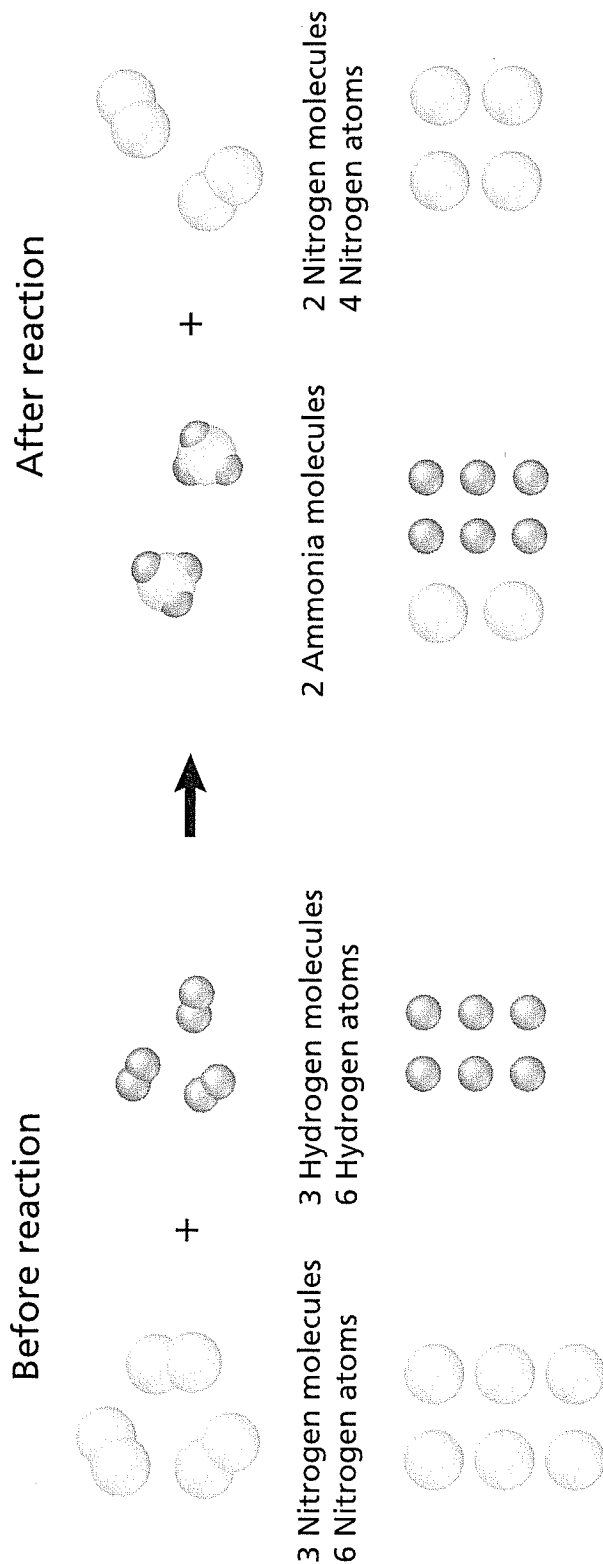


**TEACHING TRANSPARENCY MASTER** **36**

# Limiting Reactants

Use with Chapter 11,  
Section 11.3



# TEACHING TRANSPARENCY WORKSHEET

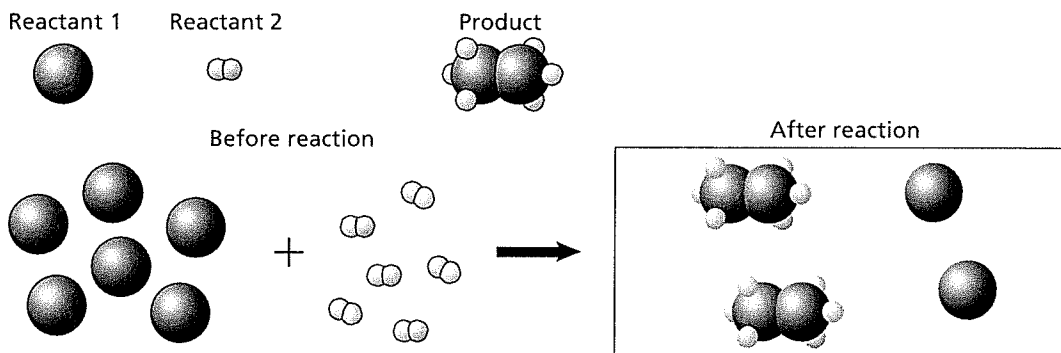
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## Limiting Reactants

Use with Chapter 11,  
Section 11.3

- How many  $N_2$  molecules are shown in the transparency? N atoms?  
\_\_\_\_\_
- How many  $H_2$  molecules are shown? H atoms?  
\_\_\_\_\_
- What is the ratio of H atoms to N atoms in one  $NH_3$  molecule?  
\_\_\_\_\_
- How many H atoms would be needed to react with all the N atoms shown in the transparency?  
\_\_\_\_\_
- How many N atoms would be needed to react with all the H atoms shown in the transparency?  
\_\_\_\_\_
- According to your answers to questions 4 and 5, how many  $N_2$  molecules and  $H_2$  molecules will be used up completely by the reaction shown in the transparency?  
\_\_\_\_\_
- Which reactant will remain after the reaction? How many molecules?  
\_\_\_\_\_

- Complete the diagram below by drawing the products of the chemical reaction in the box.



- Which reactant in the diagram is the limiting reactant?  
\_\_\_\_\_
- Which reactant in the diagram is in excess?  
\_\_\_\_\_