



LI: To be able to use a scientific enquiry to answer a question.

Explore the question

# What Is Sound?



twinkl



Can I identify how sounds are made, associating some of them with something vibrating

### Key Vocabulary

Ways to create sound – bang, blow, shake, and pluck

Loudness / Volume – quiet, quieter, quietest, loud, louder and loudest, faint, fainter and faintest

Vibration

Vibrate

source

# What Is Sound?

**Close your eyes and don't make a sound.**

What can you hear?

What direction is it coming from?

Is it loud or quiet?

Is it high pitched or a deep, low sound?

Do you like the sound?



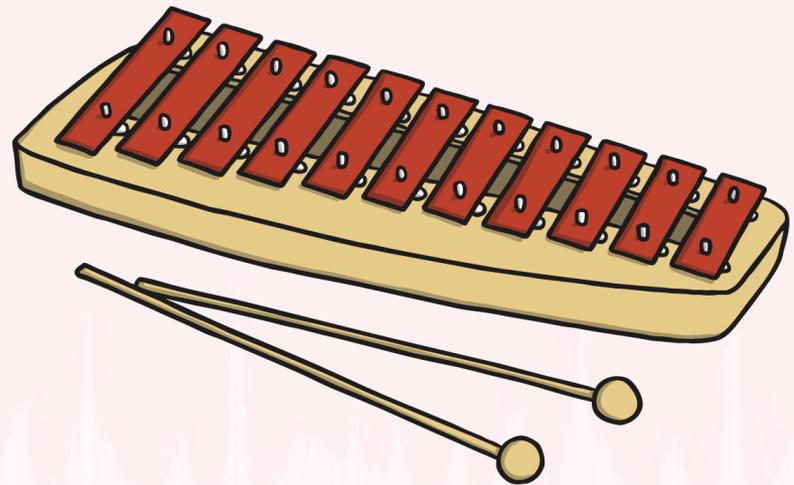
# Vibrations

Sound is made when an object **vibrates**.

Press your fingers to your throat and speak. Can you feel the vibrations in your throat?

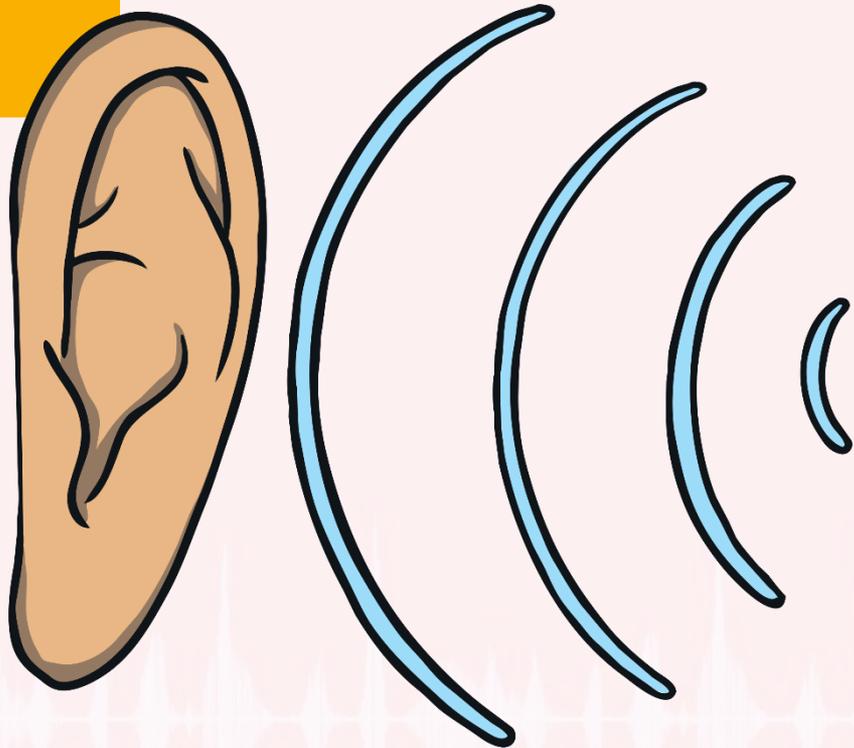


Strike a tuning fork, or a metal fork or a percussion instrument and then touch it gently with your finger. Can you feel it **vibrating**?



