

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.

	Zn ⁺² zinc	Fe ⁺² iron (II)	Fe ⁺³ iron (III)	Ga ⁺³ gallium	Ag ⁺ silver	Pb ⁺⁴ lead (IV)
Cl ⁻ chloride	ZnCl ₂	FeCl ₂	FeCl ₃	GaCl ₃	AgCl	PbCl ₄
C ₂ H ₃ O ₂ ⁻ acetate	Zn(C ₂ H ₃ O ₂) ₂	Fe(C ₂ H ₃ O ₂) ₂	Fe(C ₂ H ₃ O ₂) ₃	Ga(C ₂ H ₃ O ₂) ₃	AgC ₂ H ₃ O ₂	Pb(C ₂ H ₃ O ₂) ₄
N ³⁻ nitrate	Zn(NO ₃) ₂	Fe(NO ₃) ₂	Fe(NO ₃) ₃	Ga(NO ₃) ₃	AgNO ₃	Pb(NO ₃) ₄
O ²⁻ oxide	ZnO	FeO	Fe ₂ O ₃	Ga ₂ O ₃	Ag ₂ O	PbO ₂
N ³⁻ nitride	Zn ₃ N ₂	Fe ₃ N ₂	FeN	GaN	Ag ₃ N	Pb ₃ N ₄
SO 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) copper (II) chloride CuCl₂
 - 2) lithium acetate LiC₂H₃O₂
 - 3) vanadium (III) selenide V₂Se₃
 - 4) manganese (IV) nitride Mn₃N₄
 - 5) beryllium oxide BeO
 - 6) sodium sulfate Na₂SO₄
 - 7) aluminum arsenide Al₂As
 - 8) potassium permanganate KMnO₄
 - 9) chromium (VI) cyanide Cr(CN)₆
 - 10) tin (II) sulfite SnSO₃
 - 11) vanadium (V) fluoride VF₅
 - 12) ammonium nitrate NH₄NO₃
- Note: Give charge*