**CHAPTER 7: CELLULAR STRUCTURE AND FUNCTION RFC #5**

\* Read the following questions, **THEN** read from Chapter 7 p. 201 -205 STOP @ Active Transport **THEN** answer the following questions on your own paper in complete sentences. ***ANSWERS ARE NOT IN ORDER, YOU MUST READ FIRST!***

1. What is the MAIN Idea of Section 4?
2. How do particles in solids, liquids and gasses move and what is Brownian motion?
3. How do substances diffuse?
4. Is additional energy required for diffusion to occur? Explain why or why not.
5. What occurs when dynamic equilibrium is reached?
6. **Type II**: Describe in detail how the rate of diffusion is affected. Use the following words and underline them when used: concentration, temperature, pressure, collision, faster, slower, greater, and lesser.
7. How does facilitated diffusion differ from diffusion?
8. Compare and contrast the transport proteins and carrier proteins.
9. Why is diffusion and facilitated diffusion known as passive transport?
10. How is osmosis different than diffusion?
11. How is the amount of concentration related to the amount of solvent?
12. What happens to water and the cell in an isotonic solution? WHY?
13. What occurs to an animal cell in a hypotonic solution? Be sure to explain the direction of osmosis, what happens to osmotic pressure and what can eventually happen to the cell.
14. Does the same thing happen to a plant cell as an animal cell in a hypotonic solution? EXPLAIN.
15. What occurs to an animal cell in a hypertonic solution? Be sure to explain the direction of osmosis, what happens to osmotic pressure and what can eventually happen to the cell.

\* Read the following questions, **THEN** read from Chapter 7 p. 205 - 207 **THEN** answer the following questions on your own paper in complete sentences. ***ANSWERS ARE NOT IN ORDER, YOU MUST READ FIRST!***

1. Explain how active transport is different than diffusion.
2. How do pumps help cells maintain homeostasis?
3. Where are the sodium potassium ATPase pumps located?
4. What is the function of the sodium potassium ATPase pump?
5. Give step by step instructions on how the sodium potassium ATPase Pump works?
6. **Type II:** Compare and Contrast Endocytosis and Exocytosis in a minimum of 5 sentences.