Anglo-Chinese School
(Primary)
A Methodist Institution
(Founded 1886)

20

P5 SCIENCE
WEIGHTED ASSESSMENT 3

Name: _____ ( ) Date: 5 August 2025

Class: P5 _____

Duration: 30 mins Parent's Signature: _____

Optical Answer Sheet

1

2

3

4

5

6

Multiple Choice Questions (12 marks)

For each question from 1 to 6, four options are given. One of them is the correct answer. Make your choice (1, 2, 3 or 4) and shade your answer in the Optical Answer Sheet.

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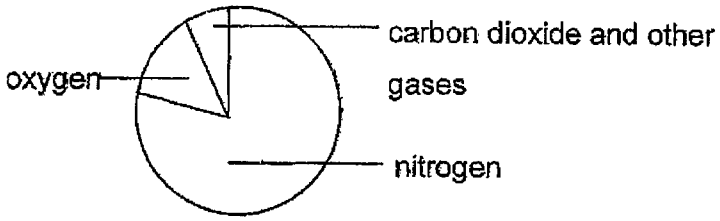
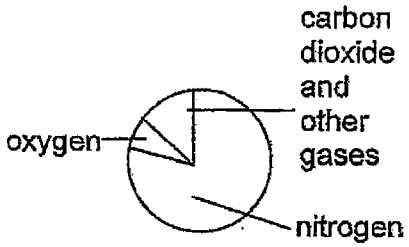
1 The pie chart below shows the proportion of gases in air exhaled by a person.

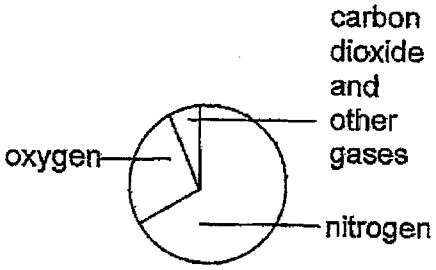


Which pie chart shows the proportion of gases in inhaled air?

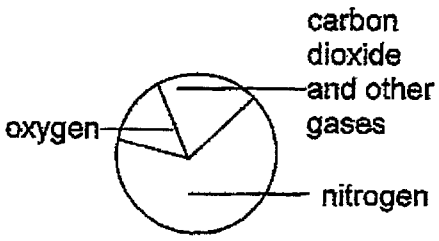
(1)



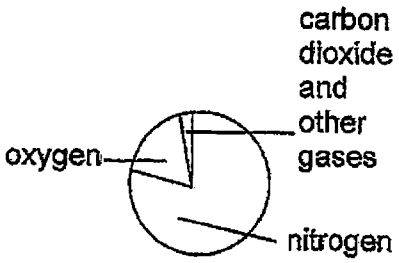
(2)



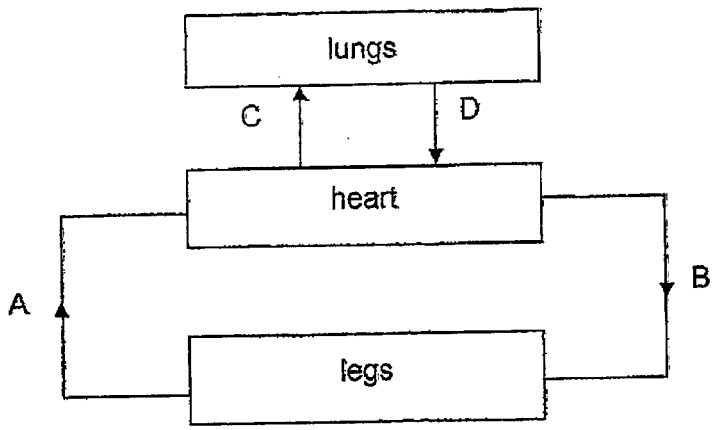
(3)



(4)



2 The diagram below shows the movement of blood in the human circulatory system to parts of the body. The arrows A, B, C and D represent blood vessels.



Which statement describes the the content of the blood in blood vessels A, B, C and D?

