

Chemical 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.

	<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 _____

Chemical Formula Writing Worksheet Solutions

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 “ ZnCl_2 ”, as shown.

	zinc	iron (II)	iron (III)	gallium	silver	lead (IV)
chloride	ZnCl_2	FeCl_2	FeCl_3	GaCl_3	AgCl	PbCl_4
acetate	$\text{Zn}(\text{C}_2\text{H}_3\text{O}_2)_2$	$\text{Fe}(\text{C}_2\text{H}_3\text{O}_2)_2$	$\text{Fe}(\text{C}_2\text{H}_3\text{O}_2)_3$	$\text{Ga}(\text{C}_2\text{H}_3\text{O}_2)_3$	$\text{Ag C}_2\text{H}_3\text{O}_2$	$\text{Pb}(\text{C}_2\text{H}_3\text{O}_2)_4$
nitrate	$\text{Zn}(\text{NO}_3)_2$	$\text{Fe}(\text{NO}_3)_2$	$\text{Fe}(\text{NO}_3)_3$	$\text{Ga}(\text{NO}_3)_3$	AgNO_3	$\text{Pb}(\text{NO}_3)_4$
oxide	ZnO	FeO	Fe_2O_3	Ga_2O_3	Ag_2O	PbO_2
nitride	Zn_3N_2	Fe_3N_2	FeN	GaN	Ag_3N	Pb_3N_4
sulfate	ZnSO_4	FeSO_4	$\text{Fe}_2(\text{SO}_4)_3$	$\text{Ga}_2(\text{SO}_4)_3$	Ag_2SO_4	$\text{Pb}(\text{SO}_4)_2$

Write the formulas for the following compounds:

- 1) copper (II) chloride CuCl_2
- 2) lithium acetate $\text{LiC}_2\text{H}_3\text{O}_2$
- 3) vanadium (III) selenide VSe
- 4) manganese (IV) nitride Mn_3N_4
- 5) beryllium oxide BeO
- 6) sodium sulfate Na_2SO_4
- 7) aluminum arsenide AlAs
- 8) potassium permanganate KMnO_4
- 9) chromium (VI) cyanide $\text{Cr}(\text{CN})_6$
- 10) tin (II) sulfite SnSO_3
- 11) vanadium (V) fluoride VF_5
- 12) ammonium nitrate NH_4NO_3