

# Can you Hear What Simon Says?

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## Description:

Students will experience the impact loud sounds have on their hearing through an interactive class activity. They will then reflect on the impacts of loud sounds on their success in the activity.

## Objectives:

- To raise awareness on the impacts of sound and noise on the ear.
- To discuss the differences between sound and noise as measured through decibels and individual perception.

## Vocabulary:

Noise, ambient, decibel

## Recommended for:

2<sup>nd</sup> – 8<sup>th</sup> grade students

## Materials:

- DEP Loudness Scale
- Reflection worksheet

## Background Information

Noise pollution is a sound that is distracting, annoying, or unpleasant and can have physical or mental repercussions. Sound is measured in units called decibels, which can be discussed in terms of loudness. Extended exposure to levels over 85 decibels can cause harmful health effects on the body.

## Method:

- Hand out DEP Loudness Scale
- Explain that a decibel is a measure of sound. A higher number means a louder sound.
- Review some of the sounds on the chart. Perhaps have students volunteer to imitate some of the sounds.
- Students should brainstorm other familiar sounds and estimate the loudness in relation to provided sounds.
- Have the class circle up silently, making no sounds. Explain that students must follow teacher's provided directions. This is a version of "Simon Says" appropriately renamed "Can You Hear What Simon Says?" Examples of instructions include:
  - **Simon says:** Raise your hands
  - **Simon says:** Run in place
  - Clap your hands (students shouldn't follow)
  - **Simon says:** Switch spots in the circle with a classmate
  - Hands on your head (students shouldn't follow)
  - **Simon says:** Spin around
  - **Simon says:** Make a funny face
  - Act like a robot (students shouldn't follow)
  - **Simon says:** Dance
  - **Simon says:** Freeze!

- After the first round, some of the class will become the sound environment while the other half remains listeners. Students whom are part of the sound environment must choose a sound from the DEP Loudness Scale or one they brainstormed earlier. They will mimic these noises, and their appropriate loudness, in the upcoming round. The number of students being part of the sound environment will increase each round.
- In the consecutive rounds, students must follow the “Simon Says” directions while encountering external sounds made from the environment.
  - It should become progressively more difficult for students to hear and therefore follow the directions.
- Hand out the age appropriate reflection worksheet for students to complete.
- How might the constant presence of loud sound and noise impact human health?
- *Optional:* Start a discussion on the results of long-term loud sound and noise impacts on human health and welfare.

## Discussion:

- Do students have an opinion on which sounds could be defined as noise?
- How did the listeners feel as the rounds proceeded? How was the student’s ability to hear and listen to directions influenced by the presence of increasing ambient sounds?
- Were some sounds more disturbing than others? Why might that be?

### For more information contact:

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Also visit DEP’s website at:  
[www.nyc.gov/dep](http://www.nyc.gov/dep)

# Reflection: Can You Hear What Simon Says?



1. What are some differences between sound and noise?

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2. What are decibels?

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3. Make a list of the sounds you heard during the activity. Which of these sounds do you consider noise? Why?

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4. How did noise impact the listener's ability to follow directions during Simon Says?

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5. Discuss the impacts noise may have on a New Yorker's life. You may want to consider students, the elderly, teenagers, babies, and other members of your community.

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6. In what ways can you help reduce the negative impacts of noise?

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# Reflection: Can You Hear What Simon Says?



1. Draw three sounds you heard.

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2. Draw three noises you heard.

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3. Use adjectives (descriptive words) or pictures to define noise:

Noise is \_\_\_\_\_

Noise is \_\_\_\_\_

Noise is \_\_\_\_\_