**CLASSIFICATION OF MIXTURES Assignment – Value 65**

**NAME: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_March 19, 2019**

1. True or False. Indicate whether the following statement is True or False. Value 20
2. ( T / F ) Elements are pure substance that contain two or more different elements in a fixed proportion.
3. ( T / F ) Compounds are pure substance that cannot be broken down into simpler substances, contain one kind of atom.
4. ( T / F ) Water (H20), carbon dioxide (CO2), and salt (NaCl) are all examples of pure substances, which are classified as compounds.
5. ( T / F ) A heterogeneous mixture is simply any mixture that is not uniform in composition. A heterogeneous mixture is simply any mixture that is not uniform in composition.
6. ( T / F ) A homogeneous mixture has the same uniform appearance and composition.
7. ( T / F ) Orange juice with pulp is an example of a homogeneous mixture.
8. ( T / F ) Air is a heterogeneous mixture.
9. ( T / F ) An unopened can of pop is homogeneous.
10. ( T / F ) Flat pop is heterogeneous.
11. ( T / F ) Shampoo is a homogeneous mixture.
12. ( T / F ) Vinegar and oil salad dressing is heterogeneous since two liquid layers are present, as well as solids.
13. ( T / F ) Air with clouds is heterogeneous, as the clouds contain tiny droplets of liquid water.
14. ( T / F ) Salt water is an example of a compound.
15. ( T / F ) A cup of coffee (without milk) is a heterogeneous mixture.
16. ( T / F ) An alloy is a metal comprised of two pure metals. Alloys such as steel and bronze are homogeneous mixtures of two metals.
17. ( T / F ) Smog is a heterogeneous mixture of various particles suspended in the air.
18. ( T / F ) Sand is a heterogeneous mixture of rock, shells, metals, and other elements, which can be separated from each other by methods like sifting.
19. ( T / F ) Soil is an example of a homogeneous mixture.
20. ( T / F ) Propane C3H8 is a pure substance and is classified as a compound.
21. ( T / F ) Milk is a mixture that is classified as a heterogeneous mixture.
22. Identify the following in the following order (SEE EXAMPLE PROVIDED): Value 20
23. First, identify as a *pure substance* or *a mixture*
24. Second, if it’s a *pure substance*, classify as an *element* or a *compound*
25. Third, if it’s *a mixture*, classify the mixture as *homogeneous* or *heterogeneous*

**Example: Pure distilled water (H20) classification (see below)**

 NOTE IF: Pure substance - Element or Compound

 IF: Mixture – Heterogeneous or Homogeneous

Pure distilled water (H20) – pure substance compound

1. Iron (Fe) - \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
2. Carbon dioxide (CO2) \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
3. Salad \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
4. Salt water (NaCl + H20) - \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
5. Popsicles \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
6. Donut \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
7. Copper (Cu) \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
8. Hydrogen (H2) \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
9. Coffee (no milk) \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
10. Coffee (with milk) \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
11. Using your periodic table provided, find the symbols EXACTLY AS SHOWN ON TABLE for each of the following elements. Value 25
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 – \_\_\_\_\_\_\_
32. Hydrogen –\_\_\_\_\_\_\_\_
33. Sodium - \_\_\_\_\_\_\_
34. Potassium – \_\_\_\_\_\_\_\_
35. Lead – \_\_\_\_\_\_\_
36. Iodine - \_\_\_\_\_\_\_\_\_