Physical Science Chapter 8 Notes Outline

Name:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Date:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**Solutions, Acids, and Bases – Pages 226-256**

8.1 Formation of Solutions

Dissolving- *Substances can dissolve in 3 ways, which are listed below*

**Solute-**

**Solvent-**

1. Dissociation of Ions-

**Dissociation-**

1. Dispersion of Molecular Compounds-

**Dispersion-**

1. Ionization of Molecular Compounds-

**Ionization-**

Properties of Liquid Solutions-

1.) Conductivity-

2.) Freezing Point-

3.) Boiling Point-

Heat of Solution-

Factors affecting Rates of Dissolving-

1.)

2.)

3.)

**SECTION QUESTIONS-**

**1.) What are three ways that substances can dissolve in water?**

**2.) What three factors affect dissolving rates?**

8.2 Solubility and Concentration-

**Solubility-**

**Saturated Solubility-**

**Unsaturated Solubility-**

**Supersaturated Solutions-**

Factors Affecting Solubility-

1.) Polar and Nonpolar Solvents-

2.) Temperature-

3.) Pressure-

Concentration of Solutions-

**Concentration-**

1**.** Percent by Volume-

2. Percent by Mass-

3. **Molarity-**

**SECTION QUESTIONS**

**1.) What three terms are used to describe solution with different amounts of solute?**

**2.) What is the effect of pressure on the solubility of a gas?**

8.3 Properties of Acids and Bases-

Identifying Acids-

**Acid-**

1.)Sour Taste-

2.) Reactivity with metals-

3.) Color changes in Indicators-

**Indicators-**

Identifying Bases-

**Base-**

1.) Bitter Taste-

2.) Slippery Feeling-

3.) Color changes in Indicators-

Neutralization and Salts-

**Neutralization-**

**Salt-**

Proton Donors and Acceptors-

**SECTION QUESTIONS-**

**1.) List three general properties of acids.**

**2.) List three general properties of bases.**

**3.) Commercials for antacids often claim these products neutralize stomach acid. Antacids are bases. Think of an analogy (comparison) for the way in which antacids neutralize acids.**

8.4 Strength of Acids and Bases-

The pH Scale-

**pH-**

Strong Acids and Bases-

Strong Acids-

Strong Bases-

Weak Acids and Bases-

Weak Acids-

Weak Bases-

**Buffers-**

**Electrolytes-**

**SECTION QUESTIONS**

**1.) What determines the degree to which an acid or base is weak of strong?**