Quiz 2A

1. A solution of cough syrup contains 7.50% active ingredient by volume. If the total volume of the bottle is 30.0 mL, how many milliliters of active ingredient are in the bottle (5 points)?

1. A thermometer containing 6.1 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. In the Density experiment, what are you finding the density of (3 points)?

Rubber stopper, metal slug, unknown liquid

1. Classify each of the following as a homogenous mixture, heterogeneous mixture, element or compound (5 points):
   1. Helium gas, He \_\_\_\_\_\_\_\_\_element\_\_\_\_\_\_\_\_\_
   2. Soft Drink \_\_\_\_homogeneous mixture\_\_\_\_\_\_\_\_\_\_\_\_\_\_
   3. Sugar, C12H22O11 \_\_\_\_\_\_\_\_compound\_\_\_\_\_\_\_\_\_\_
   4. Cheese Sandwich \_\_\_\_\_\_\_heterogeneous mixture\_\_\_\_\_\_\_\_\_\_\_
   5. Baking Soda, NaHCO3 \_\_\_\_\_\_\_\_compound\_\_\_\_\_\_\_\_\_\_
2. Identify each of the following as properties of a solid, liquid or gas (2 points):
   1. This substance has a definite volume, \_\_\_\_\_\_liquid\_\_\_\_\_\_

but takes the shape of its container.

* 1. The particles in the substance have very strong attractive forces. \_\_\_\_solid\_\_\_\_\_\_\_\_

Quiz 2B

1. In the Density experiment, what are you finding the density of (3 points)?

Rubber stopper, metal slug, unknown liquid

1. Classify each of the following as a homogenous mixture, heterogeneous mixture, element or compound (5 points):
   1. Propane, C3H8 \_\_\_\_\_compound\_\_\_\_\_\_\_\_\_\_\_\_\_
   2. Cranberry Juice \_\_\_\_\_\_\_\_homogeneous mixture\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
   3. Silver spoon \_\_\_\_element\_\_\_\_\_\_\_\_\_\_\_\_\_\_
   4. Remote Control \_\_\_\_\_\_heterogeneous mixture\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
   5. Salt Substitute, KCl \_\_\_\_\_\_\_\_compound\_\_\_\_\_\_\_\_\_\_
2. A solution of cough syrup contains 5.25% active ingredient by volume. If the total volume of the bottle is 25.0 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 7.5 g of mercury has broken. What volume of mercury spilled? The density of mercury at 25 °C is 13.6 g/mL (5 points).