

Name

Key (FPS 4-11)

don't do the crossed out compounds.

Naming Compounds (Mixed)

Due \star

\star Wednesday

Name each compound.

1. NaCl (ionic) sodium chloride

2. MnS (ionic) manganese sulfide

3. K₂O (ionic) potassium oxide

4. CuBr₂ (ionic) copper bromide

~~5. CuBr~~

6. CO₂ carbon dioxide

~~7. PbSO₄~~

~~8. Li₂CO₃~~

~~9. Na₂CO₃~~

10. NO₂ nitrogen dioxide

11. N₂O₄ dinitrogen tetroxide

~~12. Ca(OH)₂~~

~~13. NH₄Cl~~

14. SO₃ sulfur trioxide

~~15. AlPO₄~~

16. CCl₄ carbon tetrachloride

17. CaS (ionic) calcium sulfide

18. NH₃ nitrogen trihydride (ammonia)

19. MgI₂ (ionic) magnesium iodide

~~20. K₃PO₄~~

CROSS OFF:

pg. 4

(Writing Form from Names)

6, 7, 9-14,

17-19

Name _____

Writing Binary Formulas

Write the formula for the compounds formed from each ion.

- | | | | |
|--|------------------------------------|--|------------------------------------|
| 1. Na^+ , Cl^- | <u>NaCl</u> | 11. Fe^{+2} , O^{-2} | <u>FeO</u> |
| 2. Ba^{+2} , F^- | <u>BaF₂</u> | 12. Fe^{+3} , O^{-2} | <u>Fe₂O₃</u> |
| 3. K^+ , S^{-2} | <u>K₂S</u> | 13. Cr^{+2} , S^{-2} | <u>CrS</u> |
| 4. Li^+ , Br^- | <u>LiBr</u> | 14. Cr^{+3} , S^{-2} | <u>Cr₂S₃</u> |
| 5. Al^{+3} , I^- | <u>AlI₃</u> | 15. Cu^+ , Cl^- | <u>CuCl</u> |
| 6. Zn^{+2} , S^{-2} | <u>ZnS</u> | 16. Cu^{+2} , Cl^- | <u>CuCl₂</u> |
| 7. Ag^+ , O^{-2} | <u>Ag₂O</u> | 17. Pb^{+2} , O^{-2} | <u>PbO</u> |
| 8. Mg^{+2} , P^{-3} | <u>Mg₃P₂</u> | 18. Pb^{+4} , O^{-2} | <u>PbO₂</u> |
| 9. Ni^{+2} , O^{-2} | <u>NiO</u> | 19. Mn^{+2} , Br^- | <u>MnBr₂</u> |
| 10. Ni^{+3} , O^{-2} | <u>Ni₂O₃</u> | 20. Mn^{+4} , Br^- | <u>MnBr₄</u> |

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 $\text{Na}^{+1} \text{Cl}^{-1}$
 Na, Cl NaCl
3. carbon tetrachloride CCl_4
4. magnesium bromide $\text{Mg}^{+2} \text{Br}^{-1}$
 Mg, Br_2 MgBr_2
5. aluminum iodide $\text{Al}^{+3} \text{I}^{-1}$
 Al, I_3 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

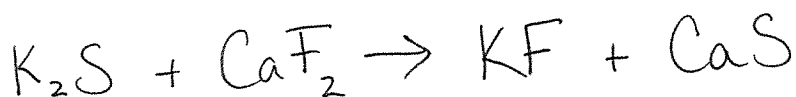
From the words or formulas, write the opposite. Do not worry about balancing yet! See the example below.

Example:

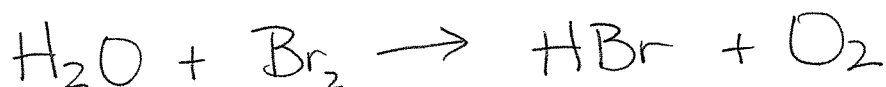
Aluminum bromide plus lithium chloride yields aluminum chloride and lithium bromide.



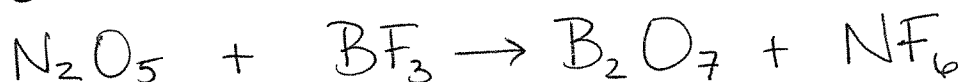
1. Potassium sulfide plus calcium fluoride yields potassium fluoride and calcium sulfide.



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



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



4. $\text{MgCl}_2 + \text{RbBr} \rightarrow \text{MgBr}_2 + \text{RbCl}$

Magnesium chloride plus rubidium bromide yields Magnesium bromide and rubidium chloride

5. $\text{SrO} + \text{NaI} \rightarrow \text{SrI}_2 + \text{Na}_2\text{O}$

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

