Name(s)	Project Number
Mia A. Placencia	**S0324**

Project Title

An Assessment of the Effectiveness of Human Hair Hygrometers

Abstract

Objectives/Goals
The objective of this study is to test the efficiency of hygrometers made out of human hair in determining humidity levels.

Methods/Materials
A digital hygrometer (used for comparisons and collaboration), three strands of three different hair types (curly, straight, bleached), wood, plastic, nails, shower and hair dryer. Hygrometers were made out of human hair to predict humidity levels and they were compared to a digital hygrometer to test effectiveness.

Results
After taking humidity levels of both the hair hygrometers and the digital hygrometer over the course of seven days, the hygrometers on average had a confidence level of 99.99%. They reacted effectively to humidity levels in the air.

Conclusions/Discussion
The hair hygrometers had confidence levels all over 99% which concluded that they were effective enough to predict humidity levels. A personalized hair hygrometer proved to be a less-expensive way to predict the weather and can also help predict bad hair days.

Summary Statement

I showed that a hygrometer made of human hair can be as effective in determining humidity levels as a digital hygrometer

Help Received

I built and tested the hygrometers myself. I recieved help gathering materials and understanding the statistical analysis from my mentors in the Summer Science Institute.