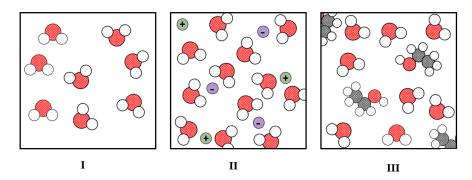
Unit 2 Reading Assignment

Learning Objectives in this Unit:

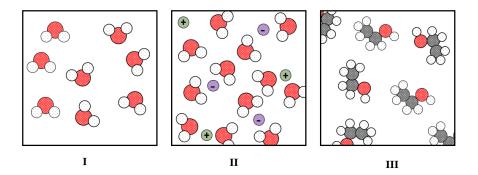
- Distinguish elements from compounds, pure substances from mixtures, homogeneous from heterogeneous mixtures (solutions), and physical from chemical properties
- Write formulas and names for elements, cations and anions, oxoacids, and ionic and covalent compounds
- Describe the properties of protons, neutrons, electrons, atoms, ions and isotopes

Read more about these topcis: <u>Sections 1.2</u>, <u>Section 1.3</u>, <u>Section 2.1</u>, <u>Section 2.2</u>, <u>Section 2.3</u>, <u>Section 2.4</u> and <u>Section 2.6</u>

- 1. Consider the following depictions
 - a. Select all of the depictions that show a mixture



b. Select all of the depictions that show a pure substance



2. Fill in the Blanks

[_____] cannot be broken down by [_____] changes. [_____] are pure substances made of two or more [_____].

- **3.** Consider the following list: Density, Melting Point, Toxicity, Acidity, Hardness, Flammability
 - a. Which are physical properties?
 - b. Which are chemical properties?

c.

Unit 2 Reading Assignment

4.	Match	the	following	terms t	o t	their	definitions
----	-------	-----	-----------	---------	-----	-------	-------------

Atomic Number	The number of protons in an atom
Mass Number	The mass of an atom
Atomic Mass	The number of protons and neutrons in an atom

			provons m mi mom				
	Mass Number	The mass of an atom					
	Atomic Mass	The number of	protons and neutrons in an atom				
5.	Fill in the blanks						
	According to Dalton's Postulates						
	A compound consis	ts of [] of t	wo or more elements combined in a small, []- the atoms are always present in the same [].				
6.	Match the laws to th						
	Law of Constant Pr	roportions The e	lements of a compound are present in fixed proportions				
	Law of Conservatio	n of Mass Mass	is neither created or destroyed				
7.	Match the historical J.J. Thompson's Ca Experiment	athode Ray	Determined the charge on the electron				
	R.A. Millikan's Oil	Drop Experiment	Observed electrons and determined the charge to mass ratio				
	Rutherford's Gold	Foil Experiment	Demonstrated the existence of the nucleus of the atom				
8.		-	electrons", or "neutrons" me number of [] but different numbers of				
9.	Which of the following are true statements for ionic compounds?						
	a. Composed of a metal and a nonmetal						
	b. Solids with high melting temperatures						
	c. Conduct ele	ctricity when mel	ted				

- d. Formed by transferring electrons
- e. Composed of all nonmetals
- f. Formed by sharing electrons **10.** Fill in the blanks

1	0.	Fill	in	the	b	lan	KS

An anion has [] electrons to become [] charged
A cation has [] electrons to become [] charged