

Naming Alkanes

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

Naming Alkanes Rules

1. Find longest continuous carbon chain (Parent Chain) and name based on how many carbons present and stick an -ane on the end
(4 carbon chain = Butane)
2. If 2 or more branches, list alphabetically,
3. If more than 1 of same type of group, add prefix (di-,tri-, etc)

Functional Groups

□

For clarification, a carbonyl is just the C=O

Classification of Isomers

Constitutional Isomers: isomers that differ in order of atoms connected

Stereoisomer: Isomers with same connections but different atom arrangements

Enantiomers: stereoisomers that are nonsuperimposable mirror images

Diastereomers: stereoisomers that are not mirror images

Cis-Trans isomers: Only compounds w/ double bonds and at least 2 different substituents on either side

Conformations

Eclipsed Conformation: Staggered Conformations:

0 degrees	Gauche=60 Degrees	Anti= 180 degrees
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In order of most to least stable:

Anti -> Gauche -> Eclipsed

Chirality

Chiral: If it can't be superimposed on its mirror image (enantiomers)

Achiral: The molecules in which mirror images are superimposable

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