

Everything about an atom: aka Electron Bookkeeping

Text Questions: P. 238 #55-84

For the element Lead, Pb ($Z=82$)

- 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 electrons does $n=6$ have?
- 8.) _____ How many s orbital electrons does Pb have?
- 9.) _____ How many p orbital electrons does Pb have?
- 10.) _____ How many d orbital electrons does Pb have?
- 11.) _____ How many f orbital electrons does Pb have?
- 12.) _____ How many paired electrons does Pb have?
- 13.) _____ How many un-paired electrons does Pb have?
- 14.) _____ Write the Noble gas shortcut electron configuration for Pb.

- 15.) Draw the orbital notation for lead's valence electrons.

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