Representing Hydrocarbons

There is a huge variety of different hydrocarbons, due to the fact that carbon atoms have four bonding pairs that can form single, double or triple bond to other carbon atoms.

Carbon structures can be straight chains, branched chains, rings, sheets, tubes and spheres.

See Figure 13.4 pg 538

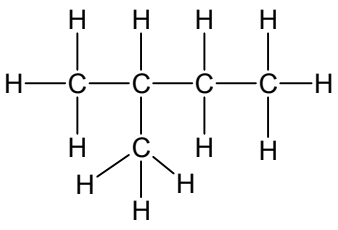
Ex 1. Pentane – Molecular Formula: C_5H_{12}

Structural Diagram:

Line Diagram:

Condensed Molecular Formula:

Ex 2. Provide the line diagram, molecular and condensed formula for the following structure:



Structural Isomers: molecules with the same molecular formula, but different structural diagrams.