Chapter 15  Classification of Matter Notetaking Worksheet

Section 1  Composition of Matter
A. _____________________ - either an element or a compound
   1. When all atoms in a substance are alike, the substance is an
      ________________________.
   2. A______________________ is a substance with two or more
      elements combined in a fixed proportion.
B. Two or more substances that can be easily separated by physical
   means form a ______________________.
   1. ______________________ mixture—mixture of different and easily
      distinguishable materials.
   2. ______________________ mixture—contains two or more gaseous,
      liquid or solid substances blended evenly; also called a
      ______________________.
   3. _______________________—heterogeneous mixture with larger
      particles that never settle; colloids scatter light in the
      ________________________.
   4. A heterogeneous mixture containing a liquid in which visible
      particles settle is called a ________________________.

Section 2.  Properties of Matter
A. _____________________-characteristics of a material which
   can be observed without changing the identity of the substance in the
   material; examples include color, shape, size, melting point, and boiling
   point.
   1. ______________--physical description of a substance.
   2. ______________--how a substance acts; for example, magnetism,
      viscosity, ductility.
   3. Physical properties such as size and magnetism can be used to
      ________________________mixtures.
B. _____________________-change in a substance's size, shape or
   state of matter.
   1. Substance does not change __________ when it undergoes a
      physical change.
   2. ________________________ is a process for separating a mixture by
      evaporating a liquid and condensing its vapor.
C. _____________________-characteristics of a substance
   indicating that it can change chemically; for example,
   flammability or light sensitivity of a substance.

D. When one substance changes to another substance, a___________
   ______________________ has occurred.
   1. Some chemical changes are indicated by ________________
      changes, ________________, or ________________ formation
   2. Other chemical changes occur very slowly such as formation of
      ________________________.
   3. Chemical changes can be used to________________________
      substances such as metals from their ores.

E. ______________________ of Earth's surface involves both
   physical and chemical changes.
   1. ________________________--big rocks split into smaller one;
      streams carry rock particles from one location to another.
   2. ________________________-- occur in rocks when calcium
      carbonate in limestone changes to calcium carbonate due to acid
      rain.

F. According to the ______________________ the mass of all substances present before a chemical change equals the mass of all substances after the change. The law of conservation of mass states that ______________________
   _____________________________________________________________________________________