GUIDELINES TO PREDICT THE SOLUBILITY OF IONIC COMPOUNDS

SOLUBLE COMPOUNDS	Exceptions
Almost all salts of Na^+, K^+, NH_4^+ **Salts of:** nitrate, NO_3^- chlorate, ClO_3^- perchlorate, ClO_4^- acetate, $CH_3CO_2^-$	
Almost all salts of Cl^-, Br^-, I^-	Halides of Ag^+, Hg_2^{2+}, Pb^{2+}
Salts containing F^-	Fluorides of Mg^{2+}, Ca^{2+}, Sr^{2+}, Ba^{2+}, Pb^{2+}
Salts of sulfate, SO_4^{2-}	Sulfates of Ca^{2+}, Sr^{2+}, Ba^{2+}, Pb^{2+}, Ag^+

INSOLUBLE COMPOUNDS	EXCEPTIONS
Most salts of: Carbonate, CO_3^{2-} Phosphate, PO_4^{3-} Oxalate, $C_2O_4^{2-}$ Chromate, CrO_4^{2-} Sulfide, S^{2-}	Salts of NH_4^+ and the alkali metal cations
Most metal hydroxides and oxides	Alkali metal hydroxides and $Ba(OH)_2$ and $Sr(OH)_2$