

Cell parts

Cell Structure

1. Cell membrane – separates cell from the outside
2. Cell wall – protection and support in plants, algae, some others
3. Nucleus – holds chromosomes
 - a. Nuclear envelope – separates nucleus from cytoplasm
 - b. Nucleolus – where ribosomes are made
 - c. Chromosomes – DNA molecules
4. Cytoplasm – everything between the nucleus and the cell membrane

Organelles

1. Mitochondria – convert stored chemical energy into compounds more readily usable
2. Chloroplasts – site of photosynthesis
3. Ribosomes – assemble proteins
4. Smooth ER – storage of chemicals and enzymes
5. Rough ER – modification of newly made proteins
6. Golgi apparatus – modifies, collects, packages and distributes proteins
7. Lysosomes – break down foreign materials
8. Vacuoles – storage of water, starches, pigments, etc.
9. Cytoskeleton – support and movement
 - a. Microtubules – support cell shape, move organelles around
 - b. Microfilaments – cytoplasmic streaming