

Acoustical Science

science: a methodical approach to the acquisition of knowledge

acoustics: the science of sound

pitch: how low or high the sound is; the frequency of a sound wave determines the pitch: the higher the frequency, the higher the pitch

control: an individual or group used as a standard of comparison for checking or verifying the results of an experiment

variable: something that is prone to variation or change

instrument family: the orchestra is divided into different instrument families with each family of instruments having specific characteristics in common; the instrument families are string, brass, woodwind, and percussion

vibration: a periodic motion of the particles of an elastic body or medium in alternating opposite directions from the position of equilibrium when the equilibrium has been disturbed as when a stretched cord produces musical tone or particles of air transmit sounds to the ear

frequency: the number of complete waves per unit of time. The higher the frequency, the higher the pitch

hertz: a unit of frequency equal to one cycle per second

resonance: the ability of an object to vibrate by absorbing energy of its own natural frequency. Every medium has its own natural vibration frequency

music: sound with a pleasing quality, a identifiable pitch, and a definite repeated rhythm

noise: sound with no pleasing quality, definite identifiable pitch, or definite repeated rhythm

hypothesis: an educated guess; an answer to the question

prediction: Example: If my hypothesis is true then _____ should happen when _____ is manipulated.

pizzicato: a note or passage played by plucking strings