

# LITTLE SHOP of PHYSICS



COLLEGE OF  
NATURAL SCIENCES  
COLORADO STATE UNIVERSITY



## Talking Strip

Waves carry energy, but they can also carry information. If you record a wave, you record the information, and if you recreate the wave, you recreate the information as well.

## What to Do

Hold the card in your left hand with the red strip on top. Pull down gently on the strip so that the card bends but doesn't fold. Now, run your fingernail down the ridged side of the strip. The card will “talk”, saying “Little Shop of Physics”.

## What is Happening

We recorded the sound of someone saying “Little Shop of Physics”. The pattern of the vibration is recorded on the plastic strip. When you run your fingernail down the ridges, it recreates this vibration. The vibration of the strip vibrates the card, and the card sends a sound wave through the air. You can also remove the strip from the card and connect it to other objects. A cup is great; tie a knot in the end of the strip and poke it through the bottom of the cup. Tie it to a balloon; this works well too. If you hold the end of the strip in your teeth and run your fingers down the ridged side, the vibration will go through your bones to your ears without going through the air—the sound is, truly, all in your head!

For more information: <http://lsop.colostate.edu>

The Little Shop of Physics is a traveling science experience, unlike any other in the United States. This award winning program has been in existence for 26 years. Each year, we visit all levels of schools with our collection of over 100 homemade, hands-on science experiments, and actively involve students in doing science. We see about 24,000 students—not including the 8,500+ people who attend our annual Open House or the 6,000+ community members in Texas who attend the HESTEC event. Our mission is to teach all people, K to Gray, that science is something anyone can do with common household materials. The Little Shop of Physics crew is a dedicated group of science educators and undergrad students based out of Colorado State University in Fort Collins, Colorado. Our goals are to:

- Find creative ways to share the wonder of science.
- Present a unique hands-on science experience to a diverse range of students.
- Travel to rural schools and Native American reservations that are out of reach for most programs.
- Involve undergraduate students in significant and meaningful service learning.
- Share ideas and insights with current and future teachers.

Little Shop of Physics is part of the Physics Department, which is housed in the College of Natural Sciences at Colorado State University.



DISCOVERY BEGINS HERE