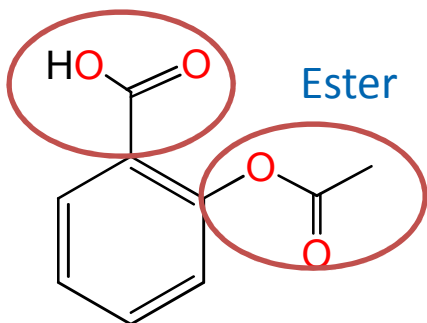
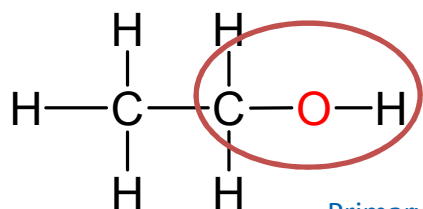


# Circle and name the functional groups

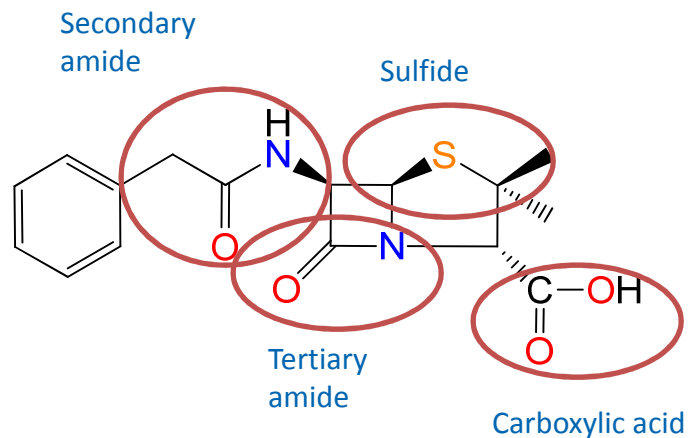
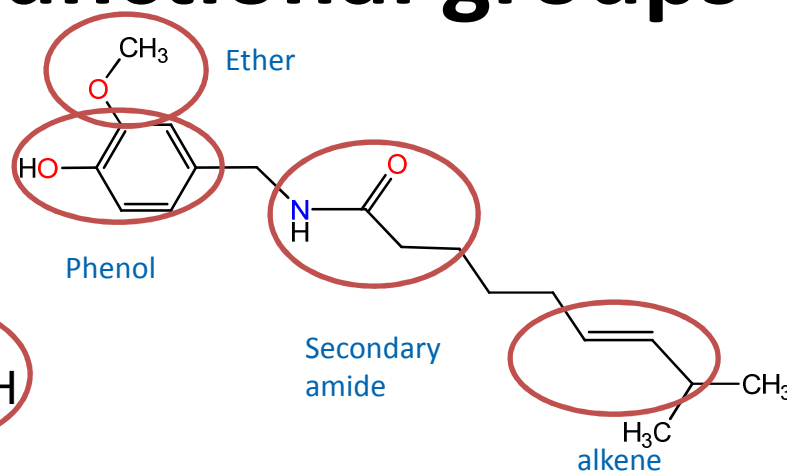
Carboxylic acid



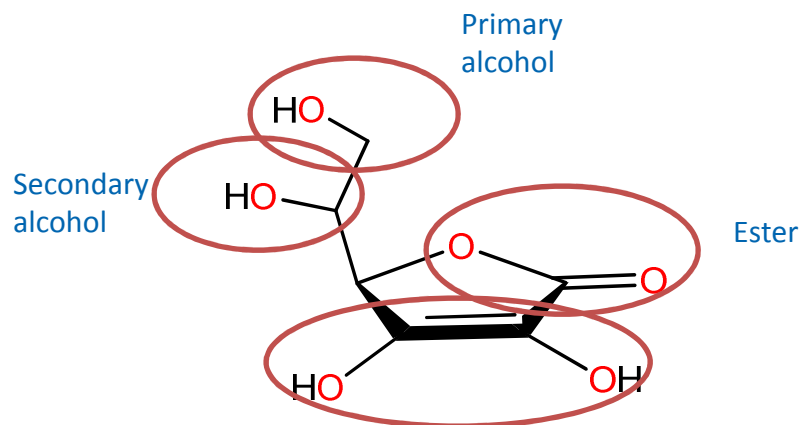
Acetylsalicylic acid (Aspirin)



