

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

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

Pd: \_\_\_\_\_

## UNIT 4, SECTION 1 - MASS AND THE MOLE - PRACTICE PROBLEMS

**Part 1: Calculate the molecular weight for the following compounds. Round your answers to two decimal places.**

Compound:	Show work and circle answer:
Sodium sulfide Na <sub>2</sub> S	
Barium carbonate BaCO <sub>3</sub>	

**Part 2: Take your molecular weights from Part 1 above and write them as molar masses:**

<u>Sodium sulfide</u>	<u>Barium carbonate</u>

**Part 4: Vocabulary:**

The molecular weight is the overall \_\_\_\_\_ of a \_\_\_\_\_. When calculating molecular weight you \_\_\_\_\_ together the masses of each element. Molar mass of a compound is measured in the unit \_\_\_\_\_ because the molar mass of any substance is equal to EXACTLY 1 mole of that substance (1 complete "set" of that substance).

**Molar Conversions:**

- If you have 1.5 mol of Lithium, how many grams do you have?
- How many grams are in 0.48 mol of Sodium chloride (NaCl)?
- Challenge:** How many molecules are in 4.56 grams of Calcium bromide (CaBr<sub>2</sub>)?