Chemistry 12
Unit 4 – Acids, Bases and Salts
Unit Outline

1. Go over "The Arrhenius Theory of Acids and Bases" on p. 109 of SW.
   In your notes, give the Arrhenius definition of and Acid, a Base and a Salt.
2. Do Ex. 1 on page 110 SW (check answers on page 279)
3. Go over steps for balancing formula equations for neutralization reactions on page 110 of SW. Do a couple of examples.
4. Do Ex. 2 a-f on page 110 SW (check answers on page 279)
5. Demonstration and notes on properties of acids and bases page 111 of SW
6. Do Ex 3 & 4 on p 112 of SW. (check answers on page 279)
7. Go over "Common Acids and Bases" on pages 112-114 of SW.
8. Do Worksheet 4-1 (On Chem 12 Web Page under Unit 4)
9. Do Tutorial 14 (On Chem 12 Web page) Make sure you do all the questions and check the answers with "Tutorial 14 Solutions"
10. Read pages 115-119 in SW
11. Do Ex 10a&b, 11, 12, 13, 14 & 15 p. 115-119
12. Read p. 119-120 in SW.
13. Do Ex 16-19 on page 121 of SW.
14. Have students print "Unit 4 Notes p 1-12" from Chem 12 Web page.
15. Do Demonstration on Conductivity of 1M HCl and 1M CH_3COOH. On "Unit 4 Notes" Go over the Section on "Strong and Weak Acids" p. 1-2
16. Take out your Data Booklet and look at the "RELATIVE STRENGTHS OF BRÖNSTED-LOWRY ACIDS AND BASES" table. (This can be called the "Acid Table"
17. Carefully go through the section on "The Acid Table" from p 2-5 of Unit 4 Notes.
    On page 4:
    What is the $[OH^-]$ in 0.10 M $Ba(OH)_2$?
    0.10 M **0.10M 0.20 M**
    $Ba(OH)_2 \rightarrow Ba^{2+} + 2OH^-$

    And:
    Find $[OH^-]$ in 0.10 M CaO
    $[O^{2-}] = 0.10$ M

    (0.10M) **0.20M**
    $O^{2-} + H_2O \rightarrow 2\ OH^-$

    $[OH^-] =$ **0.20 M**

18. Go over Notes p. 6-7
19. Do Ex. 21-27 Pg.125-126 S.W.
20. Go over Section on **Acid-Base Equilibria & Relative Strengths of Acids & Bases** on pages 8-12 of Unit 4 Notes.