Dear Family,

The next unit in your child's mathematics class this year is ***Data Distributions: Describing Variability and Comparing Groups***. Students will learn to choose among a variety of representations to display distributions and will analyze, describe, and compare sets of data.

UNIT GOALS

Exploring statistics as a process of data investigation involves a set of four interrelated components (Graham, 1987).

- Posing the question: formulating the key question(s) to explore and deciding what data to collect to address the question(s);
- Collecting the data: deciding how to collect the data as well as actually collecting it;
- Analyzing the data: organizing, representing, summarizing, and describing the data and looking for patterns in the data; and
- Interpreting the results: predicting, comparing, and identifying relationships and using the results from the analyses to make decisions about the original question(s).

This dynamic process often involves moving back and forth among the four components.

HELPING WITH HOMEWORK

You can help with homework and encourage sound mathematical habits as your child studies this unit by asking questions such as:

- Is there anything that surprises you about the data and their distribution?
- Where do the data cluster in the distribution?
- How can I use the mean or median and range to help me understand and describe a data distribution?
- What strategies can I use to compare two different data sets?

In your child's notebook, you can find worked-out examples from problems done in class, notes on the mathematics of the unit, and descriptions of the vocabulary words.

HAVING CONVERSATIONS ABOUT THE MATHEMATICS IN *DATA DISTRIBUTIONS*

You can help your child with his or her work for this unit in several ways:

- Look with your child for uses of data in magazines, newspapers, and on TV.
- Point out examples of graphical displays and ask your child questions about the information shown.
- Ask your child about the data studied in class. What were the typical (mode, median, or mean) values for these data?
- Look over your child's homework and make sure all questions are answered and that explanations are clear.

A few important mathematical ideas that your child will learn in *Data Distributions* are given on the back. As always, if you have any questions or concerns about this unit or your child's progress in class, please feel free to call.

Sincerely,