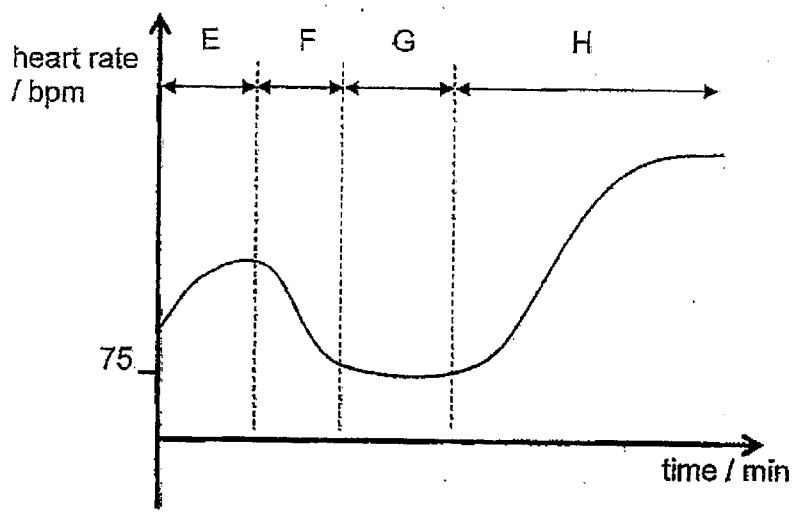
(1) The blood in C has more oxygen than in B.

(2) The blood in D has more oxygen than in A.

(3) The blood in A has less carbon dioxide than in D.

(4) The blood in B has more carbon dioxide than in C.

3 The diagram below shows Fiona's heart rate as she carried out certain activities. Her resting heart rate is 75 beats per minute (bpm).



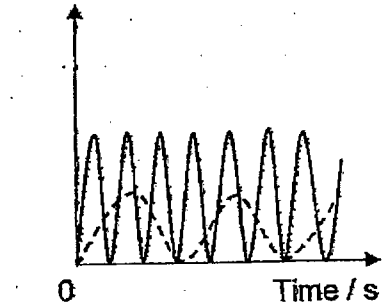
Based on the information above, which row best describes the activities Fiona was engaged in at E, F, G and H?

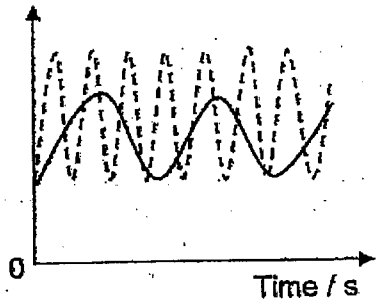
	E	F	G	H
(1)	sprinting	stretching	sitting	slow walk
(2)	sprinting	jog on the spot	stretching	slow walk
(3)	slow walk	stretching	sitting	sprinting
(4)	slow walk	jog on the spot	stretching	sprinting

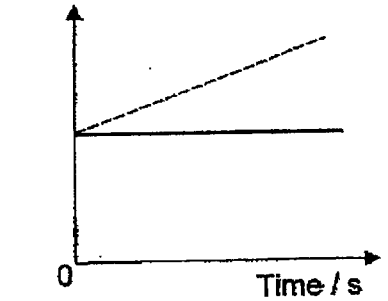
4 Heidi took part in a 400-meter race. The volume of air in her lungs was measured before and immediately after the race.

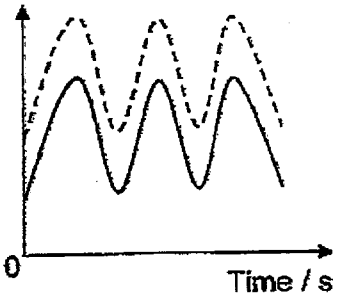
Which graph shows how the volume of air in Heidi's lungs changes before and after the race?

