

Prepare Your Own Summary

In this chapter, you learned about the properties of acids, bases, and salts, and also how to distinguish between organic and inorganic compounds. Create your own summary of the key ideas from this chapter. You may include graphic organizers or illustrations with your notes. (See Science Skill 11 for help with using graphic organizers.) Use the following headings to organize your notes:

- Using pH and Acid-Base Indicators to Measure Acidity Levels
- Names, Formulas, and Properties of Common Acids and Bases
- Common Reactions Involving Acids
- Distinguishing between Organic Compounds and Inorganic Compounds
- Hydrocarbons and Alcohols

Checking Concepts

- State the pH value or pH range of the following.
 - a neutral solution
 - a basic solution
 - an acidic solution
- Copy and complete the following chart in your notebook.

Term	Definition	Used to Describe Acids, Bases, or Both?
Alkaline		
Corrosive		
Caustic		
Low pH		

- What is a pH typical of each of the following?
 - pure water
 - normal rainwater
 - acid precipitation
 - human blood
 - human saliva
- What is the increase in acidity associated with a decrease of one unit on the pH scale?
- Describe how you would use litmus paper to determine whether a solution is acidic, basic, or neutral.

- How can you identify an acid by looking at its chemical formula?
 - How can you identify a base by looking at its chemical formula?
- State the formula of each of the following.
 - an acid used to make fertilizers
 - a base that has the common name of caustic soda
 - a household base used as a kitchen cleaner
 - the active ingredient in milk of magnesia
 - an acid in your stomach that helps digest food
 - the battery acid used in automobiles
 - hydrated lime, used in soil and water treatment
 - the acid present in vinegar
- Give the chemical name for each compound in question 7.
- State whether each of the following describes acids, bases, or both.
 - taste sour
 - taste bitter
 - feel slippery
 - conduct electricity
 - have a pH greater than 7
 - produce hydrogen (H^+) ions in solution
 - react with metals, causing them to corrode
- What is meant by the term acid-base neutralization?
- When metal oxides are dissolved in water, are the resulting solutions acidic or basic?
 - When non-metal oxides are dissolved in water, are the resulting solutions acidic or basic?
- How does adding lime (calcium carbonate) help reduce the effects of acid precipitation in lake water?
- Define:
 - organic compound
 - inorganic compound
- What two elements are present in all hydrocarbon compounds?
 - What are three uses for hydrocarbons?