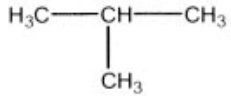
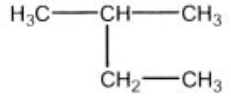
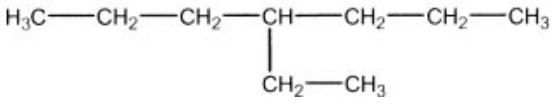
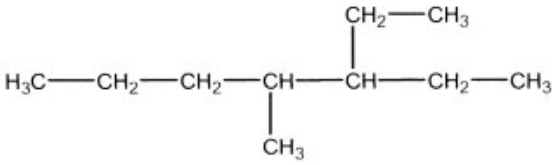
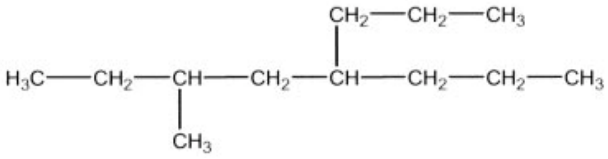
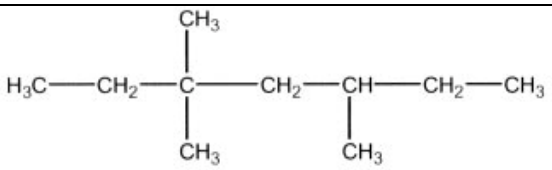
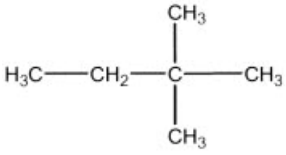
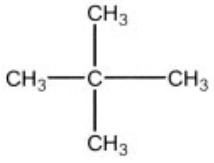
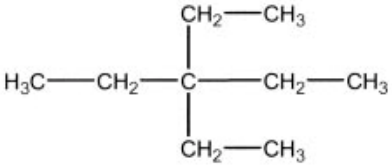
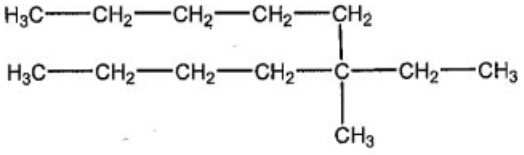
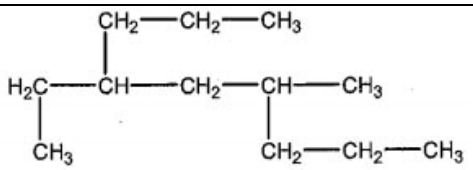
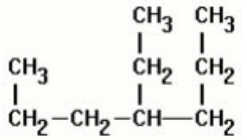
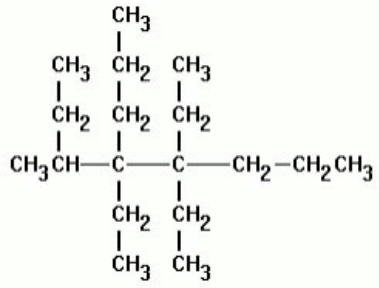
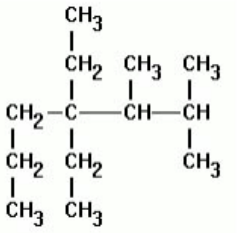
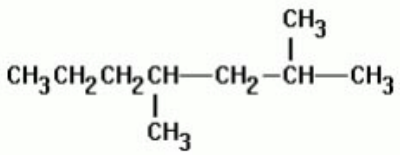
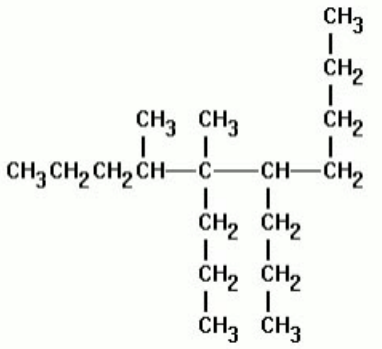
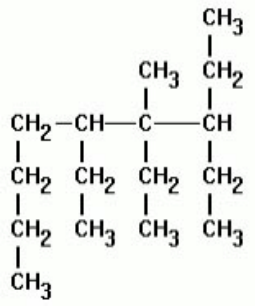
Naming Alkanes - Worksheet #1

