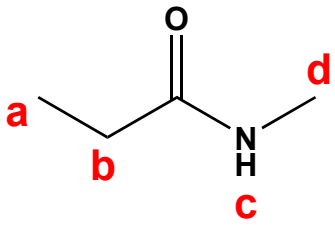
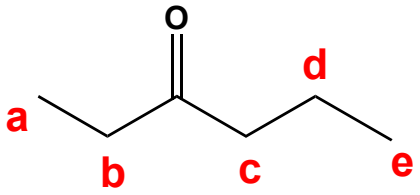
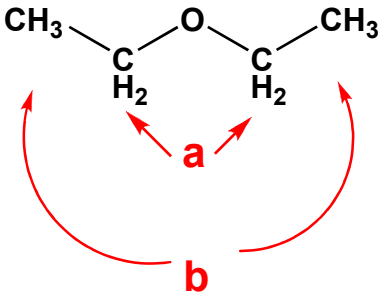
Last Name:	First Name:
UTEID:	SCORE: KEY

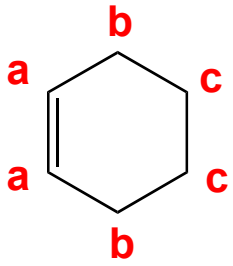
Deadline for CH310N HW 1: Sep 12; 3:00 PM

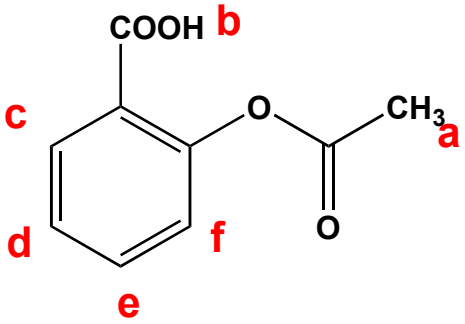
1) For the following structures, label the equivalent protons with the "a, b, c" lettering system.





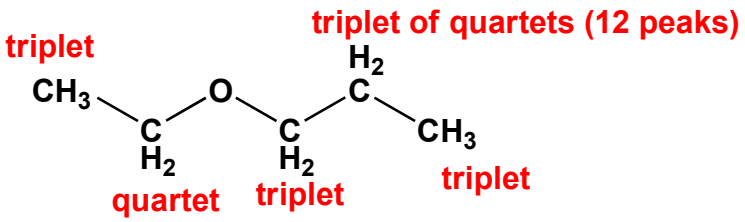


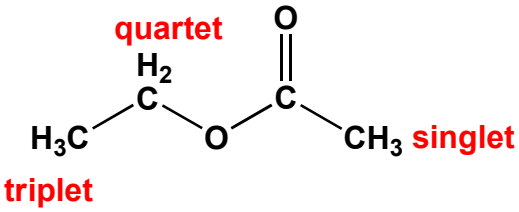




Asprin (salicylic acid)

2) Assign the splitting pattern to each type of protons in these structures. Use the following abbreviations: s= singlet; d=doublet; t=triplet; q=quartet; 5 or more peaks: multiplet. If there is coupling from different sets of protons, then both couplings must be identified. E.G. doublet of triplets: d of t or t of d.





3) There are at least 3 isomers of dichloropropane. The NMR of one of them is shown below. Determine which isomer has the NMR spectrum; label the protons on the structure & assign splitting patterns.

$C_3H_6Cl_2$

Draw structure & assignments here: