

Answers - Ionic Formulas & Names Practice Handout

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

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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
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

Cation	Anion	Formula	Proper name
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
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}	$\text{Pb}_3(\text{PO}_4)_2$	Lead (II) phosphate

Cation	Anion	Formula	Proper name
Iridium (IV) Ir^{+4}	Nitrate NO_3^{-1}	$\text{Ir}(\text{NO}_3)_4$	Iridium (IV) nitrate
Manganese (VII) Mn^{+7}	Thiocyanate SCN^{-1}	$\text{Mn}(\text{SCN})_7$	Manganese (VII) thiocyanate
Tin (IV) Sn^{+4}	Permanganate MnO_4^{-1}	$\text{Sn}(\text{MnO}_4)_4$	Tin (IV) permanganate
Mercury (II) Hg^{+2}	Chlorate ClO_3^{-1}	$\text{Hg}(\text{ClO}_3)_2$	Mercury (II) chlorate
Lead (II) Pb^{+2}	Nitrite NO_2^{-1}	$\text{Pb}(\text{NO}_3)_2$	Lead (II) nitrate
Gold (III) Au^{+3}	Sulfate SO_4^{-2}	$\text{Au}_2(\text{SO}_4)_3$	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}	$\text{Pd}(\text{OH})_2$	Palladium (II) hydroxide