

# Second Grade Science

## 2nd Grade Science: Activity 4 Essential Questions: How is sound produced?



Directions: This handout can also accompany a KCSatHome Teacher Video. If you have access to the video, watch the video before doing this activity. You can find the videos at <a href="https://www.knoxschools.org/Page/21816">https://www.knoxschools.org/Page/21816</a>

#### **Introducing Our Learning:**

Did you know that sound travels in waves? It's true! When something vibrates, or moves back and forth, sound is made. The air around the object vibrates, too. This sends out invisible waves that spread out like water waves. These invisible vibration waves reach our ears, and that is how sound is heard! Sounds can be heard through all forms of matter: solid, liquid, and gas.



Sound waves spread out like water waves.

Directions: Let's use the text above to help us show our understanding of the following question. How are we able to hear sounds? Use the space below to either give a written response or illustration to prove your answer. Don't forget to use text evidence.



#### **Connecting Our Learning:**

Let's take a look at the four pictures below. Match each instrument with how its sound is produced. Draw a line from the picture to its source of sound.



This instrument produces vibrations by blowing air into a tube.



This instrument produces vibrations by pressing a key that triggers a hammer to strike several strings inside the instrument.



This instrument produces vibrations when strings are plucked and bounce off the hollow inside.



This instrument produces vibrations when a stick or hand beats on the tight covering.



### **Extending Our Learning: Instrument Project**

Using what you have learned about how sound is produced, you will create your own instrument using only materials you have at home. Using the box, illustrate what your instrument will look like and how sound will be created. Don't forget to label your design.

Material ideas: toilet paper rolls, tape, paper bags, rice, seeds, Tupperware, rubber bands, beans, rocks, Kleenex boxes etc.	

Project Questions:
How did your instrument produce sound?
If you could redesign your instrument to produce a different sound, how would you do this? You can draw your revision in the box below.