

Organelle	Nucleus	Mitochondrion (pl. mitochondria)
Chloroplasts	Lysosomes	Ribosomes
Centrioles	Nuclear envelope	RNA (Ribonucleic acid)
Cristae	Matrix	Thylakoids
Enzymes	mRNA (messenger RNA)	Spindle
Stroma	Granum (pl. grana)	Eukaryotic Cell

<p>The organelle found in eukaryotic cells in which most of the <u>ATP synthesis</u> occurs. It is the site of <u>aerobic respiration</u></p>	<p>A large, membrane bound organelle found in eukaryotic cells which contains the genetic material in the form of chromosomes.</p>	<p>Structure inside a cell. Each has a specific function.</p>
<p>The organelle, made from 2 subunits, on which proteins are synthesised in the cell's cytoplasm.</p>	<p>Membrane bound vesicles containing hydrolytic enzymes that break down old organelles and pathogens.</p>	<p>An organelle found in plants which contains chlorophyll and is responsible for photosynthetic activity.</p>
<p>A single-stranded polynucleotide molecule that exists in three forms. Each form plays a part in the synthesis of proteins within cells</p>	<p>The double membrane structure surrounding the nucleus in eukaryotic cells</p>	<p>An organelle from which the spindle fibres develop during cell division in animal cells.</p>
<p>Flattened membrane sacs found in chloroplasts, which hold pigments used in photosynthesis and are the site of light-dependent reactions of photosynthesis</p>	<p>The central part of the mitochondria</p>	<p>The folds found in the inner membrane of a mitochondrion, covered with stalked particles containing ATP synthase</p>
<p>A structure consisting of protein fibres found in eukaryotic cells during cell division. Chromosomes become attached to this at their centromeres.</p>	<p>Carries the information coding for a polypeptide from the nucleus to the ribosomes in the cytoplasm.</p>	<p>A protein molecule that acts as a biological catalyst</p>
<p>Cells that have a nucleus inside a nuclear envelope and other membrane-bound organelles</p>	<p>A stack of thylakoids</p>	<p>The gel-like matrix found in chloroplasts. The membranes of the thylakoids are embedded in this</p>

Ultrastructure	Chromosomes	Vesicles
Endoplasmic Reticulum	Rough endoplasmic reticulum	Smooth endoplasmic reticulum
Golgi apparatus	ATP (Adenosine triphosphate)	Division of labour
Nanomet <u>re</u>	Micromet <u>re</u>	Nucleolus
Plasma membrane	Histone	Chromatin

A membrane bound sac found in cells and used to transport materials around the cell.	A linear DNA molecule wrapped around histone proteins found in the nucleus. Visible at prophase of cell division	The detailed structure of the internal components of cells as revealed by electron microscope
A series of membrane-bound flattened sacs. No ribosomes attached. Involved with lipid metabolism or membrane formation.	A series of membrane-bound flattened sacs. Ribosomes are attached to the outer surface. Involved in the synthesis of proteins	A series of membrane-bound flattened sacs extending from the outer nuclear envelope through the cytoplasm.
Any system where different parts perform specialised functions, each contributing to the functioning of the whole	Molecule used to store energy temporarily in organisms. It is broken down to form ADP and phosphate to release energy to drive metabolic processes.	Membrane-bound organelle of eukaryote cells. <u>Modifies proteins made at RER into glycoproteins</u> , packages proteins for secretion outside the cell, <u>makes lysosomes</u> , in plant cells secretes carbohydrates to make cell walls
A small dense spherical structure in the nucleus of a cell during interphase, it produce ribosomal RNA and sub units.	One millionth of a metre. It is the standard unit for measuring cell dimensions	One thousandth of a micrometre
A complex of DNA and proteins (histones), which condenses to form a chromosome during cell division.	Proteins that DNA tightly coils around to form chromosomes.	The cell's outer membrane made up of a two layers of phospholipids with embedded proteins. It separates the contents of the cell from its outside environment, and it regulates what enters and exits the cell. Also called the cell surface membrane