General Rules for Drawing Covalently Bonded Lewis Structures

- 1. The central atom most of the time is the more positive atom.
- 2. All atoms want to fulfill the octet rule.

Exceptions: Hydrogen 2 valence

Boron 6 valence
Aluminum 6 valence
Gallium 6 valence

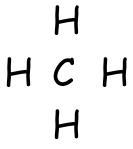
Indium 6 valence

Sometimes Exceptions:

Nitrogen 5 valence Phosphorus 10 valence Sulfur 12 valence

- 3. Double and triple bonds are represented by shared two or three pairs of electrons.
- 4. Draw electrons in pairs when making a complete Lewis structure; nitrogen can be an exception
- 5. Look at the examples on this paper to guide you.

Example 1 CH₄



Example 2 H_2

H

Example 3 CO₂

0 C O

Example 3 CO

C O

Example 4 N_2

N

Example 5 CH₃CHCH₂