Name\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Chapter 8: Acids and Bases

**Acids**

**What are they?**

-Form hydronium ions when dissolved in water (H3O+)

**Common Acids**

-Vinegar

-Carbonic acid (in carbonated beverages)

-Hydrochloric acid (digestive juices in stomach)

-Sulfuric acid (car batteries)

**Properties**

1) Sour taste

 -Lemons, limes, oranges

2) Reacts with metals

 -Aluminum foil becomes darker when you use it to cover pasta sauce

3) Color changes in indicators

-An indicator is any substance that changes color in the presence of an acid or a base.

-Acids turn blue litmus paper red

-Acids turn red litmus paper red

-Acids remain colorless when mixed with phenolphthalein

**pH**

Chemists use a number scale from 0 to 14 to describe the concentration of hydronium ions in a solution. It is known as a pH scale.

Acids have LOWER pH’s (less than 7)

**Bases**

**What are they?**

-Form hydroxide ions (OH-) when dissolved in water

**Common Bases**

-Soap

-Lye

-Antacids (tums, pepto bismol)

-Most cleaners

**Properties**

1) Bitter taste

 -unsweetened chocolate, cough syrups

2) Feels slippery

 -Soap is slippery, floors are slippery after you wash them

3) Color changes in indicators

 -Bases turn blue litmus paper blue

 -Bases turn red litmus paper blue

 -Bases turn pink when mixed with phenolphthalein

**pH**

Bases have a higher pH’s (greater than 7)

**Neutral**

Neutral substances have a pH of 7

Neutral substances turn blue litmus paper blue and red litmus paper red.

Example: Water

Name\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Chapter 8: Acids and Bases

**Acids**

**What are they?**

-Form \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ ions when dissolved in water (H3O+)

**Common Acids**

-Vinegar

-Carbonic acid (in carbonated beverages)

-Hydrochloric acid (digestive juices in stomach)

-Sulfuric acid (car batteries)

**Properties**

1) \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

 -Lemons, limes, oranges

2) Reacts with \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

 -Aluminum foil becomes darker when you use it to cover pasta sauce

3) Color changes in \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

-An indicator is any substance that changes color in the presence of an acid or a base.

-Acids turn blue litmus paper \_\_\_\_\_\_\_\_\_\_\_\_

-Acids turn red litmus paper \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

-Acids remain \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_when mixed with phenolphthalein

**pH**

Chemists use a number scale from 0 to 14 to describe the concentration of hydronium ions in a solution. It is known as a pH scale.

Acids have a \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ pH (less than 7)

**Bases**

**What are they?**

-Form \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ ions (OH-) when dissolved in water

**Common Bases**

-Soap

-Lye

-Antacids (tums, pepto bismol)

-Most cleaners

**Properties**

1) \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

 -unsweetened chocolate, cough syrups

2) Feels \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

 -Soap is slippery, floors are slippery after you wash them

3) Color changes in indicators

 -Bases turn blue litmus paper blue

 -Bases turn red litmus paper blue

 -Bases turn \_\_\_\_\_\_\_\_\_\_\_\_\_\_ when mixed with phenolphthalein

**pH**

Bases have a higher pH’s (greater than 7)

**Neutral**

Neutral substances have a pH of \_\_\_\_\_\_\_\_\_\_\_\_

Neutral substances turn blue litmus paper blue and red litmus paper red.

Example: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_