Name:_____

Naming Covalent Compounds Worksheet (Chapter 6.5)

Write the formulas for the following covalent compounds:

1. antimony tribromide_____
2. hexaboron monosilicide_____
3. chlorine dioxide_____
4. hydrogen moniodide_____
5. iodine pentafluoride_____
6. dinitrogen trioxide_____
7. phosphorus triiodide_____
8. dichlorine pentoxide_____
9. phosphorus trichloride_____
10. selenium tetrafluoride_____
11. silicon dioxide_____
12. carbon monoxide_____
13. dinitrogen pentoxide_____

Write the names for the following covalent compounds:

1. P_4S_5_____
2. NO_2_____
3. SeF_6_____
4. Si_2Br_6_____
5. SCl_4_____
6. CH_4_____
7. B_2Si_____
8. NF_3_____
9. CO_2_____
10. NI_3_____
11. N_2H_4_____
12. BF_3_____
13. Cl_2O_7_____

Name:_____

Naming Covalent Compounds Worksheet (Chapter 6.5)

Rules for Naming Covalent Compounds

Rule 1. The element with the lower electronegativity value is written first in the name; the element with the higher electronegativity value is written second.

> ***Exception: when the compound contains oxygen and a halogen, the name of the halogen is the first word in the name.***

Rule 2. The second element in the name gets an ***ide*** ending to the name of the element.

Rule 3. Greek prefixes (see the Table below) are used to indicate the number of atoms of each nonmetal element in the chemical formula for the compound.

> ***Exception: if the compound contains one atom of the element that is written first in the name, the prefix "mono-" is not used.***

Note: when the addition of the Greek prefix places two vowels adjacent to one another, the "a" (or the "o") at the end of the Greek prefix is usually dropped; e.g., "nonaoxide" would be written as "nonoxide", and "monooxide" would be written as "monoxide". The "i" at the end of the prefixes "di-" and "tri-" are never dropped.

The above information is for you to learn. The below information you will always have available to you on the back of your periodic table.

prefix	number indicated
Mono-	1
di-	2
tri-	3
Tetra-	4
penta-	5
Hexa-	6
hepta-	7
Octa-	8
Nona-	9
Deca-	10