

Everything about an atom: aka Electron Bookkeeping

Text Questions: P. 238 #55-84

For the element X, X ($Z = ?$)

- 1.) Write the complete electron configuration:

- 2.) _____ How many electrons does $n=1$ have?
- 3.) _____ How many electrons does $n=2$ have?
- 4.) _____ How many electrons does $n=3$ have?
- 5.) _____ How many electrons does $n=4$ have?
- 6.) _____ How many electrons does $n=5$ have?
- 7.) _____ How many s orbital electrons does X have?
- 8.) _____ How many p orbital electrons does X have?
- 9.) _____ How many d orbital electrons does X have?
- 10.) _____ How many f orbital electrons does X have?
- 11.) _____ How many paired electrons does X have?
- 12.) _____ How many un-paired electrons does X have?
- 13.) _____ Write the Noble gas shortcut electron configuration for X.

- 14.) Draw the orbital notation for the valence electrons.

- 15.) _____ How many valence electrons does X have?
- 16.) Write a Lewis Dot diagram for X,