11. Data Analysis

Subject: Statistics

Objective: To introduce students to the use of statistics.

Logistics: Hands-on, each student works alone.

Materials:
- small boxes of raisins
- graph

Procedure:

Step 1: Give each student a box of raisins. Have them estimate (guess) the number of raisins in the box. What is reasonable? How do you guess?

Step 2: Students open raisin box (do not touch the raisins) and look at the first layer of raisins. Does that change their estimate? Why? How can you use that information to improve your estimate?

Step 3: Each student pours his or her raisins out on a piece of paper. Count the raisins. The results are used to make a simple bar graph. Examine the data and note that some boxes have fewer and others more raisins but most clump in the middle.

Step 4: Talk about averages and ranges. Why are there differences? If someone asked you how many raisins are in a box, what would you answer? Why?

Vocabulary: averages, ranges, bar graph, data, estimate

What they Learn: Students will learn some of the basic concepts of statistics although they will not use the word “statistics.”