Unit 1 Review

Chapter 1 The Human Body and Orientation
❖ Define anatomy and physiology.
❖ Explain the principle of complementarity.
❖ Name the different levels of structural organization and explain their relationships.
❖ List the 11 organ systems of the body, identify their components, and briefly explain the major function(s) of each system.
❖ List and define the 8 Life functions. Which two functions do you have to absolutely have to show life?
❖ List and define the survival needs of the body.
❖ Define homeostasis and explain its significance. Be able to label and define all of the parts. Figure 1.4.
❖ Describe how negative and positive feedback mechanisms maintain body homeostasis. Figure 1.5, 1.6.
❖ Define homeostatic imbalance.
❖ Describe anatomical position.
❖ Use correct anatomical terms to describe body directions, regions, and planes. Table 1.1, Figure 1.7, Figure 1.8, Figure 1.9, Figure 1.11.

Chapter 2 Chemistry Comes Alive
❖ Def: matter, energy, element.
❖ What are the 4 forms of energy?
❖ What are the 3 parts of the atom and their charge?
❖ Identify the common elements of the human body. Table 2.1, know them by atomic symbol.
❖ Define Atomic number, mass number, isotopes, atomic weight, radioisotopes.
❖ Compare solutions, colloids, and suspensions. Define solute and solvent.
❖ Differentiate among ionic, covalent, and hydrogen bonds. Compare polar and nonpolar bonds.
❖ Be able to recognize the 3 types of chemical reactions by letters and definition.
❖ Describe factors that affect chemical reaction rates. Define catalysts.
❖ Know the inorganic compounds, salt, acid, base, and water by definitions and special properties
❖ What is the pH scale? What does it measure? What do the numbers corresponds to? Which acid or base would be stronger?
❖ Know each organic compound by definition, type and function (4 building blocks/macromolecules). Carbohydrates, Lipids, Proteins, Nucleic Acids
❖ Be able to describe enzymes. Know the three steps of enzyme action.