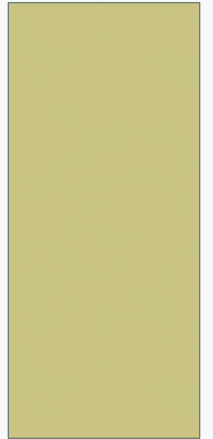


BSC

Birmingham-Southern College

INTRO TO MUSIC

2ND PRESENTATION



Unit I – Elements

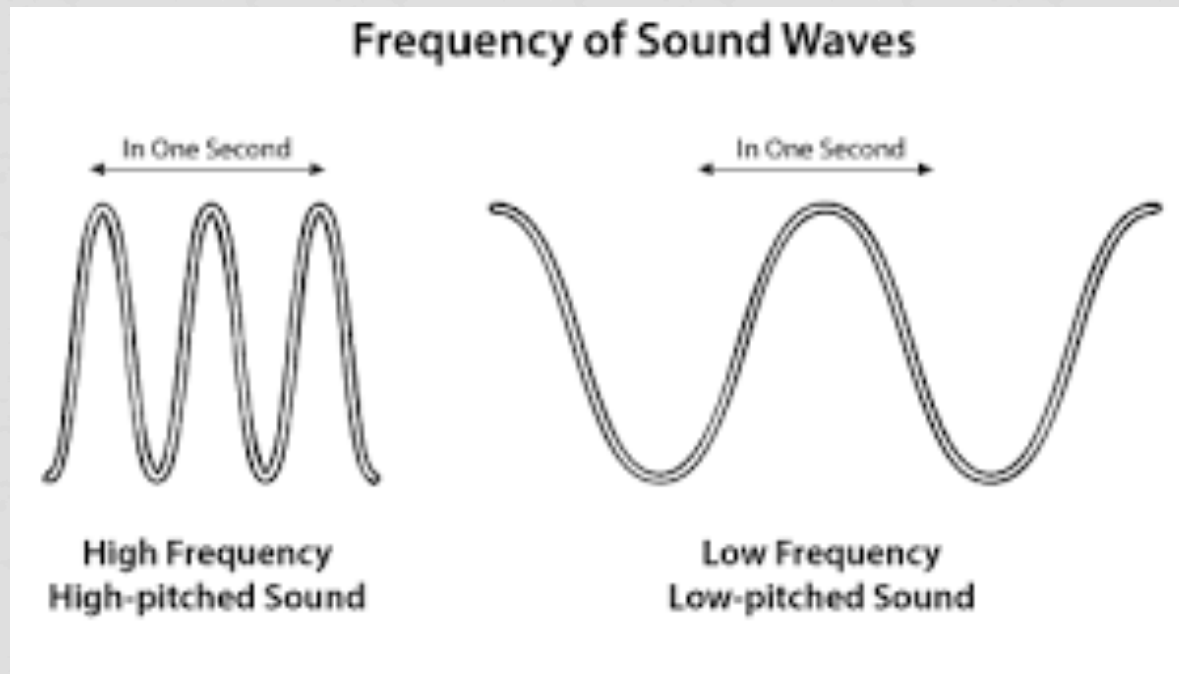
SOUND

- All sound:
 - begins as vibrations
 - ◆ is transmitted as vibrations
 - ◆ is perceived as vibrations

PITCH

- **Relative highness/lowness of a sound**
 - Determined by frequency of vibration
 - ◆ Fast vibrations result in high pitched sounds
 - ◆ Slowly vibrating objects make low pitched sounds
- **Quantitative measurement in Hertz (Hz)**
- **Human hearing is in 20-20,000Hz range**
 - ◆ Use this in choosing sound/stereo gear