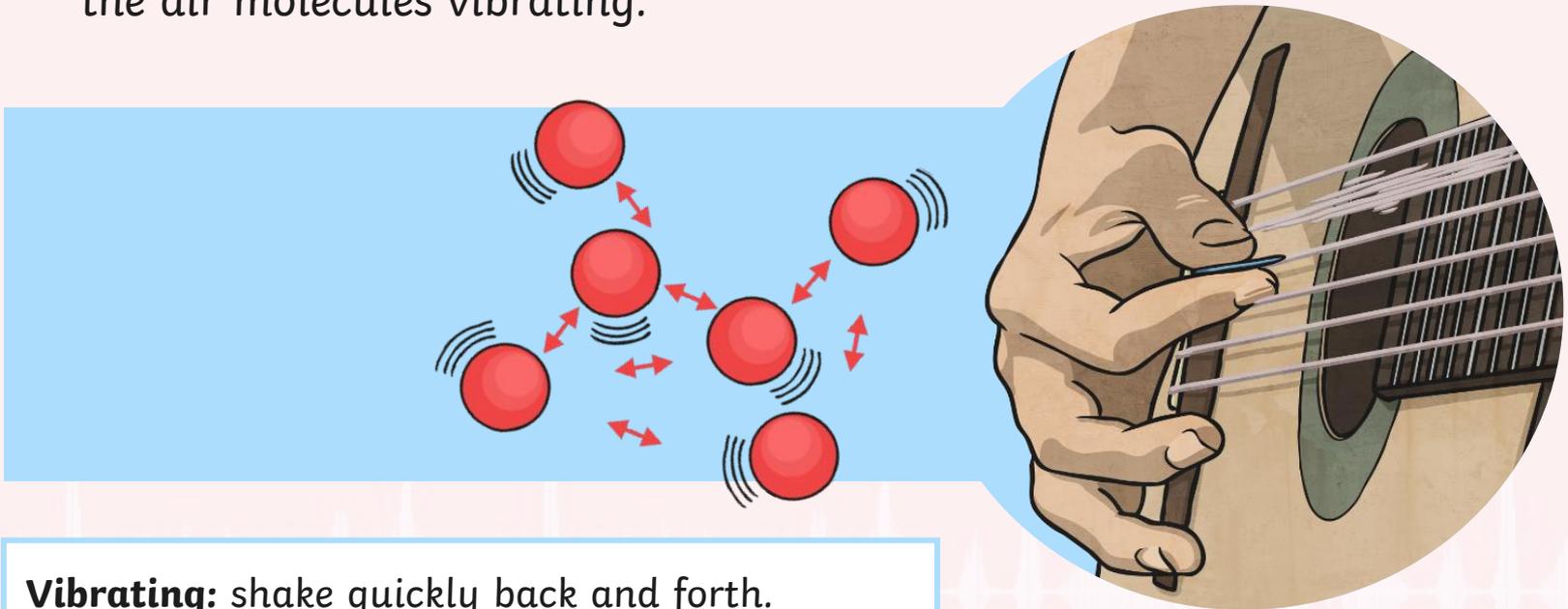
# Vibrations

These vibrations travel through the air until they reach our ears. These travelling vibrations are called **sound waves**.



# How Sound is Made

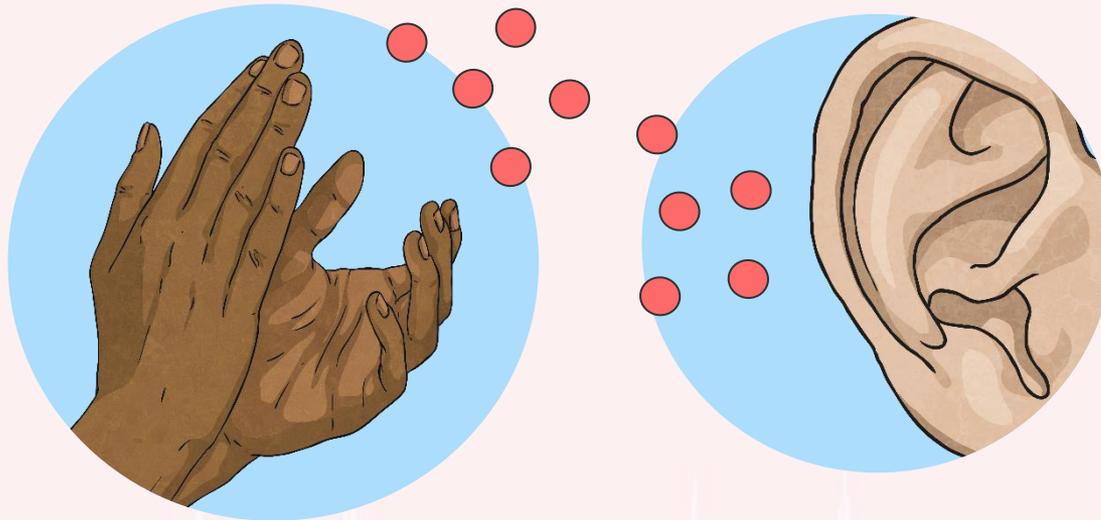
- Like light, sound travels through the air in waves.
- Sound is made by air molecules **vibrating**.
- When you clap your hands, the air around your hands shakes. This is the air molecules vibrating.



