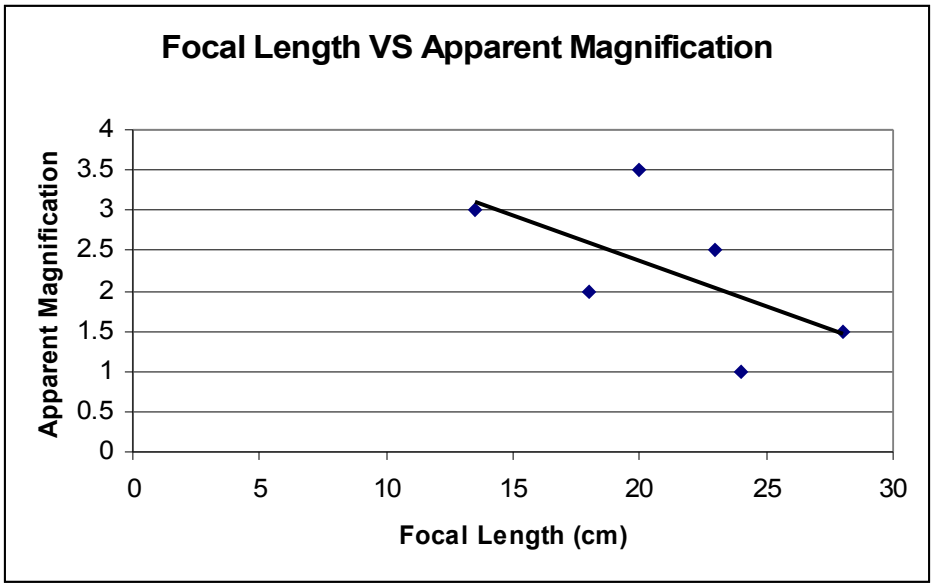
SC 130 Physical Science Laboratory Fourteen

04 December 2008

Unlike most of the laboratory activities in Physical Science, Laboratory Fourteen is practical where no specific direction or guidance is given. Laboratory Fourteen deals with magnifying lenses and finding focus points for different magnifying glasses. The equipments used in this activity are magnifying glasses (lenses), sheets of white paper, and meter sticks. The procedure is about finding the focus point, or focal length, at a certain distance of an image. The image is a fluorescent light, in which the focal length would be determined by using a meter stick. After finding the focal length, a magnified image of the meter stick at one centimeter is measured to find the apparent magnification. The apparent size of the meter stick is measured with a ruler, which is also in centimeters.

Focal Length (cm)	Apparent Magnification
13.5	3
23	2.5
20	3.5
24	1
28	1.5
18	2



The data from the activity produced a graph that is quite unusual. The data resulted in an unusual line, and it is quite difficult to determine whether there is a relationship or not. However, the focal lengths for the six different magnifying lenses are unusual when the largest-sized lens has less distance than the smallest-sized lens. Therefore, this raises a curiosity, where the sizes of the lens affect the distance of the focal length. Then, when measuring the apparent size of the meter stick, the measurements are close together regardless of the size of the lens.

In conclusion, this laboratory activity raises a curiosity in the sizes of the lenses and their focal lengths. In addition, measuring the apparent magnification is also confusing because it is difficult to get the exact image of the apparent size of the meter stick and measure it.