Important Biological Molecules Chapter 2 continued

I. Inorganic cpds
  A.WATER
    1.Abundant
    2.Reactivity
      a. Hydrolysis rxns
      b. Dehydration rxns
  B.Acids and Bases
    1.Acid
    2.Base
  C.pH scale
  D.Buffers

II. Organic cpds
  A.Carbon

III. Macromolecules
  A. Carbohydrates
    1.Monosaccharide
    2.Disaccharides
      a. dehydration rxn.
      b. hydrolysis rxn.
    3.Polysaccharides.
      a. monomers
      b. polymers
  B. Lipids
    1.Triglycerides
      a. Composition
        1)Fatty acids
        2)Glycerol
      b. Structure
        1)saturated
        2)Unsaturated
    2.Phospholipids
        1)amphipathic
    3.Steroids

C. Proteins
1. Functions
2. Monomers
   a. amino acids - 20
      1) amino group
      2) carboxyl group
      3) R group
3. Assembly
   a. peptide bond
4. Structural level
   a. Primary
   b. Secondary
      1) α helix
      2) β sheet
   c. Tertiary
   d. Quaternary
5. Denaturation

D. Nucleic Acids
   a. Nucleotides
      1) base
         a) Adenine
         b) Guanine
         c) Cytosine
         d) Thymine
         e) Uracil
      2) pentose sugar
      3) phosphate group
1. DNA
   a. Function
   b. Composition
      1) complementary base pairing
2. RNA
   a. Function
   b. Composition
3. ATP