The test will be on Thursday, March 4.

The learning objectives covered will be 10.1 – 16.2 plus 16.7. Notice this doesn’t mean you can forget all of the previous ones. For example, to write net ionic equations you will have to be able to write chemical formulas.

For the last quiz, you learned four polyatomic ions – the ammonium, nitrate, sulfate, and phosphate. For this test that list grows to include the acetate, chlorate, perchlorate, carbonate, and hydroxide. These additions are selected because they show up on the solubility rules in addition to the original four.

Here are the solubility/electrolyte rules I will expect you to know for the Test. I will not give you the flowchart or the electrolyte rules.

A. All salts are strong electrolytes.
B. Selected solubility rules for salts:
   a. All Group 1 and ammonium salts are soluble
   b. All nitrate, acetate, chlorate, and perchlorate salts are soluble
   c. Halides are soluble except for Ag$^+$ and Pb$^{2+}$ (skip the other two for now)
   d. Sulfates are soluble except for Ba$^{2+}$ and Sr$^{2+}$ (skip the other two for now)
   e. Carbonates and phosphates are insoluble except for those of Group 1 and ammonium
C. Strong acids – HCl, HBr, HI, HNO$_3$, H$_2$SO$_4$, HClO$_3$, and HClO$_4$.
D. Strong bases – Group 1 and Ca$^{2+}$, Sr$^{2+}$ and Ba$^{2+}$.

To get ready:

- Look at the homework assignments in Mastering Chemistry that are applicable.
- Look at the textbook exercises listed with the specific learning objectives
- If you are still struggling with formula writing, adding up molar masses, and that sort of thing get those things straightened out because they will hinder you in everything else covered on this test. Look back into the appropriate textbook sections for help, come to the tutorial lab (SC 202, Hours are M 9:00 – 11:00; T 8:00-9:00, 10:00 – 12:00; W 9:00 – 12:00; R 10:00 – 12:00). Those hours are staffed by chemistry faculty who can sit with you one-on-one and visit about areas where you are having difficulties. I am also in SC 202 on TR from 5:30 – 6:20 PM if you can come at those hours.

Dr. Buckley