

Name: \_\_\_\_\_

Date: \_\_\_\_\_

\_\_\_\_\_ Period: \_\_\_\_\_

## Naming WS #2: Ionic Compounds with Polyatomic Ions

**Part A - Complete the following table.**

	Ionic Compound:	Ion Pairs:	Name of Ionic Compound:
Ex.	$\text{AlCl}_3$	$\text{Al}^{3-} + 3\text{Cl}^-$	Aluminum chloride
1.	$\text{NH}_4\text{ClO}_4$	$\text{NH}_4^+ + \text{ClO}_4^-$	Ammonium perchlorate
2.		$\text{Li}^+ + \text{NO}_2^-$	
3.	$\text{Ga}_2(\text{SO}_3)_3$	$2\text{Ga}^{3+} + 3\text{SO}_3^{2-}$	Gallium Sulfite
4.		$2\text{Li}^+ + \text{CO}_3^{2-}$	
5.	$\text{Ca}_2\text{ClO}_3$	$\text{Ca}^{2+} + 2\text{ClO}^-$	Calcium chlorate
6.	$\text{Na}_2\text{SiO}_3$		
7.	$\text{Ba}(\text{OH})_2$	$\text{Ba}^{2+} + 2\text{OH}^-$	Barium hydroxide
8.		$\text{Be}^{2+} + \text{C}_2\text{O}_4^{2-}$	
9.	$\text{LiCN}$	$\text{Li}^+ + \text{CN}^-$	Lithium cyanide
10.	$(\text{NH}_4)_3\text{PO}_4$		

**Part B-** Indicate the names of the ions used to form the following ionic compounds and give the ionic compound name of each.

	Formula	Cation name		Anion Name		Compound name
Ex	$\text{NH}_4\text{NO}_3$	Ammonium ion	+	Nitrate ion	=	Ammonium Nitrate
11.	$\text{Na}_2\text{SO}_4$	Sodium ion	+	Sulfate ion	=	Sodium Sulfate
12.	$\text{K}_3\text{PO}_4$		+		=	
13.	$\text{Ba}(\text{NO}_3)_2$	Barium ion	+	Nitrate ion	=	Barium Nitrate
14.	$\text{Al}(\text{OH})_3$		+		=	
15.	$\text{Na}_2\text{SO}_3$	Sodium ion	+	Sulfite ion	=	Sodium Sulfite
16.	$\text{NaHCO}_3$		+		=	
17.	$\text{CsClO}_4$	Cesium ion	+	Perchlorate ion	=	Cesium Perchlorate