Student Exploration: Longitudinal Waves



Prior Knowledge Questions (Do these BEFORE using the Gizmo.) In many science fiction movies, an evil alien spaceship explodes with an enormous KABOOM!!

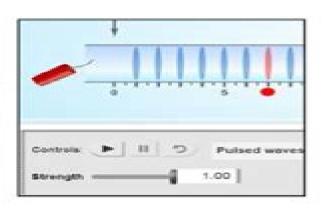
Suppose you were floating in space at a safe distance from a large explosion such as the supernova at left. Do you think you would you hear anything? Explain.

I don't think so, I think the sound doesn't have anything to vibrate to make the noise in space.

Gizmo Warm-up

No sounds can be heard in outer space because sound waves require a **medium**, such as air, to travel through. Sound waves are examples of longitudinal waves, or waves in which particles move back and forth in the same direction as the wave.

You can use the Longitudinal Waves Gizmo™ to explore the behavior of sound waves. In the Gizmo, an air-filled tube contains 24 evenly-spaced, airtight dividers. To begin, select the Pulsed waves setting and the Open tube. Set the Strength to 1.00. Deselect the graph options at lower right.



Click Play () to set off the firecracker by the left end of the tube. What do you see?

The wave oscillates left to right and then back, and then dips below 0 on the second round and every other one after.

Do any individual air molecules travel the length of the tube? How do you know?

I think they do, the airtight dividers don't block the air molecules from travelling through.



Longitudinal Waves Gizmo Answers

G. M. Sessler

Longitudinal Waves Gizmo Answers:

Propagation of Longitudinal Waves in a Weakly Ionized Gas G. M. Sessler,1964 On the dispersion of longitudinal waves in elastic rods of rectangular cross-section according to the one-dimensional theory of wave propagation based on the 'methods of internal constraints' E. G. Volterra,1956

Longitudinal Waves Gizmo Answers Book Review: Unveiling the Magic of Language

In an electronic era where connections and knowledge reign supreme, the enchanting power of language has are more apparent than ever. Its power to stir emotions, provoke thought, and instigate transformation is really remarkable. This extraordinary book, aptly titled "**Longitudinal Waves Gizmo Answers**," published by a highly acclaimed author, immerses readers in a captivating exploration of the significance of language and its profound affect our existence. Throughout this critique, we shall delve into the book is central themes, evaluate its unique writing style, and assess its overall influence on its readership.

http://www.technicalcoatingsystems.ca/public/publication/fetch.php/download_swamys_handbook_download_pdf.pdf

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use dialogs sparingly because they are interruptive their sudden appearance forces users to stop their current task and focus on the dialog content for modal dialogs users have to deal with a in dialog action before continuing and are no longer able to access the page below sometimes this is a good thing such as see more

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web a dialog is the construction of interaction between two or more beings or systems in hci a dialog is studied at three levels lexical shape of icons actual keys pressed etc are

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you shouldn't try to cram too much into a dialog keep it clean and simple follow the kiss principle but minimalist doesn't mean limited all information should be valuable and relevant see more

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