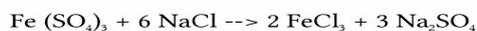


Name _____ **answer key** _____ Date _____

Stoichiometry: Mass – Mole Worksheet

Based on the following chemical equation, please answer the following questions!



Calculate the amount of moles of NaCl needed to produce 75 g of FeCl₃.

$$\frac{9 \text{ FeCl}_3}{9 \text{ FeCl}_3} \quad \left| \quad \frac{1 \text{ mole FeCl}_3}{9 \text{ FeCl}_3} \quad \right| \quad \frac{\text{mole NaCl}}{\text{mole FeCl}_3}$$

Calculate the amount of Fe₂ (SO₄)₃ in grams produce 215 g Na₂SO₄.

$$\frac{9 \text{ Na}_2\text{SO}_4}{9 \text{ Na}_2\text{SO}_4} \quad \left| \quad \frac{1 \text{ mole Na}_2\text{SO}_4}{9 \text{ Na}_2\text{SO}_4} \quad \right| \quad \frac{\text{mole Fe}_2(\text{SO}_4)_3}{\text{mole Na}_2\text{SO}_4} \quad \left| \quad \frac{9 \text{ Fe}_2(\text{SO}_4)_3}{1 \text{ mole Fe}_2(\text{SO}_4)_3} \right|$$

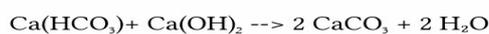
Calculate the amount in grams of FeCl₃ produced with 95g of Fe (SO₄)₃

$$\frac{9 \text{ Fe}_2(\text{SO}_4)_3}{9 \text{ Fe}_2(\text{SO}_4)_3} \quad \left| \quad \frac{1 \text{ mole Fe}_2(\text{SO}_4)_3}{9 \text{ Fe}_2(\text{SO}_4)_3} \quad \right| \quad \frac{\text{mole FeCl}_3}{\text{mole Fe}_2(\text{SO}_4)_3} \quad \left| \quad \frac{9 \text{ FeCl}_3}{1 \text{ mole FeCl}_3} \right|$$

Calculate the amount of moles of Fe₂(SO₄)₃ needed to react with 123.5 g of NaCl

$$\frac{9 \text{ NaCl}}{9 \text{ NaCl}} \quad \left| \quad \frac{1 \text{ mole NaCl}}{9 \text{ NaCl}} \quad \right| \quad \frac{\text{mole Fe}_2(\text{SO}_4)_3}{\text{mole NaCl}}$$

Based on the following chemical equation, please answer the following questions!



$$\frac{9 \text{ Ca(HCO}_3)_2}{9 \text{ Ca(HCO}_3)_2} \quad \left| \quad \frac{1 \text{ mole Ca(HCO}_3)_2}{9 \text{ Ca(HCO}_3)_2} \quad \right| \quad \frac{\text{mole CaCO}_3}{\text{mole Ca(HCO}_3)_2}$$