

**Source:** [KBiologyMasterIndex](#)

# 1 | Bio-Molecules Quiz Review

## 1.1 | Paul's Review Sheet

... is here

And Jack's raw answers: [KBhBIO201BioMoleculesRAW](#)



## 1.2 | Jack's Review Smanza

## 1.3 | Helpful review items

Bonding in organic compounds, a review.

Common nonpolar bonds

Carbon-carbon  
Carbon-hydrogen  
Carbon-sulfur

Common dipole interactions

Carbon-nitrogen  $\delta^+ - \delta^-$       Carbon-oxygen  $\delta^+ - \delta^-$   
Nitrogen-oxygen  $\delta^+ - \delta^-$       Hydrogen-oxygen  $\delta^+ - \delta^-$

Common ionic interactions

they come from acid-base interactions.

However, sometimes they are permanent. Look at the amino acid chart for those.

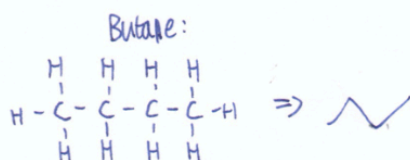
Why hydrogen bonding is excellent

Hydrogen bonding allows stronger dipole-dipole bonds than dipole-dipole bonds. They are still good ol' covalent bonds.

These bonds basically combine Hydrogen w/ the most electronegative atoms.



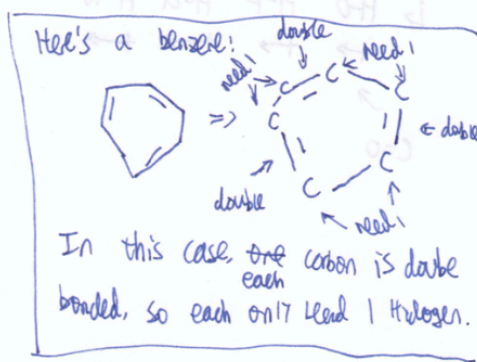
Reading a line-angle representation.



In this type of representations, start with a line. End the line at every carbon.



Now, it is assumed that carbon is not going to just be happy with  $\text{C}-\text{C}-\text{C}-\text{C}$ .



so, we still the missing orbitals with hydrogen.

need 2  
 $\text{C}-\text{C}-\text{C}-\text{C} \leftarrow \text{need 3}$   
need 2  
need 3

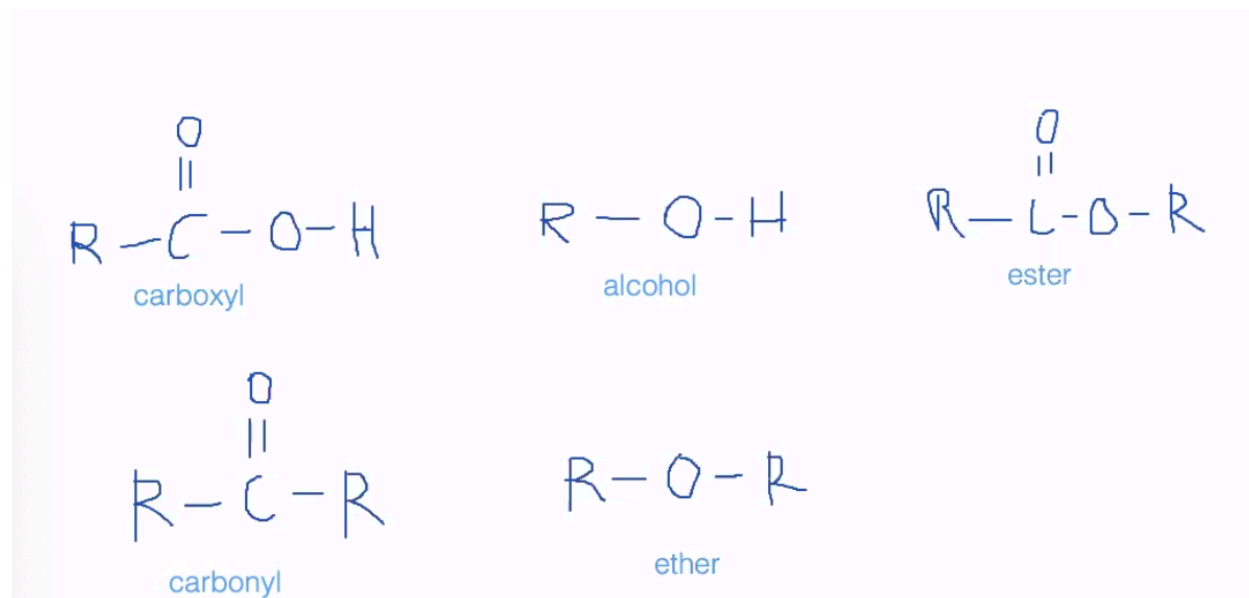


Figure 2: Screen Shot 2020-10-12 at 2.34.16 PM.png