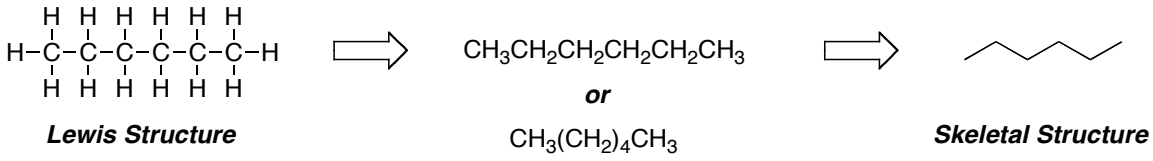
DRAWING ORGANIC COMPOUNDS

Lewis structures vs. condensed structures vs. skeletal structures:

Let's use a simple hydrocarbon, hexane, as an example.

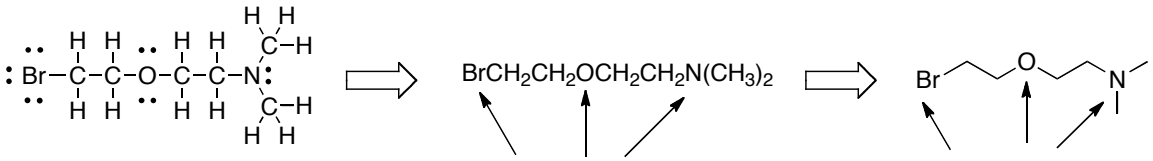


Lewis Structure ***Skeletal Structure***

Condensed Structure

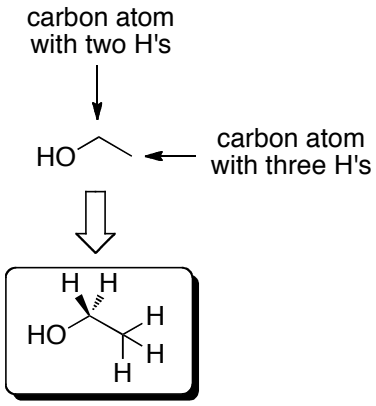
Realize that all four drawings represent the exact same molecule……..hexane. Condense and skeletal structures are just shorthand versions of Lewis structures.

More examples:

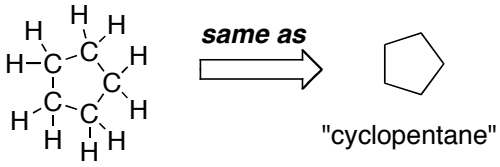


*** Notice that the lone pairs are omitted in both the condensed and skeletal structures for simplicity.**

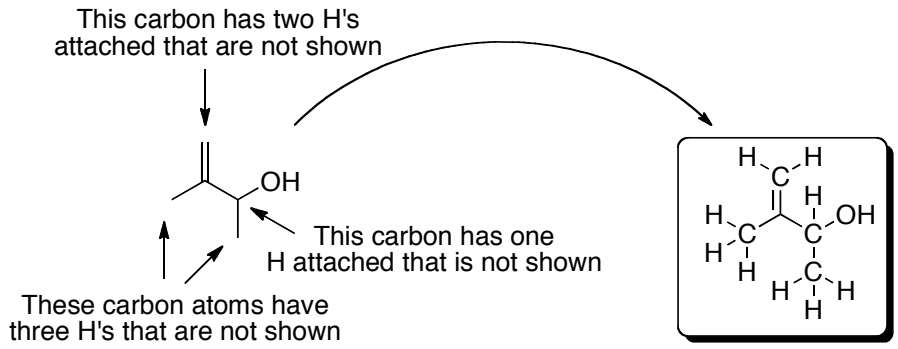
With skeletal structures, when there is no atom indicated at the junction of two lines (bonds) or at the end of a line (bond) this is a tetravalent carbon atom.



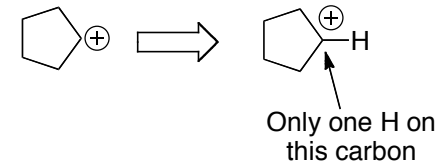
Cyclic compounds

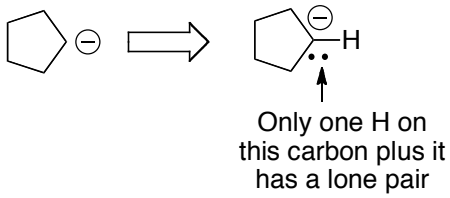


Remember that with skeletal structures, hydrogens are omitted for clarity. Thus, you need to make sure you can identify these situations to understand the bonding of each carbon atom in a given molecule.



What about carbon atoms that have formal charges?





For practice: Covert the following Lewis structures into condensed and skeletal structures.