

ORGANIC CHEM NOMENCLATURE

Steps for Naming

- 1. Count the longest chain of carbons or the number of carbons in the ring. Use this for your base name. If you are working with a ring, make it a cyclo-.
- 2. Number the carbons so the most substituent is the lowest number possible.
- 3. List, in alphabetical order, the functional groups (halogens get an -ide and carbons get an -yl). This goes in before your base.
- 4. List the carbon numbers for the functional groups.
- 5. Add the appropriate prefix based off the number of each type of functional groups.
- 6. If needed, add appropriate functional group suffix to the end of your name.

Commas between numbers, dashes between numbers and letters

FUNCTIONAL GROUPS

Q-oH Alcohol -ol or Hydroxy-

Aldehyde -al

Amide -amide

Hype Amine -amine or Amino-

-oic anhydride

Carboxylic Acid -oic acid

Billion Ester -oate

Ketone -one

Nitrile -nitrile

M-5 H Thiol -thiol

CARBON BOND SUFFIXES

C-C Alkane - Single Bonds - - ane

C=C Alkene - Atleast one double bound - - ene

C= Alkyne - Contains a triple bond - -yne

NUMERICAL PREFIXES

1 meth 2 di

2 eth3 prop4 tetra

4 but 5 penta

5 pent 6 hexa

6 hex

7 hept

8 oct

9 non

10 dec

X X

Iso ends in a fork

 \mathbf{Sec} attached to a secondary carbon

 ${\sf Tert}$ attached to tertiary carbonAdd a little bit of body text