

Materials

2 Paper cupsToothpickString









Students will learn about sound waves and vibrations as they make their own string-cup telephone!

K - 2nd Grade

Directions

- 1. The first thing you need is a long piece of string. String from an old kite or fishing line will work well. Cut a long piece of string around 30 ft or more to start. You can repeat this activity using strings of different lengths.
- 2. **Ask an adult for help!** Using your toothpick, poke a small hole in the bottom of each cup (try to make the hole in the center).
- 3. Push one end of the string through the first cup and tie a knot at the end to keep it from coming back through. Repeat this step with the other end of the string and the second cup.
- 4. Find a partner and have then hold one cup and you hold the other. Spread out the distance of the string and make sure there is nothing touching it.
- 5. Have one person talk into their cup and the other hold theirs up to their ear. Can you hear each other?

How It Works

By speaking into the cup, you are creating sound waves. These sound waves are converted into vibrations at the bottom of the cup. These vibrations travel along the entire length of the string and are converted back into sound waves when they reach the other cup. This sound can be heard by the person with the cup against his or her ear.

