

## Homogeneous and Heterogeneous

Mixtures can be either heterogeneous or homogeneous. Hetero meaning the different throughout and homo meaning same. An example of homogeneous would be sweet tea without ice – any sample you would take of the drink would be the same. A heterogeneous version of sweet tea would be if it had ice in it. A sample may or may not have ice in it so it is NOT the same throughout.

Heterogeneous mixtures can be separated via filtration. This process is simply straining a mixture through a filter that separates out the parts based on their size.

Elements and Compounds are pure chemical substances found in nature. The difference between an element and a compound is that an element is a substance made of same type of atoms, whereas a compound is made of different elements in definite proportions. Subscripts on compounds tell us the RATIO of the atoms in a compound. Water has a RATIO of 2 Hydrogens for every one Oxygen.

Chemical reactions start as REACTANTS and go to PRODUCTS. The Law of Conservation of Mass states that the mass of the products must be equal to the mass of the reactants.

## 1st Test - Next Class

### What you need to know:

Metric Units

Scientific Notation

Significant figures

Metric Prefixes

Converting units (bigger smaller bigger.....)

Chemical / Physical properties

Chemical / Physical reactions

Basic atomic structure (including how these ideas were discovered i.e. history of chemistry)

Periodic Table

atomic #, mass, element symbols, group names

Density calculations

Anything and Everything we have discussed since day 1.