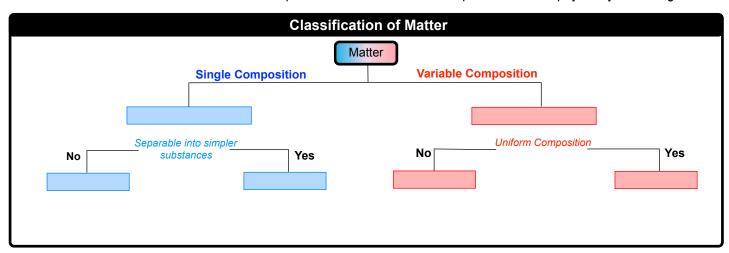
## **CONCEPT:** CLASSIFICATION OF MATTER

- Chemistry: the study of matter and the changes it undergoes, with the \_\_\_\_\_\_\_ being its basic functional unit.
   Matter: anything that occupies \_\_\_\_\_\_ and has \_\_\_\_\_\_.
   Classified into 3 types:

   \_\_\_\_\_\_: The simplest type of matter that is composed of 1 kind of atom.
   \_\_\_\_\_\_: Matter composed of 2 or more different elements that are chemically bonded together.
  - \_\_\_\_\_: Matter composed of elements and/or compounds that are physically mixed together.



## **EXAMPLE:** Consider the following substances:

- I. Gatorade
- II. Crystalline sugar
- III. Lead wire
- IV. Salsa

- a) I and II are pure substances, IV is a homogeneous mixture.
- b) I and II are homogeneous mixtures.
- c) II and III are pure substances, I is a homogeneous mixture.
- d) None of the above is true.

## **PRACTICE:** Which of the following statements is true?

- a) Compounds can only be broken down by chemical means.
- b) Gasoline is a pure substance.
- c) Only elements are pure substances.
- d) Milk is an example of a homogeneous mixture.
- e) Concrete is an example of a homogeneous mixture.

## **CONCEPT:** CLASSIFICATION OF MATTER

<b>PRACTICE:</b> Choose the homogeneous mixture from the list below. a) Soda
b) Smog
c) Trail mix
d) Blood
e) Air
<b>PRACTICE:</b> Choose the homogeneous mixture from the list below.  a) Chicken noodle soup
b) Coffee
c) Sand
d) Fruit salad
e) Seawater
<b>PRACTICE:</b> Classify each of the following as an element, compound or mixture.  a) Ammonia, NH <sub>3</sub>
b) Gold bar
c) Orange juice
d) Wine
e) Saline solution