

Unit 1 Cells

Eukaryote	A cell, like an animal or plant cell, that contains a nucleus and mitochondria
Prokaryote	A cell, like a bacteria, that has no nucleus or mitochondria
Nucleus	Where DNA is stored in the cell
Cytoplasm	Where chemical reactions happen in a cell
Cell membrane	It controls what goes in and out of a cell
Chloroplast	Does photosynthesis in a plant cell
Mitochondria	Does respiration in plant and animal cells
Respiration	The release of energy using glucose and oxygen
Cell wall	Supports plant cells
Ribosome	Makes protein in the cell
Vacuole	Stores cell sap in a plant cell
Cellulose	What the cell wall is made of
Flagellum	The tail on a bacteria
Plasmid	A ring of DNA found in a bacteria
Diffusion	The movement of particles like oxygen from a high concentration to a low concentration
Concentration gradient	The difference in concentration between two places. For example there is lots of oxygen in the lungs, not much in the blood. Oxygen diffuses in because of the high concentration gradient
Isotonic	A solution that is the same concentration as the inside of a cell
Hypotonic	A solution that is more watery than the inside of a cell
Hypertonic	A solution that is more sugary or salty than the inside of a cell
Osmosis	The movement of water from a dilute solution, to a strong solution across a semi permeable membrane
Partially permeable membrane	A membrane that lets water across it easily but blocks other things, e.g. a cell membrane.
Active transport	The movement of particles from an area of low concentration to high concentration. It needs energy and a carrier protein
Stem cell	An unspecialised cell that can turn into any other type of cell
Differentiation	The process of cell becoming specialised
Embryo stem cell	A stem cell from an embryo that can turn into any other type of cell
Bone marrow stem cell	A stem cell from bone marrow that can turn into blood cells
Mitosis	Cell division that creates 2 exact genetic copies of a cell
Clone	An exact genetic copy