

Homework 11

November 11, 2022

Weekly homework assignments are posted approximately one week prior to the due date. Collaborations are encouraged and students must report all collaborators in writing on each assignment. All external sources (websites, books) must be properly cited. Additional problems are listed at the end of each assignment. This week's assignment is due *Friday, Nov 18th at 11:59pm*.

1) Draw the Lewis structures and determine the molecular shape for the following compounds: BeCl_2 , SO_2Cl_2 , F_2CO , XeF_4 , BBr_3 , PF_3 , SF_6 , CO_2 , HN_3 , SF_3 (8 pts)

2) Describe the difference between bond polarity and molecular polarity. (1 pt)

3) For the following molecules, which ones are overall polar? Explain: NO_3^- , H_2O , SO_3 , BH_3 , O_2 , and N_2H_4 . (1 pt)

Optional Textbook Problems: Ch. 8- 8.29 – 8.69 odd, 8.83 – 8.109 odd