Rules for modelling molecular compounds - page 79

1. Count valence electrons
2. Add electrons for each negative charge, subtract for positive charges
3. Place central atom surround with remaining atoms
   A. Central atom has lowest electronegativity
   B. Central atom has highest number of bonding electrons
4. Connect peripheral atoms to central atom
5. Subtract bond electrons (two from each bond from the total)
6. Complete the octets for the peripheral atoms
7. Subtract from total
8. Place remaining electrons on central atom
9. Move lone pairs to bonding position if central atom does not have a complete octet
10. Place square brackets around molecule and indicate charge if modelling a polyatomic ion

Coordinate covalent bonds - used to explain how molecular structures are formed. The covalent bond is formed by both electrons coming from one atom.

Identify CCB's only when final structure is built

Ex. Nitrosyl trifluoride. NF_3O

Ex. PO_4 -3

Ex. NO_3 -1