

Review So Far

Is it 2 nonmetals?

YES : Use Greek Prefixes
 to indicate number of
 each kind of atom.

It is metal +
nonmetal

e.g. S_2Cl_4
 disulphur tetrachloride

ASK:

Is the metal
type 1 or type 2?

Type 1

Al
+3

Type 2

Fe
+3+2

e.g. Al_2O_3 ← NO G.P
NO RN

Aluminum oxide

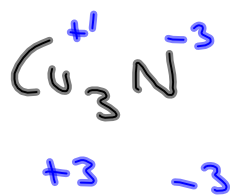
e.g. $FeCl_3$ or $FeCl_2$

iron (III) chloride

iron (II) chloride

Write metal name then
nonmetal name, change
end to 'ide'.

Use Roman numeral
to show charge
of each
individual metal ion.

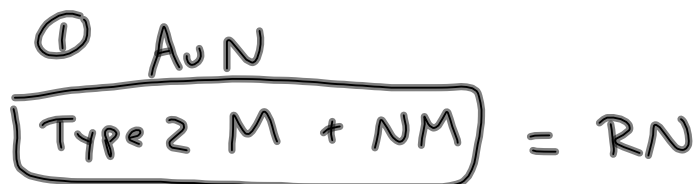


copper (I) nitride

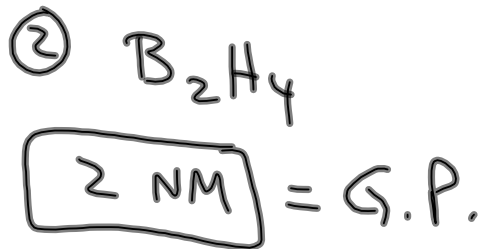
Name :

- ① Ag_3N : Silver nitride
- ② $\overset{\text{NM}}{\text{As}}\overset{\text{NM}}{\text{Br}}_5$: arsenic pentabromide
- ③ $\overset{+1}{\text{Hg}}_2\overset{-2}{\text{S}}$ mercury (I) sulphide
 $\overset{+2}{\text{Hg}}\overset{-2}{\text{S}}$
- ④ ZnO zinc oxide
- ⑤ CCl_4 carbon tetrachloride
- ⑥ $\overset{+4}{\text{Pt}}\overset{-2}{\text{S}}_2$ platinum (IV) sulphide
 $\overset{+4}{\text{Pt}}\overset{-4}{\text{S}}$

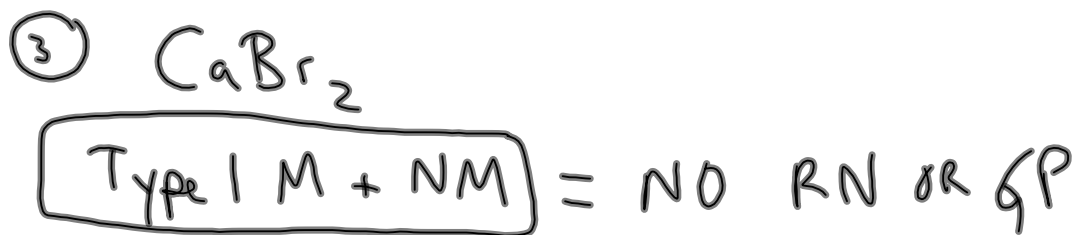
Do p.4 in violet pkg



Gold (III) nitride



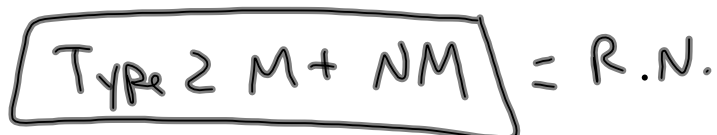
Diboron tetrahydride



Calcium Bromide



Sulphur hexafluoride



Polyatomic Ion ∴ a "clump"
of atoms
which has
an overall
charge.

"poly"
↓
"many"

↓
charged
particle

* When a polyatomic ion is present, it's an ionic compound.

