Warm Up Question 1

The pitch of a musical note corresponds to the frequency of the associated sound wave. The higher the pitch, the higher the frequency. All sound waves in air travel at the same speed. How does the wavelength of a higher pitch note compare (smaller, larger, same) to that of lower pitch note? Explain your answer.

1. Smaller for higher pitch. $v = \lambda f$.
2. Higher for higher pitch.

Warm Up Question 2

You stand alongside a railroad and a train approaches and passes while blowing its whistle. What happens to the pitch (frequency) of the sound as the train passes (stay constant, increase or decrease)? Explain your answer.

1. Decreases. Doppler effect.
2. Decreases. Distance increases.
3. Constant. Speed and frequency are constant.
4. Increases. Doppler effect.