

Accelerated General Chemistry
Problem Set 8
Due Wednesday, October 31, 2007 (at 4:00 p.m.)
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 1.381×10^{-23} J K⁻¹ particle⁻¹, then the units of Equation 3.5a 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