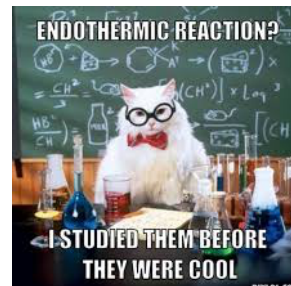


1. Enthalpy (Heat Energy)

Enthalpy (Heat Energy)

- Systems can either gain energy or release energy, often felt as heat
- Energy is measured as \_\_\_\_\_
- Symbol = \_\_\_\_\_
- Unit = \_\_\_\_\_ (\_\_\_\_\_)



Gain Energy



- \_\_\_\_\_ thermic
- $\Delta H =$  \_\_\_\_\_
- \_\_\_\_\_
- System feels \_\_\_\_\_
- \_\_\_\_\_ favoured.

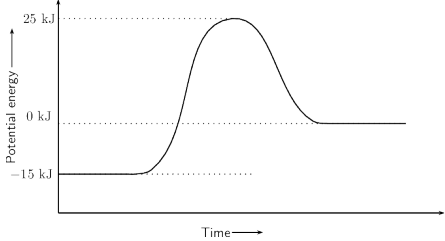
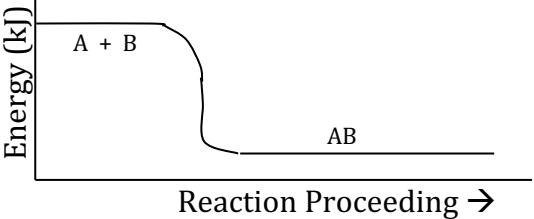
Release Energy



- \_\_\_\_\_ thermic
- $\Delta H =$  \_\_\_\_\_
- \_\_\_\_\_
- System feels \_\_\_\_\_
- \_\_\_\_\_ favoured.

Note: Systems favour \_\_\_\_\_ energy states (i.e. \_\_\_\_\_ enthalpy)

**Practice:**

Reaction:	Is the reaction endothermic or exothermic?	Which side is favoured?
1. $K + D + \text{heat} \rightarrow G$		
2. $U \rightarrow C \quad \Delta H = -60 \text{ kJ}$		
3. $F + A \rightarrow T + I \quad \Delta H = 60 \text{ kJ}$		
4. $A + B \rightarrow C + \text{heat}$		
5. 		
6. $H_2 + Cl_2 \rightarrow 2 HCl + 432 \text{ kJ}$		
7. $12CO_2 + 11H_2O \rightarrow C_{12}H_{22}O_{11} + 12 O_2 \quad \Delta H = 5638 \text{ kJ}$		
8. 		
9. $C + D \rightarrow CD \quad \Delta H = -65.7 \text{ kJ}$		
10. $E + F + 437 \text{ kJ} \rightarrow G + H$		