

Nomenclature is the basic language of Organic Chemistry. You will need to understand how things are named so that you can understand the structure (and thereby the chemistry) of a molecule.

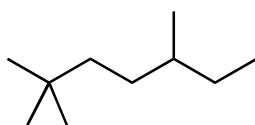
1. Give the prefix/bases which are used to indicate all the carbon counts from 1-10. (e.x. Meth = 1 carbon)

# of Carbons	Prefix/base
1	
2	
3	
4	
5	

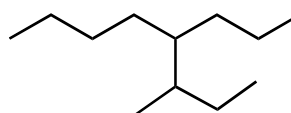
# of Carbons	Prefix/base
6	
7	
8	
9	
10	

2. Draw all the possible structures with the formula C_5H_{12} . Give the IUPAC name for each.

3. The names given for the following structures are wrong. Specify the errors in naming, and give the correct names.



2,2,5-methylheptane



5-(1-methylpropyl)octane

4. Draw the skeletal (line/angle) structures for the following compounds.

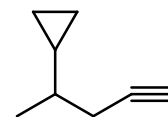
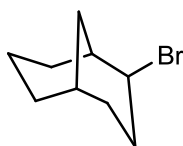
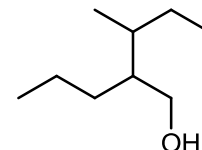
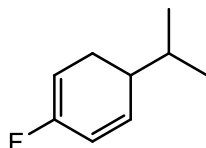
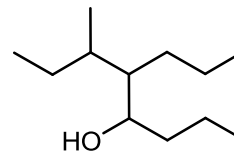
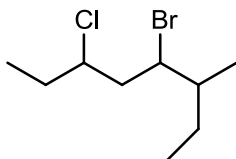
3-ethyl-5-methyloctane

cis-3,4-diethyl-2-hexene

1-chloro-2,4,4-trimethylpentane

1-bromo-3-isopropylcyclohexane

5. Give the IUPAC name for each molecule below.



6. Draw the skeletal (line/angle) structures for the following.

- 3-ethyl-5-methyl-4-(1-methylethyl)octane
- 2-bromo-3-propyl-2-cyclohexenol
- 2-methylbicyclo[4.1.0]heptane
- cis*-2-ethyl-1,1,3-trimethylcyclopentane
- trans*-non-4-en-8-yn-3-ol