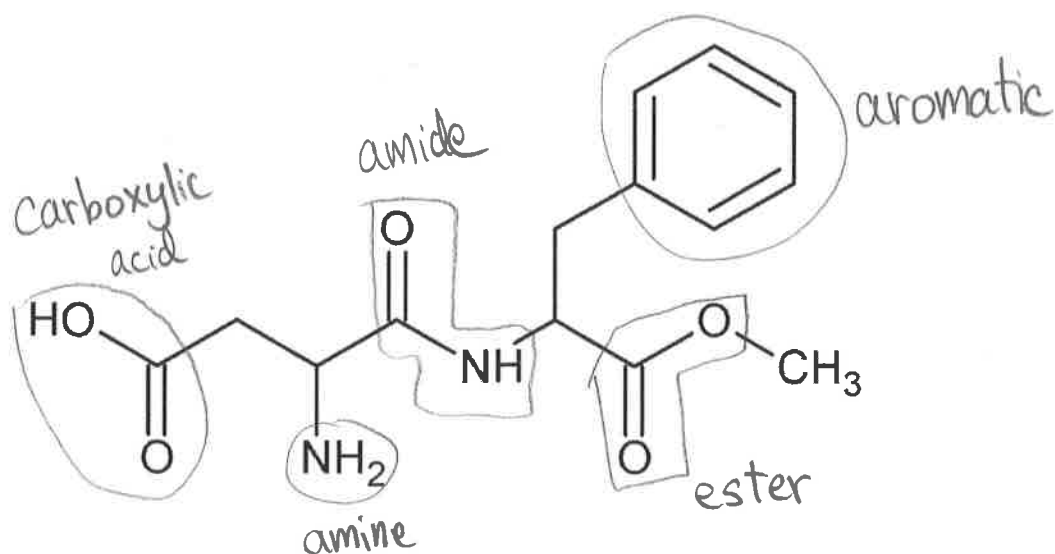


Alkanes #1: Fun With Functional Groups & A Splash of Common Naming

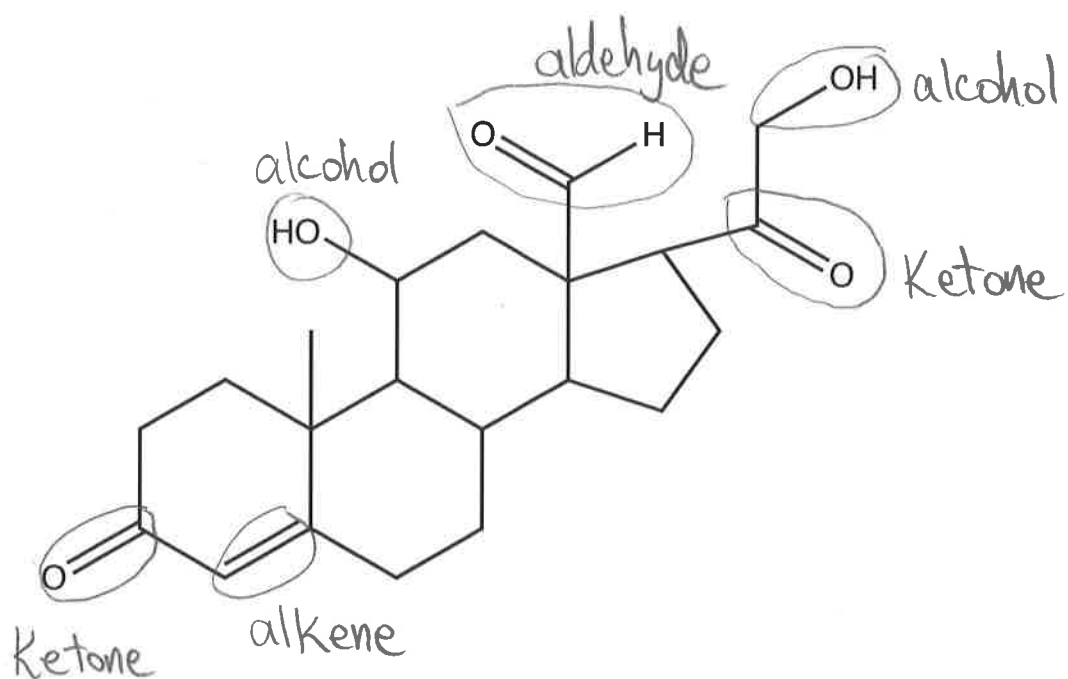
Yo, yo, yo. You made it through gen-chem: Hell yeah. But the fun is just getting started: Let's dive into some more shenanigans.

