

A New Language HW

Read and outline (Cornell style) **Section 3.3** in your chemistry textbook. Then answer the following assessment questions:

1. How do mixtures and substances differ?
2. Consider a mixture of water, sand, and oil. How many phases are present? How could you separate this mixture into individual substances?
3. Classify each of the following as either a heterogenous or homogenous mixture:
 - a. Orange juice
 - b. Tap water
 - c. Steel (a blend of iron and carbon)
 - d. Air
 - e. Raisin muffin
4. How many elements are represented by the chemical formula for sodium nitrate, NaNO_3 ? Name them.
5. What is the difference between $\text{CuSO}_4(\text{s})$ and $\text{CuSO}_4(\text{aq})$?
6. If salt, $\text{NaCl}(\text{s})$, is dissolved in water, $\text{H}_2\text{O}(\text{l})$, how would you write the chemical formula for the resulting salt water solution? (**NOT a trick question. Think about how “dissolved in water” is represented in a formula.**)