Ethanol



Penicillin G



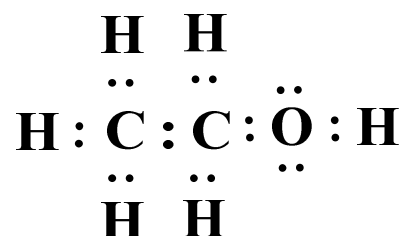
Ascorbic Acid (Vitamin C)

Enediol (not on the list of 40)

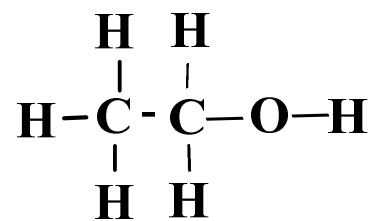
# Organic molecules can be drawn in at least 4 different ways

1. **Condensed** :  $\text{CH}_3\text{CH}_2\text{OH}$

2. **Lewis** :



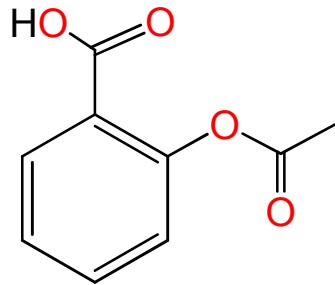
3. **Line Bond (Kekule)** :



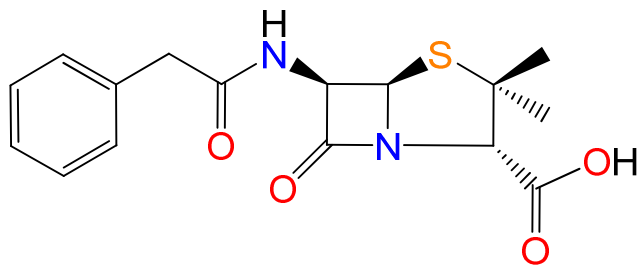
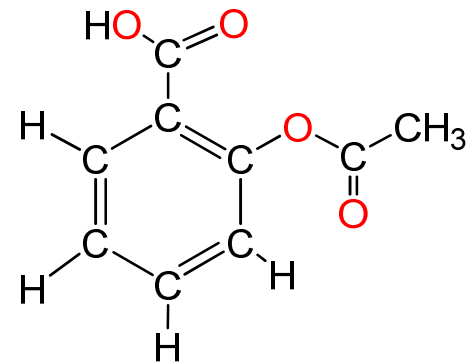
4. **Skeletal (Line Bond)** :



