

Chemistry 1B-AL
Homework #6 (#46-#49, S13)

Required (submit via [WebAssign](#))

46. Write the ground state electron configurations for the following molecules and molecular ions. Indicate the bond order and whether the species will be diamagnetic or paramagnetic in the ground state. [Be sure to read instructions for entering configurations into WebAssign.](#)
- a. H_2
 - b. B_2
 - c. N_2
 - d. N_2^+
 - e. N_2^-
47. Zumdahl #14.42 (a,b,c; and same question for the molecular ion N_2^-)
48. Write the configurations for F_2^+ , F_2 , and F_2^- . Predict the relative bond lengths of the F–F bonds in these three species. How many unpaired electrons are there in each of these species?
49. Zumdahl #14.49

Section

S13. Zumdahl #14.3