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.***

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

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| **Pure substances** |
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| Mixtures |
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1. 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.***

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

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| --- |
| Elements |
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|  |

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| --- |
| Compounds/Molecules |
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1. 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 = \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

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

R3Sq = \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

TSq2R \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

1. Look at the drawing with the “?” What would this drawing be called? \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
2. Use what you have learned to identify each below as an element (E), Compound (C) or Mixture (M)
3. Br2 \_\_\_\_\_\_\_\_\_\_ d. Cu and Zn \_\_\_\_\_\_\_\_\_\_\_
4. NaHCO3 \_\_\_\_\_\_\_\_\_ e. C \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
5. Al \_\_\_\_\_\_\_\_\_\_\_ f. H2O and Fe \_\_\_\_\_\_\_\_\_\_\_\_