

Materials

- 2 paper cups
- String
- Push pin or scissors

1

Poke a small hole in the bottom of both cups.

2

Thread the string through both the holes and tie knots at both ends so the string does not fall through the holes.

3

Have one person hold one cup to their ear and have the other person walk a distance away so there is no slack in the string. Once you've done that, whisper into the cup. Why do you think that the string has to be tight? What happens? The person holding the cup to their ear should be able to hear what the other person is saying. Why do you think you can hear what the other person is saying?

4

This works because when we talk we are vibrating the molecules in the air. Certain materials like string have molecules that are closer together. Since those molecules are closer together the sound in the form of vibrations can travel farther and be heard by the other person. The string cannot have any slack so that it is able to allow those vibrations to travel down it to person on the other end. The person should be able to hear everything!

