Assignment: 5

Name:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Hour:\_\_\_

**Unit 3 – Cells and Transport – Review Sheet Part 2**

1. The cell membrane is made up of a special type of lipid called a phospholipid, describe the special properties of a phospholipid below and describe how a phospholipid bilayer is constructed.
2. Describe what the following parts of the cell membrane do (be prepared to also have to identify them in a picture on the test!)
   1. Receptor Protein –
   2. Marker Protein –
   3. Channel Protein –
3. What is the difference between osmosis and diffusion?
4. Describe two examples of diffusion.

|  |  |  |
| --- | --- | --- |
| **Type of Environment a Cell is Placed in** | **Draw what it would look like** | **How will water move?** |
| Hypertonic |  |  |
| Hypotonic |  |  |
| Isotonic |  |  |

**Match the following terms using the word bank below:**

Active transport Concentration Gradient Selectively Permeable Exocytosis

Equilibrium Polar Non-polar Receptor Proteins

Hydrophobic Hydrophilic Marker Proteins Phagocytosis

Passive Surface Area Equilibrium Hypotonic

1. The process in which a cell removes large products and waste created by the cell
2. When there is no NET movement of molecules across the membrane but things are still crossing back and forth… just at equal speeds
3. Water is an excellent example of this
4. This protein needs to be matched for an organ donation or blood transfusion to be successful
5. The cell membrane being very picky about what goes into and out of the cell
6. Oil is an excellent example of this
7. If molecules move from low to high and need ATP to do so, it is this type of transport.
8. If a plant cell is submersed in this environment it will swell up with water
9. If this becomes too large it is hard for cells to take in enough food and to remove waste efficiently
10. This is created by having a high and low concentration in a solution.
11. Because of diffusion concentrations tend to reach this when they balance the concentration out
12. Transport is considered this if it does not expend energy
13. This protein is largely affected by hormones and transfers signals across the membrane to create a reaction inside the cell
14. This is what the heads of the phospholipids are, they love water!
15. This is what the tails of the phospholipids are, they hate water!
16. White blood cells do this to “eat” up foreign invaders