

**Project FOCUS
Best Lessons
FIRST GRADE**

Title of Lesson: Sound Vibrations: Stethoscope

Theme: Physical Science

Unit Number: **Unit Title:** Sound

Performance Standard(s) Covered (enter codes):

S1P1

S1CS3

Enduring Standards (objectives of activity):

Habits of Mind

- Asks questions
- Uses numbers to quantify
- Works in a group
- Uses tools to measure and view
- Looks at how parts of things are needed
- Describes and compares using physical attributes
- Observes using senses
- Draws and describes observations

Content (key terms and topics covered):

Sound: hearing, vibrations, volume, pitch

Learning Activity (Description in Steps)

Abstract (limit 100 characters): To examine how sound travels by listening to and making a stethoscope.

Details: First, I showed my students a BrainPop Jr. video on sound. The video discussed sound waves, volume, and pitch. After the video I talked with my students about what pitch was to make sure they understood it. I explained it by asking them to make the sounds that cats and bears make and compare and contrast the sounds. The next part of the activity I let them look at and touch a real stethoscope (I got one from my mother, who is a nurse). I asked them if they knew what it was and what it is used for. Some of the students actually knew the name of it. I let all of the students put the stethoscope on and listen to me tap the diaphragm. I explained how the stethoscope allows doctors to listen to our hearts. Next, I told them we can make our own stethoscope using objects you can find at the store. I brought in the stethoscope already put together, but I brought extra materials to show them how I put it together. I put the small end a funnel inside each end of the rubber hose that I bought from Home Depot. It was difficult finding a funnel with a small enough end to fit inside. Next, I put a small balloon on the larger end of one funnel to function as the diaphragm. Finally, I let the students play with the home-made stethoscopes and let them tap the balloon and listen to the sounds. After the activity I asked them to relate what the video said about sound and vibrations to how the stethoscope works.

Materials Needed (Type and Quantity):

1. rubber tube or hose
2. two funnels that have skinny end that will fit inside the hose
3. one small balloons to fit over funnel
4. a real stethoscope (if possible)
5. video or powerpoint about sound

Notes and Tips (suggested changes, alternative methods, cautions):

I suggest bringing alcohol swabs to clean the ear pieces of the stethoscope. I did several activities on sound throughout the period of several days, so you could combine this activity with something else to make it longer.

Sources/References:

- 1) BrainPop Jr. Sound Video
- 2)
- 3)