

Teacher's Guide: New York City Noise Code

Overview:

The New York City Noise Code balances the important reputation of New York as a vibrant, world-class city that never sleeps, with the needs of those who live in, work in, and visit the city. In 2007, the City updated the Noise Code for the first time in 30 years to reflect the changing landscape and advances in acoustic technology. The Noise Code states: “The making, creation or maintenance of excessive and unreasonable and prohibited noises within the city affects and is a menace to public health, comfort, convenience, safety, welfare and the prosperity of the people of the city.” In order to enforce this objective, the New York City Department of Environmental Protection (DEP) and the New York City Police Department (NYPD) share duties based on the type of noise complaint.

The decibel (dB) is the universal unit of sound measurement and is measured with a meter that registers sound pressure and displays these readings on a sound level scale. Decibels are a logarithmic unit, which means that a noise measuring 30 decibels is actually 10 times louder than a noise registering at 20 decibels. One challenge of measuring sound in the city is that there is a high level of ambient sound, or background noise in an area. For example, Times Square has high ambient sound levels, making it harder to distinguish the source of a sound. The same sound in a residential neighborhood may be easier to measure because there is less ambient sound. When designated as “dB(A),” the measurement is weighted in the “A” scale to simulate human hearing.

Jurisdiction Information:

Noise that is transient and created by individuals, like commercial music, motor vehicle and motorcycle noise, usually falls under the jurisdiction of the NYPD. All other stationary and non-individual city noise complaints, such as restaurant and bar noise, are handled directly by the NYC DEP. Airplanes, one of the main sources of NYC noise complaints, leave city jurisdiction and come under the jurisdiction of the Federal Aviation Administration once aircrafts take off.

Guiding Questions and Talking Points:

1. How loud, on average, do you think Times Square is during the day? (70 dBA)
2. Why do you think New York City serves as a global model for a noise code?

3. Talk about hearing as perception and reception of sound.
 - a. How do you feel about your loud music versus your neighbor's loud music or music played on the subway?
4. Why do you think loud sounds and noises are New Yorker's most significant quality of life issue? Think about neighbor relationships.
5. Do you think sound mitigation solutions have to be expensive?
 - a. Sound-proofing is common but simple solutions like the large blue plywood barriers often set up around construction sites can be just as effective.
6. Why do you think it is important to have noise regulations and to have two city agencies enforcing these regulations and responding to noise complaints (NYPD and DEP)?
7. Why do animals make sounds? What kinds of sounds do they make? What kinds of animal sounds would you consider "unreasonable"? What kinds of animal sounds do you enjoy? Why?

Additional Resources:

[Citywide Construction Noise Mitigation Rules](#) established sound level standards for specific noise sources. This law also prescribes the methods, procedures, and technologies that shall be used at construction sites to achieve noise mitigation whenever any one or more of certain construction devices or activities are employed.

[American National Standards Institute: Noise Safety Standards](#) guide the standardization of measurement and assessment of noise levels, potentially leading to the determination that a noise safety program is required or gauging the ongoing results of a noise safety program. Though cell phone applications can be used to give students a general idea of how noise metering works, this resource outlines the national standards, including required training.

[Data Logging Sound Level Meter](#) is available at Home Depot. Using a cell phone application in the classroom is sufficient for educational purposes; however, these sound level meters are more sophisticated than a cell phone application and similar to those used by the NYC DEP.

NYC Department of Environmental Protection

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For more information visit www.nyc.gov/dep