

Sc 130/ Laboratory Fourteen

04 December 2008

### **Introduction**

This laboratory is about focal length versus apparent magnification. In this laboratory, [my partner] and I used magnifying lens to generate a focused image of the lights on a sheet of blank paper. We measured the focal length distance in centimeters and we also measured the apparent magnification. We used a ruler, meter stick, magnifying lens and a bank paper to measure the focal length and the apparent magnification.

### **Procedure**

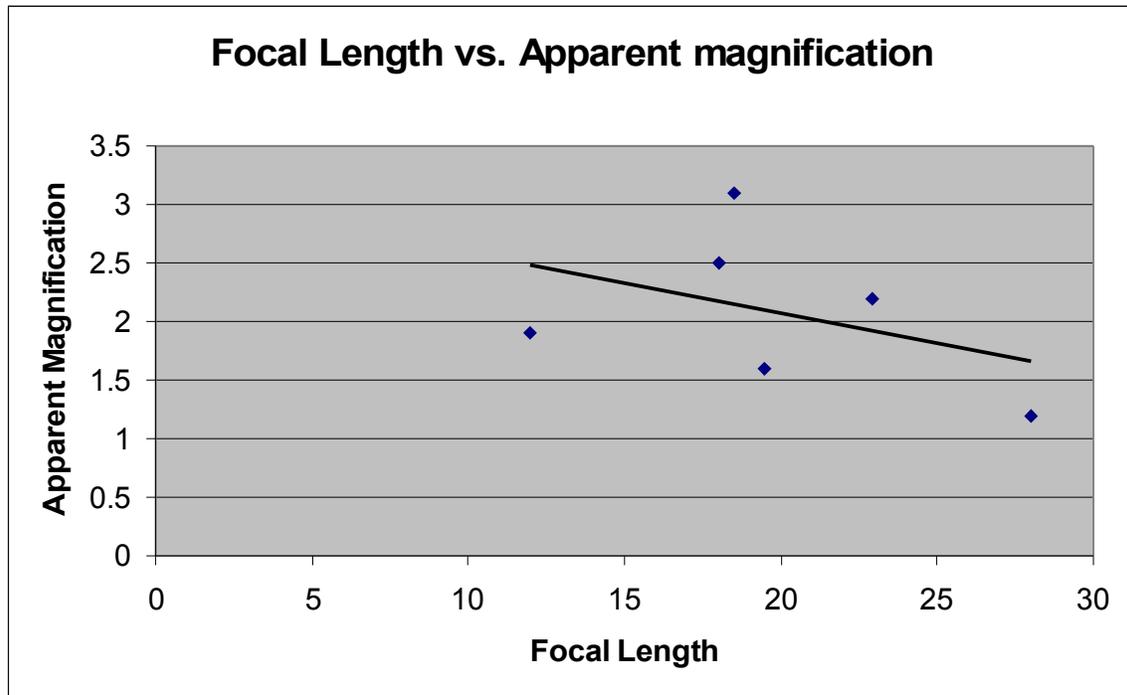
[My partner] and I worked together in this lab in order for us to help each other and measure the focal length and apparent magnification right. I measured the focal length while [my partner] help me measured the apparent magnification. I measured the focal length in centimeters using a magnifying lens, a blank paper and a meter stick. We measured the apparent magnification by placing the meter stick on the table and used the magnifying glass above the meter stick to produce a magnified image of the meter stick. We used the small ruler to measure the apparent size of one centimeter on the meter stick that as seen through the magnifying glass.

### **Data Table**

focal length (cm)	Apparent magnification
18.5	3.1

28	1.2
18	2.5
22.9	2.2
19.5	1.6
12	1.9

### Data Chart



### Data Analysis

- This graph is a linear graph. It is a straight line graph and the points all scattered along the line.
- We found the INTERCEPT by using the intercept function and it is 3.10.
- We also found the SLOPE by using the slope function and it is -0.05.

In conclusion, this laboratory is a kind of hard and interesting for me at the same time. It is hard when we measured the apparent magnification, but the focal length was easy to measure. This laboratory shows us how to measure the focal length and the apparent magnification. It shows us the relationship between focal length and magnifying length.