NAME: _____ PERIOD: _____ DATE: _____

ORGANIC MACROMOLECULES WORKSHEET

Work through the following questions using "Macromolecules (Biomolecules)" web link found on the class webpage. Answer the questions on a separate sheet of paper.

Carbohydrates

1. Name the four important roles of carbohydrates.

2. What is the most common monosaccharide? Why is this monosaccharide so important to our daily functioning?

3. What is the name of the process resulting in disaccharide formation? What specifically happens in this reaction (the animation can/will help)? What other component is required to make this reaction occur?

4. What is the name of the reaction when you spilt a disaccharide? What products do you gain?

5. What are the names of the four polysaccharides and what is required for their formation? What are their respective roles for energy storage?

Lipids

1. How are lipids defined? In what type of solvent are they soluble or insoluble? What are their functions in the body?

2. What is the length range of a triglyceride? How are glycerol and fatty acids "connected" to make a triglyceride (Hint: watch the animation)?

3. Compare and contrast unsaturated fatty acids with saturated fatty acids.