

NAMING COMPOUNDS (MIXED)

Name _____

Name the following compounds.

1. NaCl Sodium chloride
2. MnS Manganese sulfide
3. K₂O potassium oxide
4. CuBr₂ Copper (II) bromide
5. CuBr Copper (I) bromide
6. CO₂ mono carbon dioxide
7. PbSO₄ lead sulfate
8. Li₂CO₃ lithium carbonate
9. Na₂CO₃ Sodium carbonate
10. NO₂ mononitrogen dioxide
11. N₂O₄ dinitrogen tetraoxide
12. Ca(OH)₂ calcium hydroxide
13. ^{polyatomic} NH₄Cl ammonium chloride
14. SO₃ monosulfur trioxide
15. AlPO₄ aluminum phosphate
16. CCl₄ mono carbon tetrachloride
17. CaS calcium sulfide
18. NH₃ mononitrogen trihydride
19. MgI₂ magnesium iodide
20. K₃PO₄ potassium phosphate

WRITING BINARY FORMULAS

Name _____

Write the formulas for the compounds formed from the following ions.

- | | | | |
|--|------------------------------------|--|------------------------------------|
| 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>MnBr₂</u> |

WRITING FORMULAS FROM NAMES

Name _____

Write the formulas for the following compounds.

- carbon monoxide
- sodium chloride
- carbon tetrachloride
- magnesium bromide
- aluminum iodide
- hydrogen hydroxide
- iron (II) fluoride
- carbon dioxide
- sodium carbonate
- ammonium sulfide
- iron (II) oxide
- iron (III) oxide
- magnesium sulfate
- sodium phosphate
- dinitrogen pentoxide
- phosphorus trichloride
- aluminum sulfite
- copper (I) carbonate
- potassium hydrogen carbonate
- sulfur trioxide

CO
 NaCl
 CCl₄
 MgBr
 AlI₃
 HOH
 FeF₂
 CO₂
 Na₂(CO₃)₁
 (NH₄)₂S
 FeO
 Fe₂O₃
 MgSO₄
 Na₃PO₄
 N₂O₅
 PCl₃
 Al₂(SO₃)₃
 Cu₂CO₃
 KHCO₃
 SO₃

FORMULAS WITH POLYATOMIC IONS

Name _____

Matching the horizontal and vertical axes, write the formulas of the compounds with the following combination of ions. The first one is done for you.

	OH ⁻	NO ₃ ⁻	CO ₃ ⁻²	SO ₄ ⁻²	PO ₄ ⁻³
H ⁺	HOH (H ₂ O)	HNO ₃	H ₂ CO ₃	H ₂ SO ₄	H ₃ PO ₄
Na ⁺	NaOH	NaHNO ₃	Na ₂ CO ₃	Na ₂ SO ₄	Na ₃ PO ₄
Mg ⁺²	Mg(OH) ₂	Mg(HNO ₃) ₂	MgCO ₃	MgSO ₄	Mg ₃ (PO ₄) ₂
NH ₄ ⁺	NH ₄ OH	NH ₄ NO ₃	(NH ₄) ₂ CO ₃	(NH ₄) ₂ SO ₄	(NH ₄) ₃ PO ₄
Ca ⁺²	Ca(OH) ₂	Ca(NO ₃) ₂	CaCO ₃	CaSO ₄	Ca ₃ (PO ₄) ₂
K ⁺	KOH	KNO ₃	K ₂ CO ₃	K ₂ SO ₄	K ₃ PO ₄
Al ⁺³	Al(OH) ₃	Al(NO ₃) ₃	Al ₂ (CO ₃) ₃	Al ₂ (SO ₄) ₃	AlPO ₄
Pb ⁺⁴	Pb(OH) ₄	Pb(HNO ₃) ₄	Pb(CO ₃) ₂	Pb(SO ₄) ₂	Pb ₃ (PO ₄) ₄