Cells and Transport

Fundamental life processes depend on the structure and the chemical activities of the cell.

- Describe significant similarities and differences in the basic structure of plant and animal cells.
- Explain the role of the cell membrane in supporting cell functions.
- Prokaryotic cells, eukaryotic cells (including those from plants and animals), and viruses differ in complexity and general structure.

Key Vocabulary	Assignments	Due
Active Transport Cell Cell Wall Cellulose Centriole Chloroplast Chromosome Cilia Concentration Gradient Cytoplasm Contractile vacuole Diffusion DNA Endocytosis Endoplasmic Reticulum (ER) Equilibrium Eukaryote Exocytosis Facilitated diffusion Flagella Golgi Apparatus Hypertonic Hypotonic Isotonic Lysosome Metabolism Microtubule Mitochondria Nuclear Membrane Nucleolus Nucleus Organ Organelle Organism Osmosis Passive Transport Phagocytosis Pinocytosis Prokaryote Ribosome Sodium-potassium pump System Tissue Turgor pressure Vacuole/Vesicle Virus	**#1 - Cells are the Units of Life (Introduction & 5.1)** a. Put the following parts of an organism in order from simple to most complex: body systems, molecules, organs, cells, tissues, and organism. b. What are the two statements that summarize the cell theory? c. Explain why is it the Cell THEORY and not the Cell LAW? **#2 - Read pages 125 to 128 (5.3)** a. Create a T chart that compares and contrasts prokaryotic and eukaryotic cells. **Optional Assignment: (5 points)** a. Define the key vocabulary words in normal English.	⚙ CP Bio

Cells and Organelles

Types of Cells		Virus	Light Microscope	Electron Microscope
-Eukaryotic - Prokaryotic				
			Magnification	**Resolution**
Organelles				
Cell Membrane	**Cytoplasm**	**Ribosome**	**Endoplasmic Reticulum**	**Cell Wall**
Golgi Apparatus	**Cytoskeleton**	**Nuclear Membrane**	**Mitochondria**	**Chloroplast**
		-Nucleoli		
Transport		**Cell Theory**		**Vacuole**
Active	**Passive**	1. 2. 3.		
Diffusion	**Osmosis**	**Concentration Gradient**		**Homeostasis**