

MEMORANDUM Chemistry Department

To: Bill, Nellie, Melissa, Carolyn, and Randy
From: John I. Gelder
Date: May 4, 2001
Re: Grading PS#14

STAFF MEETINGS...FRIDAY, MAY 4, 2001, 12:30 p.m. PS117.

The answers to PS #14 are attached. Students only had to do PS14.1 – 3, 4a and 6a. None of the other problems should be graded. After reviewing the problem sets I have decided we should grade problems PS14.1, PS14.3, and PS14.6 for 3 points. The maximum possible on the problem set is twelve points. The remaining three points are awarded on an all or nothing basis for completion of the remaining problems. Note: If the word 'Late' is written at the top of the Problem Set grade as usual but deduct 3 points from their total. Note: 'Late' means the student found me at the end of class or immediately after class. I will not accept Problem Sets more than a few minutes after class is over, and such cases will have a minimum of 3 points deducted from their score.

Please return the graded problem sets to your students in laboratory next week. Be sure to record the scores for each student.

Copies of the answers and the grading memo are on the WEB.

Grading the Review Problem Set

- PS14.1 **3 points** 1 point each for parts b, c and d. In part b be sure at least one of the volumes is calculated in detail. I do not care which one. Part c pretty much R/W. In part d check that the work shows the pH calculation. The neutralization part does not have to be there since I said it was at the equivalence point. But some kind of calculation of the concentration of the conjugate base must be there.
- PS14.3 **3 points** 2 point each for parts a and 1 point for part b (c). In part a award 1 point for the neutralization portion of the calculation and 1 point for the pH calculation. In part c) award 1 point for both parts. The majority of the work must be there for the points.
- PS14.6 **3 points.** Grade the initial pH of the buffer and part a and b each for 1 point. The initial pH should be pretty straight forward point. In part a, the student must show the neutralization equation and the calculation and then the new buffer system and the new pH calculation for the point. In part b the same, the neutralization and the new buffer calculation must be there for the point.
- 3 points** For attempting the remaining 7 problems. Remember each problem must have an answer, an attempt. If the student writes nonsense for any of the other answers deduct the 3 points.