

Homemade Harmony

Create your own shoebox guitar!

Items you need:

- **Shoe box with lid**
- **4-8 rubberbands - the same length but different widths**
- **Piece of board 3 inches wide and a little longer than the shoe box (can use a pencil instead)**
- **Construction paper, markers, paint, glitter, glue, etc. to decorate the shoe box**
- **Scissors**
- **Ruler (optional)**

Instructions:

1. **Decorate your shoe boxes with paper, paint and glitter.**
2. **Wrap rubber bands around the shoe boxes the long way.
Be sure there is space between the rubber bands.**
3. **Pluck the rubber bands and listen to the sounds. How are sounds made? By vibrations.**
4. **Place the wooden board across the top of the box under the rubber bands.**
5. **Pluck the rubber bands again. How is the sound different?**
6. **Part of the difference has to do with resonance—or the vibrating of the board and box as the rubber bands vibrate.**
7. **Change rubber bands—you can make different pitches using different widths and lengths of rubber bands.**
8. **A ruler can be glued to the back of your shoebox to use as a “guitar neck.”**

