

NATIONAL ENGINEERS WEEK

Sponsored by NORTHROP GRUMMAN

MATERIALS LIST:

- Two jumbo craft sticks
- Two 1-inch pieces of a straw
- Wide rubber band
- Two thin rubber bands



BUZZ BUZZ!

When you blow into the sticks, the moving air causes the rubber band to vibrate. This vibration produces sound. Things that vibrate slowly create deep sounds, while quickly vibrating objects create higher pitched sounds.

TRY THIS:

- ⇒ What is your favorite musical instrument? What do you like most about them? By hitting, strumming, bowing or blowing, all musical instruments use vibration to make music. How does your favorite instrument vibrate?
- ⇒ When you blow into the sound sandwich, try squeezing the sticks as you blow. How does that change the sound?

Sound Sandwich

PROCEDURE:

Have science fun as a family! Complete activities with parental supervision.

- 1. Take the wide rubber band and stretch it longwise across one of the craft sticks.
- 2. Place one of the straw pieces between the rubber band and the craft stick, about an inch away from the end of the craft stick.
- 3. Place the other straw piece on the opposite side of the craft stick. You can opt to have it beneath the straw or above the straw.
- 4. Place the second craft stick on top of the straws. Secure them together by wrapping a rubber band around each end.
- 5. Test it out! Place the sound sandwich to your mouth in the middle and blow—just like playing a harmonica!
- 6. Be sure to take a picture or video or even share your catapult in action in the Facebook comments on the Buffalo Museum of Science or Tifft Nature Preserve pages!







Source: Exploratorium