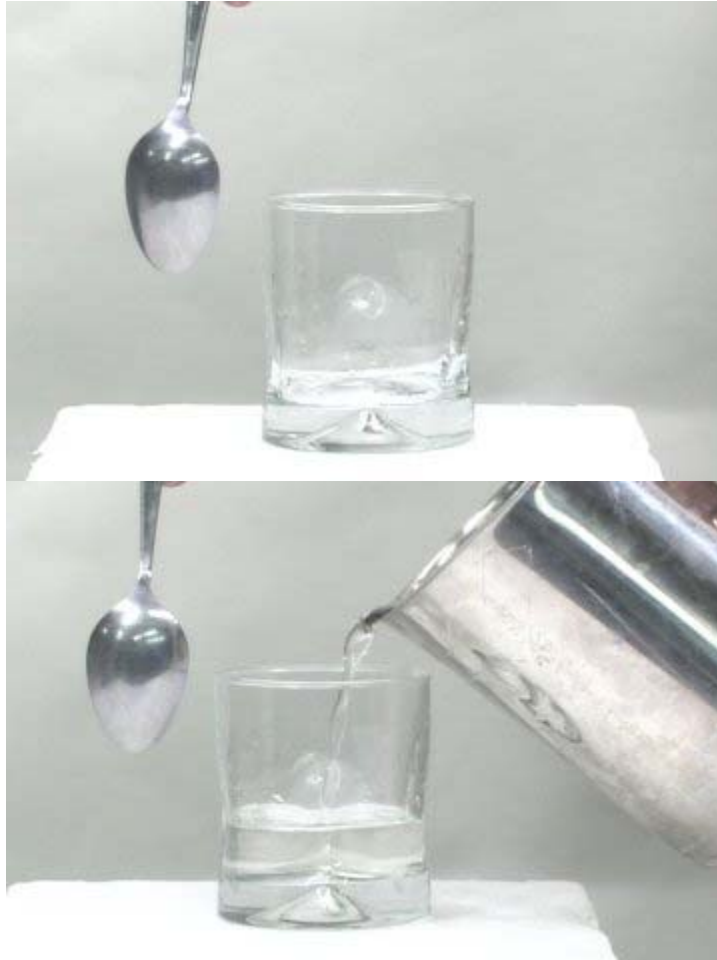


Question #301

Shown in the photograph at the left below is an empty glass. Striking the glass lightly along its rim with a spoon creates a ringing tone, as can be seen and heard in an mpeg video by clicking your mouse on the photograph below.



Now suppose that I begin to fill the glass full with water and strike it in the same way, as seen in the photograph at the right above and in an mpeg video by clicking your mouse on the photograph. The video stops just before the glass is about half full.

As the glass becomes filled with water:

- (a) the frequency of the tone will become higher than that of the empty glass.
- (b) the frequency of the tone will become lower than that of the empty glass.
- (c) the frequency of the tone will remain the same as that of the empty glass.

Click here for [Answer #301](#) after January 14, 2008.

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For questions and comments regarding the *Question of the Week* contact [Dr. Richard E. Berg](#) by e-mail or using phone number or regular mail address given on the [Lecture-Demonstration Home Page](#).