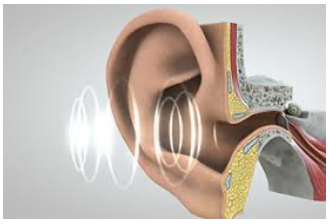
Sound and Light (Part I)



Essential Question: How do sound and light travel?

Students will explore the role of vibrations in the creation of sound. What causes different sounds? What do these sounds "look" like?

Next Generation Science Standards

- 1-PS4-1 Plan and conduct investigations to provide evidence that vibrating materials can make sound and that sound can make materials vibrate.

Materials needed:

- 1 toilet paper tube or paper towel tube per student
- 3 rubber bands per student
- 1 square piece of each (aluminum foil, wax paper, regular paper)
- ¼ sheet of paper
- Plastic or Styrofoam disposable bowl with water
- Pencil
- Paper towels for clean up

Materials provided:

- Tuning Forks

Advanced preparation:

- Cut aluminum foil, wax paper, and regular paper into approximately 4”x4” squares.
- Pitcher of water (for filling cups)
- Cut one piece of copy paper into 4 equal pieces. Cut enough for each student to have one section.

Lesson Overview:

This is the first lesson in the 1st Grade Sound and Light Series. Each lesson is designed as a stand-alone lesson, so you can participate in one or all of the lessons! In this lesson students will explore the role of vibrations in the creation of sound and what causes different sounds?

Be watching for more lessons in the **1st Grade Sound and Light series**!
October: Light
November: Communication

Program Connection Information

Please use an external microphone (conference style) rather than the integrated one in the computer for the audio for your class and locate it centrally in the room. It can be difficult for the Greenbush teacher to hear the students using the computer microphone and therefore it reduces the interactive nature of the lesson. It is fine to use the computer webcam for your video source.

All classes will take place using Zoom desktop video. If your building is already set up to use a desktop video application with a computer, simply open a browser and enter https://greenbush.zoom.us/j/5337714346 in the URL space. You may need to download Zoom launcher software (free download) if you don't already have it. This needs to be done in advance of the lesson.

If using a Polycom video conferencing unit (or any legacy type video conferencing unit) to connect to a ZOOM conference, make sure the unit is in "encrypted mode" then dial the following IP on the internet:162.255.37.11 or 162.255.36.11 and once connected, they will ask for a MEETING ID: enter 533 771 4346 (for Sheila at Science Center).

It's always a good idea to touch base with your district technology facilitator prior to your program to make sure all systems/equipment are in place and operational and that there aren't any firewalls in place that might prevent you from connecting to Zoom.

Once you connect, you will enter a Zoom waiting room. Your Greenbush teacher will admit you into the final meeting room.

If you have questions, please call Sheila Sandford at Greenbush, 620-724-6281, or email at sheila.sandford@greenbush.org (best method of contact).