# Frontier Molecular Orbitals - Summary Sheet

## MO's and Relative Energies:

Electrons in higher energy HOMO orbitals = more nucleophilic

Lower energy LUMO orbitals = more electrophilic

## **Hybridization:**

#### **Electronegativity:**

As atoms become more electronegative, the molecular orbitals become lower in energy.

#### **Bond Length:**

As bonds become longer, the HOMO energy increases while the LUMO Energy decreases (pinching effect).