

PERCENT YIELD

1. Calcium carbonate is decomposed by heating, as shown in the following equation.



- a. What is the theoretical yield of CaO if 24.8 g of CaCO₃ is heated?
- b. What is the percent yield if 13.1 g of CaO is produced?
2. What is the % yield of H₂O if 58 g H₂O are produced by combining 60 g O₂ and 7.0 g H₂?
3. If 300 g of FeS₂ is burned in 200 g of O₂, 143 g of Fe₂O₃ results. What is the % yield of Fe₂O₃?
4. 70 g of MnO₂ + 3.5 mol HCl gives a 42% yield. How many grams of Cl₂ are produced?
Given: $\text{MnO}_2 + 4\text{HCl} \rightarrow \text{MnCl}_2 + 2\text{H}_2\text{O} + \text{Cl}_2$