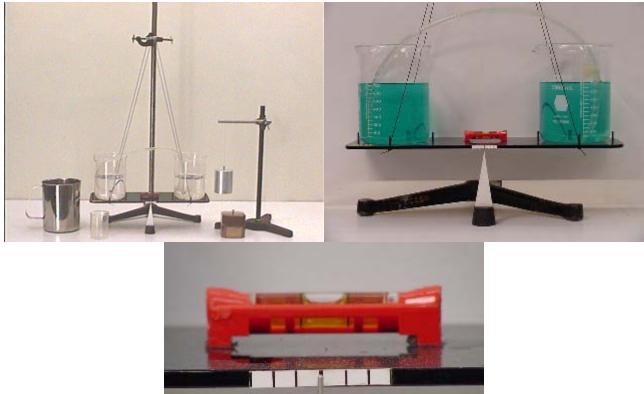
Question #158

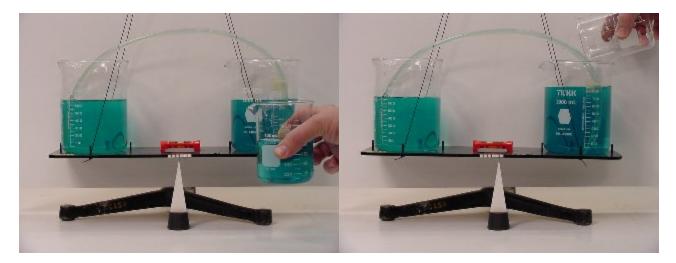
Now that we have studied the chain model of a siphon so that we understand how a siphon actually works, we can try some interesting examples.

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. The picture at the left contains a number of accoutrements that will be used in this and the following questions.





The photograph at the left below includes a small beaker of water that will be poured into the beaker at the right on the balance. Immediately after the water is poured into the beaker on the balance the system becomes unbalanced, as shown in the photograph at the right below.



The question this week regards what the system will do 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 <u>Answer #158</u> after October 6, 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>.