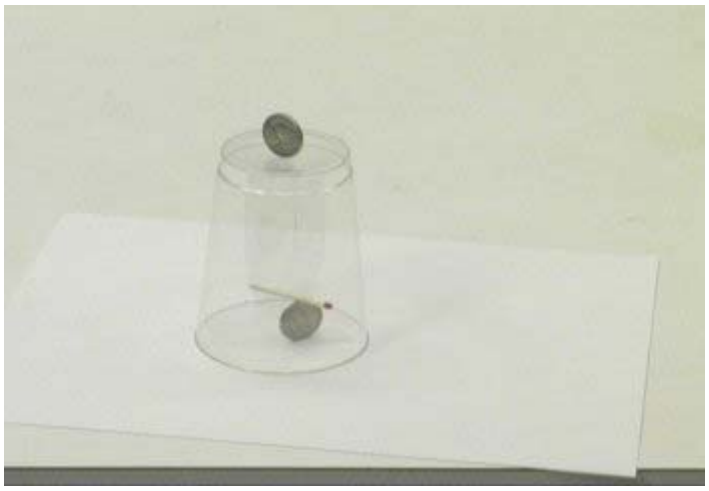
Question #243

A nickle is balanced on its edge in the center of a piece of paper, and a wooden match is balanced on the nickle. A plastic cup is placed upside down over the nickle and match, and a second nickle is balanced on bottom of the upside-down cup. This is shown in the photograph below.



The question this week is how to dislodge the matchstick from atop the nickle under the cup without overturning either of the two nickles. Because there are conceivably a large number of possible ways to do this, we will limit the discussion to three choices, listed below.

To dislodge the matchstick without overturning either of the two nickles as seen in the photograph, you must:

- (a) move the paper out from under the cup.
- (b) move one pole of a magnet near the cup.
- (c) move a charged rod near the cup.

You should try to predict the result, and provide a reason for that result to happen, before doing the experiment.

Click here for Answer #243 after February 27, 2006.

Question of the Week

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For questions and comments regarding the *Question of the Week* contact

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