AP Common Ions

CATIONS (+ve)

Name	Symbol/ Formula	Alternative*
Aluminum	Al^{3+}	
Ammonium	NH_4^+	
Arsenic (III)	As^{3+}	
Arsenic (V)	As^{5+}	
Barium	Ba^{2+}	
Bismuth (III)	Bi^{3+}	
Bismuth (V)	Bi^{5+}	
Cadmium	Cd^{2+}	
Calcium	Ca^{2+}	
Chromium (II)	Cr^{2+}	
Chromium (III)	Cr^{3+}	
Cobalt (II)	Co^{2+}	
Cobalt (III)	Co^{3+}	
Copper (I)	Cu^+	(Cuprous)
Copper (II)	Cu^{2+}	(Cupric)
Hydrogen	H^+	
Hydronium	H_3O^+	
Iron (II)	Fe^{2+}	(Ferrous)
Iron (III)	Fe^{3+}	(Ferric)
Lead (II)	Pb^{2+}	(Plumbous)
Lead (IV)	Pb^{4+}	(Plumbic)
Lithium	Li^+	
Magnesium	Mg^{2+}	
Manganese (II)	Mn^{2+}	
Manganese (IV)	Mn^{4+}	
Mercury (I)	Hg_2^{2+}	(Mercurous)
Mercury (II)	Hg^{2+}	(Mercuric)
Nickel (II)	Ni^{2+}	
Potassium	K^+	
Silver	Ag^+	
Sodium	Na^+	
Strontium	Sr^{2+}	
Tin (II)	Sn^{2+}	(Stannous)
Tin (IV)	Sn^{4+}	(Stannic)
Zinc	Zn^{2+}	

ANIONS (-ve)

Name	Symbol/ Formula	Alternative*
Bromide	Br^-	
Bromate (I)	BrO^-	(Hypobromite)
Bromate (III)	BrO_2^-	(Bromite)
Bromate (V)	BrO_3^-	(Bromate)
Bromate (VII)	BrO_4^-	(Perbromate)
Carbonate	CO_3^{2-}	
Chlorate (I)	ClO^-	(Hypochlorite)
Chlorate (III)	ClO_2^-	(Chlorite)
Chlorate (V)	ClO_3^-	(Chlorate)
Chlorate (VII)	ClO_4^-	(Perchlorate)
Chloride	Cl^-	
Chromate	CrO_4^{2-}	
Cyanide	CN^-	
Dichromate	$Cr_2O_7^{2-}$	
Dihydrogen Phosphate	$H_2PO_4^-$	
Ethanoate	$C_2H_3O_2^-$	(Acetate)
Fluoride	F^-	
Hydride	H^-	
Hydrogen Carbonate	HCO_3^-	(Bicarbonate)
Hydrogen Oxalate	$HC_2O_4^-$	(Binoxalate)
Hydrogen Phosphate	HPO_4^{2-}	
Hydrogen Sulfate	HSO_4^-	(Bisulfate)
Hydrogen Sulfide	HS^-	(Bisulfide)
Hydrogen Sulfite	HSO_3^-	(Bisulfite)
Hydroxide	OH^-	
Iodate (I)	IO^-	(Hypoiodite)
Iodate (III)	IO_2^-	(Iodite)
Iodate (V)	IO_3^-	(Iodate)
Iodate (VII)	IO_4^-	(Periodate)
Iodide	I^-	
Manganate (VII)	MnO_4^-	(Permanganate)
Nitrate	NO_3^-	
Nitride	N^{3-}	
Nitrite	NO_2^-	
Oxalate	$C_2O_4^{2-}$	(Ethandioate)
Oxide	O^{2-}	
Peroxide	O_2^{2-}	
Phosphate	PO_4^{3-}	
Phosphide	P^{3-}	
Phosphite	PO_3^{3-}	
Sulfate	SO_4^{2-}	
Sulfide	S^{2-}	
Sulfite	SO_3^{2-}	
Thiosulfate	$S_2O_3^{2-}$	
Thiocyanate	SCN^-	

* In the case of the cations, the alternative names are generally redundant in modern chemistry, but the anions *sometimes* use the alternate names. E.g. the oxyhalogen ions (bromate, chlorate, iodate etc.) are usually referred to by the alternate names, but HSO_3^- is more commonly called Hydrogen Sulfite. In each case where two names are given, the more common one used in the United States is underlined.

POLYATOMIC IONS

+2	+1	-1	-2	-3
Hg_2^{2+}	NH_4^+	BrO^-	CO_3^{2-}	PO_3^{3-}
		BrO_2^-	$C_2O_4^{2-}$	PO_4^{3-}
		BrO_3^-	CrO_4^{2-}	
		BrO_4^-	$Cr_2O_7^{2-}$	
		$C_2H_3O_2^-$	HPO_4^{2-}	
		ClO^-	SO_3^{2-}	
		ClO_2^-	SO_4^{2-}	
		ClO_3^-	$S_2O_3^{2-}$	
		ClO_4^-		
		CN^-		
		HCO_3^-		
		$HC_2O_4^-$		
		$H_2PO_4^-$		
		HS^-		
		HSO_3^-		
		HSO_4^-		
		IO^-		
		IO_2^-		
		IO_3^-		
		IO_4^-		
		MnO_4^-		
		NO_2^-		
		NO_3^-		
		OH^-		
		SCN^-		