1. pH = 4.1

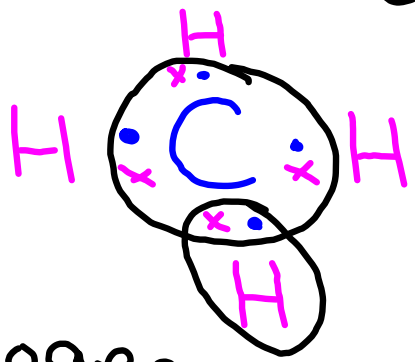
2. x = .181 N

x = .0905 M

inorganic	organic
NaCl (s)	CH_4 methane (g)
ionic bonding	covalent bonds
↑ mp and bp	↓ mp and bp
hard to burn	easy to burn
Soluable in H_2O	insoluable in H_2O

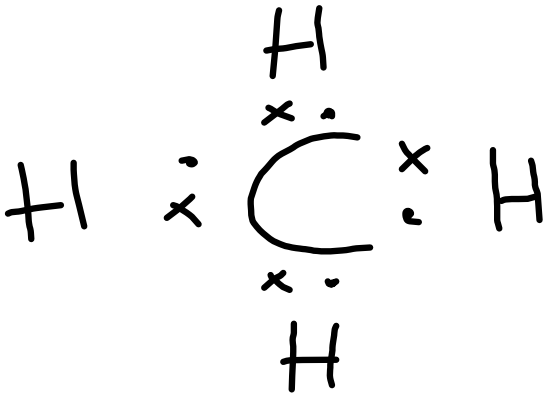
C 4 valence e⁻s

H 1 valence e⁻

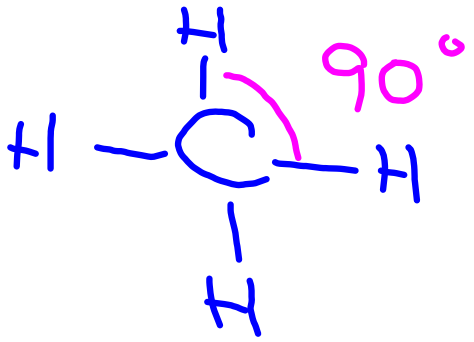


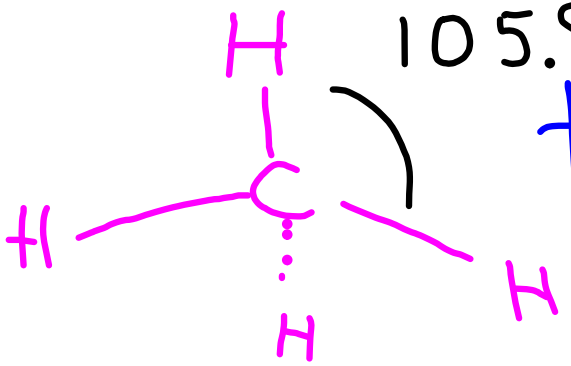
Hydrogens are known as a stopper in a carbon chain

Carbons can be bonded with each other.



