



Science

Sound



A detailed illustration of a hand playing a stringed instrument, possibly a guitar or a similar fretted instrument. The hand is shown in a close-up, with the fingers positioned to pluck or strum the strings. The strings are depicted as multiple parallel lines, and several red dots are placed along them, indicating points of vibration or resonance. The background is a warm, brownish-yellow color, and the overall style is that of a children's book illustration. The text "Good Vibrations" is written in a large, white, sans-serif font across the lower half of the image. A small blue logo with the word "twinkl" is visible in the bottom right corner of the illustration area. The entire image is framed by a yellow border featuring musical notes and various instruments like a guitar, a trumpet, a drum, and a xylophone.

Good Vibrations

twinkl

The slide features a yellow background with a decorative border. At the top and bottom, there are illustrations of various musical instruments: a red and white drum, an acoustic guitar, a brass instrument (possibly a tuba or euphonium), a pan flute, and a CD. On the left and right sides, there are vertical lines of musical notes, including a treble clef and various note values (quarter, eighth, and sixteenth notes).

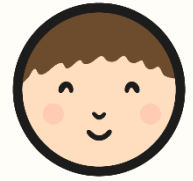
Aim

- I can describe and explain sound sources.

Success Criteria

- I can identify and describe sound sources around school.
- I can explain how sources of sound vibrate, creating sound.

What is Sound?



What do you already know about sound and do you know anything about how sounds are made?

Complete your Sound Mind Map to show what you already know, and to ask questions about what you want to find out.

Mind Map

Draw or write about the things you already know about sound.

Sound

How are sounds made?

What makes sounds louder or quieter?

How do musical instruments work?

How do we hear sounds?

What makes sounds higher or lower?

How can sounds be made quieter?

Do you have any questions about sound? What would you like to find out? Write your thoughts below.

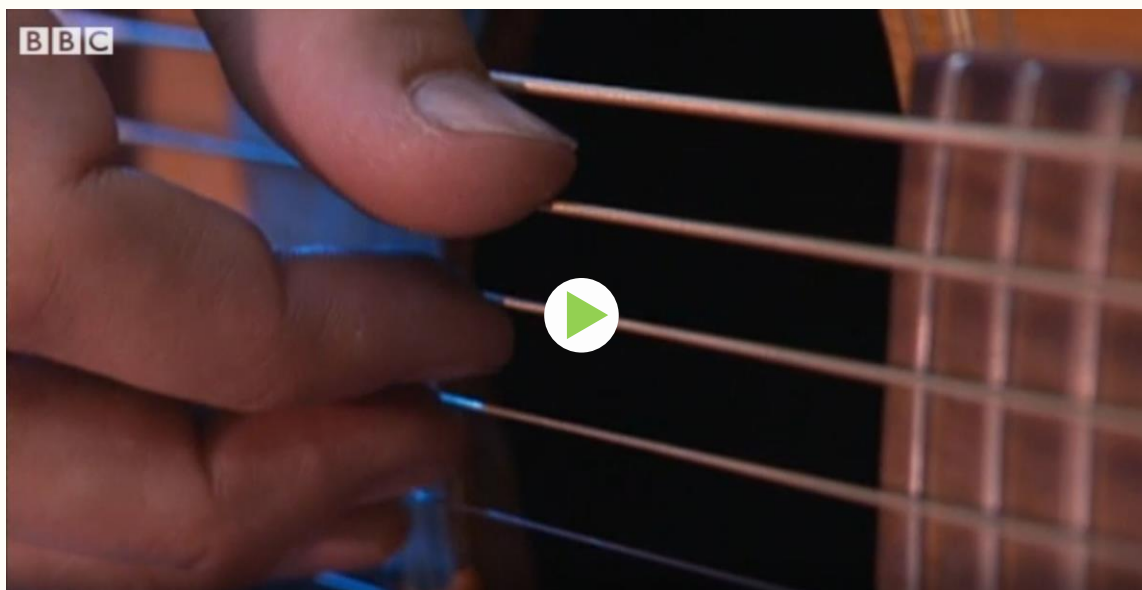
planit
twinkl.co.uk

Science | Year 4 | Sound | Good Vibrations | Lesson 1

What is Sound?



Watch this clip to see to see how the different families of musical instrument create different sounds.



Click on this image to play the video in a new window

What is Sound?



Did you come up with some words to explain how the musical instruments make sounds?

Look at the words below. Did you choose any of these words?

Vibrate

Vibration

Twang

Blow

Bang

Scrape

Shake

Pluck

Vibrations



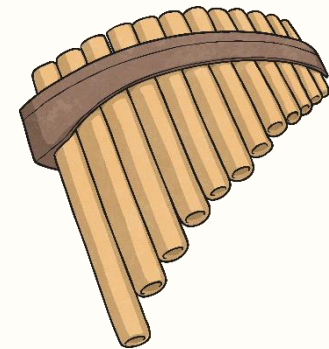
All the instruments are played in different ways, but they all have something in common. They all create sounds by vibrating.

The strings of the guitar and the gopichand vibrate when they are plucked.

The pan pipes and horn are filled with air, which vibrates when they are blown.

The balafon and the bongos make sounds when they are hit or banged, causing the blocks or the skin to vibrate.

But what is a vibration?



Vibrations



We can see and feel vibrations whenever sounds are made.

Gently place your hand on your throat.

Say 'Ah!'

Can you feel the vibrations from your vocal cords?

Ahh

Vibrations



If a few grains of rice are put on a drum skin and then the drum is gently hit, what do you think will happen and why?

The grains of rice bounce on the drum skin when it is hit.



This is because the drum skin vibrates, and the vibrations pass to the grains of rice, which also vibrate.

Vibrations



If a tuning fork is gently hit off a table and then lowered into a bowl of water, what do you think will happen and why?

You can see the ripples in the water when you place the tuning fork into it.



The tuning fork vibrates when it is hit, making the sound. These vibrations travel through the water, making the ripples as the water vibrates.

Activity Time

Time to complete your activity sheet.



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