Name Key (FPS 4-11)

don't do the crossed out compounds.

Naming Compounds (Mixed)

Due * Wednesday

Name each compound.

1. NaCl (ionic) sodium chloride
2. MnS (ionic) manganese sulfide
3. K_2O (ionic) potasium oxide
4. $CuBr_2$ (ionic) copper bromide
5. ~~CuBr~~
6. CO_2 carbon dioxide
7. ~~$PbSO_4$~~
8. ~~Li_2CO_3~~
9. ~~Na_2CO_3~~
10. NO_2 nitrogen dioxide
11. N_2O_4 dinitrogen tetroxide
12. ~~$Ca(OH)_2$~~
13. ~~NH_4Cl~~
14. SO_3 sulfur trioxide
15. ~~$AlPO_4$~~
16. CCl_4 carbon tetrachloride
17. CaS (ionic) calcium sulfide
18. NH_3 nitrogen trihydride (ammonia)
19. MgI_2 (ionic) magnesium iodide
20. ~~K_3PO_4~~

CROSS OFF:
pg. 4
(Writing Formfrom Names)
6, 7, 9-14, 17-19

Name_____

Writing Binary Formulas

Write the formula for the compounds formed from each ion.

1. Na^{+}, Cl^{-} NaCl
2. Ba^{+2}, F^{-} BaF_2
3. K^{+}, S^{-2} K_2S
4. Li^{+}, Br^{-} LiBr
5. Al^{+3}, I^{-} AlI_3
6. Zn^{+2}, S^{-2} ZnS
7. Ag^{+}, O^{-2} Ag_2O
8. Mg^{+2}, P^{-3} Mg_3P_2
9. Ni^{+2}, O^{-2} NiO
10. Ni^{+3}, O^{-2} Ni_2O_3
11. Fe^{+2}, O^{-2} FeO
12. Fe^{+3}, O^{-2} Fe_2O_3
13. Cr^{+2}, S^{-2} CrS
14. Cr^{+3}, S^{-2} Cr_2S_3
15. Cu^{+}, Cl^{-} CuCl
16. Cu^{+2}, Cl^{-} $CuCl_2$
17. Pb^{+2}, O^{-2} PbO
18. Pb^{+4}, O^{-2} PbO_2
19. Mn^{+2}, Br^{-} $MnBr_2$
20. Mn^{+4}, Br^{-} $MnBr_4$

Name_____

Naming Binary Compounds (Covalent)

Name each compound using the prefix method.

1. CO — carbon monoxide
2. CO_2 — carbon dioxide
3. SO_2 — sulfur dioxide
4. NO_2 — nitrogen dioxide
5. N_2O — dinitrogen monoxide
6. SO_3 — sulfur trioxide
7. CCl_4 — carbon tetrachloride
8. NO — nitrogen monoxide
9. N_2O_5 — dinitrogen pentoxide
10. P_2O_5 — diphosphorus pentoxide
11. N_2O_4 — dinitrogen tetroxide
12. CS_2 — carbon disulfide
13. OF_2 — oxygen difluoride
14. PCl_3 — phosphorus trichloride
15. PBr_5 — phosphorus pentabromide

Name_____

Writing Formulas from Names

Write the formula for each compound.

1. carbon monoxide — CO
2. sodium chloride — NaCl
3. carbon tetrachloride — CCl_4
4. magnesium bromide — $MgBr_2$
5. aluminum iodide — AlI_3
6. hydrogen hydroxide — don't do!
7. iron(II) fluoride — don't do!
8. carbon dioxide — CO_2
9. sodium carbonate — don't do!
10. ammonium sulfide — don't do!
11. iron(II) oxide — don't do!
12. iron(III) oxide — don't do!
13. magnesium sulfate — don't do!
14. sodium phosphate — don't do!
15. dinitrogen pentoxide — N_2O_5
16. phosphorus trichloride — PCl_3
17. aluminum sulfite — don't do!
18. copper(I) carbonate — don't do!
19. potassium hydrogen carbonate — don't do!
20. sulfur trioxide — SO_3

Writing names/formulas from chemical equations

From the words or formulas, write the opposite. Do not worry about balancing yet! See the example below.

Example:

Aluminum bromide plus lithium chloride yields aluminum chloride and lithium bromide.

$AlBr_3 + LiCl \rightarrow AlCl_3 + LiBr$

1. Potassium sulfide plus calcium fluoride yields potassium fluoride and calcium sulfide.

$K_2S + CaF_2 \rightarrow KF + CaS$

2. Water plus bromine gas yields hydrogen monobromide and oxygen gas.

$H_2O + Br_2 \rightarrow HBr + O_2$

3. Dinitrogen pentoxide plus boron trifluoride yields diboron heptoxide and nitrogen hexafluoride.

$N_2O_5 + BF_3 \rightarrow B_2O_7 + NF_6$

4. $MgCl_2 + RbBr \rightarrow MgBr_2 + RbCl$

Magnesium chloride plus rubidium bromide yields Magnesium bromide and rubidium chloride

5. $SrO + NaI \rightarrow SrI_2 + Na_2O$

Strontium oxide and sodium iodide yields strontium iodide and sodium oxide.