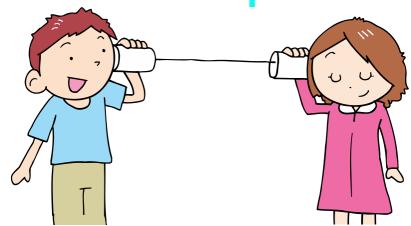
Make a Tin Can Telephone

## You will need:

Empty tin cans (washed and dried)

Hammer and a nail (get a grown- up to help with this)

2 metres string



## The method:

- 1- Gather all your materials
- 2—Create holes for the string in the tin cans

\*Note—get a grown-up to supervise when using a hammer and nail

Hammer a hole in the centre of the can using the nail, this should be big enough to pass your string through the hole and tie a knot on the inside of the can.

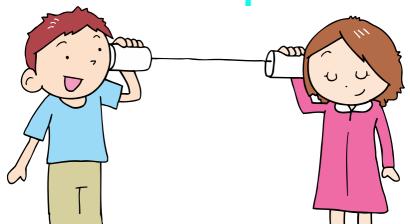
Repeat for the other tin can.

3— Pass the string through each tin can and tie a knot inside the can. You might need to use a needle or a paperclip to guide the string through the hole. Tie the knot to such a size that it will not go back through the hole. Repeat for the other tin can.

4— Get a friend or family member to help you test it out. Hold the string taut between the two of you. One person speaks into the tin can and the other person should hear the sound in their tin can. Take turns talking and listening. If the string is droopy, you may not hear the sound.



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## The Science:

So what is happening here?

The sound is amplified in the tin can and the sound waves travel along the string as vibrations. The sound can then be heard in the other tin can.

## Try other options:

Will this still work with longer string? Is the sound the same? Will this experiment work with different types of string?

Will the experiment work with paper cups?

