

LETTER HOME

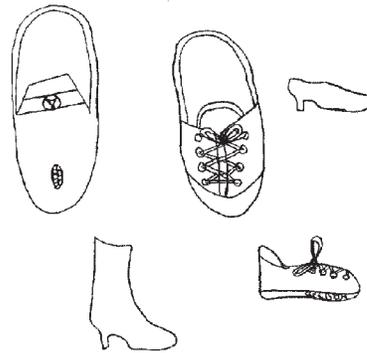
Populations and Samples

Dear Family Member:

Welcome to Math Trailblazers. This curriculum is based on two foundational ideas: the scientific investigation of everyday situations is an ideal setting for learning mathematics, and all students deserve a rich and challenging curriculum.

Throughout the year, we will create a mathematics classroom where students work together on challenging tasks and discuss ideas with their peers, teacher, and family. At times I will ask you to participate by sending small items to school, playing a math game, or helping with homework assignments.

We begin this year by collecting and using data about our classroom. This first unit, Populations and Samples, addresses ways of collecting, organizing, describing, and making generalizations and predications about a data set. The unit begins with students studying the number of eyelets in their shoes. Your child will then develop questions that will lead to surveys that can be used to collect and analyze data about the class using both categorical and numerical variables. Your child will use data tables, line plots, and bar graphs to represent the data collected. He or she will also use averages to describe the data that is collected. In this unit, your child will use two types of averages to represent the data: the median and the mode.



E = number of eyelets on two shoes

P = number of pairs of shoes with that number of eyelets

Students draw pictures to show what an experiment is about and what the important variables are.

Your child will also conduct an investigation in which students study a small sample of a larger population in order to make estimates about the population. Your child will organize the data, make and interpret a bar graph, and make and check predictions.

As we explore mathematics concepts in the classroom, you can help by providing additional mathematics opportunities at home. For example:

- **Averages.** Watch for the word “average”. It may appear on food labels, in weather reports, in sporting events, or in newspapers and magazines. Discuss these averages with your child.
- **Graphs and Tables.** Invite your child to look for graphs and tables in printed materials such as newspapers, magazines, and books. Discuss the graphs with your child. You might ask questions like:
 - What information does the graph show?
 - Does anything surprise you about the graph?
 - What else would you like to know based on what you see?
 - What variables are being compared?
- **Kinds of Data.** Encourage your child to talk about the Searching the Forest Lab. Ask your child to describe what was investigated, how he or she carried out the investigation, and what your child learned about using samples to make generalizations about a population.

Thank you for taking time to talk with your child about what he or she is doing in math. I look forward to working with you and your child during this school year. Please feel free to contact me with any questions, concerns, or comments.

Sincerely,