Mole, molecule, atom, molarity and volume problems worksheet 2

1. How many moles are in 25.0 g of KCl?

2. How many molecules are in 5.00 g of NaCl?

3. How many hydrogen atoms are in 250 g of H_2O?

4. How many moles of NaCl are in 950 mL of a 4.1 M solution?

5. What volume of a 1.5 M solution of H_2O contains 3.0 g of solute?

6. Calculate the molarity of a solution by dissolving 15 g of KOH in enough water to make 3.75 L of solution.

7. There are 650 g/ 420 mL of H_2O. What is the molar concentration?

8. How many grams of NaCl are in 450 ml of a 1.75 M solution?

9. Which of the following solutions has the highest concentration in g/L?
  A- 5.5 mol in a 3.0 L of KBr
  B- 5.5 mol in a 3.0 L of NaOH