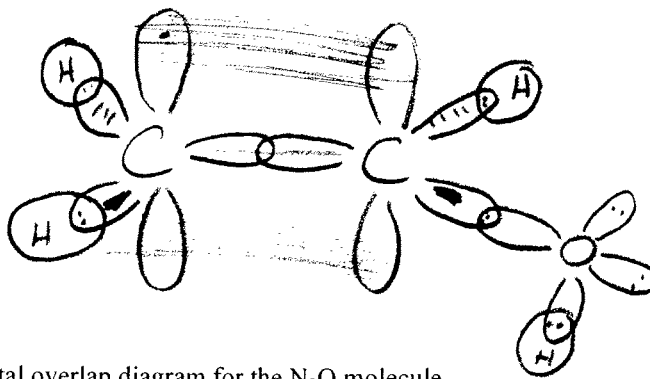
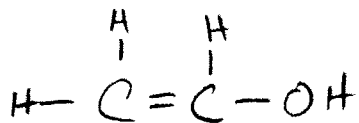


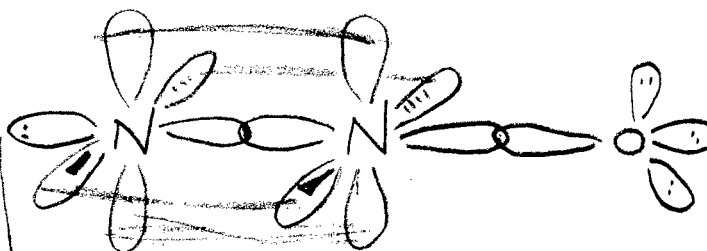
Molecular Structures & Isomers 1

For each of the following covalent molecules, answer the questions about the molecule. In each case, answering the questions will be aided by determining the electron arrangements and shapes of the molecules in question. ~~Answer the questions on a separate sheet.~~

1. Draw the electron dot structure and the orbital overlap diagram for $\text{CH}_2\text{CH}(\text{OH})$.



2. Draw the electron dot structure and orbital overlap diagram for the N_2O molecule.

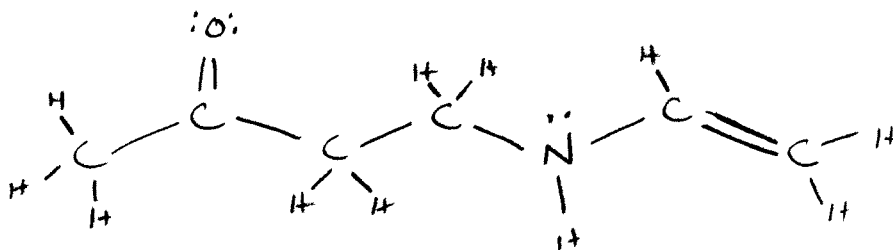


Please Note:

This is a simplified structure of a complex system

3. Draw one possible structure for $\text{C}_6\text{H}_{11}\text{NO}$

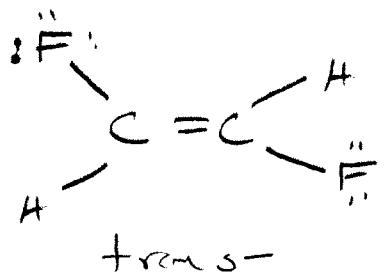
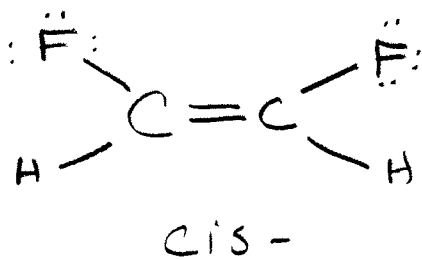
(contains 2 π bonds or 2 rings or 1 of each)



+ MANY
OTHERS

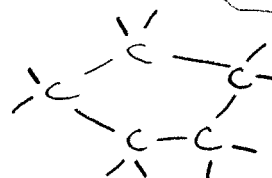
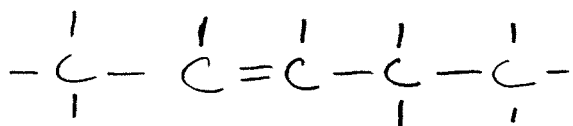
Note: requires presence of a double bond.

4. Draw the electron dot structures for the cis- and trans- forms of $C_2H_2F_2$.

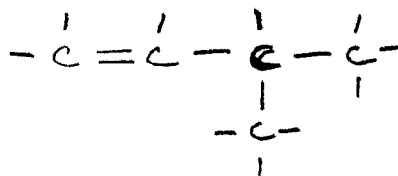
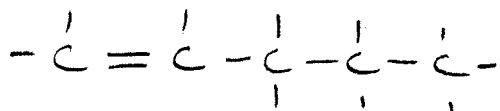


5. Draw 4 different structural isomers for C_5H_{10} .

(contains 1 π bond or 1 ring)



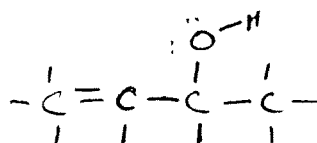
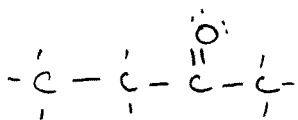
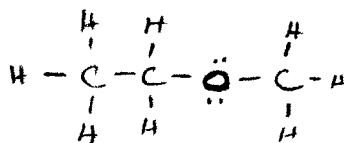
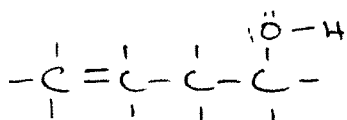
Assume a H
at the end of
each line on a
carbon



+ many others

6. Draw 4 different structural isomers for $C_4H_8O_2$.

(1 π bond or 1 ring)



+ many others