

Guidelines for drawing Lewis structures ^a

1. *Count all the valence electrons of the atoms.* If the species is an ion, add an additional electron for each negative charge or subtract an electron for each positive charge.
2. *Place one pair of electrons in each bond.*
3. *Complete the octets of the atoms bonded to the central atom.* (Remember, however, that the valence shell of any hydrogen atom is complete with only two electrons.)
4. *Place any additional electrons on the central atom in pairs.*
5. *If the central atom still has less than an octet, you must form multiple bonds so that each atom has an octet.*

^a Source: General Chemistry - Principles and Structure, 3rd Ed. J. E. Brady, G. E. Humiston, John Wiley & Sons, 1982