

CONCEPTS:

- **Amplitude:** The maximum displacement of the wave from its resting position.
- **Wavelength:** The distance between identical points on consecutive waves (e.g., crest to crest).
- **Frequency:** The number of waves that pass a fixed point per second, measured in Hertz (Hz).
- **Wave Speed:** How fast the disturbance moves, calculated by multiplying wavelength by frequency.

Transverse and longitudinal waves are two types of mechanical waves, which involve the transfer of energy through a medium (e.g. water, air, a solid).

FORMULA:

$$F = n/t$$

F = frequency (Hz)

n = number of vibrations

t = total time (s)

$$V = f \cdot \lambda$$

v = Wave speed (m/s)

f = frequency (Hz)

λ = Wavelength (m)

$$T = 1/f$$

T = Period (S)

1 = 1 (one)

f = frequency (Hz)