Name the following branched alkanes:

Naming Alkanes - Worksheet #2

Draw the structural formula and line bond for the following molecules. Remember the following:

- Carbons on the end of a chain are attached to three hydrogens
- Carbons in the middle of a chain are attached to two hydrogens
- Carbons that have one branch attached are also attached to one hydrogen
- Carbons that have two branches attached are not attached to any hydrogens

4-ethyl-octane

2-methyl-nonane

3,3-dimethyl-pentane

3-ethyl-pentane

3-ethyl-2methyl-heptane

2,2,3-trimethyl-butane

3-ethyl-2,2-dimethyl-hexane

2,3,4,5,6,7-hexamethyl-octane

4-ethyl-octane

2-methyl-nonane

2-ethyl-2methyl-butane

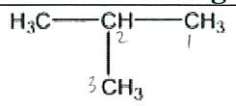
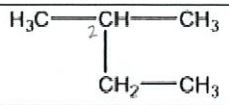
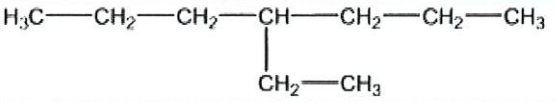
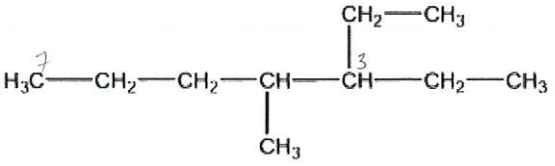
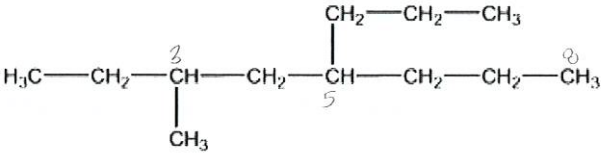
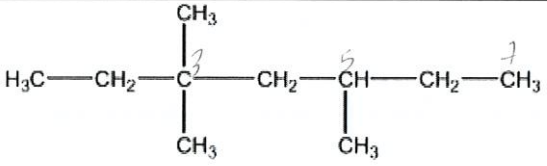
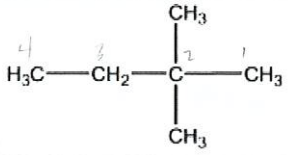
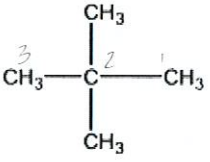
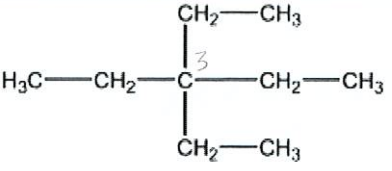
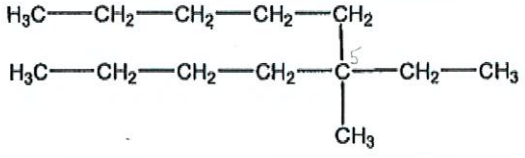
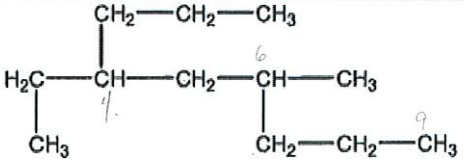
3-ethyl-pentane

