

Name \_\_\_\_\_

## Naming Binary Compounds (Covalent)

Name each compound using the prefix method.

1. CO \_\_\_\_\_
2. CO<sub>2</sub> \_\_\_\_\_
3. SO<sub>2</sub> \_\_\_\_\_
4. NO<sub>2</sub> \_\_\_\_\_
5. N<sub>2</sub>O \_\_\_\_\_
6. SO<sub>3</sub> \_\_\_\_\_
7. CCl<sub>4</sub> \_\_\_\_\_
8. NO \_\_\_\_\_
9. N<sub>2</sub>O<sub>5</sub> \_\_\_\_\_
10. P<sub>2</sub>O<sub>5</sub> \_\_\_\_\_
11. N<sub>2</sub>O<sub>4</sub> \_\_\_\_\_
12. CS<sub>2</sub> \_\_\_\_\_
13. OF<sub>2</sub> \_\_\_\_\_
14. PCl<sub>3</sub> \_\_\_\_\_
15. PBr<sub>5</sub> \_\_\_\_\_

Name \_\_\_\_\_

## Writing Formulas from Names

Write the formula for each compound.

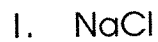
1. carbon monoxide \_\_\_\_\_
2. sodium chloride \_\_\_\_\_
3. carbon tetrachloride \_\_\_\_\_
4. magnesium bromide \_\_\_\_\_
5. aluminum iodide \_\_\_\_\_
- ~~6. hydrogen hydroxide~~ \_\_\_\_\_
- ~~7. iron(II) fluoride~~ \_\_\_\_\_
8. carbon dioxide \_\_\_\_\_
9. sodium carbonate \_\_\_\_\_
10. ammonium sulfide \_\_\_\_\_
- ~~11. iron(II) oxide~~ \_\_\_\_\_
- ~~12. iron(III) oxide~~ \_\_\_\_\_
- ~~13. magnesium sulfate~~ \_\_\_\_\_
- ~~14. sodium phosphate~~ \_\_\_\_\_
15. dinitrogen pentoxide \_\_\_\_\_
16. phosphorus trichloride \_\_\_\_\_
- ~~17. aluminum sulfite~~ \_\_\_\_\_
- ~~18. copper(I) carbonate~~ \_\_\_\_\_
- ~~19. potassium hydrogen carbonate~~ \_\_\_\_\_
20. sulfur trioxide \_\_\_\_\_

Name \_\_\_\_\_

don't do the crossed out compounds.

## Naming Compounds (Mixed)

Name each compound.



\_\_\_\_\_



\_\_\_\_\_



\_\_\_\_\_



\_\_\_\_\_



\_\_\_\_\_



\_\_\_\_\_



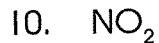
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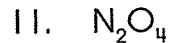
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\_\_\_\_\_



\_\_\_\_\_



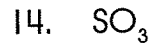
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\_\_\_\_\_



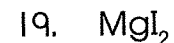
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\_\_\_\_\_



\_\_\_\_\_



\_\_\_\_\_



\_\_\_\_\_

Name \_\_\_\_\_

Example:  $\text{Pb}^{(4+)} \text{O}^{(2-)}$  CROSS

$\text{Pb}_{2/2} \text{O}_{4/2}$

reduce (if possible)

$\text{Pb}_1 \text{O}_2$

don't write 1

## Writing Binary Formulas

FINAL:  $\text{PbO}_2$

Write the formula for the compounds formed from each ion.

1.  $\text{Na}^+, \text{Cl}^-$  \_\_\_\_\_

11.  $\text{Fe}^{+2}, \text{O}^{-2}$  \_\_\_\_\_

2.  $\text{Ba}^{+2}, \text{F}^-$  \_\_\_\_\_

12.  $\text{Fe}^{+3}, \text{O}^{-2}$  \_\_\_\_\_

3.  $\text{K}^+, \text{S}^{-2}$  \_\_\_\_\_

13.  $\text{Cr}^{+2}, \text{S}^{-2}$  \_\_\_\_\_

4.  $\text{Li}^+, \text{Br}^-$  \_\_\_\_\_

14.  $\text{Cr}^{+3}, \text{S}^{-2}$  \_\_\_\_\_

5.  $\text{Al}^{+3}, \text{I}^-$  \_\_\_\_\_

15.  $\text{Cu}^+, \text{Cl}^-$  \_\_\_\_\_

6.  $\text{Zn}^{+2}, \text{S}^{-2}$  \_\_\_\_\_

16.  $\text{Cu}^{+2}, \text{Cl}^-$  \_\_\_\_\_

7.  $\text{Ag}^+, \text{O}^{-2}$  \_\_\_\_\_

17.  $\text{Pb}^{+2}, \text{O}^{-2}$  \_\_\_\_\_

8.  $\text{Mg}^{+2}, \text{P}^{-3}$  \_\_\_\_\_

18.  $\text{Pb}^{+4}, \text{O}^{-2}$  \_\_\_\_\_

9.  $\text{Ni}^{+2}, \text{O}^{-2}$  \_\_\_\_\_

19.  $\text{Mn}^{+2}, \text{Br}^-$  \_\_\_\_\_

10.  $\text{Ni}^{+3}, \text{O}^{-2}$  \_\_\_\_\_

20.  $\text{Mn}^{+4}, \text{Br}^-$  \_\_\_\_\_

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.

