

# Science : Sound

## Lesson 1: Good Vibrations

Spring 2: Friday 25<sup>th</sup> February 2021



A decorative border surrounds the page. 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 wooden wind instrument (possibly a pan flute or recorder), and a CD. On the left and right sides, there are black musical notes of different shapes and sizes, including a treble clef, arranged vertically.

## Aim

- I can describe and explain sound sources.

## Success Criteria

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

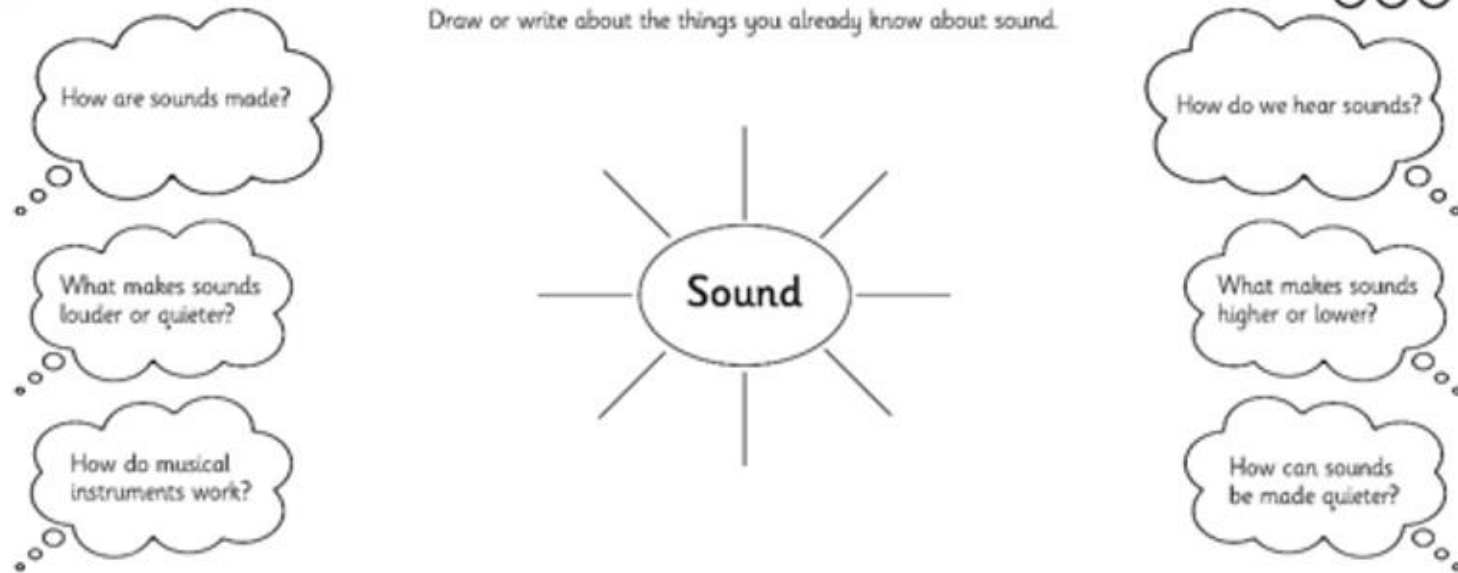
# What is Sound?



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.

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



Watch the clip below to find out all about sound.

<https://www.bbc.co.uk/teach/class-clips-video/music-science-ks2-what-is-sound/zbnmhbk>



# 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?



A decorative border at the top and bottom of the page features various musical instruments: a drum, an acoustic guitar, a trumpet, a xylophone, and a CD. The sides of the page are decorated with a vertical line of musical notes and treble clefs.

# 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

## Task 1:

# Vibrations

Place a few grains of rice on a tin tray and gently bang the tray. Hold the tray over a sink in case you spill any rice.

What do you observe?



