

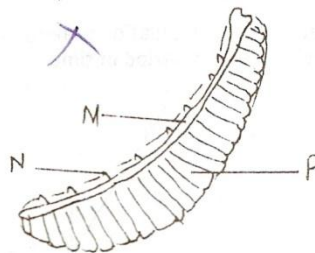
NAME _____ INDEX NUMBER _____

SCHOOL _____ DATE _____

GASEOUS EXCHANGE

1. 1992 Q11 P1

The diagram below represents an organ from a bony fish. Study the diagram and answer the questions that follow



(a) Identify the organ and the parts labelled M, N, and P

M.....

N.....

P.....

(b) How the structures are labelled P adapted to their function?

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2. 1994 Q14 P1

What are the characteristics do gills of a fish and the mouth cavity of a frog have in common that enables them to be efficient in gaseous exchange?

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3. 1996 Q14 P1

(a) Describe the path taken by carbon dioxide released from the tissue of an insect to the atmosphere (3 marks)

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(b) Name two structures used for gaseous exchange in plants (2 marks)

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4. 1998 Q4 P1

Why are gills in fish highly vascularised?

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5. 1999 Q5 P1

Suggest three reasons why green plants are included in a fish aquarium.

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6. 1999 Q16 P1

Describe the:

a) Process of inhalation in mammals.

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b) Mechanisms of opening and closing of stomata in plants.

7. 2000 Q11c P1

State two ways in which the leaf is suited to gaseous exchange

8. 2001 Q10 P1

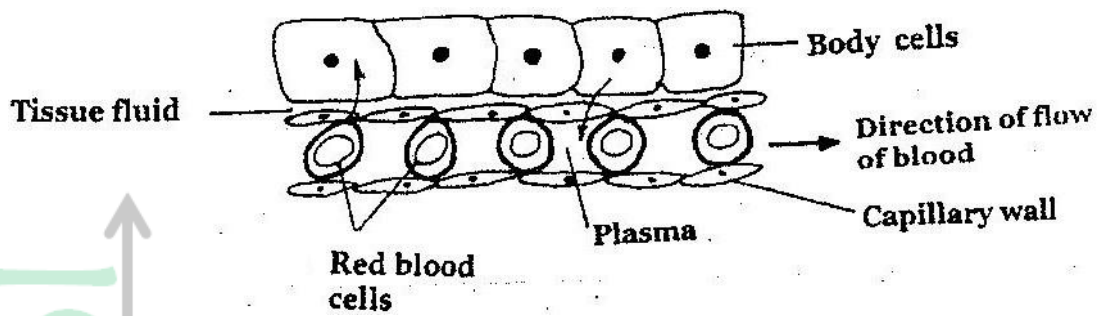
Name three sites where gaseous exchange takes place in terrestrial plants.

9. 2002 Q9 P1

Name two gaseous exchange structures in higher plants.

10. 2003 Q13 P1

The diagram below shows gaseous exchange in tissues.



a) Name the gas that diffuses:

i) To the body cells

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ii) From the body cells

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b) Which compound dissociates to release the gas named in (a) (i) above?

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c) i) What is tissue fluid?

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ii) What is the importance of tissue fluid?

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d) Name the blood vessel with the highest concentration of:

i) Glucose

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ii) Carbon dioxide

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11. 2004 Q3 P1

The diagram below represents a part of the rib cage.





a) Name the parts labelled W, Y and Z. (3 marks)

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b) How does the part labelled Z facilitates breathing in? (3 marks)

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12. 2005 Q18 P1

Describe how gaseous exchange takes place in terrestrial plants. (20 marks)

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13. 2006 Q5 P1

State two ways in which floating leaves of aquatic plants are adapted to gaseous exchange. (2 marks)