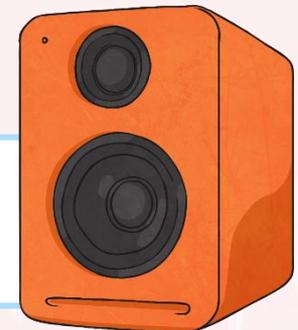
**Vibrating:** shake quickly back and forth.

# How Sound is Made

The vibration of the air molecules around the hands shake the molecules next to them and so on, until the air molecules in the ear are vibrating.



Have you ever felt a speaker when the sound is on?  
**It vibrates.**



# How Sound is Made

- Sound needs molecules to move. It is impossible for sound to travel in space.
- Sound doesn't have to move through air. It can travel through water or metal.
- In fact, sound travels faster through water and solids than it does through air.



# How Sound is Made

- Sound travels much slower than light, whether in air or in water.
- You often hear things after you see them, for example you see the lightning before you hear the thunder.

Light travels at 186,000 miles per second.

Sound travels at 770 miles per hour.



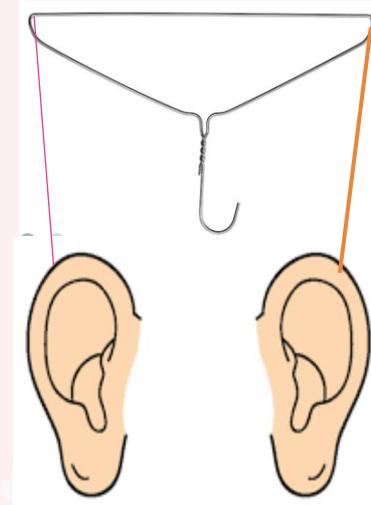
# Try this

Place your fingertips against your throat as you speak. What can you feel?

Place a filled balloon between two people. One of you talks against it and the other places their ear against it. Take turns. What do you feel?



Hang a metal coat hanger upside down. Tie a piece of string from each of the two corners and place each one on each ear. Someone else strikes the coat hanger.

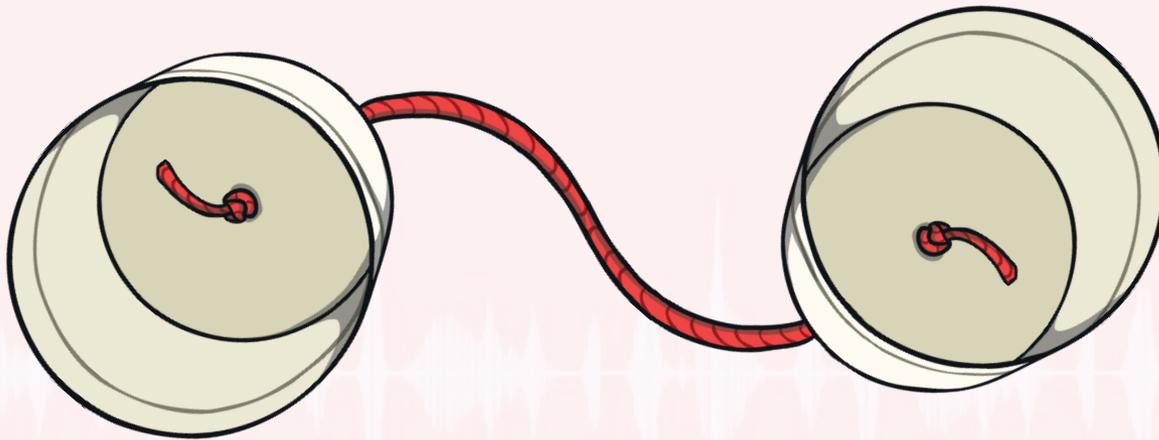


# String Telephone

You can experiment with **sound waves** by making your own telephone.

