

Revised August 2008



AP Common Ions

CATIONS (+ve)			ANIONS (-ve)		
Name	Symbol	Alternative*	Name	Symbol	Alternative*
Aluminum	Al ³⁺		Bromide	Br ⁻	
Ammonium	NH ₄ ⁺		Bromate (I)	BrO ⁻	(Hypobromite)
Arsenic (III)	As ³⁺		Bromate (III)	BrO ₂ ⁻	(Bromite)
Arsenic (V)	As ⁵⁺		Bromate (V)	BrO ₃ ⁻	(Bromate)
Barium	Ba ²⁺		Bromate (VII)	BrO ₄ ⁻	(Perbromate)
Bismuth (III)	Bi ³⁺		Carbonate	CO ₃ ²⁻	
Bismuth (V)	Bi ⁵⁺		Chlorate (I)	ClO ⁻	(Hypochlorite)
Cadmium	Cd ²⁺		Chlorate (III)	ClO ₂ ⁻	(Chlorite)
Calcium	Ca ²⁺		Chlorate (V)	ClO ₃ ⁻	(Chlorate)
Chromium (II)	Cr ²⁺		Chlorate (VII)	ClO ₄ ⁻	(Perchlorate)
Chromium (III)	Cr ³⁺		Chloride	Cl ⁻	
Cobalt (II)	Co ²⁺		Chromate	CrO ₄ ²⁻	
Cobalt (III)	Co ³⁺		Cyanide	CN ⁻	
Copper (I)	Cu ⁺	(Cuprous)	Dichromate	Cr ₂ O ₇ ²⁻	
Copper (II)	Cu ²⁺	(Cupric)	Dihydrogen Phosphate	H ₂ PO ₄ ⁻	
Hydrogen	H ⁺		Ethanoate	C ₂ H ₃ O ₂ ⁻	(Acetate)
Hydronium	H ₃ O ⁺		Fluoride	F ⁻	
Iron (II)	Fe ²⁺	(Ferrous)	Hydride	H ⁻	
Iron (III)	Fe ³⁺	(Ferric)	Hydrogen Carbonate	HCO ₃ ⁻	(Bicarbonate)
Lead (II)	Pb ²⁺	(Plumbous)	Hydrogen Oxalate	HC ₂ O ₄ ⁻	(Binoxalate)
Lead (IV)	Pb ⁴⁺	(Plumbic)	Hydrogen Phosphate	HPO ₄ ²⁻	
Lithium	Li ⁺		Hydrogen Sulfate	HSO ₄ ⁻	(Bisulfate)
Magnesium	Mg ²⁺		Hydrogen Sulfide	HS ⁻	(Bisulfide)
Manganese (II)	Mn ²⁺		Hydrogen Sulfite	HSO ₃ ⁻	(Bisulfite)
Manganese (IV)	Mn ⁴⁺		Hydroxide	OH ⁻	
Mercury (I)	Hg ₂ ²⁺	(Mercurous)	Iodate (I)	IO ⁻	(Hypoiodite)
Mercury (II)	Hg ²⁺	(Mercuric)	Iodate (III)	IO ₂ ⁻	(Iodite)
Nickel (II)	Ni ²⁺		Iodate (V)	IO ₃ ⁻	(Iodate)
Potassium	K ⁺		Iodate (VII)	IO ₄ ⁻	(Periodate)
Silver	Ag ⁺		Iodide	I ⁻	
Sodium	Na ⁺		Manganate (VII)	MnO ₄ ⁻	(Permanganate)
Strontium	Sr ²⁺		Nitrate	NO ₃ ⁻	
Tin (II)	Sn ²⁺	(Stannous)	Nitride	N ³⁻	
Tin (IV)	Sn ⁴⁺	(Stannic)	Nitrite	NO ₂ ⁻	
Zinc	Zn ²⁺		Oxalate	C ₂ O 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 ₂ O 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 older, alternate names. For example, the oxyhalogen ions (bromate, chlorate, iodate etc.) are usually referred to by the alternate names, but HSO₃⁻ is much more likely to be called Hydrogen Sulfite rather than Bisulfite.

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POLYATOMIC IONS				
+2	+1	-1	-2	-3
Hg_2^{2+}	NH_4^+	BrO^-	CO_3^{2-}	PO_3^{3-}
		BrO_2^-	$\text{C}_2\text{O}_4^{2-}$	PO_4^{3-}
		BrO_3^-	CrO_4^{2-}	
		BrO_4^-	$\text{Cr}_2\text{O}_7^{2-}$	
		$\text{C}_2\text{H}_3\text{O}_2^-$	HPO_4^{2-}	
		ClO^-	SO_3^{2-}	
		ClO_2^-	SO_4^{2-}	
		ClO_3^-	$\text{S}_2\text{O}_3^{2-}$	
		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^-		