



# Frindle

*fun activities*

## Telephone Talk

### How Sound Travels

Nick Allen is a boy with plenty of ideas. His big imagination and curious nature often land him in some pretty interesting situations like the time he made the great blackbird discovery. When Nick learned about the curious way a red-wing blackbird makes sound travel he came up with an unforgettable sound experiment of his own.

Just like the chirps of a blackbird, the sounds we make travel as well. That's because sound occurs when an object vibrates back and forth, just like your voice box when you speak. We can hear sounds because the vibrations travel through the air to our ears.

Here's an easy experiment you can do with your classmates to learn something about the sounds we hear and how they travel. To get started, here's what you'll need:

2 empty disposable, plastic cups  
scissors  
string  
2 paper clips  
notebook

#### Instructions:

1. Using a pencil, poke a hole into the center of the bottom of each cup.
2. Using the scissors, cut a string that is 15 feet long.

3. Poke the string through the hole in each cup.
4. Knot both ends of the string onto a paper clip and use the clips to prevent the string from slipping back through the hole in each cup.
5. With a partner on the other end, walk away until the string is pulled tightly.
6. Finally, whisper loudly into the cup.

#### Say What?

Could you hear the sound travel across the string? What happens if you pinch the string between the two cups? Can you hear it as well? What if the string isn't pulled tightly? Does the sound change? Record your observations in a notebook and share your findings and conclusions with the class.

This experiment works because vibrations travel through the cup, across the string and into the other cup which then catches the sound waves and channels them into your ear. For the "telephone" to work, the string must be able to vibrate freely. That's why if the string is pinched you can't hear as well and why it must be pulled tightly. If the string is loose, the vibrations die out before they reach the other cup. And, that's how sound waves travels.

*Mice type: This activity meets the following Sunshine State Standard(s): SC.3.N.1.3, SC.3.N.1.6, SC.3.N.3.2, and SC.3.P.10.2.*

For more information: <http://nieonline.com/orlando>

## Win a Class Cake Party from Publix Supermarkets!

### Enter for a Chance to win -

Grand Prize: Party for teacher's class including cake from Publix for up to 40 students.

To Enter visit [orlandosentinel.com/sweepstakes](http://orlandosentinel.com/sweepstakes) and locate the "Enter Here" link on the page.

**NO PURCHASE NECESSARY.** Sweepstakes runs from 4/9/17 at 12:01 am ET to 5/5/17 at 11:59 pm ET. Open only to legal residents of Orange, Osceola, Volusia, Lake & Seminole counties, 21+ as of entry date who teach elementary school (K-5) in such counties, Void where prohibited & outside listed counties. Excludes Sponsor & Publix Supermarkets employees & their hshld/immed fam mbrs. To enter, complete entry form at [orlandosentinel.com/sweepstakes](http://orlandosentinel.com/sweepstakes) & submit essay about using book *Frindle* in class. If teacher or teacher's school does not have a copy of *Frindle*, email [jgoerner@orlandosentinel.com](mailto:jgoerner@orlandosentinel.com)/sweepstakes for a complimentary copy. Limit one book per school. If teacher requests book by email w/in 5 days before 5/5, teacher will have until 5/9/17 to submit entry. Limit 1 entry per person/email. 1 Grand Prize: Party for teacher's class with cake from Publix for up to 40. ARV: \$75. Odds of winning depend on # of elig. Entries & essay quality will not determine winner. Other restrs apply. For full rules visit [orlandosentinel.com/sweepstakes](http://orlandosentinel.com/sweepstakes). Sponsor: Orlando Sentinel Communications Co. LLC, 633 N Orange Ave, Orlando, FL 32801.

Title Sponsor:

**Publix**®

**20/20 EYEGLASS**  
SUPERSTORE®

**INTERNATIONAL**  
**LITERACY**  
**ASSOCIATION**