**BIOLOGY 21 CYTOLOGY REVIEW**

1. Cell theory: know the parts and exceptions
2. Prokaryotic/eukaryotic: what are they and know examples of each
3. Cell organelle functions (only):
   1. Cell/plasma membrane
   2. Vaculole
   3. Chloroplast
   4. Mitochondria
   5. Cell wall
   6. Cytoplasm
   7. Ribosomes
   8. Lysosomes
   9. Golgi Apparatus
   10. Endoplasmic Reticulum
4. Identify the organelles listed below (only)
   1. Nucleus
   2. Mitochondria
   3. Chromosomes
5. Define diffusion and osmosis and be able to apply them to examples
6. What is able to diffuse through a cell membrane and what is not?
7. What does selectively permeable mean?
8. How is active transport different from passive transport?
9. What is the difference between phagocytosis and exocytosis?
10. Compare and contrast isotonic, hypertonic, and hypotonic solutions.
11. What happens to plants when they lose water? Gain water?
12. Know that a solute is what is dissolved (like salt) in a water solution.
13. What is the cell membrane made of? Why is it important?
14. Identify, compare and contrast the cells of the kingdoms (Bacteria, Prostist, Plant and Animal).
15. Be able to explain how the various organelles listed above interact with each other. (Hint: Like on the quiz)