

Project FOCUS
Best Lessons
FOURTH GRADE

Title of Lesson: Make a Band

Theme: Physical Science

Unit Number: 4 Unit Title: Sound and Light

Performance Standard(s) Covered (enter codes):

S4P2

Enduring Standards (objectives of activity):

Habits of Mind

XAsks questions

Uses numbers to quantify

XWorks in a group

Uses tools to measure and view

X Looks at how parts of things are needed

X Describes and compares using physical attributes

X Observes using senses

Draws and describes observations

Content (key terms and topics covered):

Sound, vibration, beat, pitch, volume

Learning Activity (Description in Steps)

Abstract (limit 100 characters): Students will make different instruments in stations and discuss how each produces sound.

Details:

Students should know the basics about sound before this activity. Set up three stations in the classroom. Each should have the materials and instructions to make one instrument. The instruments are a guitar (rubber bands over a tissue box), glass beakers filled with different amounts of water, and maracas (containers filled with M&Ms). Give each student a worksheet with specific instructions and questions for each station. This ensures that they are paying attention and working when you are not at their station. Walk around and assist at each station, asking questions about the instrument. Some question/worksheet ideas include:

1. How does sound reach our ears?
2. How does this instrument make sound?
3. What part of the instrument is vibrating to make the sound?
4. Is the vibrating part of the instrument a solid, liquid or gas?
5. How can we change the pitch of the instrument?
6. What happens if I hold the glass beaker in my hand while we tap it?
7. What happens if I pinch the middle of the rubber band and we pluck it?
8. How can we create more volume with this instrument?

At the end of the lesson, students who have completed their worksheets get a packet of M&Ms from the maraca station.

Materials Needed (Type and Quantity):

Tissue box - 2

Rubber bands - 8

Container for M&Ms (I used easter eggs)

M&Ms

Glass beakers

Water

paper

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

Sources/References:

- 1)
- 2)
- 3)