

# What is science research?

When I was in undergraduate school at Vanderbilt, I lived in a dorm overlooking West End Avenue. I lived with 5 other guys on the 14th floor. We ate all our evening meals together, with a rotating cooking and cleanup schedule. We did have two of us (not me) who really loved to cook and were very good at it.

. . . Well, anyway we wanted to do something special for the Christmas parade which went right by our window thirteen stories down. George brought in one night a paper helicopter as outlined on the next page (only without the rabbit design!) and said, "What about throwing a thousand or two out our window as Santa passes?" Being the good scientist types that we all were, we decided to determine the best design for our helicopter. That was our project. Our standard for best was the copter that stayed in the air the longest while giving a nice twirl.

*Your lab activity for today is to isolate one variable of design and determine what is the effect of changing that variable on the quality and time of the flight.*

You will be given scissors, paper, ruler and paperclips. Graph your data in an appropriate fashion and give an oral report back to the class. Turn in by (see instructor) a word processed report (using the headings below) as an illustration of a simple research report. (See our class web site for details on writing each section.)

You will be asked to work individually or in a group on a much more extensive project for submission to the class at the end of the semester. Your topic must be approved by (see instructor) . The finished product will include a word processed report, a visual display, and an oral presentation.

## **Title**

## **Author**

## **Partners**

## **Introduction (background at beginning– ends with purpose)**

## **Procedure (write in past tense of passive voice – no listing, paragraphs)**

## **Results (tables of data, sample calculations, graphs, observations)**

## **Conclusions (answer the purpose, discuss errors and significance of results)**