

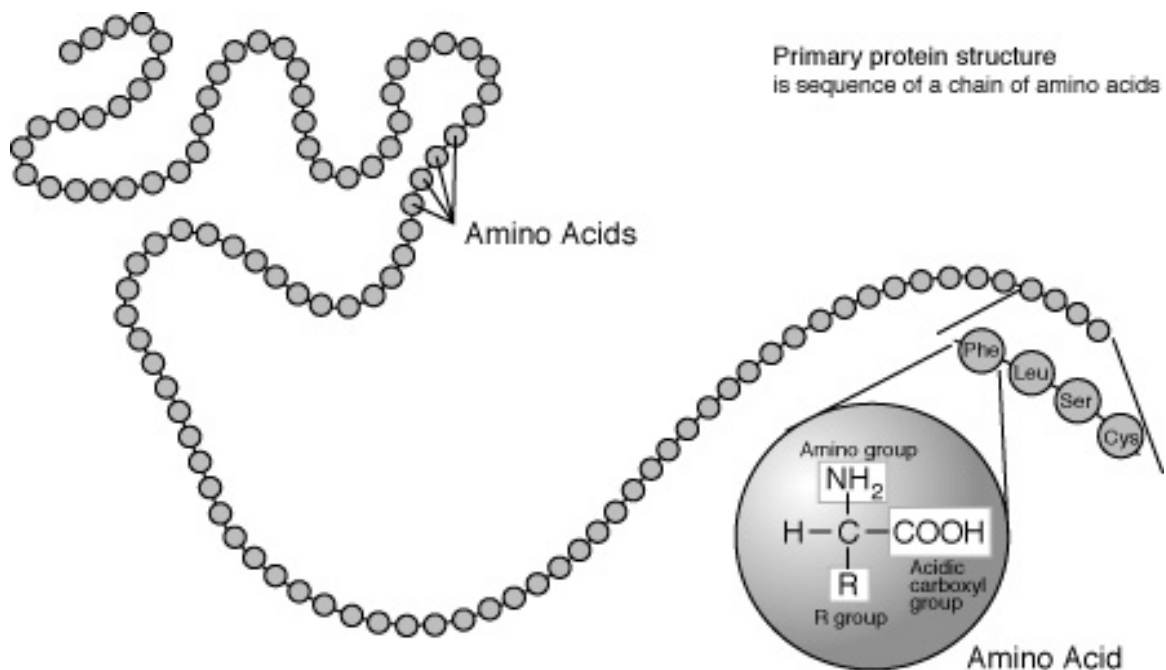
Biomolecules

Four main classes of polymeric cell compounds

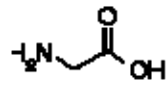
- * Protein
- * Nucleic acid: DNA, RNA
- * Polysaccharide (carbohydrate)
- * Lipid

Amino Acid and Protein

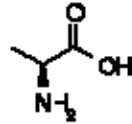
(www.genome.gov/glossary.cfm)



