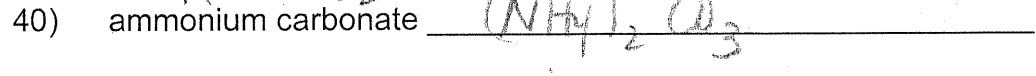
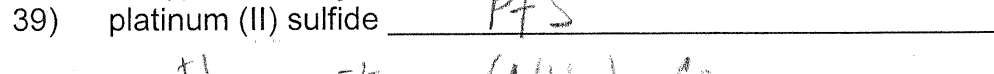
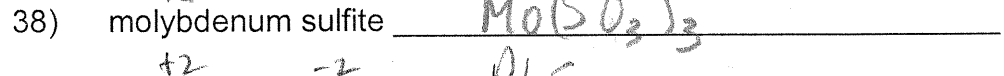
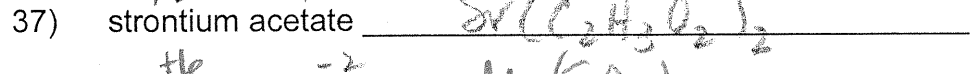
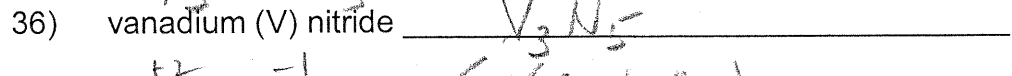
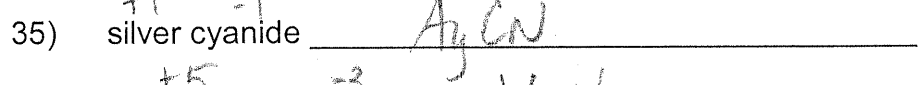
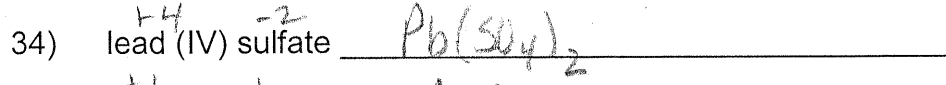
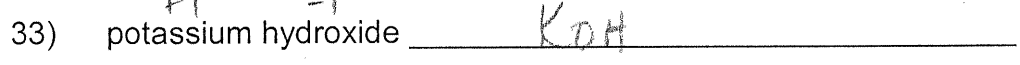
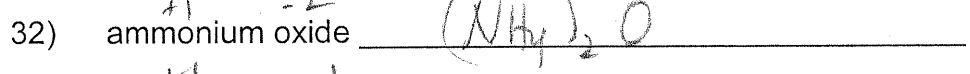
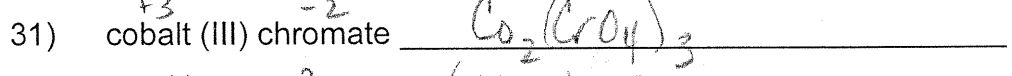
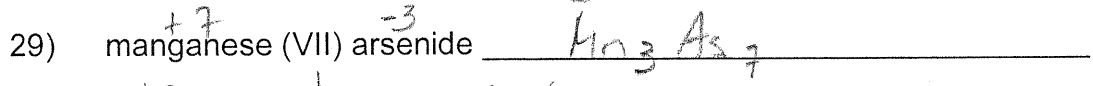
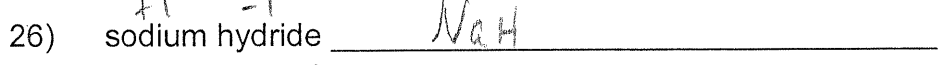
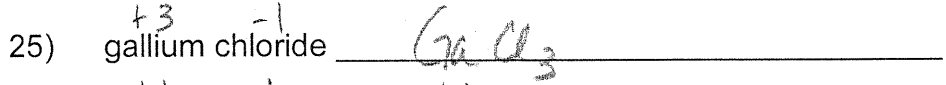
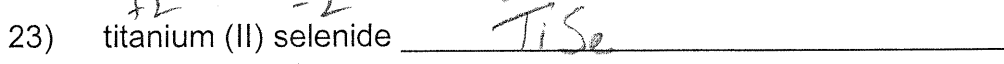
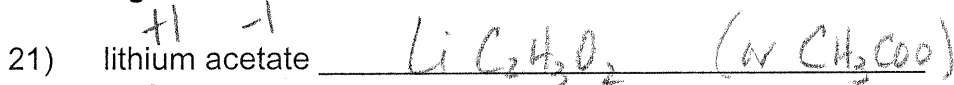


Write the formula for the cation, the anion, and the compound for the following:



