

Key Concept Builder 

LESSON 3

Acid and Base Solutions

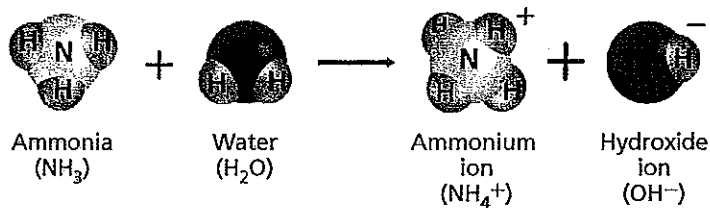
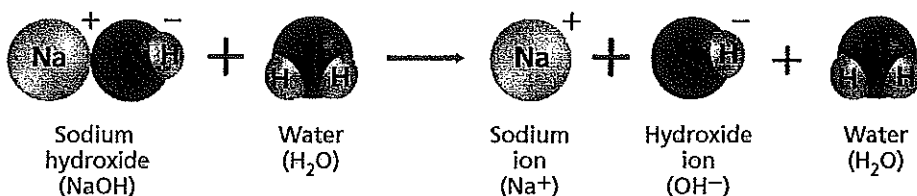
Key Concept What happens when acids and bases dissolve in water?

Directions: Answer the question on the lines provided.

1. How is *base* defined?

Directions: Use the diagram to answer each question on the lines provided.

Bases Mixed with Water



2. What happens when sodium hydroxide dissolves in water?

3. What happens when ammonia dissolves in water?

4. How is ammonia different from sodium hydroxide?

Copyright © Glencoe/McGraw-Hill, a division of The McGraw-Hill Companies, Inc.

Key Concept Builder **LESSON 3****Acid and Base Solutions****Key Concept** How does the concentration of hydronium ions affect pH?**Directions:** On each line, write the term from the word bank that correctly completes each sentence. Some terms may be used more than once.

acidic	basic	hydronium	hydroxide
inverse	neutral	pH	solution

- _____ means that as one thing increases, another thing decreases.
- For the safety of all swimmers, it is important for pool water to have the correct _____.
- A(n) _____ measure of the concentration of hydronium ions in a solution defines pH.
- When the concentration of _____ ions increases, the pH decreases.
- A solution with a lower pH is more _____.
- A solution with a higher pH is more _____.
- An acid is distinguished from a base by a higher amount of _____ ions than hydroxide ions.
- Bases are distinguished from an acid by a higher amount of _____ ions than hydronium ions.
- A change from one pH unit to another pH unit represents a ten-fold change in how acidic or basic a(n) _____ is.
- Solutions that have a pH of 7 are not acidic or basic; they are referred to as _____.