

Welcome to Mr Chalk's Online Lab!

Today's Lesson: Movement Across the Membrane Consolidation

Extension tasks

Movement of Molecules

Diffusion is the movement of a substance from an area of high concentration to an area of low concentration. Diffusion happens in liquids and gases because their particles move randomly from place to place. Diffusion is an important process for living things. It is how substances move in and out of cells.

Describe how the rate of diffusion across a membrane can be measured.

One example of molecules that diffuse across cell membranes is:

Describe facilitated diffusion:

In cellular biology, active transport is the movement of molecules across a membrane from a region of their lower concentration to a region of their higher concentration—against the concentration gradient. Active transport requires cellular energy to achieve this movement.

What is active transport?

Where in the body does active transport occur?

Describe the spontaneous net movement of solvent molecules through a selectively permeable membrane into a region of higher solute concentration, in the direction that tends to equalize the solute concentrations on both sides.

Describe what osmosis is and the effect changing water concentration has on it.

Cells Game Design Instructions

Specification Link: A.3 Cell Biology

Checklist: Before you start have you got the following:

Have you got:

- A list of several questions you can ask people while they play
- An idea of what your game is going to look like
- An idea of what the rules of your game are going to be
- All of the equipment you need to make your game
- An idea of what could give your game the "WOW" factor

Questions that you should ask yourself while completing this:

What should it do first?

Is something confusing me?

Could I explain this to someone else?

Could I have used more scientific terms?

Where can I look for help?

Have I double checked what I need to include?

How can I do it better?

Do my instructions make sense?

Could I make my game look any better?

How easy was my game to play?

TASKMASTER

You have 1 hour to complete this task

Background Information

Useful information

The human respiratory system contains the organs that allow us to get the oxygen we need and to remove the waste carbon dioxide we do not need. It contains these parts: two lungs, tubes leading from the mouth and nose to the lungs.

After you have completed the task don't forget to send in a photo of what you've done

In this video we will look at

- Diffusion
- Active transport
- Osmosis

Today's notes



Higher questions

Foundation questions

