

Diffusion

Describe diffusion.

Diffusion

Where does the energy for diffusion come from?

Diffusion

Do substances cross the cell membrane by diffusion?

Diffusion

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

Diffusion

What four factors affect the rate of diffusion?

Diffusion

Why does a smaller agar cube change colour faster?

Diffusion

Surface area to volume ratio of a 2 cm cube?

The kinetic energy of the random movement of molecules and ions.

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.

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

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

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

Surface area, temperature, concentration gradient and distance.

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