



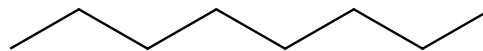
## ORGANIC NOMENCLATURE, HOW TO FIND CARBON #1

Substitutions

Backbone

Family

If no address is needed for family, backbone, or substituents, there is no carbon #1.

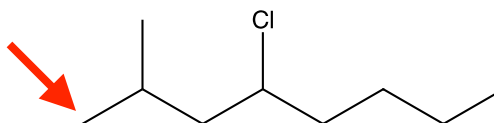


OCTANE

eight carbons: OCT  
alkane: -AN-

hydrocarbon: -E

If no address is needed for family, or backbone choose carbon #1 to give smallest number to substituent addresses.



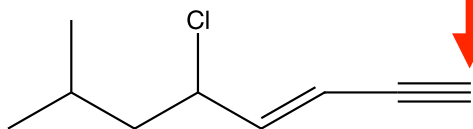
4-CHLORO-2-METHYLOCTANE

methane branch at 2: 2-METHYL-  
chlorine substituent at 4: 4-CHLORO-

eight carbons: OCT  
alkane: -AN-

hydrocarbon: -E

If no address is needed for family, choose carbon #1 to give smallest number to unsaturations in backbone.



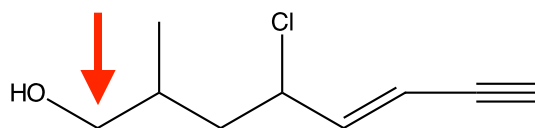
*trans*-5-CHLORO-7-METHYLOCT-3-EN-1-YNE

methane branch at 7: 7-METHYL-  
chlorine substituent at 5: 5-CHLORO-

eight carbons: OCT  
alkene (*trans*): -3-EN-  
alkyne: -1-YN-

hydrocarbon: -E

Choose carbon #1 to give smallest number to address of functional group that defines the family of the substance.



*trans*-4-CHLORO-2-METHYLOCT-5-EN-7-YN-1-OL

methane branch at 2: 2-METHYL-  
chlorine substituent at 4: 4-CHLORO-

eight carbons: OCT  
alkene (*trans*): -5-EN-  
alkyne: -7-YN-

alcohol: -1-OL