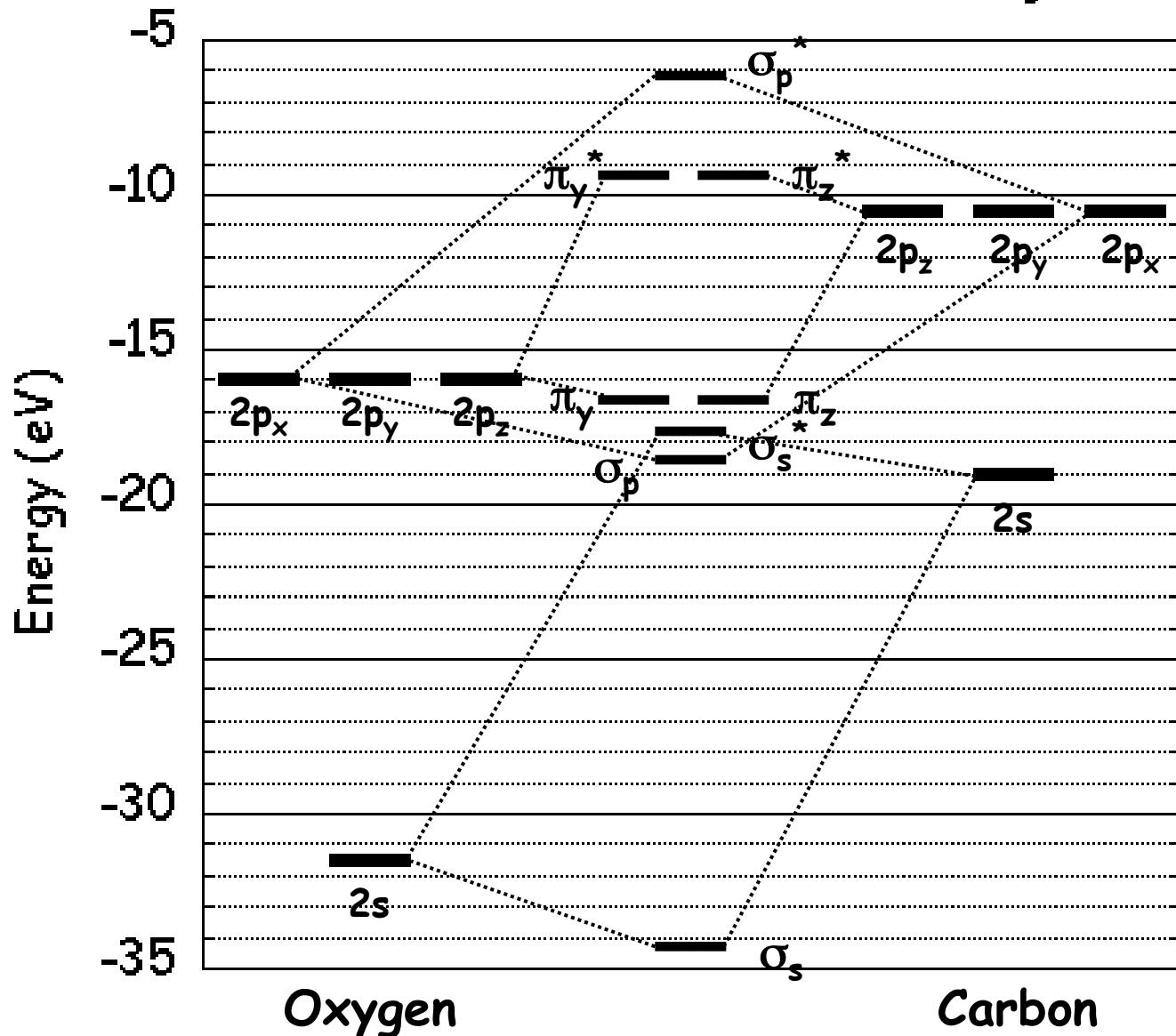
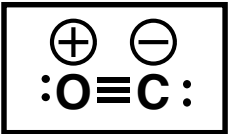


The MO Diagram of Carbon Monoxide

Carbon Monoxide Orbital Interaction Diagram



Begin just as with F₂.
Compare the AO energies for CO vs. F₂.

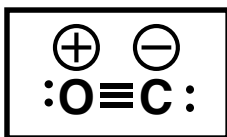


Can we ignore the C2s / O2p_x interaction?

NO



Consider C2s + O2p_x Mixing



C2s + O2p_x orbitals are closer in energy than O2s + C2s and O2p_x + C2p_x

But orbitals must be conserved (8 AOs produce 8 and only 8 MOs)

Remove σ_p and σ_s^*

Carbon Monoxide Orbital Interaction Diagram

