Section 2.2-Mixtures

Classifying Mixtures
- defined as a physical blend of two or more substances
- classified as 'heterogeneous' or 'homogeneous'

Heterogeneous
    -composition is NOT uniform
    -ex. chicken soup

Homogeneous
    -composition is uniform
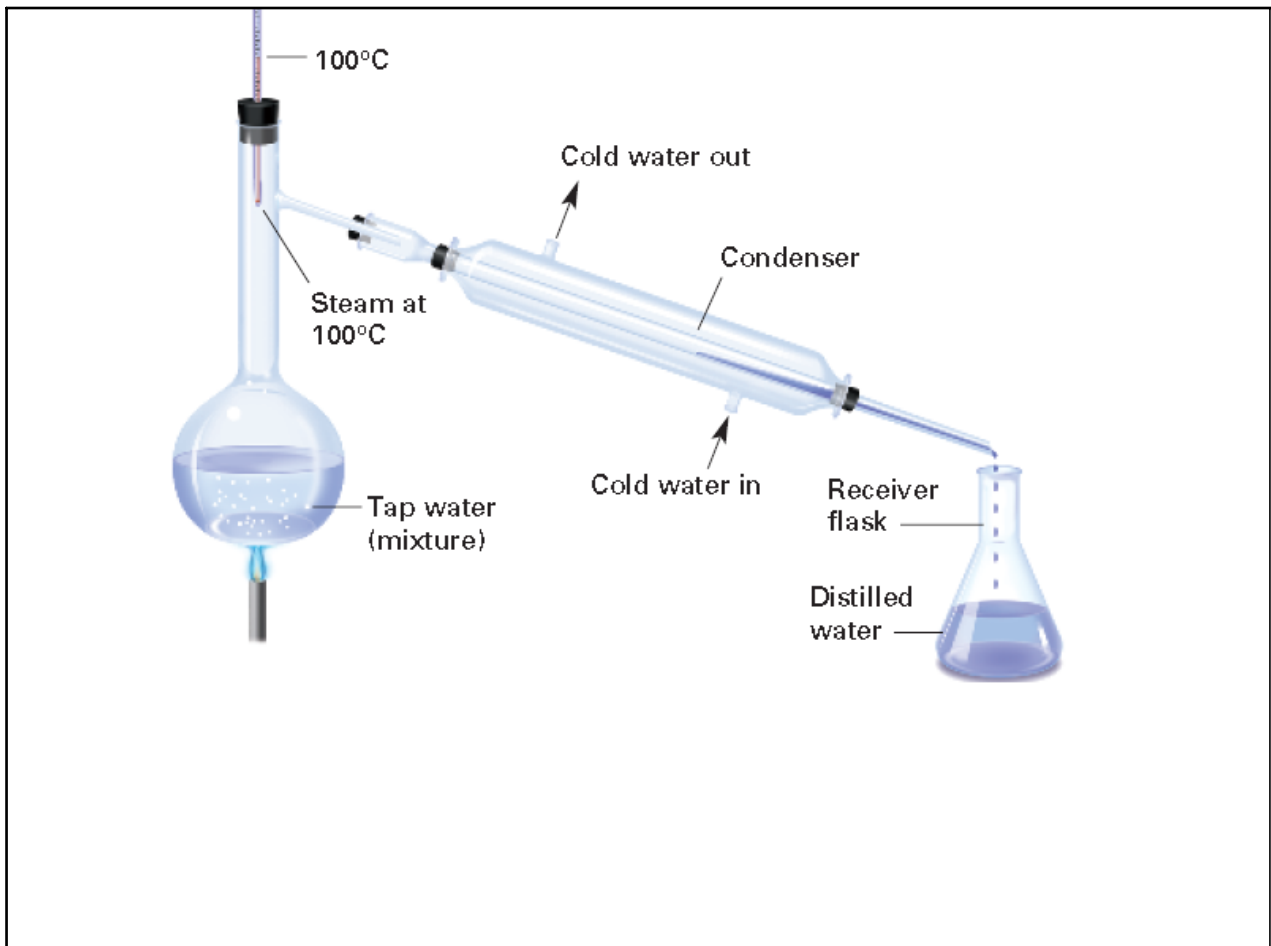   -also called 'solutions'

Separating Mixtures

- differences in physical properties are used to separate mixtures

-Filtration
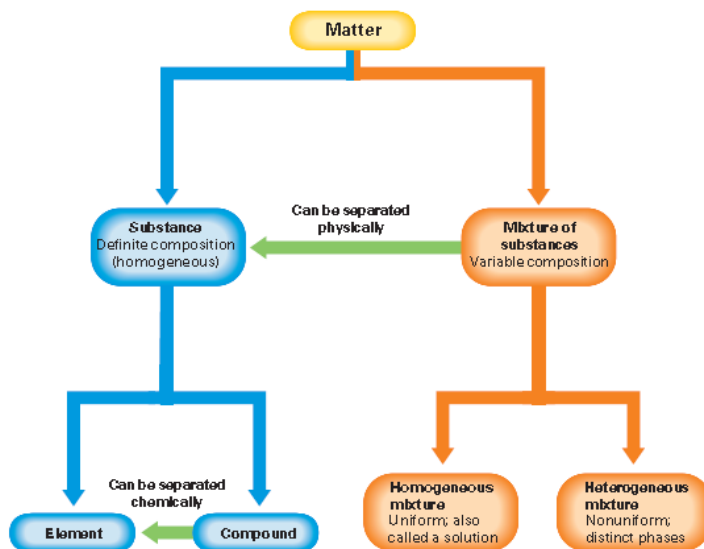   -different sizes of particles can be 'filtered' through variable size mesh

-Distillation
    -liquids can be separated using distillation which relies on the fact that many liquids have different boiling points

Section 2.3-Elements and Compounds

- element
    - -the simplest form of matter with a unique set of properties

- compound
    - -two or more elements chemically combined in a fixed ratio

chemical change vs physical change

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                            Matter

        Substance          Can be separated          Mixture of
    Definite composition      physically              substances
      (homogeneous)      ←───────────────      Variable composition


                                            Homogeneous      Heterogeneous
        Can be separated                    mixture          mixture
          chemically                        Uniform; also    Nonuniform;
                                            called a solution distinct phases
    Element  ←──  Compound
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Common names are not precise enough so chemists use symbols and formula to represent elements and compounds

Table 2.2

Symbols and Latin Names for Some Elements

Name	Symbol	Latin name
Sodium	Na	*natrium*
Potassium	K	*kalium*
Antimony	Sb	*stibium*
Copper	Cu	*cuprum*
Gold	Au	*aurum*
Silver	Ag	*argentum*
Iron	Fe	*ferrum*
Lead	Pb	*plumbum*
Tin	Sn	*stannum*