



Central O uses  
 $\text{sp}^2$  hybrids

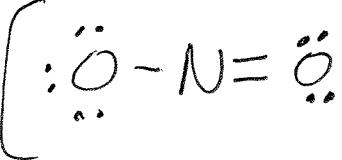
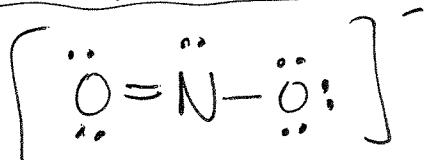
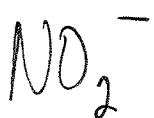
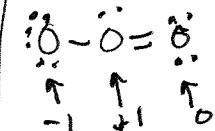
epg = trigonal planar

mg = bent

bond angle =  $\sim 120^\circ$

non-polar

formal charges



N uses  $\text{sp}^2$  hybrids

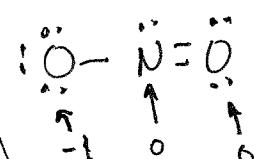
epg = trigonal planar

mg = bent

bond angle =  $\sim 120^\circ$

polar

formal charges



P uses  $\text{sp}^3$  hybrids

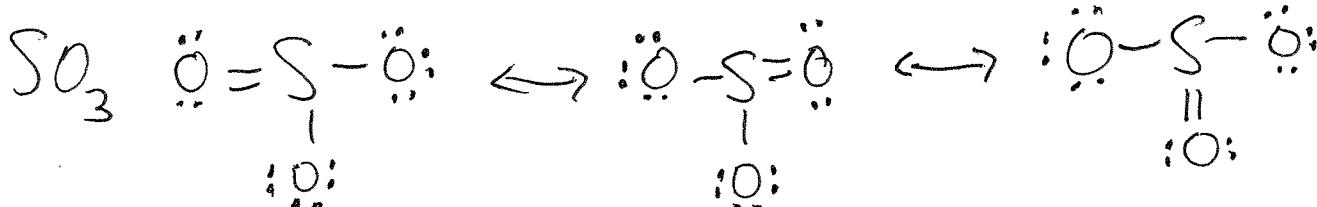
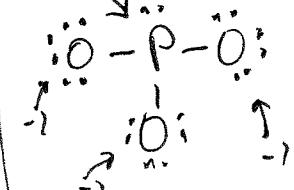
epg = tetrahedral

mg = trigonal pyramidal

bond angle =  $\sim 109.5^\circ$

polar

formal charges



S uses  $\text{sp}^2$  hybrids

epg = trigonal planar

mg = trigonal planar

bond angle =  $120^\circ$

non-polar

Formal charges

