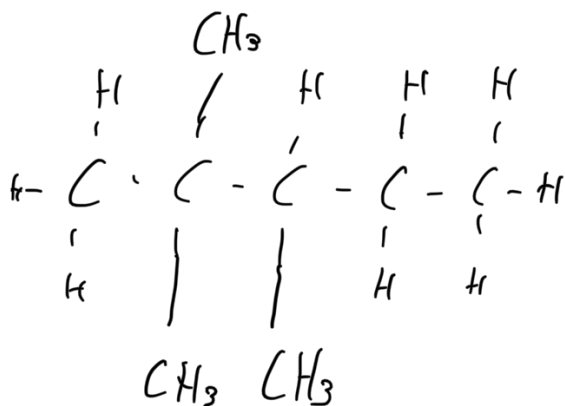
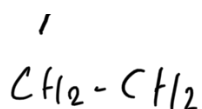


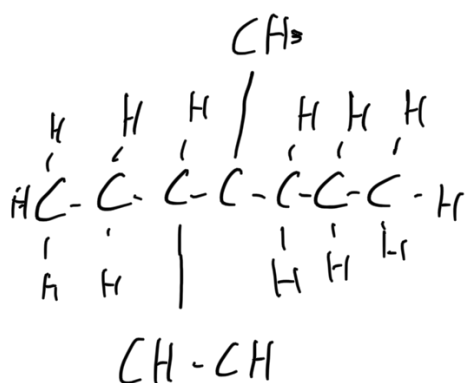
# Systematic naming of hydrocarbons

(Side note: How does the names of hydrocarbon remind Mrs Hynes of old ladies?)

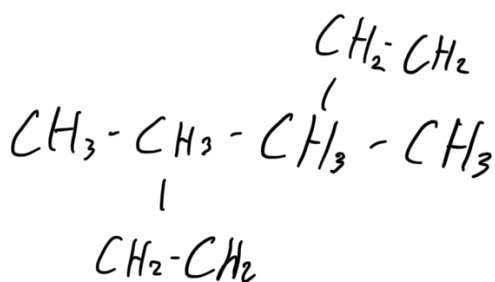
Structural Formula	Name of molecule
$  \begin{array}{c}  \text{CH}_3 \\    \\  \text{CH}_3 - \text{C} - \text{CH}_2 - \text{CH}_3 \\    \\  \text{CH}_3  \end{array}  $	2,2-Dimethylbutane
$  \begin{array}{ccccccc}  & & & & \text{CH}_3 & & \text{CH}_3 \\  & & & &   & &   \\  \text{CH}_3 - & \text{CH}_2 - & \text{CH}_3 - & \text{CH}_2 - & \text{CH} - & \text{CH}_2 - & \text{C} - \text{CH}_3 \\  & & & & & &   \\  & & & & & & \text{CH}_3  \end{array}  $	Trimethyloctane
$  \begin{array}{ccccccc}  & \text{H} & \text{H} & & \text{H} & \text{H} & \\  &   &   & &   &   & \\  \text{H} - & \text{C} - & \text{C} - & \text{C} - & \text{C} - & \text{C} - & \text{H} \\  &   &   & &   &   & \\  & \text{H} & \text{H} & & \text{H} & \text{H} &   \end{array}  $	3-Diethylhexane



