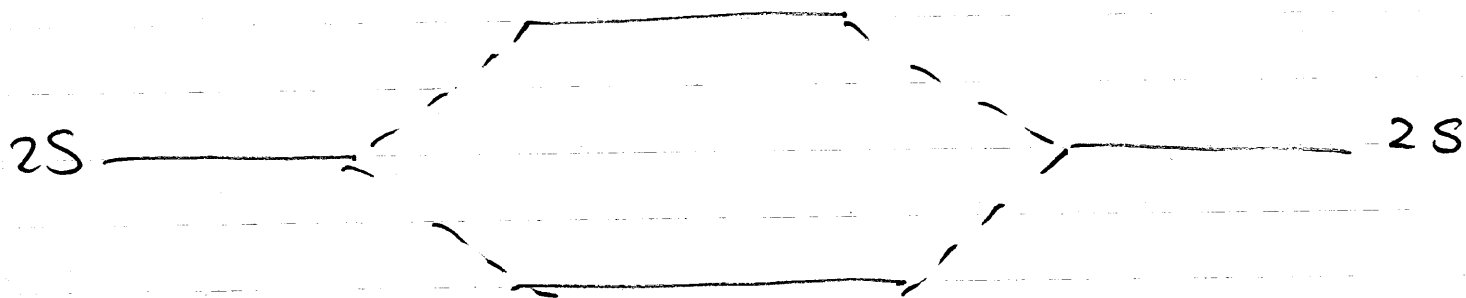
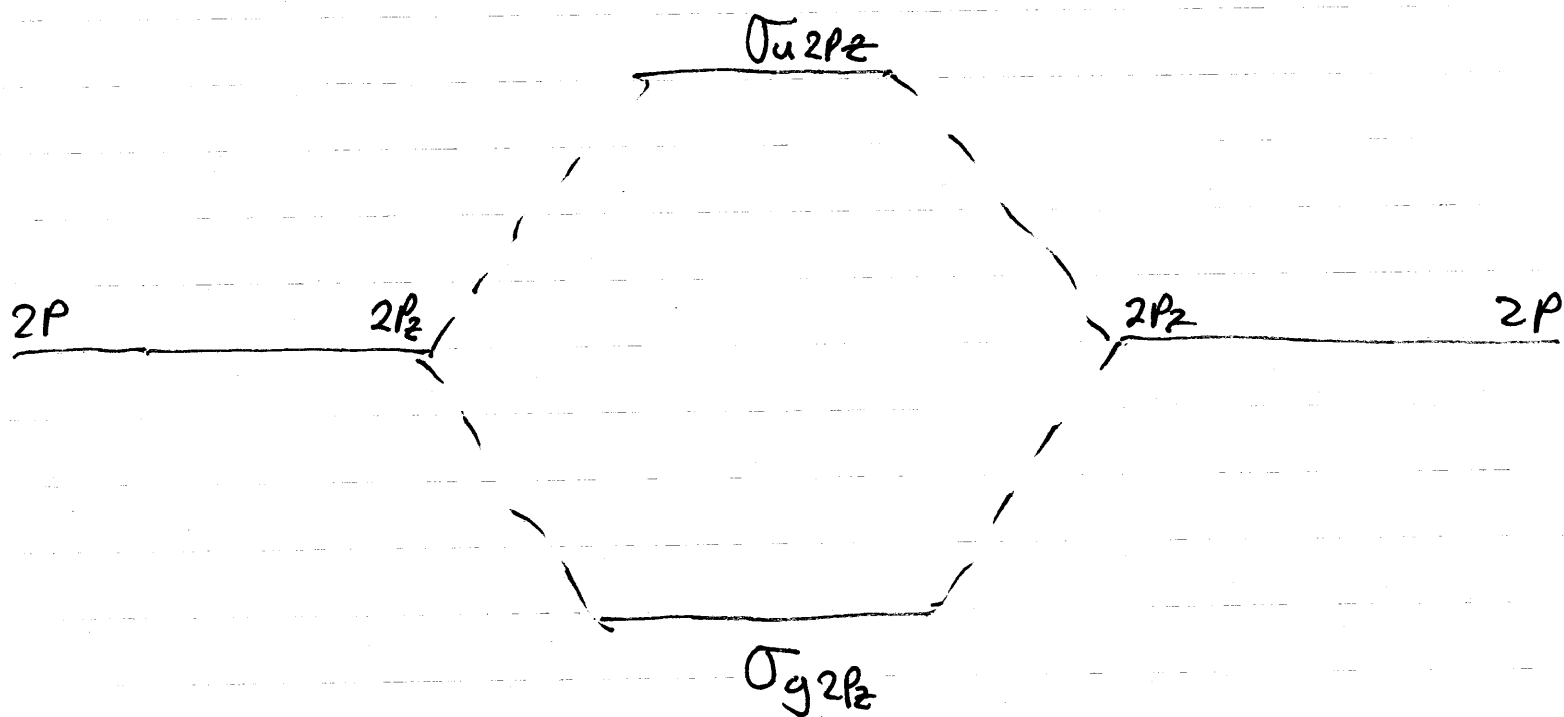
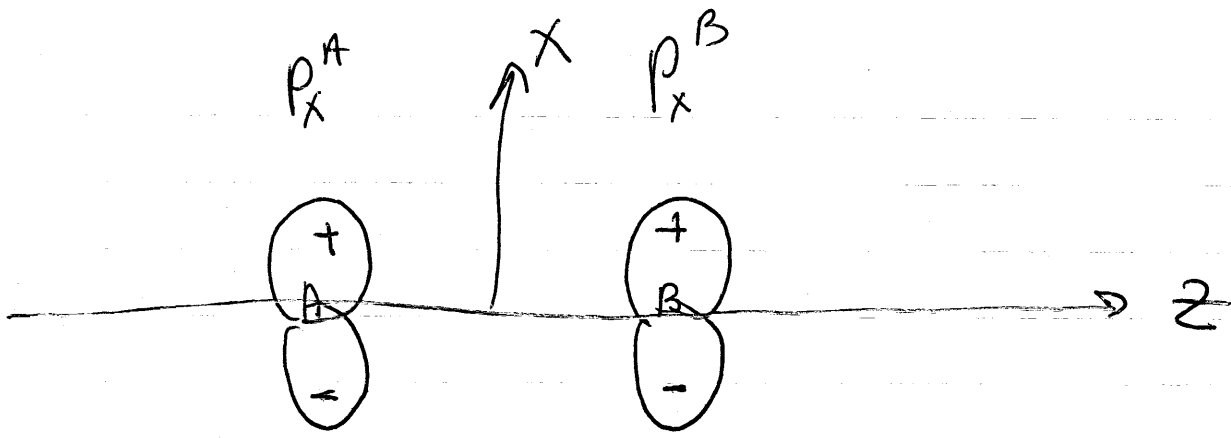
