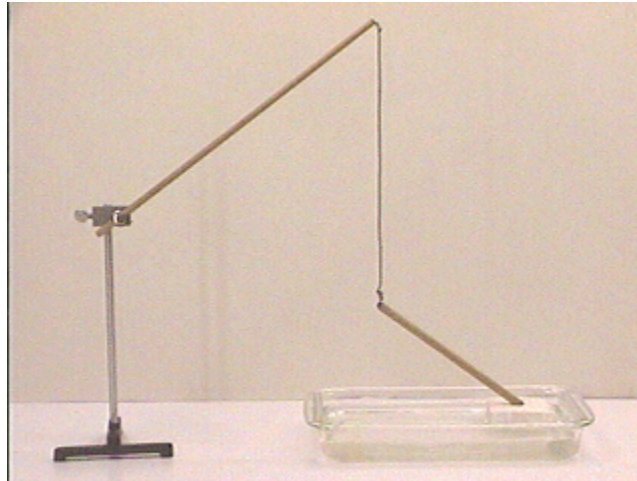


Answer #25

The answer is (a): the rod will come to a resting position with its upper end directly below the support point. This occurs because in the absence of friction acting on the lower end it will move so that the center of mass of the stick assumes its lowest possible position. This result is seen in the photograph below.



Any other position would result in a higher position for the center of mass, and therefore a higher resting potential energy.

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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](#).