

Nomenclature B– Naming Transition Ions

Use the stock system to name the cation and add –ide to the end of the anion.

Give the names of the following compounds:

1. AgCl silver chloride
2. FeI₃ iron (III) iodide
3. MnO manganese (II) oxide
4. ZnF₂ zinc fluoride
5. FeN iron (III) nitride
6. CuI copper (I) iodide
7. Cr₂S₃ chromium (III) sulfide
8. Cd₃P₂ cadmium phosphide
9. HgBr₂ mercury (II) bromide
10. CuO copper (II) oxide
11. Mn₃N₄ manganese (IV) nitride
12. CoF₂ cobalt (II) fluoride
13. SnO₂ tin (IV) oxide *hard one*
14. PbS lead (II) sulfide
15. Hg₂I₂ mercury (I) iodide (Recall: Hg⁺¹-Hg⁺¹ diatomic ion)
16. Co₃P₄ cobalt (IV) phosphide
17. SnBr₂ tin (II) bromide
18. PbS₂ lead (IV) sulfide
19. Ag₂O silver oxide
20. CoCl₃ cobalt (III) chloride

Give the formulas of the following compounds:

<u>Name</u>	<u>Cation</u>	<u>Anion</u>	<u>Compound</u>
1. copper (I) fluoride	Cu^{+1}	F^{-}	CuF
2. tin (II) sulfide	Sn^{+2}	S^{2-}	SnS
3. cobalt (IV) nitride	Co^{+4}	N^{3-}	Co_3N_4
4. iron (III) oxide	Fe^{3+}	O^{2-}	Fe_2O_3
5. mercury (I) bromide	Hg_2^{2+}	Br^{-}	Hg_2Br_2
6. manganese (IV) sulfide	Mn^{+4}	S^{2-}	MnS_2
7. lead (II) iodide	Pb^{+2}	I^{-}	PbI_2
8. iron (II) phosphide	Fe^{3+}	P^{3-}	Fe_3P_2
9. copper (II) oxide	Cu^{+2}	O^{2-}	CuO
10. tin (IV) chloride	Sn^{+4}	Cl^{-}	SnCl_4
11. silver sulfide	Ag^{+}	S^{2-}	Ag_2S
12. mercury (II) nitride	Hg^{2+}	N^{3-}	Hg_3N_2
13. lead (IV) oxide	Pb^{+4}	O^{2-}	PbO_2
14. cobalt (II) fluoride	Co^{+2}	F^{-}	CoF_2
15. zinc bromide	Zn^{2+}	Br^{-}	ZnBr_2