

EQUILIBRIUM PRACTICE: Predict the result

system	change	result
1. $\text{CO}_2 + \text{H}_2 \rightleftharpoons \text{H}_2\text{O}(\text{g}) + \text{CO}$	a drying agent is added to absorb H_2O	
2. $\text{H}_2(\text{g}) + \text{I}_2(\text{g}) \rightleftharpoons 2\text{HI}(\text{g})$	Some nitrogen gas is added	
3. $\text{NaCl}(\text{s}) + \text{H}_2\text{SO}_4(\text{l}) \rightleftharpoons \text{Na}_2\text{SO}_4(\text{s}) + \text{HCl}(\text{g})$	reaction is carried out in an open container	
4. $\text{H}_2\text{O}(\text{l}) \rightleftharpoons \text{H}_2\text{O}(\text{g})$	water evaporates from an open container	
5. $\text{HCN}(\text{aq}) \rightleftharpoons \text{H}^+(\text{aq}) + \text{CN}^-(\text{aq})$	the solution is diluted	
6. $\text{AgCl}(\text{s}) \rightleftharpoons \text{Ag}^+(\text{aq}) + \text{Cl}^-(\text{aq})$	some NaCl is added to the solution	
7. $\text{N}_2 + 3 \text{H}_2 \rightleftharpoons 2 \text{NH}_3$	a catalyst is added to speed up this reaction	

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