
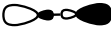






*Shapes of Common Frontier Molecular Orbitals*

	$\pi$ bonds	$\sigma$ bonds	lone pairs	cation
<b>LUMO</b>	 $\pi^*$	 $\sigma^*$		 p
<b>HOMO</b>	 $\pi$	 $\sigma$	 lp	

Remember:

- (1) If 2 atoms are different, the coefficients will not be the same.
  - (a) In HOMO, larger coefficient on more electronegative atom.
  - (b) In LUMO, larger coefficient on less electronegative atom.
- (2) Substituent effects
- (3) Use Huckel MO when considering conjugated systems.