

(1)

Oxyacids - have H^{1+} as the cation + they contain oxygen

Names - do not use the prefix hydro-

- Look at the polyatomic ion's name

ite?
change to -ous acid

ex) HNO_3 nitrate
ic
nitric acid

H_2SO_3 sulfite
sulfurous acid

ate?
change to -ic acid

$HClO_2$ chlorite
ous
chlorous acid

H_3PO_4 phosphate
phosphoric acid

Practice

(1) H_2CO_3

carbonic acid

HNO_2

nitrous acid

$HClO_4$ perchlorate
perchloric acid

Formulas

- write H^{1+}

- Look at polyatomic ion ? its name

- ous?

use ite

- criss-cross'

Ex) acetic acid

H^{1+} $C_2H_3O_2^{1-}$

$H C_2 H_3 O_2$
or

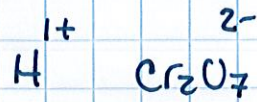
* $[CH_3COOH]$ old

sulfurous acid

H^{1+} SO_3^{2-}

H_2SO_3

dichromic acid



hypochlorous acid



Covalent Bonding

- ↳ occurs between 2 nonmetals
- ↳ share valence e⁻'s to have an octet (total of 8 valence e⁻)
 - ↳ because neither nonmetal is willing to give up their valence e⁻'s (have high ionization energies)

Types of Covalent Bonds

(1) Pure covalent
- share e⁻'s equally

(2) Polar Covalent
- share e⁻'s unequally

How do you know which type it is?

Find the difference in their electronegativities

pure

$$0 \rightarrow .4$$

polar

$$.4 - 1.3$$

higher than 1.3 (it's ionic)

