

Diffusion

Describe diffusion.

Diffusion

Do substances cross the cell membrane by diffusion?

Diffusion

Give two examples of why diffusion is important in living organisms.

Diffusion **Supplement**

What four factors affect the rate of diffusion?

Diffusion **Supplement**

Why does a smaller agar cube change colour faster?

Diffusion **Supplement**

Surface area to volume ratio of a 2 cm cube?

Yes. Some substances move into and out of cells by diffusion through the cell membrane.

The net movement of particles from a region of their higher concentration to a region of their lower concentration (i.e. down a concentration gradient), as a result of their random movement.

Surface area, temperature, concentration gradient and distance.

Oxygen enters cells for respiration; carbon dioxide enters leaf cells for photosynthesis; digested food diffuses into the blood; urea leaves cells.

Surface area $24 \text{ cm}^2 \div \text{volume } 8 \text{ cm}^3 = 3 : 1$.

It has a larger surface area to volume ratio and a shorter distance for the acid to travel.