

Week 11 – SCIENCE NOTE PAGE

Acids and Bases



Acids

- **Acids** - have an increased number of _____ ions (H^+) in solution when dissolved in water
- An acid's compound name has an **H** first
- Are usually poisonous

Bases

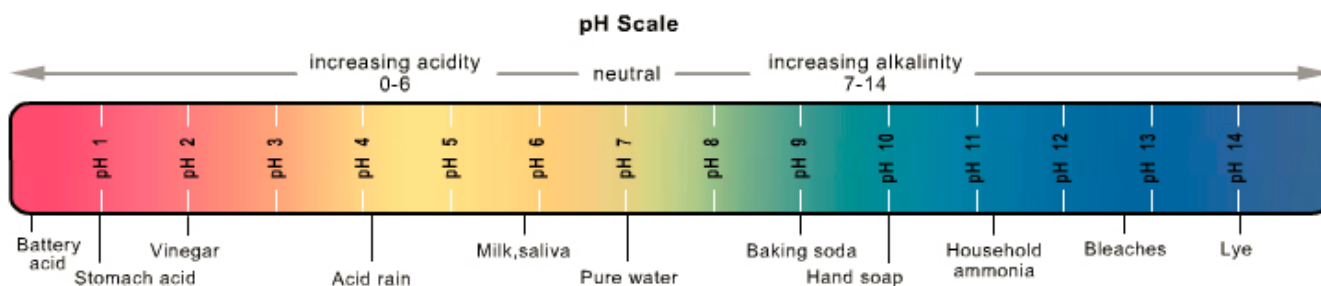
- **Bases** - have an increased number of _____ ions (OH^-) in solution when dissolved in water
- A base's compound name usually contains **OH**.
- Are usually poisonous

Acids vs. Bases

How do they taste?	Do they conduct electricity?	What is the pH level?	What are some other facts?	What are some examples?
<ul style="list-style-type: none"> • Acids have a sour taste. • Bases have a bitter taste. 	<ul style="list-style-type: none"> • Both acids and bases will conduct electricity when in an aqueous solution. 	<ul style="list-style-type: none"> • Acids have a pH less than 7. • Bases have a pH greater than 7. • Water has a pH of 7; it is neither an acid nor a base. 	<ul style="list-style-type: none"> • Acids react with metals to produce hydrogen gas. • Bases are slippery to the touch. • When acids and bases combine, they form salt and water. 	<p>Acids</p> <ul style="list-style-type: none"> • hydrochloric acid, HCl • acetic acid, CH_3COOH • boric acid, H_3BO_3 • sulfuric acid, H_2SO_4 <p>Bases</p> <ul style="list-style-type: none"> • ammonia, NH_3 • lye (sodium hydroxide), $NaOH$ • sodium bicarbonate, $NaHCO_3$

pH Scale

- The **pH Scale** is how the _____ of acids and bases are measured.



- What is a neutral pH? _____
- **Litmus Paper** – a material used to _____ the amount of acids and bases

Neutralization Reaction

- Acid + Base \rightarrow Salt + Water