Dot Structure



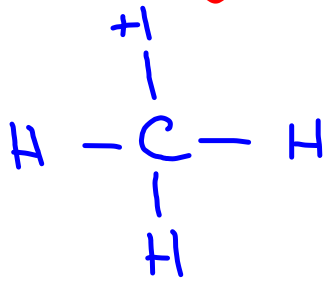


tetrahedron

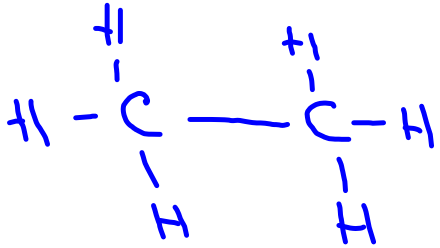
CH_4

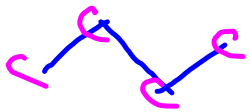
C_2H_6

molecular formulas



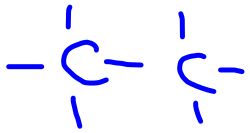
Structural formulas





each carbon has 4 bonds

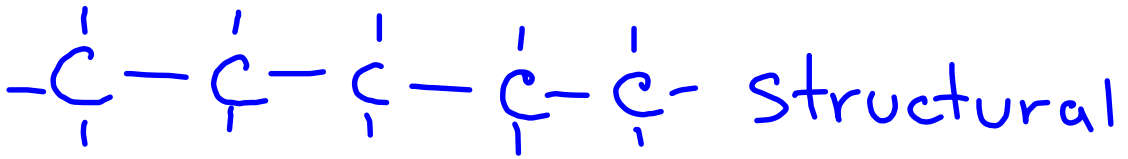
CH_3CH_3 condensed formula



Alkanes - all single bonded Carbons

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

(prefex)



