

BIOLOGY
Worksheet**LW11 - SIMPLE & FACILITATED DIFFUSION**

Q1) Diffusion is a method of transporting substances.

a) Define Diffusion.

[3 marks]

b) Explain why diffusion is important in cells?

[2 marks]

c) Which of the following statements is incorrect?

A Diffusion moves up the concentration gradient

B It takes place until molecules are equally distributed

C Diffusion is a passive process

D Small molecules use diffusion to pass through the cell membrane

[1 mark]

Q2) Facilitated diffusion and simple diffusion are very similar processes as they both occur naturally.

a) Give another way in which facilitated and simple diffusion are similar.

b) How are molecules transported across the cell membrane in facilitated diffusion?

[1 mark]

c) What types of molecules pass the cell membrane via facilitated diffusion?

[1 mark]

d) Explain why these types of molecules use facilitated diffusion?

[1 mark]

[2 marks]

Q3) A fast rate of diffusion is required by cells to ensure that essential substances can be transported rapidly.

a) Explain how the rate of diffusion is affected by a high temperature?

[3 marks]

b) What effect does a thicker membrane have on the rate of diffusion?

[3 marks]

c) Give another factor that affects the rate of diffusion except temperature and the thickness of membrane.

[1 mark]

[TOTAL 18 MARKS]