**Study Guide for the Chemistry of life and Organic Molecules**

Name 3 different examples of lipids and their functions

Name the monomers that are joined together to form a polysaccharide carbohydrate.

Compare and contrast the two types bonds discussed in class

Name the monomers used to build a protein.

What is the molecular difference between a saturated and an unsaturated fat?

Which type of lipid is solid and why?

What is the name of the energy storage polysaccharide found in humans, and what is the **Function** of this polysaccharide?

Name the chemical elements that make up a protein.

Describe the characteristics of a condensation synthesis reaction.

Describe the characteristics of a hydrolysis reaction.

Name the 3 components of a nucleotide.

What is the main **function** of nucleic acids?

Describe some examples and functions of proteins.

What are the elements found in nucleic acids?

Consider these two carbohydrates: C6H12O6 and C12H22O11. Which one would be sucrose and which one would be fructose; explain.

What are some examples of nucleic acids?

 Polysaccharides are large complex molecules (polymers) created by joining smaller molecules (called monomers) together.

 a. To which group of organic molecules do polysaccharides belong?

 b. what is the general name of the small, simple carbohydrate monomers?

 c. Tell the name of the **short-term** energy storage polysaccharide found in animals and plants

 d. Name the **long-term energy storage compound** found in animals and plants.

Identify each of the **4** types of organic molecules.

What specific kind of molecule is Glucose? Sucrose?

How many different kinds of amino acids are used to make all of life’s proteins? How can cells make so many different proteins from so few amino acids?

What are the three subatomic particles? How could you deduce the quantity of them for a specific atom using the periodic table?

Describe the octet rule, and its importance in chemical bonding.

Describe what makes a molecule “organic”.