Solutions Lesson 3 Check for Understanding

$$\mathbf{M} = \frac{\text{moles solute}}{\text{Liters of solution}}$$

Calculate the answer to the following questions using the appropriate formula. Show all WORK.

1. What is the molarity of 2.0-L of a solution that contains 3.6 moles of KCl?

2. What volume (in L) of solution is needed to make a 0.67 M solution with 1.7 moles of NaBr?

3. What is the molarity of a solution containing 60.0 grams of CaCl₂ in 500.0 mL of solution?

4. What mass of CaCl₂ needed to make 1.8-L of a 0.35M solution?

5. Describe the process for making 250.0 mL of 1.50 M Na₂SO₄.

Add ______ g of _____ into a volumetric flask. Then add water while stirring until the final volume reaches _____mL.