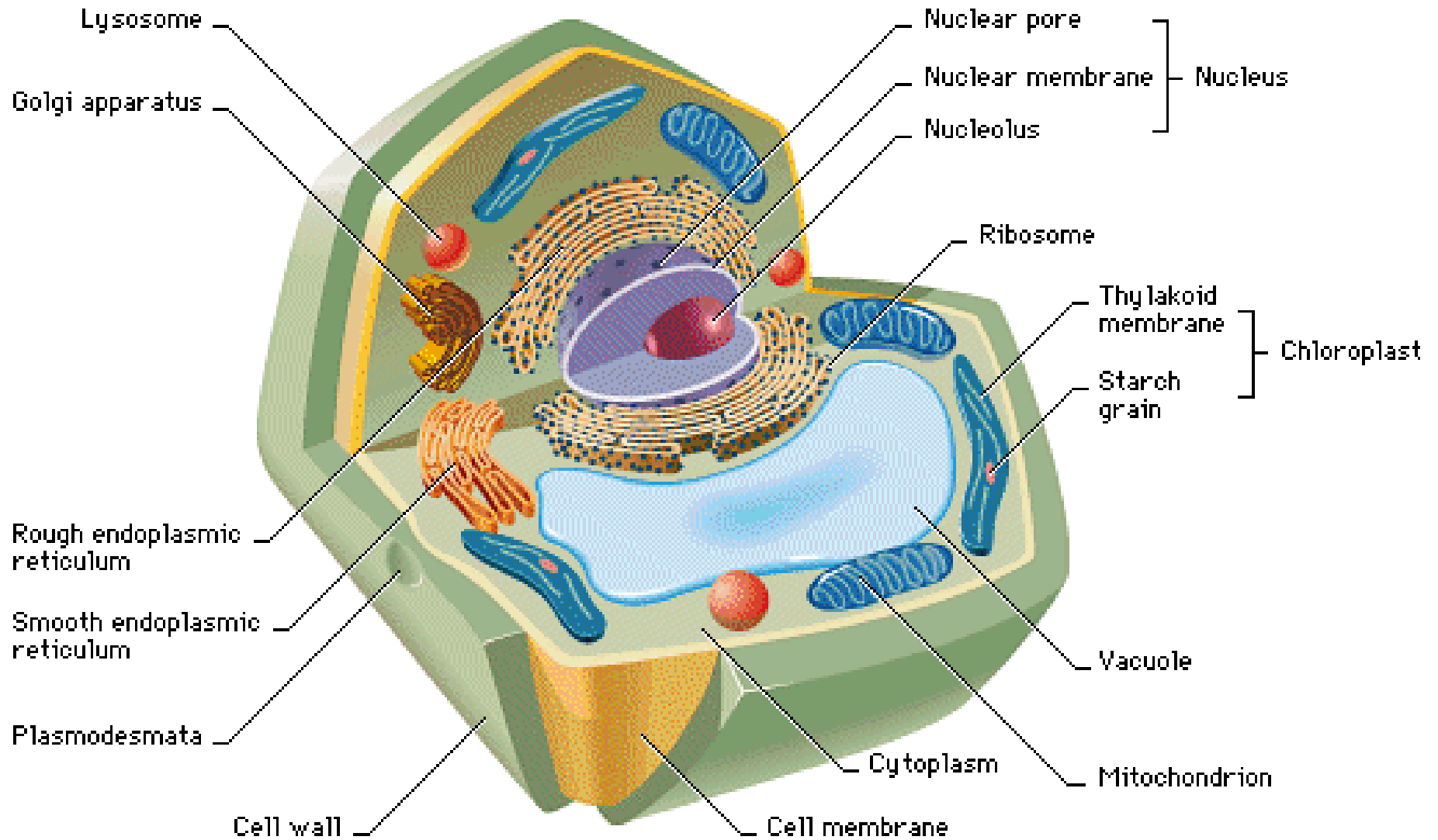


Cell Diagram



Cell Diagram

4 CYTOSKELETON: supports organelles and cell shape and plays a role in cell motion:

Microtubule: tube of protein molecules present in cytoplasm, centrioles, cilia, and flagella

Intermediate filament: intertwined protein fibers that provide support and strength

Actin filament: twisted protein fibers that are responsible for cell movement

12 Centriole: complex assembly of microtubules that occurs in pairs

2 Cytoplasm: semifluid matrix that contains the nucleus and other organelles

2 Mitochondrion: organelle in which energy is extracted from food during oxidative metabolism

Secretory vesicle: vesicle fusing with the plasma membrane, releasing materials to be secreted from the cell

7 Lysosome: vesicle that breaks down macromolecules and digests worn out cell components

6 Golgi complex: collects, packages, and distributes molecules manufactured in the cell

6 Smooth endoplasmic reticulum: system of internal membranes that aids in the manufacture of carbohydrates and lipids

6 Rough endoplasmic reticulum: internal membranes studded with ribosomes that carry out protein synthesis

5 NUCLEUS: command center of cell

Nucleolus: site where ribosomes are produced

Nuclear envelope: double membrane between the nucleus and the cytoplasm

Nuclear pore: opening embedded with proteins that regulates passage into and out of the nucleus

Ribosomes: small complexes of RNA and protein that are the sites of protein synthesis

7 Peroxisome: vesicle that contains enzymes that carry out particular reactions, such as detoxifying potentially harmful molecules

1 Plasma membrane: lipid bilayer in which proteins are embedded

Lipid bilayer

Membrane protein

