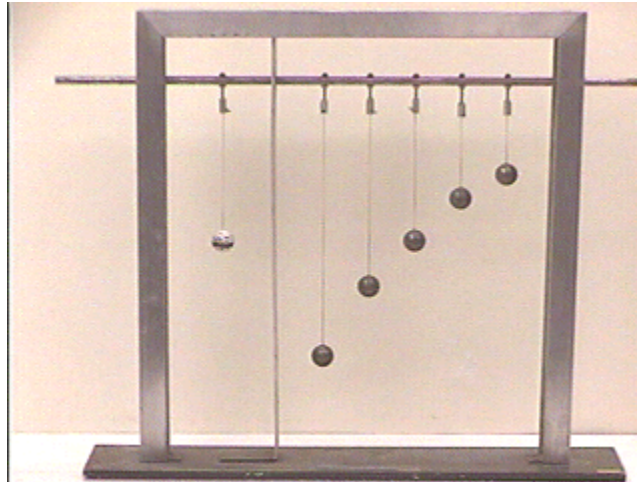


Question #222

This question involves analysis of the motion of the device shown in the photograph below. The pendulum at the left in the photograph is displaced and released so that it oscillates in and out of the plane of the picture. The support rod is free to oscillate in larger openings in the support frame, as seen in an mpeg video by clicking your mouse on the photograph.



The question this week involves what the five pendula on the right will do when the pendulum at the left is set into motion.

When the pendulum at the left is set into motion:

- (a) the center pendulum will move with a large amplitude, but none of the others will move at all.
- (b) the center pendulum will move with a large amplitude, while only the two pendula next to the middle pendulum will move at all, but with less amplitude.
- (c) the center pendulum will move a lot, while all four of the others will move, but with much less amplitude.
- (d) all of the pendula will move randomly with very small amplitudes.
- (e) all of the pendula will move randomly with larger amplitudes.

Explain exactly what you mean by your answer.

Click here for [Answer #222](#) after May 23, 2005.

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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](#).