## **Question #162**

Clicking your mouse on the photograph below will display an mpeg video demonstrating the resonance of the tuning fork with the plastic tube.



In this case the tube is about 68 cm long and about 6 cm in diameter, the frequency of the tuning fork is 480 Hz, and the speed of sound is approximately 345 m/s. When you blow across the end of the plastic tube you can create a musical tone. We now wish to compare the frequency of the tuning bar with that obtained by blowing across the end of the tube.

Will the frequency of the sound obtained by blowing across the end of the tube be higher, lower, or about the same as that of the tuning fork?

- (a) higher.
- (b) lower.
- (c) about the same.

Click here for <u>Answer #162</u> after November 3, 2003.

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>.