

## Naming Ws #6: Naming Acids

Acids can be named using 3 rules that focus on the ending of the anion of the acid.

| <u>Anion Ending:</u> | <u>Change To:</u>  | <u>Example:</u>   |                   |
|----------------------|--------------------|-------------------|-------------------|
| -ide                 | Hydro _____ic Acid | HCl               | Hydrochloric Acid |
| -ite                 | _____ous Acid      | HClO <sub>2</sub> | Chlorous Acid     |
| -ate                 | _____ic Acid       | HClO <sub>3</sub> | Chloric Acid      |

A) Complete the chart

|    | Acid Formula                                  | Anion Formula    | Name of Anion | Acid Name          |
|----|---|------------------|---------------|--------------------|
| 1. | HF  | F <sup>1-</sup>  | Fluoride      | Hydrofluoric Acid  |
| 2. | H <sub>2</sub> SO <sub>4</sub>                |                  |               |                    |
| 3. | HBr   | Br <sup>1-</sup> | Bromide       | Hydrobromic Acid   |
| 4. | HC <sub>2</sub> H <sub>3</sub> O <sub>2</sub> |                  |               |                    |
| 5. | H <sub>2</sub> S                              | S <sup>2-</sup>  | Sulfide       | Hydrosulfuric Acid |
| 6. | HNO <sub>2</sub>                              |                  |               |                    |

B) Write the formulas of the following acids

7. nitric acid     **HNO<sub>3</sub>**
8. hydrochloric acid
9. acetic acid     **HC<sub>2</sub>H<sub>3</sub>O<sub>2</sub>**
10. hydrofluoric acid
11. phosphorous acid     **H<sub>3</sub>PO<sub>3</sub>**
12. carbonic acid
13. nitrous acid     **HNO<sub>2</sub>**
14. phosphoric acid
15. hydrosulfuric acid     **H<sub>2</sub>S**

C) Name the following acids

16. HNO<sub>3</sub>
17. H<sub>2</sub>SO<sub>4</sub>     **Sulfuric Acid**
18. H<sub>2</sub>SO<sub>3</sub>
19. HC<sub>2</sub>H<sub>3</sub>O<sub>2</sub>     **Acetic Acid**
20. HBr
21. HNO<sub>2</sub>     **Nitrous Acid**
22. HClO
23. H<sub>2</sub>CO<sub>3</sub>     **Carbonic Acid**
24. HCl