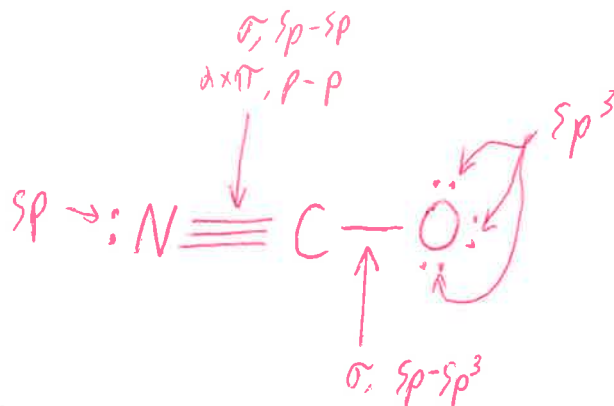


Quiz 11.3 – Covalent Bonds

Name: Key

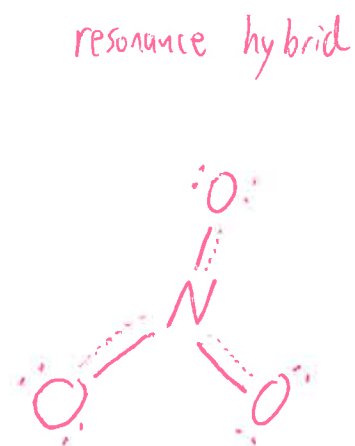
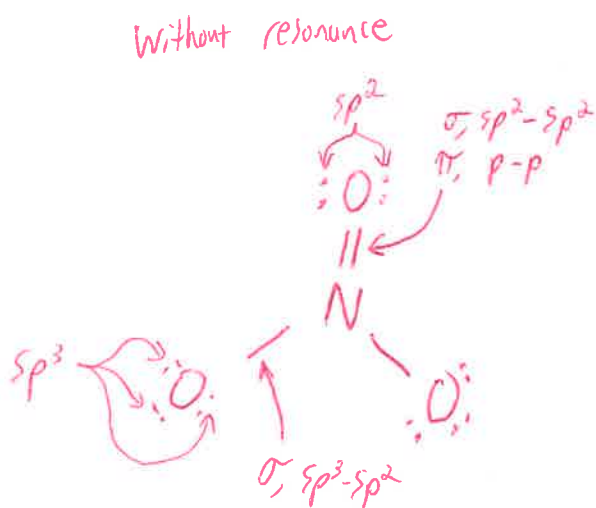
Problem 1 (2 points)

Consider the ion NCO^- . List what sorts of bonds are present in this ion, what sorts of orbitals overlap to form the bonds, and what sorts of orbitals hold lone pairs.



Problem 2 (3 points)

Consider the ion NO_3^- . List what sorts of bonds are present in this ion, what sorts of orbitals overlap to form the bonds, and what sorts of orbitals hold lone pairs.

all lone pairs: sp^2 all bonds: σ, sp^2-sp^2 $\pi, p-p$