

Type IV - Acidic Nomenclature (ionic)

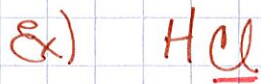
• 2 types of acids - have H^{1+} as their cation

↳ binary acids
- do not have oxygen in it

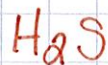
↳ oxyacids
- have oxygen in it.

(1) Binary Acids

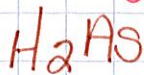
• Names
- write hydro + 2nd element's name + ic acid



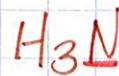
hydrochloric acid



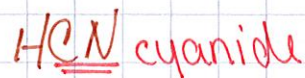
hydrosulfuric acid



Hydroarsenic
Acid



hydronitric acid



hydrocyanic acid

• Formulas

- write H^{1+}
- write symbol & charge for anion
- criss-cross charges

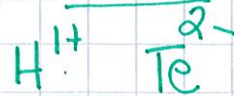
Ex) hydrofluoric acid



hydrophosphoric acid



hydrotelluric acid

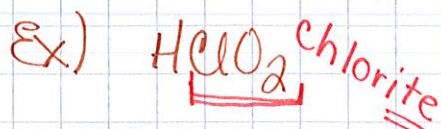


(2) Oxyacids

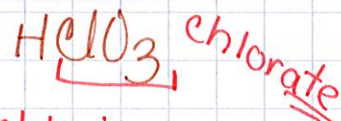
• Names

- Look at the polyatomic ion.
- If the name of the polyatomic ion ends in:

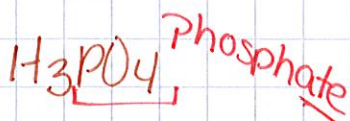
ate, change ate to ic acid or ite, change ite to ous acid



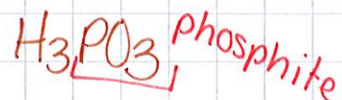
chlorous acid



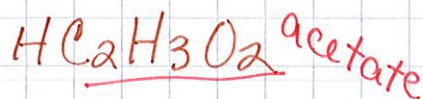
chloric acid



phosphoric acid



phosphorous acid



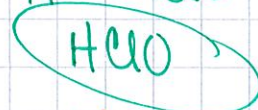
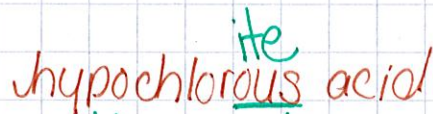
acetic acid

• Formulas

- write H^{1+}
- Write the appropriate polyatomic ion
ic \rightarrow ate ous-ite
- Criss-cross charges



nitric acid



sulfurous acid

