

Limiting Reactant Stoichiometry

Q#1: If 10.6 grams of Na_2CO_3 reacts with 3.65 grams of HCl then find the mass of CO_2 produced.

$\text{Na}_2\text{CO}_3 + 2\text{HCl} \rightarrow 2\text{NaCl} + \text{H}_2\text{O} + \text{CO}_2$		
1. Moles of reactants	$\text{Na}_2\text{CO}_3 = \frac{\quad}{106} =$	$\text{HCl} = \frac{\quad}{36.5} =$
2. Divide moles on coefficient of reactant.	$\text{Na}_2\text{CO}_3 = \frac{\quad}{1} =$	$\text{HCl} = \frac{\quad}{2}$
3. Limiting Reactant		
4. Moles of CO_2	$\frac{1}{2} \times =$	
5. Mass of CO_2		