* Rules for naming ionic compounds apply.

i.e. Type 1 Metal present = no roman numerals

Type 2 Metal present = need roman numerals

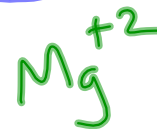
Type I Ionic Compounds which
Contain Polyatomic Ions.



aluminum hydroxide

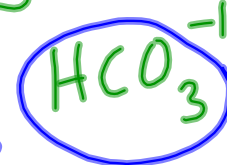


Magnesium bicarbonate



OR

Magnesium hydrogen carbonate



e.g. $ZnSO_4$
Zinc sulphate

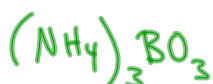
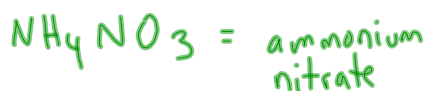
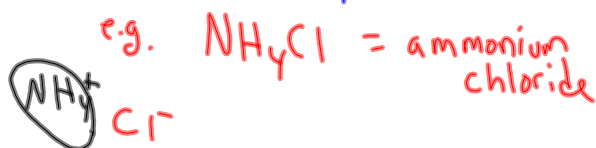
e.g. $Al_2(SO_3)_3$
Aluminum sulphite

Name :

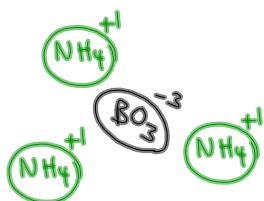
- ① CdCr_2O_7 cadmium dichromate
- ② $\text{Os}(\text{CrO}_4)_2$ Osmium chromate
- ③ $\text{Mo}(\text{PO}_4)_2$ Molybdenum phosphate
- ④ $\text{Sr}(\text{C}_2\text{H}_3\text{O}_2)_2$ Strontium acetate

All polyatomic ions shown so far are negatively charged (so they are in second half of compound).

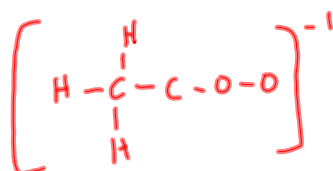
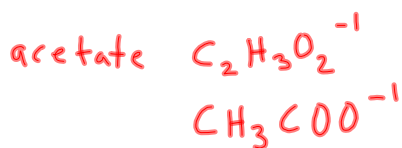
There is only one polyatomic ion that is positively charged, that you'll see in the front of a compound: $\text{NH}_4^{+1} = \text{ammonium}$



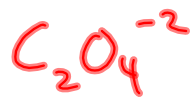
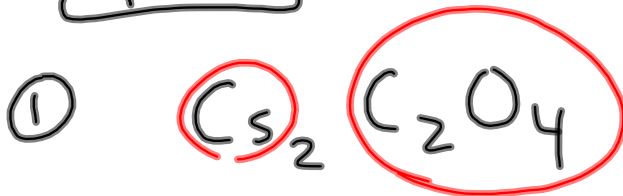
ammonium borate



