

Build your own tin-cane_telephone!

Material:



- box
- two empty and clean tins or canes)
- a rope (ca. 2m long)
- scissors

Instruction:

Use the scissors in order to make two holes into the canes' bottoms. Be careful by using the scissors, maybe you ask an adult for help.



Threat one end of the rope through the cane's bottom. Start from beneath in order to have the rope's end inside the cane. Do the same with the second cane and the second rope's end.



Your telephone is almost ready. Now you have to knot both ends of the riope in order to make the rope staying inside the cane. Therefore the know has to be bigger than the hole in the cane's bottom.





In order to use your telephone you need of course a somebody to call. Both ouf you take one of the canes and step back until the rope does not hang down anymore and is streight. One holds the cane at the ear and the other one can try to speak.

Explanation:

Your voice's sound is vibrating air. As you learned in the wiki-article: soundwaves. I The vibrating air passes the cane and is influences the rope. The rope is straigth and therefore it is also able to vibrate like the air. The rope is even more "solid" than the air and therefore the vibrations are carried faster and spread faster and better. This fact causes that your partner can hear voice better than talking without the telephone. The characterisic of carrying soundwaves better or worth depends on how soild the material is.