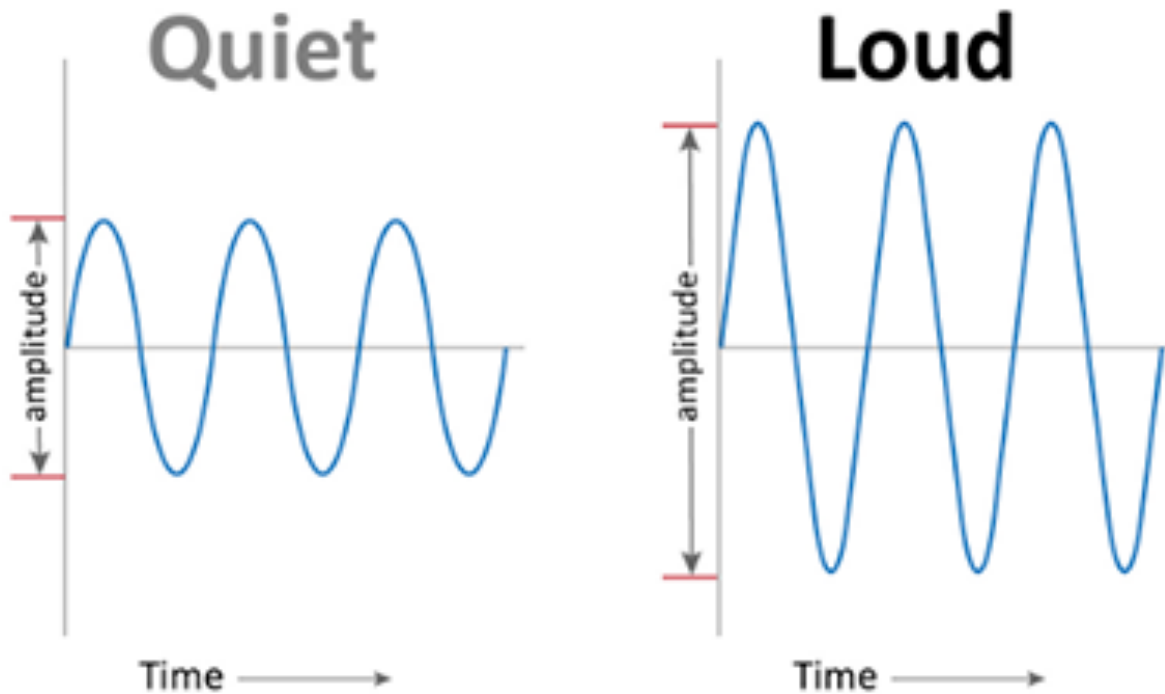
FREQUENCY IN SOUNDWAVE



DYNAMICS

- Relative loudness of a sound
 - Quantitatively measured as amplitude
 - ◆ An amplifier increases the amplitude of a wave
- Italian words/terms used to indicate dynamics
 - ◆ Piano (soft)
 - ◆ Forte (loud)
 - ◆ Mezzo (medium/moderately)
 - ◆ -issimo (ending—"very")

AMPLITUDE IN SOUNDWAVE



DYNAMICS

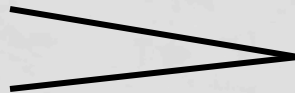
- *ff*—Fortissimo—very loud
- *f*—Forte—loud
- *mf*—Mezzo Forte—moderately loud
- *mp*—Mezzo Piano—moderately soft
- *p*—Piano—soft
- *pp*—Pianissimo—very soft

DYNAMICS

- *Crescendo*—gradually louder



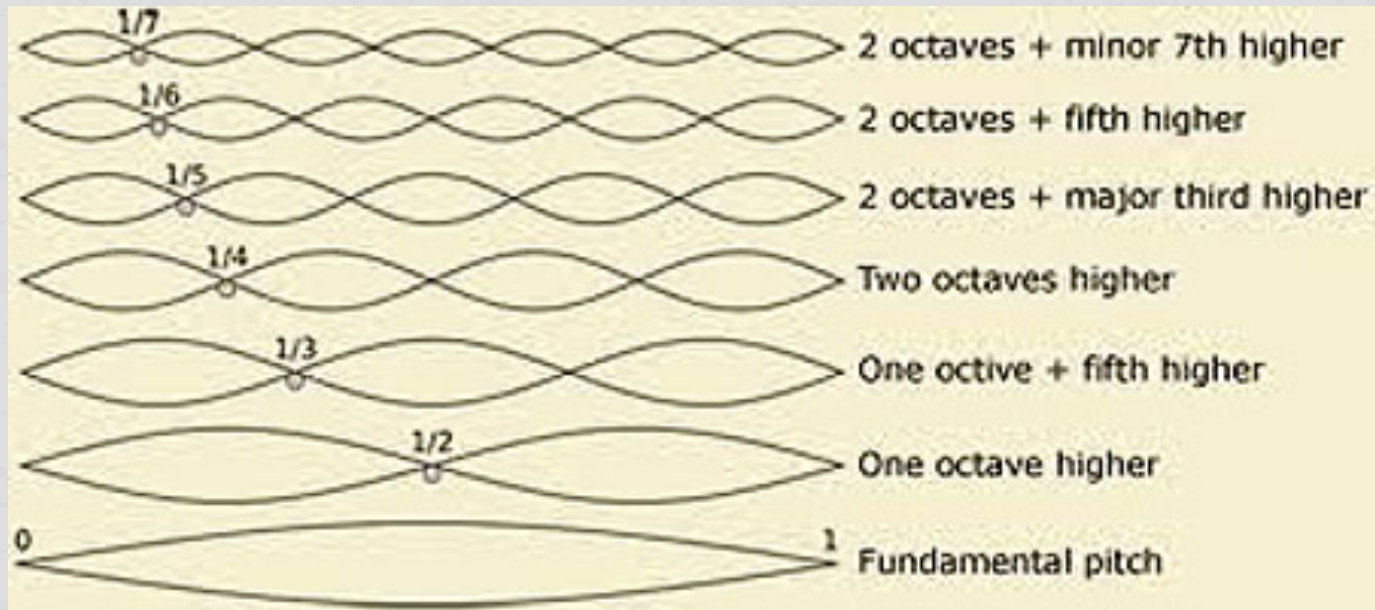
- *Decrescendo (diminuendo)*—gradually softer



TIMBRE

- Color or tone quality of a sound
- Result of the Harmonic Content of a sound
 - ◆ **Pythagoras and overtone series**
 - ◆ **These are the smaller secondary amplitudes**
 - ◆ **Heard as part of the pitch**

HARMONIC SERIES



COMPLEX SOUND WAVE WITH PARTIALS

