

# \* Biological Macromolecules

Proteins

\* Understand:

\* Structure & function of proteins

\* Amino acid structure & properties

\* Stages involved with formation of proteins

\* Primary, secondary, tertiary & quaternary structures

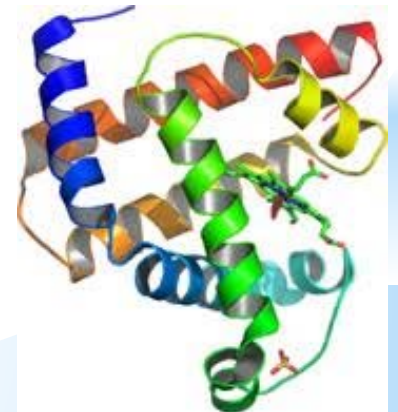
\* Be able to:

\* Draw monomer & polymers of proteins

# \* Learning Goals

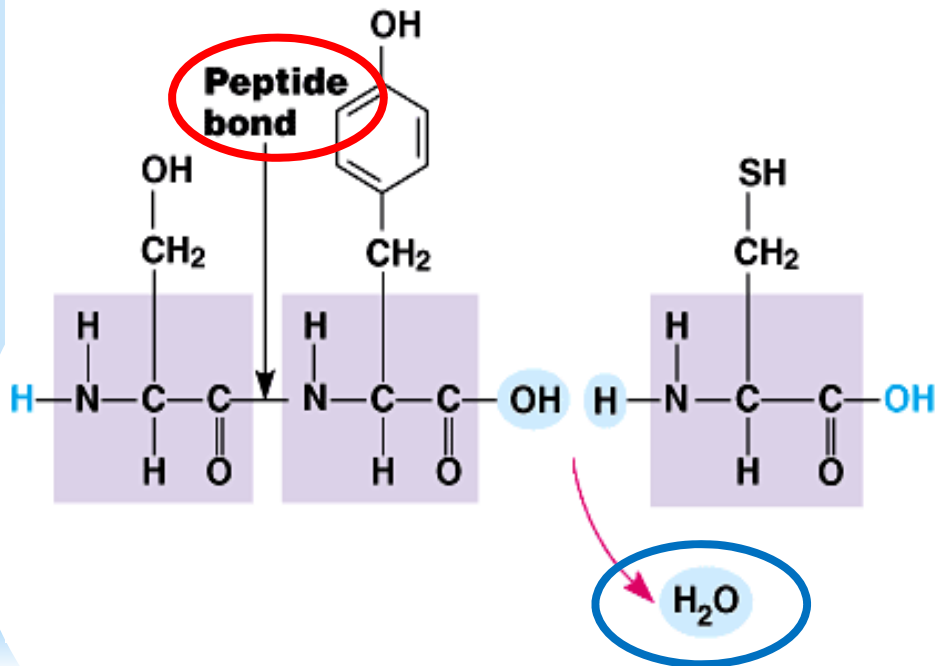
# \* Protein Functions

- \* Structural support -
- \* Transport of substances -
- \* Cell signaling -
- \* Movement -
- \* Coordination & regulation of activities -
- \* Accelerating chemical reactions -

