

**Note-taking
Worksheet****Acids, Bases, and Salts****Section 1 Acids and Bases**

- A. _____—contains at least one _____ atom that can be removed when the acid is dissolved in water, forming _____ ions
- B. _____ of acids
1. Taste _____
 2. _____ and can damage skin or tissue
 3. React with an _____ such as _____ paper to produce a predictable color change
- C. Common acids
1. Foods contain _____.
 - a. Citrus fruits have _____.
 - b. Yogurt and buttermilk have _____.
 - c. Vinegar, or _____, is in pickled foods.
 2. The stomach uses _____.
 3. Four acids are vital to _____.
 - a. _____ is used in car _____ and the manufacturing of _____.
 - b. _____ is used to manufacture _____, fertilizers, and _____ drinks.
 - c. _____ is used to manufacture _____ and explosives.
 - d. Steel can be cleaned with _____.
- D. _____—a substance that forms _____ ions in a water solution; also accepts _____ ions from acids
- E. _____ of bases
1. Many are _____ in pure undissolved state.
 2. Feel _____ in solution
 3. Strong bases are _____.
 4. React with _____ to produce predictable _____ changes; litmus paper turns _____

Note-taking Worksheet (continued)

- F. Common bases are used in _____, medications, fabrics, and deodorants.
- G. _____ of acids and bases
1. Acid describes compounds that can be _____ in water to form _____ ions.
 2. Base describes compounds that can form _____ ions in solution.
 3. Solutions of acids and solutions of bases are _____ to some extent.

Section 2 Strength of Acids and Bases

- A. The strength of an acid or base depends on how completely a compound separates into ions when dissolved in _____.
1. A _____ ionizes almost completely in solution.
 2. A _____ only partly ionizes in solution.
 3. A _____ dissociates completely in solution.
 4. A _____ does not dissociate completely.
 5. Strong acids and bases conduct _____ electricity than weak ones.
 6. Equations for strong acids and bases use a _____ arrow, indicating ions are formed.
 7. Equations for weak acids and bases use _____ arrows pointing in opposite directions, indicating an incomplete reaction.
 8. _____ and _____ are terms to describe the amount of acid or base dissolved.
- B. pH of a _____
1. _____ is a measure of the concentration of _____ in a solution or how acidic or basic it is.
 - a. pH lower than 7 means _____.
 - b. pH greater than 7 means _____.
 - c. pH exactly 7 indicates a _____ solution.
 2. pH is determined using a _____ paper or a pH _____.
 3. Blood contains _____ which keep the pH in the blood balanced at about 7.4.

Note-taking Worksheet (continued)**Section 3 Salts**

- A. _____—chemical reaction between an acid and a base taking place in a water solution
- B. _____—compound formed when the _____ ions from an acid combine with the _____ ions from a base; salts also form when _____ react with metals
1. Salts are essential for many _____.
 2. Other salt _____ include manufacturing of paint, rubber, glass, soap, detergents, and _____ batteries.
- C. **Titration** is used to determine the _____ of an acidic or basic solution.
1. A solution of known concentration is the _____ solution.
 2. An acid/base _____ is added to the _____ solution.
 3. A color change that persists is the _____ point.
- D. _____ are organic salts with polar and _____ ends.
1. The nonpolar, _____ end interacts with _____ and _____.
 2. The polar end helps oil and dirt _____ in water.
- E. _____—form more _____ salts with the _____ in hard water and reduce soap scum; can cause other _____ problems
- F. _____—come from _____ that are not bases but have a _____ group
1. Esters are used in _____ and perfumes.
 2. Polyesters are _____ used to make fabrics.