**MACROMOLECULE WEBQUEST**

**Site 1 The Lipids**

Site Location: <http://www.wisc-online.com/objects/index_tj.asp?objid=AP13204>

1. Lipids are \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_molecules that are insoluble in water.
2. What are fatty acid chains?
3. Define saturated fatty acids
4. Where do saturated fatty acids originate?
5. Define unsaturated fatty acids.
6. Where do unsaturated fatty acids originate?
7. What is cholesterol used for in our bodies?

**Site 2 The Proteins**  
Site Location: <https://www.wisc-online.com/learn/natural-science/life-science/ap13304/biomolecules---the-proteins>

1. Proteins comprise what percentage of our body cells? \_\_\_\_\_\_\_
2. What are elements are present in proteins?
3. Proteins are built from \_\_\_\_\_\_\_\_ common building blocks called \_\_\_\_\_\_\_\_\_\_\_\_\_\_
4. The primary structure of an amino acid is based upon what?

**Site 3 The Carbohydrates**  
Site Location: <https://www.wisc-online.com/learn/general-education/anatomy-and-physiology2/ap21316/biomolecules-the-carbohydrates-video>

1. Give an example food from each of the following carbohydrates
   1. Disaccharide:
   2. Polysaccharide:
   3. Monosaccharide:
2. What elements are found in carbohydrates? \_\_\_\_\_\_\_\_\_\_\_\_\_\_
3. What is the ratio of Carbon to Hydrogen to Oxygen? \_\_\_\_\_\_\_\_
4. Carbohydrates comprise what percentage of cells mass? \_\_\_\_\_\_\_\_
5. List 4 monosaccharides
6. Which disaccharide is table sugar?
7. How are two monosaccharides joined together to form a disaccharide?
8. Please give an example of a polysaccharide.

**Site 4 About nucleic acids**  
Site Location: <http://biology.about.com/library/weekly/aa051701a.htm?terms=nucleic+acids>

1. What are nucleic acids?
2. Nucleotides are composed of what three parts?
3. Please provide two examples of nucleic acids.
4. DNA is organized into \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ and found within the \_\_\_\_\_\_\_\_\_\_\_ of our cells.
5. List the nitrogenous bases of DNA
6. List the nitrogenous bases of RNA

**Site 5 Enzyme Characteristics**  
Site Location: <https://youtu.be/UVeoXYJlBtI>

1. What are macromolecule group includes enzymes?
2. Enzymes \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ chemical reactions.
3. What are the molecules called that bind to an enzyme?
4. What is the special region on the enzyme where binding occurs called?
5. Once the reaction has occurred, what is released from the active site?

**Site 6 Biochemistry Jeopardy**  
Site Location: <http://www.quia.com/cb/86263.html>  
Test your knowledge of the macromolecules -- compete against yourself in Biochemistry Jeopardy!

How did you do?