

Question #261

A candle mounted on the lid of a gallon jug (a cork) is lit, and the cork quickly affixed to the jug. In this configuration the candle will remain lit for over one minute before the oxygen in the jug is sufficiently used up by the combustion process and the flame is extinguished.

Now suppose that the candle flame is lit and the lid again quickly affixed to the jug. However, the bottle is now dropped about six feet starting from the orientation shown in the photograph below.



What will happen? In particular, by the time the jug falls six feet the candle flame will:

- (a) burn more brightly.
- (b) remain at about the same brightness.
- (c) burn less brightly.
- (d) go out.

Click here for [Answer #261](#) after October 30, 2006.

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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](#).