Mixtures & Separations
Bromfield Honors Chemistry
Mixture

A sample of matter containing 2 or more different pure substances, physically blended together.
Mixture

- The components may be separated
2 categories of mixtures

- Homogeneous
  - Components are uniformly distributed
2 categories of mixtures

- Homogeneous
  - Components are uniformly distributed
  - Also referred to as “solution”
2 categories of mixtures

- Homogeneous
  - Components are uniformly distributed
  - Also called “solution”
  - May be in solid, liquid, or gas phase
Alloys

- Homogeneous mixtures of metals

- Video
2 categories of mixtures

- Heterogeneous
  - Components are non-uniformly distributed
2 categories of mixtures

- Heterogeneous
  - Ratios of components may vary throughout
  - May observe distinct phases or an interface
Filtration

- Separating solids from fluids (liquids or gases)
Chromatography

- Separates components of a mixture based on differences in solubility
Distillation

- Separation of components in a mixture based on differences in boiling points.
What types of matter are shown?

A

B

C

D
The picture shows a mixture of two compounds.

A. True
B. False
The picture shows a mixture of two compounds.

- A. True
- B. False
The picture illustrates a heterogeneous mixture in the solid phase.

- A. True
- B. False
The picture illustrates a heterogeneous mixture in the solid phase.

- A. True  
- B. False