

Cell Membrane

Cell Wall

Nucleus

Ribosomes

Rough ER

Smooth ER

Lysosomes

Golgi Apparatus

Mitochondrion

Cytoskeleton

- Found in plant and animal cells
- Encloses the cell's contents
- Keeps some materials out; holds some in, allows others out
- Is described by the fluid mosaic model

- Found in plant and animal cells
- **Make proteins**
- Are produced in the nucleolus
- Very small in size compared to most other organelles
- Some are attached to the rough ER

Vacuole

- Found in plant cells only
- Surrounds the cell membrane
- Is strong and fairly rigid
- Is made mostly of cellulose

- Appears "pebbled"
- Has ribosomes attached to its surface
- Is attached to the nucleus
- Produces and packages proteins

Chloroplast

- Found in plant and animal cells
- **A large organelle**
- **Contains DNA**
- Is responsible for "running" the cell by controlling the production of proteins

- Appears smooth
- Is attached to the rough ER
- Has many roles, including making lipids and steroids, breaking down toxins, and releasing calcium

- Digest macromolecules
- Contain enzymes
- Help fight disease, aid in digestion, recycle cell components
- Can kill a cell if the contents of many are released at once

- Is composed of a stack of sacs made of membranes
- Modifies, stores, packages, and transports substances such as hormones and enzymes

- Found in plant and animal cells
- The site of cellular respiration
- Has a smooth outer membrane and an inner membrane with many folds

- A network of fibres extending throughout the cytosol
- Supports the cell and helps maintain its shape

- Storage compartments
- Are very large in plant cells
- In plant cells, help keep the cell firm by maintaining outward pressure on the cell wall

- Are found in plant cells only
- The site of photosynthesis
- Contain the green pigment chlorophyll