structural

Pentane

$CH_3CH_2CH_2CH_2CH_3$ Condensed

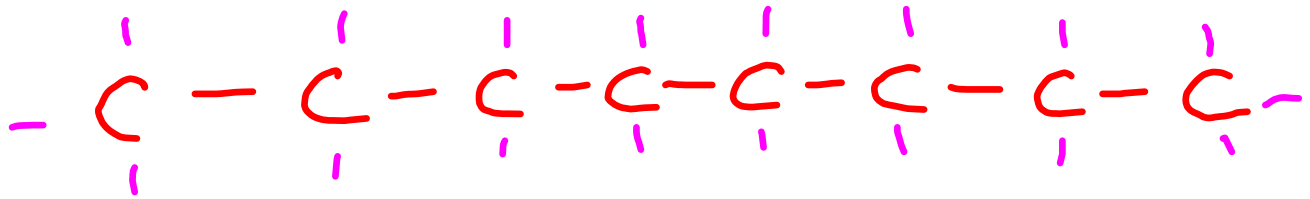
C_5H_{12} molecular formula

$C_n H_{2n+2}$ general formula for alkanes

# of carbons

$C_5 H_{2(5)+2}$

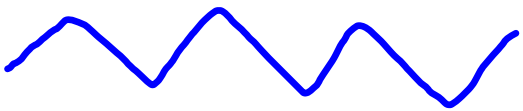
$C_5 H_{12}$



Octane

C_nH_{2n+2}

C_8H_{18}

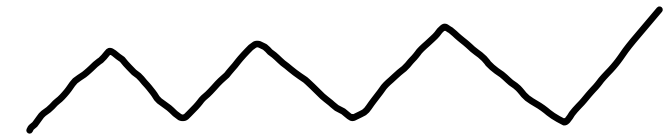


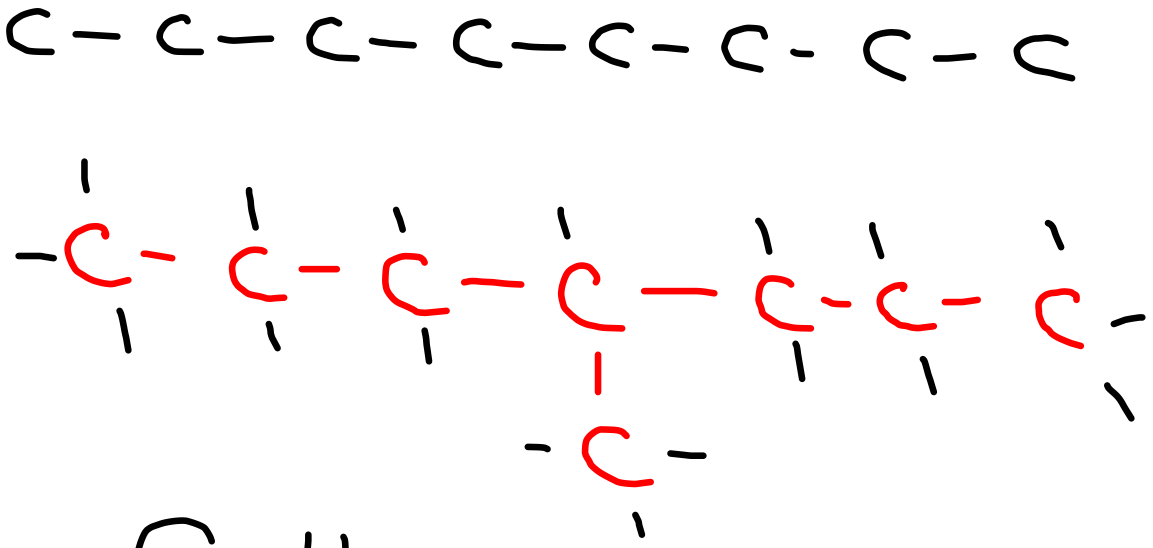
Carbon backbone

P 411

11.1 11.5 11.7

$C_n H_{2n+2}$

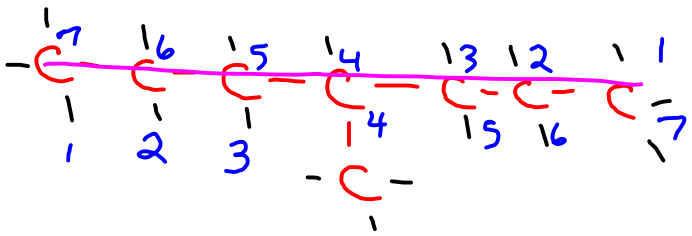




$C_8 H_{2n+2}$

$C_8 H_{18}$

isomers- same # of C_s and H_s but built differently and having a different name.



① Find the longest chain w/o picking up you pencil or doubling back over a previous line.

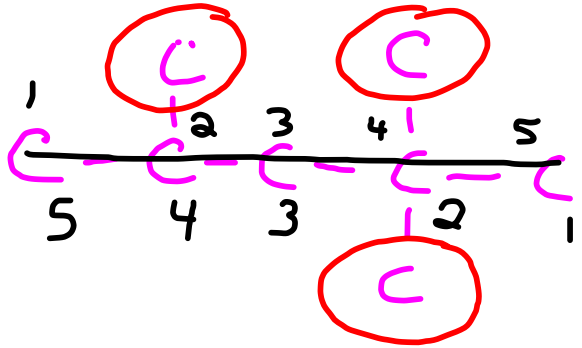
heptane

② Find the branches and name them. methyl heptane

③ If more than one group has the same name, use di, tri, tetra, penta

④ Number main chain such that the one with the most # of branches or largest in mass gets the lowest #.

