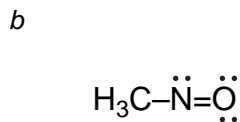
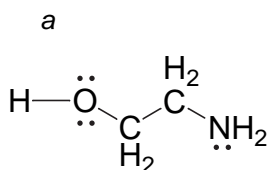
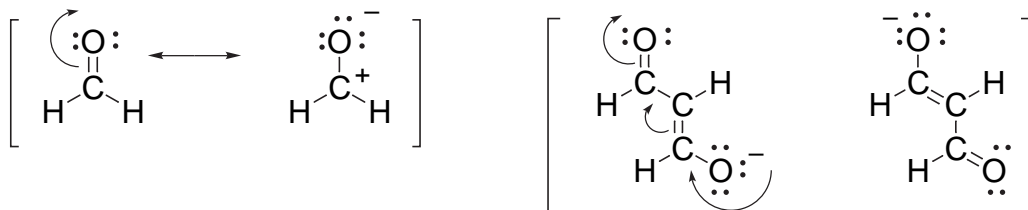


In addition to Problems 1-20 through 1-27 (not to be handed in), please complete the following  
Do NOT do problem 1-19

1) Draw Lewis Dot structures for the following:



2) Draw Lewis Dot Structures, and use arrow pushing formalism to interconvert the following structures



3) Chloroform ( $\text{CHCl}_3$ ) has a dipole moment, but Carbon Tetrachloride does not ( $\text{CCl}_4$ ).  
Show the direction of the dipole for chloroform, and explain the lack of one for  $\text{CCl}_4$ .

