

AQA, OCR, Edexcel

GCSE Science

GCSE Biology

Diffusion Questions

Name:

M M E

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Total Marks: /18

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Q1: What is the definition of diffusion?

(1 mark)

Q2: Draw an arrow to show the concentration movement in diffusion.

High
Concentration

Low
Concentration

(1 mark)

Q3: Give 2 examples of diffusion occurring in the body.

1 _____

2 _____

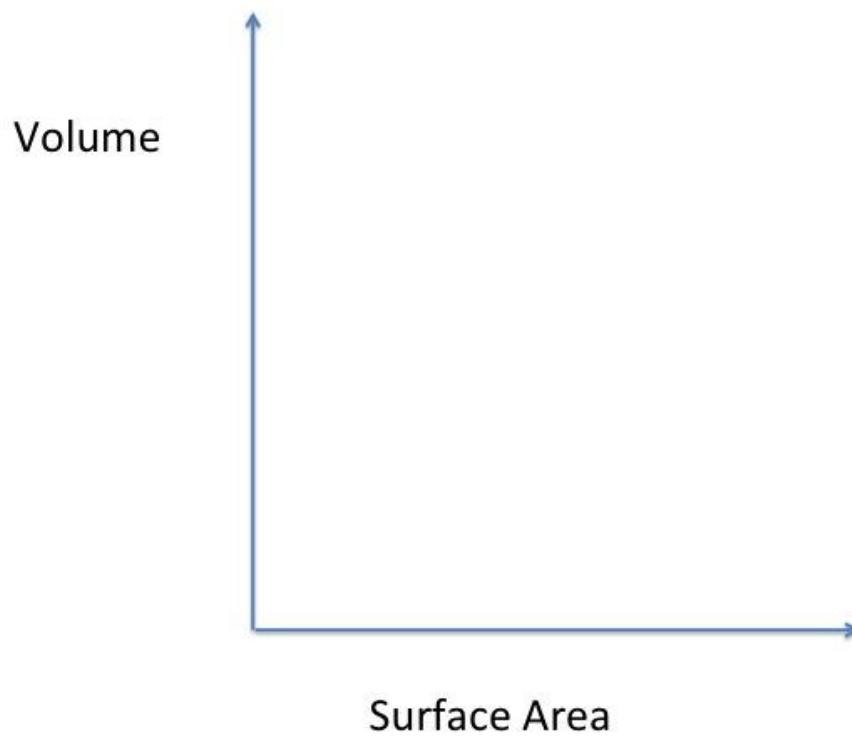
(2 marks)

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Q4: Two students want to design an experiment to investigate the rate of diffusion in the lungs. What variables could the students change to see the effects on diffusion rate?

(3 marks)

Q5: Using the graph below, plot what the rate of diffusion would be.



(2 marks)

Q6: Explain why the lungs are highly specialised to use oxygen molecules by diffusion.

(3 marks)

Q7: Name 2 substances that leave the cell by diffusion.

1 _____

2 _____

Q8: Cells surface to volume ration can be calculated using cubes as examples.

	1cm	2cm	3cm
Surface Area (cm ²)	6	24	54
Volume (cm ³)	1	8	27
Surface Area: Volume			

i) Using the table above calculate and fill in the surface area to volume ratio.

(3 marks)

ii) Which cell has the most efficient surface area to volume ratio?

Cell _____

(1 mark)

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Q9: Explain how the digestive system has adapted to provide efficient diffusion in the intestine.

(6 marks)