

Mixtures, Solutions and Compounds

Compounds vs. Mixtures

Mixture	Compound
Created by a physical combination – substances are mixed or blended	Created by a chemical reaction - new substance is formed
Each material in the mixture keeps its properties	New substance has different properties from original materials
Can have varying or different amounts of each substance	Must have the same amounts of each substance
Usually easy to separate - use physical separation	Not easy to separate – use chemical reactions

Mixtures

- Can be made up of elements, compounds, or both elements and compounds

3 Types of Mixtures

- Solution
 - Looks the same all the way through
 - Evenly colored or transparent (see through)
 - Never settle into layers
 - Examples:
- Suspension and Heterogeneous Mixture
 - Usually translucent (cloudy) or opaque (can't see through at all)
 - Settle into layers = **SUSPENSION**
 - Examples:
- Colloid
 - Emulsion - milk
 - Aerosol – fog,
 - Gel – Jello
 - Foam – whipped cream, marshmallows

Physical Science Vocabulary cont.....

Mixture – 2 or more substances blended or mixed together that keep their original properties

Solution – a type of mixture that is completely blended together and looks the same everywhere

Suspension – a mixture that settles or separates into layers

Heterogeneous - doesn't look the same throughout

Homogeneous – looks the same throughout

Transparent – can see through (example:)

Translucent – cloudy but can still see through (example:)

Opaque – cannot see through at all (example:)

Colloid – particles of one type spread throughout another

Emulsion – one type of liquid spread through another type of liquid

Aerosol – liquid or solid particles spread through a gas

Gel – solid particles spread through a liquid

Foam – gas particles spread a liquid or a solid