

Teaching Artist Lesson, Part One

Sound and Vibration

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Artform(s): Music

Learning Objectives

Students will:

- Understanding sound as vibration through exploration of the triangle.
- Experiment with of the concept of duration, i.e., long vs. short.

Students' Prior Knowledge Necessary For This Experience

- Shapes
- Counting

Vocabulary

Arts Vocabulary:

- Duration (long vs. short)
- Vibration (sound waves)

Curriculum Content Vocabulary:

- Experiment: a scientific procedure undertaken to make a discovery.

Materials Needed

- Triangle with handle and striker (preferably metallic)
- Listening ears

Lesson Plan

Warm Up

- Introduce the triangle as a shape. Suggested questions:
 - How many sides does a triangle have?
 - How many corners?
 - Let's count the corners and sides together.

Main Experience

- Introduce concept of sound as vibration using triangle.
- Compare sound of triangle without handle (holding in hand), and then with handle.
- Explore the concept of duration (long or short).
 - How do you make a long sound shorter?
 - Make a long sound shorter by stopping the vibration (by holding the triangle in hand).

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Wrap Up

Finish lesson with song while playing triangle.

“Are You Sleeping?” (traditional)

Are you sleeping, are you sleeping,

Brother John, Brother John?

Morning bells are ringing, morning bells are ringing:

Ding, dong, ding, ding, dong, ding.

Intentional Questions

Open-Ended

- What sounds can you hear around you when you are quiet, e.g., air conditioner, birds, sirens, etc.?
- What is an example of a long sound?
- What is an example of a short sound?

Problem Solving/Critical Thinking

- How can you stop the vibration?
- How can you make a long sound shorter?
- What instruments can you think of where you can see the vibration, e.g., guitar, drum, violin, etc.?

Factual Questions

- What is vibration?
- How many sides does a triangle have?
- What happens to the sound of the triangle when you stop the vibration?