4-methyl heptane



2,2,4-trimethyl pentane

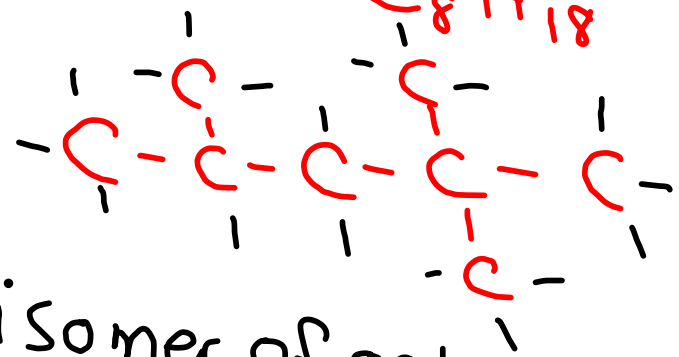
3C 5C

8 carbons

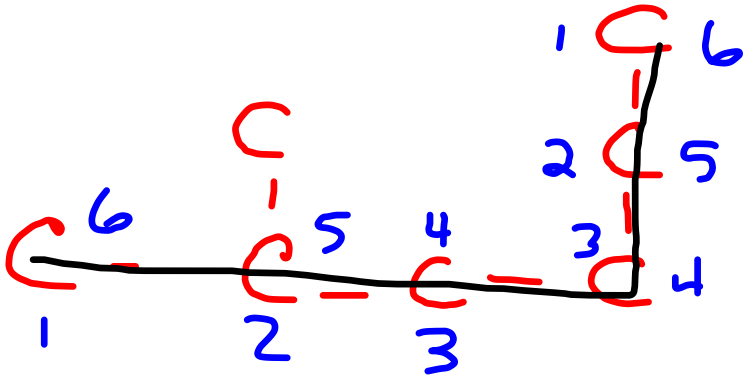
2,2,4

2,4,4

C_8H_{18}



isomer of octane.

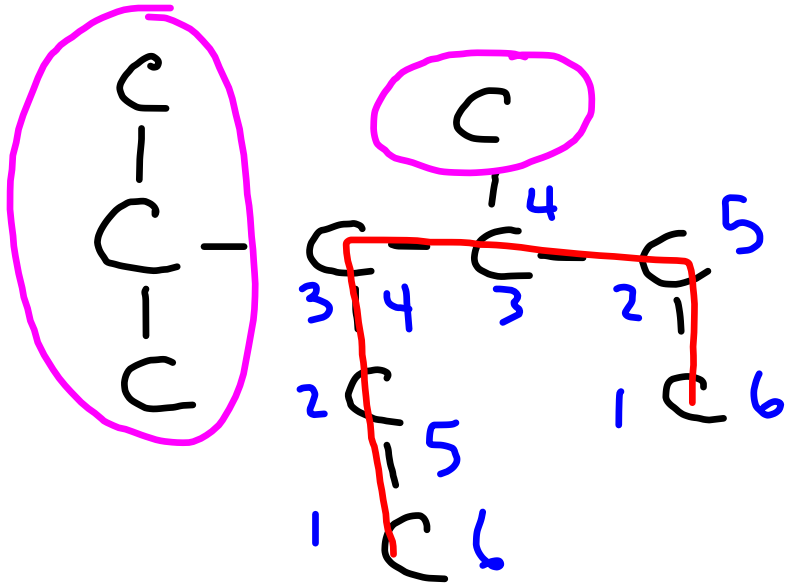


2-methylhexane

(1) + (6) = 7

2
5

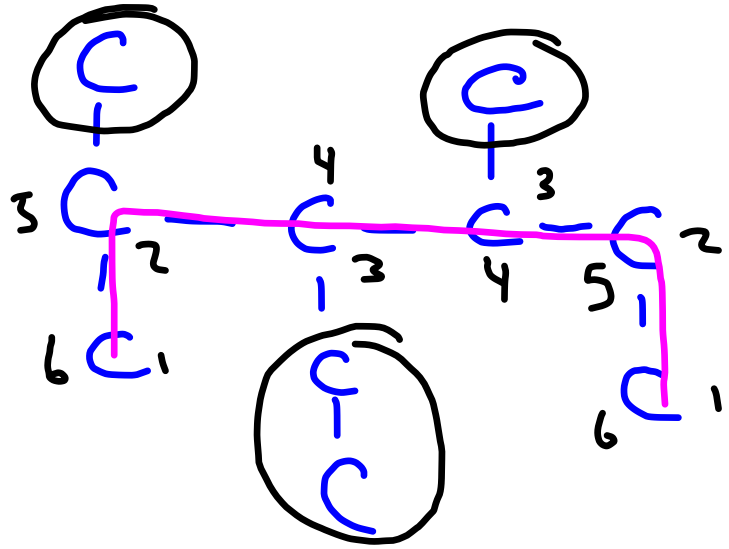
isomer of heptane



3-isopropyl-4-methyl hexane

4 3

3 4



3- ethyl-2,4-dimethyl hexane

3
4

2, 4
3, 5

p 415

11.9, 11.11 a.b.c. ~~d~~

11.13 a.b.c. ~~d~~