AP: CHAPTER 5A

MACROMOLECULES

1. Define the following:
   a. monomer
   b. polymer
   c. condensation reaction
   d. hydrolysis

2. Which foods do you think will enter the blood the quickest? Why?

3. What are the general roles of carbohydrates?

4. List some monosaccharides with their molecular formulas.
5. Double sugars are called ____________________________
   List the monosaccharides that form each:
   a. maltose ____________________________
   b. sucrose ____________________________
   c. lactose ____________________________

6. Polymers of sugars form ____________________________

7. Which forms of polysaccharide is best for each function:
   a. Strength of structure ____________________________
   b. Storage and sugar release ____________________________
   c. What theme is this addressing? ____________________________

8. How does the alpha differ from the beta form of glucose and why is it significant to animals?
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   ____________________________
   ____________________________

9. How do the role and structure of the following polysaccharides compare?
   a. starch ____________________________
   b. glycogen ____________________________
   c. cellulose ____________________________

10. Ninety percent of Asians, 75% of African-Americans, and a much smaller percent of northern Europeans are lactose intolerant. Why do you suppose we see this pattern?
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