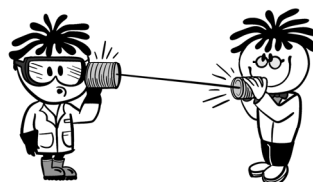


Enrichment activity that forms part of the Gr 10 Physical Sciences 3-in-1 Class text and Study Guide. See p. 91 MODULE 2 TOPIC 4 Unit 1 for the theory.

**ACTIVITY****Making a string or wire telephone****Materials**

- two 340 ml cooldrink tins
- 2 nails
- string of thin copper wire
- 2 polystyrene cups
- cotton string

**Method**

- 1 Punch a small hole in the bottom of each can.
- 2 Connect the two tins by passing the one end of the wire from the outside through the hole in one tin and tie it around a screw inside the tin.
- 3 Connect the other end of the wire in the same way to the other tin.
- 4 Standing away from each other with the wire stretched tightly between you, let your friend speak into the one tin while you hold the other tin to your ear. Note if you can hear what he/she is saying.
- 5 Observe the effect on the sound if:
 - the metal tins are replaced with polystyrene cups.
 - the metal wire is replaced with a cotton string.
 - the wire is not stretched tightly but hangs loosely.
 - you speak around a corner with the string telephone.

Observations and conclusion

Note your observations and come to a final conclusion.