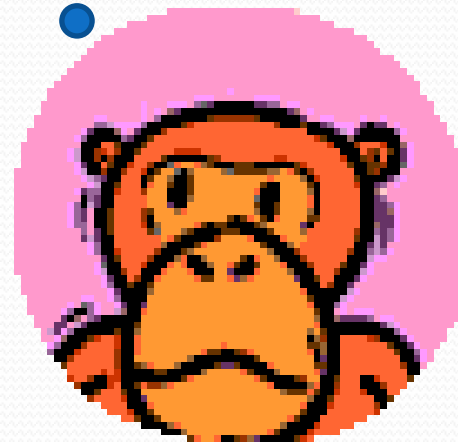


Naming Acids



How do you know that
it's an acid?

Most likely it will have H
(hydrogen) as the first
element in the
compound.

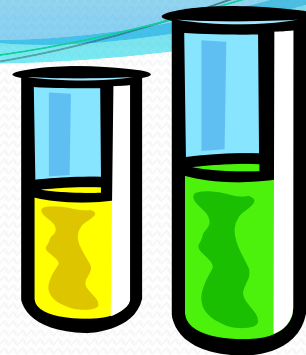


Binary Acids

- Contains two elements
- Prefix is always hydro-
- Name the second element with the suffix -ic acid
- Example: HCl is called hydrochloric acid; HI is called hydroiodic acid



Ternary Acids



- Acids that are made of more than two elements (including H and O); usually contain a polyatomic ion
- If polyatomic ion ends in $-ate$, replace with $-ic$ acid.
- If polyatomic ion ends in $-ite$, replace with $-ous$ acid.
- If polyatomic ion has one less O than the $-ite$, use prefix $hypo-$ and suffix $-ous$ acid
- If polyatomic ion has one more O than the $-ate$, use prefix $per-$ and suffix $-ic$ acid

Ternary Acid Example

- H_3PO_4 is phosphoric acid.
- H_3PO_3 is phosphorous acid.
- H_3PO_2 is hypophosphorous acid.
- H_3PO_5 is perphosphoric acid.



Practice

1. hydrofluoric acid
2. nitric acid
3. sulfurous acid
4. HBr
5. H_2CO_3
6. $\text{HC}_2\text{H}_3\text{O}_2$