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?**