Name: _____   Date: _____   Period: _____

Molarity Practice

Directions: Show all conversion work with units and chemical formulas.

$$\text{Molarity}\,(M) = \frac{\text{mole solute}}{\text{L solution}}$$

1. What is the molarity of a 0.550 L solution containing 25 g sodium chloride?

2. What is the molarity of a 2750 mL solution containing 25 g of sodium sulfide?

3. What is the mass of HI used to create 2.50L of a 0.48 M solution of hydroiodic acid?

4. How many moles of aluminum hydroxide are needed to make 755 mL of 0.250 M solution?

5. If you have 2.50 moles of sulfuric acid and want to make a 0.50 M solution how many liters of water do you need?

6. How many grams of magnesium phosphate do you need to make 2750 mL of a 4.50 M solution?

7. What is the molarity of 875mL saline solution containing 67.45 g sodium chloride?

8. How many milliliters of solution is needed to make use 48.0 g calcium sulfide to make a 0.250 M solution?