

NAME DATE

Sounds in the Classroom

Attention Junior Scientists! Different materials can make different types of sounds. Let's explore the sounds of different materials in the classroom!

DIRECTIONS

- 1. Pick two items from around the classroom. You will use these items to make sounds.
- 2. Fill in the blanks below.

The name of my first item is	•
My first item is made from the material	
The name of my second item is	
My second item is made from the material	

- 3. Follow the instructions:
 - A. Take your first item and gently tap it against the table.
 - B. Listen for the sound.
 - C. Talk about the sound with your partner.
 - D. Take your second item and gently tap it against the table.
 - E. Listen for the sound.
 - F. Talk about the sound with your partner.



4. Were the sounds you made with your first and second items similar or different? How so?	
• Extra Exploration: What else do you want to explore with sound? Write down something you want to try, a question you have, or an extra experiment you did. You can even draw a picture!	
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Sounds in the Classroom



Why It's Easy for You

- Students use materials from around the classroom.
- Worksheets are ready to print.

Conditions and Challenges

 All students are engaged in the activity, so more classroom management. Classroom might get noisy it's a sound lab, after all!

Before You Begin

• Students should know information in Teacher Scripts 1–3 before starting this lab.

Tips

 If students have questions and interests beyond the scope of the lesson go with it! Encouraging students to follow their curiosity helps them learn and retain knowledge.

Attention Junior Scientists! Different materials can make different types of sounds. Let's explore the *sounds* of different materials in the classroom!

DIRECTIONS

1. Pick two items from around the classroom. You will use these items to make sounds.

Directions to give students:

- 1. Students can work in groups of two.
- 2. Items should be something they can hold at their desk (if they are interested in exploring a leg of a desk or chair or some other large item, they can incorporate that in the Extra Exploration section at the end.)
- 3. Suggest to them that they get two items that are different from each other.
- 4. Encouarge them to use "Science Language" as they work with their partners. Use words like "materials", "volume" and "pitch".

Suggestions for materials: Recycled Paper, book, pencil, crayon, eraser, scissors, hair clip, fabric (from sweatshirt, coat etc.), finger, hand, fingernail.



2. Fill in the blanks below.

If an item is made of two materials, have students write down both. For example, a hair clip might be metal and plastic. (Note: Hardcover books are usually made of cardboard, wrapped in cloth or paper.)

The name of my first item is <u>crayon</u> , <u>pencil</u> , <u>book</u> , <u>etc.</u>	•
My first item is made from the material wax, wood, paper, etc.	•
The name of my second item is <u>crayon, pencil, book, etc.</u>	
My second item is made from the material wax, wood, paper, etc.	

3. Follow the instructions:

- A. Take your first item and gently tap it against the table.
- B. Listen for the sound.
- C. Talk about the sound with your partner.

Students can talk about the sounds being loud or quiet, or the pitch being high or low. They can compare the sounds to other sounds they've heard before.

While students should stay on task in terms of exploring sounds, if they become curious about other aspects of sound encourage their exploration! The objective of these activities is to spark student interest and curiosity. For example, if students start tapping the material against their hands, and comparing that to the sound of tapping against the table, that is a good outcome for this activity. Another good outcome would be students crinkling a piece of paper to hear the sound that it made.

- D. Take your second item and gently tap it against the table.
- E. Listen for the sound.
- F. Talk about the sound with your partner.

4. Were the sounds you made with your first and second items similar or different? How so?

Students can talk about the sounds being similar or different pitch (high or low) or volume. They can compare the two sounds to different or similar sounds they have heard before.

• Extra Exploration: What else do you want to explore with sound? Write down something you want to try, a question you have, or an extra experiment you did. You can even draw a picture!

This is a place where students can explore their curiosity and/or write down questions they have. Based on how the activity went, you can customize the final instruction for this section. For example, let's say the class became very curious about how it would sound if they all clapped at the exact same time. You could run that activity and then have all the students write about what they observed about the sound. Alternatively, each student could do their own investigation on something they became interested in during the earlier experiments. Another idea is having each student write a question they have, and then you can address some questions as a class—or encourage the students to answer to the questions at home with their parents.