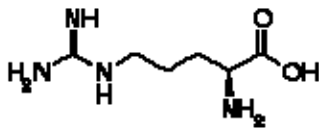
Amino Acids



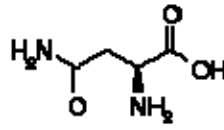
gly g Glycine



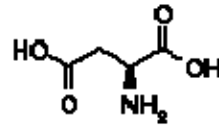
ala a Alanine



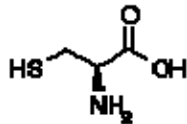
arg r Arginine



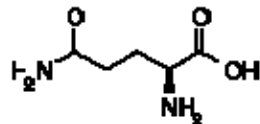
asn n Asparagine



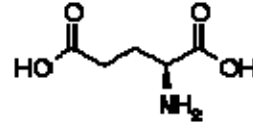
asp d Aspartic acid



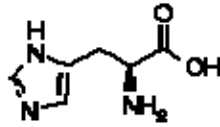
cys c Cysteine



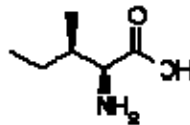
gln q Glutamine



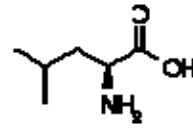
glu e Glutamic acid



his h Histidine



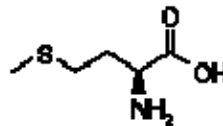
ile i Isoleucine



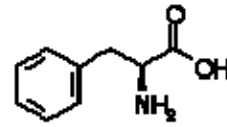
leu l Leucine



