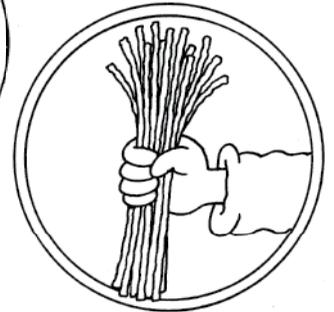
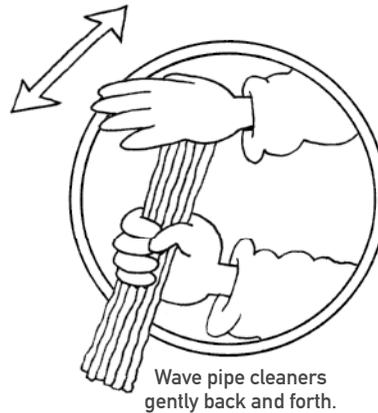


Safe and Sound

When it comes to your hearing, bigger is definitely not better. Loud concerts or your iPod at maximum volume can damage the delicate hair cells inside your inner ear. Hair cells are sensitive structures that turn sound energy into signals that travel to the brain. They make hearing possible; once damaged, they are gone for good.

PART I

Look at these illustrations while your teacher leads a class experiment to show how loud sounds can damage hearing.



PART II

How much noise is too much? The loudness of sound is measured in units called **decibels (dB)**. Any sound greater than 80 dB has the potential to cause hearing loss. Use this chart to measure the loudness of noises you encounter during the day. Then use the information on this sheet to think about the questions that follow.

How Loud?		
Safe to Moderate	Loud to Extremely Loud	Dangerous
Quiet room 40 decibels	Lawn mower 90 decibels	Rock concert 120 decibels
Conversation 60 decibels	Chain saw 100 decibels	Air raid siren 125 decibels
Vacuum cleaner 70 decibels	Helicopter 105 decibels	Fireworks 125 decibels

Sources: Starkey Hearing Technologies, www.starkey.com; The Children's Hearing Institute, www.childrenshearing.org.

What loud noises do you come in contact with on a regular basis? List as many as you can think of.

How can you avoid certain loud sounds? (Nice try, but you still have to mow the lawn!) When can you wear earplugs to protect your hearing from sounds you can't avoid? Make a plan to listen smart!

Now Hear This!

Do you know what your cerumen is? That's the technical term for earwax. Sure, it's gross, but it serves an important purpose: trapping dust and dirt to keep the ear canal clean. It also contains chemicals that fight infections!

