

Cell Structure and Function

- Be able to distinguish between an organelle and its function
 - o Example: the mitochondria- formation of ATP from oxygen
 - o What is the function of microvilli (where are they located)
 - o In which can cells increase energy for higher metabolic functions
 - o Other organelles to know roles of: cell (plasma) membrane, lysosome, mitochondria, ER (smooth and rough), nucleus, nucleoli, flagellum, golgi apparatus

Cell Membrane Structure and Function

- Describe the components of the cell membrane
- How many layers of phospholipids make up the cell membrane
- What is the function of the cell membrane
- Be able to identify the parts of the phospholipids along with their characteristics of why they are oriented in a specific way
- Passive vs. Active Transport
- In which way do molecules move in simple diffusion, facilitated diffusion and osmosis
- What type of help do molecules in facilitated diffusion need
- What specific molecule is being moved in osmosis
- Difference between a isotonic, hypertonic and hypotonic solution (you may want to draw for a good visualization)
- Types of active bulk transport (endo, exocytosis, pinocytosis and phagocytosis)
- What do cells look like when placed in hypo, iso, hypertonic solutions
- Know the terms: hemolyzed, lyzed, crenated