

Chemistry 12
Chemistry 11 Review

Name:
Date:
Block:

1. Calculate the molar mass of each of the following:

a) NO

b) $\text{Al}_2(\text{SO}_4)_3$

c) CH_3COOH

2. Calculate the mass of the following:

a) 1.00 mol of NH_4Cl

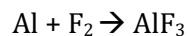
b) 0.0125 mol of XeF_3

3. Calculate the number of moles in the following:

a) 17.0 g of H_2SO_4

b) 01.5g of H_2O

4. The equation for the reaction of aluminum metal with fluorine gas is:

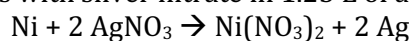


a) What is the balanced chemical equation?

b) If 116.1 g of Al reacts, how much mass of the product is made?

5. A sample of potassium chloride has 84.0% purity. If 39.8 g of this sample reacts with excess bromine gas, what volume of chlorine gas could be produced under STP conditions? Begin by writing a balanced chemical equation.

6. What mass of nickel wire reacts with silver nitrate in 1.25 L of a 0.150M solution?



7. Consider a solution containing 5.12g of CuSO_4 in 250.0 mL of solution.

a) What is the molar concentration of the solution?

b) If 150.0 mL of water was added to the above solution, what would be the resulting molar concentration?