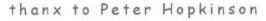
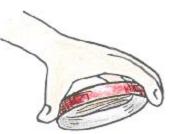
A short and a long candle burn in an open jar as shown. When the jar is covered the candle to go out first will be

- a) the short candle.
- b) the tall candle.
- c) 50-50, a toss up.

Defend your answer!!







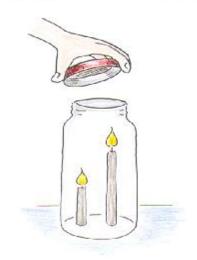




CONCEPTUAL Physics

A short and a long candle burn in an open jar as shown. When the jar is covered the candle to go out first will be

- a) the short candle.
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- c) 50-50, a toss up.



Answer: b

CONCEPTUAL Physics

The tall candle will go out first. Why? Because the burning candles consume oxygen and expel mainly carbon dioxide. You might guess that the denser carbon dioxide would settle to the bottom of the jar and snuff out the shorter candle. It would if it weren't so warm. Being much warmer than it is denser, it rises to snuff the taller candle first.



Can you image a larger jar where the shorter candle would be the first to snuff?

