

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

### Unit 9 Molarity Handout (Honors)

#### Molarity problems:

#### Finding Molarity (M):

- 1) If 4.30 moles of  $\text{Ca}(\text{NO}_3)_2$  are dissolved in 5.00L of solution, what of the what is the molarity of the solution?
- 2) If 1.72 grams of  $\text{AgC}_2\text{H}_3\text{O}_2$  are dissolved in water to make 6.0L of solution, what is the molarity of the solution?

#### Finding Volume:

- 3) If you want .529 moles of  $\text{MgSO}_4$ , how many liters of a 4.71 M  $\text{MgSO}_4$  solution is needed?
- 4) If you want 1.46 moles of  $\text{K}_2\text{O}$ , how many liters of a .271M  $\text{K}_2\text{O}$  solution do you need?

#### Finding moles:

- 5) .560 L of a 1.92 M  $\text{FeCl}_3$  solution contains how many moles of  $\text{FeCl}_3$ ?
- 6) 36.1 L of a .0716 M  $\text{NaNO}_3$  solution contains how many moles and grams of  $\text{NaNO}_3$ ?

#### Molarity and conversions:

- 7) How many mL will needed to make a 5.87 M solutions from 134g of  $\text{NaCl}$ ?
- 8) 67.9 mL of .987 M will contain how many grams of  $\text{LiCl}$ ?