Chemistry
Chapter 1 and 2
Test Review

Be able to define the following terms:

**CHAPTER 1**
- Scientific method
- Observation
- Hypothesis
- Experiment
- Theory
- Scientific law

**CHAPTER 2**
- extensive properties
- intensive properties
- pure substance
- physical property
- state or phase
- solid
- liquid
- gas
- plasma
- vapor
- physical change
- mixture
- homogeneous
- heterogeneous
- solution
- filtration
- distillation
- element
- compound
- chemical change
- chemical symbol
- chemical formula
- chemical property
- chemical reaction
- reactants
- products
- precipitate
- Law of Conservation
- of Mass

**Know/be able to do the following:**

**Chapter 1:**
1) Discuss the scientific method (process). Be able to discuss at least six steps of the process.
2) Be able to compare and contrast scientific law and scientific theory. Give a couple examples of each one.

**Section 2.1: Properties of Matter.**
3) Distinguish between the physical properties and chemical properties of matter.
4) Explain the gas, liquid, and solid states of matter in terms of the kinetic molecular theory and physical properties.

**Section 2.2: Mixtures.**
5) Distinguish between a mixture and a pure substance.
6) Be able to describe different kinds of matter in terms of chemical and physical properties.
7) Be able to describe and perform a set of procedures to separate a mixture into its components using your knowledge of the physical and chemical properties of the components.

**Section 2.3: Elements and Compounds.**
8) Be able to give five examples each of elements, compounds, and mixtures.
9) Use a periodic table to name elements, given their symbols.
10) Use a periodic table to write the symbols of elements given their symbols.
11) Draw and label a graphic organizer of the classification of matter.
12) Identify elements whose symbol is derived from the element’s older or Latin name.

**Section 2.4: Chemical Reactions**
13) Classify changes of matter as physical or chemical. State at least five evidences for a chemical change.
14) Be able to give five examples each of chemical and physical changes.
15) State and explain the Law of conservation of mass. Give a couple of examples of this law in a chemical change.