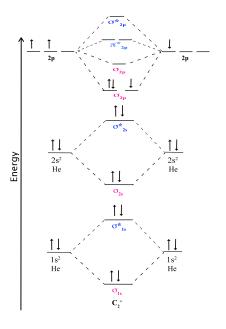
## Molecular Orbital Theory

The MO diagram below is for  $C_2^+$ . Write the MO configuration and determine the bond order. Is this bond stable? Indicate if  $C_2^+$  is paramagnetic or diamagnetic.



Draw a molecular orbital diagram for  $F_2^-$ . Write the MO configuration and determine the bond order. Is this bond stable?