Physical Science Chapter 3 Notes Outline

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

**States of Matter – Pages 66-94**

3.1 Solids, Liquids, and Gases

Describing the States of Matter-

**Solids-**

**Liquids-**

**Gases-**

Other states of matter-

**Kinetic Energy-**

Explaining the Behavior of Gases-

Motion in Gases-

Kinetic Theory of Gases-

Explaining the Behavior of Liquids-

Explaining the Behavior of Solids-

**SECTION QUESTIONS**

**1.) What does the kinetic theory say about the motion of atoms?**

**2.) Explain why a solid has a definite shape and volume.**

**3.) A hazardous chemical is leaking from a tank truck. Rescue workers need to evacuate people who live near the accident. Why are more people likely to be affected if the chemical is a gas, rather than a liquid?**

3.2 The Gas Laws

**Pressure-**

Factors that affect Gas Pressure-

1.) Temperature-

2.) Volume-

3.) Number of Particles-

**Charles’s Law-**

**Absolute Zero-**

**Boyle’s Law-**

The Combined Gas Law-

**SECTION QUESTIONS**

**1.) What 3 factors affect gas pressure?**

**2.) What happens to the pressure of a gas if its volume is reduced?**

**3.) What do Boyle’s law and Charles’s Law have in common?**

3.3 Phase Changes-

Characteristics of Phase Changes-

**Phase change-**

Temperature and Phase Changes-

Energy and Phase Changes-

**Endothermic-**

**Heat of fusion-**

**Exothermic-**

Melting and Freezing-

Melting-

Freezing-

Vaporization and Condensation-

**Vaporization-**

**Heat of vaporization-**

**Evaporation-**

**Vapor pressure-**

Boiling-

**Condensation-**

Sublimation and Deposition-

**Sublimation-**

**Deposition-**

**SECTION QUESTIONS-**

**1.) Name six common phase changes.**

**2.) How does the energy of a system change during a phase change?**

**3.) What is the difference between evaporation and boiling?**