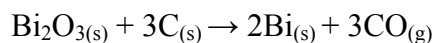


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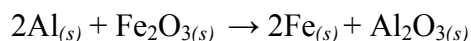
Practice Major Quiz 3 Key

1. How many moles of $\text{Ni}_2(\text{SO}_4)_3$ are in 102.3 g of the compound?
(Answer: 0.252mol)
2. How many grams of NaCl are in 750.0 mL of a solution which is 0.150 M?
(Answer: 6.57g NaCl)
3. Determine the empirical formula of a compound which percent composition is 39.10% C, 8.700% H, and 52.20% O. (Answer: $\text{C}_3\text{H}_8\text{O}_3$)

4. How many grams of $\text{Bi}_{(s)}$ are produced from 352.0 g $\text{Bi}_2\text{O}_{3(s)}$ according to the balanced chemical equation shown: (Answer: 315.7g Bi)



5. 12.0 grams of aluminum react with 54.0 grams of iron (III) oxide. If 19.5 grams of iron were obtained, what was the percent yield of the reaction?
(Answer: 78.6%)



6. How many mL of 0.500 M acetic acid are required to react with 250.0 mL of barium hydroxide solution which is 0.250 M according to the following reaction:
(Answer: 250.mL $\text{CH}_3\text{COOH}_{(aq)}$)

