

Name: \_\_\_\_\_ Date: \_\_\_\_\_ Block: \_\_\_\_\_

### Practice Worksheet: Naming Acids

#### Remember...

When the anion does **NOT** contain Oxygen:

- The acid name comes from the *root name of the anion*.
- The prefix **hydro-** and the suffix **-ic acid** are then added to the root name of the anion.

Examples:

HCl, which contains the anion chloride, is called **hydrochloric acid**.

HCN, which contains the anion cyanide, is called **hydrocyanic acid**.

When the anion **DOES** contains Oxygen:

- The name will depend on the name of the *polyatomic anion*.
- **DO NOT** use the prefix hydro.
- Suffixes are used based on the ending of the original name of the *polyatomic anion*.
- If the name of the polyatomic anion ended with -ate, change it to -ic for the acid and if it ended with -ite, change it to -ous in the acid.

ATE → IC

Think... I **ate** it and it tasted **icky**

ITE → OUS

Examples:

HNO<sub>3</sub>, which contains the polyatomic ion nitrate, is called **nitric acid**.

HNO<sub>2</sub>, which contains the polyatomic ion nitrite, is called **nitrous acid**.

## Naming Acids Worksheet

Name the following as acids

$\text{H}_2\text{C}_2\text{O}_4$  \_\_\_\_\_

$\text{H}_2\text{CO}_3$  \_\_\_\_\_

$\text{H}_2\text{Cr}_2\text{O}_7$  \_\_\_\_\_

$\text{H}_2\text{CrO}_4$  \_\_\_\_\_

$\text{H}_2\text{S}$  \_\_\_\_\_

$\text{H}_2\text{Se}$  \_\_\_\_\_

$\text{H}_2\text{SO}_3$  \_\_\_\_\_

$\text{H}_2\text{SO}_4$  \_\_\_\_\_

$\text{H}_3\text{AsO}_4$  \_\_\_\_\_

$\text{H}_3\text{PO}_4$  \_\_\_\_\_

$\text{HBr}$  \_\_\_\_\_

$\text{HBrO}_3$  \_\_\_\_\_

$\text{HC}_2\text{H}_3\text{O}_2$  \_\_\_\_\_

$\text{HCl}$  \_\_\_\_\_

$\text{HClO}$  \_\_\_\_\_

$\text{HClO}_2$  \_\_\_\_\_

$\text{HClO}_4$  \_\_\_\_\_

$\text{HCN}$  \_\_\_\_\_

$\text{HF}$  \_\_\_\_\_

$\text{HI}$  \_\_\_\_\_

$\text{HMnO}_4$  \_\_\_\_\_

$\text{HNO}_2$  \_\_\_\_\_

$\text{HNO}_3$  \_\_\_\_\_

Write formulas for the following acids

acetic acid \_\_\_\_\_

arsenic acid \_\_\_\_\_

bromic acid \_\_\_\_\_

carbonic acid \_\_\_\_\_

chromic acid \_\_\_\_\_

dichromic acid \_\_\_\_\_

hydrobromic acid \_\_\_\_\_

hydrochloric acid \_\_\_\_\_

hydrocyanic acid \_\_\_\_\_

hydrofluoric acid \_\_\_\_\_

hydroiodic acid \_\_\_\_\_

hydroselenic acid \_\_\_\_\_

hydrosulfuric acid \_\_\_\_\_

hypochloric acid \_\_\_\_\_

hypochlorous acid \_\_\_\_\_

nitric acid \_\_\_\_\_

nitrous acid \_\_\_\_\_

oxalic acid \_\_\_\_\_

perchloric acid \_\_\_\_\_

permanganic acid \_\_\_\_\_

phosphoric acid \_\_\_\_\_

sulfuric acid \_\_\_\_\_

sulfurous acid \_\_\_\_\_