Building Blocks of Matter

Element - a unique and pure substance in its simplest form; each element has its own unique properties (Sulfur-solid; yellow; rotten egg odor)

- ***Each LEGO block represents one atom. Each color is a different atom or different element.***

1. Remove the LEGOS from the bag.
2. Sort the LEGOS by color. Each color is a different element. Each block is a different atom.
3. Using squares to represent the LEGOS, draw and color the atoms for each of the 3 elements.

Compounds – a compound has to have ***2 or more different elements chemically bonded together***. In order for compounds to form, a chemical reaction must occur and energy is needed.

1. Using the elements, create at least 3 different ***compounds.***
2. Draw and color the **compounds** you created.

Mixtures - mixtures are not chemically bonded, they are just physically mixed together; substances can be separated; ingredients can always be separated out.

1. Create a **mixture** containing ***two different elements.*** Draw and color the **element mixture.**

2. Create one **mixture** containing ***3 different compounds.*** Draw and color the **compounds mixture.**

3. Create one **mixture** containing ***elements and compounds.*** Draw and color the ***element and compound mixture.***

Name_____

Date_____Period_____

Element 1 ozone (O_3) (harmful)

Element 2 1 atom of chlorine (Cl)

Element 3 1 atom of Calcium (Ca)

Compound 1 Calcium Carbonate ($CaCO_3$)

Compound 2 Hydrogen Peroxide H_2O_2

Compound 3 oxygen (Rust) Fe_2O_3 (Iron Oxide)

Mixture of at least 2 different elements

Mixture of 3 different compounds Hydrochloric Acid Salt

Mixture of elements and compounds H_2O Carbon monoxide Fe