

HOMEWORK #4

1. What is the electronic configuration, term symbol and bond order of each of the following molecules? In those cases, there are multiple low energy configurations, list each one.
 - a) Si_2
 - b) LiF
 - c) BN^+
 - d) Be_2^-
 - e) BeMg
 - f) Li_2^-
 - g) Cu_2

2. Discuss the dissociation of BeO , NaCl , and O_2 . What are the term symbols of the dissociation products? Do the molecules correlate "correctly" with the lowest energy atomic products when they dissociate?