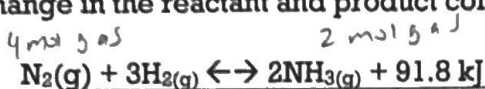


Name: KEY Official Class: _____ Date: _____
 Teacher: _____ Period: _____ Class: _____

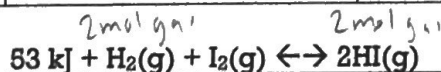
Le Châtelier's Principle Practice

Directions: Complete the chart below by writing either left, right, no shift in the equilibrium column, and either increase, decrease, or no change in the reactant and product column.



Add Away Take Toward

Stress	Equilibrium Shift	[N ₂]	[H ₂]	[NH ₃]
1. Add N ₂	→	-----	↓	↑
2. Add H ₂	→	↓	-----	↑
3. Add NH ₃	←	↑	↑	-----
4. Remove N ₂	←	-----	↑	↓
5. Remove H ₂	←	↔ ↑	-----	↓
6. Remove NH ₃	→	↓	↓	-----
7. Increase temperature (energy)	←	↑	↑	↓
8. Decrease temperature (energy)	→	↓	↓	↑
9. Increase pressure	→	↓	↓	↑
10. Decrease pressure	←	↑	↑	↓



Stress	Equilibrium Shift	[H ₂]	[I ₂]	[HI]
1. Add H ₂	→	-----	↓	↑
2. Add I ₂	→	↓	-----	↑
3. Add HI	←	↑	↑	-----
4. Remove H ₂	←	-----	↑	↓
5. Remove I ₂	←	↑	-----	↓
6. Remove HI	→	↓	↓	-----
7. Increase temperature (energy)	→	↓	↓	↑
8. Decrease temperature (energy)	←	↑	↑	↓
9. Increase pressure	NO EFFECT!			
10. Decrease pressure	NO EFFECT!			

same # mol gas on both sides