



## KEY

### Sound Energy Pre – Post Poll

Choose the most correct answer.

- B 1. Sound travels as a wave through a medium. Through which of the following would sound NOT travel?
- A. air
  - B. outer space
  - C. the ocean
  - D. wood
- C 2. If I wanted to make the sound LOUDER, I would change the \_\_\_\_\_ of the sound wave?
- A. pitch
  - B. wavelength
  - C. amplitude
  - D. frequency
- A 3. In a sound wave, what travels in the wave?
- A. energy
  - B. frequency
  - C. particles
  - D. matter
- D 4. In which material would sound travel the slowest?
- A. milk
  - B. steel
  - C. brick
  - D. air
- D 5. A reflected sound wave that you hear is called an....
- A. opaque.
  - B. noise.
  - C. refracted wave.
  - D. echo.

- D 6. A person loses his hearing. The change may be due to....
- A. the ear canal is blocked.
  - B. the sound wave does not have enough energy to vibrate the eardrum.
  - C. the eardrum cannot vibrate.
  - D. all of the above.

- A 7. A sound's frequency determines:
- A. how high or low the pitch is.
  - B. how loud the sound is.
  - C. how soft the sound is.
  - D. none of the above.

- B 8. If a sound is high pitched and soft, the sound wave is:
- A. high frequency and high amplitude.
  - B. high frequency and low amplitude.
  - C. low frequency and high amplitude.
  - D. low frequency and low amplitude

9. Short answer. (2 point question.)

Using straws, explain how to change the pitch when you blow air through them.

When you blow through the straw, the air in the column vibrates. The length of the vibration, depends on the length of the straw. This determines the wavelength. The longer the straw results in the deeper the pitch because the wavelength is longer. If you shorten the straw, the pitch will be higher with the shorter wavelength.