

Let's Explore Sound

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Learning Goals

- Define sound as vibrations we hear
- Demonstrate that sounds are made by plucking, blowing, stroking, and striking objects
- Explain that sound travels through air, solids, and liquids

Video Summary

Exploration Segment

Children sing a song and play instruments by plucking, blowing, stroking, or striking objects. The hostess asks viewers to consider where they hear sounds. A variety of indoor and outdoor sources prove that sounds are all around us.

Concept Development Segment

Sound is made when something vibrates. Children discover different ways to make objects vibrate. They work with their teacher to investigate how sounds move through solids, air, and liquids.

Application Segment

Deaf children demonstrate how they can dance to the vibrations of sounds, even though they can't hear them. "You Try It" challenges children to make sounds with their body parts.

Key Words

pluck	to pull at something and let it go
stroke	to rub gently in one direction
strike	to hit against something
vibrate	to swing back and forth
vibrations	trembling, back-and-forth motions

Let's Do It

- Help children discuss these questions: "How do we make sounds?" "Where do they come from?" Accept all answers, then tell students: *Watch this video to see what you can learn about sound.*
- Begin the tape. Stop/pause it after the hostess asks, "Where do you hear sounds?" Ask children to sit silently for twenty seconds and raise their hands each time they hear a new sound. Signal that the time has passed by clapping your hands. Compile a list of the sounds the children heard, then continue the video.
- Stop/pause the tape again after the hostess reviews how sounds travel through solids, air, and liquids. Now help your children explore how sounds travel: Gather a wooden board, a rubber hose or a cardboard tube, a tank or large glass bowl of water, and several objects for making sounds (rubber bands, rocks, string, coins, etc.). Have children make sounds as shown in the video, then ask them to suggest other ways to make sounds travel through solids, air, or liquids. If students need help understanding these concepts, replay this segment of the video. When finished with the activity, watch the rest of the video.

You Try It

How many sounds can you make with your body? How can you change the sounds you make? Encourage children to explore making sounds with their fingers, mouths, hands, etc. Discuss which sounds are loud and soft. If you like, turn the class into a "body orchestra," with each child playing a different instrument of his body while the group performs songs. (Don't forget to sing and make other vocal sounds!)

More Exploring

Identify the sounds children heard in the room during a pause in the video. See if they can name the source of each sound they listed.

Explore vibrations. Have children put a plastic lid on a metal coffee can, then sprinkle salt on the lid and tap it. What do they see? Have children observe other sound vibrations by plucking a stretched rubber band or string instrument, tapping a glass filled with water, or speaking and singing with fingers touching throats. Ask children to think of other ways they can make vibrations.



Make comb kazoos with wax paper folded over plastic combs that the children have brought to class. Have students hum through the kazoos with their lips barely touching the paper. Ask them to describe what they feel, and why it is happening. As a class, have students hum favorite tunes, exploring how the paper feels when they hum louder or softer.

Form a class gadget band. Have children “play” songs on a variety of classroom objects by hitting, plucking, blowing, or stroking them.

How does it sound in a can? Have children explore how a variety of objects sound when rattled inside a tin can. Have them predict the sounds based on what the objects look like, then test their predictions.

Take a sound walk around the school. Record on audiotape the sounds of various locations in the school. Discuss with students what they hear in each place. Back in the classroom, play the tape and challenge children to name the locations they hear.

Play Name that Sound by making noises behind a screen with a variety of objects. Choose one sound as a reference, then ask children

to say whether the other sounds are louder or softer than the reference sound. Can students identify the sound makers?

Explore deafness. Have children wear ear plugs and attempt to participate in class. Ask, *How would life be different if you couldn't hear?* Invite a person with a hearing loss to visit the class and describe his experiences. As a class, learn how to spell names and simple words with the sign language alphabet (see an encyclopedia for illustrations of the alphabet).

Play Sound Concentration. Have a child begin by making a sound. The next child repeats that sound and adds her own sound. The third child repeats both sounds and adds his own, and so on, around the class.