Perform a simple, organic-compounds lab where iodine solution is used to test for carbohydrates, Sudan III stain is used to test for lipids, and Biuret’s solution is used to test for proteins. Spice up the lesson by using crime tape to secure the “crime scene.” Create scenarios of suspects such as Becky the Baker, Bob the Butcher, and Sam the short order cook at the local Greasy Spoon Restaurant giving each of them a motive for the crime. Keep the scenario light to avoid upsetting students who may have been the victim of a criminal act, such as Victor the chair of the local Vegan organization who dates Becky and frequents the Greasy Spoon is missing. The scenario can go something like this: footprints were found on the lab/classroom floor, the last place where Victor was seen. Samples of the substance which made the footprints have been sent to the lab for you (the student) to analyze. Of course the students will then perform the tests with the bio-indicators, record the results, and draw conclusions to issue a search warrant of the suspect’s home. I have done this lab for years, but just added the crime scene twist this year and the students loved it. One told me it was the most interesting lab she had ever done:)