

For each cation write the proper formula with charge. For each anion, write the proper formula with charge. Combine in proper (John Dalton) ratio, making a formula for the compound they form together. (no charges in the formulas, the compounds are NEUTRAL! Then, write the proper IUPAC name. One example...

Cation	Anion	Formula	Proper name
Ammonium NH_4^{+1}	Cl Cl^{-1}	NH_4Cl	Ammonium chloride
Ammonium NH_4^{+1}	S S^{-2}	$(\text{NH}_4)_2\text{S}$	Ammonium sulfide
Ammonium NH_4^{+1}	P P^{-3}	$(\text{NH}_4)_3\text{P}$	Ammonium phosphide
Beryllium Be^{+2}	F F^{-1}	BeF_2	Beryllium fluoride
Magnesium Mg^{+2}	O O^{-2}	MgO	Magnesium oxide
Calcium Ca^{+2}	N N^{-3}	Ca_3N_2	Calcium nitride
Strontium Sr^{+2}	Nitrate NO_3^{-1}	$\text{Sr}(\text{NO}_3)_2$	Strontium nitrate
Sodium Na^{+1}	Hydroxide OH^{-1}	NaOH	Sodium hydroxide
Lithium Li^{+1}	Chromate CrO_4^{-2}	Li_2CrO_4	Lithium chromate
Potassium K^{+1}	Carbonate CO_3^{-2}	K_2CO_3	Potassium carbonate
Aluminum Al^{+3}	Iodine I^{-1}	AlI_3	Aluminum iodide
Aluminum Al^{+3}	Acetate $\text{C}_2\text{H}_3\text{O}_2^{-1}$	$\text{Al}(\text{C}_2\text{H}_3\text{O}_2)_3$	Aluminum acetate

Cation	Anion	Formula	Proper name
Niobium (V) Nb^{+5}	Carbonate CO_3^{-2}	$\text{Nb}_2(\text{CO}_3)_5$	Niobium (V) carbonate
Bismuth (III) Bi^{+3}	Perchlorate ClO_4^{-1}	$\text{Bi}(\text{ClO}_4)_3$	Bismuth (III) perchlorate
Bismuth (V) Bi^{+5}	Chlorine Cl^{-1}	BiCl_5	Bismuth (V) chloride
Chromium (II) Cr^{+2}	Sulfur S^{-2}	CrS	Chromium (II) sulfide
Chromium (III) Cr^{+3}	Sulfur S^{-2}	Cr_2S_3	Chromium (III) sulfide
Chromium (VI) Cr^{+6}	Sulfur S^{-2}	CrS_3	Chromium (VI) sulfide
Zinc Zn^{+2}	Hydroxide OH^{-1}	$\text{Zn}(\text{OH})_2$	Zinc hydroxide
Manganese (VII) Mn^{+7}	Dichromate $\text{Cr}_2\text{O}_7^{-2}$	$\text{Mn}_2(\text{Cr}_2\text{O}_7)_7$	Manganese (VII) dichromate
Silver Ag^{+1}	Nitrogen N^{-3}	Ag_3N	Silver nitride
Tungsten W^{+6}	Oxygen O^{-2}	WO_3	Tungsten oxide
Barium Ba^{+2}	Sulfite SO_3^{-2}	BaSO_3	Barium sulfite
Tin (II) Sn^{+2}	Permanganate MnO_4^{-1}	$\text{Sn}(\text{MnO}_4)_2$	Tin (II) permanganate
Molybdenum Mo^{+6}	Chlorine Cl^{-1}	MoCl_6	Molybdenum chloride

Cation	Anion	Formula	Proper name
Vanadium (IV) V^{+4}	Sulfur S^{-2}	VS_2	Vanadium (IV) sulfide
Zirconium Zr^{+4}	Chlorine Cl^{-1}	$ZrCl_4$	Zirconium chloride
Lead (II) Pb^{+2}	Phosphate PO_4^{-3}	$Pb_3(PO_4)_2$	Lead (II) phosphate
Iridium (IV) Ir^{+4}	Nitrate NO_3^{-1}	$Ir(NO_3)_4$	Iridium (IV) nitrate
Manganese (VII) Mn^{+7}	Thiocyanate SCN^{-1}	$Mn(SCN)_7$	Manganese (VII) thiocyanate
Tin (IV) Sn^{+4}	Permanganate MnO_4^{-1}	$Sn(MnO_4)_4$	Tin (IV) permanganate
Mercury (II) Hg^{+2}	Chlorate ClO_3^{-1}	$Hg(ClO_3)_2$	Mercury (II) chlorate
Lead (II) Pb^{+2}	Nitrite NO_2^{-1}	$Pb(NO_3)_2$	Lead (II) nitrate
Gold (III) Au^{+3}	Sulfate SO_4^{-2}	$Au_2(SO_4)_3$	Gold (III) sulfate
Scandium Sc^{+3}	Nitrogen N^{-3}	ScN	Scandium nitride
Ammonium NH_4^{+1}	Hydrogen carbonate HCO_3^{-1}	NH_4HCO_3	Ammonium hydrogen carbonate
Tantalum Ta^{+5}	Sulfur S^{-2}	Ta_2S_5	Tantalum sulfide
Palladium (II) Pd^{+2}	Hydroxide OH^{-1}	$Pd(OH)_2$	Palladium (II) hydroxide