

Everything about an atom: aka Electron Bookkeeping

Text Questions: P. 238 #55-84

For the element Lead, Pb (Z= 82)

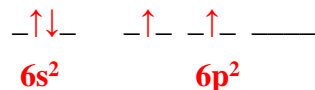
1.) Write the complete electron configuration:



- 2.) 2 How many electrons does n=1 have?
- 3.) 8 How many electrons does n=2 have?
- 4.) 18 How many electrons does n=3 have?
- 5.) 32 How many electrons does n=4 have?
- 6.) 18 How many electrons does n=5 have?
- 7.) 4 How many electrons does n=6 have?
- 8.) 12 How many *s* orbital electrons does Pb have?
- 9.) 26 How many *p* orbital electrons does Pb have?
- 10.) 30 How many *d* orbital electrons does Pb have?
- 11.) 14 How many *f* orbital electrons does Pb have?
- 12.) 80 How many paired electrons does Pb have?
- 13.) 2 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.) 4 How many valence electrons does Pb have?
- 17.) Write a Lewis Dot diagram for Pb