

Challenge: Make Your Own String Telephone



1. Make a small hole in the bottom of two paper cups or yoghurt pots.
2. Thread one end of a long piece of string through the hole in one cup and tie a knot in the end (with the knot inside the cup).
3. Thread the other end through the hole in the second cup and tie a knot in the end of the string.
4. Give your partner one cup and hold the other cup securely.
5. Walk away from each other until the string is quite taut.
6. Speak (don't shout) into your cup while your partner holds his/her cup to their ear and listens. Finish your message with the word 'Over!'
7. Swap over so that you now hold your cup to your ear, while your partner speaks into their cup, finishing with the word 'Over!'
8. Work through the following questions.

Try repeating your conversation at the same distance apart without the telephone. Is it easier to hear with or without the string telephone?

Can you make your telephone work around a corner?

What happens if you tie a knot in the middle of your piece of string? Why do you think this is?

Jot down the difference in the sound when the string is tight compared to when it is loose.

Undo one knot, cut the string in half, then reattach the second cup. What difference does the shorter string make to the sound?

On the next sheet, draw a labelled diagram of your string telephone and write a short explanation about how it works.