

Name: _____

Mole Problems #0 – Calculating Molar Mass, Moles → Mass, Mass → Moles

1. Determine the molar mass of each of the following compounds:

- a. Fe_2O_3
- b. H_3PO_4
- c. Be_5As_2
- d. Rubidium sulfite
- e. Aluminum sulfate
- f. Magnesium hydroxide

2. Determine the mass of each of the following compounds (Moles → Mass):

- a. 2.50 mol K_2CrO_4
- b. 0.25 mol $\text{Ba}(\text{NO}_3)_2$
- c. 0.375 mol $\text{Na}_2\text{Cr}_2\text{O}_7$
- d. 0.25 mol Sodium acetate
- e. 0.418 mol Iron (III) nitrate
- f. 1.872 mol Copper (II) acetate

3. Determine the number of moles in each of the following compounds (Mass → Moles):

- a. 50.0 g of $\text{C}_6\text{H}_{12}\text{O}_6$
- b. 25.00 g of K_3PO_4
- c. 15.57 g of $\text{Bi}(\text{OH})_3$
- d. 3.50 g of Arsenic trichloride
- e. 27.85 g of Iron (II) phosphate
- f. 4.90 g of Aluminum carbonate