

Unit 4 - Equilibrium

- What is an equilibrium?

- Rate of reaction

Transition state, Activation energy

- ~~• Factors affecting Reaction Rate~~

- Percent Reaction / Percent Yield

$$\% \text{ rxn} = \frac{\text{exp}}{\text{theor}} \times 100\%$$

- Equilibrium Law

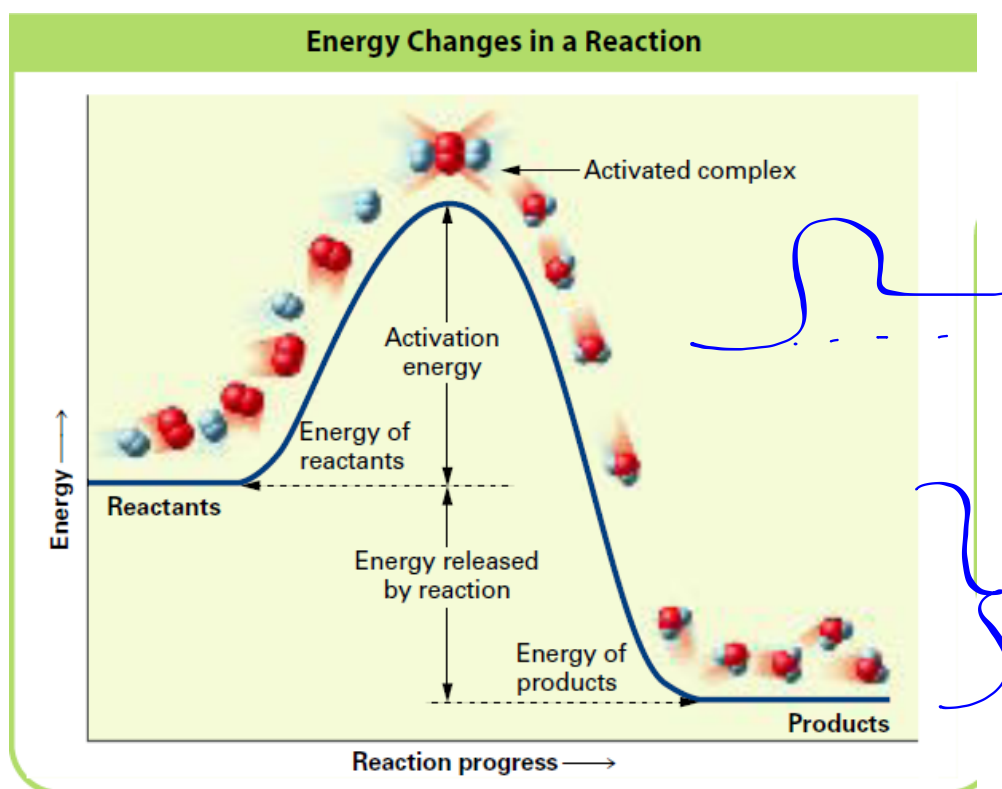
- Le Chatelier's Principle

$$K = \frac{[\text{NH}_3]^2}{[\text{N}_2][\text{H}_2]^3}$$

$$C = \frac{n}{V}$$

↓
mol/L





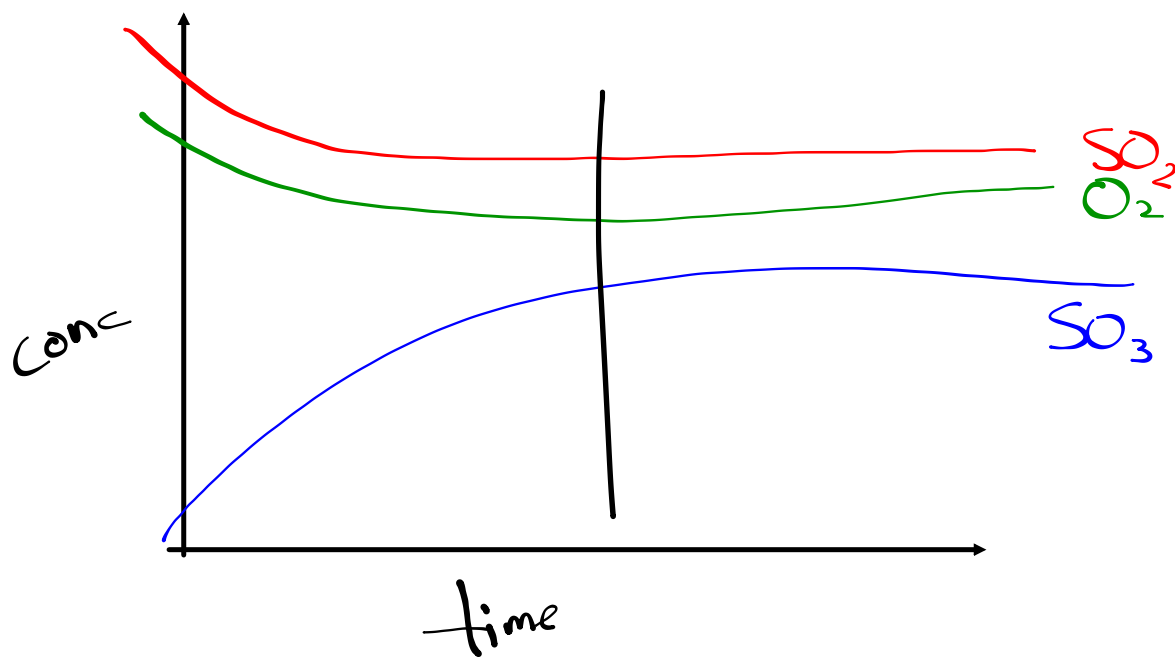
$$V = 3.00 \text{ L}$$



$$0.010 \text{ mol} \quad 0.20 \text{ mol} \quad 0.060 \text{ mol}$$

$$C = \frac{0.010 \text{ mol}}{3 \text{ L}} \quad \frac{0.20 \text{ mol}}{3 \text{ L}} \quad \frac{0.060 \text{ mol}}{3 \text{ L}}$$

$$K = \frac{[\text{NH}_3]^2}{[\text{N}_2][\text{H}_2]^3}$$



Equilibrium Review Worksheet