

A P CHEMISTRY

Study Guide For Chapter 13

Chemical Equilibrium

Days 1, 2 _____

L - Lab 13-1 Determination of an Equilibrium Constant

Day 3 _____ **READ:** Chapter 13, Sections 1-4. Define all **bold** face terms.

1. Write a paragraph explaining how equilibrium is established.
2. Create a list of the characteristics of chemical equilibrium.
3. Show the equilibrium expression for the equation $jA + kB \rightarrow lC + mD$.
4. Show how to calculate values for the equilibrium constant.
5. Write a summary of conclusions about the equilibrium expression.
6. Distinguish between K and K_p .
7. Explain how condensed phases (solids and liquids) are treated in constructing the equilibrium expression.

S - Q. 17, 19, 21, 23, 27, 29, 31

Day 4 _____ **READ:** Chapter 13, Sections 5-7. Define all **bold** face terms.

9. Write a paragraph to explain how the equilibrium constant is used to predict the direction a system will move to reach equilibrium.
10. Create a list of the possible cases when comparing Q to K . Include the equilibrium shift related to each case.
11. List the steps involved in solving equilibrium problems.
12. Explain how systems that have small equilibrium constants are treated.
13. Explain how a change in concentration affects the equilibrium position.
14. Explain how a change in pressure affects the equilibrium position.
15. Explain how a change in temperature affects the equilibrium position.

S - Q. 37, 41, 43, 45, 53, 61, 63

Days 5, 6 _____

L - Lab 13-1 Determination of an Equilibrium Constant

Days 7, 8 _____

L - Lab 13-2 Stresses Applied to Equilibrium Systems

Day 9 _____

C - Chapter 13 Test
