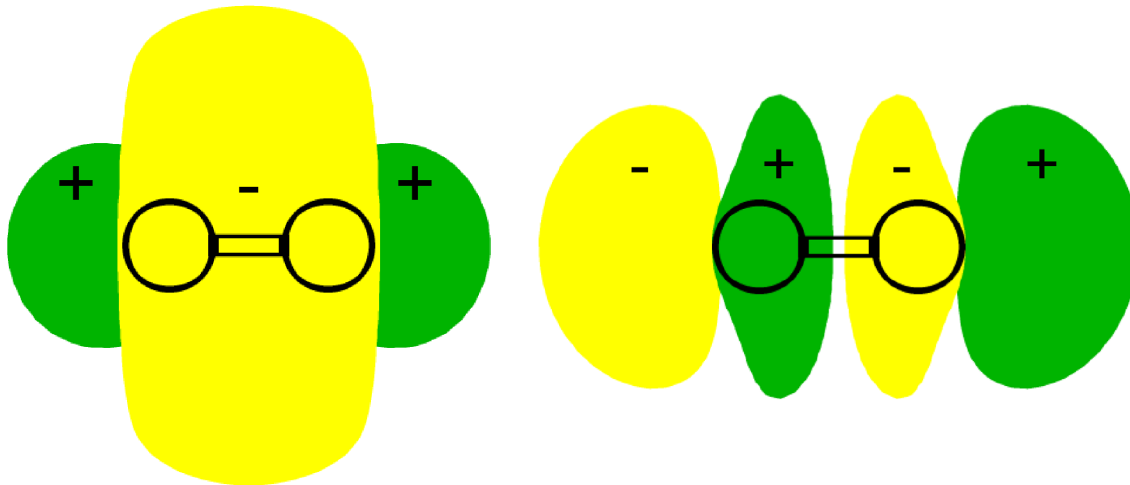**Result:** The orbital diagrams look like this:

Bonding MO, σ₂ₚz   **Antibonding MO, σ*₂ₚz**

Solution: When the orbitals overlap so that the phases match between the nuclei, there is bonding. When the orbitals are out of phase there is antibonding. The orbitals are labeled σ because they are cylindrically symmetric around the internuclear axis (there is no node that contains the internuclear axis).