**Classification of Matter Assignment – Total Value 65 – November 16, 2016**

**Name:** \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**DUE:** **November 17, 2016**

1. Match the following terms on the left column with the definition provided on the right column. **Value 5**

|  |  |
| --- | --- |
| **TERMS** | **DEFINITIONS** |
| 1. Elements
 | \_\_\_\_ is a mixture where the different parts of each substance can be separated physically, different parts are visible. |
| 1. Mixtures
 | \_\_\_\_\_ is a substance made by combining two or more different materials in such a way that no chemical reaction occurs, can be separated by physical means. |
| 1. Heterogeneous Mixtures
 | \_\_\_\_ are pure substance that contain two or more different elements in a fixed proportion. |
| 1. Homogeneous Mixtures
 | \_\_\_\_ are mixtures where two different substances that are combined together are mixed very well, any portion has the same properties and composition. |
| 1. Compounds
 | \_\_\_\_ are pure substance that cannot be broken down into simpler substances, contain one kind of atom. |

1. All of the following are examples of *pure substances*. Indicate whether the pure substance are classified as *an element or a compound*. Value 10
2. Krypton Kr \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
3. Sugar C6H12O6 \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
4. Propane C3H8 \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
5. Gasoline C8H18 \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
6. Calcium Ca \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
7. water H2O \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
8. sulfate SO4 \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
9. nitrogen N \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
10. arsenic As2O3 \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
11. methane CH4 \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
12. All of the following are example of *mixtures*. Indicate whether the mixtures are classified as a *homogeneous mixture or a heterogeneous mixture*. Value 10
13. cake \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
14. orange pop \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
15. salt/pepper chips \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
16. vanilla ice cream \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
17. hot chocolate \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
18. molasses \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
19. root beer \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
20. fudge \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
21. mayonnaise \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
22. sand \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
23. Classify the following as: **Value 20**
24. a mixture or a pure substance
25. if a mixture, classify as heterogeneous or homogeneous mixture
26. if a pure substance, classify as an element or a compound.

Example:

Pure distilled water - \_\_\_\_\_pure substance\_\_\_\_\_\_ \_\_\_\_\_\_\_\_compound\_\_\_\_\_\_\_\_\_

Pizza - \_\_\_\_\_\_\_\_mixture\_\_\_\_\_\_\_\_\_ \_\_\_\_\_heterogeneous mixture**\_\_**

1. iron Fe \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
2. carbon dioxide CO2\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
3. salad \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
4. salt water NaClH2O\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
5. popsicles \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
6. donut \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
7. copper Cu \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
8. hydrogen H \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
9. coffee \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
10. gravel \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
11. Using *your periodic table at the back of your textbook*, find the symbols for the following elements (write them exactly as shown in table, capital letter following by a lower case letter for some elements). Value 20
12. chromium \_\_\_\_\_\_\_\_\_
13. radium \_\_\_\_\_\_\_\_\_
14. lithium \_\_\_\_\_\_\_\_\_
15. bromine \_\_\_\_\_\_\_\_\_
16. aluminum \_\_\_\_\_\_\_\_\_
17. boron \_\_\_\_\_\_\_\_\_
18. tin \_\_\_\_\_\_\_\_\_
19. cadmium \_\_\_\_\_\_\_\_\_
20. cobalt \_\_\_\_\_\_\_\_\_
21. platinum \_\_\_\_\_\_\_\_\_
22. manganese \_\_\_\_\_\_\_\_\_
23. scandium \_\_\_\_\_\_\_\_\_
24. argon \_\_\_\_\_\_\_\_\_
25. carbon \_\_\_\_\_\_\_\_\_
26. zinc \_\_\_\_\_\_\_\_\_
27. helium \_\_\_\_\_\_\_\_\_
28. potassium \_\_\_\_\_\_\_\_\_
29. cesium \_\_\_\_\_\_\_\_\_
30. silicon \_\_\_\_\_\_\_\_\_
31. barium \_\_\_\_\_\_\_\_\_