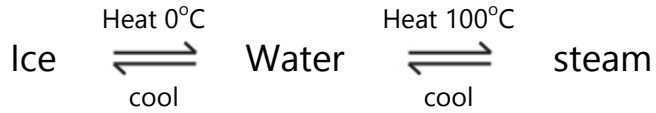
KINETIC THEORY OF MATTER

According to the particulate or atomic theory of matter, matter is known to be made up of very tiny particles such as atoms, molecules and ions. The Kinetic Theory of Matter postulates that these particles are continually moving and so possess kinetic energy. An increase in temperature causes on increase in the average kinetic energy of the particles.

States of Matter

Matter can exist in three physical states–solid, liquid and gas. A solid has a define volume and shape; a liquid has a define volume but no define shape (it takes the shape of its container); and a gas has neither a definite volume nor shape (it fills the entire container). Matter can change from one state to another. We see some of these changes around us. The most common example of a substance undergoing a change of state is water.



Generally, a given substance changes its state when it is heated or cooled. For example, candle wax and margarine liquefy on warming and solidify on cooling. Solid iron melts into a liquid at 1,540°C. When it is poured into a mould and cooled, it solidifies, taking the shape of the mould.