



NATURE OF SOUND

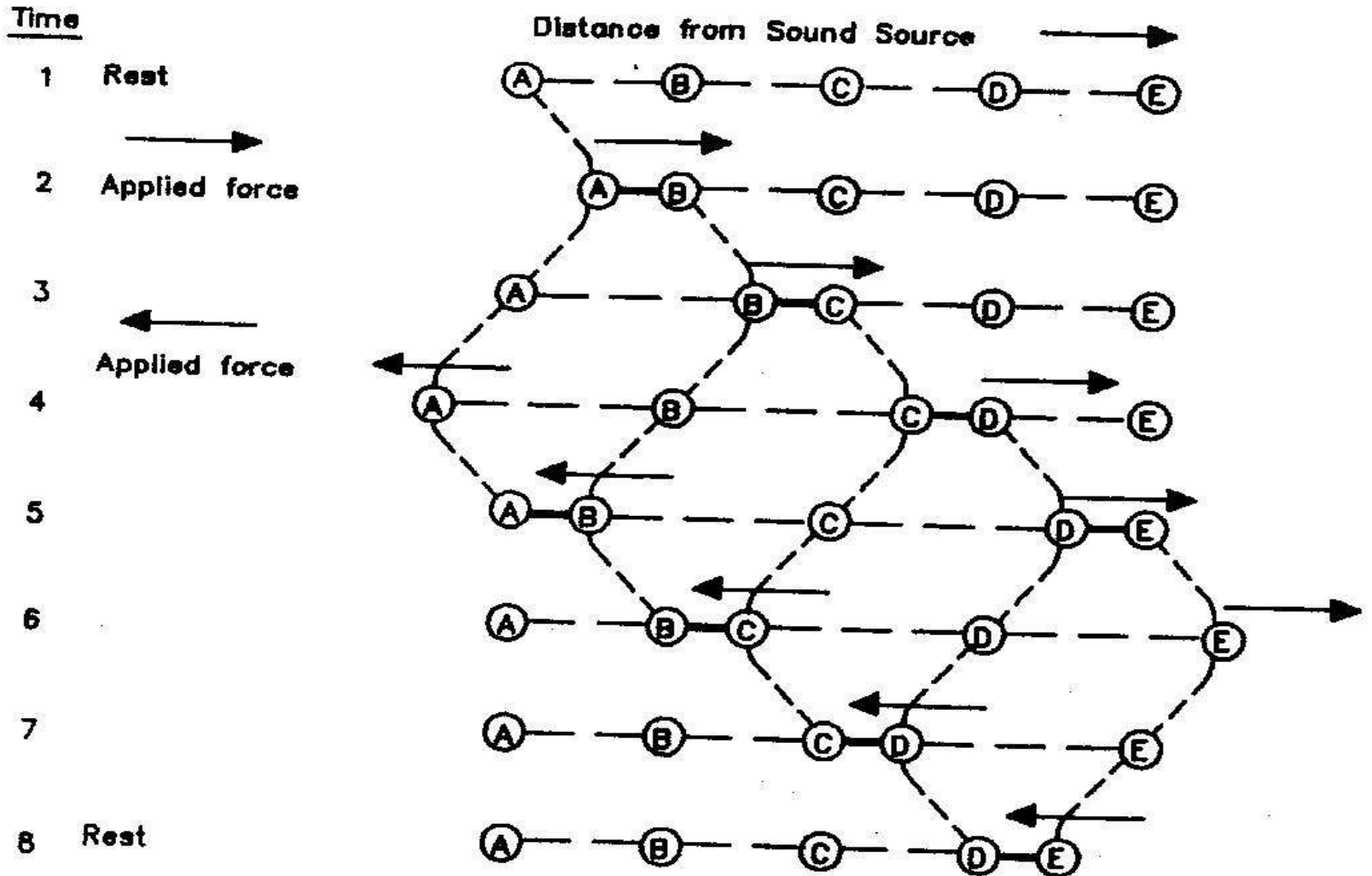
BHPI
hearing for all 2024

Better Hearing Philippines Inc.

Nature of Sound

- Sound is transmitted to our ear through a medium which can “carry” vibrations
- Generally Air
- When the object vibrates, air particles vibrate too

Nature of Sound



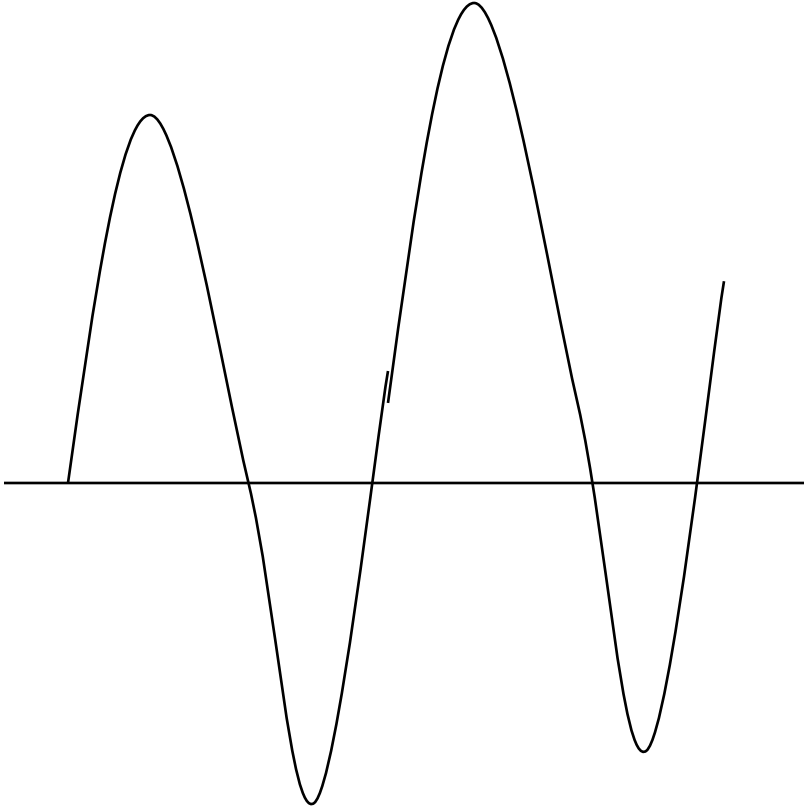
Pitch

- Highness or lowness of a sound
- In audiology, it is referred to as *Frequency*.

