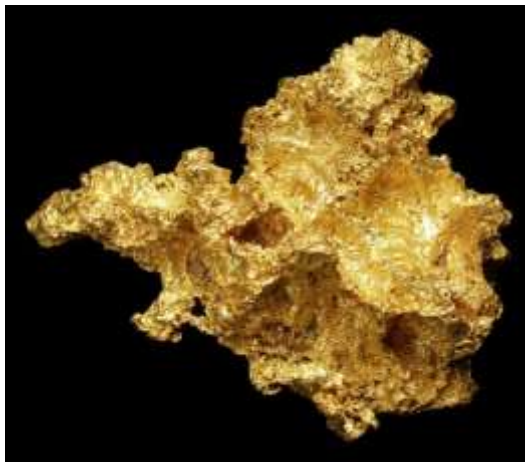


Mixtures & Solutions

Mr. Skirbst

4 Classes of Matter



4 Classes of Matter

1. Mixtures



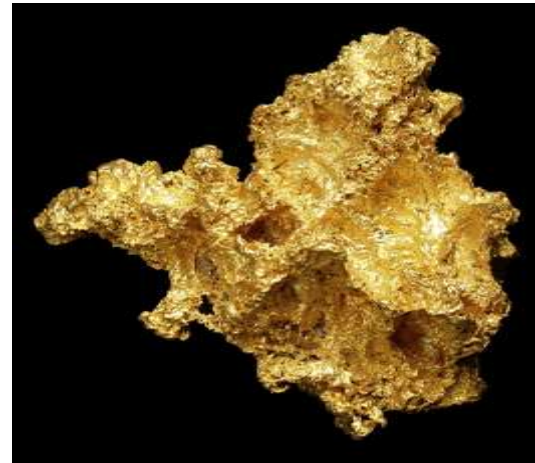
4 Classes of Matter

1. Mixtures
2. Solutions



4 Classes of Matter

1. Mixtures
2. Solutions
3. Elements



4 Classes of Matter

1. Mixtures
2. Solutions
3. Elements
4. Compounds



Mixtures

A combination of two or more substances mixed together but not chemically combined







Properties of Mixtures

- Substances keep individual identity

Properties of Mixtures

- Substances keep individual identity
- No new substances formed

Properties of Mixtures

- Substances keep individual identity
- No new substances formed
- No fixed proportions

Properties of Mixtures

- Substances keep individual identity
- No new substances formed
- No fixed proportions
- Can be physically separated





2 Types of Mixtures

1. Heterogeneous

- different throughout

- least mixed mixture

(ex. Tossed salad)



2 Types of Mixtures

2. Homogeneous

- same throughout

- well-mixed mixture

(ex. milk)



Homogeneous Mixtures

Colloid

- particles are mixed, but not dissolved



Colloids

Colloid— A mixture of two phases of matter

emulsions	aerosols
smoke	fog
foams	gels
milk	clouds

Gel & Foam **Clouds** **Milk**

Homogeneous Mixtures

Colloid

- particles are mixed, but not dissolved

Solution

- particles are dissolved



Solutions

Homogeneous mixture formed
when one substance
dissolves in another

Solutions

Solute – substance that IS
dissolved

Solvent – substance that DOES
the dissolving

Solubility – substance's ABILITY
to dissolve





Lab Techniques

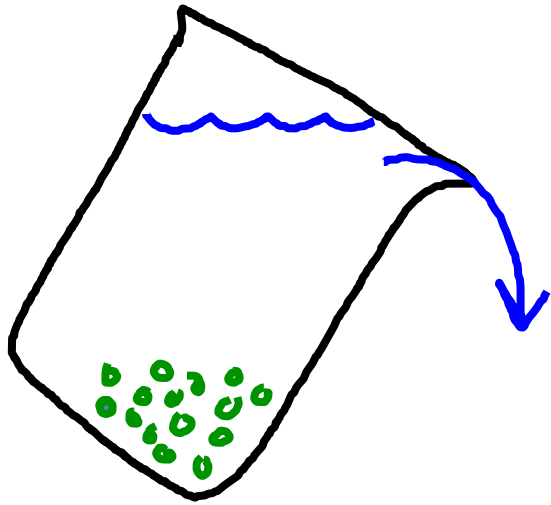
Decanting– separating liquids + solids by pouring off liquid

Lab Techniques

Decanting– separating liquids + solids by pouring off liquid

Filtering– separating liquids + solids by passing through a filter (semi-permeable membrane)

Lab Techniques



Decanting

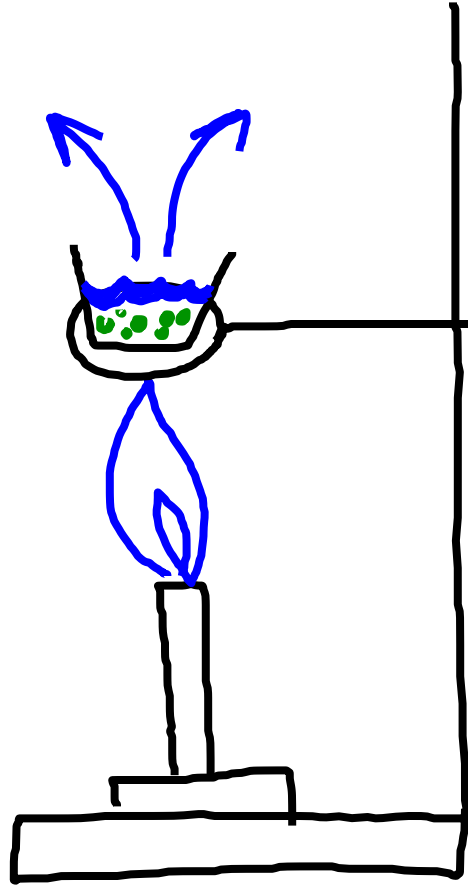


Filtering

Lab Techniques

Evaporation – separating liquids + solids by heating the liquid until it evaporates, leaving the solid behind

Lab Techniques



Evaporation