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| **Main ideas** | **Essential Questions** |
| * Acids produce hydrogen ions (H+) in water, and bases produce hydroxide ions (OH-) in water. * Strength describes the degree to which an acid or a base dissociates in water: strong acids and bases dissociate nearly completely, weak acids and bases dissociate partially. * Concentration describes the amount of acid or base dissolved in a certain volume of water. * An acid and a base react to form a salt and water. | 1. What is an acid? What is a base?  2. What are the properties of acids and bases?  3. How types of ions do acids and bases form?  4. What determines the strength of an acid or a base?  5. What is a neutralization reaction?  6. What are the products of a neutralization reaction? |
| **Skills** | |
| 1. Compare and contrast acids and bases and identify the characteristics they have.  2. Examine some formulas and uses of common acids and bases.  3. Determine how the process dissociation apply to acids and bases.  4. Determine what is responsible for the strength of an acid or a base.  5. Examine the link between pH the strength of acids or bases.  6. Identify a neutralization reaction.  7. Determine what a salt is and how salts form. | |
| **Key vocabulary** | |
| 1. acid, hydrogen ion, base, hydroxide ion, ionization, indicator  2. strong acid, weak acid, strong base, weak base, pH  3. neutralization, salt, buffer | |

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| **STANDARDS** | **RESOURCES** |
| **PSc.2.2 Understand chemical bonding and chemical interactions.**  PSc.2.2.6 Summarize the characteristics and interactions of acids and bases. | 1.Key Words Worksheet  2.Unit Review Worksheet  3. Ppt – Classification of Matter  4. Class Worksheets  5. Holt physical science book  6. [www.ck12.org](http://www.ck12.org) |