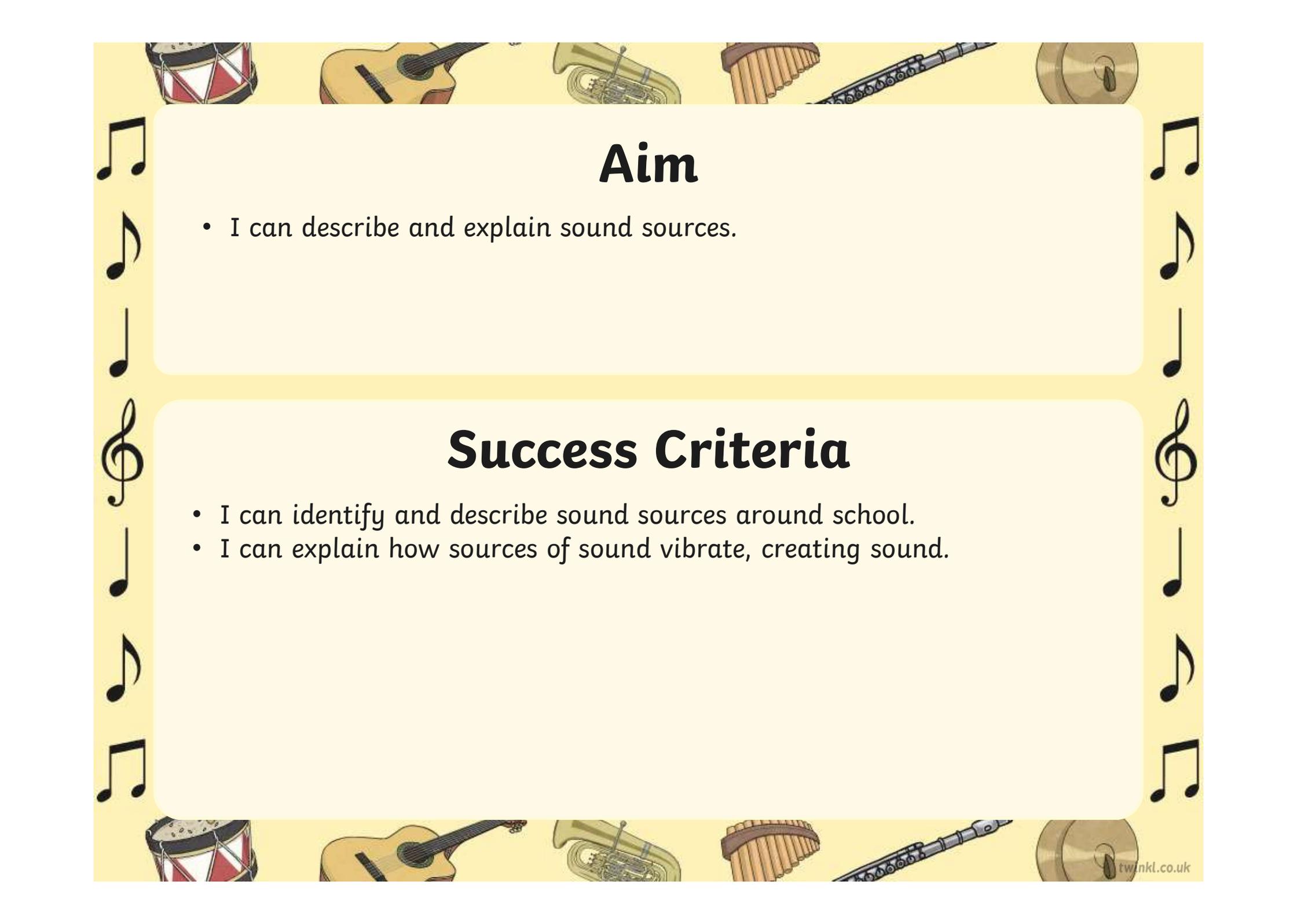




Good Vibrations

twinkl

The page 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 trumpet or trombone), a pan flute, and a CD. On the left and right sides, there are vertical lines of musical notes and a treble clef.

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.

How are sounds made?

How do we hear sounds?

What makes sounds louder or quieter?

What makes sounds higher or lower?

How do musical instruments work?

How can sounds be made quieter?