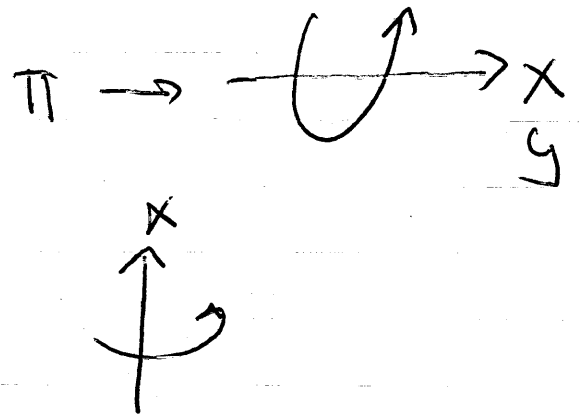
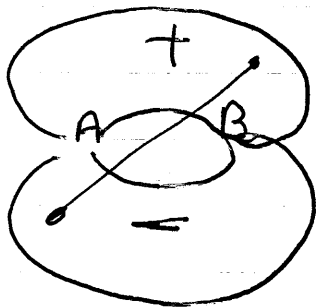
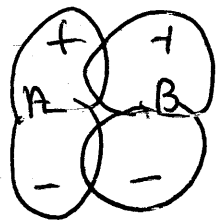


