

Symbols and Names of Some Common Polyatomic Ions and One Molecule					
NH_4^+	ammonium ion	OH^-	hydroxide ion	CN^-	cyanide ion
SO_4^{2-}	sulfate ion	O_2^{2-}	peroxide ion	CNO^-	cyanate ion
HSO_4^-	hydrogen sulfate ion	$\text{C}_2\text{H}_3\text{O}_2^-$	acetate ion	SCN^-	thiocyanate ion
SO_3^{2-}	sulfite ion	ClO_4^-	perchlorate ion	CO_3^{2-}	carbonate ion
NO_3^-	nitrate ion	ClO_3^-	chlorate ion	HCO_3^-	hydrogen carbonate
NO_2^-	nitrite ion	ClO_2^-	chlorite ion	$\text{C}_2\text{O}_4^{2-}$	oxalate ion
PO_4^{3-}	phosphate ion	ClO^-	hypochlorite ion	$\text{S}_2\text{O}_3^{2-}$	thiosulfate ion
HPO_4^{2-}	hydrogen phosphate	CrO_4^{2-}	chromate ion	Hg_2^{2+}	mercury(I) ion
H_2PO_4^-	dihydrogen phosphate	$\text{Cr}_2\text{O}_7^{2-}$	dichromate ion	H_3O^+	hydronium ion
PO_3^{3-}	phosphite ion	MnO_4^-	permanganate ion	NH_3	ammonia
Formulas and Names for Some Common Acids (<i>all names should have acid added</i>)					
H_2SO_4	sulfuric	H_3PO_4	phosphoric	HNO_3	nitric
$\text{HC}_2\text{H}_3\text{O}_2$	acetic	HCl	hydrochloric	HBr	hydrobromic
HClO_3	chloric	HClO_2	chlorous	HBrO_3	bromic

Oxidation States For Metals (Cations) and Non-metals (Anions) In Compounds

Group	Oxidation States for Metal Cations	Group	Oxidation States for Non-metal Anions
IA	Always +1 (Li, Na, K, Rb, Cs, Fr)	IVA	Always -4 (C^{4-}) as an anion
IIA	Always +2 (Be, Mg, Ca, Sr, Ba, Ra)	VA	Always -3 (N^{3-} , P^{3-}) as an anion
IIIB	Always +3 (Sc, Y, La)	VIA	Always -2 (O^{2-} , S^{2-} , Se^{2-} , Te^{2-}) as an anion
IVB-VIIIB	Commonly +2 and +3 (e.g., Cr, Mn, Fe, Co, Ni)	VIIA	Always -1 (F^- , Cl^- , Br^- , I^-) as an anion
IB	Cu (+1, +2); Ag (+1); Au (+1, +3)	hydrogen	Always -1 (H^-) as anion; but +1 otherwise
IIB	Zn and Cd (+2); Hg (+1, +2)		
IIIA	Al and Ga (+3); In and Tl (+1, +3)		
IVA	Sn and Pb (+2, +4)		
VIA	Pb (+2, +4)		

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Note: this list contains *commonly-found* oxidation states. Oxidation states not shown exist, but they are less-frequently encountered and therefore not "common." Other oxidation states are commonly encountered for metals in polyatomic ions, where the metal is not the cation of a compound. When naming compounds, the oxidation state of the metal cation is given only if the metal has more than one common oxidation state (e.g., Iron(III) or Iron(II) in the name).