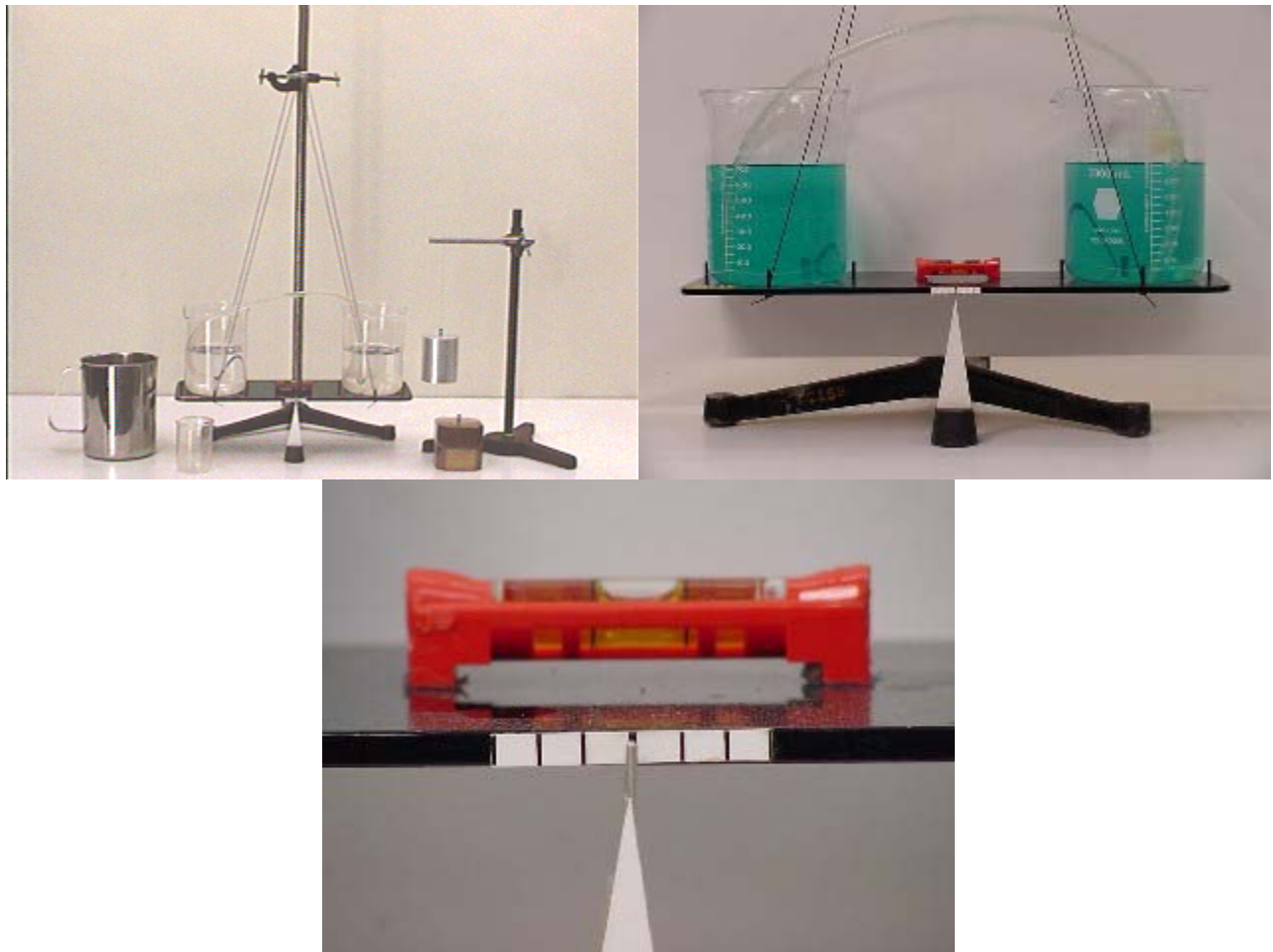
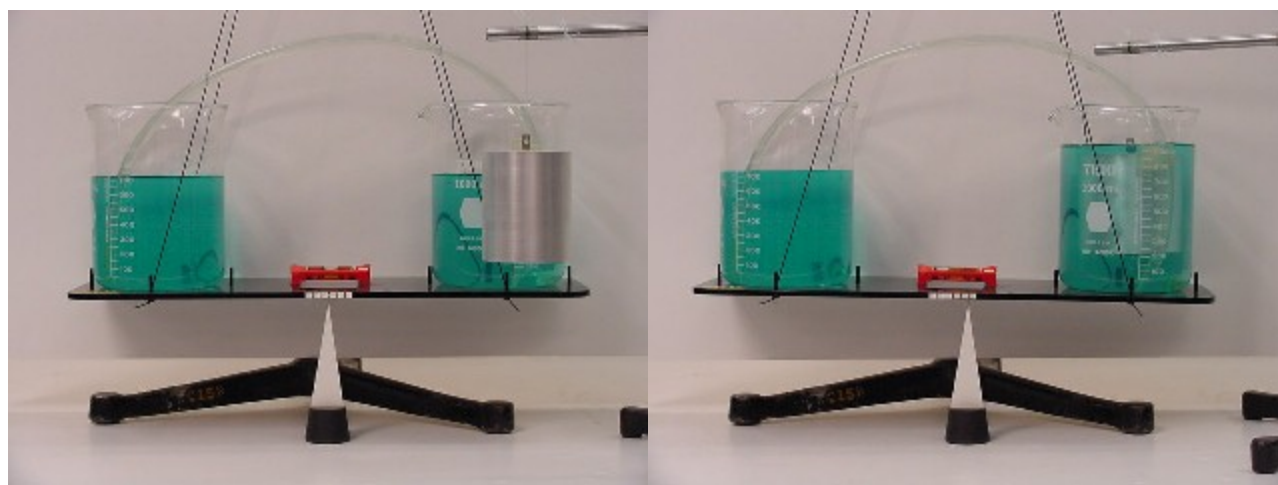


Question #159

The device shown in the photographs at the left and the center (close-up) below, called a *siphon balance*, consists of a hanging balance with identical beakers of water positioned equally from the center line so that the system is in balance in a horizontal position, as indicated by a level in the close-up photograph at the right. A tube filled with water connects the two beakers, as seen in the center photograph. In the picture at the center we have used azure blue water from the Caribbean Sea so that it is more visible.



An aluminum cylinder hanging by a string from a fixed support, shown in the photograph at the left below, is now lowered into the water beaker at the right on the balance. Immediately after the cylinder is lowered into the water, the system becomes unbalanced, as seen in the photograph at the right.



The question this week involves what the system will do some time after the photograph at the right was taken, allowing everything time to come to its new equilibrium condition.

After the system comes to its new equilibrium condition:

- (a) the system will have returned to a level orientation.
- (b) the system will stay the way it is in the picture at the right.
- (c) the system will move so as to become more unbalanced.

Click here for [Answer #159](#) after October 13, 2003.

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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](#).