

Accelerated General Chemistry
Problem Set 2
Due Monday, September 21, 2009 (at 4:00 p.m.)
Total Points on This Assignment = 32

When solving numerical problems, be sure to show your reasoning clearly. Report all final numerical answers to the correct number of significant figures and with appropriate units attached. (Refer to pp. A5-A6 for the rules governing significant figures.)

1. (6 points) Exercise 1.10. Answer part (a) in J particle^{-1} , and parts (b) and (c) in kJ
2. (8 points) Exercise 1.14. Briefly justify why you classify each statement (not just the false ones) as true or false.
3. (6 points) Exercise 1.16. Following the convention I discussed in class, the units of the work function for Cr should be eV particle^{-1} . Report the wavelength in nm.
4. (4 points) Exercise 1.20. Report the wavelength in nm.
5. (8 points) Exercise 1.28. Note that $n = 1$ is the ground state, $n = 2$ is the first excited state, etc.