

Chapter 7-8 Test Topics

1. What is equilibrium, terms?
2. Phase, solubility, chemical equilibrium
3. Percent reaction and equilibrium
4. ICE tables
5. Equilibrium constants
6. Rules for writing equilibrium expressions
7. Magnitude of equilibrium constants
8. Le Chatelier principle
9. Haber Process
10. Calculations – initial [] or equilibrium [] or K_e given
11. Predict direction – Q values
12. Assumption rule, quadratic equation, perfect squares
13. Solubility
14. Molar solubility and K_{sp}
15. Predict precipitates – Q values
16. Common ion effect
17. Bronsted-Lowry theory
18. Amphoteric
19. Trends of acids and bases
20. Water self ionizes, K_w
21. Strong acid and strong base calculations: pH, pOH, $[H^+]$, $[OH^-]$
22. K_a and weak acids
23. K_b and weak bases
24. $K_w = K_a \times K_b$
25. Percent Ionization and K_a and pH
26. Polyprotic acids
27. Salt Solutions
28. Titrations: Strong acid and strong base; Weak acid Strong Base; Strong Acid and Weak base
29. Buffers – what makes a buffer
30. Adding strong acid or base to a buffer