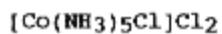


Cheryl Shimazu
Associate Professor in Chemistry

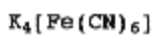
Chemistry 112 Lec. Notes Answer Keys EXAM 3

Nomenclature

EXAMPLES:

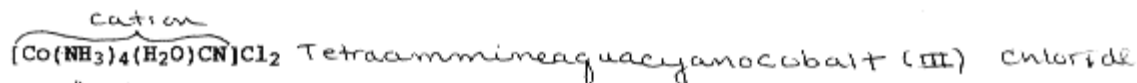


one word
Pentaamminechlorocobalt(III) Chloride



Potassium Hexacyanoferrate(II)
one word

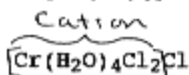
EXERCISES:



Sodium Tetrachloroxomolybdate(IV)



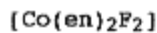
Sodium Tetrahydroxoaluminate



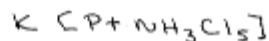
Tetraaquadichlorochromium(III) chloride



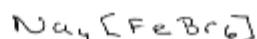
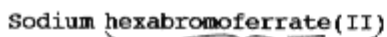
Potassium Tetracyanonickelate(0)



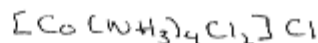
Bisethylenediaminedifluorocobalt(II)



Anion



Anion



Cation

Nomenclature

CHEMISTRY 1.2 WORKSHEET ON NOMENCLATURE OF COORDINATION COMPOUNDS AND IONS

A. Name the following complex compounds or ions:

1. $[\text{Al}(\text{H}_2\text{O})_6] \text{Br}_3$ Hexaquaaluminum (III) bromide
2. $[\text{Cr}(\text{NH}_3)_6] \text{Cl}_3$ Hexaamminechromium (III) chloride
3. $\text{K}_3[\text{FeF}_6]$ Potassium hexafluoroferrate (III)
4. $[\text{Zn}(\text{OH})_4]^{2-}$ Tetrahydroxozincate (II) ion
5. $[\text{Co}(\text{H}_2\text{O})_4\text{Cl}_2] \text{Cl}$ Tetraaquadichlorocobalt (III) chloride
6. $[\text{Cu}(\text{NH}_3)_4]^{2+}$ Tetraamminecopper (II) ion
7. $\text{K}_2[\text{SnCl}_6]$ Potassium hexachlorostannate (IV)
8. $[\text{Pt}(\text{NH}_3)_4\text{Cl}_2][\text{PtCl}_6]$ Tetraammine dichloroplatinum (IV) hexachloroplatinate (IV)

B. Write the formula for each of the following complex compounds or ions.

1. Hexaamminecobalt (III) chloride $[\text{Co}(\text{NH}_3)_6] \text{Cl}_3$
2. Diamminetetrabromoplatinum (VI) bromide $[\text{Pt}(\text{NH}_3)_2 \text{Br}_4] \text{Br}_2$
3. Tetraaquacadmium (II) nitrate $[\text{Cd}(\text{H}_2\text{O})_4] (\text{NO}_3)_2$
4. Diamminesilver (I) ion $[\text{Ag}(\text{NH}_3)_2]^+$
5. Sodium tetracyanocuprate (I) $\text{Na}_3[\text{Cu}(\text{CN})_4]$
6. Silver hexacyanoferrate (II) $\text{Ag}_4[\text{Fe}(\text{CN})_6]$
7. Tetraammineoxalatonicel (II) $[\text{Ni}(\text{NH}_3)_4 \text{C}_2\text{O}_4]$