

SECTION



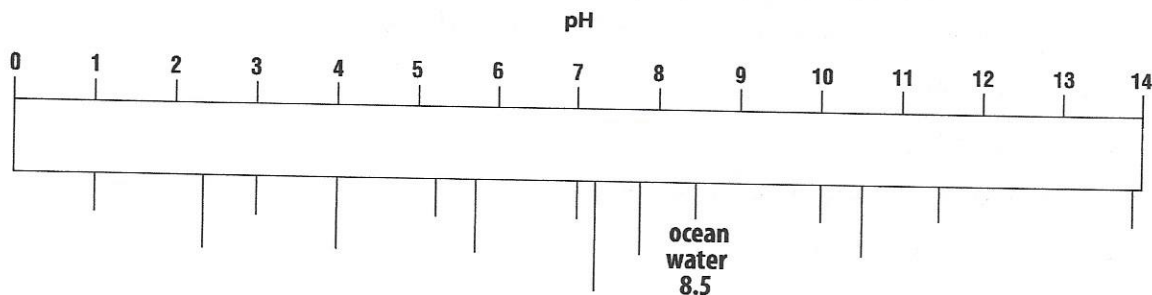
Study Guide

Strength of Acids and Bases

Chapter

24

Directions: The pH values of several common substances are listed below. Place each item from the list on the pH scale in its proper location. The first one has been done for you.



ocean water 8.5

tomatoes 4.0

lye 13.8

stomach acid 1.0

lemons 2.5

shampoo 5.8

bananas 5.2

blood 7.2

milk of magnesia 10.5

ammonia 11.5

eggs 7.8

soap 10.0

vinegar 3.0

Directions: Complete the table below by writing the name of each of the above substances under the proper heading. Place substances with a pH lower than 3.0 in the strong acids column. Place substances with a pH higher than 10.0 in the strong bases column.

1. Strong Acids	2. Weak Acids	3. Weak Bases	4. Strong Bases

Directions: Answer the following questions on the lines provided.

- Is pure water an acidic, basic, or neutral substance? _____
- Is the pH of a strong acid higher or lower than the pH of a weak acid of the same concentration?

- Is the pH of a strong base higher or lower than the pH of a weak base of the same concentration?

- On the pH scale, what are the values of acids and what are the values of bases?