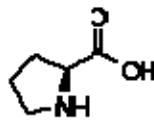
lys k Lysine



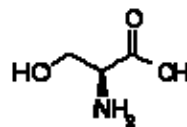
met m Methionine



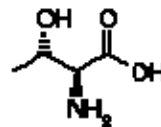
phe f Phenylalanine



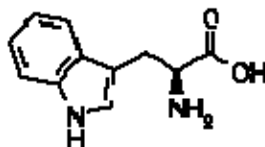
pro p Proline



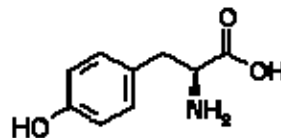
ser s Serine



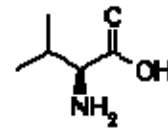
thr t Threonine



trp w Tryptophan



tyr y Tyrosine



val v Valine

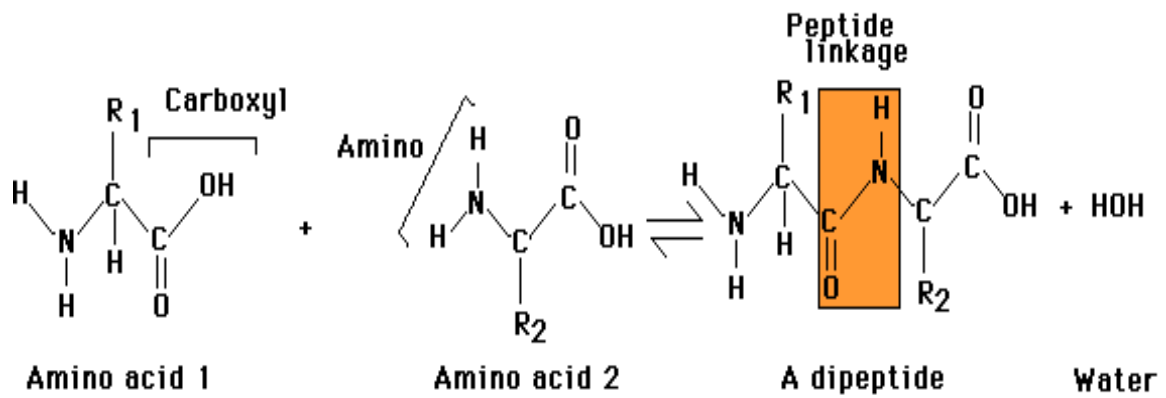
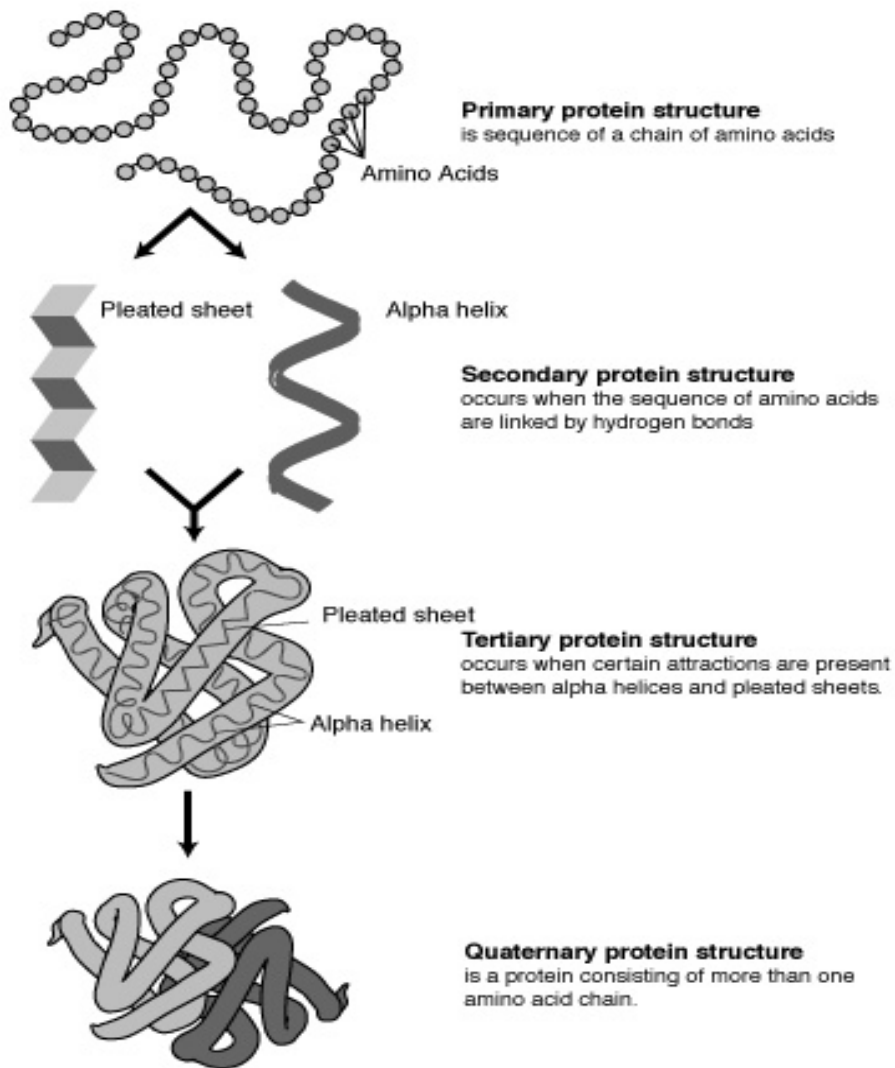
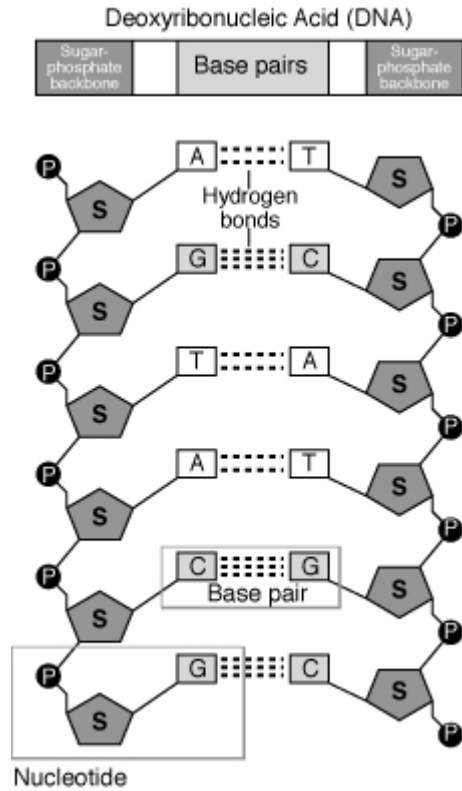
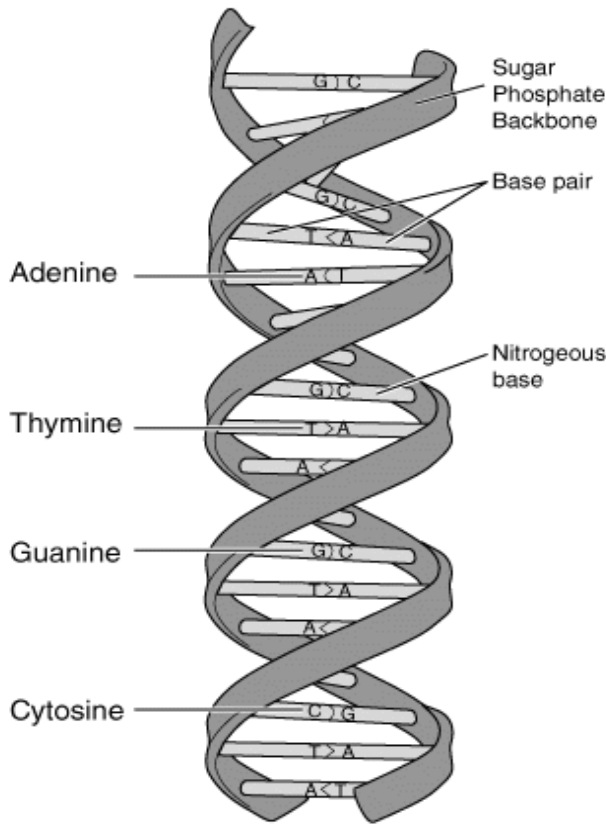


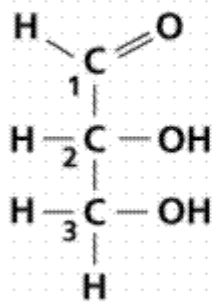
Fig. Formation of a peptide bond between two amino acids.



