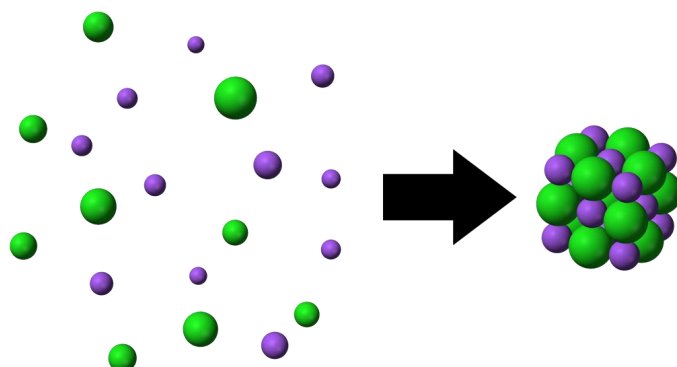


**Lattice Formation Enthalpy** is the enthalpy change when one mole of crystal lattice is formed from the isolated gaseous ions.



Lattice energy is also called as lattice enthalpy and is sometimes defined as energy required to completely separate one mole of a solid ionic compound into gaseous constituent ions. Ionic compounds normally are stabilized by lattice energy. Salt-like or ionic compounds in the solid state exist as three dimensionally ordered arrangements of cations and anions which are held together by electrostatic forces of attraction. The three-dimensional network of points that represents the basic repetitive arrangement of atoms in a crystal is known as a lattice or a space lattice. Thus, a qualitative measure of the stability of an ionic compound is provided by its enthalpy of lattice formation.

The reaction of the lattice formation enthalpy energy can be written as

