

Name Answer Key

Date \_\_\_\_\_ Period \_\_\_\_\_

**Mixed Formulas & Naming Compounds WS** Fill in the missing information. Remember, molecular compounds have no ions.

	Cation	Anion	Formula	Metal & NM OR Just Nonmetals?	Ionic Molecular or Acid?	Name
Ex. 1	–	–	PCl <sub>3</sub>	NM's	Molecular	Phosphorous trichloride
Ex. 2	Li <sup>+</sup>	N <sup>3-</sup>	Li <sub>3</sub> N	M & NM	Ionic	lithium nitride
Ex. 3	H <sup>+</sup>	Cl <sup>-</sup>	HCl	NM's	Acid	hydrochloric acid
1.	--	--	N <sub>2</sub> O <sub>4</sub>	NM's	Molecular	dinitrogen tetroxide
2.	--	--	SF <sub>6</sub>	NM's	Molecular	sulfur hexafluoride
3.	Na <sup>+</sup>	HCO <sub>3</sub> <sup>-</sup>	NaHCO <sub>3</sub>	M & NM	Ionic	sodium hydrogen carbonate or sodium bicarbonate
4.	Fe <sup>3+</sup>	S <sup>2-</sup>	Fe <sub>2</sub> S <sub>3</sub>	M & NM	Ionic	iron (III) sulfide
5.	NH <sub>4</sub> <sup>+</sup>	SO <sub>4</sub> <sup>2-</sup>	(NH <sub>4</sub> ) <sub>2</sub> SO <sub>4</sub>	all NM's	Ionic	ammonium sulfate
6.	H <sup>+</sup>	Br <sup>-</sup>	HBr	all NM's	Acid	hydrobromic acid
7.	Hg <sup>2+</sup>	O <sup>2-</sup>	HgO	M & NM	Ionic	mercury(II) oxide
8.	--	--	N <sub>2</sub> O	NM's	Molecular	dinitrogen monoxide
9.	H <sup>+</sup>	IO <sup>-</sup>	HIO	all NM's	Acid	hypoiodous acid
10.	--	--	NCl <sub>3</sub>	NM's	Molecular	nitrogen trichloride
11.	Mn <sup>4+</sup>	Cr <sub>2</sub> O <sub>7</sub> <sup>2-</sup>	Mn(Cr <sub>2</sub> O <sub>7</sub> ) <sub>2</sub>	M & NM	Ionic	manganese(IV) dichromate
12.	--	--	CS <sub>2</sub>	NM's	Molecular	carbon disulfide
13.	Ba <sup>2+</sup>	H <sup>-</sup>	BaH <sub>2</sub>	M & NM	Ionic	barium hydride
14.	H <sup>+</sup>	SO <sub>3</sub> <sup>2-</sup>	H <sub>2</sub> SO <sub>3</sub>	all NM's	Acid	sulfurous acid
15.	Mg <sup>2+</sup>	CN <sup>-</sup>	Mg(CN) <sub>2</sub>	M & NM	Ionic	magnesium cyanide
16.	--	--	NF <sub>5</sub>	NM's	Molecular	nitrogen pentafluoride
17.	Co <sup>3+</sup>	NO <sub>2</sub> <sup>-</sup>	Co(NO <sub>2</sub> ) <sub>3</sub>	M & NM	Ionic	cobalt(III) nitrite
18.	Al <sup>3+</sup>	ClO <sub>4</sub> <sup>-</sup>	Al(ClO <sub>4</sub> ) <sub>3</sub>	M & NM	Ionic	aluminum perchlorate
19.	Cu <sup>+</sup>	Br <sup>-</sup>	CuBr	M & NM	Ionic	copper(I) bromide
20.	H <sup>+</sup>	NO <sub>2</sub> <sup>-</sup>	HNO <sub>2</sub>	all NMs	Acid	nitrous acid
21.	Ag <sup>+</sup>	NO <sub>3</sub> <sup>-</sup>	AgNO <sub>3</sub>	N & NM	Ionic	silver nitrate
22.	--	--	CO	NM's	Molecular	carbon monoxide