

Writing Chem Formulas and Naming CompoundsName Key

Date _____ Blk _____

A. Rules

- In a chemical formula the metal is written first and the non-metal is written second.
- When writing the chemical name, for simple ionic compounds, the suffix (ending) ide is given to the non-metal and it would be found on the right side of the periodic table.
- Polyatomics usually have these characteristics:
 - negative charge
 - more than one atom
 - a bracket
- The suffix (endings) for polyatomics are: ate or ite. The exceptions to these endings are: hydroxide & ammonium.
- Roman numerals are ONLY used when the metal has more than one ionic charge.
- When writing chemical names, Roman numerals are placed after the metal. Roman numerals are used for chemical names/chemical formulas (choose one).

B. Write the chemical formula for the following compounds.

1. sodium chloride	NaCl	21. cesium phosphate	Cs_3PO_4
2. magnesium fluoride	MgF_2	22. strontium bromide	SrBr_2
3. lithium sulphide	Li_2S	23. barium phosphide	Ba_3P_2
4. calcium phosphate	$\text{Ca}_3(\text{PO}_4)_2$	24. scandium sulphide	ScS
5. titanium (III) nitride	Ti_3N	25. chromium (III) sulphate	$\text{Cr}_2(\text{SO}_4)_3$
6. molybdenum (III) nitrite	Mo_3N	26. iron (II) thiocyanate	$\text{Fe}(\text{SCN})_2$
7. cobalt (III) carbonate	$\text{Co}_2(\text{CO}_3)_3$	27. ammonium chloride	NH_4Cl
8. zinc phosphate	$\text{Zn}_3(\text{PO}_4)_2$	28. manganese (III) sulphite	$\text{Mn}_2(\text{SO}_3)_3$
9. ammonium nitride	$(\text{NH}_4)_3\text{N}$	29. aluminum oxide	Al_2O_3
10. aluminum dichromate	$\text{Al}_2(\text{Cr}_2\text{O}_7)_3$	30. cadmium chromate	CdCrO_4
11. silver cyanide	AgCN	31. tin (IV) oxide	SnO_2
12. tungsten bromide	WBr_6	32. gold (III) nitrite	$\text{Au}(\text{NO}_2)_3$
13. ammonium phosphate	$(\text{NH}_4)_3\text{PO}_4$	33. nickel (II) nitride	Ni_3N_2
14. lead (IV) phosphite	Pb_2PO_3	34. sodium acetate	NaCH_3COO
15. potassium phosphide	K_3P	35. ammonium thiocyanate	NH_4SCN
16. beryllium dichromate	$\text{Be}(\text{Cr}_2\text{O}_7)$	36. calcium chlorate	$\text{Ca}(\text{ClO}_3)_2$
17. zirconium nitride	Zr_3N_2	37. aluminum hydroxide	$\text{Al}(\text{OH})_3$
18. copper (II) cyanide	$\text{Cu}(\text{CN})_2$	38. nickel (II) chloride	NiCl_2
19. chromium (III) carbonate	$\text{Cr}_2(\text{CO}_3)_3$	39. rhenium (VII) oxide	Re_2O_7
20. mercury (II) iodide	HgI_2	40. platinum (IV) phosphate	$\text{Pt}_3(\text{PO}_4)_4$

C. Write the chemical name for each of the following compounds.

1. NaF	Sodium fluoride
2. Li_3PO_4	Lithium phosphate
3. NiCl_3	Nickel (III) chloride
4. $\text{Al}(\text{CN})_3$	Aluminum cyanide
5. $\text{Mn}_3(\text{PO}_4)_7$	Manganese (VII) phosphate
6. HgO	Mercury (II) oxide
7. CoN	Cobalt (III) nitride
8. $\text{Zr}(\text{CrO}_4)_2$	Zirconium (IV) chromate
9. CdO	Cadmium oxide
10. $\text{Co}_3(\text{PO}_4)_2$	Cobalt (II) phosphate
11. Ti_2O_3	Titanium (III) oxide
12. SnO	Tin (II) oxide
13. RhI_3	Rhodium (III) iodide
14. BeCr_2O_7	Beryllium dichromate
15. $(\text{NH}_4)_3\text{PO}_3$	Ammonium phosphite
16. NH_4Cl	Ammonium chloride
17. PbO	Lead (II) oxide
18. $\text{W}(\text{OH})_6$	Tungsten hydroxide
19. CuCO_3	Copper (I) carbonate
20. CrPO_4	Chromium (III) phosphate
21. Ni_2S_3	Nickel (III) sulphide
22. $\text{Zn}_3(\text{PO}_4)_2$	Zinc phosphate
23. FeN	Iron (III) nitride
24. AuF_3	Gold (III) fluoride
25. CuNO_3	Copper (I) nitrate
26. KOH	Potassium hydroxide
27. SnO_2	Tin (IV) oxide
28. CsSCN	Cesium thiocyanate
29. AuHCO_3	Gold (I) hydrogen carbonate
30. AlP	Aluminum phosphide