HOMONUCLEAR DIATOMIC MOLECULES



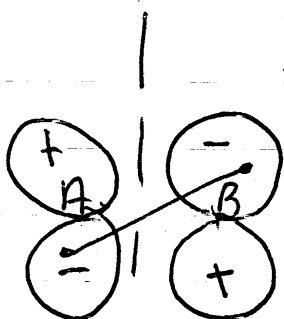
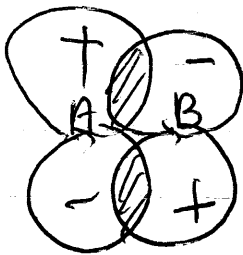
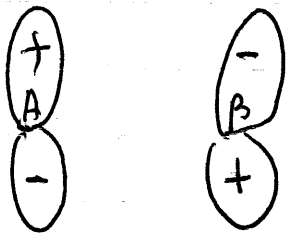
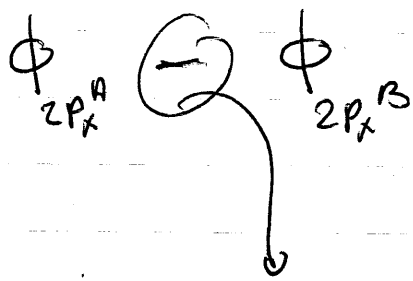


