#### Family Letter 5th Grade Representing and Interpreting Data

Dear Family,

During the week of <date> we will begin a new math unit focused on representing and interpreting data. The purpose of this letter is to provide background information about our new unit.

## Focus of the Unit

In this unit, students will determine whether a survey question will yield categorical data, numerical data, or data over time. They will formulate a question that yields data over time (i.e. rainfall, plant growth, temperature, etc.) and collect the data. Students will also create and interpret a line graph of the data.

### **Building on Past Mathematics**

In previous grade levels, students collected data by asking survey questions and organized it in bar graphs, pictographs, and line plots. Students also solved one- and two-step "how many more" and "how many less" problems using information presented in the graphs.

### Strategies that Students Will Learn

In this unit, students will: (1) ask questions that will yield data that changes over time, (2) collect the data, (3) represent it using a line graph, and (4) answer questions about the data. For example, when investigating the growth of a class plant, students may ask the question, "How tall will our class plant grow during the first 18 weeks?" They would then collect the data over time to create a graph, similar to the line graph shown below:



Students would then use the graph to answer questions about the data:

- How tall was our plant on Day 5?
- How much did our plant grow from Day 3 to Day 7?
- What can we say about our plant's growth over the first 9 days?
- What predictions could we make about our plant's growth over the next 9 days?

## Ideas for Home Support

Identify opportunities to track data over time. Some opportunities might include recording the money in a savings account or changes in gas prices. Use a line graph to track the data and discuss changes that occur over time. Talk about patterns you notice and what can be learned from those patterns.

# Thank you for serving as partners in your child's success as a mathematician! <signature>