



String Telephone

Ring Ring! It's Street Science calling! Unlock a new method of communication in this vibrating "String Telephone" experiment. Grab a friend and let the science begin!

Materials

- 🚀 2 large paper/ disposable plastic cups
- 🚀 2 paper clips or toothpicks
- 🚀 Cotton string or fishing line (3-10 metres)



Method

Step 1: Cut a long piece of string.

Step 2: Punch a small hole in centre of the bottom of each cup

Step 3: Thread one end of string through the bottom of each cup.

Step 4: To prevent the string from slipping through the cup, tie the loose end of the string around a paperclip or toothpick.

Step 5: Give one cup to your friend and take one for yourself. Then walk apart until the string is tight. Make sure the string is not touching anything else.

Step 6: While one of you talks into the cup, the other puts their cup to their ear and listens. Can you hear your friend talking?

What is happening? The Science explained.

When speaking into the cup, you create sound waves and make the bottom of the cup vibrate. These vibrations are transferred to the string and travel along it. When these vibrations touch the bottom of your friend's cup make the inside vibrate and become sound. It is crucial the string is tight, otherwise the vibrations dissipate and get lost along the way.

Stop & Think: What happens if a third person holds on to the center of the string with their hand?

