

Ionic Compounds

 = polyatomic (need parentheses if more than 1)

	Cl ⁻	CO ₃ ²⁻	OH ⁻	SO ₄ ²⁻	PO ₄ ³⁻	NO ₃ ⁻
Na ⁺	NaCl	Na ₂ CO ₃	NaOH	Na ₂ SO ₄	Na ₃ PO ₄	NaNO ₃
NH ₄ ⁺						
K ⁺	KCl	K ₂ CO ₃	KOH	K ₂ SO ₄	K ₃ PO ₄	KNO ₃
Ca ²⁺						
Mg ²⁺	MgCl ₂	MgCO ₃	Mg(OH) ₂	MgSO ₄	Mg ₃ (PO ₄) ₂	Mg(NO ₃) ₂
Zn ²⁺						
Fe ³⁺	FeCl ₃	Fe ₂ (CO ₃) ₃	Fe(OH) ₃	Fe ₂ (SO ₄) ₃	FePO ₄	Fe(NO ₃) ₃
Al ³⁺						
Co ²⁺	CoCl ₂	CoCO ₃	Co(OH) ₂	CoSO ₄	Co ₃ (PO ₄) ₂	Co(NO ₃) ₂
Fe ²⁺						
H ⁺	HCl	H ₂ CO ₃	* H ₂ O	H ₂ SO ₄	H ₃ PO ₄	HNO ₃



Writing Chemical formulas for ionic compounds

Coefficient	+ Charge		Coefficient	- Charge	
1	+2	+	2	-1	=0
2	+1	+	1	-2	=0
1	+4	+	4	-1	=0
2	+3	+	3	-2	=0
3	+2	+	2	-3	=0
	+3	+		-1	=0
	+1	+		-4	=0
	+1	+		-1	=0
	+4	+		-3	=0
	+2	+		-2	=0

Coefficient	Cation		Coefficient	Anion		Chemical Formula
1	Mg^{2+}	+	2	Cl^{-}	=0	$MgCl_2$
1	Na^{+}	+	1	Cl^{-}	=0	$NaCl$
1	Pb^{4+}	+	2	S^{2-}	=0	PbS_2
2	Al^{3+}	+	3	O^{2-}	=0	Al_2O_3
	Ca^{2+}	+		P^{3-}	=0	
	NH_4^{+}	+		S^{2-}	=0	
	Fe^{2+}	+		SO_4^{2-}	=0	
	Fe^{3+}	+		SO_4^{2-}	=0	
	Li^{+}	+		SO_4^{2-}	=0	
	Ba^{2+}	+		NO_3^{-}	=0	