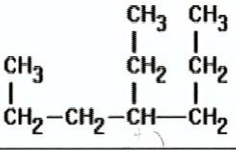
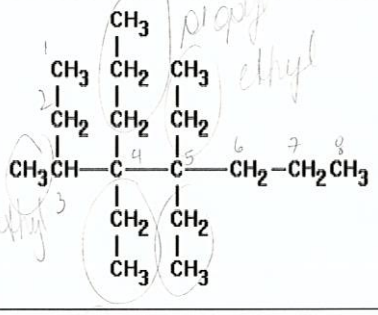
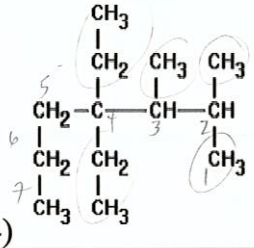
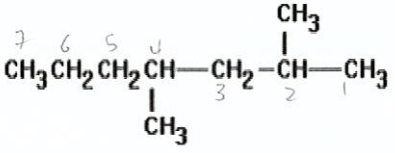
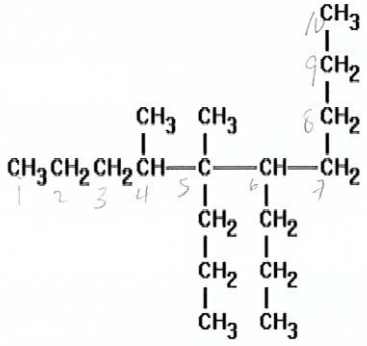
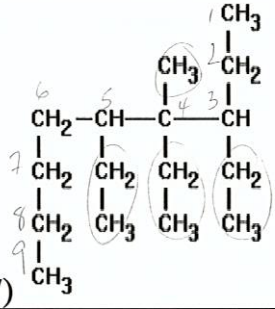
2-ethyl-2-methyl-heptane

NAME Key Date _____ Due Date _____

Naming Alkanes - Worksheet #1

Name the following branched alkanes:

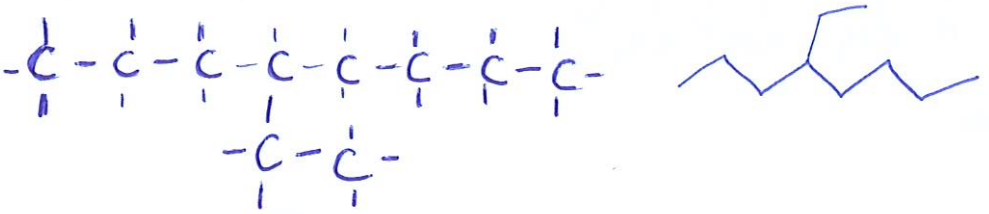
1) 	2-methylpropane
2) 	2-methylbutane
3) 	4-ethylheptane
4) 	3-ethyl-4-methylheptane
5) 	3-methyl-5-propyloctane
6) 	3,3,5-trimethylheptane
7) 	2,2-dimethylbutane
8) 	2,2-dimethylpropane
9) 	3,3-diethylpentane
10) 	5-ethyl-5-methyldecane
11) 	4-ethyl-6-methylnonane

12) 	4-ethylheptane
13) 	4,5,5-triethyl-3-methyl-4-propyloctane
14) 	4,4-diethyl-2,3-dimethylheptane
15) 	2,4-dimethylheptane
16) 	4,5-dimethyl-5,6-dipropyldecane
17) 	3,4,5-triethyl-4-methylnonane

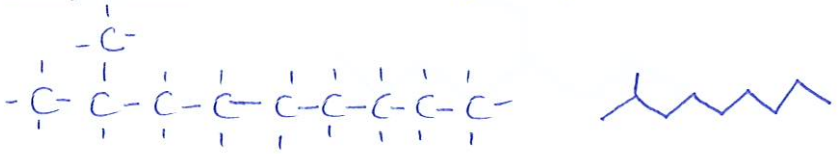
Naming Alkanes - Worksheet #2

Draw the structural formula and line angle formula for the following molecules. Remember the following:

