

Chem 115
Fall, 2006
Assignment 5

Test Week and Columbus Day Week

Remember that Monday, October 9th, is Columbus Day, and the University will be closed. There will be no new homework assignment or regular discussions for that week (October 9-13). Also, owing to the holiday, there will be no laboratories. Laboratories and discussions (covering this assignment) will resume the following week.

Reading Assignment

As previously announced, read all of Chapter 4 and continue by reading Chapter 5.

Test 1

The test will be given during regular class time on **Friday, October 13th**. It will cover all the material in the lectures corresponding to Chapters 1 through 3 in the text. Look for the Sample Test 1, Key to Sample Test 1, and a Study Guide for Test 1 on the web site under "Information." These should give you a better feel for the coverage and format of the exam. The exams will be returned at the beginning of class on Monday, October 16th, but we will have a full lecture, as well.

Homework Assignment

Do the following problems before coming to your discussion during the period October 16 - 20: 4.3, 4.7, 4.15, 4.17, 4.19, 4.21, 4.25, 4.27, 4.35, 4.37, 4.39, 4.41, 4.49, 4.51, 4.61, 4.67, 4.69, 4.71, 4.75, 4.77, 4.79, 4.85. [Discussion of problems 4.61 and beyond may be postponed until next week.]

Also, predict the products and write balanced net ionic equations for the following. When writing the ionic and net ionic equations, remember to write all molecular, weak electrolyte, and insoluble electrolyte species in "molecular" form; i.e., do not break them up into ions. Answers for these have been posted under "Solutions".

- (a) $\text{Ni}(\text{NO}_3)_2(aq) + \text{H}_2\text{S}(g) \rightarrow$
- (b) $\text{H}_3\text{PO}_4(aq) + \text{Ca}(\text{OH})_2(aq) \rightarrow$
- (c) $\text{NaNO}_2(aq) + \text{HBr}(aq) \rightarrow$
- (d) $\text{CuS}(s) + \text{HClO}_4(aq) \rightarrow$
- (e) $\text{Pb}(\text{C}_2\text{H}_3\text{O}_2)_2(aq) + \text{HCl}(aq) \rightarrow$