

## THE DEMONSTRATION CORNER

### THE ELECTRIC HOTDOG (followed by the Electric Pickle)

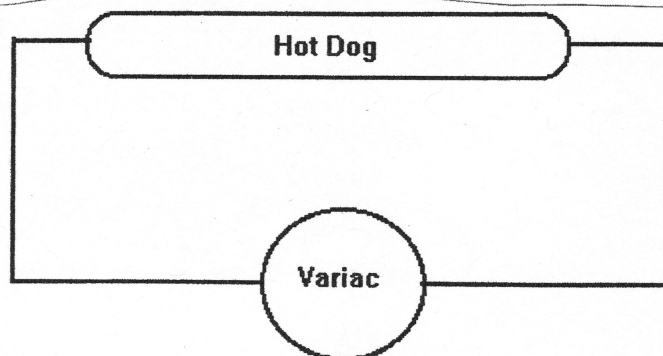
by

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A current can be run through a hotdog in order to cook it. There are commercial hotdog cookers that make use of this principle. I use it near the end of the unit on resistance in the Grade 12 Physics course. I have a couple of projection metres which I add to the circuit so that students may monitor and record the voltage and current during the minute or two that the hotdog



Probes from voltmeters or ammeters make good connecting wires.

cooks. This is a nice example of a decrease in resistance with an increase in temperature. At the end of the demonstration, students may calculate the total energy required to cook the hotdog, and compare it to other methods of cooking. I usually do the cooking on a porcelain plate, and then cut the hotdog into small pieces for the consumption of those who wish to try. Mustard is optional.

This is followed by a similar demonstration using a pickle. A nice, salty kosher pickle seems to work best. I like to use Strub's<sup>®</sup>, which are easily available in any grocery store. The room should be darkened for this one, since the pickle will light up with a ghostly greenish-orange glow. Since the next unit is Optics, a brief mention of the yellow-orange light produced by sodium is in order.

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Submissions describing demonstrations will be gladly received by the column editor.

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