Accelerated General Chemistry
Problem Set 7
Due Friday, November 6, 2009 (at 4:00 p.m.)
(note change in date from syllabus)

Total Points on This Assignment = 40

Note: You are free to write the units of *h* as **J s** or as **J s particle^{-1}**. Likewise, for *k*, you are free to write the units as **J K^{-1}** or as **J K^{-1} particle^{-1}**.

1. (8 points) Problem 3.6. Report all answers in this problem to two significant figures. If you write *k* as 1.381 x 10^{-23} J K^{-1} $particle^{-1}$, then the units of Equation 3.9 need to be changed to J $particle^{-1}$

2. (10 points) Problem 3.14. Assume all atomic masses are known to the nearest 0.1 amu.

3. (4 points) Problem 3.19. Note: You should use information from Problem 3.14.

4. (12 points) Problem 3.20

5. (6 points) Problem 3.28. Assume that each gas being considered is being confined to a 1-L container.