

Cycloalkanes

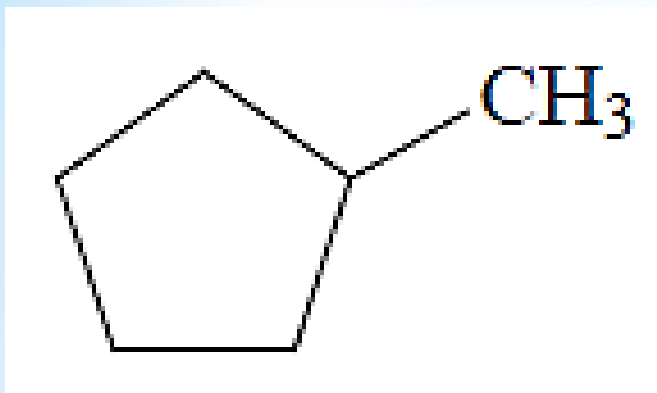
- Saturated (ie only single bonds between atoms) ring structures.
- General formula is C_nH_{2n} .
- Part of a homologous series, each differing by CH_2 .

Nomenclature (Naming)

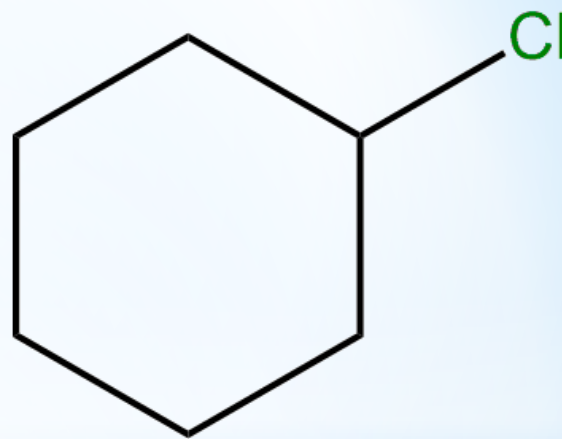
- Add the prefix cyclo- to the stem name.

Eg cyclobutane, cyclodecane, etc

- Note the shorthand way of drawing cycloalkanes.
Eg



(Mysolutionguru.com 2013)

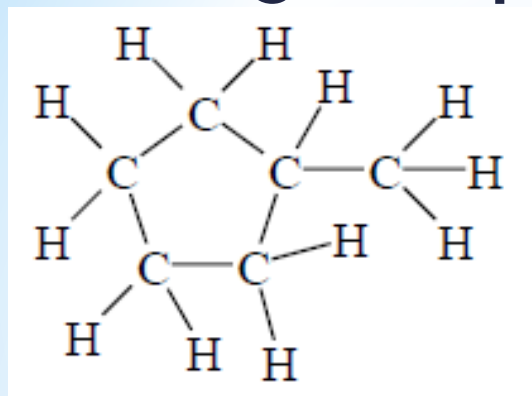


(Frenkel 2012)

- Be careful as most questions ask you to show all atoms, for which this form is not acceptable!

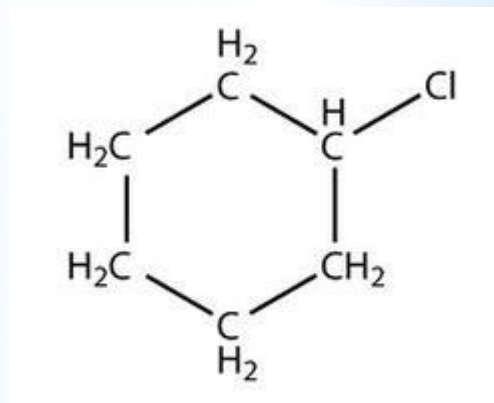
- If there is only one substituted group, no numbering is required.

Eg



(Mysolutionguru.com 2013)

methylcyclopentane

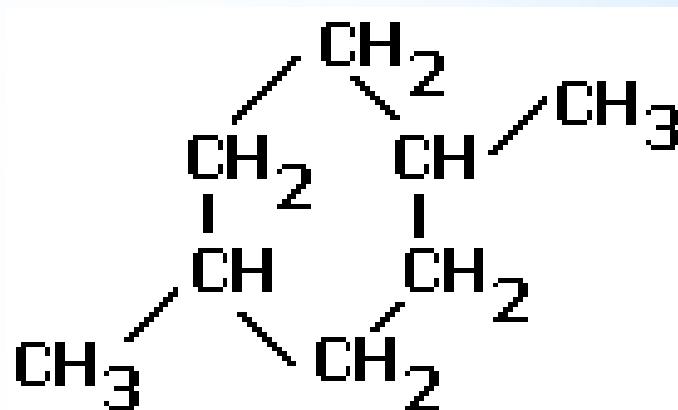


(Neogen Chemicals Limited nd)

chlorocyclohexane

- If there are more than one substituted group, numbering is required (follow alkane numbering rules).

1,4-dimethylcyclohexane



(pixshark.com nd)