

18.2

REVERSIBLE REACTIONS AND EQUILIBRIUM

Section Review

Objectives

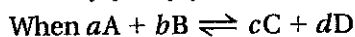
- Describe how the amounts of reactants and products change in a chemical system at equilibrium
- Identify three stresses that can change the equilibrium position of a chemical system
- Explain what the value of K_{eq} indicates about the position of equilibrium

Vocabulary

- reversible reaction
- chemical equilibrium
- equilibrium position
- Le Châtelier's principle
- equilibrium constant (K_{eq})

Key Equation

$$K_{\text{eq}} = \frac{[\text{C}]^c \times [\text{D}]^d}{[\text{A}]^a \times [\text{B}]^b}$$



Part A Completion

Use this completion exercise to check your understanding of the concepts and terms that are introduced in this section. Each blank can be completed with a term, short phrase, or number.

In principle, all reactions are 1. That is, reactants go to 2 in the 3 direction, and products go to 4 in the 5 direction.

The point at which the rate of conversion of 6 to 7 and vice versa is equal is the 8 position. The 9 of a reversible reaction, K_{eq} , is useful for determining the position of equilibrium. It is essentially a measure of the 10 of products to reactants at equilibrium. The direction of change in the position of equilibrium may be predicted by applying 11 principle.

- reversible
- products
- forward
- reactants
- reverse
- reactants
- products
- equilibrium
- equilibrium constant
- ratio
- LeChatelier's