

# NOISY NEIGHBOURS

This activity explores how sounds travel and begins with an everyday common experience.

This is then followed up with hands on activities so you can experience hearing sounds in different ways.

🕒 15 minutes to 3 hours

Skills unlocked: Creative, Communicator, Collaborative



## 🧰 Kit list

Paper

Metal coat hangers

2 pieces of  
60cm string

Paper cups

20m of string (kite  
string/fishing line  
is best)

A compass

## 📖 Instructions

- 1 Discuss the following questions in groups:
  - Have you ever heard your neighbours in the next house or flat?
  - Was the door or window open?
  - How do you think the sounds travel from your neighbour to your ear?
- 2 Draw labelled diagrams of how you heard your neighbour(s), indicating all the different materials the sound had to travel through to get to your ears.
- 3 Tie one piece of 60cm length string to one side of a metal coat hanger and the second piece to the other side of the hanger. Wrap the other end of each piece of string around each forefinger and then put your forefingers in each ear. Listen as you gently swing the coat hanger so it hits an object like a desk. How did the sound travel to your ears? How does the sound differ when you repeat this without putting your fingers in your ears?
- 4 Investigate string telephones – poke a hole in the bottom of 2 paper cups, threading a piece of string 20m long through each cup, and knotting the ends to stop it pulling through the cup. Ensuring the string is taut, get a partner to talk into the cup whilst you listen. What can you hear?

## ⚠️ Watch out

- Be careful when poking holes in the paper cups.

## ➤➤ Next steps

Extend this activity by using different lengths of string.

Note to teachers: This activity is based upon the primary science capital approach, which uses children's experiences to enhance their learning and enables them to become the experts. Further information can be found here: [explorify.uk](https://explorify.uk) ✨

## 🏠 At home

Why do some animals have larger ears than others? Find out by making a cone with A3 paper. Try listening with and without a cone.

## ↔️ Career options

- Sound is everywhere. Sound engineers and technicians are needed to ensure good sound quality at concerts. They help make TV and radio programmes, design quieter machines and buildings, as well as voice-activated devices.
- Audiologists test people's hearing and fit hearing aids.