

Name: _____

Date: _____

Worksheet: Carbohydrates

1. Draw each of the following chemical groups:

- a. methyl b. hydroxyl c. carbonyl d. carboxyl e. phosphate f. amino

2. Name of the chemical reaction that breaks complex chains into individual monomers: _____

3. Name of the chemical reaction used to build polymers by joining individual monomers together: _____

4. Name the monomer used to build each of the following macromolecules:

- a. Lipids: _____
b. Polysaccharides: _____
c. Proteins: _____
d. Nucleic acids: _____

5. Draw the sugar backbone of the polysaccharide.

6. Draw a straight chain polypeptide. Which chemical groups are shown (aside from a straight chain ring)?

7. Draw a straight chain nucleotide, a structural model of the different atoms. What are structural models?

8. Where do most of the protein's hydrophilic side chains are attached? Name the chemical groups that attach?