



Name: _____

Period: _____

Assigned on Monday, November 03, 2025

12.1 Molarity Stoichiometry**Due Tuesday, November 04, 2025**

1. What is the molarity of a 3.5 L solution that contains 2.3 moles of solute?
2. What is the molarity of a solution that contains 45 g of LiBr in 0.250 L of the solution?
3. How many liters of a 5.6 M solution contains 3.4 moles of solute?
4. How many liters of 1.35 M CaF_2 contains 6.58 g of CaF_2 ?
5. How many liters of 5.23 M $\text{C}_6\text{H}_{12}\text{O}_6$ contains 255 g of $\text{C}_6\text{H}_{12}\text{O}_6$?
6. How many grams of HCl are needed to make 0.500 L of a 1.5 M solution of HCl?
7. How many grams of CuSO_4 are needed to make 1.3 L of a 3.18 M solution of CuSO_4 ?
8. 30.0 mL of a 2.5 M solution of HCl reacts with excess AgNO_3 . What mass of AgCl will be produced? (Don't forget the first thing you need to do is write a balanced equation!)
9. If 100.0 mL of a 3.0M lead(II) acetate reacts with excess potassium iodide, what mass of lead(II) iodide will be produced?
10. What volume of 2.58 M silver nitrate when reacted with copper will produce 13.9 g of silver? (Assume $\text{Cu}(\text{NO}_3)_2$ is produced.)