Rules for drawing Lewis Dots Diagrams
1. Determine the total number of valence electrons.
2. Form single covalent bonds between each of the atoms arranged correctly.
3. Determine how many electrons have been used by forming these bonds. Subtract this number from the total number of valence electrons determined in Step #1.
4. Place the remaining valence electrons evenly around the outside atoms to fulfill the “Octet Rule”. Due to Hydrogen only requiring two electrons (Duet Rule), electrons are not added to Hydrogen.
5. Once the outside elements are stable (Octet Rule), place any remaining electrons on the central atom.
6. If the central atom does not have 8 electrons, use double or triple bonds. Do this by eliminating an unshared pair, and converting it into a covalent bond.

Suggestions & Hints
1. Hydrogen and Halogen atoms (group 17) usually bond to only one other atom in a molecule and are usually at the outside, or end, of a molecule.
2. The atom with the smallest electronegativity is often the central atom.
3. When a molecule contains more atoms of one element than the others, these atoms often surround the central atoms.

Label the number of total valance electrons and draw Lewis Dot Structures of each molecule.

1. HBr  VE =
2. ICl  VE =
3. CH₃OH  VE =
4. CH₂Cl₂  VE =
5. N₂  VE =
6. SCl₂  VE =
7. AsF₃  VE =
8. N₂F₂  VE =