

Day 2 Lecture



Writing & Naming Covalent Compounds

Covalent Bonds

- A chemical bond in which the atoms share electrons
- Forms between TWO NON-METALS
- Example: H₂O

Review

- Diatomic Elements
 - Elements that exist in nature as a 2-atom elements
 - Covalently bonded elements
 - H_2 , N_2 , O_2 , F_2 , Cl_2 , Br_2 , & I_2

Rules: NAMING Covalent Compounds

Non-metal & Non-metal

Ex: CO₂

1. Identify & name the first non-metal furthest to the left on the periodic table
2. Write the name of the second non-metal furthest to the right, then change the ending to "ide" (make sure to leave a space between the names)

Carbon ~~Oxygen~~

becomes...

Carbon Oxide

Rules: NAMING Covalent Compounds

_____carbon _____oxide

3. Insert the correct prefix in front of *BOTH* non-metals to indicate the number of atoms present.
4. If the first atom is *mono* then leave it off but if the second atom is *mono* you **MUST** have it in the name.

Prefixes Include:

1-mono

2-di

3-tri

4-tetra

5-penta

6-hexa

Carbon dioxide

Independent Practice



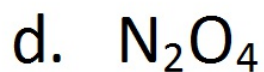
Carbon tetrachloride



Carbon monoxide



Dinitrogen monoxide

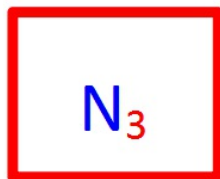


Dinitrogen tetroxide

Rules: WRITING Covalent Formulas

Trinitrogen pentoxide

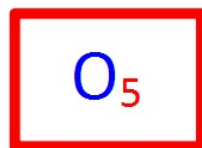
1. First, identify the name of the first atom and write its symbol
2. Second, if the first atom has a prefix, then attach the number to the symbol that corresponds with the prefix in the name



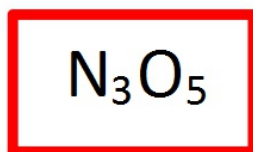
Rules: WRITING Covalent Formulas

Trinitrogen pentoxide

3. Repeat the first 2 steps for the second atom (remember that we changed the ending to "ide")



4. Combine the two to get the final formula



Independent Practice

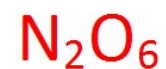
a. Carbon tetrabromide



b. Hydrogen monosulfide



c. Dinitrogen hexaiodide



d. Trioxygen pentafluoride

