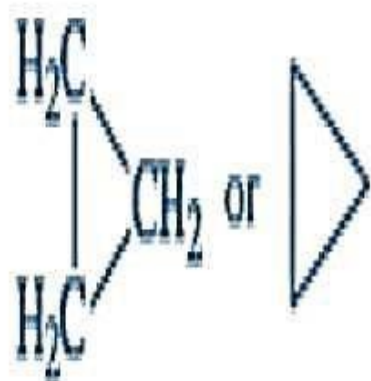
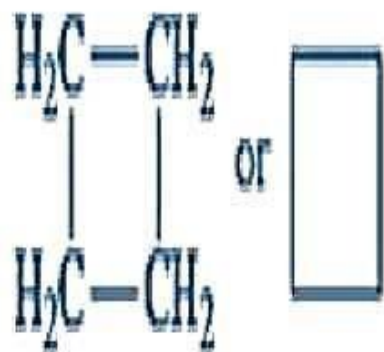


Cyclo Alkanes

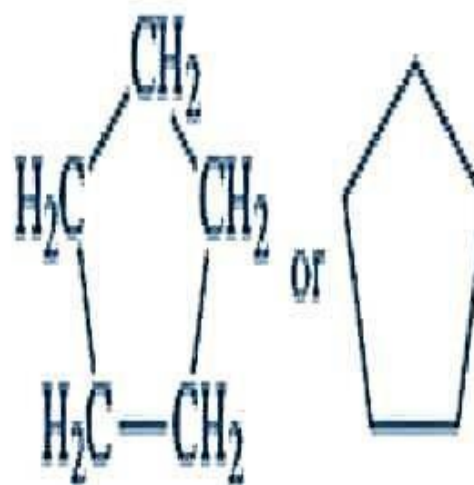
A hydrocarbon that contains carbon atoms joined to form a ring is called a cyclic hydrocarbon. When all carbons of the ring are saturated, the hydrocarbon is called a cycloalkane.



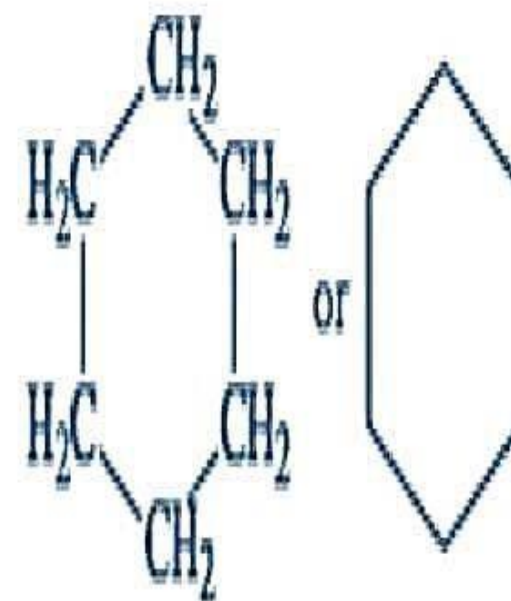
Cyclopropane



Cyclobutane



Cyclopentane



Cyclohexane

Physical Properties of Alkanes

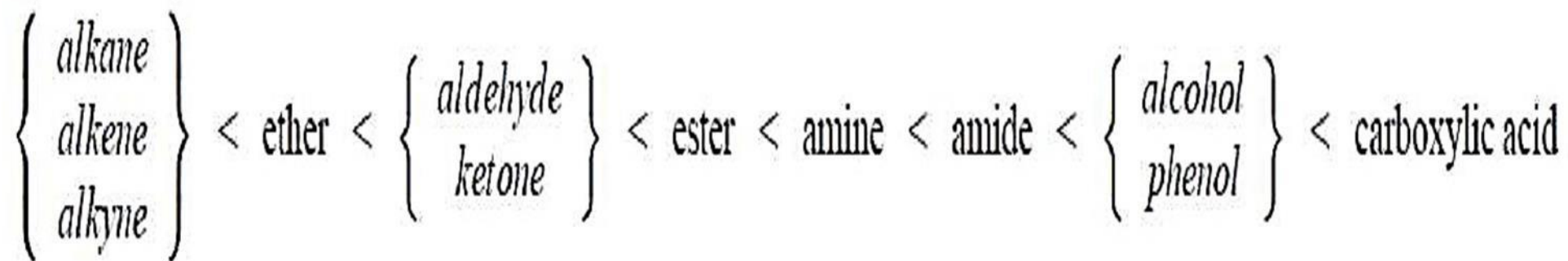
- The first four n-alkanes are **gases**, but, as a result of the rise in boiling point and melting point with increasing chain length, the next 13 (**C5-C17**) are **liquids**, and those- containing **18 carbons or more** are **solids** physical constants for a number of the n-alkanes., the boiling points and melting points rise as the number of carbons increases.
- The processes of boiling and melting require overcoming the intermolecular forces of a liquid and a solid; the boiling points and melting points rise because these intermolecular forces **increase** as the molecules get larger.

- We see that in every case a **branched-chain isomer** has a lower boiling point than a **straight-chain isomer**, and further, that the more numerous the branches, the lower the boiling point.

Properties

Least Polar

Most Polar



Lowest b.p.

Highest b.p.

Lowest water solubility

Highest water solubility

Thank
you



