

CELL ORGANELLES

Organelle	Function
Cell wall	Gives shape and structure to the cell. Seen only in plants.
Cytoplasm/cytosol	An aqueous solution in which all the organelles are suspended
Cell membrane	Surrounds the cell and acts as a gateway. Regulates what enters or exits a cell
Nucleus	Control center of the cell and directs all of the cell's activities
Nucleolus	Contains RNA for protein synthesis
Chromatin	The genetic information of the cell. Has all the characteristics of the cell
Mitochondria	The power house of the cell
Smooth Endoplasmic Reticulum	Membranous tubes and canals that connect the nuclear envelope to other parts of the cell. Acts as a channel for transportation. Manufactures many lipids
Rough Endoplasmic Reticulum	Same as above but has ribosomes attached to it so used in protein synthesis.
Ribosome	Organelles used by the cell to produce proteins. They are either free and floating in the cytoplasm or attached to membranes.
Golgi bodies	Chemically change fats and proteins manufactured in the ER and packages them into vesicles
Centriole	Found only in animal cells used during cell division
Lysosome	Found only in animal cells. Contain proteins that can break down the contents of a cell. Also referred to as 'suicide sacs'
Vacuole	One large centrally located in plant cells. Filled with water, dissolved sugars, mineral and proteins. Responsible for firm structure due to turgor pressure.
Chloroplast	Center for photosynthesis. Contains the pigment chlorophyll