Ch.3.1 notes By: Stormy 9/17/13 3rd period physical science class

States of matter

Materials are classified as solids, liquids, and gases. Solids: solid has the shape that materializes the shape and the volume. Liquids: liquid is the state of matter in which a material has a definite volume but not a definite shape. Gases: gas is neither the state of matter in which a material has neither a definite shape nor a definite volume of its container. Kinetic energy is the energy an object has due to its motion. The kinetic theory of matter says that all particles are in motion.kinetic theory of gases: the constant motion of particles in a gas allows a gas to fill a container of any shape or size. Pressure is the result of a force distributed over an area. Collisions between particles of a gas and the walls of the container cause the pressure in a closed container of gas. The SI unit of pressure is derived from SI units for force and area. Force is measured in newton’s (N).Area is measured in square meters (M2).Factors That Affect Gas Pressure: Factors that affect the pressure of an enclosed gas are its temperature, its volume, and the numbers of its particles. Temperature: Raising the temperature of a gas will increase its pressure if the constant. Volume: reducing the volume of a gas increases its pressure if the temperature of the gas and the number of particles are constant.