

Source: [\[KBhBIO101Cells\].md](#)

1 | Organelles in Eukaryotic Cells

1.1 | Chloroplast and Mitochondria

- **Chloroplast** — found in plants + does photosynthesis
- **Mitochondria** — found in animals + store ATP and extract energy from ATP

1.2 | Rough Endoplasmic Reticulum (ER) and Smooth ER

- **Rough ER** — covered by ribosomes and folds [\[KBhBIO101Proteins\]](#) proteins
- **Smooth ER** — not covered by ribosomes and makes [\[KBhBIO101Lipids\]](#) lipids

1.3 | Cell Wall and Plasma Membrane

- **Cell Wall** — found in plants => surround the cell: hard
- **Plasma membrane** — found in animals => surround the cell: soft [\[KBhBIO101Lipids\]](#) lipids

1.4 | Cytosol, Cytoplasm and Cytoskeleton

- **Cytosol** => liquid found inside cells; the “cytoplasm” floats within it
- **Cytoplasm** => all the stuff within the cell

1.5 | Nucleus and Nucleolus

- **Nucleus** => centre of the cell, stores DNA
- **Nucleolus** => largest part of the nucleus that makes ribosomes

1.6 | Lysosomes and Food Vacuoles

- **Lysosomes** => vesicles that contains enzymes that breaks down biomolecules
- **Food Vacuoles** => vesicles that stores food and other resources
- cytoskeleton and microtubules * Cytoskeleton => complex network of proteins + fibres that organize the rest of the cell * Microtubules => Polymers of tubulin protein that provides the main structure of eukaryotic cells