$$\phi_{2p_x^A} + \phi_{2p_x^B}$$



π_{u2p}

BONDING

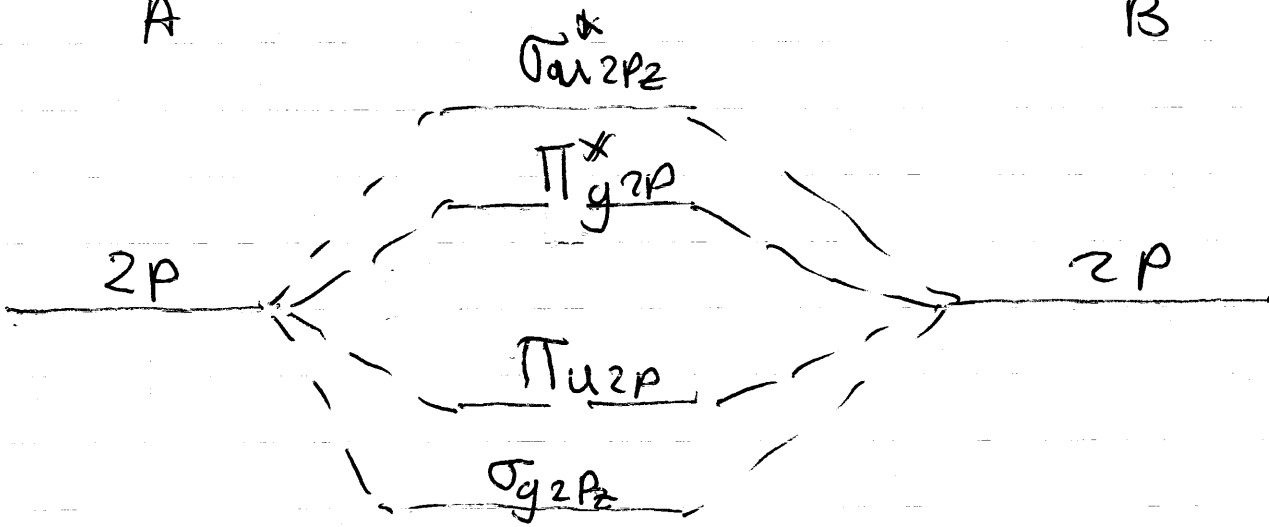


π^*
 g_{2p}

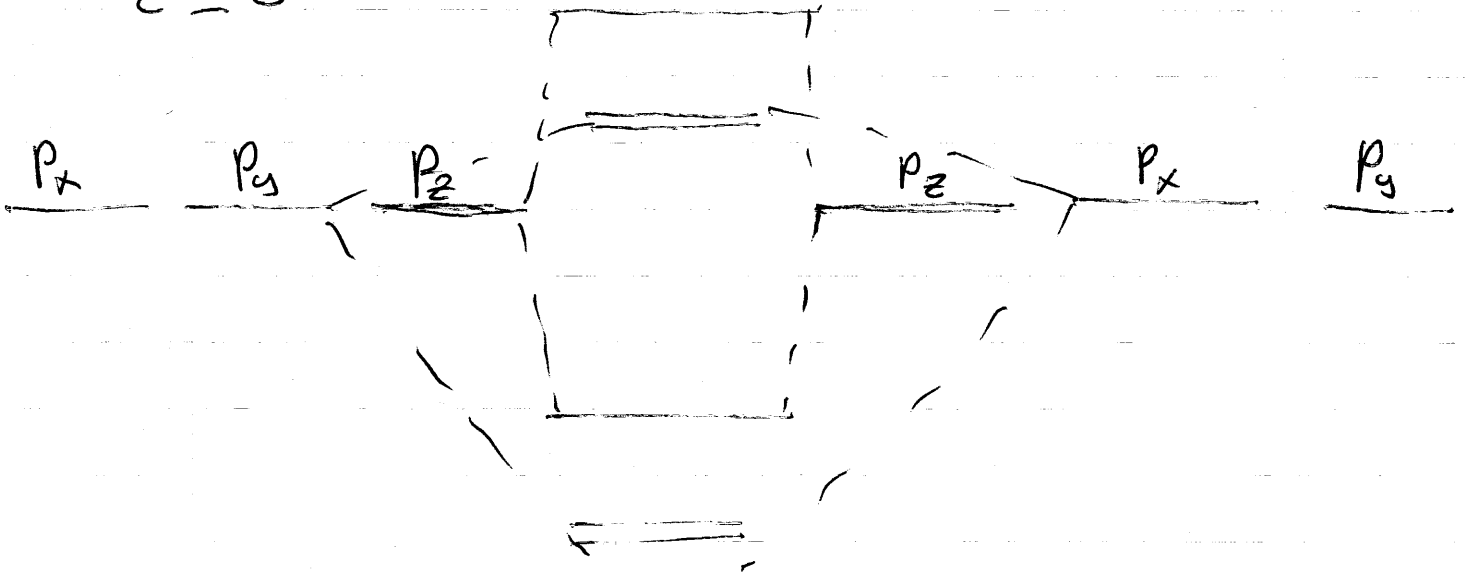

 ANTI BONDING

A

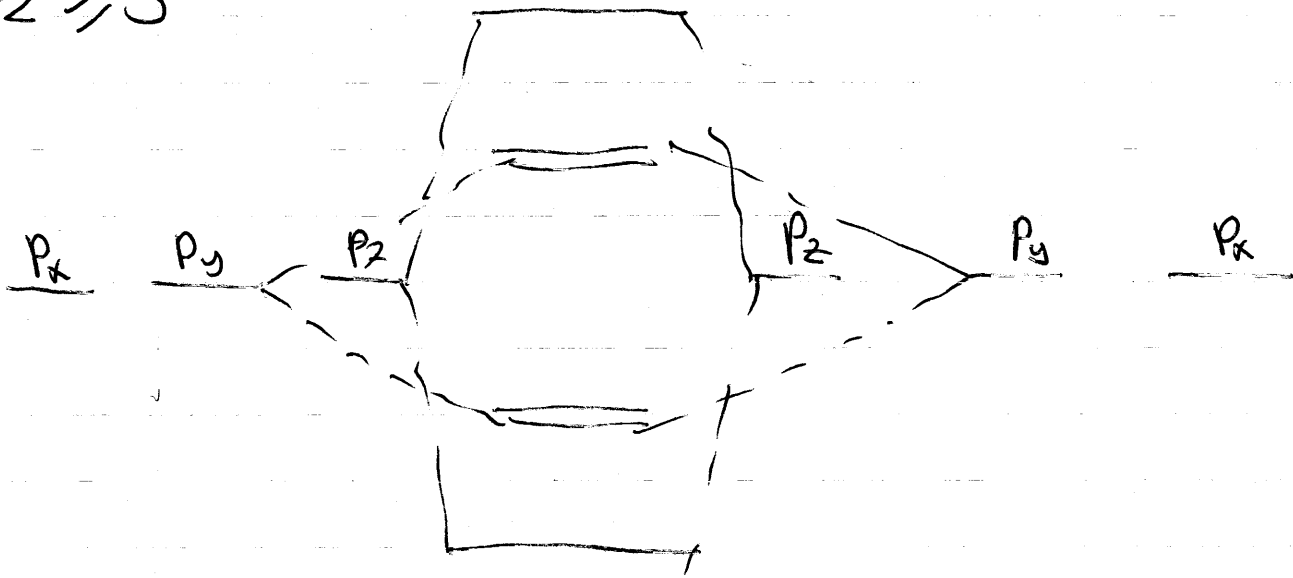
