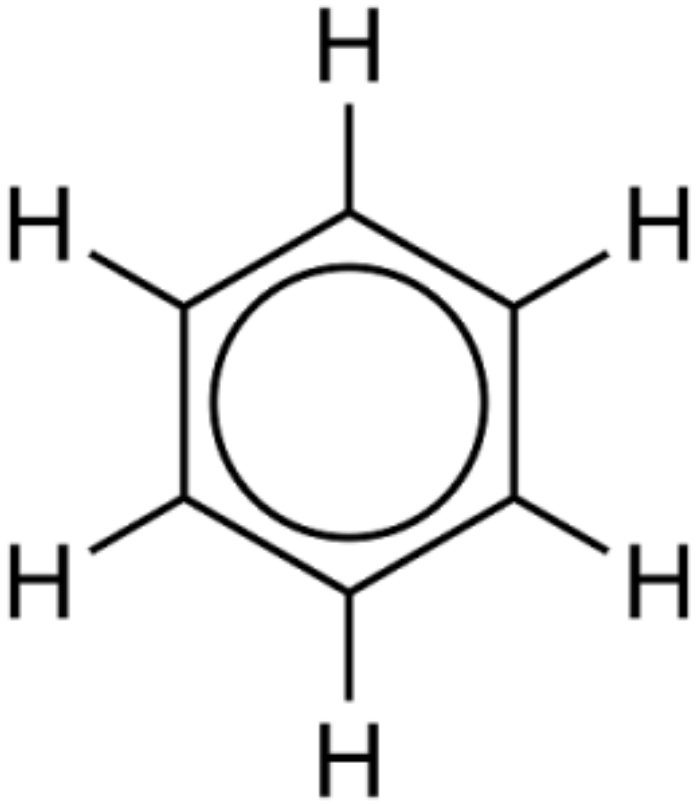
HW 18, chemistry 2



Benzene, molecular formula C_6H_6, the molecule has hexagon ring. The structure is interesting. Each carbon has three bonds, two C-C and one C-H. The remaining electrons from each carbon (total number 6) are delocalized. Compounds that contain a benzene ring perform characteristic chemical reactions (the functional group here is the ring), they are called aromatic compounds.

Questions.

1. Cyclohexane and benzene each have six carbon atoms. Draw the structural formulas, explain how they are different.
2. When methane and benzene are burned under identical conditions which compound is more likely to produce soot? Why?
3. Why does benzene prefer substitution reactions over addition reactions?