

## Properties of Matter

10<sup>th</sup> Grade Chemistry

Name: \_\_\_\_\_ Date: \_\_\_\_\_

I. Classify each of the following as a chemical or physical property. Write C if it is chemical and P if it is physical.

- |   |   |
|---|---|
| a) reacts with vinegar _____            | i) is flammable _____                           |
| b) is green _____                       | j) is 2.7 cm long _____                         |
| c) conducts heat _____                  | k) is malleable _____                           |
| d) easily corrodes _____                | l) condenses at $-123^{\circ}\text{C}$<br>_____ |
| e) boils at $110^{\circ}\text{C}$ _____ | m) has a density $1.3\text{ g/cm}^3$<br>_____   |
| f) dissolves in kerosene _____          | n) reacts with water _____                      |
| g) can be drawn into a wire<br>_____    |   |
| h) is corrosive _____                   |   |

II. Calculate the density of the following materials.

- 35.0 g of a substance that occupies 25.0 mL
- 2.80 g of a substance that occupies 2.00 L
- Determine the volume that a 35.2 g of carbon tetrachloride will occupy if it has a density of 1.60 g/mL.
- The density of ethanol is 0.789 g/mL. What is the mass of a 150 L of this alcohol?
- A block of lead displaces a volume of 27.00 mL. Calculate the mass of this block, if the density of lead is 11.34 g/mL.