

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

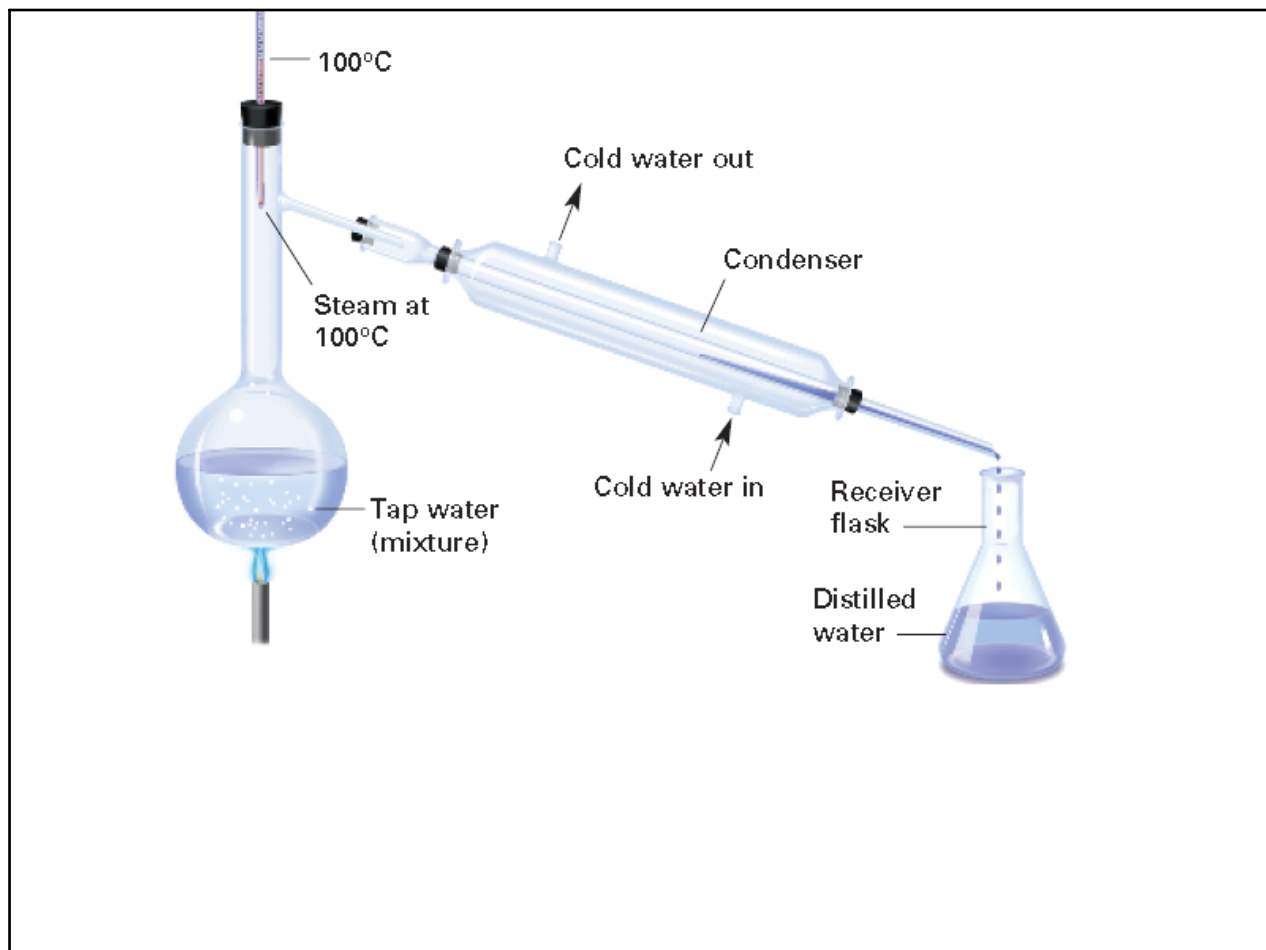
- differences in physical properties are used to separate mixtures

-Filtration

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

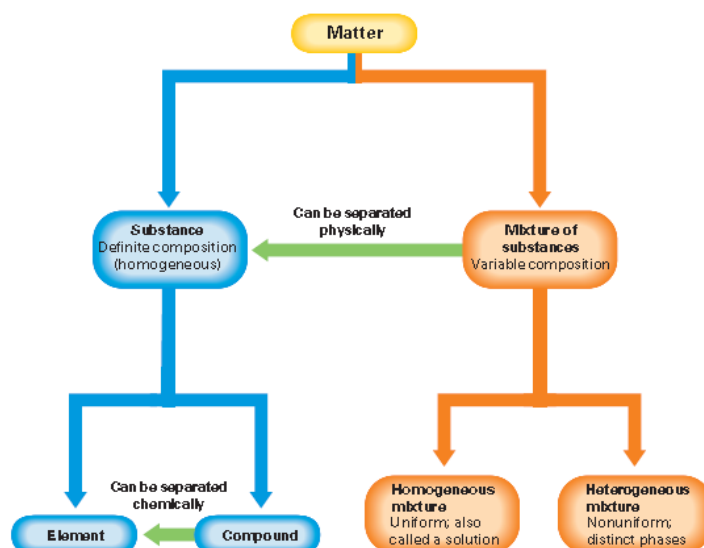
-Distillation

- 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*



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 | <i>natrium</i> |
| Potassium | K | <i>kalium</i> |
| Antimony | Sb | <i>stibium</i> |
| Copper | Cu | <i>cuprum</i> |
| Gold | Au | <i>aurum</i> |
| Silver | Ag | <i>argentum</i> |
| Iron | Fe | <i>ferrum</i> |
| Lead | Pb | <i>plumbum</i> |
| Tin | Sn | <i>stannum</i> |