

Binary Ionic Compounds (with monovalent metals)

A: Write the name/formulas for each of the following.

AlBr_3	LiCl
Ba_3N_2	K_2S
CaO	AgBr
MgCl_2	ZnO
KH	AlI_3
Na_2S	Mg_3P_2
Silver oxide	Barium sulphide
Aluminum iodide	Sodium nitride
Beryllium phosphide	Zinc sulphide
Barium chloride	Magnesium oxide
Lithium phosphide	Sodium hydride

Binary Ionic Compounds (with multivalent metals)

B: Write the name/formula for the following:

Mercury(I) hydride	Chromium(III) chloride
Lead(II) oxide	Nickel(III) oxide
Copper(II) sulfide	Manganese(IV) iodide
Tin(II) chloride	Tin(IV) oxide
Copper(II) nitride	Lead(II) sulfide
Copper(I) chloride	Cobalt(III) oxide
NiN	CrCl_6
FeI_3	Ni_2S_3
SnO	CuBr

NiI_2	SnS
CrF_3	Cu_3N
Cu_2S	Fe_3N_2

Polyatomic Ionic Compounds (with monovalent metals)

C. Write the names/formulas for each of the following:

$\text{Al}(\text{ClO}_3)_3$	LiNO_3
$\text{Ba}(\text{NO}_3)_2$	$\text{Ba}(\text{H}_2\text{PO}_4)_2$
$\text{Ca}_3(\text{PO}_4)_2$	$(\text{NH}_4)_2\text{CO}_3$
$\text{Mg}(\text{HSO}_4)_2$	MgSO_4
Ag_2CO_3	$\text{Ba}(\text{FO}_3)_2$
Na_2SO_3	$\text{Mg}(\text{CN})_2$
ZnHPO_4	$\text{Be}(\text{OH})_2$
Zinc nitrate	Calcium hydrogen phosphate
Magnesium hydrogen carbonate	Lithium carbonate
Calcium fluorate	Ammonium dihydrogen phosphate
Barium nitrite	Aluminum bromate
Aluminum phosphate	Magnesium chlorate
Silver sulfite	Potassium sulfate
Zinc phosphate	Ammonium hydrogen sulfate

Polyatomic Ionic Compounds (with multivalent metals)

D: Write the name/formula for the following.

HgHPO_4	$\text{Sn}(\text{SO}_3)_2$
FeCO_3	NiCO_3
$\text{Pb}(\text{NO}_3)_2$	CuNO_3

$\text{Mn}(\text{IO}_3)_2$	$\text{Mn}_3(\text{PO}_4)_4$
CuNO_2	$\text{Fe}(\text{FO}_3)_2$
$\text{Cr}(\text{HSO}_4)_3$	SnHPO_4
CuSO_4	AuHCO_3
Copper(I) hydrogen sulfate	Tin(IV) bromate
Chromium(III) carbonate	Vanadium (III) sulfite
Tin(II) nitrate	Nickel (II) hydroxide
Copper(II) sulfate	Manganese (II) carbonate
Cobalt(II) hydrogen carbonate	Calcium cyanide
Iron (III) phosphate	Ammonium nitrate

Acids

: Name/write formulas for the following acids

$\text{HCl}_{(\text{aq})}$	$\text{HClO}_{3(\text{aq})}$
$\text{H}_2\text{SO}_{4(\text{aq})}$	$\text{H}_2\text{S}_{(\text{aq})}$
$\text{HBrO}_{3(\text{aq})}$	$\text{HI}_{(\text{aq})}$
$\text{HCN}_{(\text{aq})}$	HNO_2
Hydrofluoric acid	Carbonic acid
Sulfurous acid	Phosphoric acid
Hydrobromic acid	Nitric acid

Molecular Compounds

F: Name/write the formulas for each of the following.

PN	AsCl
PH_3	P_2O_5
PBr_5	SO_2
S_3N_4	TeF_2

As_2O_5	CH_4
SI_4	SiF_2
Carbon monoxide	Dinitrogen pentoxide
Sulfur hexafluoride	Diphosphorus pentasulfide
Dinitrogen trioxide	Carbon tetrabromide

Hydrated Ionic Compounds

G: Name/write formulas for the following:

$FeCl_2 \cdot 4H_2O$	$NiSO_4 \cdot 2H_2O$
$CuSO_4 \cdot 5H_2O$	$Mg(NO_3)_2 \cdot 3H_2O$
Aluminum nitrate nonahydrate	Copper (II) chloride dihydrate
Iron(III)sulfate heptahydrate	Copper(I) nitrate tetrahydrate

Formulas & Names of All Compounds

H: Write the name/formula for each of the following.

$Fe(OH)_3 \cdot 6H_2O$	AsN_5
N_2	$SbPO_4$
$Sb(ClO_3)_5 \cdot 2H_2O$	H_2
$Al(NO_3)_3 \cdot 2H_2O$	$NiSO_4 \cdot 4H_2O$
$BaSO_4$	$Zn(HSO_4)_2$
$MnCO_3$	$HClO_{3(aq)}$
KCN	$H_2S_{(aq)}$
O_2	H_2O_2
$Fe(HSO_4)_2$	NH_3
NaOH	F_2

$\text{H}_3\text{PO}_{4(\text{aq})}$	$\text{HIO}_{3(\text{aq})}$
$(\text{NH}_4)_2\text{CO}_3$	MnO_2
CO_2	Li_2SO_4
CCl_4	AgF
$\text{HI}_{(\text{aq})}$	K_3PO_4
Aluminum phosphate trihydrate	Aluminum hydroxide
Cobalt(II) chlorate	Potassium sulfate
Nickel(III) nitrate	Manganese(II) dihydrogen phosphate
Calcium carbonate	Mercury(II) chloride dihydrate
Hydrosulfuric acid	Potassium sulfide
Sulfurous acid	Silver phosphate
Magnesium hydroxide	Sodium hydrogen carbonate
Carbon dioxide	Manganese(IV) bromate pentahydrate
Hydrogen chloride	Copper(II) phosphide
Carbonic acid	Sulfur trioxide
Nitric acid	Sulfuric acid
Sodium nitride	Potassium carbide
Lithium nitrite	Calcium sulfite
Dinitrogen tetroxide	Phosphorus pentachloride
Nitrogen dioxide	Dihydrogen monoxide
Bromic acid	Hydrobromic acid