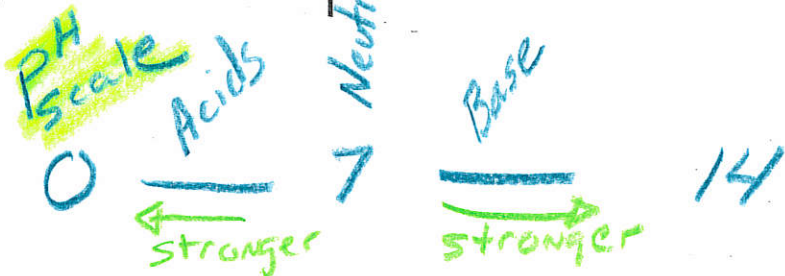
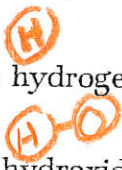


Lesson 23
ACIDS AND BASES

Words to Know

acids Compounds that release hydrogen ions in water solutions.

bases Compounds that release hydroxide ions in water solutions.



PH paper - paper that identifies acids and bases within the pH scale.



citric (SIT-rik) **acid**. The body can obtain energy from this acid. Vinegar is a dilute solution of **acetic** (uh-SEE-tik) **acid**. Milk contains **lactic** (LAK-tik) **acid**, which can also supply energy to the body. Vitamin C is **ascorbic** (ay-SKOR-bik) **acid**. Ascorbic acid is necessary for good health. **Carbonic** (kar-BAHN-ik) **acid** is found in soft drinks.

Find out what an acid is.

Foods such as grapefruits, lemons, and vinegar have a sour taste. This is because these foods contain **acids**. An acid is a compound that releases hydrogen ions (H^+) in water solutions. Fruits and many other foods contain weak acids that are very dilute. Stronger, or more concentrated, acids can be very reactive. This means that these acids react easily with certain other substances. Some acids can dissolve metals. Many acids can burn the skin on contact. Many acids are poisonous.

1. An acid is a _____

Find out some chemical properties of acids.

Acids have many chemical properties. Acids turn blue **litmus** (LIT-muhs) **paper** red. Acids react with certain metals to release hydrogen gas. Acids also react with compounds called **bases** to produce water and a salt.

2. Three chemical properties of acids are that acids _____

3. Some examples of acids found in foods are _____

Find out about some important corrosive acids.

Some types of acids are **corrosive** (kuh-ROH-siv). Corrosive acids will damage living tissue. A corrosive acid commonly used in chemistry laboratories is **hydrochloric** (hy-druh-KLOR-ik) **acid** (HCl). Hydrochloric acid is a solution of hydrogen chloride gas in water. The stomach contains a dilute solution of this acid. Hydrochloric acid helps break down food. **Sulfuric** (sul-F[Y]UR-ik) **acid** (H_2SO_4) is another common corrosive

Find out about some acids found in foods.

As we have said, certain foods contain acids. Oranges, lemons, and grapefruits contain

The pH Scale

