

Carbon Compounds

10th Grade

Why carbon builds more compounds than every other element combined.



Carbon forms four covalent bonds and readily bonds to itself, so it builds chains, branches and rings of almost unlimited length.

- Carbon always makes exactly four bonds.
- It bonds to itself in chains and rings — this is catenation.
- Alkanes have only single bonds: methane, ethane, propane.
- Alkenes contain a double bond, which makes them more reactive.
- A functional group determines a molecule's chemistry more than its chain length.

LOOK FOR IT

Methane CH_4 , ethane C_2H_6 , propane C_3H_8 — each adds one carbon and two hydrogens.

More carbon compounds are known than compounds of all other elements put together.