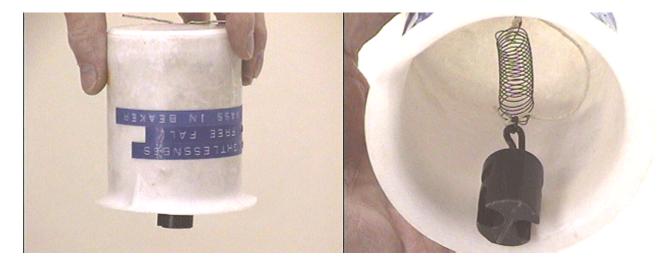
Question #103

A steel mass hangs by a spring from the inside of an upside-down teflon beaker, as seen in the photographs below. The photograph at the right is looking up into the beaker to see how the spring is attached.



The beaker will be held in the air and released from rest. Of course, the entire system will fall vertically downward. But the question this week involves what the steel weight will do relative to the beaker immediately after it is released.

The beaker might act like a parachute and catch the air, so the weight would then extend the spring a bit more after it is released. On the other hand, perhaps because the teflon beaker is less dense than the steel weight, the beaker will accelerate faster and the weight will move up into the beaker. Or perhaps the entire system will simply fall downward in the same configuration - that is, with the weight extending out the same distance that is shown in the still photograph. Or maybe the logic here is entirely dorked up.

When the beaker system is released, the weight will:

- (a) extend the spring further.
- (b) move into the beaker.
- (c) remain in the same configuration as it falls.

Click here for Answer #103 after February 11, 2002.

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>.