What is sound?

Sound is energy, like light or electricity.

Sound is made when objects vibrate.

Sound vibrations travel in waves by pushing air molecules together.

Vibrations can be powerful. The stronger the vibrations, the louder the sound.

Sound is measured in decibels.

How do we hear?

Healthy hair cell bundles
What too much noise can do to hair bundles

Hair cells on this end detect low-pitched sounds (like a bass guitar and men’s voices).

As we age, hair cells at the entrance to the cochlea “wear out” before those at the opposite end, so our ability to hear high-pitched sounds is the first to go.

What’s that sound?

A sound most adults can’t hear

Guess what common noises sound like if you have hearing loss.
What you can do to protect your hearing

Household appliance experiment

Insert a photo of someone you know or a celebrity using hearing protectors. Make sure to give credit to the photographer.
Educational materials

- Fact Sheets
- Posters
- Bookmarks

Materials Available in Spanish

For more information, visit:
www.noisyplanet.nidcd.nih.gov

Presentation adapted from Dangerous Decibels, partner to the Noisy Planet Campaign