Lots of Ionic Naming Practice Problems Worksheet Four

Name the following ionic compounds:

- 1) NaBr Sodium bromide
- 2) Sc(OH)₃ Scandium hydroxide
- 3) V₂(SO₄)₃ Vanadium (III) sulfate
- 4) NH₄F Ammonium fluoride
- 5) CaCO₃ Calcium carbonate
- 6) NiPO₄ Nickel (III) phosphate
- 7) Li₂SO₃ Lithium sulfite
- 8) Zn₃P₂ Zinc phosphide
- 9) Sr(C₂H₃O₂)₂ Strontium acetate
- 10) Cu₂O Copper (I) oxide
- 11) Ag₃PO₄ Silver phosphate
- 12) YClO₃ Yttrium chlorate
- 13) SnS₂ tin (IV) sulfide
- 14) Ti(CN)₄ tin (IV) cyanide
- 15) KMnO₄ Potassium permanganate
- 16) Pb₃N₂ Lead (II) nitride
- 17) CoCO₃ Cobalt (II) carbonate
- 18) CdSO₃ Cadmium (II) sulfite
- 19) Cu(NO₂)₂ Copper (II) nitrite
- 20) Fe(HCO₃)₂ Iron (II) bicarbonate
hydrogen carbonate

Compound Names and Formulas – Solution Key

Formula to name problems:

- 1) NaF is sodium fluoride
- 2) K_2CO_3 is potassium carbonate
- 3) $MgCl_2$ is magnesium chloride
- 4) $Be(OH)_2$ is beryllium hydroxide
- 5) SrS is strontium sulfide
- 6) Cu_2S is copper (I) sulfide
- 7) ZnI_2 is zinc iodide
- 8) $Ca_3(PO_4)_2$ is calcium phosphate
- 9) NH_4I is ammonium iodide
- 10) $Mn(NO_3)_3$ is manganese (III) nitrate
- 11) $FePO_4$ is iron (III) phosphate
- 12) $CoCO_3$ is cobalt (II) carbonate

Name to formula problems:

- 13) potassium fluoride is KF
- 14) ammonium sulfate is $(NH_4)_2SO_4$
- 15) magnesium iodide is MgI_2
- 16) copper (II) sulfite is $CuSO_3$
- 17) aluminum phosphate is $AlPO_4$
- 18) lead (II) nitrite is $Pb(NO_2)_2$
- 19) cobalt (II) selenide is CoSe
- 20) silver cyanide is AgCN
- 21) copper (II) bicarbonate is $Cu(HCO_3)_2$
- 22) iron (II) oxide is FeO
- 23) lithium cyanide is LiCN
- 24) lead (IV) sulfite is $Pb(SO_3)_2$

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.

	+2	+2	+3 Cations	+3	+1	+4	
Anions	zinc	iron (II)	iron (III)	gallium	silver	lead (IV)	
-1	chloride	ZnCl ₂	FeCl ₂	FeCl ₃	GaCl ₃	AgCl	PbCl ₄
-1 (Ac)	acetate	Zn(C ₂ H ₃ O ₂) ₂	Fe(C ₂ H ₃ O ₂) ₂	Fe(Ac) ₃	Ga(Ac) ₃	Ag(C ₂ H ₃ O ₂)	Pb(Ac) ₄
-1	nitrate	Zn(NO ₃) ₂	Fe(NO ₃) ₂	Fe(NO ₃) ₃	Ga(NO ₃) ₃	AgNO ₃	Pb(NO ₃) ₄
-2	oxide	ZnO	FeO	Fe ₂ O ₃	Ga ₂ O ₃	Ag ₂ O	PbO ₂
-3	nitride	Zn ₃ N ₂	Fe ₃ N ₂	Fe ₂ N ₃	Ga ₂ N ₃	Ag ₃ N	Pb ₃ N ₄
-2	sulfate	ZnSO ₄	FeSO ₄	Fe ₂ (SO ₄) ₃	Ga ₂ (SO ₄) ₃	Ag ₂ SO ₄	Pb(SO ₄) ₂

Write the formulas for the following compounds:

- 1) ⁺² copper (II) ⁻¹ chloride CuCl₂
- 2) ⁺¹ lithium ⁻¹ acetate LiC₂H₃O₂
- 3) ⁺³ vanadium (III) ⁻² selenide V₂Se₃
- 4) ⁺⁴ manganese (IV) ⁻³ nitride Mn₃N₄
- 5) ⁺² beryllium ⁻² oxide BeO
- 6) ⁺¹ sodium ⁻² sulfate Na₂SO₄
- 7) ⁺³ aluminum ⁻³ arsenide AlAs
- 8) ⁺¹ potassium ⁻¹ permanganate KMnO₄
- 9) ⁺⁶ chromium (VI) ⁻¹ cyanide Cr(CN)₆
- 10) ⁺² tin (II) ⁻² sulfite SnSO₃
- 11) ⁺⁵ vanadium (V) ⁻¹ fluoride VF₅
- 12) ⁺¹ ammonium ⁻¹ nitrate NH₄NO₃

