Dynamic Equilibrium in Industry

Pre-lesson assignment- textbook page 156-157

Make notes on the Haber Process

Use the following questions as guidance

- 1. Write an equation for the Haber process including state symbols. Also show the enthalpy change of reaction.
- 2. Explain the effect, on the equilibrium, of...
 - a. Increased pressure.
 - b. Decreased temperature.
 - c. Condensation of gaseous ammonia into liquid ammonia.
- 3. What role does a catalyst have in establishing an equilibrium?
- 4. State the optimal conditions of the reaction. Explain why these conditions are not used.
- 5. State the actual conditions used in the reaction. Explain how this makes the process more economical.