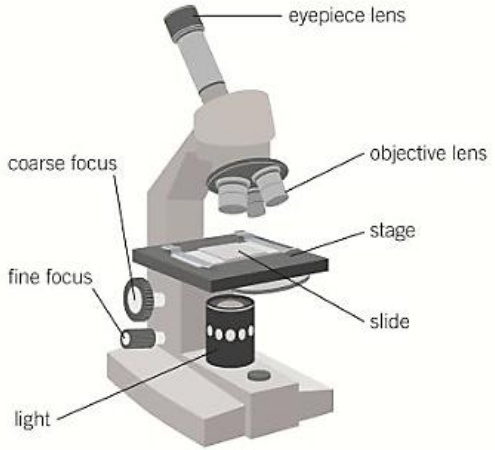
wymondham high

7 Science B1.1

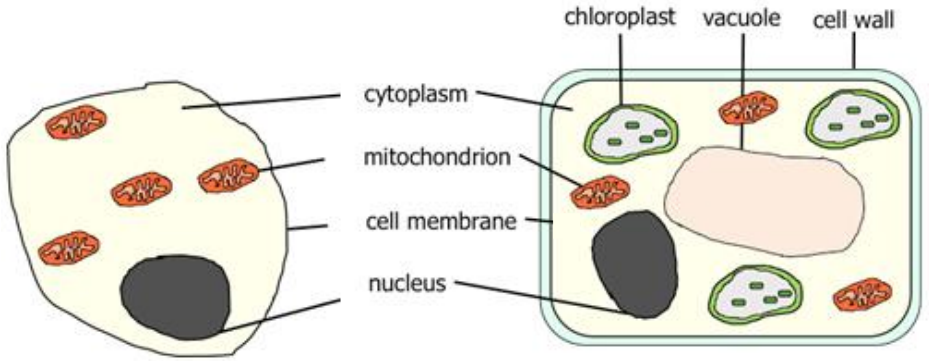
Section 1- Observing cells – The microscope



Section 2- Cell structures

Animal cell

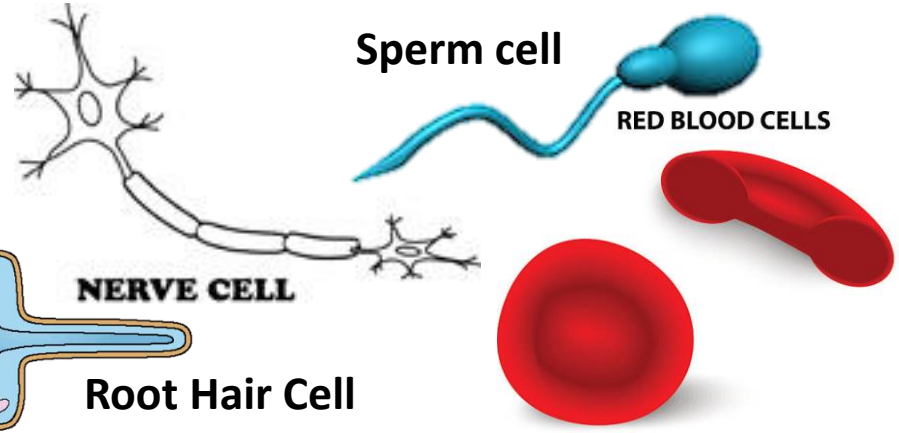
Plant cell



Nucleus	Controls the cell and contains genetic material. This is needed to make new cells.
Cell membrane	This is a barrier around the cell. It controls what can come in and out of the cell.
Cytoplasm	Where chemical reactions take place
Mitochondria	This is where respiration happens. Respiration is the process by which food molecules are broken down to release energy for the cells.
Cell Wall	This strengthens the cell and provides support. It is made of a tough fibre called cellulose, which makes the wall rigid.
Vacuole	Contains a watery liquid called cell sap. It keeps the cell firm.
Chloroplasts	Where photosynthesis happens. Contains a green substance called chlorophyll, which traps energy transferred from the sun.

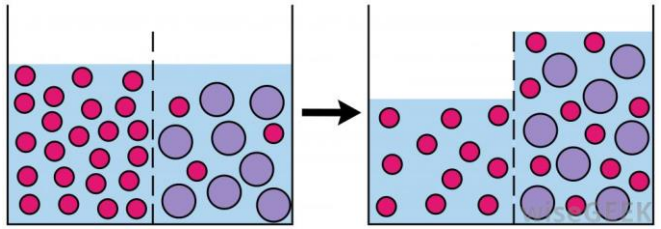
Section 3 – Specialised cells

Many cells have changed their shape and structure so that they are suited to carry out a particular job.



Section 4 – Movement of substance - DIFFUSION

Substances move in and out of cells by **diffusion**. Diffusion is the movement of particles from a place of high concentration to a place where they are in low concentration.



Water and oxygen diffuse into cells.

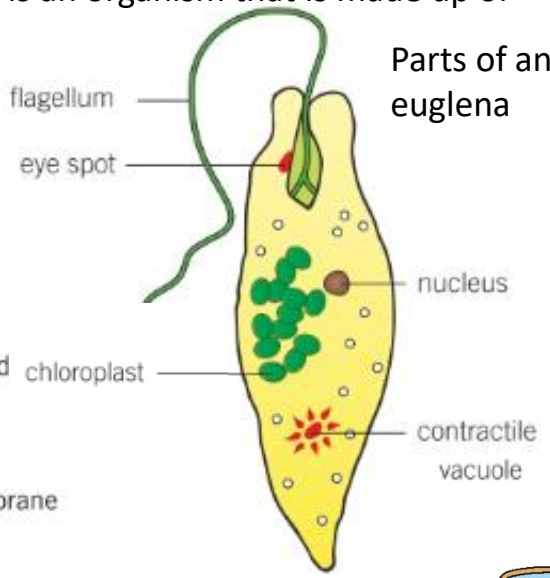
Diffusion of water is known as **osmosis**.

Section 5- Unicellular organisms

A unicellular organisms is an organism that is made up of just **one** cell.

E.g. Amoeba, Euglena

Parts of an euglena



Parts of an amoeba