

ARTS INTEGRATION LESSON FRAMEWORK (ARTS/OTHER DISCIPLINE)

Title: Measure and Make a Drum		Grade: K-3
Subject/Content Area & Art Form: Social Studies, Math, Music		Lesson Duration: 65 minutes
Driving Question: What size are the drums in the video? How are they made?		
Connected Objective: At the end of this lesson, students will learn to estimate the size of a drum, be able to infer what the drum is made of, and make their own drum using common materials.		
Subject/Content Area Objective Students will know: How natural resources influence music instrument construction. Students will be able to: How to estimate size, measure and make a drum.		Art Form Objective Students will know: Why instruments are made from specific materials and made to a certain size. Students will be able to: Make their own drum and discuss how size and materials influence the sound.
Subject Area Standard(s): Social Studies CC.3.R.1 Math KMD.A.2, 1MD.C.4, 2MD.A.3, 3MD.D.8	Art Elements: MU:Cn11.0.K, 1, 2, 3 Demonstrate understanding of relationships between music and the other arts, other disciplines, varied contexts, and daily life. MU:Pr4.2.K a. With guidance, explore and demonstrate awareness of music contrasts (such as high/low, loud/soft, same/different) in a variety of music selected for performance.	21st Century Skills: (Choose skills that apply to lesson) <ul style="list-style-type: none"> <input type="checkbox"/> Creativity & Innovation <input type="checkbox"/> Critical Thinking & Problem Solving <input type="checkbox"/> Collaboration & Teamwork <input type="checkbox"/> Communication <input type="checkbox"/> Cross-cultural Understanding
Formative Assessment(s): Have students create a chart of drum measurements including their estimate of Danny's drum in the video and the actual sizes and materials of their classmates' drums.		Summative Assessment(s): Make and play a drum for the class. Explain that the materials and size influence the pitch and timbre of the drum- compare the sound with other drums in the class.

Lesson Materials/ Preparation:

- Melodic Planet interview with Danny Richardson and Rich Senegal
- Chromebooks/internet or presentations from lesson 1
- Rulers/measuring tape
- Large poster size paper
- Balloons
- Rubber bands
- Containers (any size from home)

Lesson Steps/Strategies for Learning

- **Introduce:**

When teaching about how citizens make choices because of limited resources, read an excerpt from a text relative to a community problem and demonstrate understanding of the text by answering questions related to the resolution of the issue. Support answers by referring explicitly to the text.

Resources:

Common Ground by Molly Bang. (Blue sky Press, 1997) ISBN -0-590-10056-4 Lesson plan to accompany the text available at www.econed.org

- **Engage: (5 min.)** Watch the interview with Danny Richardson and Rich Senegal, the section on drum making is from 18:03-19:22. Discuss why Native people might have used different animal hides and different sizes of wood. (Natural resources around them, and having to move often or quickly).
- **Build Knowledge: (10 min.)** Look at tribes in several areas of the US. (See lesson 1- research a tribe). Discuss what natural resources the tribe would have and what sort of lifestyle they had, (nomadic or sedentary/agricultural). What size drums are they most likely to build?
- **Deepen/Assess Understanding: (20 min.)** Watching the video, what size is the drum Danny and Rich are playing? How can you estimate the size? Can you estimate how many people could sit around that drum? Use a large piece of paper to cut out a drum shape using the classes' measurement estimate. Test how many students can sit around the drum. (Actual dimensions- W 28"(diameter), H 16").
- **Apply: (20 min.)** Using a container of any size brought from home, make a drum by stretching a deflated balloon over one open end and securing it with a rubber band. For instructions and more ideas, see these sites:
- WikiHow, search "Make a Drum"
SavyHomeMade, search Make a Drum

Have each student present their drum by playing it for the class. They should comment on if the drum has a high or low pitch and how the material, (metal, glass, plastic), might change the tone or timbre of the drum.

- **Reflect: (10 min.)** Measure each of the drums made by the students. Does the size affect the sound of the drum? How? What other factors might affect the sound? (Depth, material).

