Topic 8 – Acids, Bases, and Salts

Lesson 1 – Defining Acids and Bases

Terms to Know

Arrhenius Acids –

Arrhenius Bases –

Alternate Theory of Acids –

Alternate Theory of Bases –

pH –

Indicators –

Litmus Paper –

Phenolphthalein –

Bromthymol blue –

Comparison of Properties of Acids and Bases

|  |  |  |
| --- | --- | --- |
| Property | Acids | Bases |
| Electrolytes | Yes | Yes |
| Change Color of Indicators? | Yes | Yes |
| React in Neutralization reactions? | Yes | Yes |
| Ion produced in solution | H+ is only positive ion | OH- is only negative ion |
| Relative ion concentration | H+ > OH- | OH- > H+ |
| pH value | Less than 7 | Greater than 7 |
| When added to water or another solution | Increase H+  Decrease pH  Decrease OH- | Decrease H+  Increase pH  Increase OH- |
| Effect on Litmus | Change it red | Change it blue |
| Effect on phenolphthalein | None – stays colorless | Change it to pink |
| Taste | Sour | Bitter |
| React with some metals to produce H2 gas? | Yes | No |

Neutral Substances – pH = 7

H+ = OH-







