

# Acids and Bases

| Text | Unit Objectives:  |
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| 19.1 | 1. Know the characteristic properties of both acids and bases. Be able to identify an acid or base by looking at its formula.   |
| 19.1 | 2. Be able to define both acids and bases using the Arrhenius theory and Bronsted-Lowry theory. Know how each theory differs.   |
| 19.1 | 3. By looking at an acid-base reaction be able to identify an acid and its conjugate base. Also be able to identify a base and its conjugate acid.                    |
| 19.4 | 4. Be able to explain the process of neutralization.  |
| 19.4 | 5. Be able to conduct an acid-base titration, know the products formed in the reaction, and be able to calculate the molarity of the solution titrated.               |
| 19.5 | 6. Using the $K_w$ value listed in table L for water be able to determine the $[H^+]$ concentration given the $[OH^-]$ concentration and vice versa.                  |
| 19.2 | 7. Be able to determine the pH of a solution if given the $[H^+]$ concentration or the $[OH^-]$ . Be able to classify a solution as acidic basic or neutral given pH. |
| 19.5 | 8. Given a salt's formula be able to determine if the salt will cause water to become acidic, basic, or neutral (hydrolysis).   |

### Essential Vocabulary

Acid, Amphoteric, Base, Bronsted-Lowry acid (or base), Conjugate Pair, Hydrolysis, Indicators, Neutralization, pH, Strong Acid, Strong Base, Titration, Weak Acid, Weak Base

### Announcements: