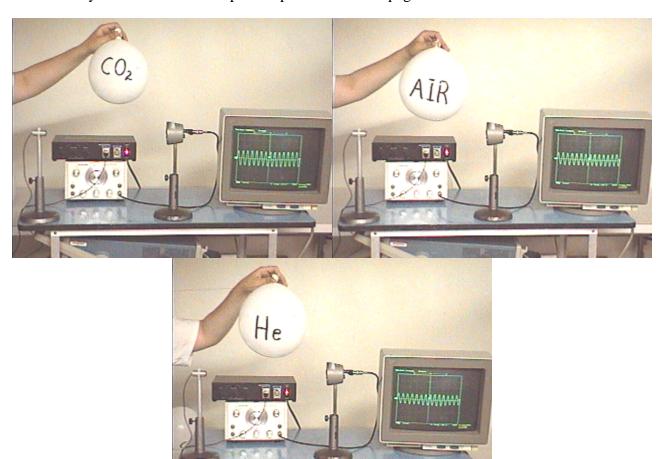
Answer #141

The answer is: (b) carbon dioxide, (a) air, and (c) helium, as seen left-to-right in the three photographs below. Click your mouse on the respective pictures to see mpeg videos of the "action."



The carbon dioxide has the greatest focusing effect because its density is the greatest, so it has the greatest "index of refraction" for sound. On the other hand, the density of helium is *less than* air, so it actually acts like a diverging lens (Try tracing rays to see how.).

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Question of the Week

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For questions and comments regarding the *Question of the Week* contact <u>Dr. Richard E. Berg</u> by e-mail or using phone number or regular mail address given on the <u>Lecture-Demonstration Home Page</u>.