Name:

Section:

Honors Chemistry

Solubility Table

Solubility of Some Ionic Compounds in Water

Negative Ion (Anion)	+	Positive Ion (Cation)	Form a Compound Which Is…
Any anion	+	Alkali metal ions (Li^+, Na^+, K^+, Rb^+, or Cs^+)	Soluble (i.e., >0.1 mol/L)
Any anion	+	Ammonium ion, NH_4^+	Soluble
Nitrate, NO_3^-	+	Any cation	Soluble
Acetate, CH_3COO^-	+	Any cation except Ag^+	Soluble
Chloride, Cl^-, or	+	Ag^+, Pb^{2+}, Hg_2^{2+}, or Cu^+	Not soluble
Bromide, Br^-, or	+	Any other cation	Soluble
Iodide, I^-	+		
Sulfate, SO_4^{2-}	+	Ca^{2+}, Sr^{2+}, Ba^{2+}, Ra^{2+}, Ag^+ or Pb^{2+}	Not soluble
	+	Any other cation	Soluble
Sulfide, S^{2-}	+	Alkali metals or NH_4^+	Soluble
	+	Be^{2+}, Mg^{2+}, Ca^{2+}, Sr^{2+}, Ba^{2+}, or Ra^{2+}	Soluble
	+	Any other cation	Not soluble
Hydroxide, OH^-	+	Alkali metal ions or NH_4^+	Soluble
	+	Sr^{2+}, Ba^{2+}, or Ra^{2+}	Slightly soluble
	+	Any other cation	Not soluble
Phosphate, PO_4^{3-}, or	+	Alkali metal ions or NH_4^+	Soluble
Carbonate, CO_3^{2-}, or	+	Any other cation	Not soluble
Sulfite, SO_3^{2-}			