

Acids, Bases, and Solutions ▪ 7.4 Review and Reinforce**Acids and Bases in Solution****Understanding Main Ideas**

Complete the concept map shown below and answer the following questions on a separate sheet of paper.

0	1	2	3	4	5	6	7	8	9	10	11	12	13	14
{							{							
Substances with a pH in this range are 1. _____.							Substances with a pH in this range are 2. _____.							
In water, they form 3. _____ ions.							In water, they form 4. _____ ions.							

5. What is the difference between a strong acid and a weak acid?
6. What is the difference between a strong base and a weak base?
7. Which solution has a greater concentration of hydrogen ions (H^+), a solution with a pH of 3 or one with a pH of 7? Explain.
8. What are the products formed when a base reacts with an acid?
9. What is the pH of a neutral solution?

Building Vocabulary

Match each term with its definition by writing the letter of the correct symbol or definition on the line beside the term in the left column.

- | | |
|-------------------------|--|
| ____ 10. hydroxide ion | a. ionic compound that can form from the reaction of an acid with a base |
| ____ 11. pH scale | b. reaction between an acid and a base |
| ____ 12. hydrogen ion | c. series of numbers that indicates the concentration of hydrogen ions in solution |
| ____ 13. neutralization | d. H^+ |
| ____ 14. salt | e. OH^- |