

Tin can telephone instructions

Even in the era of the cordless and the mobile, there's a lot to be said for the old fashioned tin-can phone.

There's nothing flashy about this model, and you can't send email through the wire – er, string.

But it offers something more modern versions don't – a fun project to make with a friend, and a dramatic illustration of vibration and sound waves.

What You Need:

Two tin cans, tops removed Duct tape A nail A hammer String Markers, paint, glitter, felt, or other decorations.

What You Do:

1. If the can opener left rough edges when you removed the tops, tape over them so your child won't scratch a finger. Give them the decorating materials and let them loose! They can personalize their "phones" however they'd like.
2. Turn both cans upside down and hammer a nail through the bottom of each can to make a hole in the center. Remove nail and set aside.
3. Cut a long length of string – up to 10 feet.
4. Poke one end through the bottom of one can, knotting on the inside. Repeat with the other end of string in the other can.
5. Instruct two kids to each take a can and move apart until the string is taut.
6. One child should put a can to his ear while the other talks directly into the other can.

The sound will travel over the "wire." What happened? When you speak, your voice makes vibrations. Once the string is stretched tight enough, these vibrations travel down the string and vibrate the bottom of the can on the other end which, in turn, vibrates the air and those vibrations travel through the air to the other person's ear.