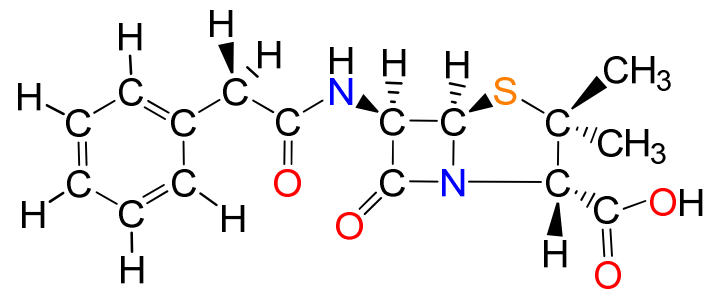
# Redraw, showing all atoms



Aspirin

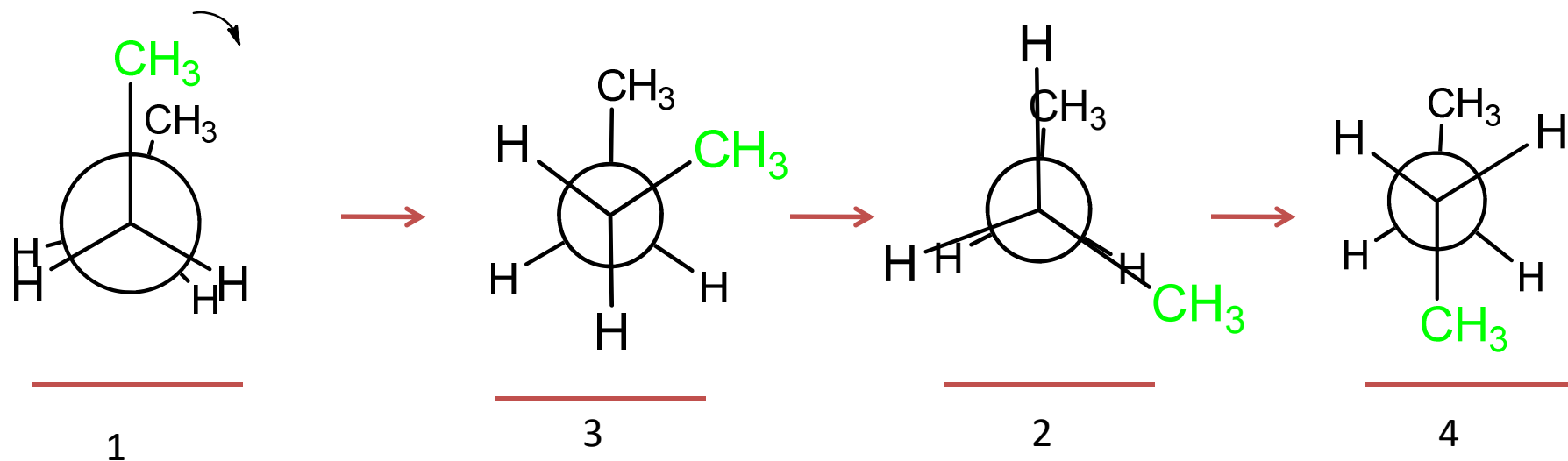
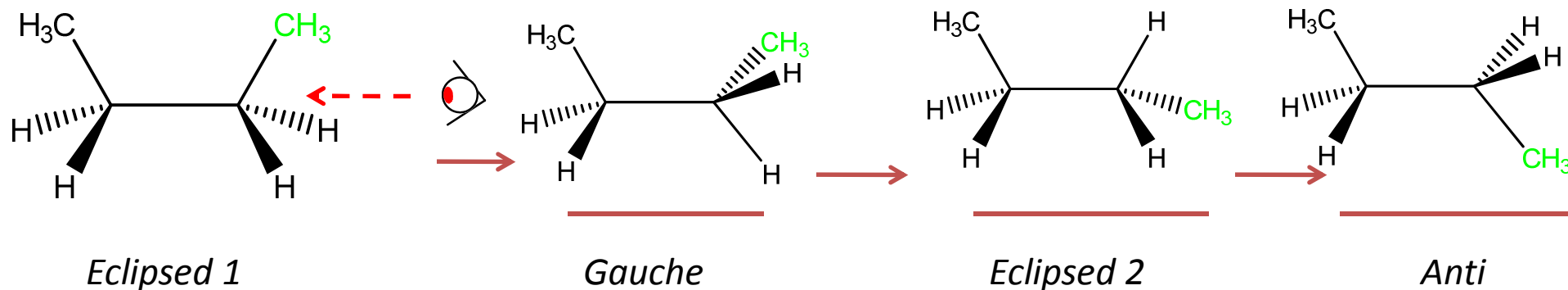


Penicillin G



Recall: Carbon must have 4 bonds, Nitrogen 3 bonds, and Oxygen 2 bonds

# Conformations of Butane ( $C_4H_{10}$ )

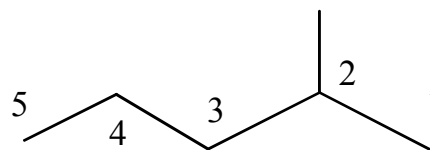


Rank conformations in order of stability (1 least stable)

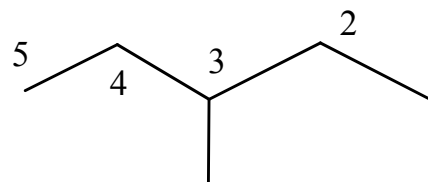
# Draw and name all structural isomers of $C_6H_{14}$



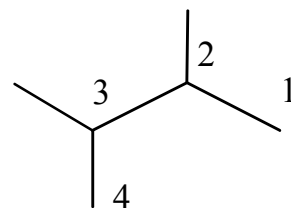
n-hexane



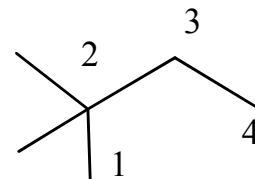
2-methylpentane



3-methylpentane



2,3-dimethylbutane



2,2-dimethylbutane

There are 4 structural isomers of n-hexane!