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

Sound

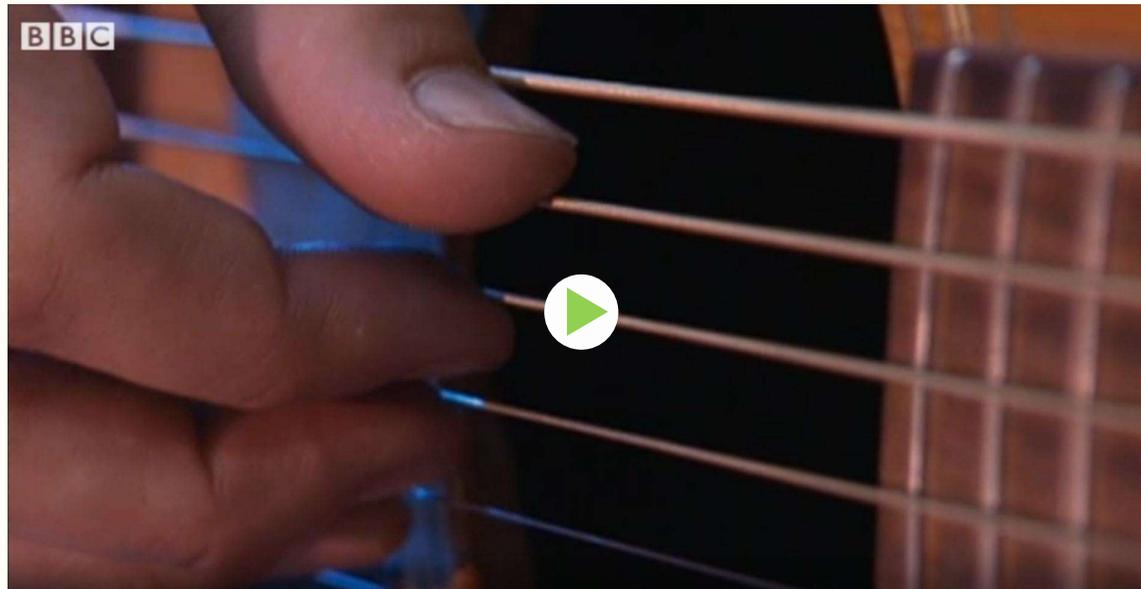
 

Science | Year 4 | Sound | Good Vibrations | Lesson 1

What is Sound?



Watch this clip to see to see how the different families of musical instrument create different sounds.
Find the link for this video on the planning.



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

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

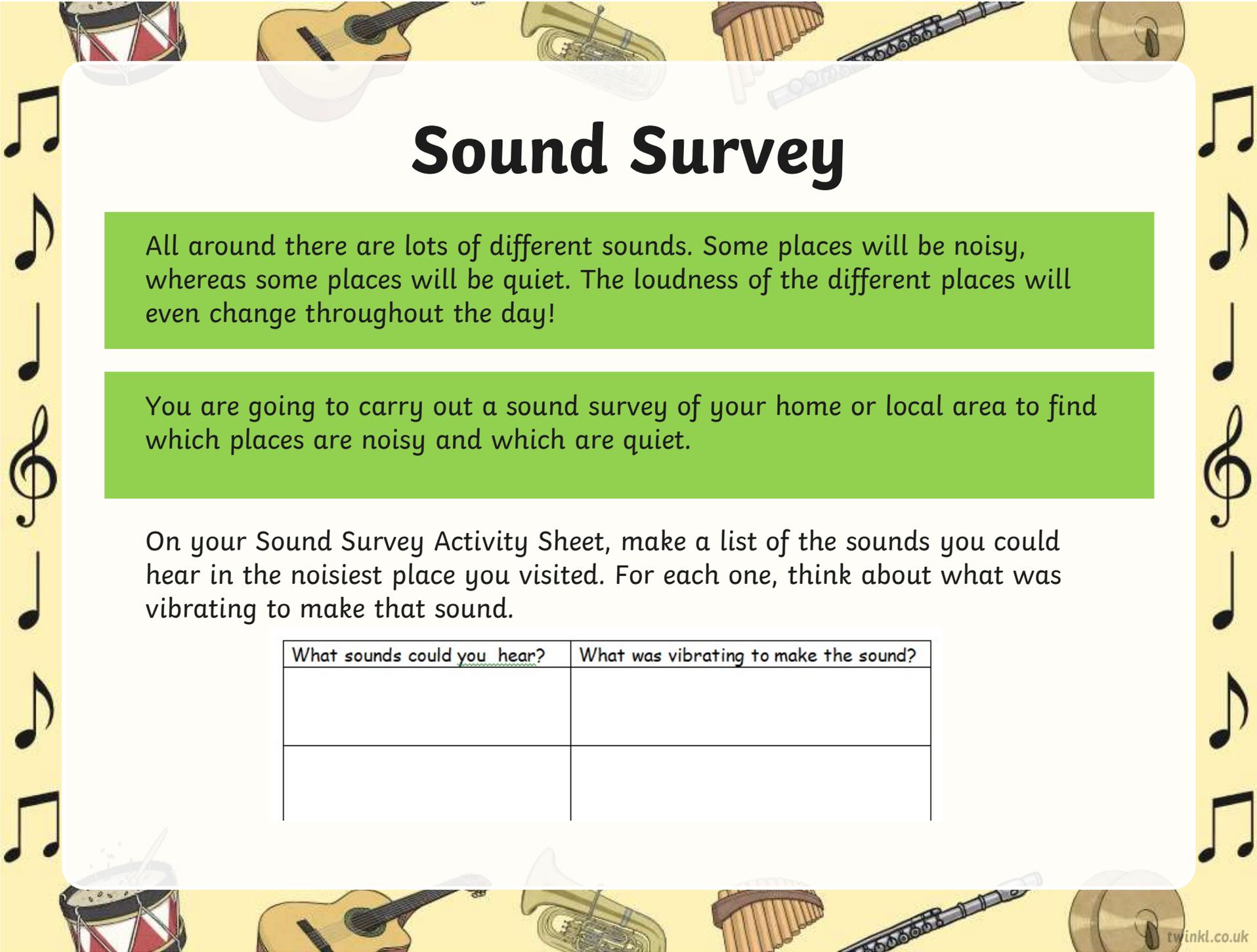


Place a few grains of rice on a drum skin and gently bang the drum. (Maybe you could experiment with this - have a go at making a drum with a Tupperware pot or a saucepan and some cling film on the top - see what happens to the rice! What do you observe?)

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.



Sound Survey

All around 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 or local area to find which places are noisy and which are quiet.

On your Sound Survey Activity Sheet, make a list of the sounds you could hear in the noisiest place you visited. For each one, think about what was vibrating to make that sound.

What sounds could you hear?	What was vibrating to make the sound?