

**Covalent Bonding- Day 1 and 2**  
**MUST BE HANDWRITTEN TODAY**

11/10 - 11/12/20

DNA:

- 1) What is a chemical bond? Why do they form?
- 2) What are 5 facts that are true for ionic bonds?

Learning Targets:

- ▶ Describe Covalent bonding
- ▶ Identify covalent bonds

Classwork Practice:

**Practice 1:**

Indicate whether a bond between the following would be

**(1) Ionic or (2) covalent**

- \_\_\_ A. sodium and oxygen
- \_\_\_ B. nitrogen and oxygen
- \_\_\_ C. phosphorus and chlorine
- \_\_\_ D. calcium and sulfur
- \_\_\_ E. chlorine and bromine

**Practice 2:**

Identify the following as ionic or molecular:

- $\text{CH}_4$ ,  $\text{CaCl}_2$ ,  $\text{SiO}_2$ ,  $\text{Cl}_2$

**Practice 3:**

**Drawing Lewis structures for covalent bonds:**

- **N** (Needed):

*All atoms need 8.*

*Hydrogen needs only 2.*

- **A** (Available):

*Number of valence electrons.*

- **S** (Shared):

*Subtract: Needed - Available*

*Divide by 2 = # of bonds.*

- **Draw** the molecule.

*First atom in the center.*

*H and Halogens are usually on outside.*

*Draw in bonds.*

*Fill in all **Available** electrons.*

**Draw the Lewis-dot-structure for the following molecules**

- 1) HF
- 2)  $\text{CCl}_2\text{H}_2$
- 3) CO

Daily Class Summary:



**Homework 11/10 - 11/12/20**

*Complete the following book problems:*

***Ch. 9 #1-8 & 13-17 \*for problems 13-17 draw Lewis structure and ignore written directions.  
\*show NAS for each problem you draw a Lewis structure for, any problem that does not show work will not be graded.***