## Abstract Submitted for the TSS08 Meeting of The American Physical Society

How much sun does sunblock block? JENNIFER HENDRYX — Sunscreens vary by strength, brand, and active ingredients. Consumers want to know which product is most effective. Using a spectrometer, I am able to observe the behavior of UV rays when they encounter the sunscreen. The UV is expected to be absorbed or reflected at different amounts, depending on the active ingredients of the sunscreen. What is the cause of the variations? More importantly, how can these variations be measured? The objective of this experiment is to answer these questions with limited time and resources. I will take several spectra of transmitted and reflected UV rays and compare between samples how much of the UV is actually blocked. I hope to analyze several variable factors that may (or may not) change the effectiveness of sunscreen.

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Date submitted: 11 Feb 2008 Electronic form version 1.4