**Study Guide Chapter 2 Quiz**

**Proteins and Nucleic Acids**

* Be able to construct polymers from monomers (proteins and nucleic acids) if given the monomers
* Be able to differentiate between dehydration/condensation and hydrolysis reactions
* Be able to identify the parts of an amino acid and discuss how they differ from one another
* Be able to identify the name and location of the bonds found in each of the biomolecules (peptide, phosphodiester, hydrogen, disulfide bridges, etc.)
* Be able to describe the 4 levels of structure in a protein
* Be able to predict where you would find a particular amino acid in a protein given is chemical properties
* Be able to describe the effects of denaturation on a protein and identify factors which would cause it to occur
* Be able to relate the following terms: DNA, RNA and protein
* Be able to describe the structure of a nucleotide
* Know which base pairs form in DNA and in RNA and why
* Be able to classify nitrogenous bases as purines or pyrimidines
* Be able to discuss the structural differences between RNA and DNA
* If given one strand of DNA, be able to provide the sequence that would be found on the complimentary strand
* Be able to describe the antiparallel structure of DNA
* Know what factor regarding the structure of DNA allows it to be replicated.
* Be able to identify the role of each enzyme involved in DNA replication
* Be able to describe the sequence of events in DNA replication

\*\*23 Multiple Choice Questions & 1 Short Answer