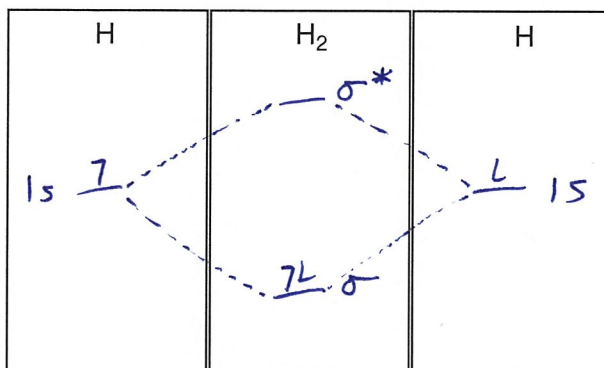
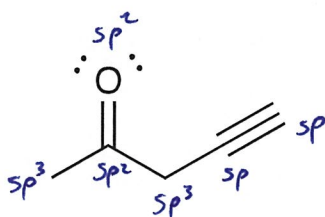


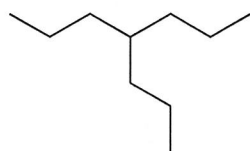
1.) Fill in this MO diagram for H₂. Label all relevant AOs and MOs: (5pts)



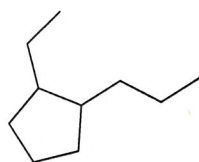
2.) State the hybridization of each atom (excluding H's) in this molecule: (6pts)



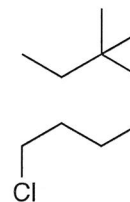
3.) Give the IUPAC names of the following compounds: (9pts)



4-propylheptane



1-ethyl-2-propylcyclopentane



1-chloro-6,6-dimethyloctane