

Common Cations

Ionic Charge +1		Ionic Charge +2		Ionic Charge +3	
<u>Alkali Metals (Group 1A)</u>		<u>Alkaline Earths (Group 2A)</u>		<u>Group 3A</u>	
Li ⁺	Lithium	Be ⁺²	Beryllium	Al ⁺³	Aluminum
Na ⁺	Sodium	Mg ⁺²	Magnesium	Ga ⁺³	Gallium
K ⁺	Potassium	Ca ⁺²	Calcium	<u>Transition Elements</u>	
Rb ⁺	Rubidium	Sr ⁺²	Strontium	Cr ⁺³	Chromium(III)
Cs ⁺	Cesium	Ba ⁺²	Barium	Mn ⁺³	Manganese(III)
<u>Transition Elements</u>		<u>Transition Elements</u>		Fe ⁺³	Iron(III)
Cu ⁺	Copper(I)	Cr ⁺²	Chromium(II)	Co ⁺³	Cobalt(III)
Ag ⁺	Silver	Mn ⁺²	Manganese(II)		
<u>Polyatomic Ions</u>		Fe ⁺²	Iron(II)		
NH ₄ ⁺	Ammonium	Co ⁺²	Cobalt(II)		
<u>Others</u>		Ni ⁺²	Nickel		
H ⁺	Hydrogen	Cu ⁺²	Copper(II)		
H ₃ O ⁺	Hydronium ^a	Zn ⁺²	Zinc		
		Cd ⁺²	Cadmium		
		Hg ₂ ⁺²	Mercury(I) ^b		
		Hg ⁺²	Mercury(II)		
		<u>Others</u>			
		Sn ⁺²	Tin(II)		
		Pb ⁺²	Lead(II)		

a: this is the species that actually exists when H⁺ is present in water;

b: mercury(I) ions always occur bound together to form Hg₂⁺² ions;

c: Not included in the table are two common +4 ions: Pb⁺⁴ = Lead(IV) and Sn⁺⁴ = Tin(IV)

Greek Prefixes

1 mono-	6 hexa-
2 di-	7 hepta-
3 tri-	8 octa-
4 tetra-	9 nona-
5 penta-	10 deca-

Common Anions

Ionic Charge -1		Ionic Charge -2		Ionic Charge -3	
<u>Halogens (Group 7A)</u>		<u>Group 6A</u>		<u>Group 5A</u>	
F ⁻	Fluoride	O ⁻²	Oxide	N ⁻³	Nitride
Cl ⁻	Chloride	S ⁻²	Sulfide	P ⁻³	Phosphide
Br ⁻	Bromide				
I ⁻	Iodide				
	<u>Acid Anions</u>		<u>Oxvanions</u>		<u>Oxvanion</u>
HCO ₃ ⁻	Hydrogen carbonate ^a	CO ₃ ⁻²	Carbonate	PO ₄ ⁻³	Phosphate
HS ⁻	Hydrogen sulfide	SO ₄ ⁻²	Sulfate		
HSO ₄ ⁻	Hydrogen sulfate	SO ₃ ⁻²	Sulfite		
HSO ₃ ⁻	Hydrogen sulfite	C ₂ O ₄ ⁻²	Oxalate		
H ₂ PO ₄ ⁻	Dihydrogen phosphate	CrO ₄ ⁻²	Chromate		
		Cr ₂ O ₇ ⁻²	Dichromate		
	<u>Other Anions</u>		<u>Acid Anion</u>		
SCN ⁻	Thiocyanate	HPO ₄ ⁻²	Hydrogen Phosphate		
CN ⁻	Cyanide		<u>Diatomic Elementals</u>		
H ⁻	Hydride	O ₂ ⁻²	Peroxide		

^a: Commonly referred to as Bicarbonate