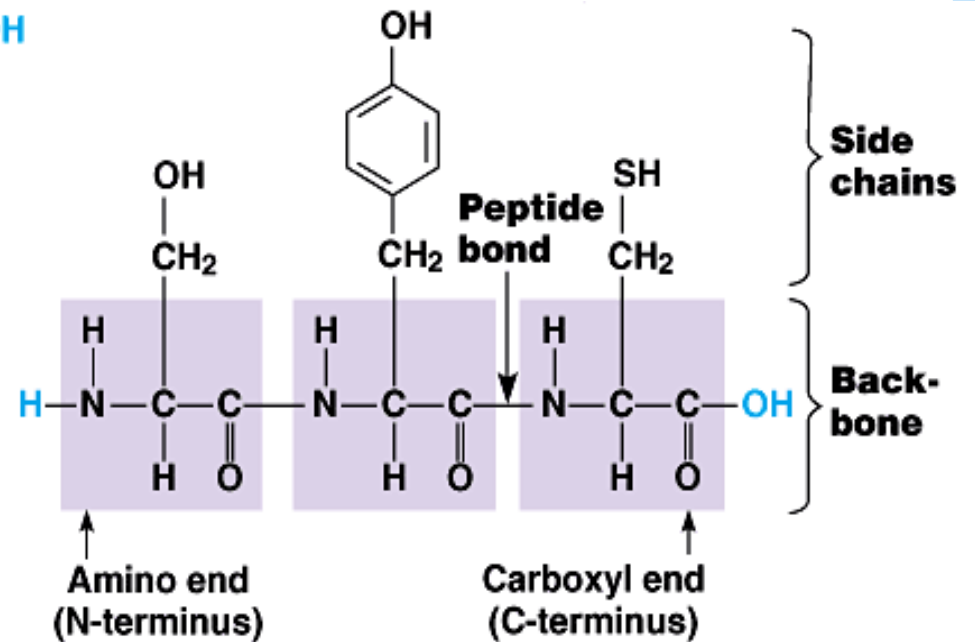




# \* Formation of a Protein

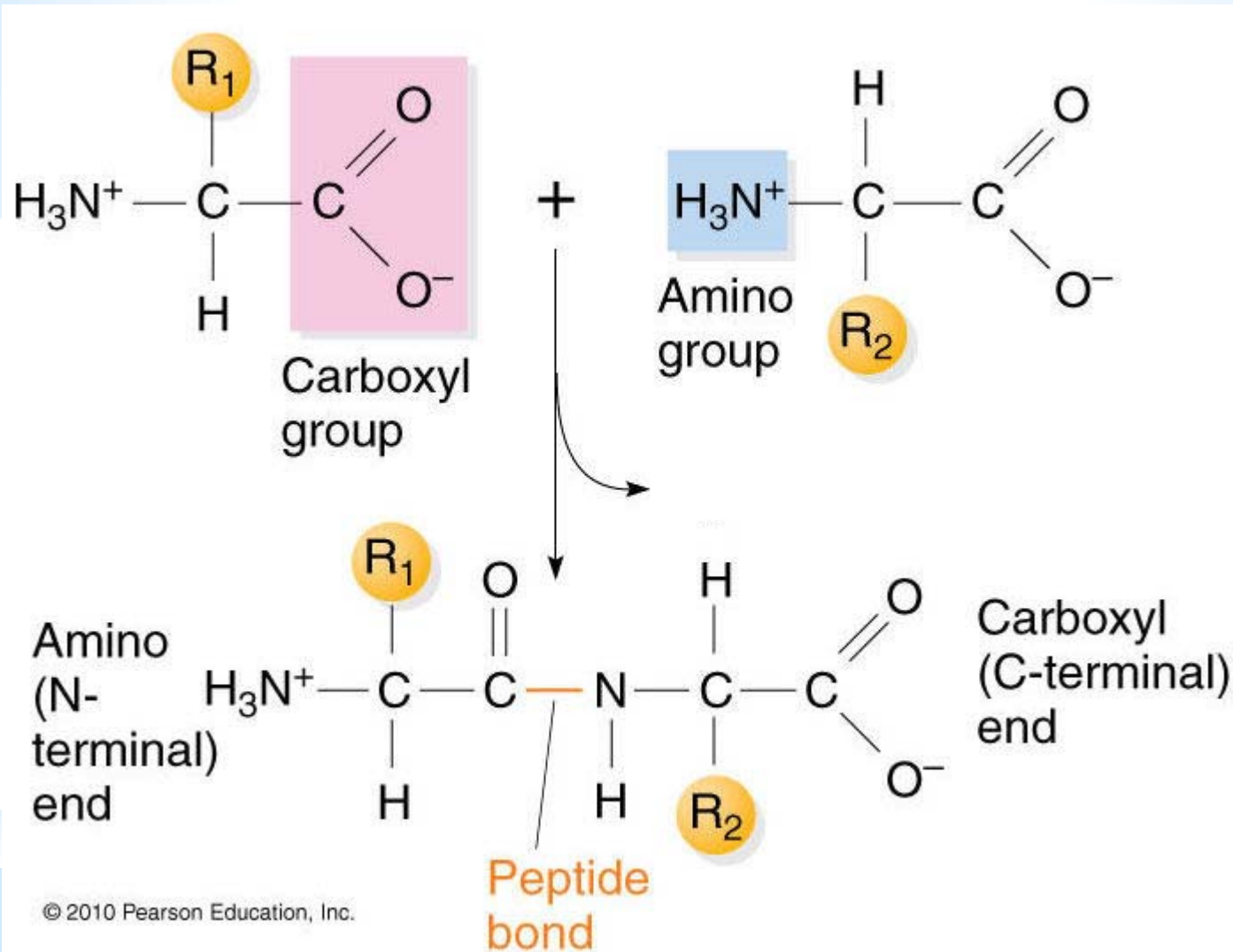


## Condensation Reaction

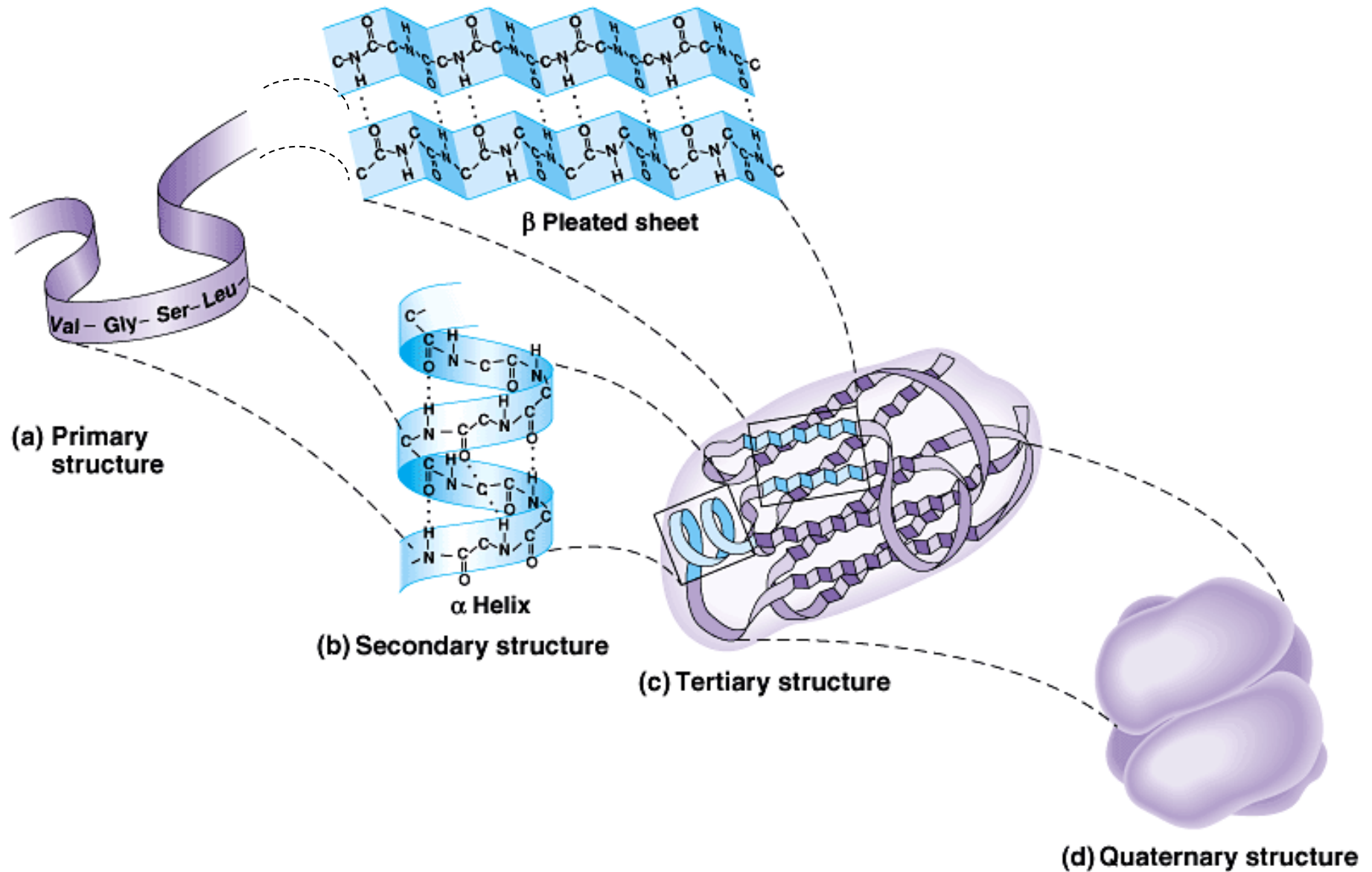


# \* Formation of a Protein

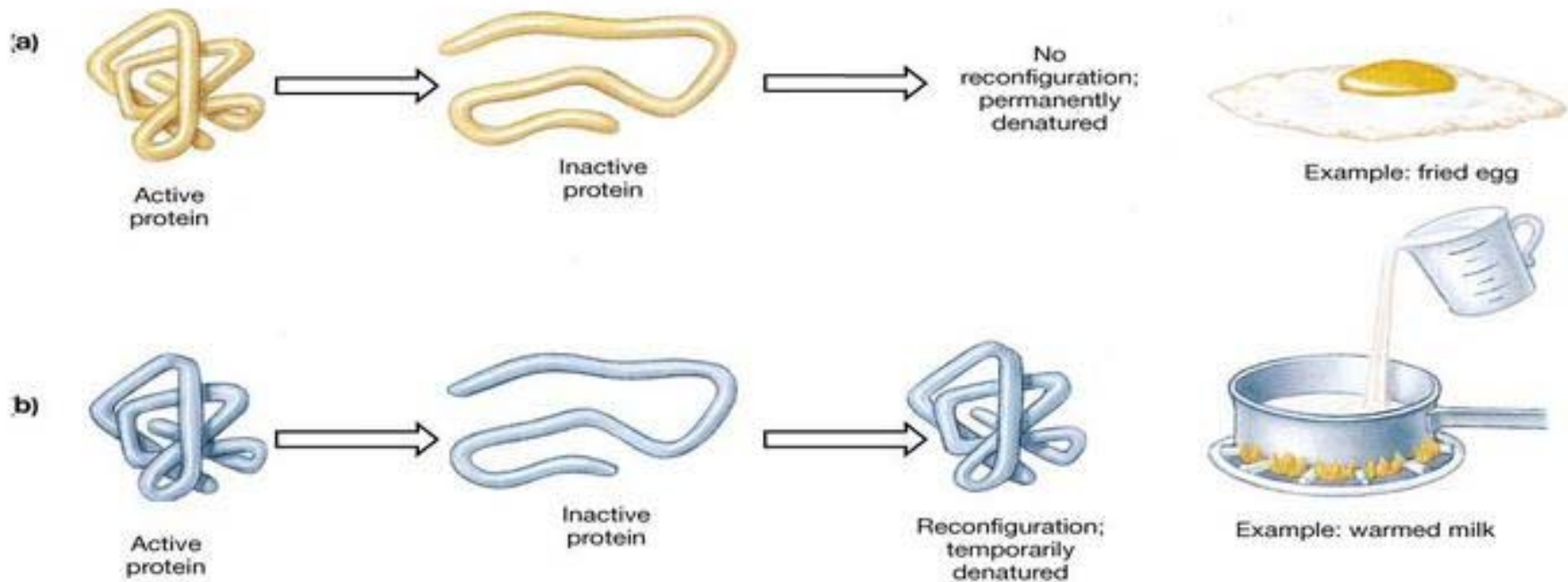
