**CRISS CROSS METHOD FOR WRITING FOMULAS**

Write the formula and name for the following compounds.

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| IONS | Na | Ca | Al | K | Mg |
| Cl |  |  |  |  |  |
| O |  |  |  |  |  |
| N |  |  |  |  |  |
|  S |  |  |  |  |  |
|  F |  |  |  |  |  |
|  P |  |  |  |  |  |
|  Br |  |  |  |  |  |
|  I |  |  |  |  |  |

**NAMING BINARY COMPOUNDS**

Name the following binary compounds

BaCl2 \_\_\_\_\_\_\_\_\_\_\_\_\_

NaF \_\_\_\_\_\_\_\_\_\_\_\_\_

Ag2O \_\_\_\_\_\_\_\_\_\_\_\_\_

CuBr \_\_\_\_\_\_\_\_\_\_\_\_\_

CuBr2 \_\_\_\_\_\_\_\_\_\_\_\_\_

FeO \_\_\_\_\_\_\_\_\_\_\_\_\_

Fe2O3 \_\_\_\_\_\_\_\_\_\_\_\_\_

MgS \_\_\_\_\_\_\_\_\_\_\_\_\_

Al2O3 \_\_\_\_\_\_\_\_\_\_\_\_\_

CaI2 \_\_\_\_\_\_\_\_\_\_\_\_\_

K2S \_\_\_\_\_\_\_\_\_\_\_\_\_

CrCl2 \_\_\_\_\_\_\_\_\_\_\_\_\_

CrCl3 \_\_\_\_\_\_\_\_\_\_\_\_\_

CaO \_\_\_\_\_\_\_\_\_\_\_\_\_

Ba3P2 \_\_\_\_\_\_\_\_\_\_\_\_\_

NaCl \_\_\_\_\_\_\_\_\_\_\_\_\_

Na2O \_\_\_\_\_\_\_\_\_\_\_\_\_

BeS \_\_\_\_\_\_\_\_\_\_\_\_\_

MnO \_\_\_\_\_\_\_\_\_\_\_\_\_

Mn2O3 \_\_\_\_\_\_\_\_\_\_\_\_\_

**NAMING IONIC COMPOUNDS**

Name the following compounds

1. CaCO3 \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

2. KCl \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

3. FeSO4 \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

4. LiBr \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

5. MgCl2 \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

6. FeCl3 \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

7. Zn3(PO4)2 \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

8. NH4NO3 \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

9. Al(OH)3 \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

10. CuC2H3O2 \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

11. PbSO3 \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

12. NaClO3 \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

13. CaC2O4 \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

14. Fe2O3 \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

15. (NH4)3PO4 \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

16. NaHSO4 \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

17. Hg2Cl2 \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

18. Mg(NO3)2 \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

19. CuSO4 \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

20. ZnSO4 \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**Writing chemical formulas**

Name the following compounds

1. CuBr
2. LiI
3. CuCl2
4. H2S
5. Na2O
6. FeF2
7. BeCl2
8. AlBr3
9. AgF

1. MgS

Write the formulas for the following compounds

1. calcium bromide
2. barium sulfide
3. zinc chloride
4. gold oxide
5. sodium nitride
6. magnesium phosphide
7. iron (II) sulfide
8. copper (I) oxide
9. iron (III) nitride
10. potassium iodide

**Transition metal compounds**

1. Iron (II) Hydroxide \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

2. Cobalt (III) chlorate \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

3. Chromium (II) nitrate \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

4. Copper (I) sulfate \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

5. Tin (II) carbonate \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

6. Cr(PO4) \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

7. Co3(PO4)2 \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

8. Fe(OH)3 \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

9. Pb(NO3)2 \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

10. Co(C2H3O2)3 \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

11. Copper (I) cyanide \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

12. Copper (II) nitrite \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

13. Lead (IV) carbonate \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

14. Chromium (III) sulfate \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

15. Lead (II) chromate \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_