

AP CHEM ASSIGNMENT SHEET #2

ELECTRON CONFIGURATION AND PERIODICITY

Skim chapter 7 in Chang.

note: Figures 7.1 (for the creative photo caption), 7.2, 7.3, 7.4, 7.6, 7.8, 7.11, 7.12, 7.13, 7.18, 7.22-24, and 7.28
the Chem in Action articles on pages 280 and 284
the Chemical Mystery on page 312
nice summary on pages 302-303
Table 7.2; memorize Table 7.3 (☺)

From pages 303-308, please answer the following questions:

8, 10, 16, 18, 20, 25, 28, 29, 31, 32, 34, 120, 37, 40, 42 (for fun), 54, 56, 66, 68, 73, 74, 76, 77, 78, 90, 92, 115, 114, 93, 96, 106, 110, 120, 125 (while you're catching some rays)

From page 350, answer question 57.

Here's an old AP test question for you:

#201

- Write the ground-state electron configuration for an arsenic atom, showing the number of electrons in each subshell (a.k.a. orbital).
- Give one permissible set of four quantum numbers for each of the outermost electrons in a single As atom when it is in its ground state.
- Is an isolated arsenic atom in the ground state paramagnetic or diamagnetic? Explain briefly.

Then . . . read section 2.4 and skim chapter 8 in Chang.

note: Figures 8.1, 8.2, 8.3, 8.5, and 8.9

Tables 8.2 and 8.3

the Chem in Action on p. 346 (a nice piece of history)

There are lots of really cool pictures in this descriptive chapter (chapter 8).

From pages 348-354, please answer the following questions:

4, 11, 16, 20, 22, 26, 30, 32, 28 (pick a couple), 33, 34, 35, 36, 44, 46, 49, 52, 54, 62, 75, 76, 78, 81, 88, 90, 104, 119, 126, 127, 128, 131, 132 (ha ha ha)

From the APQ packet, please answer questions **2ab**, **19abc**, **24**, **43**, and **66 acd**.