

Source: [KBiologyMasterIndex](#)

1 | **Bio-Molecules Quiz Review**

1.1 | **Paul's Review Sheet**

... is here

1.1.1 | Carbohydrates

1.2 | 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.

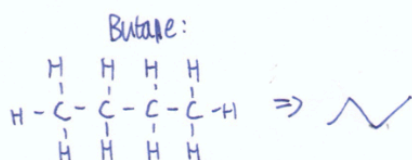
why hydrogen bonding is excellent

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

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



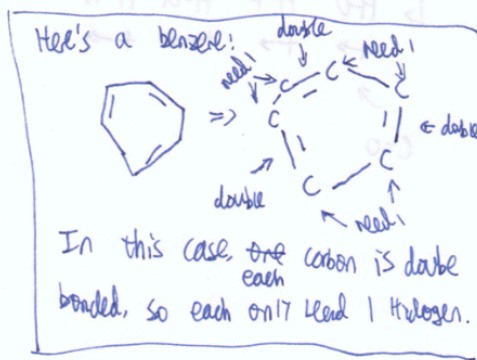
Reading a line-angle representation.



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