Connect two plastic cups or yoghurt pots with a length of string. Make sure that when you talk the string is tight.

Experiment with the length of string to see if you can still hear the sounds.



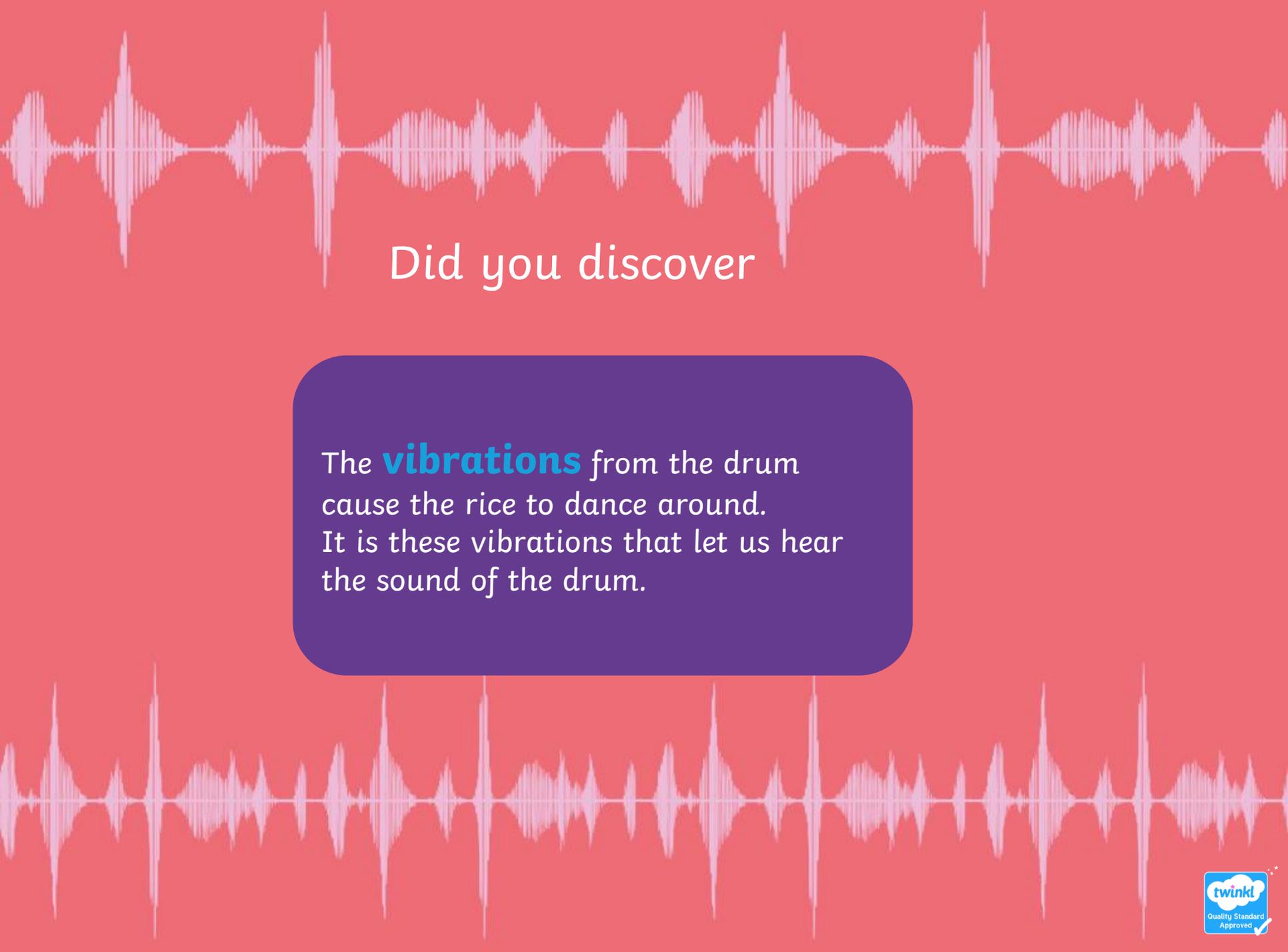
# Dancing Rice

Now try the experiment on the activity sheet before you look at the final slide.  
Record your prediction and then do the activity.

What do you predict will happen?

Why?





Did you discover

The **vibrations** from the drum cause the rice to dance around. It is these vibrations that let us hear the sound of the drum.