**How to Make and Name Carbon Compounds:**

|  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Prefix | Meth | Eth | Prop | But | Pent | Hex | Hept | Oct | Non | Dec |
| # of carbons | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |

|  |  |  |  |
| --- | --- | --- | --- |
| **Classification** | **Bond Types** | **Name Ending** | **Formula** |
| Alkane | All single | \_\_\_\_\_\_\_\_\_\_ane | CnH2n+2 |
| Alkene | At least one double | \_\_\_\_\_\_\_\_\_\_ene | CnH2n |
| Alkyne | Al least one triple | \_\_\_\_\_\_\_\_\_\_yne | CnH2n-2 |

|  |  |
| --- | --- |
| Cyclo Means “Circular” CnH2n  Example: Cyclohexane | -“ol” ending means alcohol CnH2n+2O  Example: Ethanol |

What about branching?

Example: 2-methyl pentane Draw it:

Main chain of 5 carbons, single-bonded

Methyl (1 carbon) branch

Located on the second carbon

Write the molecular formula and diagram (zig zag) each:

|  |  |  |
| --- | --- | --- |
| pentane | 1-pentene | 1-pentyne |
| Cyclopentane | 2,2-dimethyl pentane | 1-pentanol |