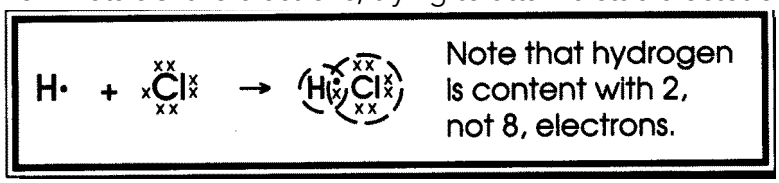
Name: _____ Date: _____

Unit 3 - Topic 3

Covalent Bonding

Lewis Dot Diagrams of Covalent Compounds: Covalent bonding occurs when two or more non-metals **share** electrons, trying to attain a stable octet of electrons.



H + H (H_2)
O + O (O_2)
N + N (N_2)
C + O (CO_2)
H + O (H_2O)

Naming Binary Covalent Compounds

Name the following binary covalent compounds. Refer to your notes for the prefixes for the number of atoms.

Examples:
Cl_2O_3 = dichlorine trioxide
silicon tetrafluoride = SiF_4

1. SO_3 _____
2. SO_2 _____
3. N_2O_5 _____
4. CO _____

Name: _____ *Date:* _____

Some covalent compounds have 'common names' you also need (and may already) know. What are the IUPAC names and common names for the following compounds?

Compound	Common Name	IUPAC Name
H_2O		
NH_3		

Write formulas or names for the following compounds:

1. phosphorus trihydride _____
2. CO_2 _____
3. carbon tetrachloride _____
4. NO_2 _____
5. dinitrogen pentoxide _____
6. SO_3 _____
7. sulfur pentoxide _____