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## The Sounds We Hear

Read this page to learn what people with normal hearing and what people with hearing loss can hear.

### Facts about sound

- Sound travels through the air as waves you can't see.
- The faster the waves are, the higher the sound.
- How fast a sound travels is called its **frequency**.  
Frequency (or pitch) is also how high or low a sound is.
  - High-pitched sounds (like a squeal) have a higher frequency.
  - Low-pitched sounds (like thunder) have a lower frequency.
- Frequency is measured in **hertz (Hz)**.
- The bigger the waves, the louder the sound.
- The loudness of sound is measured in **decibels (dB)**.

### What people with normal hearing can hear

People with normal hearing can hear from about 0 dB to 140 dB.

Here's how loud those sounds can be:

Sound	Loudness, in dB
whisper	about 20 dB
refrigerator humming	about 40 dB
normal conversation	about 60 dB
noise of traffic in the city	about 80 dB
lawn mower	about 90 dB
chainsaw	about 110 dB
firecracker	about 140 dB

People with normal hearing can hear sounds as low as 20 Hz. Some can hear as high as 20,000 Hz. Here's how high or low those sounds can be:

Sound	High or low sounds, in Hz
thunder	20 Hz to 80 Hz
talking	250 Hz to 6,000 Hz
opera singer hitting a high note	2,000 Hz

### What children with hearing loss can hear

- Each child's hearing loss is different.
- Some children with hearing loss can hear some sounds.
- How well a child can hear affects how well he can understand when people talk.
- Some children can hear sounds at a lower frequency better than at a higher frequency.
  - Most words are made up of high-frequency sounds.
  - "S" and "f" are high-frequency sounds. These are harder to hear.
  - If you can't hear high-frequency sounds, understanding what people say is hard.
  - Vowel sounds like "u" have a low frequency. These are easier to hear than high-frequency sounds.

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You can find this page online at:  
<http://www.raisingdeafkids.org/hearing/sounds.jsp>