

Waves

7th Grade

How energy moves without the material moving with it.



A wave carries energy from place to place without permanently moving the material it travels through.

- Amplitude is the height — it decides loudness or brightness.
- Wavelength is the distance between two peaks.
- Frequency is how many waves pass per second, in hertz.
- Transverse waves shake side to side — light, water.
- Longitudinal waves squash and stretch — sound.
- Sound needs a medium; light does not, which is why space is silent.

LOOK FOR IT

Higher frequency means higher pitch in sound, and bluer light in the visible spectrum.

speed = frequency × wavelength. Increase one, the other must fall.