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



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

## Task 2:

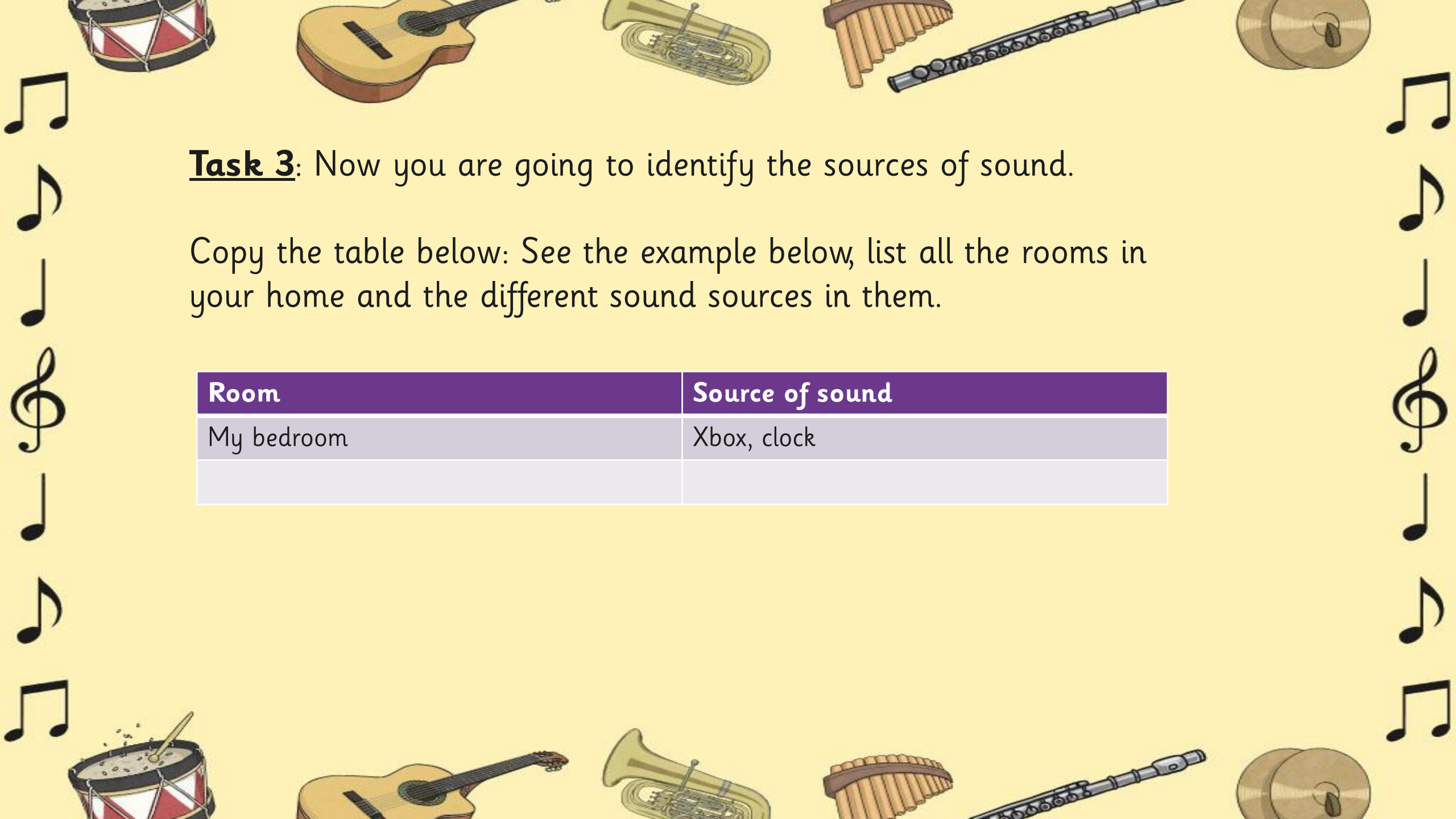
# ‘Sounds around your home Survey’

Around your home there are lots of different sounds. Some places will be noisy whereas some places will be quiet. The loudness of the different places will even change throughout the day!

You are going to carry out a sound survey of your home to find which places are noisy and which are quiet at different times of day. You may decide to rate each place out of 5, with 5 being very noisy and 0 being totally silent.

Draw a table to record your findings: Look at the example below. List all your rooms in your house in the first column.

Room	8.00 am	2pm	6pm
Kitchen	5 - noisy	1 very quiet	5 noisy

The page is decorated with a yellow background. 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 set of panpipes, a flute, and a CD. On the left and right sides, there are vertical columns of musical notes, including eighth notes, quarter notes, and a treble clef.

**Task 3:** Now you are going to identify the sources of sound.

Copy the table below: See the example below, list all the rooms in your home and the different sound sources in them.

Room	Source of sound
My bedroom	Xbox, clock



Well Done Year 4!

