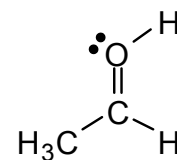
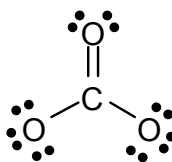
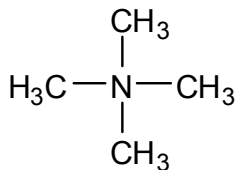
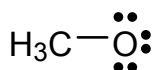


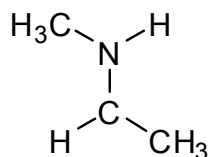
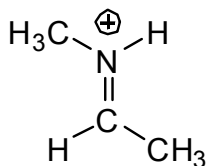
Chemistry 2301

Workshop 4 Charge and Resonance

1. Are any of the atoms in the structures below formally charged? If so, draw the charge on the atom.

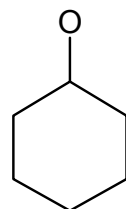
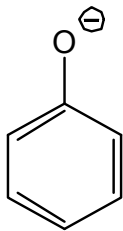


2. For each of the structures below, draw the most significant resonance forms. (No need to re-draw the one I've drawn—just draw new ones.) Rate each resonance structure in order of significance. (Major? Minor?) Then, on the blank structure below the first, complete the consensus structure by drawing in partial positive (δ^+) and negative (δ^-) charges and partial bonds that illustrate the contributions from all resonance structures.



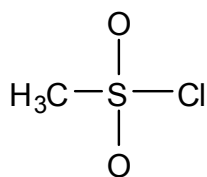
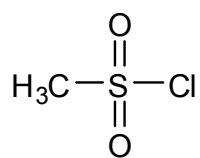
*consensus
structure*

resonance forms



*consensus
structure*

resonance forms



*consensus
structure*

resonance forms