

Naming Ionic Compounds Worksheet One

Give the name of the following ionic compounds:

1) Na_2CO_3 _____

2) NaOH _____

3) MgBr_2 _____

4) KCl _____

5) FeCl_2 _____

6) FeCl_3 _____

7) Zn(OH)_2 _____

8) BeSO_4 _____

9) CrF_2 _____

10) Al_2S_3 _____

11) PbO _____

12) Li_3PO_4 _____

13) TiI_4 _____

14) Co_3N_2 _____

15) Mg_3P_2 _____

16) $\text{Ga(NO}_2)_3$ _____

17) Ag_2SO_3 _____

18) NH_4OH _____

19) Al(CN)_3 _____

20) $\text{Be(CH}_3\text{COO)}_2$ _____

For the following compounds, give the formulas

- 22) sodium phosphide _____
- 23) magnesium nitrate _____
- 24) lead (II) sulfite _____
- 25) calcium phosphate _____
- 26) ammonium sulfate _____
- 27) silver cyanide _____
- 28) aluminum sulfide _____
- 29) beryllium chloride _____
- 30) copper (I) arsenide _____
- 31) iron (III) oxide _____
- 32) gallium nitride _____
- 33) iron (II) bromide _____
- 34) vanadium (V) phosphate _____
- 35) calcium oxide _____
- 36) magnesium acetate _____
- 37) aluminum sulfate _____
- 38) copper (I) carbonate _____
- 39) barium oxide _____
- 40) ammonium sulfite _____
- 41) silver bromide _____
- 42) lead (IV) nitrite _____

Chemical Formula Writing Worksheet Two

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.

Cations

| Anions | <i>zinc</i> | <i>iron (II)</i> | <i>iron (III)</i> | <i>gallium</i> | <i>silver</i> | <i>lead (IV)</i> |
|-----------------|-------------------|------------------|-------------------|----------------|---------------|------------------|
| <i>chloride</i> | ZnCl ₂ | | | | | |
| <i>acetate</i> | | | | | | |
| <i>nitrate</i> | | | | | | |
| <i>oxide</i> | | | | | | |
| <i>nitride</i> | | | | | | |
| <i>sulfate</i> | | | | | | |

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 _____

Compound Names and Formulas Worksheet Three

For the list on the left, name the compound. For the list on the right, give the chemical formula that corresponds to the name

| | Name | | Formula |
|-----|---|-----|-------------------------|
| 1) | NaF | 13) | potassium fluoride |
| 2) | K ₂ CO ₃ | 14) | ammonium sulfate |
| 3) | MgCl ₂ | 15) | magnesium iodide |
| 4) | Be(OH) ₂ | 16) | copper (II) sulfite |
| 5) | SrS | 17) | aluminum phosphate |
| 6) | Cu ₂ S | 18) | lead (II) nitrite |
| 7) | ZnI ₂ | 19) | cobalt (II) selenide |
| 8) | Ca ₃ (PO ₄) ₂ | 20) | silver cyanide |
| 9) | NH ₄ I | 21) | copper (II) bicarbonate |
| 10) | Mn(NO ₃) ₃ | 22) | iron (II) oxide |
| 11) | FePO ₄ | 23) | lithium cyanide |
| 12) | CoCO ₃ | 24) | lead (IV) sulfite |