



Diffusion

1 Define diffusion (remember to use key words)

Diffusion is the **movement (spreading out) of particles** from an area of **higher concentration to an area of lower concentration**.

[2 marks]

2 Name 3 factors that will affect the rate of diffusion

- 1) Concentration gradient
- 2) Area over which the particles are diffusing
- 3) Distance of diffusion

[3 marks]

3 Cells are surrounded by a cell membrane. These can control what enters and leaves the cells because only very small molecules in the solutions either side of the membrane can diffuse through.

Tick the molecules below that are able to diffuse through cell membranes.

Amino acid

Water

Glucose

Glucose

Oxygen

Starch

[3 marks]

4 Name 3 places in an animal or plant that diffusion or osmosis takes place

Example - Water is absorbed across the wall of the large intestine in animals.

- 1) Glucose across small intestine
- 2) Oxygen or CO₂ across alveoli/capillary
- 3) Water in roots of plants (osmosis)

Many more

[3 marks]

[Total - 11 marks]