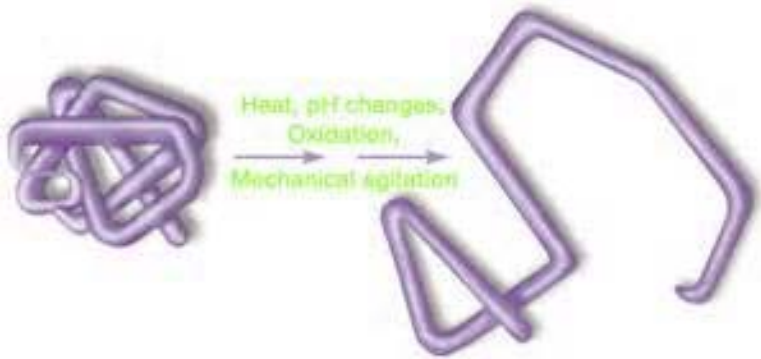
\* What do I draw?



# \* Structure



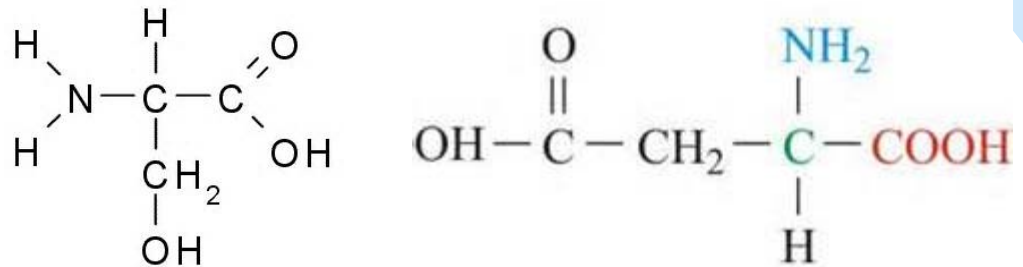
# \* Protein Denaturation





# \*Try These

1. What 2 functional groups do all amino acids have in common?
2. Write an equation showing the formation of a peptide bond between serine and aspartic acid.



3. Define primary structure and describe how it is specified by genetics.
4. Name the 2 types of secondary structure.
5. What type of intermolecular bond stabilizes secondary structure?