Carbohydrate Identification Lab Analysis Questions

Use your results from the carbohydrate identification lab and any notes or resources about carbohydrates to answer the following questions:

- 1. Name the three categories of carbohydrates studied in this investigation.
- 2. What three chemical elements are present in all carbohydrates?
- 3. Give two examples each of the names of sugar molecules from our discussion or the textbook/online that are:
 - a. Monosaccharides
 - b. Disaccharides
 - c. Polysaccharides
- 4. How many times larger is the number of hydrogen atoms than oxygen atoms in:
 - a. water?
 - b. carbohydrates?
- 5. "Mono" means one, "di" means two, and "poly" means many. Why are these terms used in describing the three types of sugars?
- 6. How can you tell by using Benedict's and iodine solutions if a sugar is a
 - a. Monosaccharide?
 - b. Disaccharide?
 - c. Polysaccharide?
- 7. A certain sugar has no change in color when tested with Benedict's solution.
 - a. Can you tell what type of saccharide it is?
 - b. Explain.
- 8. A certain sugar has a color change in Benedict's solution.
 - a. Can you tell what type of saccharide it is?
 - b. Explain.
- 9. Give examples of foods that contain
 - a. Monosaccharides
 - b. Disaccharides
 - c. Polysaccharides