Warm Up

Draw the following compounds:

a) diethylpentane

c) trimethylbutane

b) 4-ethyl-2-methylhexane

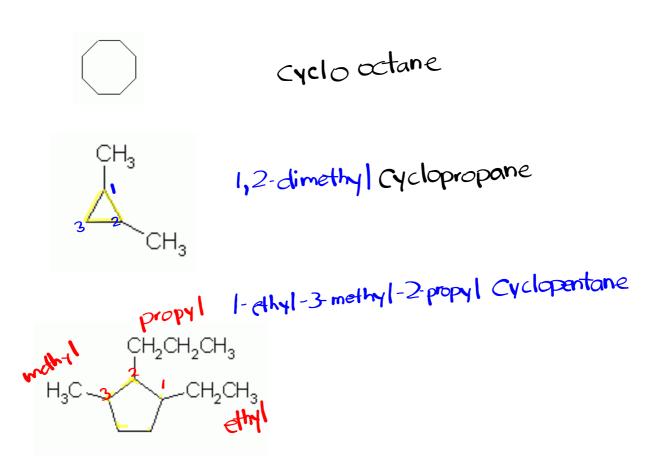
Worksheets - Naming Alkanes

(2) 2-methyl propyl heptane

Same rules apply as naming branched alkanes:

- Name parent (ring)
- Number carbons in parent with branches beginning on first carbon (lowest numbering possible)
- Put branches in alphabetical order

Naming Cycloalkanes



Naming Alkenes / Alkynes

Naming alkenes (double bonds) and alkynes (triple bonds) are very similar to alkanes. When naming, take these two points into consideration:

- the longest parent chain of carbon atoms must include the multiple bond, and the chain is numbered from the end closest to the multiple bond
- the name of the compound's parent chain is preceded by a number that indicates the position of the multiple bond on the parent chain.

Ex.
$$CH_2 = CH - CH_2 - CH_3$$

$$\begin{vmatrix} 2 & 3 & 4 \end{vmatrix}$$

$$CH_3 - C = C - CH_3$$

$$2 - butyne$$

$$CH_3$$
 CH₃ - CH = CH - CH - CH ₃
 $\frac{1}{2}$ $\frac{2}{3}$ $\frac{3}{4}$ $\frac{5}{5}$

$$CH_2CH_2CH_2CH_3$$
 $CH_3 - CH = CH_2$

Multiple Multiple Bonds

If there is more than one multiple bond in an organic compound, the name of the compound is changed to a _____diene, with the placing of the double bonds indicated at the beginning of the parent name.

$$CH_3$$
 $CH_2 = C - C = CH_2$ CH_3 CH_3

Homework

Worksheet 46