**Chapter 7.3 Test Study Guide**

1. Describe the phospholipid bilayer
   1. Parts of a phospholipid
   2. What parts are polar? Nonpolar?
2. Role of the cell membrane
   1. What is it trying to maintain?
3. What are channels and pumps made out of in the cell membrane?
4. What does it mean to be selectively permeable?
5. Know the parts of the cell membrane
6. Hydrophilic vs. hydrophobic
7. Fluid mosaic model
8. Role of transport proteins
9. Concentration gradient
10. Dynamic equilibrium
11. Definition of passive transport
    1. 3 types and their descriptions
    2. Role of transport proteins
       1. Channel vs. carrier proteins
12. Diffusion definition
    1. Does it need energy?
    2. Brownian motion
    3. Speed is affected by 3 factors: what are they?
13. Osmosis definition
    1. Direction of motion
    2. Know isotonic, hypertonic, and hypotonic solutions
       1. Definition of each
       2. Direction of movement of water
       3. What happens to shape of cell?
14. Active transport
    1. Definition
    2. Is energy required?
    3. Direction of movement of substances?
    4. Role of carrier proteins
       1. Endocytosis vs. exocytosis
          1. Phagocytosis vs. pinocytosis
15. Active vs. passive transport (know your venn diagram!!!)
16. Diffusion vs. facilitated diffusion
17. Role of the contractile vacuole in protists
18. Plasmolysis