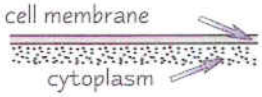
Functions of Organelles

Cells are surrounded by membranes

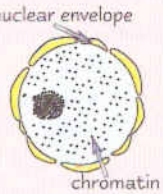
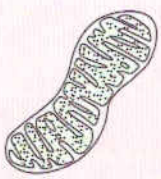
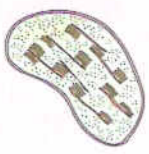
The membrane is found on the surface of animal cells and just inside the cell wall of plant cells. It's made mainly of protein and lipids.



The function of the cell membrane is to regulate the movement of substances into and out of the cell. It also has receptor molecules on it, which allow it to respond to chemicals like hormones.

Cells contain organelles

An organelle is a structure found inside a cell — and each organelle has a specific function. The important thing to remember here is that they're not cells — they're parts of cells. Take a look at this chart, which describes the four main cell organelles.

ORGANELLE	DIAGRAM	DESCRIPTION	FUNCTION
Nucleus		A large organelle surrounded by a nuclear envelope. The nucleus contains chromatin.	The chromatin contains the genetic material (DNA) which controls the cell's activities.
Ribosome		A very small organelle either floating free in the cytoplasm or attached to membranes called the rough endoplasmic reticulum.	The site where proteins are made.
Mitochondrion		They are usually oval and contain enzymes involved in respiration.	The site of respiration, where ATP is produced. They are found in large numbers in cells that are very active and require a lot of energy.
Chloroplast		A small, flattened structure found in plant cells.	The site where photosynthesis takes place.

Learn the functions of these important organelles...

Most organelles are surrounded by membranes, which sometimes causes confusion — don't make the mistake of thinking that a diagram of an organelle is a diagram of a whole cell. Read, cover, write, check — it's the best way to make sure you've learned all of this.