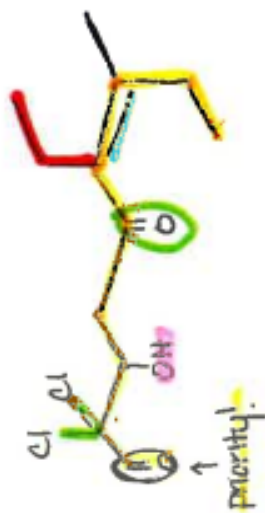




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NAMING ORGANIC COMPOUNDS



RIGHT NUMBERING:

$$1+2+3+5+6=17$$

WRONG NUMBERING:

$$3+4+5+7+8+9=26$$

2,2-dichloro-

don't forget di, tri etc if more than one of the same functional groups represented

ANOTHER EXAMPLE?



2-AMINO-5-OXO-

6-OXO

prefixes

hex-3-ynoic acid

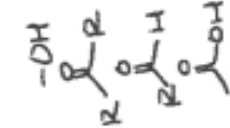
backbone

REMEMBER?

- meth = 1 hex = 6
- eth = 2 hept = 7
- prop = 3 oct = 8
- but = 4 non = 9
- pent = 5 dec = 10



aldehydes are 1st position always. Name position if higher priority.



① Find your "backbone"

- has to have largest # of carbons & include function group priorities

② Are there any double bonds/triple bonds? if so it is ene/yne respectively. INCLUDE THEM IN BACKBONE CHAIN & include position.

③ Number carbons. You want them to add up to the lowest #.

④ Determine backbone priority

* Acids have mostly priority. then aldehydes, ketones etc.

PREFIX	SUFFIX
hydroxy	ol.
OXO	one
OXO	al
—	oic acid

⑤ Determine prefixes. We have several. Also put POSITION

Dash between every letter & #. comma between every # & #

⑥ ALPHABETIZE PREFIXES!



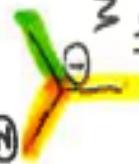
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ANOTHER EXAMPLE?



Naming carbon within a carbon chain: IUPAC STANDARD CAN'T call this "isopropyl"

thus

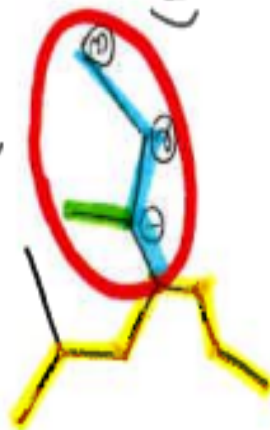


-this is a methyl within an ethyl

the methyl is on the 1st ethyl carbon so it is

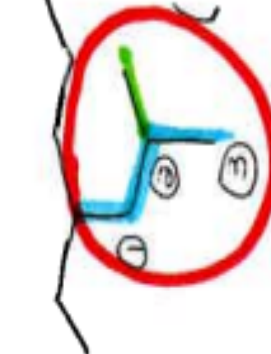
(1-methyl ethyl)

ex:



-this is a methyl on a propyl so it is (1-methyl propyl)

ex #2:



Again methyl on a propyl but different position so (2-methyl propyl)

5-amino-2-chloro-4,4-dimethyl-3-(1-methyl ethyl) hept-1,5-dien-6-ol

Contact us via:

- Student Affairs Building, 2nd floor
- (954) 262-8350
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