

## Objective

By the end of this lesson, you will be able to create your own musical instrument using everyday household items and understand the basic principles of sound production.

## Materials and Prep

- Empty tissue box
- Rubber bands of various sizes
- Pencils or chopsticks
- Scissors
- Tape
- Markers or paint (optional for decorating)
- Internet access (for research, if needed)

No prior knowledge or skills are required for this lesson.

## Activities

1. Start by exploring different sounds produced by everyday objects. Take a few minutes to experiment with tapping, shaking, and rubbing different objects in your surroundings to see what sounds they make. Write down your observations.
2. Research different types of musical instruments and their basic components. Focus on instruments that can be easily recreated at home using simple materials.
3. Design and build your own musical instrument using the materials provided. Use the empty tissue box as the base and attach rubber bands of various sizes across the opening. Experiment with different placements and tensions of the rubber bands to create different pitches and tones. Use pencils or chopsticks as the bridge to hold the rubber bands in place.
4. Once your instrument is built, decorate it using markers or paint to make it visually appealing.
5. Practice playing your instrument. Experiment with different techniques and explore the range of sounds you can produce.

## Seventh Grade Talking Points

- "Sound is produced when an object vibrates, creating waves that travel through the air or other mediums."
- "Musical instruments are designed to produce specific pitches and tones by controlling the vibrations of different materials."
- "Different musical instruments have different ways of producing sound. Some rely on strings, others on air, and some on percussion."
- "The pitch of a sound is determined by the frequency of the vibrations, with higher frequencies producing higher pitches and lower frequencies producing lower pitches."
- "By adjusting the tension and length of the rubber bands on your homemade instrument, you can change the pitch and tone it produces."
- "Musical instruments have been a part of human culture for thousands of years, serving various purposes in different societies."