

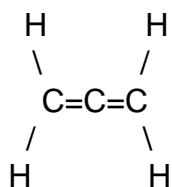
Name:

Quiz Chapter 9

1. (8 points) For each of the following molecules write the Lewis structure, predict the molecular structure (including bond angles) give the expected hybrid orbitals of the central atom, and predict the overall polarity

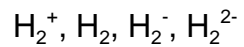


2. (4 points) Allene has the following Lewis structure:



Are the four hydrogens in the same plane? If not, how are they arranged, and why do they have that arrangement?

3. (5 points) Rank the following diatomic species in order of stability, and explain your choices.



Most Stable

Least Stable

4. (3 points) What are the relationships among bond order, bond energy and bond length. Which of these quantities can be measured?