

Common Polyatomic Ions

+1 Charge		-2 Charge	
ammonium	NH_4^{+1}	carbonate	CO_3^{-2}
hydronium	H_3O^{+1}	chromate	CrO_4^{-2}
		dichromate	$\text{Cr}_2\text{O}_7^{-2}$
-1 Charge		sulfate	SO_4^{-2}
nitrate	NO_3^{-1}	sulfite	SO_3^{-2}
nitrite	NO_2^{-1}	oxalate	$\text{C}_2\text{O}_4^{-2}$
hydroxide	OH^{-1}	peroxide	O_2^{-2}
permanganate	MnO_4^{-1}		
cyanide	CN^{-1}	-3 Charge	
acetate	$\text{C}_2\text{H}_3\text{O}_2^{-1}$	phosphate	PO_4^{-3}
		phosphite	PO_3^{-3}
Special Cases			
<p>All of the halogens with the exception of fluorine (that's Cl, Br, I, At), make a series of 4 ions (for a total of 16) with oxygen as the example of chlorine illustrates:</p> <p><i>perchlorate</i> ClO_4^{-1} <i>chlorate</i> ClO_3^{-1} <i>chlorite</i> ClO_2^{-1} <i>hypochlorite</i> ClO^{-1}</p> <p>In each case only the portion of the name in italics changes with a change in the halogen.</p>			
<p>Almost all anions (ions with a negative charge) with a charge of -2 or more can have a single hydrogen attached. This adds the prefix "bi" to the name of the ion. For example:</p> <p>carbonate = CO_3^{-2} <u>bi</u>carbonate = HCO_3^{-1}</p> <p>Of course the charge is reduced by one (since the hydrogen added is really an hydronium, H^{+1})</p>			