

TURN Method to Draw Lewis Structures

1. Determine the total number of valence electrons available. Set this number equal to **T**.
2. Draw the skeleton of the compound. The central atom is usually the one with the lowest electron affinity.
3. Count up the number of electrons used. Set this number equal to **U**.
4. Subtract U from T. Set the number you get equal to **R**.
5. Count up the number of electrons needed to fill the octet rule for all of the atoms. Set this number equal to **N**.
6. The TESTS
 - a. If $N = R$ then fill in the remaining electrons.
 - b. If $N > R$ then you need to add multiple bonds. $(N-R) \div 2 =$ the number of bonds to add. Don't forget to fill in your lone pairs.
 - c. If $N < R$ then you need to add electrons to the central atom (make sure the central atom is a 3rd period or greater atom). Don't forget to fill in your lone pairs.
7. The CHECKS
 - a. Make sure total number of electrons is equal.
 - b. Make sure formal charges add up to the molecules over all charge.
 - i. Try to get all formal charges to zero.