

Transport in cells

Define diffusion

Transport in cells

Define osmosis

Transport in cells

Define active transport

Transport in cells

Factors that increase the rate of diffusion

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Which of diffusion, osmosis and active transport need energy from respiration?

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Potato core practical: what is measured?

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Potato core practical: why blot the cylinders dry?

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What does a potato gaining mass show?

The diffusion of water from a dilute solution to a more concentrated solution through a partially permeable membrane.

The net movement of particles from a region of higher concentration to a region of lower concentration.

A steeper concentration gradient, a higher temperature and a larger surface area.

Movement of substances against a concentration gradient, from dilute to concentrated, using energy from respiration.

The mass of potato cylinders before and after time in solutions of different concentrations.

Only active transport.

The solution is more dilute than the cell contents, so water entered by osmosis.

Water on the surface would add extra mass that is not from osmosis.

Transport in cells

Percentage change in mass equation

	$\frac{(\text{final mass} - \text{initial mass})}{\text{initial mass}} \times 100.$