

Naming Alkanes – Worksheet #2

Name the following branched alkanes:

1.	$\begin{array}{ccccccccccc} & & & & & & \text{CH}_2 & - & \text{CH}_2 & - & \text{CH}_3 \\ & & & & & & & & & & \\ \text{H}_3\text{C} & - & \text{CH}_2 & - & \text{CH} & - & \text{CH}_2 & - & \text{CH} & - & \text{CH}_2 & - & \text{CH}_2 & - & \text{CH}_3 \\ & & & & & & & & & & & & & \\ & & & & \text{CH}_3 & & & & & & & & & \end{array}$	
2.	$\begin{array}{ccccccccccc} & & & & & & \text{CH}_3 & & & & & & & \\ & & & & & & & & & & & & & \\ \text{H}_3\text{C} & - & \text{CH}_2 & - & \text{C} & - & \text{CH}_2 & - & \text{CH} & - & \text{CH}_2 & - & \text{CH}_3 \\ & & & & & & & & & & & & & \\ & & & & \text{CH}_3 & & & & \text{CH}_3 & & & & & \end{array}$	
3.	$\begin{array}{ccccccc} & & & & & & \text{CH}_3 \\ & & & & & & \\ \text{H}_3\text{C} & - & \text{CH}_2 & - & \text{C} & - & \text{CH}_3 \\ & & & & & & \\ & & & & \text{CH}_3 & & \end{array}$	
4.	$\begin{array}{ccccccc} & & & & & & \text{CH}_3 \\ & & & & & & \\ \text{CH}_3 & - & \text{C} & - & \text{CH}_3 \\ & & & & \\ & & \text{CH}_3 & & \end{array}$	
5.	$\begin{array}{ccccccccccc} & & & & & & \text{CH}_2 & - & \text{CH}_3 \\ & & & & & & & & & & \\ \text{H}_3\text{C} & - & \text{CH}_2 & - & \text{C} & - & \text{CH}_2 & - & \text{CH}_3 \\ & & & & & & & & & & \\ & & & & \text{CH}_2 & - & \text{CH}_3 & & & & \end{array}$	

6.	$ \begin{array}{c} \text{CH}_3 \\ \\ \text{H}_3\text{C}-\text{CH}_2-\text{C}-\text{CH}_2-\text{CH}_3 \\ \\ \text{CH}_2-\text{CH}_3 \end{array} $	
7.	$ \begin{array}{ccccccccc} & & \text{CH}_3 & & \text{CH}_3 & & & & \\ & & & & & & & & \\ \text{H}_3\text{C} & - & \text{CH} & - & \text{CH} & - & \text{CH} & - & \text{CH} & - & \text{CH} & - & \text{CH}_2 & - & \text{CH}_3 \\ & & & & & & & & & & & & & & \\ & & \text{CH}_3 & & \text{CH}_3 & & \text{CH}_3 & & & & & & & & \end{array} $	

Draw structural formulas for the following molecules:

8. 2,2,3-trimethyl-butane

9. 3-ethyl-2,2-dimethyl-hexane

10. 2,3,4,5,6,7-hexamethyl-octane