

Heat and temperature



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Introduction to Heat and Temperature Gonzalo Leon Strayer University

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Study of Heat and Kinetic Theory Kinetic theory can be describes as a scientific theory of the movement of an object. Kinetic theory relates to capacity of a subject to do work on another object due to their motion.

Kinetic theory of matter explains that the same is compose of tiny pieces of, atoms or molecules in continues motion. The theory states that the actions of matter inside an object and the actions heat generates.

Kinetic theory explains as well the temperature transition by the means of transmission, where thermal powers shows to be conducted throughout matter, heating up cooler regions. This reaction is the delivery of heat or heat flow. Kinetic theory relates to the study of heat due to the fact that once heat is produced, kinetic energy is created as well. Heat energy can convert or transfer its self into kinetic energy that could make a subject move. Definition of Heat and Temperature Heat: Heat could simply be summarize as been energy. It is the delivery of Kinetic energy from one subject to a different one.

Heat is conveyed in three different ways: radiation, convection and conduction. An example of heat by radiation could be infrared energy when this one strikes a surface. Heat by conduction occurs when two subjects are in direct contract with one another. Heat by convection can occur as the movement of a liquid or gas takes energy of a part to another. Heat is also be described as the movement of molecules and atoms that create a form of energy, that energy is call heat or and thermal energy which is exist in all

matter. Also the coldest spaces matter demonstrates a very low percentage of heat.

The correct portion of heat could be good or bad for an organic body as well as a non organic subject. Heat plays an important factor in our everyday life and society, without heat we wouldn't be able to accomplish what we have. Natural heat has been use in prehistoric times as a tool utilize from our ancestor such as the sun and volcanoes, however now a days we have various alternative sources of heat that have assisted to the development of today's society as we know it. Temperature: Temperature is the measurement of the quantity of heat or coldness of a subject or substance in reference to a standard value (Webster Dictionary).

Temperature can also be described as the measurement of the most common Kinetic energy of the particles in a matter sample, express in the form of existing measurements in units and degrees of the common scale. In today society we regulate heat by utilizing temperature measuring devices to our advantage. Temperature measurement sources vary from many different types of use, from Thermostat to measure the amount of heat on a human body to different electrical measuring devices of temperature (Webster Online Dictionary). Relation between Heat and Temperature

Heat is a type of energy that is often transformed into Kinetic energy. Temperature is the measurement of energy inside a subject, body or object. Heat equates to energy, and temperature is the measurement of the effect of that energy. The same reason we use to note the difference between heat and temperature as stated prior and mentioned above, Temperature is the

average energy of the movement of molecules within a subject as to heat is the total amount of energy of the molecular substance. Properties of a substance that determine Heat capacity

Heat capacities are different ones and they change according to the chemical composition, as well as the temperature and pressure of a subject. Changes in heat capacity affect people in everyday life, from everyday activities like the amount of time it takes to cook to the construction of a bridge. Heat capacities are usually measured and tabulated in a different form of conditions for a multiple number of examples. Knowing the stage or property of the heat, (solid, liquid or vapor) of the substance during pressure, temperature and common desire composition is an important tool to remember before figuring up its heat.

Heat capacity could be determined by the capacity of the temperature of an object multiplied by the mass as well as the chemical composition, temperature, and pressure of a substance (Science. com) Heat Sources Heat source is anything that produces heat, there are plenty examples of heat sources, the sun, a volcano, light from planets and moon, friction, nuclear heat, etc. Heat sources are use for a different variety of reasons. We utilize heat sources to adjust the temperature of our work, living spaces, as well as to start the engine of a vehicle (Webster online dictionary).

Heat sources have assisted and aided on the development of the world by supporting and allowing us utilize machinery and other devices for the agricultural process, farming process, construction and areal as well as others. These heat sources have been an essential element on the

development of not only the nation but the world, tracing it back to the times of the Inca that utilized the sun as a natural heat source for their farming, etc. References Tillery, B. W. , Enger, E. E. , & Ross, F. C. (2008). *SCI110: Integrated science: 2009 custom edition (4th ed.)*. New York, NY: McGraw-Hill; Science. com; online Webster Dictionary