Common Polyatomic Ions: Names, Formulas and Charges of Polyatomic Ions

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This is a list of some of the most common polyatomic ions. It is worth committing the polyatomic ions to memory, including their molecular formulas and ionic charge.

Polyatomic Ion Charge = +1

ammonium - NH_4^+

Polyatomic Ion Charge = -1

acetate - $C_2H_3O_2^-$
bicarbonate (or hydrogen carbonate) - HCO_3^-
bisulfate (or hydrogen sulfate) - HSO_4^-
chlorate - ClO_3^-
chlorite - ClO_2^-
cyanate - OCN^-
cyanide - CN^-
dihydrogen phosphate - $H_2PO_4^-$
hydroxide - OH^-
nitrate - NO_3^-
nitrite - NO_2^-
perchlorate - ClO_4^-
permanganate - MnO_4^-
thiocyanate - SCN^-

Polyatomic Ion Charge = -2

carbonate - CO_3^{2-}
chromate - CrO_4^{2-}
dichromate - $Cr_2O_7^{2-}$
hydrogen phosphate - HPO_4^{2-}
peroxide - O_2^{2-}
sulfate - SO_4^{2-}
sulfite - SO_3^{2-}
thiosulfate - $S_2O_3^{2-}$

Polyatomic Ion Charge = -3

borate - BO_3^{3-}
phosphate - PO_4^{3-}