GENERATIONGENIUS
ALWAYS QUESTION. ALWAYS WONDER.

TEACHER GUIDE

INTRODUCTION TO SOUND
GRADES K-2

COMMON MISCONCEPTIONS

Due to the abstract concept of sound waves, a common misconception is that sound is made directly by our mouths. In actuality, sound is the movement of air in the form of sound waves. These waves are produced by our vibrating vocal cords, or the vibration of a musical instrument. Sound waves are a difficult concept for young students to understand since they are difficult to see. Young students think very concretely, so giving students many opportunities to "see" sound is very important to developing their conceptual understanding.

SOUND

Sound is the result of vibrations. All instrument sounds are the result of vibrations. Different instruments produce different sounds based on the speed of the vibrations and the material being vibrated. String instruments include guitars, bass, piano and violin. When the strings are plucked, they produce vibrations. Reed instruments include clarinets and saxophones. When air is blown through the reed it produces vibrations. The frequency of the vibrations combined with other factors create unique sounds for each instrument.

Sound can also cause vibrations. This is because the waves created by sound can be strong enough to move other objects. Many students have seen a photo or video of someone sitting in front of loud speakers with their hair blowing past them. Some sound waves are strong enough to make other things vibrate or move.

TIPS FOR TEACHERS

Instruments are a great way to teach students about sound and vibrations. Giving students opportunities to play different instruments, or even make simple instruments can help them develop a solid understanding of sound.

"Next Generation Science Standards" is a registered trademark of Achieve, Inc.
A non-profit dedicated to raising academic standards and graduation requirements.