# Elements, Compounds, or Mixtures Activity (pg 2)

Names of group members _____

Date _____ hour _____

1. Appoint one group member to cut apart Model 1 into nine separate drawings. As a team, sort the drawings into two groups based on the following:

***Matter is classified as a pure substance when all of the particles are identical. Matter is classified as a mixture if it is composed of two or more different particles.***

2. Once you have your two groups, list the codes for the drawings in the appropriate places below.

| **Pure substances** |
|---|
| |
| |
| |
| |
| |
| |

| Mixtures |
|---|
| |
| |
| |

3. Look at the drawings you identified as being Pure Substances. Decide which of these are examples of elements and which are Compounds/molecules based on the following:

***Elements are defined as pure substances made from only one type of atom. Compounds/molecules are pure substances made from two or more types of atoms that are chemically bonded to one another.***

4. Once you have your two groups, list the codes for the drawings in the appropriate places below.

| Elements |
|---|
| |
| |

| Compounds/Molecules |
|---|
| |
| |
| |
| |

5. Look at the codes for the drawings. Can you figure out what they mean? Notice any patterns?

   What do these codes mean?

   T = _____ Sq = _____

   R = _____

6. Using this information, what do these codes mean?

$R_3Sq$ = _____

$TSq_2R$ _____

7. Look at the drawing with the "?" What would this drawing be called? _____

8. Use what you have learned to identify each below as an element (E), Compound (C) or Mixture (M)

   a. $Br_2$ _____ d. Cu and Zn _____

   b. $NaHCO_3$ _____ e. C _____

   c. Al _____ f. $H_2O$ and Fe _____