Chapter 15:
Classification of Matter

- Composition of Matter
  - Pure Substances
  - Mixtures
    - Homogeneous
    - Heterogeneous

Pure Substances

- _____

  All the atoms have the same _____

  <u>Examples:</u> copper, iron, mercury, gold,

  _____

Pure Substances

- _____

  Two or more elements combined in a fixed proportion

  (_____)

  <u>Examples:</u> _____(H_2O),

  _____(NaCl)

Mixtures

- _____

  Mixtures
  - A mixture with different materials that are _____ and easily recognized
  - <u>Examples:</u> Italian dressing, _____, cement, fabric

Mixtures

- _____ Mixtures
  - Two or more substances

    _____

    _____throughout

  - <u>Examples:</u> _____, soda, vinegar, tea

Homogeneous Mixture

- _____
  - _____ particles that are _____ _____ and will not settle out
  - <u>Examples:</u> _____ is a solution of water, sugar, flavor, color, and carbon dioxide
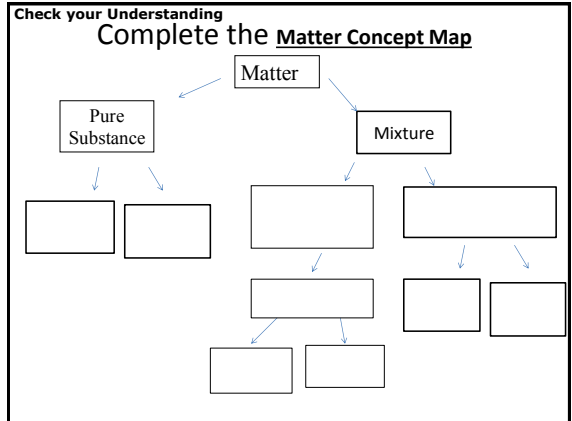
Heterogeneous Mixture

- _____
  - Mixture that has _____ particles that will _____
  - <u>Examples:</u> muddy water, hot chocolate, _____

Other Type of Mixture

- _____
  - Like _____- particles won't settle out
  - Like _____- particles are larger and vary in proportion
  - <u>Example:</u> milk,_____, _____, gelatin

Other Type of Mixture

_____

- _____by the particles in a colloid.
- <u>Example:</u> Light beam shining through _____

Check your Understanding
Complete the <u>Matter Concept Map</u>

Matter

Pure Substance

Mixture

Check your Understanding

How would you classify each of the following substances?
Where on the <u>**Matter Concept Map**</u> (**above)**
would you place the substances?

- **sugar**
- **sodium**
- **tea**
- **milk**
- **fruit salad**