

## Sound and Vibration

Sound is more than just noise -- it's energy. Airy whispers and ear-splitting screeches all are forms of energy that cause physical objects to vibrate. Let your young scientist explore this new world of sound with an experiment that just requires a handful of common household items.

### What You Need:

- Cereal bowl
- Plastic wrap
- Salt
- Whistle

### What You Do:



1. Explain to your child that sound is a form of energy. With the right circumstances, you can see as well as hear that transfer of energy.
2. Have your child stretch a piece of plastic wrap tightly across the top of the cereal bowl.
3. Let him gently tap the plastic wrap to test it. Help him stretch the plastic wrap tighter across the bowl if necessary.
4. Have him sprinkle a few pinches of salt over the plastic wrap.
5. Let your child get ready to blow the whistle -- as close to the salt and plastic wrap as possible.
6. Remind him that he should keep his eyes on the salt as he blows the whistle.
7. Have him blow the whistle! What happens to the salt?
8. Talk to your child about the salt's movement. The sound energy caused the plastic wrap to vibrate which caused the salt to move and jump.
9. What other noise makers can you and your child try out? Compare the whistle's result with a drum or even a smoke detector. Go outside and practice yelling loud enough to cause the plastic wrap to vibrate. What makes the salt jump the most?

If your child loves studying sound and vibration, why not explore our ears work? Our eardrums vibrate just like the plastic wrap. It's that vibration that allows us to hear sounds!