Key:
Before the race: ——————
After the race: - - - - - - - - -

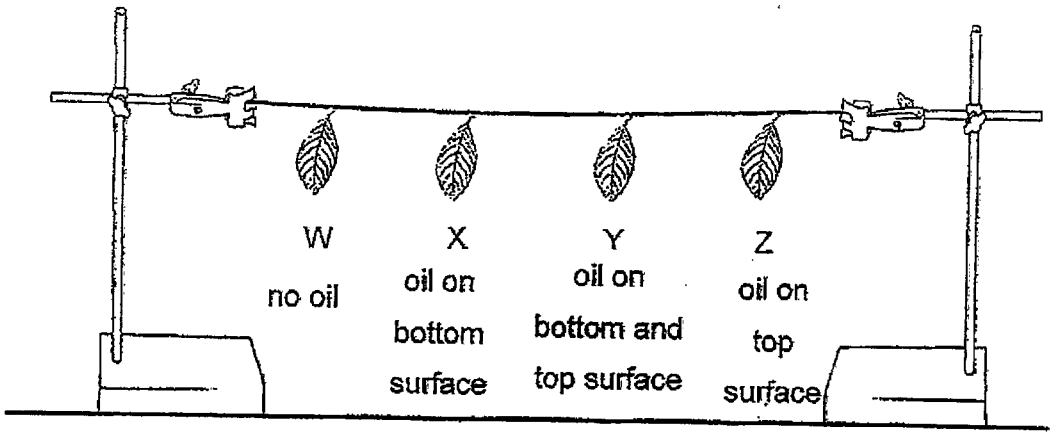
(1)


(2)


(3)


(4)


5 Jacob carried out an experiment using the set-up below with four leaves W, X, Y and Z of the same size and from the same plant. He coated some of the leaf surfaces with oil that did not drip. Each leaf was then weighed and hung up in an open space as shown below.



After six hours, each of the leaves were weighed again. Which of the following results shows that leaves have more tiny openings on the bottom surface?

(1)

Leaf	Initial mass / g	Final mass /g
W	15	6
X	15	9
Y	15	15
Z	15	12

(2)

Leaf	Initial mass / g	Final mass /g
W	15	6
X	15	12
Y	15	15
Z	15	9

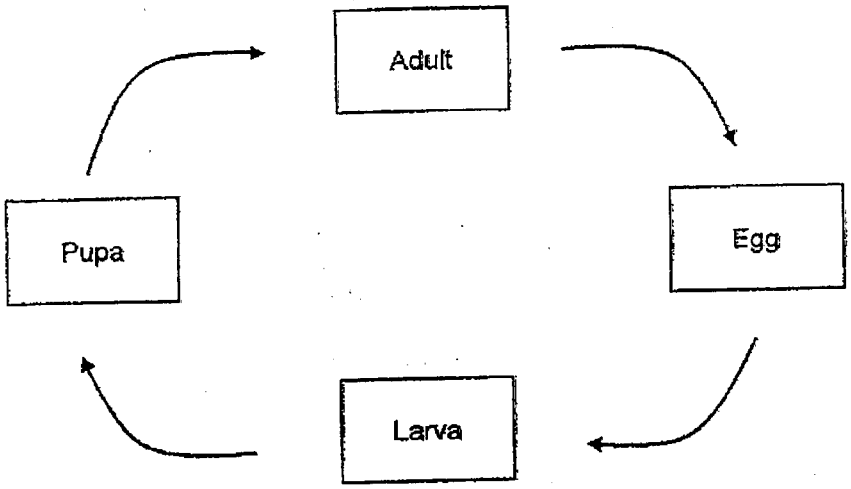
(3)

Leaf	Initial mass / g	Final mass /g
W	15	15
X	15	9
Y	15	6
Z	15	12

(4)

Leaf	Initial mass / g	Final mass /g
W	15	15
X	15	12
Y	15	6
Z	15	9

6 The diagram below shows the life cycle of animal K.



What is animal K?

(1) Frog

(2) Chicken

(3) Grasshopper

(4) Mealworm beetle

Open-Ended Questions (8 marks)

For questions 7 and 8, write your answers in the spaces provided. The number of marks available is shown in brackets [ ] at the end of each part.

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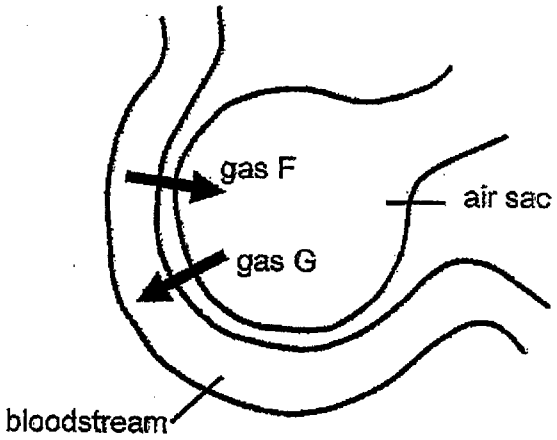
7 The diagram below shows an air sac and bloodstream found in the human respiratory system.

