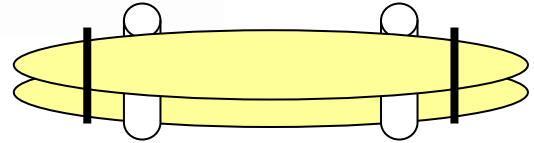




Science of Sound - Music Sandwich

Science and Math Concept

Vibration
Sound
Frequency
Pitch
Volume

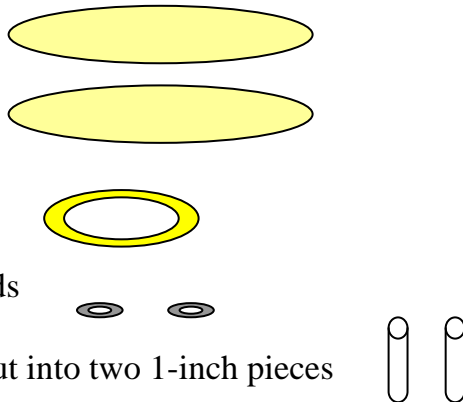


Special instructions

You may need to help some younger students wrap the elastic band around the craft sticks.

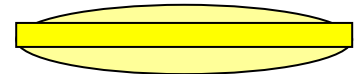
Materials

- 2 large craft sticks
- 1 #64 elastic band
- 2 small elastic bands
- A drinking straw cut into two 1-inch pieces

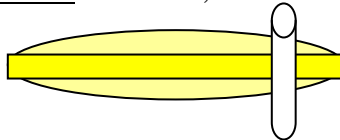


What to Do

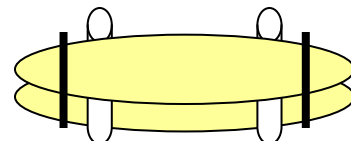
1. Stretch the #64 band length-wise around one craft stick



2. Lay one piece of straw underneath the band, about one inch from the edge.



3. Lay the 2nd craft stick on top of the straw and sandwich the straw between the two sticks.
4. Secure the two sticks by wrapping one of the small bands around the sticks, being careful to not bind the straw.



5. Repeat steps 1 through 4.
6. Now you can play your music sandwich.

What's happening?

As you blow through the sticks, air flows across the elastic band, causing it to vibrate and make the buzzing sound. As you move the straws closer you shorten the length of the elastic band and change the frequency of the vibrations, thus changing the pitch.

Questions

1. What causes the sound?
2. What happens when you move the straws closer together?