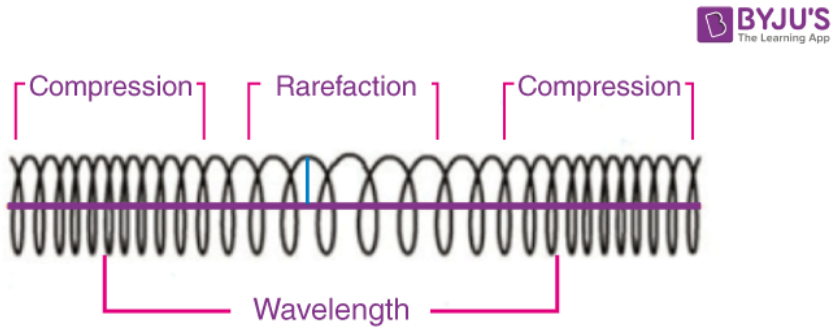
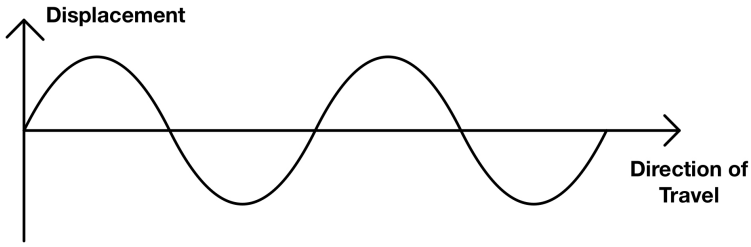
4.2 Types of Waves

Longitudinal waves: The Oscillations are parallel to the direction of energy transfer Such as sound waves and Seismic P-waves.



Rarefaction (R): The particles are Spread out.
Compression (C): Where particles are densely packed

Transverse waves: The direction of disturbance is at right angles/perpendicular to the direction of energy transfer. For example, a transverse wave can be sent along fixing one rope by end and moving the Other rapidly up and down. The disturbance is generated by the hand, the humps, and the hollow of the wave traveling along the rope as each Part of the rope vibrates transversely about its undisturbed Position.
Transverse waves can be water waves or electromagnetic electromagnetic radiation.



Credit: thescienceandmathszone