Question #238

A ball and a plastic SLINKY spring are shown sitting side-by-side in the picture at the left below. A marker of red tape has been positioned at the center of mass of the SLINKY (physical center of the collapsed spring).

Now the spring is suspended from one end, with the ball suspended vertically at the location of the center of mass marker on the spring, as seen in the photographs at the center and the right below. The bottom end of the extended spring is about one foot off the floor.

If the spring and the ball are released from rest simultaneously from this position what will happen? In particular, will the SLINKY or the ball get to the floor first, or will it be a tie? Exactly how the SLINKY falls when it is released is seen in our <u>Demonstration C4-62</u> and was the subject of Question of the Week <u>Question #9</u>.



When the SLINKY and the ball are released simultaneously from the position shown in the picture at the right above:

- (a) the ball will arrive at the floor first.
- (b) the SLINKY will arrive at the floor first.
- (c) the ball and the SLINKY will arrive at the floor simultaneously.

Question of the Week

Outreach Index Page

Lecture-Demonstration Home Page



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>.