

Extra Problems for Chapter 5

1. Draw the Lewis structures for the following molecules:
 - a. CF_4
 - b. PHCl_2
 - c. TeI_2
 - d. Se_2
 - e. ClP
2. Determine the shape and draw a stick figure for the molecules in problem #1.
3. For each of the molecules in problem #1, indicate whether it is polar covalent or purely covalent.
4. For each of the molecules in problem #1, indicate whether or not it is likely to dissolve in water.
5. Name the following molecules:
 - a. CaCl_2
 - b. N_2O
 - c. SO_3
 - d. N_2O_4
 - e. C_2Cl_2
6. Order the following atoms in terms of increasing size: O, Cs, Al, Ca
7. Order the following atoms in terms of increasing electronegativity P, Ga, O, Rb, Ca
8. Which of the following molecules will have one or more purely covalent bonds? CF_4 , O_2 , OCl_2