

Vocabulary: Different Types of Cells

- Cell membrane – a double-layered membrane that surrounds the cell.
 - Also called the *plasma membrane*, the cell membrane regulates what enters and leaves the cell.
- Cell wall – the rigid, porous outer layer of a plant cell.
- Chloroplast – an *organelle* that converts the radiant energy of the Sun into chemical energy through the process of photosynthesis.
- Cytoplasm – a jelly-like substance, composed mainly of water, occupying most of the space between the cell membrane and the *nucleus*.
- Endosymbiotic theory – theory that states that *eukaryotic cells* evolved from a symbiotic relationship that developed between small *prokaryotic cells* that were engulfed by larger prokaryotic cells.
- Eukaryotic cell – a cell that has a membrane-bound nucleus.
- Organelle – a cell structure that performs a specific function.
- Mitochondrion – an organelle that, using oxygen, converts nutrients into energy that can be used by the cell.
- Nucleus – a round body in the center of the cell that contains DNA and directs the cell's activities.
- Prokaryotic cell – a cell that lacks a membrane-bound nucleus and other membrane-bound organelles.
- Vacuole – sac that stores water, nutrients, and other chemicals.
 - The large vacuole found in plant cells helps the cells maintain their shape.
- Virus – a microscopic particle, which is made of proteins, nucleic acid, and sometimes lipids, that can replicate only by infecting living cells.
 - Viruses are not alive. They do not grow, develop, or metabolize energy.
 - The nucleic acid in a virus is either DNA or RNA. Bacteriophages have DNA. The viruses that cause the flu and AIDS have RNA.
 - Viruses are often classified by their shape. Some viruses are shaped like coils (helical), some viruses are shaped like spheres (enveloped), and some viruses are shaped like crystals (polyhedral). The final group of viruses, the bacteriophage, is shown above.