## Answer #161

The answer is (b): the sound of the lower tuning fork will be softer, as seen in an mpeg video by clicking your mouse on the photograph below.



The 480 Hz tuning fork is "in resonance" with the length of the tube, so its sound will be amplified by the tube. A nearby tube, such as the 384 Hz tube used here will *not* be in resonance, so its sound will not be amplified by the tube. Note that Gwen holds the lower-frequency tuning fork by the tube without hearing a tone, then touches the tunig fork to the table to demonstrate that it is actually creating a sound.

The next <u>Question of the Week</u> will investigate another aspect of this resonant tube.

