

Sound Sandwiches

Materials:

- 2 craft sticks
- 2 straw pieces (1" length)
- Markers
- 1 wide rubber band
- 2 small rubber bands

Directions:

Optional (but fun) step - decorate your craft stick using markers!

1. Place a wide rubber band lengthwise over one craft stick.
2. Tuck one piece of straw under the rubber band at one end of the stick - about 1 inch from the end. Place the second straw on top of the rubber band at the other end.
3. Place another craft stick on top of the straws - like the top piece of bread on a sandwich.
4. Wrap a small rubber band around each end of the sandwich to hold it together. See diagram below!
5. Hold the sound sandwich up to your mouth and blow through the space between the sticks.

Try adjusting the placement of the straws to change the pitch of the sound!



What are we learning?

When you blow through the sandwich and feel a vibration, you are feeling the sound waves moving through the band. Sound is produced when a vibration moves through a solid, liquid, or gas. When air was blown through the space between the craft sticks, that air caused the rubber band to vibrate (move up and down quickly), producing a sound!

Sound moves like the rubber band does, up and down in a wave. Sound waves can have different lengths and different wavelengths result in different sounds. When the straws are closer to gether, the rubbr band that vibrates gets shorter and moves more quickly, resulting in a higher pitchd sound.