## **Question #235**

The photograph below shows a light bulb with a device that can drill a hole into the side of the bulb while the bulb is operating. The question this week regards what happens when the glass is penetrated by the drill bit, allowing air to enter the bulb and the gas in the bulb to escape.

In particular, what will happen and how fast will it happen? Click your mouse on the photograph below to see the drill begin to penetrate the glass bulb, but then the video is cut, leaving the final result to guess.



After the light bulb is penetrated, the bulb:

- (a) immediately goes out.
- (b) quickly gets brighter, then quickly goes out.
- (c) goes out slowly.
- (d) slowly gets brighter then slowly goes out.
- (e) remains lit as before for a long time.

Give time estimates for the answers that you select.

Click here for <u>Answer #235</u> after December 19, 2005.

Question of the Week

Outreach Index Page

Lecture-Demonstration Home Page



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.