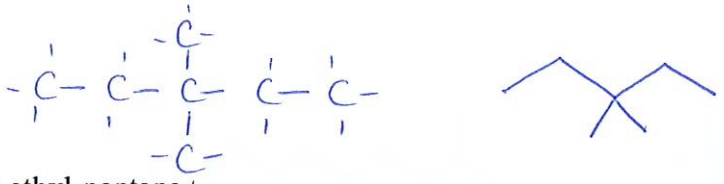
1) 4-ethyl-octane



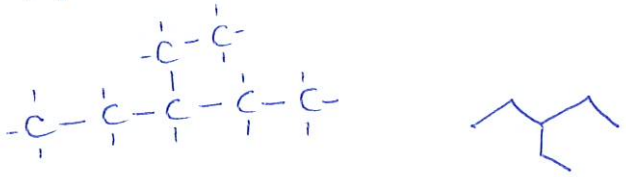
2) 2-methyl-nonane



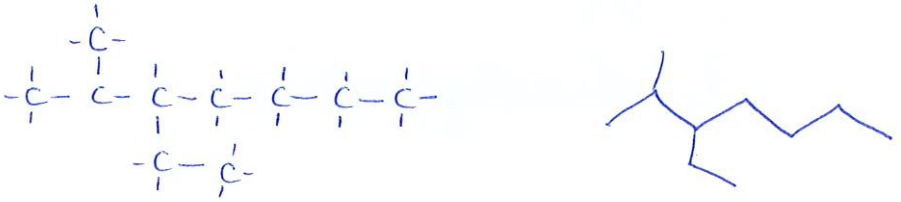
3) 3,3-dimethyl-pentane



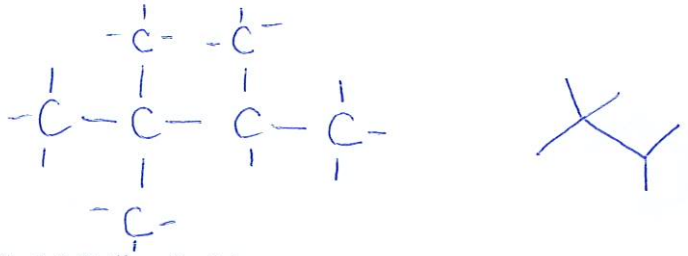
4) 3-ethyl-pentane



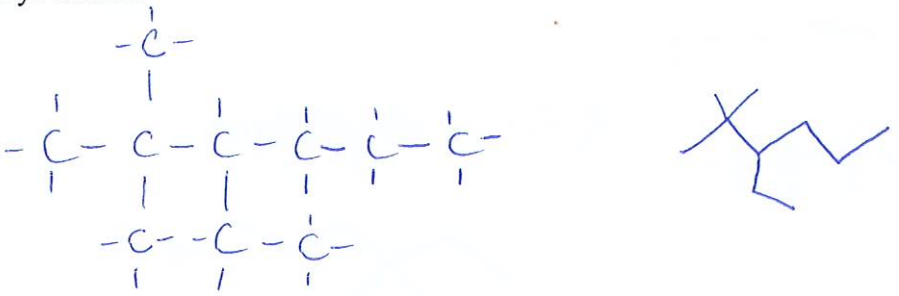
5) 3-ethyl-2methyl-heptane



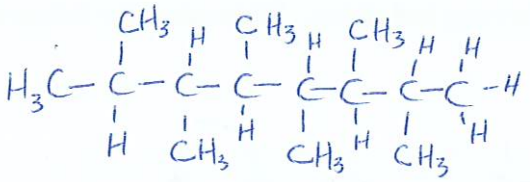
6) 2,2,3-trimethyl-butane

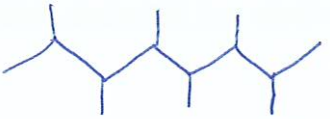


7) 3-ethyl-2,2-dimethyl-hexane

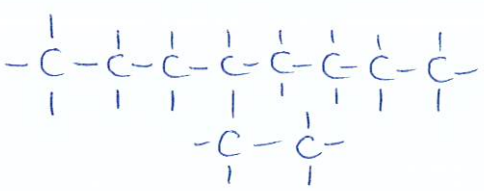


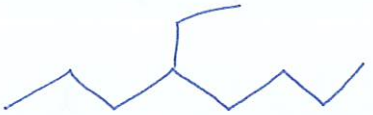
8) 2,3,4,5,6,7-hexamethyl-octane



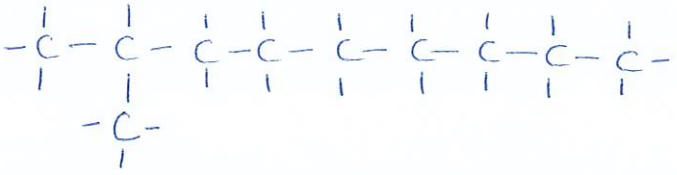


9) 4-ethyl-octane

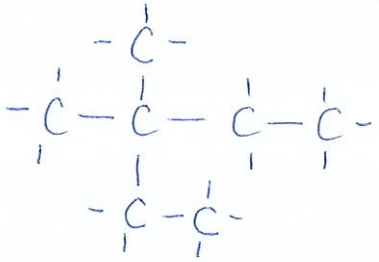




10) 2-methyl-nonane

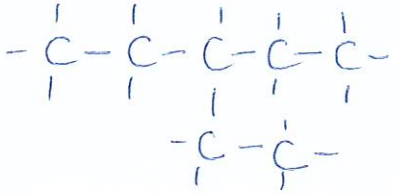


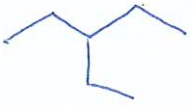
11) 2-ethyl-2methyl-butane wrongname



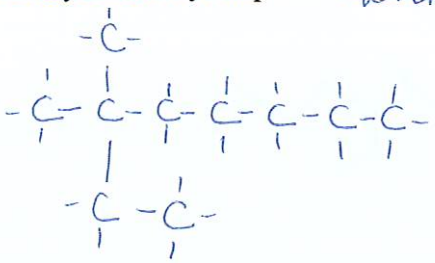
