Quiz 2A

1. A solution of cough syrup contains 7.50% active ingredient by volume. If the total volume of the bottle is 25.00 mL, how many milliliters of active ingredient are in the bottle (5 points)?

1. A thermometer containing 5.879 g of mercury has broken. What volume of mercury spilled? The density of mercury at 25 °C is 13.6 g/mL (5 points).
2. Answer the following questions about the Density experiment (3 points):
   1. Density is a (physical/chemical) property of a substance.
   2. You will find the density of gold in this experiment. (True/False)
   3. Volumes in this experiment should be recorded to the nearest \_\_\_0.1\_\_\_ mL.
3. Classify each of the following as a homogenous mixture, heterogeneous mixture, element or compound (5 points):
   1. Copper metal, Cu \_\_\_\_\_\_\_\_\_element\_\_\_\_\_\_\_\_\_
   2. Soft Drink \_\_\_\_homogeneous mixture\_\_\_\_\_\_\_\_\_\_\_\_\_\_
   3. Sugar, C12H22O11 \_\_\_\_\_\_\_\_compound\_\_\_\_\_\_\_\_\_\_
   4. Ham Sandwich \_\_\_\_\_\_\_heterogeneous mixture\_\_\_\_\_\_\_\_\_\_\_
   5. Baking Soda, NaHCO3 \_\_\_\_\_\_\_\_compound\_\_\_\_\_\_\_\_\_\_
4. Identify each of the following as properties of a solid, liquid or gas (2 points):
   1. This substance has a definite volume and \_\_\_\_\_\_solid\_\_\_\_\_\_

shape.

* 1. The particles in the substance have negligible attractive forces. \_\_\_\_gas\_\_\_\_\_\_\_\_

Quiz 2B

1. Answer the following questions about the Density experiment (3 points):
   1. You will find the density of iron in this experiment. (True/False)
   2. Density is a (physical/chemical) property of a substance.
   3. Volumes in this experiment should be recorded to the nearest \_\_\_0.1\_\_\_ mL.
2. Classify each of the following as a homogenous mixture, heterogeneous mixture, element or compound (5 points):
   1. Butane, C4H10 \_\_\_\_\_compound\_\_\_\_\_\_\_\_\_\_\_\_\_
   2. Cranberry Juice \_\_\_\_\_\_\_\_homogeneous mixture\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
   3. Platinum ring \_\_\_\_element\_\_\_\_\_\_\_\_\_\_\_\_\_\_
   4. Battery \_\_\_\_\_\_heterogeneous mixture\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
   5. Salt Substitute, KCl \_\_\_\_\_\_\_\_compound\_\_\_\_\_\_\_\_\_\_
3. A solution of cough syrup contains 5.25% active ingredient by volume. If the total volume of the bottle is 50. mL, how many milliliters of active ingredient are in the bottle (5 points)?

1. Identify each of the following as properties of a solid, liquid or gas (2 points):
   1. The particles in a substance are very far apart. \_\_\_\_gas\_\_\_\_\_\_\_\_
   2. This substance occupies the entire volume of the container. \_\_\_gas\_\_\_\_\_\_
2. A thermometer containing 9.821 g of mercury has broken. What volume of mercury spilled? The density of mercury at 25 °C is 13.6 g/mL (5 points).