Question #256

Shown in the photograph at the left below is an approximately five-foot section of thin plastic tubing that has been cut off a large roll and tied at one end, forming a sort of uninflated balloon. (The tubing is actually a Playtex Diaper Genie® Toddler Film replacement refill.)

I can blow it up, forming a filled balloon, as shown in the photograph at the center above. It takes about ten deep breaths to fully inflate the "balloon."

Now suppose that rather than blow in controlled deep breaths, I hold the end open and blow sharp breaths into the balloon from a distance of a few inches. this is shown in the picture at the right above.

How many breaths will it take to inflate the balloon as in the center photograph above?

• (a) One.
• (b) Two.
• (c) About the same number as blowing like a balloon.
• (d) More than the number for blowing it up like a balloon.
• (e) You cannot inflate the balloon that way.

Click here for Answer #256 after September 25, 2006.
For questions and comments regarding the *Question of the Week* contact [Dr. Richard E. Berg](mailto:drberg@umd.edu) by e-mail or using phone number or regular mail address given on the [Lecture-Demonstration Home Page](http://example.com).