Name \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ date \_\_\_\_\_\_\_\_\_\_\_\_\_\_ hour \_\_\_\_\_\_

Intro to Covalent Bonding

When non-metals bond they share valence electrons with each other. These types of bonds are called covalent bonds. We know how to draw Lewis dot diagrams to show ionic bonds between metals and non-metals but how do you show covalent bonds between non-metals? Let’s find out!

**Fill in the worksheet as you watch the “Lewis Dot Structures and examples of Covalent Bonding” YOU TUBE video on MOODLE.**

|  |  |  |
| --- | --- | --- |
| Types of Covalent Bonds | Number of lines used to show the bond | Number of electrons shared by the atoms in this type of bond |
| Single bond |  |  |
| Double bond |  |  |
| Triple bond |  |  |

**Drawing Lewis Dot diagrams:**

|  |  |  |  |
| --- | --- | --- | --- |
| Molecule to Draw | Total number of valence electrons to be shared | Lewis dot diagram of the bonded molecule | Electron check! Count the number of electrons each atom has. Does it meet the octet rule? Is each element stable?  If not, check your work. Something is wrong |
| 1. H2O |  |  |  |
| 1. SO3 |  |  |  |

**Use what you learned to try these!**

|  |  |  |  |
| --- | --- | --- | --- |
| Molecule to Draw | Total number of valence electrons to be shared | Lewis Dot diagram of the bonded molecule | Electron check! Count the number of electrons each atom has. Does it meet the octet rule? Is each element stable?  If not, check your work. Something is wrong |
| 1. HCl |  |  |  |
| 1. PCl3 |  |  |  |
| 1. O2 |  |  |  |