Chemistry 311/312

Name: Answer Key

Formula Writing

Binary Ionic Compounds

Learning Target
Apply the rules for writing formulas of binary ionic compounds.

Practice writing binary ionic compounds using the table below. Make sure to include the correct charges on each cation and anion.

	Compound	Cation	Anion	Chemical Formula
1	Sodium fluoride	Na^+	F^-	NaF
2	Calcium sulfide	Ca^{2+}	S^{2-}	CaS
3	Radium bromide	Ra^{2+}	Br^-	$RaBr_2$
4	Beryllium bromide	Be^{2+}	Br^-	$BeBr_2$
5	Potassium selenide	K^+	Se^{2-}	K_2Se
6	Strontium oxide	Sr^{2+}	O^{2-}	SrO
7	Cesium nitride	Cs^+	N^{3-}	Cs_3N
8	Copper (I) chloride	Cu^+	Cl^-	$CuCl$
9	Nickel (III) oxide	Ni^{3+}	O^{2-}	Ni_2O_3
10	Barium fluoride	Ba^{2+}	F^-	BaF_2
11	Manganese (III) iodide	Mn^{3+}	I^-	MnI_3
12	Mercury (II) phosphide	Hg^{2+}	P^{3-}	Hg_3P_2
13	Iron (III) bromide	Fe^{3+}	Br^-	$FeBr_3$
14	Lead (IV) sulfide	Pb^{4+}	S^{2-}	$Pb_2S_4 \rightarrow PbS_2$
15	Platinum (II) chloride	Pt^{2+}	Cl^-	$PtCl_2$
16	Tin (IV) sulfide	Sn^{4+}	S^{2-}	SnS_2
17	Copper (II) fluoride	Cu^{2+}	F^-	CuF_2
18	Aluminum selenide	Al^{3+}	Se^{2-}	Al_2Se_3
19	Gallium phosphide	Ga^{3+}	P^{3-}	GaP
20	Tin (IV) nitride	Sn^{4+}	N^{3-}	Sn_3N_4