

Name _____

Hour _____

ORGANIC MACROMOLECULES WORKSHEET

Carbohydrates

1. What elements are carbohydrates composed of? Write the whole name.
2. Name an important role of carbohydrates.
3. What is the most common monosaccharide?
4. What is the name of the process resulting in disaccharide formation? What specifically happens in this reaction?
5. What is the name of the reaction when you split a disaccharide? What products do you gain?
6. What is the name of a polysaccharides and what is required for their formation?
7. Name two types of stored sugar and in what organisms they are stored in.

Lipids

1. What elements are lipids composed of? Write the whole name.
2. How are lipids defined? In what type of solvent are they soluble or insoluble?
3. Compare and contrast unsaturated fatty acids with saturated fatty acids.
4. What are two functions of lipids?
5. Name three lipids and where you find them in your everyday lives.

Proteins

1. What elements are proteins composed of? Write the whole name.
2. What functional groups make up an Amino Acid? Draw/label an amino acid.
3. How are polypeptides formed? How are many amino acids joined together?

4. What process has to take place for a polypeptide to be broken into amino acids?
5. What defines the function of a protein?
6. List one important biological functions of proteins and provide an example.

Nucleic Acids

1. What elements are nucleic acids composed of? Write the whole name.
2. What makes up a nucleotide? Draw/label a nucleotide.
3. What are the four component bases of DNA? How do the bases of RNA differ from DNA?
4. Name two functions of nucleic acids.