Sound and Music Worksheet

Match both the science/engineering terms on the left and the music terms on the right with the definitions in the middle. You will use some of the definiitons twice.

____ Low Frequency

____ Longitudinal Waves

____ Frequency

____ High Amplitude

____ White Noise

____ Amplitude

____ Sound Waves

____ Standing Waves

____ Transverse Waves

____ Wavelength

____ High Frequency

____ Low Amplitude

A. Waves in the air caused by vibrations

B. Waves that move in one direction, but "wave" in another direction

C. Waves that move and "wave" in the same direction

D. The distance between one wave and the next wave

E. How often a single wave goes by

F. How big the difference is between the high points and the low points of the waves

G. Big difference between highs and lows

H. Small difference between highs and lows

I. Lots of short waves

J. Very few long waves

K. Waves that can keep vibrating in or on something for a long time. because they "fit"

L. A sound that is a mixture of all wavelengths

M. Sounds that are organized by people

____ Low note

____ Pitch

____ Dynamic level

____ Soft note

____ Music

____ High note

____ Sounds

____ Loud note

Give short answers:

1. Can sound travel through empty space? Why or why not?

2. How are sound waves like water waves? How are they not like water waves?

3. Name 2 ways a player of a musical instrument can change the sound of the instrument.

4. How can an instrument with only 4 strings get more than 4 different pitches?

5. When a trumpet player pushes down a valve, she opens an extra loop of tubing. What does this do to the trumpet? To the sound?