Cycloalkanes

- Propane
- Cyclopropane
- cyclopropyl
- Butane
- Cyclobutane
- Cyclobutyl
- Pentane
- Cyclopentane
- Cyclopentyl
- Hexane
- Cyclohexane
- Cyclohexyl
- Heptane
- Cycloheptane
- Cycloheptyl
- Octane
- Cyclooctane
- Cyclooctyl
- Nonane
- Cyclononane
- Cyclononyl
- Decane
- Cyclodecane
- Cyclodecyl
Naming Cycloalkanes

1. Parent Chain
   a. Use the cycloalkane as the parent chain if it has a greater number of carbons than any alkyl substituent.
   b. If an alkyl chain off the cycloalkane has a greater number of carbons, then use the alkyl chain as the parent and the cycloalkane as a cycloalkyl-substituent.

   ![Methylcyclopentane](image1)  ![2-Cyclopropylbutane](image2)

2. Numbering the Cycloalkane
   a. When numbering the carbons of a cycloalkane, start with a substituted carbon so that the substituted carbons have the lowest numbers (sum).

   ![1,3-Dimethylcyclohexane](image3)  ![1,5-Dimethylcyclohexane](image4)
   ![1,2,4-Trimethylcyclohexane](image5)  ![1,3,4-Trimethylcyclohexane](image6)

   b. When two or more different substituents are present, number according to alphabetical order.

   ![1-Ethyl-2-methylcyclohexane](image7)  ![2-Ethyl-1-methylcyclohexane](image8)

3. Halogen Substituents
   Halogen substituents are treated exactly like alkyl groups:
   - F fluoro-
   - Cl chloro-
   - Br bromo-
   - I iodo-

   ![1-Chloro-2-methylcyclobutane](image9)