# Project FOCUS Best Lessons FIRST GRADE

Title of Lesson: Creating Sound

**Theme:** Physical Science

**Unit Number:** 5 **Unit Title:** Sound

Performance Standard(s) Covered (enter code):

S1P1. A. Students will investigate light and sound. C. Investigate how vibrations produce sound.

## **Enduring Standards (objectives of activity):**

**Habits of Mind** 

X Asks questions Uses numbers to quantify

X Works in a group

Uses tools to measure and view

Looks at how parts of things are needed

- X Describes and compares physical attributes
- X Observes using senses

**Draws and describes observations** 

## Content (key terms and topics covered):

Sound, vibrations

What are sounds? How are they made?

### **Learning Activity**

**Abstract**: Learning how sounds are produced by different vibrations.

#### **Details**:

Activator- Create a sound word web to see what students already know. This can be done on the Smart Board within the PowerPoint for the mini lesson.

Mini lesson- SMART notebook PowerPoint.

Students will engage in a PowerPoint presentation that further describes how sound is created by vibrations. This needs to be created before the class and can be done in just a couple slides that explain: 1. Sounds are energy that we hear. 2. Vibrations make sound. 3. Different vibrations make different sounds. Also, link the following website for a short video that further explains. Stop the video at 44 seconds.

# http://www.learninggamesforkids.com/science\_songs/vibration-science-song.html

During discussion about how sounds are made (vibrations) have students put their hand on their throat and hum. Talk about what they feel and how their vocal cords make sounds by vibrating when air rushes past them as we talk or sing.

Place ruler on edge of table and bend down to allow students to hear noise and see movement. Explain how this movement is what a vibration looks like and creates sound.

Work Session- Students will divide into three groups to explore how different vibrations make different sounds. Each group will receive an egg carton filled with plastic eggs, and each student will receive a baggie with a laminated outline of an egg carton as well as twelve small pictures of items that could be within the eggs in the egg carton. The students will take turns shaking a plastic egg. All students in the group will listen to the sound made and then guess which of the twelve items is within the plastic egg. They will then place the picture of the item on their outline of the egg carton in the corresponding spot. This will continue until all twelve eggs have been shaken and items guessed.

Closing- Students will share their findings as a full class and watch as the teacher opens each egg to see what was inside of it. Reinforce that the different sounds were made because of different vibrations.

# Materials Needed (type and quantity): Click here to enter text.

3 empty egg cartons

3 dozen plastic eggs

12 different items that could fit inside the eggs (Examples include: rice, marbles, cotton, paper clips, coins)

Laminated egg carton outlines (Enough for the whole class)

Small laminated pictures of the above items (All twelve per individual student)

Notes and Tips (general changes, alternative methods, cautions): Click here to enter text. Allow students to answer questions by telling their neighbors to avoid only allowing a few to speak during the activator and mini lesson. Completely explain the activity with the egg cartons before dividing the students into groups or giving them materials. The egg carton outlines and pictures do not have to be laminated, but they will last longer if they are. During the activity, make sure to walk around to all the groups to make sure they are taking turns and not opening the eggs. It might be helpful to actually tape the eggs closed in order to avoid any accidental opening.

Safety Concerns: Do not allow students to open eggs or remove contents. Make sure that all the eggs and cartons are handled carefully to avoid anything from being dropped on a student. Some eggs will be much heavier than others.

#### **Sources/References:**

1) http://www.learninggamesforkids.com/science\_songs/vibration-science-song.html