

Sound and Noise Glossary

Students: *This list of sound words is to help define unfamiliar terms that you may encounter in class, readings, or on field trips related to your sound study. Quiz your friends with these words, and remember to research other sound words that do not appear here.*

Teachers: *You can use this glossary as a guide to familiarize yourself with some common terminology used by the New York City Department of Environmental Protection. You and your students will encounter many of these words during classroom lessons, in readings, and during your field trips into the community. A great way to introduce these words to your students is by having a vocabulary bee and making a crossword puzzle or matching game. Have fun!*

Acoustics – The science of production, transmission and effects of sound

Ambient – The surrounding or environmental sound in a particular location, accruing from sounds both near and far

Attenuation – Decrease of sound intensity or signal strength by various means

Audible – The capability of being heard

Barrier – Anything physical or an environment that interferes with communication or listening; e.g., a poor acoustical environment can be a barrier to good listening and especially so for persons with a hearing impairment

Bass Sounds – The lowest of pitch that resonates physically and can be felt by a person

Beats – The alternating soft and loud sounds that occur when two sound waves of very similar frequencies interfere with one another

Community – A group of living things that belong to one or more species, interact ecologically, and are located in one place (as a bog or pond)

Decibel (dB) – A unit for measuring the relative loudness of sounds

Decibels (dBA) – The decibel level that follows the frequency sensitivity of the human ear at low levels

Echo – The repetition of a sound that is caused by reflection of sound waves

Energy – The capacity for work or vigorous activity

Exposure – To be affected by something

Frequency – The number of waves, vibrations and its rate

Hearing – Reception and perception of sound

Hearing Impairment – A degree of hearing loss, temporary or permanent

Hertz – A unit of frequency equal to one cycle per second

Impact Noise – A short burst of sound

Oscillation – A single fluctuation between maximum and minimum values in such an effect

Noise – A sound that is loud, unpleasant, unexpected, or undesired

Noise Abatement – The measures taken to reduce unacceptable sounds or vibrations, or to protect people from exposure to them

Noise Pollution – Annoying or harmful sounds in an environment

Pitch – The degree of height or depth of a tone or of sound, depending upon frequency

Quiet – Making low noise or sound

Reverberation – A collection of reflected sounds from a surface

Silence – Absence of any sound or noise

Sonar – A system using transmitted and reflected underwater sound waves to detect and locate submerged objects or measure distances underwater

Sound – Vibrations transmitted through air or another medium capable of being detected by human organs of hearing

Tone – Any sound considered with reference to its quality, pitch, strength, or source

Vibration – An oscillatory motion with respect to a given reference point

Volume – The amplitude or loudness of a sound

Wavelength – Sound that passes through air produces a wavelike motion of compression and rarefaction; wavelength is the distance between two identical positions in the cycle or wave

Parts of the Ear:

Ear – The sense organ that detects sounds

Inner Ear (Cochlea) – A hollow tube in the inner ear of higher vertebrates, usually coiled like a snail shell where sound waves are transformed into electrical impulses which are sent on to the brain

Middle Ear (Ear Canal) – A tube running from the outer ear to the inner ear to transmit sound

Outer Ear (Pinna) – Acts as a funnel on the outside of the ear that directs sound into the ear

For more information contact:

New York City
Department of Environmental Protection
59-17 Junction Boulevard
Flushing, NY 11373
educationoffice@dep.nyc.gov

Also visit DEP's website at: www.nyc.gov/dep