

**Art/Science Lesson
Elementary Level**

Title: The Sounds of a Harp
Grade Level: Grade 4-5-6

Date: November 15, 2006

Objectives:

- ♥ Students will be able to identify and appreciate the sound of a harp and to construct and decorate a harp shape.
- ♥ Students will use his or her harp shape to experiment with sound and explain why we hear those sounds.
- ♥ Students will express the feelings that they experience when they hear music.

PA Academic Standards: Arts and Humanities Standards

9.1.5.a Know and use the elements and principles of each art form to create works in the arts and humanities.

♥ Elements:

≈ Visual Arts • Color • Form/shape • Line • Space • Texture • Value
≈ Music • Duration • Pitch • Timbre • Intensity

♥ Principles:

≈ Visual Arts • Movement/rhythm
≈ Music • Composition • Harmony • Rhythm

Integration with other subjects: Science and Technology Standards

3.4.4.c. Observe and describe different types of force and motion.

≈ Identify characteristics of sound (pitch, loudness and echoes)

Materials: The book *Zoe and the Magic Harp* by Jane Andrews, A lap harp, a CD with harp Music, Shoe box lids, old sheet music to cover the lids, Harp templates (cut from paper or card stock), Tempura paint, water colors, markers, crayons, glitter, gold shavings, glue, shoe boxes, (you can use the sheet music to cover the box too!), Elastic bands, Salt, colored rice.

Vocabulary: Sound, Pitch, Rhythm, Timbre, Eardrum, Vibrations

Instructional Procedure:

Anticipatory Set: Read the book *Zoe and the Magic Harp* by Jane Andrews. Talk about the harp in the story and share a piece of music from a CD that has beautiful harp music. Next, Play a tune to the students using the lap harp Talk about sound, introduce scientific terms and write them on the board. Tell the students that they will be making and decorating their very own harp.

Developmental Activities:

♥ After the Anticipatory set, I will go into detail about the ear, vibrations, and why we hear pitch and Timbre. I will also talk about the sound of the harp and give the students rules and instructions for an art activity that will help them understand vibrations.

♥ Students glue paper (sheet music) onto the shoe box lid.

♥ Students decorate their harp shape with crayons, markers, paint, glitter..

♥ The students will glue the decorated harp shape onto the shoebox lid.

♥ The shoebox lid then goes onto the shoebox. (Optional: the shoebox can be covered with sheet music as well).

♥ The students will then be told to put the rubber band or elastic band around the box.

♥ The students will be given the salt and/or colored rice and will be instructed to place some inside the box.

♥ Students will be encouraged to experiment by holding the box in different positions to see the different effects on the salt when plucking the elastic band.

♥ The students will experiment with the rubber band making different sounds.

♥ The students will pluck the elastic band and observe the way the salt or rice dances, responding to the vibrations.

Closure: The students will present his or her artistic masterpiece, play a tune, and talk about their feelings when the music is played.

Assessment: I will observe the students as they are constructing their harps, as they are discussing the science concepts of sound, and as they are playing their harps and expressing their feelings.

Special Needs Adaptations: I will use large poster board with large lettering with the rules and instructions for those with visual impairments. I will have another student or class mother help construct the instrument. I will have larger boxes for those with

fine motor impairments. I will have books for ESL students that have information about music in their culture.

Extensions: I could have the students write a poem from the music that they created.

I will teach the students the history of the harp while listening to a soothing CD of Harp Sounds.