

Topic:- Characteristics of wave motion — The wave motion is the transfer of energy and momentum through a medium via periodic motion as a particle disturbance without transporting matter.

The key characteristics of wave motion are their amplitude (A/a), wave length (λ), Frequency (f/ν), wave speed (v'), and Phase that is state of motion of particles. Also

The energy transfer without matter transport.

The periodic disturbance — It is the ~~motion~~ result of motion repeated periodic vibrations of particles

The medium dependence of sound wave requires a material medium to propagate without speed depending on elasticity and density (e.g. - faster in solids than liquids and gases).