

Definitions and Concepts for WJEC (Wales) Biology GCSE

Topic 1.1: Cells and Movement Across Membranes

*Definitions in **bold** are for higher tier only*

Definitions marked by '' are for separate sciences only*

Active site - The part of the enzyme which is specific to the substrate and has a complementary shape to it.

Active transport - The movement of particles from an area of low concentration to an area of high concentration, against the concentration gradient. This requires energy.

Amino acids - Small molecules that link together to make up a protein.

Cell differentiation - The production of specialised cells with specific functions.

Cell membrane - A selectively permeable barrier which controls the movement of substances into and out of the cell. It also has receptor molecules on the surface for cell-to-cell signalling.

Cell wall - An outer layer made of cellulose fibres in plant cells. It provides the plant cell with strength and support.

Chloroplasts - The organelles that are the site of photosynthesis. They contain chlorophyll (a green pigment) which absorbs light energy and important enzymes which are needed for photosynthesis.

Concentration gradient - The difference in concentration between two areas.

Cytoplasm - Contains dissolved nutrients and salts and the organelles. It is also the site of many chemical reactions.

Denaturation - The permanent change in the shape of an enzyme's active site that stops the enzyme functioning normally.

Diffusion - The net spreading out of particles from a high concentration to a lower concentration (down their concentration gradient). Energy is not required, so it is a passive process.

Enzymes - Biological catalysts that increase the rate of chemical reactions.

This work by [PMT Education](https://www.pmt.education) is licensed under [CC BY-NC-ND 4.0](https://creativecommons.org/licenses/by-nc-nd/4.0/)



