Question #121

The photograph at the left below shows a ramp leading into the gap of a fairly strong permanent magnet. If a wooden dowel rod is rolled down the ramp, what will happen when it rolls into the magnet gap? Click your mouse on the photograph to see.

The answer is "nothing;" wood is not attracted by magnets, at least not on the scale of this experiment.

Now suppose that the four tubes in the photograph at the right above: aluminum, copper, iron, and plastic respectively, are rolled down the ramp into the magnet gap. What will happen in each case? In particular, how quickly will they reach the end of the ramp?

Rank the four rods in order of how fast they reach the end of the ramp, with the faster rod first.

- (a) aluminum.
- (b) copper.
- (c) iron.
- (d) plastic.

Click here for Answer #121 after September 23, 2002.
given on the Lecture-Demonstration Home Page.