- 1.) Below are pictures of aspartame and aldosterone, a sweetener and a hormone, respectively. In the case of each molecule, circle and write the names of every functional group found in each molecule (do not label 'alkane' as a functional group).

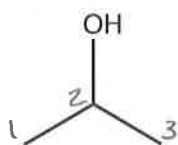
i.)



ii.)



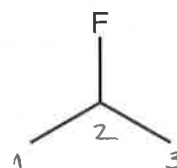
2.) Make sure you nail those down: Functional Groups never go away. But anyways, moving on. Coincidentally, another thing that never goes away is Common Naming. I know you're up to the task—for each structure below, give the correct common name.



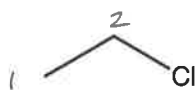
isopropyl alcohol



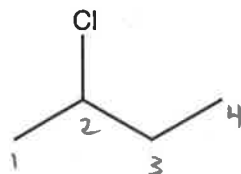
butyl bromide



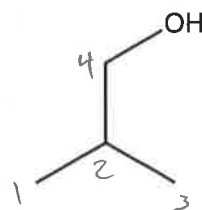
isopropyl fluoride



ethyl chloride



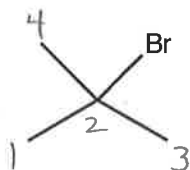
sec-butyl chloride
(remember - the Cl is on the 2° carbon)



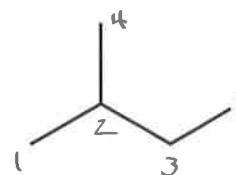
isobutyl alcohol



propyl alcohol



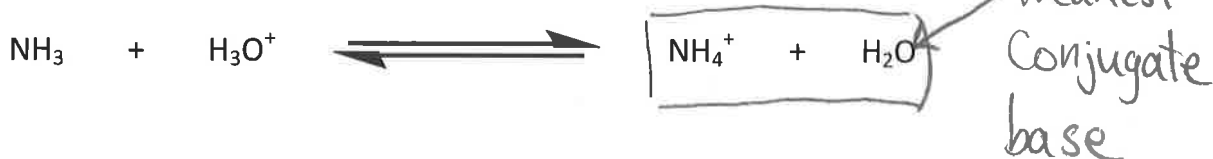
t-butyl bromide
(Br is on the 3° carbon)



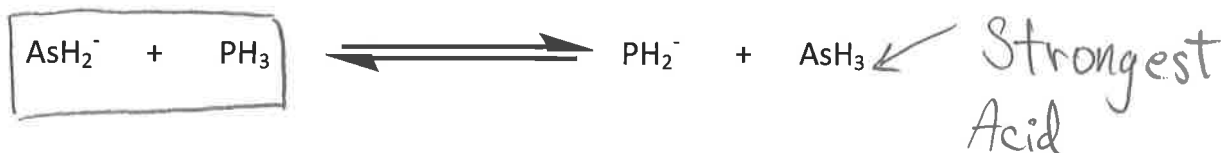
isobutyl iodide

3.) Okay, one more thing before we wrap this worksheet up: A little blast from our acid-base past. For the acid-base reactions below, predict which side will be favored at equilibrium.

a.) In this reaction, also label the weakest conjugate base



b.) In addition, label the strongest acid in this reaction



c.) Lastly, label the most unstable conjugate base = Strongest conj. base



Good job, gang. I know that wasn't terribly riveting, but knowing functional groups and common names is very important. It helps you talk-the-talk to people who do organic chemistry, and it doubles up as a way to sound smart, allowing you to use big science words in front of friends and family. And maybe, just maybe, if you're bold enough, it can also function to impress that special someone in your life—or maybe (and most likely) not. Regardless, I promise things will get much more exciting very soon.