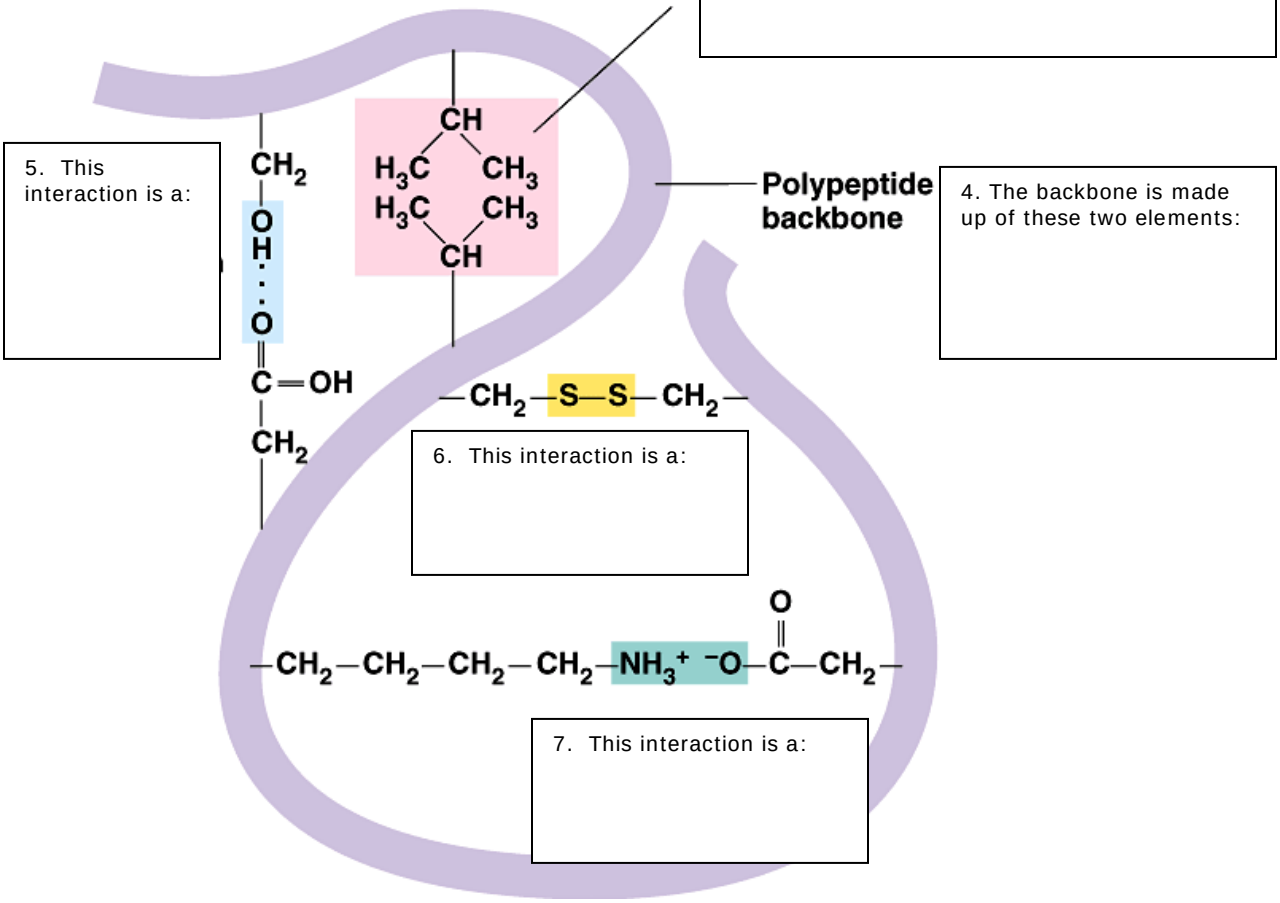
Name: _____ Date: _____

Review Protein Structure

1. Fill in the following:



This level of organization is called _____ structure. The resulting shape of the polypeptide is determined by the specific sequence of amino acids. This structure ultimately determines the _____ of the protein.

3. With your understanding of the nature of interactions holding the 3-D structure of a protein together think of what may happen if you disrupt these interactions. When a protein loses its structure, we say that it is **denatured**. Listed below are three conditions that can cause proteins to denature. Come up with an explanation of why the particular condition will denature a protein. (hint: how do each of these conditions actually change the environment?) Explain thoroughly in complete sentences.

Changes in pH (hint: what does pH actually measure? With changes in this, what type of interaction can possibly be disrupted?)

High salt concentration (hint: what is a salt? What do salts do in solution?)

Increasing temperature