

Name: _____ **KEY** _____

Nomenclature C – Using Polyatomic Ions

Refer to your periodic table for the polyatomic ions.

Write the names of the following compounds:

1. KCN potassium cyanide
2. NaOH sodium hydroxide
3. LiNO₃ lithium nitrate
4. CaCO₃ calcium carbonate
5. MgSO₄ magnesium sulfate
6. BeNO₂ beryllium nitrite
7. Na₂SO₃ sodium sulfite
8. Ca₃(PO₄)₂ calcium phosphate
9. NH₄Cl ammonium chloride
10. CuCN copper (I) cyanide
11. FeCO₃ iron (II) carbonate
12. Zn(NO₃)₂ zinc nitrate
13. Hg(OH)₂ mercury (II) hydroxide
14. PbSO₄ lead (II) sulfate
15. Sn(CrO₄)₂ tin (IV) chromate
16. MnCr₂O₇ manganese (II) dichromate
17. Fe₂(SO₃)₃ iron (III) sulfite
18. Cu(C₂H₃O₂)₂ copper (II) acetate

Write the formulas of the following compounds:

<u>Name</u>	<u>Cation</u>	<u>Anion</u>	<u>Formula</u>
1. iron (III) acetate	Fe^{3+}	$\text{C}_2\text{H}_3\text{O}_2^-$	$\text{Fe}(\text{C}_2\text{H}_3\text{O}_2)_3$
2. copper (II) nitrate	Cu^{2+}	NO_3^-	$\text{Cu}(\text{NO}_3)_2$
3. aluminum sulfite	Al^{3+}	SO_3^{2-}	$\text{Al}_2(\text{SO}_3)_3$
4. nickel (II) phosphate	Ni^{2+}	PO_4^{3-}	$\text{Ni}_3(\text{PO}_4)_2$
5. copper (I) cyanide	Cu^+	CN^-	CuCN
6. ammonium hydroxide	NH_4^+	OH^-	NH_4OH
7. mercury (I) permanganate	Hg_2^{2+}	MnO_4^-	$\text{Hg}_2(\text{MnO}_4)_2$
8. calcium chromate	Ca^{2+}	CrO_4^{2-}	CaCrO_4
9. magnesium cyanide	Mg^{2+}	CN^-	$\text{Mg}(\text{CN})_2$
10. chromium (III) sulfate	Cr^{3+}	SO_4^{2-}	$\text{Cr}_2(\text{SO}_4)_3$
11. mercury (II) nitrite	Hg^{2+}	NO_2^-	$\text{Hg}(\text{NO}_2)_2$
12. ammonium phosphate	NH_4^+	PO_4^{3-}	$(\text{NH}_4)_3\text{PO}_4$
13. tin (IV) dichromate	Sn^{4+}	$\text{Cr}_2\text{O}_7^{2-}$	$\text{Sn}(\text{Cr}_2\text{O}_7)_2$
14. lead (II) acetate	Pb^{2+}	$\text{C}_2\text{H}_3\text{O}_2^-$	$\text{Pb}(\text{C}_2\text{H}_3\text{O}_2)_2$
15. cobalt (II) carbonate	Co^{2+}	CO_3^{2-}	CoCO_3
16. silver nitrite	Ag^+	NO_2^-	AgNO_2
17. iron (III) hydroxide	Fe^{3+}	OH^-	$\text{Fe}(\text{OH})_3$
18. cobalt (IV) sulfite	Co^{4+}	SO_3^{2-}	$\text{Co}(\text{SO}_3)_2$