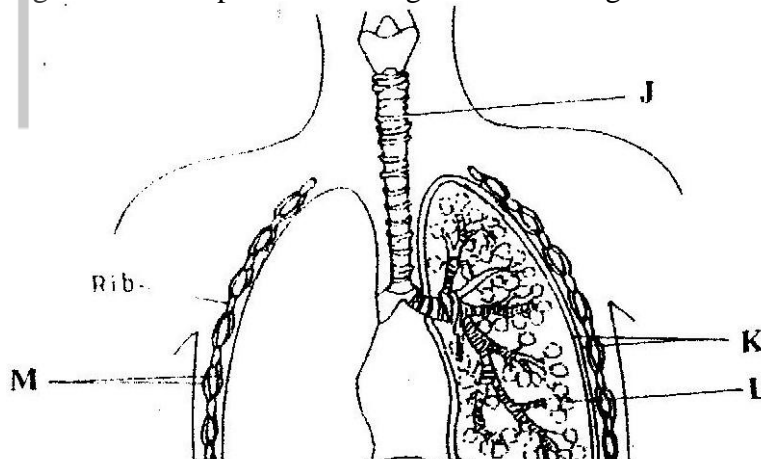
14. 2007 Q12 P1

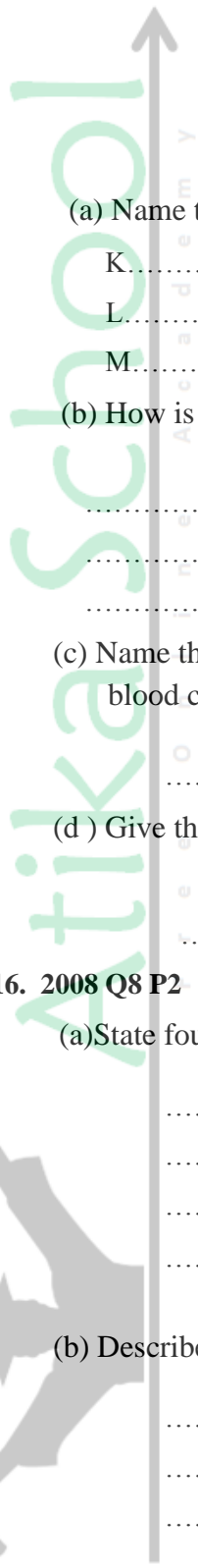
(a) Name two structures for gaseous exchange in aquatic plant (2 marks)

(b) What is the effect of contraction of the diaphragm muscles during breathing in mammals? (3 marks)

15. 2007 Q1 P2

The diagram below represents some gaseous exchange structures in humans





(a) Name the structures labeled K, L, and M (3 marks)

K.....
L.....
M.....

(b) How is the structure labeled J suited to its function? (3 marks)

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(c) Name the process by which inhaled air moves from the structure labeled L into blood capillaries (1 mark)

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(d) Give the scientific name of the organism that causes tuberculosis in humans (1 mark)

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16. 2008 Q8 P2

(a) State four characteristics of gaseous exchange surfaces (4 marks)

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(b) Describe the mechanism of gaseous exchange in a mammal (16 marks)

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17. 2009 Q16 P1

(a) Name the gaseous exchange surface in insects (1 mark)

(b) How is the surface named in (a) above suited to its function (2 marks)

18. 2011 Q19a P1

a) Apart from the lungs, name two gaseous exchange surfaces in a frog. (2 marks)

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19. 2011 Q22 P1

State the difference in content of oxygen and carbon (IV) Oxide in the air that enters and leaves the human lungs. (2 marks)

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20. 2011 Q3a, b P2

a) Name the causative agents for the following respiratory diseases.

i) Whooping cough. (2 marks)

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ii) Pneumonia (2 marks)

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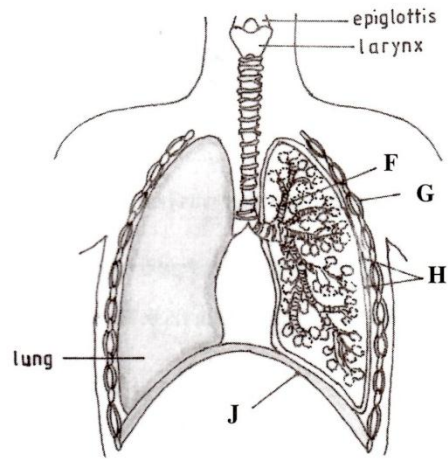
b) Describe how oxygen in the alveolus reaches the red blood cells (4 marks)

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21. 2012 Q6 P1

The diagram below represents part of gaseous exchange system in human





(a) Name the parts labelled F and G. (2 marks)

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(b) State one function of each of the parts labelled H and J (2 marks)

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22. 2012 Q5 P2

(a) Describe the process of inhalation. (4 marks)

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(b) Explain the mechanism of stomatal opening (4 marks)

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