

During Class Activities:

Memorize each half reaction in Group 1

Chemical Equations:

1. Complete the following table:

Formula	Solubility	Anion Formula	Cation Formula
AgI	insoluble		
$\text{Ba}(\text{NO}_3)_2$	soluble	NO_3^-	Ba^{2+}
PbI_2	insoluble		
$\text{Ca}(\text{NO}_3)_2$	soluble	NO_3^-	Ca^{2+}

Solubility Table:

Ion	Solubility	Exceptions
NO_3^-	soluble	none
ClO_4^-	soluble	none
Cl^-	soluble	except Ag^+ , Hg_2^{2+} , Pb^{2+}
Br^-	soluble	except Ag^+ , Hg_2^{2+} , Pb^{2+}
SO_4^{2-}	soluble	except Ca^{2+} , Ba^{2+} , Sr^{2+} , Hg_2^{2+} , Pb^{2+} , Ag^+
CO_3^{2-}	insoluble	except Group 1A and NH_4^+
PO_4^{3-}	insoluble	except Group 1A and NH_4^+
OH^-	insoluble	except Group 1A, Ca^{2+} , Ba^{2+} , Sr^{2+}
S^{2-}	insoluble	except Group 1A, 2A and NH_4^+
$\text{S}_2\text{O}_3^{2-}$	soluble	none
NO_2^-	soluble	none
O^{2-}	soluble	none

Slightly soluble

2. Write the chemical formula of the products and balance the following reactions. Identify all products phases as either liquid, dissolved, insoluble or gaseous.