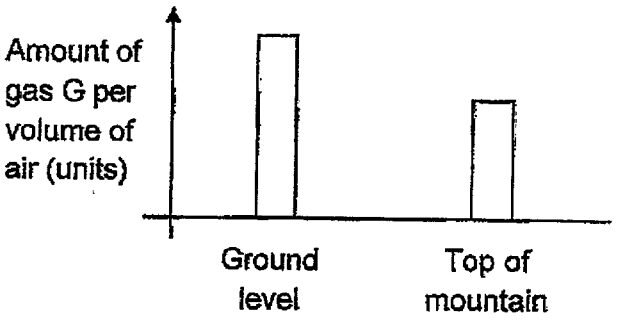


(a) Identify gases F and G. [1]

(i) Gas F: _____

(ii) Gas G: _____

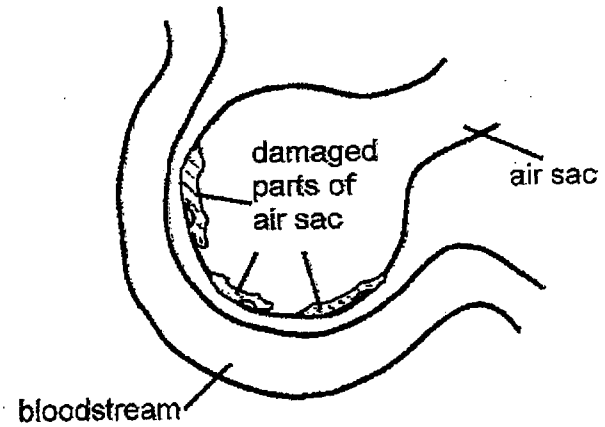
(b) The graph below shows the amount of gas G per volume of air on ground level and at the top of a mountain.



1

Explain why a person's heart rate increases at the top of the mountain. [2]

(c) Disease X causes some parts of the air sacs to be damaged as shown below.

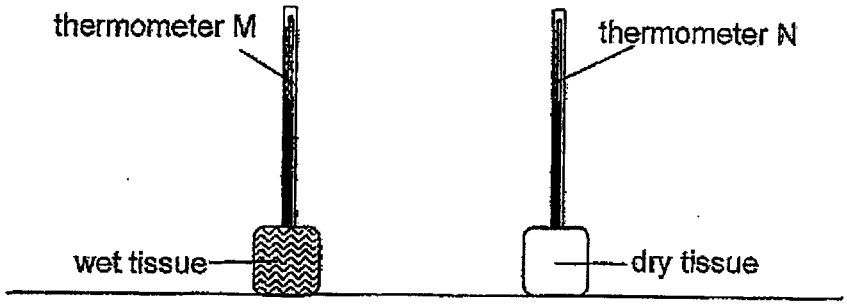


Explain how disease X will affect the amount of gas G entering the bloodstream? [2]

4

8 (a) State what boiling is. [1]

(b) Adam wrapped the bulb of thermometer N with a piece of dry tissue paper and the bulb of thermometer M with a piece of wet tissue paper. Both pieces of tissue paper and both termometers were at room temperature at the start of the experiment.



Which thermometer, M or N, will have a lower temperature after 30 minutes? Explain. [2]

End of Paper

YEAR : 2025
LEVEL : PRIMARY 5
SCHOOL : ANGLO-CHINESE SCHOOL (PRIMARY)
SUBJECT : SCIENCE
TERM : WEIGHTED ASSESSMENT 3

Q1	4	Q2	2	Q3	3	Q4	4	Q5	3
Q6	4								

Q7	a)	Gas F: Carbon dioxide Gas G: Oxygen
	b)	There is less oxygen at the top of the mountain. The heart needs to pump blood faster to transport enough oxygen to the body.
	c)	Disease X causes the exposed surface area to the bloodstream of the air sac to be less. Hence the amount of gas G entering the blood stream will decrease.
Q8	a)	Boiling is when a liquid changes into a gas because it is heated to its boiling point.
	b)	M. The water in the wet tissue gains heat from the thermometer and evaporates.

END