Question #129

A glass rod is charged positive by rubbing it with (artificial) fur. It is then used to charge the electroscope as follows: the rod is brought near to the electroscope terminal, causing a deflection. While the rod is held in place, a grounded wire is touched to its terminal, discharging the electroscope. The glass rod is then withdrawn, resulting in a deflection of the electroscope. This sequence of events is shown in an mpeg video by clicking your mouse on the photograph below.

That same glass rod is then charged positive in the same way and brought near to the terminal of the electroscope. How will the electroscope respond?

When the charged glass rod is brought near the terminal, the electroscope will:

• (a) indicate a higher voltage.
• (b) indicate a lower voltage.
• (c) remain the same.

Click here for Answer #129 after November 25, 2002.