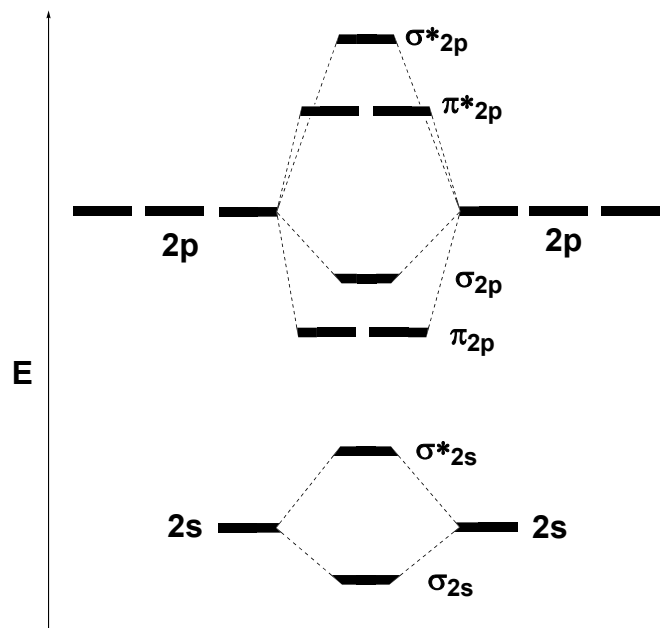
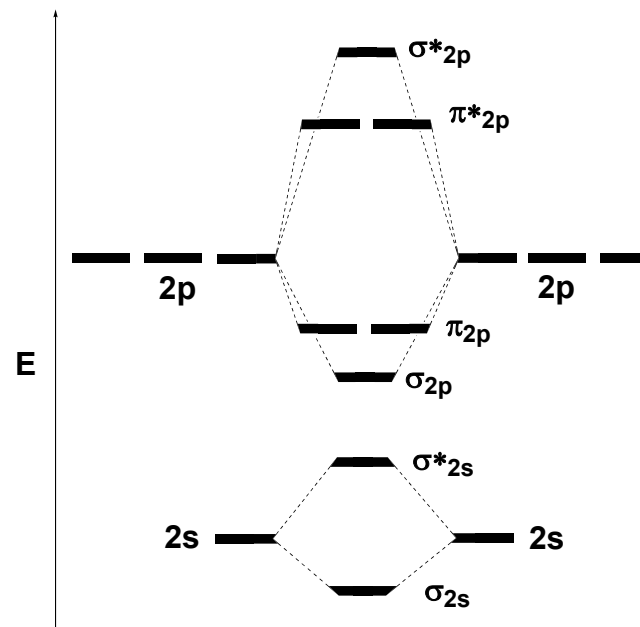


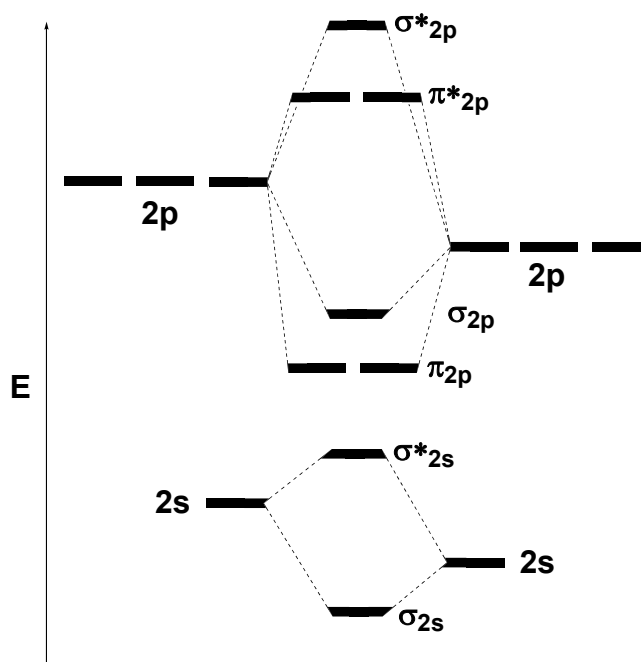
### 2nd Row Homonuclear Diatomics $3 \leq Z \leq 7$



### 2nd Row Homonuclear Diatomics $8 \leq Z \leq 10$



## 2nd Row Heteronuclear Diatomics



Note: Some textbooks switch the order of the  $\pi_{2p}$  and the  $\sigma_{2p}$  molecular orbitals. However, the above diagram is believed to be more accurate for most diatomics.