**Bonding Basics - Covalent Bonds**

Complete the chart for each element.

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Element | # of Protons | # of Electrons | # of Valence Electrons | # of electrons to fill outer shell |
| Carbon |  |  |  |  |
| Chlorine |  |  |  |  |
| Hydrogen |  |  |  |  |
| Oxygen |  |  |  |  |
| Phosphorus |  |  |  |  |
| Sulfur |  |  |  |  |
| Nitrogen |  |  |  |  |

Draw the following covalent bonds

1. Hydrogen + Hydrogen
2. Hydrogen + Oxygen
3. Chlorine + Chlorine

1. Oxygen + Oxygen
2. Carbon + Oxygen
3. Carbon + Hydrogen