

Worksheet: Le Châtelier's Principle

Key

1. Restate Le Châtelier's Principle in your own words.

A system at equilibrium will adjust to a new equilibrium if a change is forced upon it.

2. Consider the exothermic system: $\text{N}_2 + 3\text{H}_2 \leftrightarrow 2\text{NH}_3$

Which way does the reaction shift when the following changes occur:

- | | |
|-------------------------|------------------|
| a. Add nitrogen | <u>products</u> |
| b. Remove hydrogen | <u>reactants</u> |
| c. Add ammonia | <u>reactants</u> |
| d. Decrease temperature | <u>products</u> |
| e. Add catalyst | <u>no effect</u> |