

Ch 12

HW: Rev Con 45-47, 64, 83

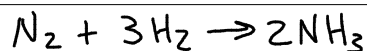
Sec 12.3

obj: Identify the limiting and excess reagents of a reaction.

Limiting + Excess Reagents

- The reactants of the rxn.
- The Limiting reactant will determine how much product is produced.
- The excess reactant is the leftover.
- To determine which reactant is the limiting reactant a stoichiometric calculation is made btw the two reactants.

12/16/2002 8:17 AM



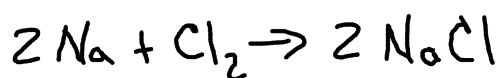
10g of H_2 reacts w/ 15g of N_2 . Which reactant is the Limiting Reactant?

<u>Given</u>	10g H_2	15g N_2		
<u>Wanted</u>			46.7g N_2	
				Limiting Reactant

* When the calculated value is less than the Given value that Reactant is the Excess Reactant.

* When the calculated value is greater than the given value, that reactant is the Limiting Reactant.

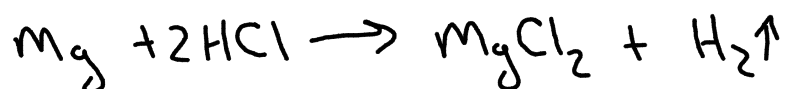
Dec 17 - 12:01 PM



How much NaCl is produced when 20g of Na reacts w/ 15g of Cl₂?

<u>Given</u>	20g Na	1mol Na	1mol Cl₂	71g Cl ₂
20g Na	23g Na	2mol Na	1mol Cl₂	
15g Cl ₂				
<u>Wanted</u>		30.9g Cl ₂		
mass of NaCl	20g Na	1mol Na	2mol NaCl	58.5g NaCl
	23g Na	2mol Na	1mol Cl₂	

Dec 15 - 11:55 AM



30g of Mg reacts w/ 45g HCl. How much of the excess reactant is left over?

<u>Given</u>
30g Mg
45g HCl
<u>Wanted</u>
mass of excess left

Dec 12 - 10:51 AM