

# Homework - Worksheet



# Naming and Writing Formulas for Acids and Bases

## Reminder:

Acids are **aqueous hydrogen compounds** that turn blue litmus red.

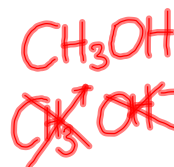
Bases are aqueous solutions of **ionic hydroxides** that turn red litmus blue.

## IDENTIFYING ACIDS AND BASES FROM FORMULA'S

Most acid can be identified from **starting with H** or ending in COOH.

i.e. HCl, H<sub>2</sub>SO<sub>4</sub>, CH<sub>3</sub>COOH

**Note:** NH<sub>3</sub> and CH<sub>4</sub> are not acids!



Most bases can be identified from ending in -OH

Bases are named using the rules for naming ionic compounds.

**Ex. NaOH      sodium hydroxide**



When naming acids, common names (for common acids) or IUPAC names can be used.

### Classical Acid Names

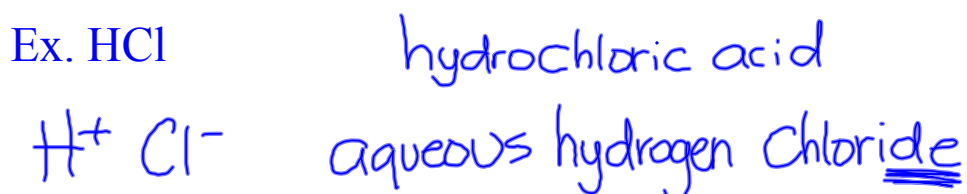
- used the suffix **-ic** Ex. sulfuric
- used hydro and the suffix **-ic** Ex. hydrochloric
- used suffix **-ous** Ex. sulfurous
- and others (see inside back cover)

### IUPAC (modern) Acid Names

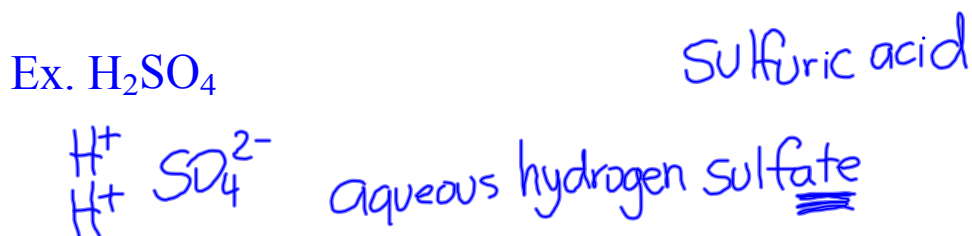
- name the acid as an aqueous hydrogen compound
- Ex. aqueous hydrogen sulfide - H<sub>2</sub>S<sub>(aq)</sub>

## Rules for Naming Acids

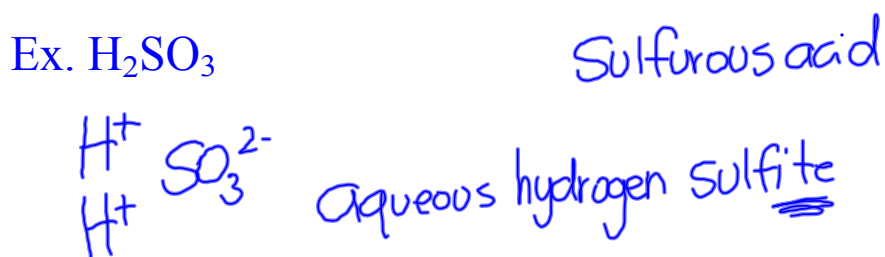
1. If anion ends in -ide, the acid is "hydro\_\_\_\_\_ic acid"



2. If anion ends in -ate, the acid is "\_\_\_\_\_ic acid"



3. If anion ends in -ite, the acid is "\_\_\_\_\_ous acid"



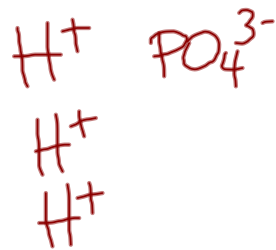


aqueous hydrogen benzoate

benzoic acid

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phosphoric acid



	Litmus Test	Solution Conductivity
Ionic		
Molecular		
Acids		
Bases		

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**EXERCISE # 26-33**