Review Sheet for Chapter 3 Test

Be able to define:

active transport
alveoli
amino group
bladder
brochiol tree
cellular respiration
cholesterol
concentration gradient
cytoplasm
cytosol
deamination
diffusion
equilibrium
exocytosis/endocytosis
facilitated diffusion
glycolipid
glycoprotein
hydrophobic/hydrophilic
hypertonic
hypotonic
isotonic
kidney
liver
nitrogenous wastes (ammonia, urea, uric acid)
osmosis
passive transport
phagocytosis
phospholipid bilayer
pinocytosis
solute
solvent
trachea
turgor pressure
ureter
urethra

Understand these concepts & understand how they may interrelate. Be able to explain them fully. If there is a picture involved, make sure you know how to draw it.

- What type of molecules would be able to cross the phospholipid bilayer, through transport proteins, by endocytosis
- Difference between plant cell boundaries & animal cell boundaries (which has a cell wall?)
- Membrane: structure & its components
- Diffusion & osmosis (which direction would a molecule go because of a particular gradient-lab)
- Transport mechanisms and energy costs (active vs.passive)
- Understand the relationship between cell size and efficiency of diffusion (surface area/volume ratios and how to calculate them-lab)
- Understand the need for gill countercurrent exchange and be able to show how it works
- Pressure and volume relationship: be able to explain the mechanisms involved for human breathing (balloon apparatus demonstration in class)

What would happen to a cell in different concentrations (hypertonic, hypotonic, isotonic)

- Know the major parts of the human respiratory system and function
- Know the major parts of the human urinary system and function