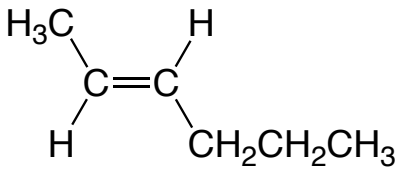
Naming Alkenes

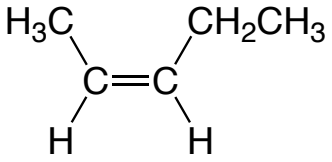
General Directions:

1. Locate longest continuous chain.
2. Number the chain so the double bond gets the lowest possible number.
3. For the parent chain name, use "-ene" not "-ane" as suffix and place a number to indicate the location of the double bond before the main chain name.
4. Make the suffix "-adiene" , "-atriene", etc. if multiple double bonds are present.

***cis/trans* nomenclature** – older chemical nomenclature, but still used commonly in biochemistry – most useful when each sp^2 atom of the double bond has an H atom.

1. Track the longest chain through the double bond
   c. ***cis*** if whole main chain is on the same side of the double bond.
   d. ***trans*** if chain emerges on opposite sides of the double bond.





_____ _____

Naming Alkenes

General Directions:

1. Locate longest continuous chain.
2. Number the chain so the double bond gets the lowest possible number.
3. For the parent chain name, use "-ene" not "-ane" as suffix and place a number to indicate the location of the double bond before the main chain name.
4. Make the suffix "-adiene" , "-atriene", etc. if multiple double bonds are present.

***E,Z* nomenclature** - A general IUPAC nomenclature to names alkenes.

Z (zusammen) = *z*ame *z*ide, *z*ame *z*ide, *z*ame *z*ide

E (entgegen) = opposite side

5. On each carbon of the double bond rank the two groups according to the Cahn, Ingold, Prelog priority rules (*R* vs. S rules).
6. If both of the highest-ranking groups are on the zame zide of the double bond it is ***Z***.
7. If both of the highest-ranking groups are on opposite sides of the double bond it is ***E***.