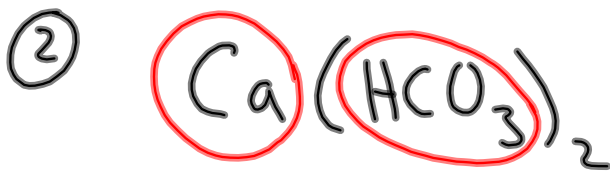
p. 5 → 1st half



P. S



cesium oxalate



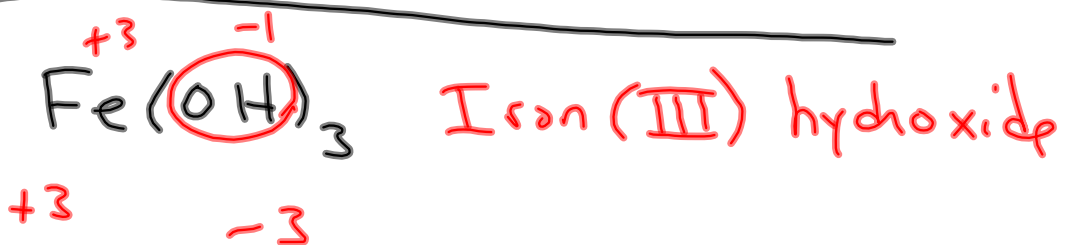
bicarbonate or hydrogen carbonate

calcium

ANS: calcium bicarbonate

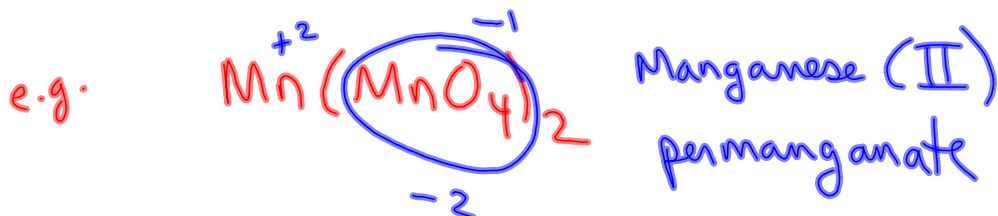
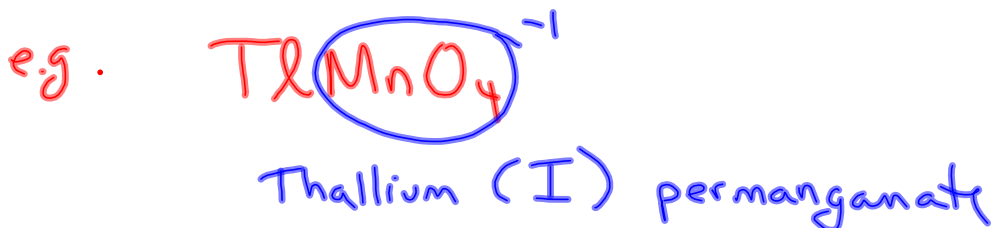
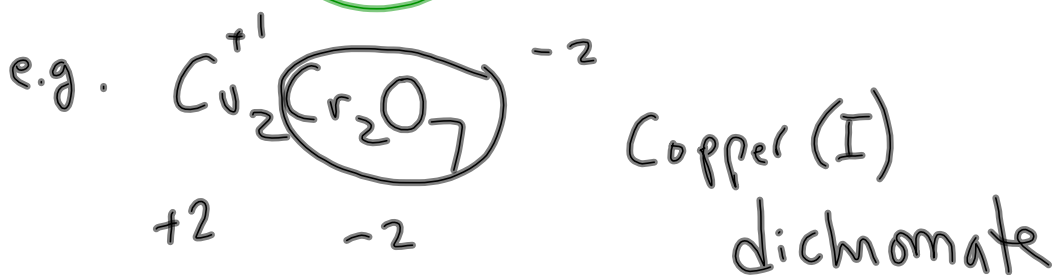
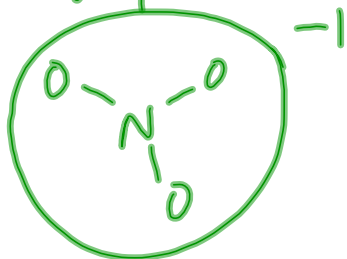
- ③ Ag_3PO_4
silver phosphate
- ④ $\text{Cd}_3(\text{PO}_4)_2$
cadmium phosphate
- ⑤ KSCN potassium thiocyanate
- ⑥ $(\text{NH}_4)_2\text{CO}_3$ ammonium carbonate
- ⑦ $\text{Ba}(\text{CH}_3\text{COO})_2$ barium acetate
- ⑧ LiOH
Lithium hydroxide
- ⑨ SrSO_3 strontium sulphate
- ⑩ $\text{Mg}_3(\text{BO}_3)_2$ magnesium borate
- ⑪ ZnS_2O_3 zinc thiosulphate
- ⑫ NH_4Br Ammonium bromide

Naming Type II Ionic Compounds Which Contain a Polyatomic Ion





only 1 of it



Do : bottom p5, top p.6
(1-20)