SNC2D
Ms. Kueh

Multivalent Compounds

Multivalent metals can lose different numbers of electrons, having more than one valence.

Example: Fe^{3+} and Fe^{2+}

To avoid confusion when naming the compounds they form, we identify the metal valence using a *roman numeral* in *brackets*:

Charge Number (Valence)	Roman Numeral
1	(I)
2	(II)
3	(III)
4	(IV)
5	(V)
6	(VI)

Name to Formula:

Example:

a) Iron (II) oxide

b) Iron (III) oxide

c) Copper (II) nitride

d) Lead (IV) sulfide

Formula to Name:

Example:

a) Ni_2O

b) FeI_2

c) Co_2S_3

d) $PbBr_4$

e) Hg_2O

f) Fe_2S_3

Find the formula for the following compounds:

1. iron (III) chloride _____
2. gold (III) bromide _____
3. copper (I) sulfide _____
4. lead (II) bromide _____
5. lead (IV) oxide _____
6. tin (IV) iodide _____
7. copper (II) sulfide _____
8. lead (IV) nitride _____
9. tin (II) iodide _____
10. cobalt (II) phosphide _____
11. mercury (I) sulfide _____
12. tin (II) sulfide _____
13. copper (II) iodide _____
14. manganese (II) oxide _____
15. chromium (II) nitride _____
16. mercury (II) fluoride _____
17. tin (IV) oxide _____
18. chromium (II) chloride _____
19. iron (II) phosphide _____

Name the following compounds:

1. FeO _____
2. Fe_2O_3_____
3. CuBr _____
4. PbO _____
5. PbO_2_____
6. CuS _____
7. $ZnBr_2$_____
8. $AuCl_3$_____
9. Sn_3P_4_____
10. $CrCl_3$_____
11. MnO_2_____
12. Hg_2O _____
13. HgO _____
14. Co_2S_3_____
15. CoO_____