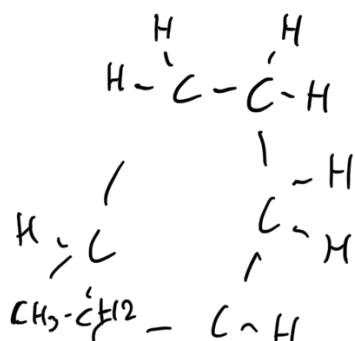
2,2,3-Trimethylpentane



3-ethyl-4-methylheptane



2,3-dimethylbutane



2-Dipentylhexane

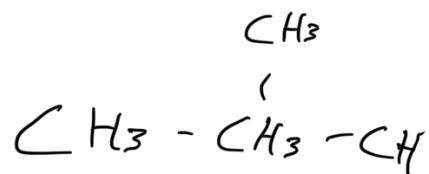
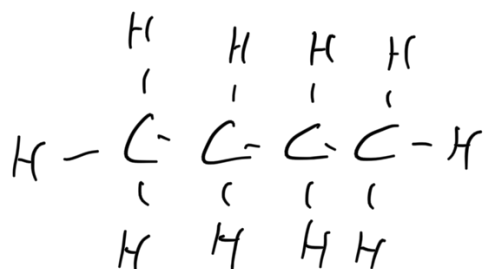
$  \begin{array}{c}  \text{H} \quad \text{H} \quad \text{H} \\    \quad   \quad   \\  \text{H} \quad \text{H} \quad \text{H}  \end{array}  $	
$  \begin{array}{c}  \text{CH}_3 \quad \text{H} \\    \quad   \\  \text{H} - \text{C} - \text{C} - \text{H} \\    \quad   \\  \text{H} - \text{C} - \text{C} - \text{H} \\    \quad   \\  \text{H} \quad \text{H}  \end{array}  $	Butane 1-methyl 1-methylbutane
$  \begin{array}{c}  \text{CH} - \text{CH} \quad \text{H} \\    \quad   \quad   \\  \text{H} - \text{C} - \text{C} - \text{H} \\    \quad   \quad   \\  \text{H} - \text{C} - \text{C} - \text{CH} - \text{CH} \\    \quad   \quad   \quad   \\  \text{H} \quad \text{H} \quad \text{H} \quad \text{H}  \end{array}  $	1,3-dimethylcyclopentane
$  \begin{array}{c}  \text{CH}_3 \\    \\  \text{CH}_3 - \text{CH} - \text{CH} = \text{CH}_2  \end{array}  $	2-methylbutene
$  \begin{array}{c}  \text{CH}_3 \\    \\  \text{CH}_2 = \text{CH} - \text{C} - \text{CH}_2 - \text{CH}_3 \\    \\  \text{CH}_3  \end{array}  $	3,3-methylpentene
$  \begin{array}{c}  \text{CH}_3 \quad \text{CH}_3 \\    \quad   \\  \text{CH}_3 - \text{CH}_2 - \text{CH} - \text{C} = \text{CH} - \text{CH}_3  \end{array}  $	3,4-methylhexene

$\begin{array}{c} \text{CH}_3 \\   \\ \text{CH}_2 = \text{C} - \text{CH}_3 \end{array}$	2-methylpropene
$\begin{array}{c} \text{CH}_2 \\   \\ \text{CH}_3 - \text{CH}_2 - \text{CH}_3 - \text{CH}_2 - \text{CH}_2 \end{array}$	Pent-1-ene
$\begin{array}{c} \text{CH} - \text{CH} \\   \\ \text{CH}_2 - \text{CH}_3 - \text{CH}_2 = \text{CH}_2 \\   \\ \text{CH} - \text{CH} \end{array}$	2,3-dimethylbut-2-ene (I don't understand the 2 the middle of it)
$\begin{array}{c} \text{CH} \\   \\ \text{CH}_3 - \text{CH}_2 - \text{CH} - \text{CH}_3 - \text{CH}_2 = \text{CH}_3 \\   \\ \text{CH} \end{array}$	2-methylhex-3-ene
$\begin{array}{c} \text{CH} - \text{CH} \qquad \text{CH} - \text{CH} \\   \qquad \qquad   \\ \text{CH}_3 - \text{CH}_3 - \text{CH}_2 - \text{CH} = \text{CH}_2 \\   \\ \text{CH} - \text{CH} \end{array}$	3,3-dimethylpent-1-ene

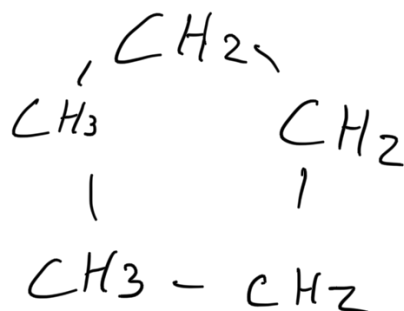
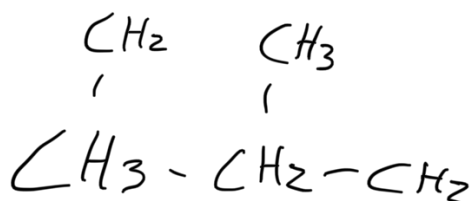
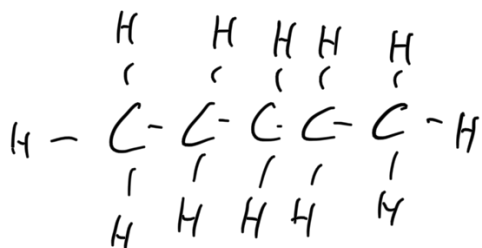
Isomers

1 1 1 1 1

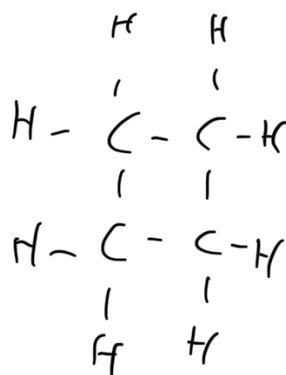
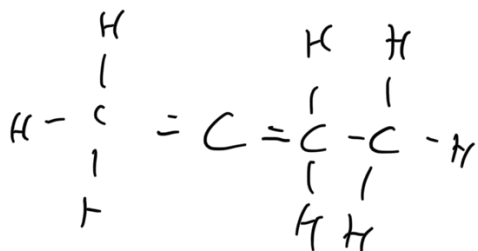
$C_4H_{10}$



$C_5H_{12}$



$C_4H_8$



2 6  
 $C_4H_8$

