

MEMORANDUM Chemistry Department

To: Bill, Nellie, Melissa, Carolyn, Randy
From: John I. Gelder
Date: January 28, 2001
Re: Grading PS1

STAFF MEETINGS...FRIDAYS, 12:30 p.m. PS117.

The answers to PS #1 are attached. After reviewing the problem sets I have decided we should grade problems PS1.4, PS1.5, and PS1.7 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. NOTE: Problems PS1.8 and PS1.9 did NOT have to be completed for this PS. Do not deduct 3 completeness points if these two problems are blank.

If you have any questions about the grading procedure described below, please see me. Please do not assign any fractional points. Use a holistic approach, if the student's answer is not quite correct you must make the decision if it is at least half right in which case give the student the point. However, on the next occasion (in the same grading session) that you have to stop and ask yourself whether the student should receive the benefit of the doubt, do not give them the point. Reverse this procedure if for the first time you decide not to give them the benefit of the doubt, the next occasion give them the point.

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

PS1.4 **3 points** 1 point each for the hybridization on NO_2^- , HCN and XeF_4 . R/W

PS1.5 **3 points** 1 point each for part a, b and c. R/W. In part a both of the bond angles and the hybridization must be correct for the point. Everything must be correct in parts b and c also. But grade holistically. If the student does everything correct in one part, but makes an error in one bond angle or one hybridization, given them the benefit of the doubt and award the point. But the next time the student makes the mistake, take off the point.

PS1.7 **3 points.** 1 point each for part a, b and c. R/W. Parts a and b should be straightforward. In part c all three bonds must be identified for the one point. So if the student identifies the orbitals for the sigma bond, but leaves off the pi-bonds, deduct 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.