Nucleotide and DNA

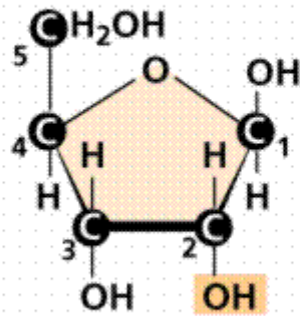


Three-carbon sugar

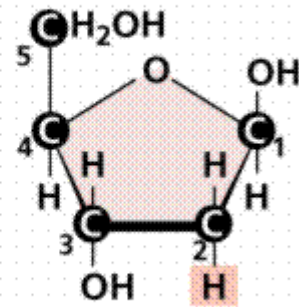


Glyceraldehyde

Five-carbon sugars

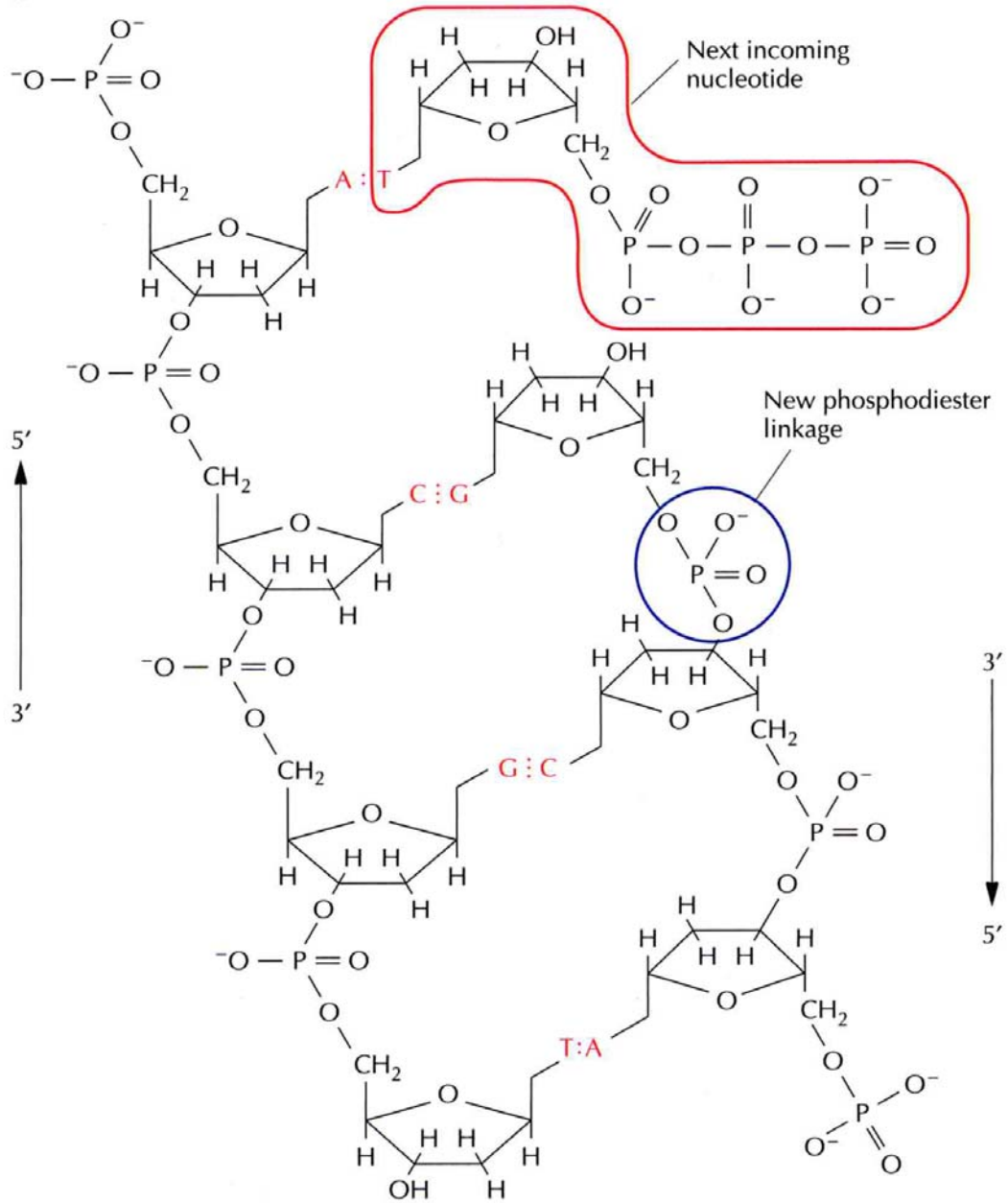


Ribose



Deoxyribose

B



DNA and RNA

