**Table 7.1 Common Monoatomic Cations**

Cation	Stock System	Latin System
Al ³⁺	aluminum ion	
Ba ²⁺	barium ion	
Cd ²⁺	cadmium ion	
Ca ²⁺	calcium ion	
Co ²⁺	cobalt(II) ion	cobaltous ion
Co ³⁺	cobalt(III) ion	cobaltic ion
Cu ⁺	copper(I) ion	cuprous ion
Cu ²⁺	copper(II) ion	cupric ion
Cr ³⁺	chromium(III) ion	
H ⁺	hydrogen ion	
Fe ²⁺	iron(II) ion	ferrous ion
Fe ³⁺	iron(III) ion	ferric ion
Pb ²⁺	lead(II) ion	plumbous ion
Pb ⁴⁺	lead(IV) ion	plumbic ion
Li ⁺	lithium ion	
Mg ²⁺	magnesium ion	
Mn ²⁺	manganese(II) ion	
Hg ₂ ²⁺	mercury(I) ion*	mercurous ion
Hg ²⁺	mercury(II) ion	mercuric ion
Ni ²⁺	nickel(II) ion	
K ⁺	potassium ion	
Ag ⁺	silver ion	
Na ⁺	sodium ion	
Sr ²⁺	strontium ion	
Sn ²⁺	tin(II) ion	stannous ion
Sn ⁴⁺	tin(IV) ion	stannic ion
Zn ²⁺	zinc ion	

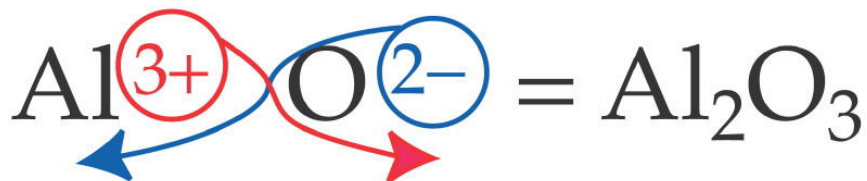
*Note that the mercury(I) ion is diatomic and is written Hg₂²⁺.

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Table 7.2 Common Monoatomic Anions			
Anion	IUPAC Name	Anion	IUPAC Name
Br ⁻	bromide ion	N ³⁻	nitride ion
Cl ⁻	chloride ion	O ²⁻	oxide ion
F ⁻	fluoride ion	P ³⁻	phosphide ion
I ⁻	iodide ion	S ²⁻	sulfide ion

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Table 7.3 Common Polyatomic Ions

Cation	IUPAC Name	Anion	IUPAC Name
NH_4^+	ammonium ion		
$\text{C}_2\text{H}_3\text{O}_2^-$	acetate ion	OH^-	hydroxide ion*
CO_3^{2-}	carbonate ion	ClO^-	hypochlorite ion
ClO_3^-	chlorate ion	NO_3^-	nitrate ion
ClO_2^-	chlorite ion	NO_2^-	nitrite ion
CrO_4^{2-}	chromate ion	ClO_4^-	perchlorate ion
CN^-	cyanide ion*	MnO_4^-	permanganate ion
$\text{Cr}_2\text{O}_7^{2-}$	dichromate ion	PO_4^{3-}	phosphate ion
HCO_3^-	hydrogen carbonate ion	SO_4^{2-}	sulfate ion
HSO_4^-	hydrogen sulfate ion	SO_3^{2-}	sulfite ion

*Note that the suffix *-ide* is an exception to the general *-ate* and *-ite* rule.

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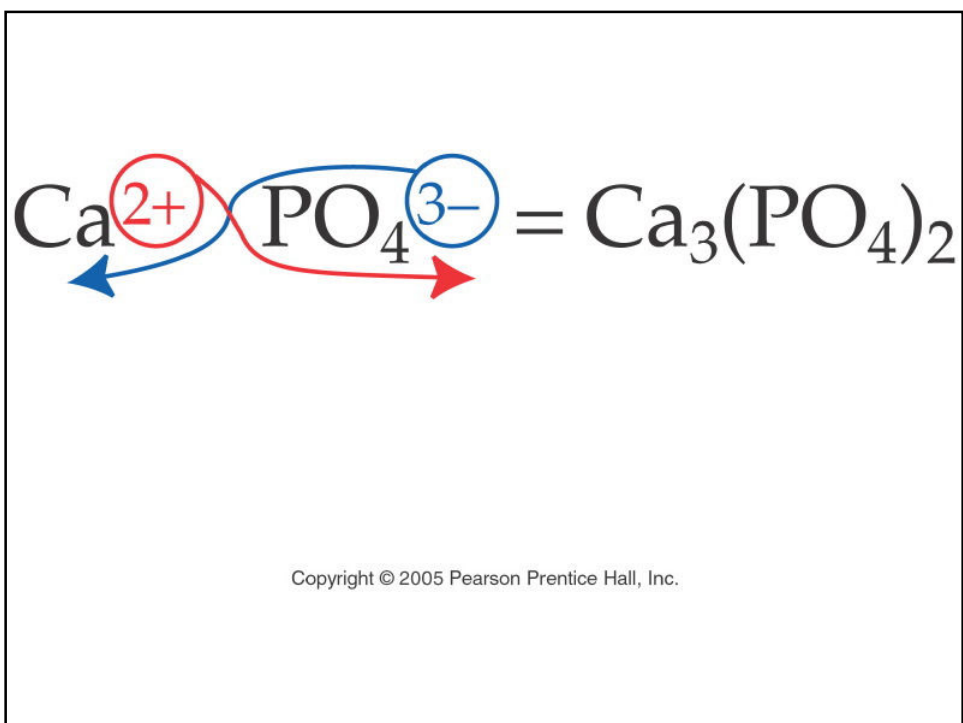


Table 7.4 Greek Prefixes for Binary Molecular Compounds			
Atoms	Prefix	Atoms	Prefix
1	<i>mono-</i>	6	<i>hexa-</i>
2	<i>di-</i>	7	<i>hepta-</i>
3	<i>tri-</i>	8	<i>octa-</i>
4	<i>tetra-</i>	9	<i>nona-*</i>
5	<i>penta-</i>	10	<i>deca-</i>

*Although the Latin prefix *nona-* is commonly used, IUPAC prefers the Greek prefix *ennea-*.
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