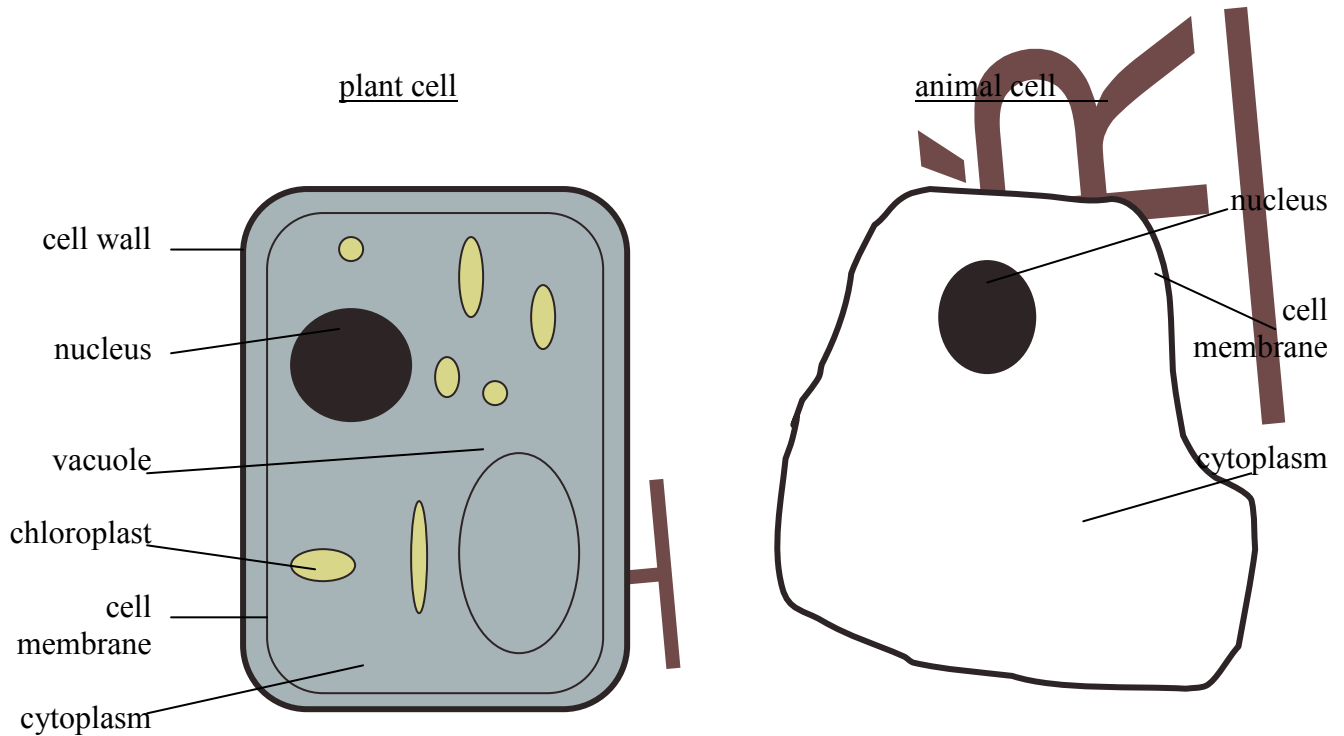


S2 Processes of Life

Revision Sheets

Cell Structure and Function

Cells are the basic unit of life.



There are many different kinds of cells, each with their own function (job).

Cells are very small so we use a **microscope** to see them.

To make cell structures show up more clearly under a microscope we can stain them with **iodine**.

Respiration

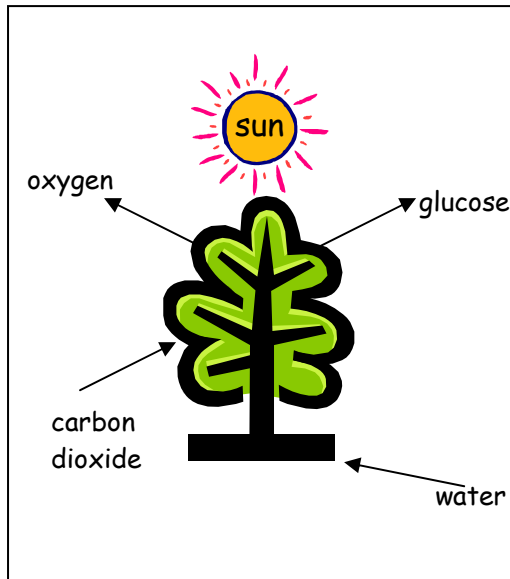
Aerobic respiration takes place when there is oxygen.

The word equation for aerobic respiration is:



Anaerobic respiration takes place when there is no oxygen.

Photosynthesis



Photosynthesis is the process by which plants make food.

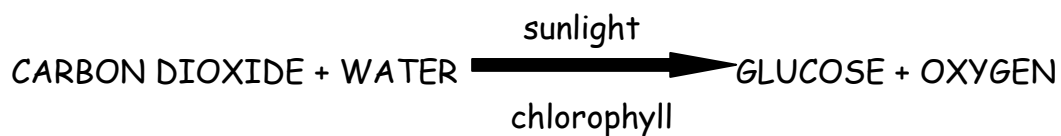
Plants take in **water** through their **roots**.

Plants take in **carbon dioxide** through their **leaves**.

Light energy is needed for photosynthesis.

Chlorophyll absorbs the light energy and also gives the plant its green colour.

The word equation for photosynthesis is:



Enzymes

Enzymes are found in all living cells and **speed up** the rate of a reaction.

Enzymes are **specific**, they work on only one substrate.

Enzymes have an **optimum** pH and temperature (one at which they work best).

Enzymes can be **denatured** (chemically changed) by an incorrect **pH or temperature**.

Substrate	Enzyme	Products	Memory Aid	Occurs in the ...
Starch	Amylase	Maltose	SAM	Mouth
Fats	Lipase	(Fatty) Acids and Glycerol	FLAG	Small intestine
Protein	Pepsin	Peptides (Amino Acids)	PPP	Stomach