SCH 3UI

Reference Sheet

Table 1: Solubility of Ionic Compounds at SATP

		ANIONS						
		$C\ell^-$, Br^-, I^-	S^{2-}	OH^-	SO_4^{2-}	CO_3^{2-}, PO_4^{3-}, SO_32^-	$C_2H_3O_2^-$	NO_3^-
CATIONS	High Solubility (aq) ≥ 0.1mol/L	Most	Group 1, NH_4^+, Group 2	Group 1, NH_4^+, Sr^{2+}, Ba^{2+}, $T\ell^+$	Most	Group 1, NH_4^+,	Most	All
		All Group 1 compounds, including acids and all ammonium compounds are assumed to have high solubility in water						
	Low Solubility (s) ≤0.1mol/L	Ag^+, Pb^{2+}, $T\ell^+$, Hg^{2+}, Hg^+, Cu^+	Most	Most	Ag^+, Pb^{2+}, Ca^{2+}, Ba^{2+}, Sr^{2+}, Ra^{2+}	Most	Ag^+	None

Table 2: Activity Series of Common Metals

Li K Ba Ca Mg Al Zn Fe Sn Pb **H** Cu Hg Ag Au

⟵ React with Acids ⟶

⟵ React with water ⟶

Table 3: IUPAC Names and Formulae of Some Common Polyatomic ions

Ion Formula	Name	Ion Formula	Name
$C_2H_3O_2^-$	acetate	C_2^{2-}	carbide
BrO_3^-	**bromate**	**CO_3^{2-}**	**carbonate**
$C\ell O_3^-$	**chlorate**	CrO_4^{2-}	chromate
CN^-	cyanide	$Cr_2O_7^{2-}$	dichromate
OH^-	**hydroxide**	$C_2O_4^{2-}$	oxalate
IO_3^-	**iodate**	O_2^{2-}	peroxide
NO_3^-	**nitrate**	SiO_3^{2-}	silicate
SCN^-	thiocyanate	**SO_4^{2-}**	**sulfate**
MnO_4^-	permanganate	$S_2O_3^{2-}$	thiosulfate
		AsO_4^{3-}	arsenate
H_3O^+	hydronium	BO_3^{3-}	borate
NH_4^+	ammonium	**PO_4^{3-}**	**phosphate**