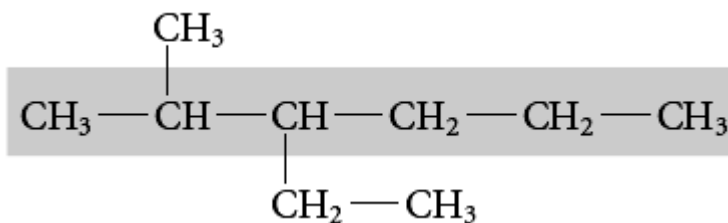


• Identify the root.

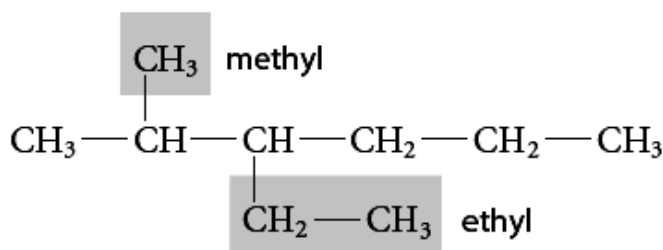


– Find the longest continuous chain.	6 carbon atoms.
– Find the root name for the number of carbon atoms in the chain.	Root is hex-.

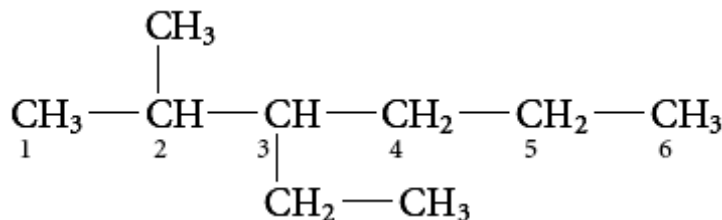
• Identify the suffix.

– For alkanes the suffix is <i>-ane</i> .	Compound is an alkane. hex- plus <i>-ane</i> is hexane
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• Identify the prefix.



– Find the number of carbon atoms in each side group.	One side group has one carbon so it is a <i>methyl</i> group. The other side group has two carbon atoms so it is an <i>ethyl</i> group.
– Find the root name for each side group according to the number of carbon atoms. Add <i>-yl</i> to the root to name the side group.	
– Determine the alphabetical order of the side groups (if there is more than one).	Alphabetical order is <i>ethyl methyl</i> .
– Find the position of each side group.	



– Precede each side group name with the number of the carbon atom to which it is attached on the main chain.	The ethyl group is on carbon atom 3. The methyl group is on carbon atom 2. The name of the compound is 3-ethyl-2-methylhexane.
– There are hyphens between numbers and words but no hyphen or space between the last prefix and the root.	