Enzyme Review II
Biology

1. All organic compounds contain the element carbon
2. Which chemical pathway that occurs in the chloroplast produces simple sugars like glucose? photosynthesis
3. Glycogen, also known is animal starch is store in the liver and muscle. When the body needs more energy this molecule is broken down and released into the blood as the simple sugar glucose
4. Explain why fats are important energy storage molecules when compared to carbohydrates. They contain twice the number of calories
5. Proteins are composed of long chains of amino acids these long chains are also called polypeptide chains.
6. The molecules that store, transmit and translate the genetic information are called nucleic acids; The two major nucleic acids are DNA and RNA
7. The movement of a material such as salt or sugar from an area of high concentration to an area of low concentration is called diffusion.
8. The movement of water across a selectively permeable membrane from an area of high concentration to an area of low concentration is called osmosis
9. Explain why the cell membrane is selectively permeable:
   control/regulates the flow of materials into and out of the cell
10. Identify each of the below environments as isotonic, hypertonic or hypotonic. Note if the cell in each will gain mass, lose mass or stay the same mass

11. Starch/Glucose/Iodine Lab
12. The Paramecium is in a hypotonic environment, this means that it will gain water from the environment. To solve this water balance issue the Paramecium has contractile vacuoles that pump excess water at the same rate as it enters the cell.