**Steps for Drawing Lewis Dot Structures**

1. Make a list of each atom in the molecule.

2. Look at the periodic table to determine the number of valence electrons in each atom in the molecule:

* Atoms of elements in Groups 1 and 2 have the same number of valence electrons as their group number.
* Atoms of elements in Groups 3–12 do not have a general rule relating the number of valence electrons to their group number.
* Atoms of elements in Groups 13–18 have 10 fewer valence electrons than their group number. Hydrogen is an exception; it has 2 valence electrons.

3. A single bond is equivalent to two electrons.

4. When the structure is complete, each atom must have satisfied the octet rule but the total number of electrons must not exceed the total number of valence electrons.

The **octet rule**: Most atoms tend to combine so that they each have eight electrons in their valence shells.

5. Draw the molecule so that is has symmetry.