## **Four Principles of Molecular Orbital Theory**

Principle #1:	The total number of molecular orbitals produced is always equal to the total number of atomic orbitals contributed by the atoms that have combined.
Principle #2:	The bonding molecular orbital is lower in energy than the parent orbital, and the antibonding orbital is higher in energy than the parent orbital.
Principle #3:	Electrons of the molecule are assigned to orbitals of successively higher energy.
Principle #4:	Atomic orbitals combine to form molecular orbitals most effectively when the atomic orbitals are of similar energy.