3,3-dimethylpentane

12) 3-ethyl-pentane





13) 2-ethyl-2-methyl-heptane wrongname



3,3-dimethyloctane

WORKSHEET #3

Give the correct name for the following compounds:

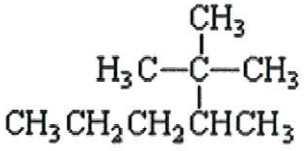
1) $CH_3CH_2CH_2CH_2CH_3$

pentane

2) $CH_3CH_2C(CH_3)_2CH_3$ OR $CH_3CH_2-\overset{\overset{CH}{|}}{\underset{\underset{CH_3}{|}}{C}}-CH_3$

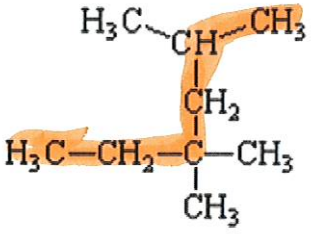
2,2 dimethylbutane

3)



2,2,3-trimethylhexane

4)



2,4,4-trimethylhexane

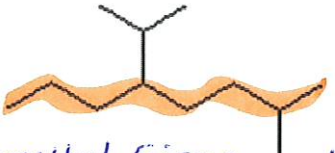
5)

4-methylnonane

2,3dimethylhexane

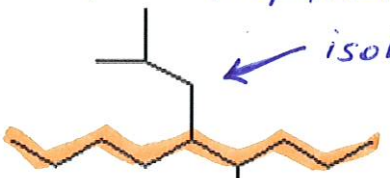
6) $CH_3CH_2CH_2CHCH_3$

7)



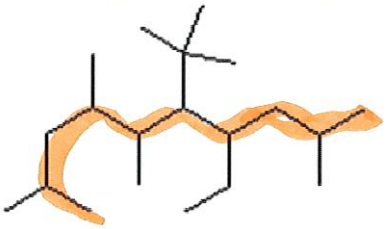
2-methyl-5-isopropyloctane

8)

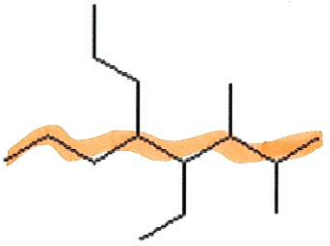


5-isobutyl-4-methylnonane

9)



10)



4-ethyl-2,3-dimethyl-5-propyloctane

5-t-butyl-4-ethyl-2,6,7,9-tetramethyldecane