the following activity below?

Strolling: _____

Sally wanted to find out how her average heart rate changed when she engaged in three different activities.
The results are shown below.



Explain why her average heart rate increased while she was engaged in activity S. (2 marks)

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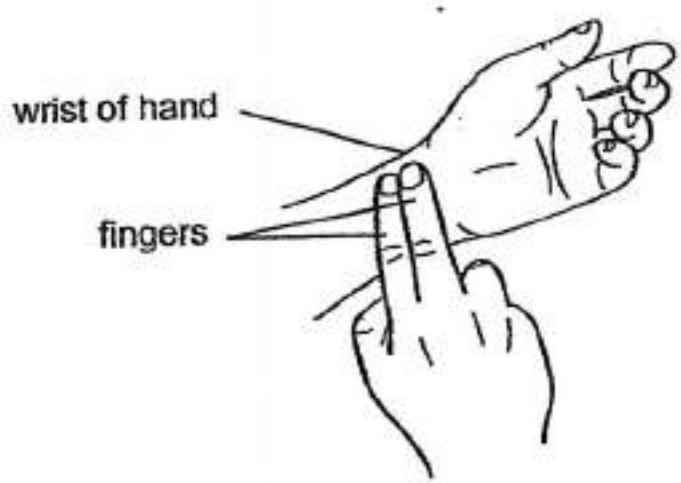
Question 25 of 26

Primary 5 Science (Term 3) 1 pt

Sally felt her pulse by pressing her fingers on her wrist as shown below.



To feel a pulse, which part of the circulatory system were her fingers pressing on?

Question 26 of 26

Primary 5 Science (Term 3) 0 pts

What role does the circulatory system play in the digestion of food? (1 mark)

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