

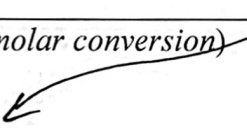
Name Example Data Period A11

Assignment 6F – Measuring Molar Mass

40 Points

Use the following template to measure the masses given in lab and determine the molar mass of each compound.

$$\text{Mass}_{\text{Hydrate}} = \text{Mass}_{\text{Beaker\&Hydrate}} - \text{Mass}_{\text{Beaker}}$$

Compound A (given) CaCO_3		Compound B (given) NaHCO_3	
Molar Mass A $\text{Ca} : 1 : \underline{\hspace{1cm}} \text{g}$ $\text{C} : 1 : \underline{\hspace{1cm}} \text{g}$ $\text{O} : 3 : \underline{\hspace{1cm}} \text{g}$ 		Molar Mass B 	
Mass Beaker + A <u>59.2g</u>	Mass Beaker <u>50.0g</u>	Mass Beaker + B <u>56.3g</u>	Mass Beaker <u>50.0g</u>
Mass A (Mass Beaker + A – Mass Beaker) $\text{Mass}_A = 59.2\text{g} - 50.0\text{g}$ $= \underline{\hspace{1cm}}$		Mass B (Mass Beaker + B – Mass Beaker) 	
Mol A (use molar conversion)  $\frac{\text{g}}{\text{MM}_A \text{ (above)}} \times \frac{1 \text{ mol } A}{\text{g}}$		Mol B (use molar conversion) 	
Mol A = <u> </u>		Mol B = <u> </u>	

Compound C (given) $(\text{NH}_4)_2\text{SO}_4$		Compound D (given) $\text{MgCl}_2 \cdot 6\text{H}_2\text{O}$	
Molar Mass C N: 2 . _____ g H: 8 . _____ g S: 1 . _____ g O: 4 . _____ g Molar Mass C = _____		Molar Mass D Mg: 1 . _____ g H: 12 . _____ g Cl: 2 . _____ g O: 6 . _____ g Molar Mass D = _____	
Mass Beaker + C 63.9g	Mass Beaker 50.0g	Mass Beaker + D 58.2g	Mass Beaker 50.0g
Mass C (Mass Beaker + C – Mass Beaker) $\text{mass}_c = 63.9\text{g} - 50.0\text{g}$ $=$ _____ g		Mass D (Mass Beaker + D – Mass Beaker) 	
Mol C (use molar conversion) Mol C = _____		Mol D (use molar conversion) Mol D = _____	