Frequency

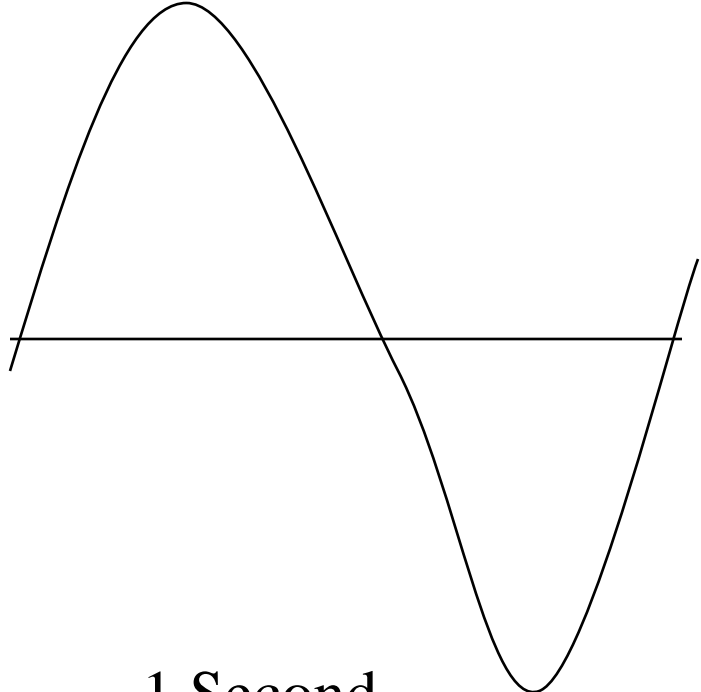
- Number of wave cycles happening in a second
- Number of complete vibration per second
- Lesser vibrations per second, the lower the frequency
- More vibrations per second, the higher the frequency

Frequency



1 Second

High Frequency



1 Second

Low Frequency

Frequency

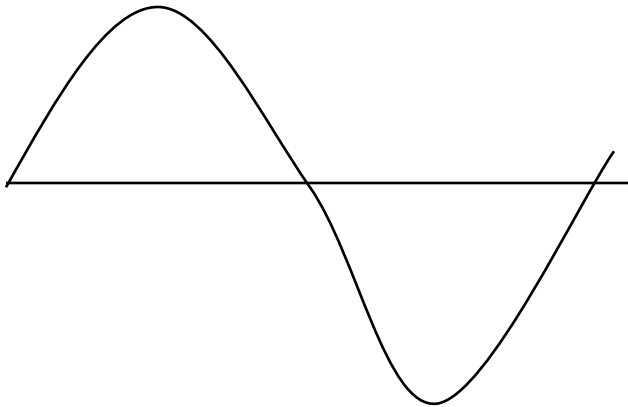
- Measured in Hertz (Hz)
- Human ear can detect over the range of 20Hz to 20,000Hz

Intensity

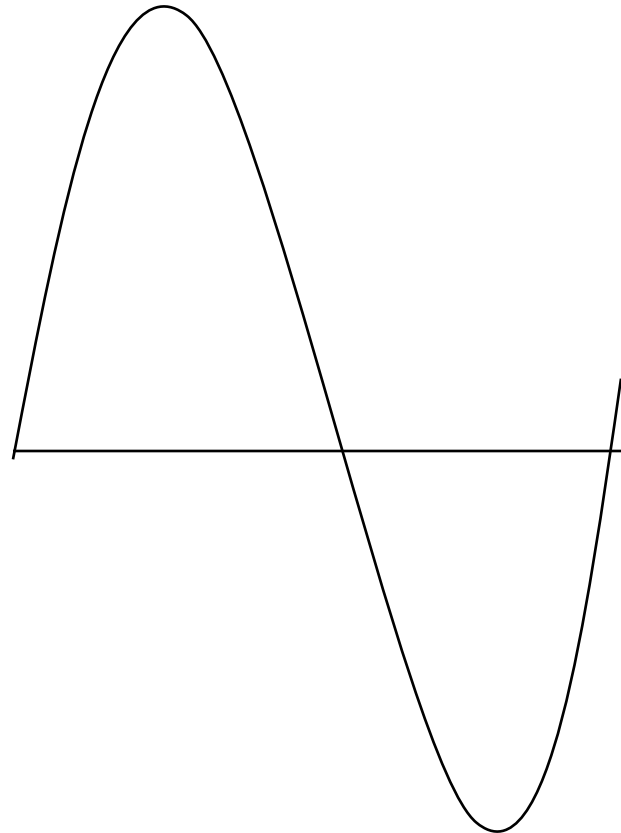
- Softness or loudness of sound
- Greater force applied to the air particles, the louder the sound will be
- Amount of force per unit area of the sound wave
- Measured in Decibels(dB)

Intensity

Low Intensity



High Intensity



Sound Level of Some Environmental Sounds

0dB	Softest sound human ear can hear
10dB	Normal breathing
20dB	Leaves rustling in the breeze
30dB	Very soft whisper
60dB	Average speaking voice
90dB	City traffic
110dB	Loud Thunder

Sounds We Hear

