**AP Bio Test #2**  **Topics to Review**

Ch 6,7 and 8 (primarily sections 8.4, 8.5)

1. Cell Theory
2. Cell volume vs. surface area
3. Microscopy
4. Cell Fractionation
5. Prokaryotic vs Eukaryotic
6. Plant vs Animal cell (\*Know all organelles structure and function)
7. Cytoskeleton- Structure and Function
8. Properties of cell wall
9. Intercellular junctions
10. ECM of animal cell
11. Selective permeability and membrane structure
12. Amphipathic
13. Fluid Mosaic model vs Davson- Danielli Model (freeze fracture)
14. Contributing factors to fluidity
15. Membrane proteins and functions
16. Cell to cell recognition
17. Function of transport proteins
18. Passive transport- types (ex- osmosis, facilitated diffusion, etc)
19. Tonicity and Water Potential
20. Turgid vs flaccid; plasmolysis
21. Active transport- Ion pumps, cotransport, exocytosis, endocytosis, receptor mediated
22. Water Potential concepts and problems
23. Enzymes- Catalyst, Induced fit with substrate, activation energy (how enzymes lower it), active site, allosteric site, catalysis, effects of temp and pH, denaturation, cofactors, coenzymes, competitive inhibitors, noncompetitive, allosteric regulation, cooperativity, feedback inhibition
24. Osmosis Lab (Review data, graphs, analysis questions)
25. Enzyme Lab (Review data, graphs, analysis questions)