

Loudness/Pitch

- When a sound pressure wave contains more energy (greater pressure), it's perceived as being louder. A sound pressure wave containing less energy (less pressure) is perceived as being softer.
- A series of air pressure waves (if between 20 and 20k Hz) is perceived as sound. The lower the frequency (near 20), the lower the pitch we hear. The higher the frequency (near 20,000), the higher the pitch we hear. A tone of 1,000 pulses per second is approximately high "C" on the piano. A tone of 10,000 pulses per second is a really high squeek.
- Consider the mix of sounds which a band produces. Low-frequency instruments mixing sounds with high-frequency instruments. Some instruments playing softly, while others play loudly. Some percussion instruments making "thump" sounds, with other string instruments (guitars) making "singing" sounds.

