Name _____

Date _____ Pd ____

Unit 4 – Worksheet 1
Molecular Compounds

Properties

Basic structural unit

Laws of definite & multiple proportions

1. Name each of the following binary compounds of non-metallic elements

a. CBr_4

b. N_2P_3

c. PCl_3

d. ICl

e. N_2O

f. SiF_4

2. Write the name for the following compounds of nonmetallic elements.

a. GeH_4

b. N_2Br_4

c. P_2S_5

d. SeO_2

e. NH_3

f. SiO_2

3. Write the formula for the following binary compounds of nonmetallic elements.

a. phosphorus triiodide

b. silicon tetrachloride

c. dinitrogen pentoxide

e. dinitrogen tetroxide

f. carbon monoxide

4. Write the formula for these compounds of nonmetallic elements.

a. carbon dioxide

b. sulfur hexafluoride

c. dinitrogen tetrachloride

d. carbon tetraiodide

e. phosphorus pentafluoride

f. diphosphorus pentoxide

Ionic Compound Practice

Give a correct formula for each compound. For fun, samples of the actual compounds can be seen around the lab tables.

1. Sodium hydrogen carbonate (*baking soda*)
2. mercury (II) oxide
3. potassium permanganate
4. iron (II) sulfide
5. copper (II) sulfate
6. potassium nitrate
7. sodium hydroxide
8. lead (II) oxide
9. manganese (IV) oxide
10. nickel (II) sulfate
11. chromium (III) oxide
12. potassium chromate
13. potassium dichromate
14. sodium chloride
15. nickel (II) nitrate
16. cobalt (II) chloride
17. lead (II) sulfide (*galena*)
18. iron (II) chloride
19. sodium phosphate
20. calcium fluoride
21. ammonium dichromate
22. antimony (III) sulfide (antimony: Sb)
23. chromium (III) sulfate
24. copper (II) chloride
25. potassium hydrogen phosphate
26. zinc acetate