B



$z \leq 5$



$z > 5$

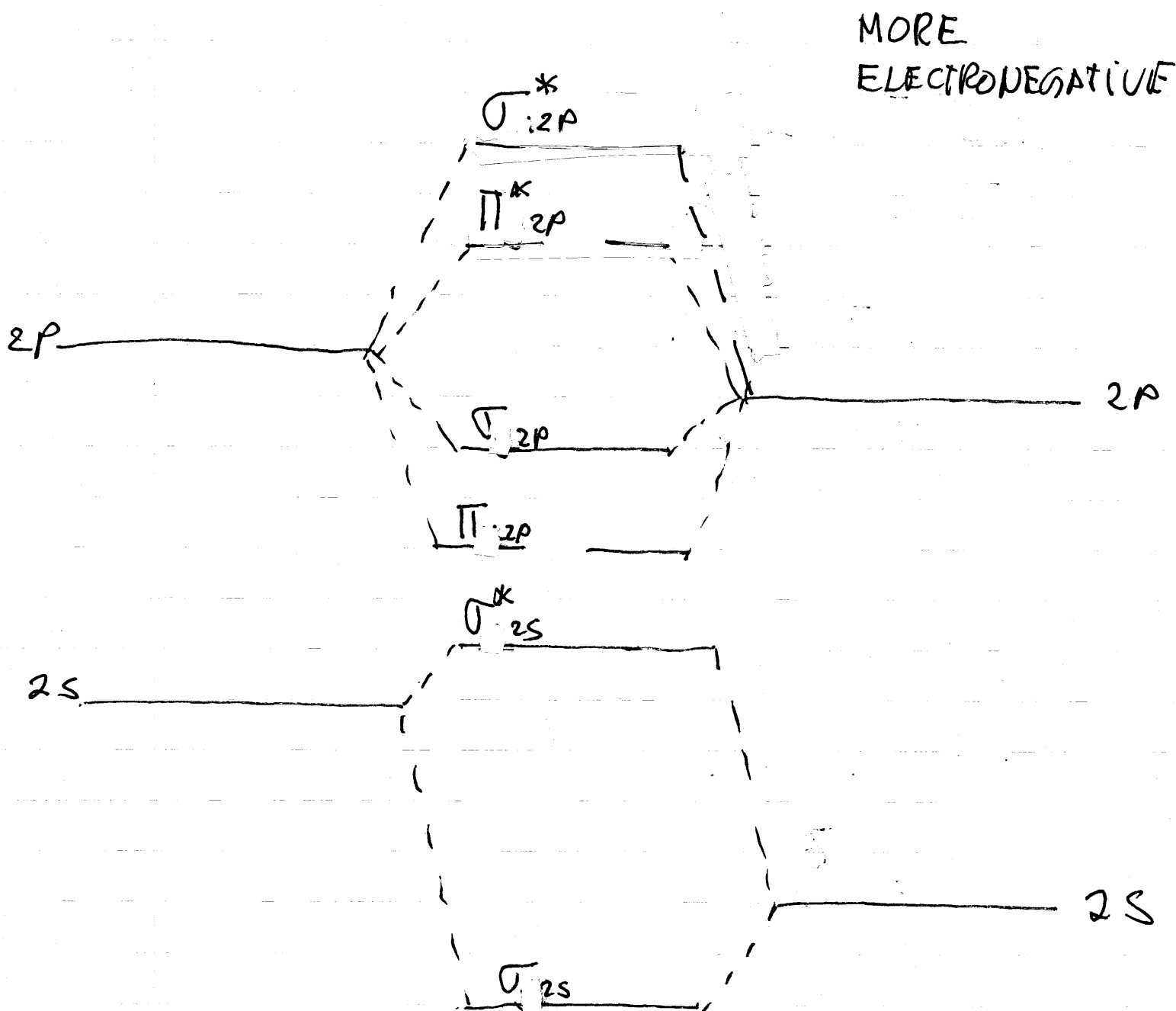


B_2 AND O_2 N_2 (N_2^{2+})
(10e) (16e) (14e)
 $8e \rightarrow 1, 2, 5$ $8e \rightarrow 1, 2, 5$ $8 \rightarrow 1, 2, 5$

