Objective: The student will learn to make something new with things that would be thrown away.

Materials:

- Empty metal coffee can with plastic lid
  - OR:
  - Empty tin can greater than 20oz
- Plastic lid materials: balloon, thick plastic bag, old raisin container lid
- Wooden chopsticks, pencils, or sticks!
- Your choice of shakable stuff: beads, pebbles, paper clips, seashells, dried beans, old pen caps, etc.
- Decorations: markers, paint, stickers, etc.

Introduction:

The concept of using found objects to build cool stuff reinforces the Reduce-Reuse-Recycle triangle. Musical instruments are surprisingly easy to build with everyday materials! The physics of these instruments work the same way as new, expensive ones regardless of the simplicity of the materials. In the simplest form, instruments make sounds. So anything that makes sound can become an instrument with enough imagination. All sounds are vibrations which travel through the air around us. These vibrations are then transformed in our eardrum. That thin vibrating membrane sends the vibrations along the inner ear to eventually hit the nerves that send information to our brain. Our brain then interprets the sounds. A musical instrument might itself vibrate, or have a part that vibrates, or amplifies and/or modifies another vibration. This craft will create four distinct sounds, or types of vibrations.

Process:

1. Clean the can and take off the label. Have an adult help tape any sharp edges, if there are any.
2. Put shakable stuff in the can.
3. Secure a lid on top. Perhaps it is just reattaching the lid, using a rubber band to hold a stiff piece of plastic on top, or stretching a balloon to fit across the opening!
4. Decorate the can as desired. Undecorated will work just as well.
5. Use the chopsticks to bang the metal bottom, hit the lid, or scrape the side ridges. Shake the drum to produce another fun sound!