For the following compounds, give the formulas

- 22) $\begin{matrix} +1 & -3 \\ \text{sodium phosphide} \end{matrix}$ Na_3P
- 23) $\begin{matrix} +2 & -1 \\ \text{magnesium nitrate} \end{matrix}$ $\text{Mg}(\text{NO}_3)_2$
- 24) $\begin{matrix} +2 & -2 \\ \text{lead (II) sulfite} \end{matrix}$ PbSO_3
- 25) $\begin{matrix} +2 & -3 \\ \text{calcium phosphate} \end{matrix}$ $\text{Ca}_3(\text{PO}_4)_2$
- 26) $\begin{matrix} +1 & -2 \\ \text{ammonium sulfate} \end{matrix}$ $(\text{NH}_4)_2\text{SO}_4$
- 27) $\begin{matrix} +1 & -1 \\ \text{silver cyanide} \end{matrix}$ AgCN
- 28) $\begin{matrix} +3 & -2 \\ \text{aluminum sulfide} \end{matrix}$ Al_2S_3
- 29) $\begin{matrix} +2 & -1 \\ \text{beryllium chloride} \end{matrix}$ BeCl_2
- 30) $\begin{matrix} +1 & -3 \\ \text{copper (I) arsenide} \end{matrix}$ Cu_3As
- 31) $\begin{matrix} +3 & -2 \\ \text{iron (III) oxide} \end{matrix}$ Fe_2O_3
- 32) $\begin{matrix} +3 & -3 \\ \text{gallium nitride} \end{matrix}$ GaN
- 33) $\begin{matrix} +2 & -1 \\ \text{iron (II) bromide} \end{matrix}$ FeBr_2
- 34) $\begin{matrix} +5 & -3 \\ \text{vanadium (V) phosphate} \end{matrix}$ $\text{V}_3(\text{PO}_4)_5$
- 35) $\begin{matrix} +2 & -2 \\ \text{calcium oxide} \end{matrix}$ CaO
- 36) $\begin{matrix} +2 & -1 \\ \text{magnesium acetate} \end{matrix}$ $\text{Mg}(\text{C}_2\text{H}_3\text{O}_2)_2$
- 37) $\begin{matrix} +3 & -2 \\ \text{aluminum sulfate} \end{matrix}$ $\text{Al}_2(\text{SO}_4)_3$
- 38) $\begin{matrix} +1 & -2 \\ \text{copper (I) carbonate} \end{matrix}$ Cu_2CO_3
- 39) $\begin{matrix} +2 & -2 \\ \text{barium oxide} \end{matrix}$ BaO
- 40) $\begin{matrix} +1 & -2 \\ \text{ammonium sulfite} \end{matrix}$ $(\text{NH}_4)_2\text{SO}_3$
- 41) $\begin{matrix} +1 & -1 \\ \text{silver bromide} \end{matrix}$ AgBr
- 42) $\begin{matrix} +4 & -1 \\ \text{lead (IV) nitrite} \end{matrix}$ $\text{Pb}(\text{NO}_2)_4$

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Naming Ionic Compounds Worksheet One

Give the name of the following ionic compounds:

- 1) Na_2CO_3 Sodium carbonate
- 2) NaOH Sodium hydroxide
- 3) MgBr_2 magnesium bromide
- 4) KCl potassium chloride
- 5) FeCl_2 iron (II) chloride
- 6) FeCl_3 iron (III) chloride
- 7) Zn(OH)_2 Zinc hydroxide
- 8) Be_2SO_4 Beryllium sulfate
- 9) CrF_2 Chromium (II) fluoride
- 10) Al_2S_3 Aluminum sulfide
- 11) PbO lead (II) oxide
- 12) Li_3PO_4 Lithium phosphate
- 13) TiI_4 Titanium (IV) iodide
- 14) Co_3N_2 Cobalt (II) nitride
- 15) Mg_3P_2 magnesium phosphide
- 16) $\text{Ga(NO}_2)_3$ Gallium nitrite
- 17) Ag_2SO_3 silver sulfite
- 18) NH_4OH Ammonium hydroxide
- 19) Al(CN)_3 Aluminum cyanide
- 20) $\text{Be(CH}_3\text{COO)}_2$ Beryllium acetate