HETERONUCLEAR DIATOMIC MOLECULES

CO, NO

THE 1S electrons do not participate in any kind of binding.

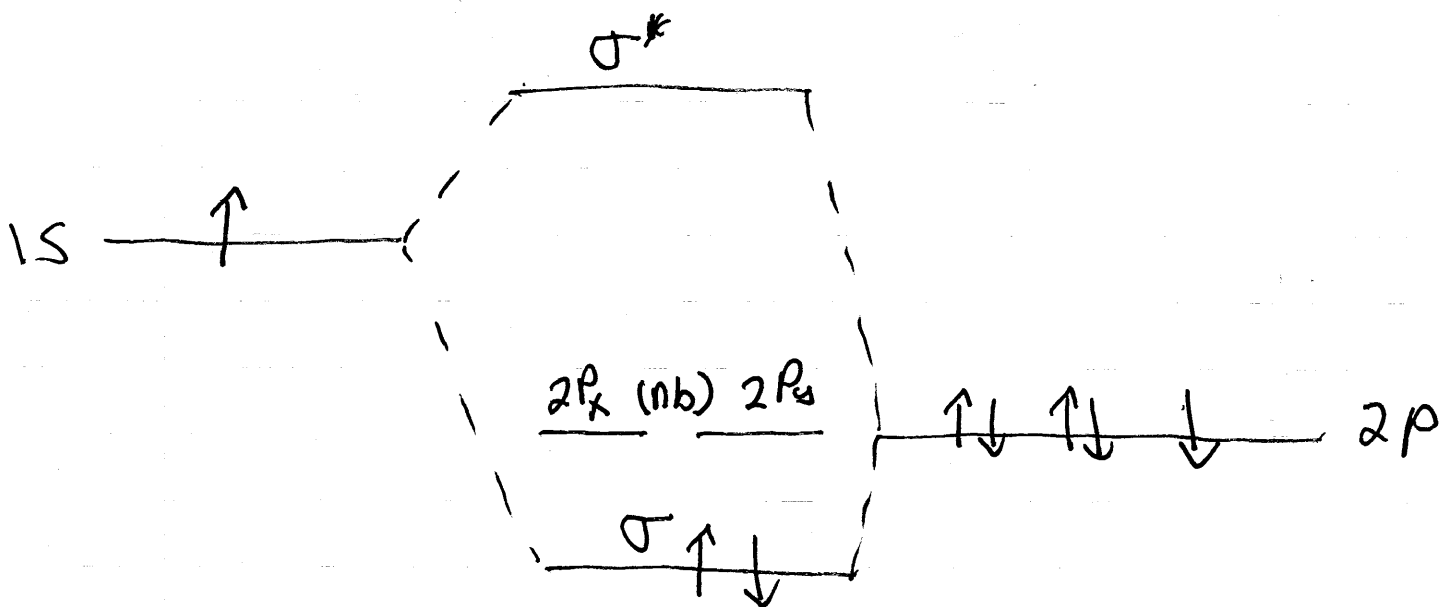


H F

(nb \equiv non bonding)

H

F



$2s$ (nb)

$\uparrow\downarrow$ $2s$