**Ionic Compound Formula Writing Worksheet**

*Write chemical formulas for the compounds in each box. The names are found by finding the intersection between the cations and anions. Example: The first box is the intersection between the “zinc” cation and the “chloride” anion, so you should write “ZnCl2”, as shown.*

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
|  | *zinc* | *iron (II)* | *iron (III)* | *gallium* | *silver* | *lead (IV)* |
| *chloride* | ZnCl2 |  |  |  |  |  |
| *acetate* |  |  |  |  |  |  |
| *nitrate* |  |  |  |  |  |  |
| *oxide* |  |  |  |  |  |  |
| *nitride* |  |  |  |  |  |  |
| *sulfate* |  |  |  |  |  |  |

*Write the formulas for the following compounds:*

1) copper (II) chloride \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

2) lithium acetate \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

3) vanadium (III) selenide \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

4) manganese (IV) nitride \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

5) beryllium oxide \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

6) sodium sulfate \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

7) aluminum arsenide \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

8) potassium permanganate \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

9) chromium (VI) cyanide \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

10) tin (II) sulfite \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

11) vanadium (V) fluoride \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

12) ammonium nitrate \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**Names and Formulas for Ionic Compounds**

*Give the name or formula of the following ionic compounds:*

**Name**

1) Na2CO3 \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

2) NaOH \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

3) MgBr2  \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

4) KCl \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

5) FeCl2 \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

6) FeCl3 \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

7) Zn(OH)2 \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

8) BeSO4  \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

9) CrF2  \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

10) Al2S3  \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

11) PbO \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

12) Li3PO4 \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

13) TiI4  \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

14) Co3N2  \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

15) Mg3P2 \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

16) Ga(NO2)3  \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

17) Ag2SO3  \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

18) NH4OH \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

19) Al(CN)3 \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

20) Be(CH3COO)2  \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**Formula**

21) sodium phosphide \_\_\_\_\_\_\_\_\_\_\_\_\_

22) magnesium nitrate \_\_\_\_\_\_\_\_\_\_\_\_\_

23) lead (II) sulfite \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

24) calcium phosphate \_\_\_\_\_\_\_\_\_\_\_\_\_

25) ammonium sulfate \_\_\_\_\_\_\_\_\_\_\_\_\_

26) silver cyanide \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

27) aluminum sulfide \_\_\_\_\_\_\_\_\_\_\_\_\_\_

28) beryllium chloride \_\_\_\_\_\_\_\_\_\_\_\_\_\_

29) copper (I) arsenide \_\_\_\_\_\_\_\_\_\_\_\_\_

30) iron (III) oxide \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

31) gallium nitride \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

32) iron (II) bromide \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

33) vanadium (V) phosphate \_\_\_\_\_\_\_\_

34) calcium oxide \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

35) magnesium acetate \_\_\_\_\_\_\_\_\_\_\_\_

36) aluminum sulfate \_\_\_\_\_\_\_\_\_\_\_\_\_\_

37) copper (I) carbonate \_\_\_\_\_\_\_\_\_\_\_\_

38) barium oxide \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

39) ammonium sulfite \_\_\_\_\_\_\_\_\_\_\_\_\_\_

40) silver bromide \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_