

LETTER HOME

Data About Us

Dear Family Member:

Welcome to *Math Trailblazers*®. It 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.

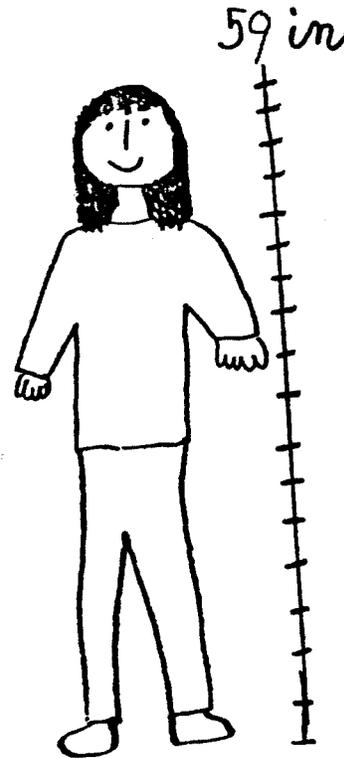
Throughout the year, we will create a mathematics classroom where students work together on challenging tasks and discuss ideas with their peers, teacher, and family. At times, I will ask you to participate by sending small items to school, playing a math game, or helping with homework assignments.

We begin the year by using averages to describe our class. This first unit, *Data About Us*, addresses ways of collecting, organizing, describing, and making predictions about a data set. We will study the concept of an average. In your child's everyday world, the word "average" is commonly used. He or she has probably heard the phrases "batting average" or "the average amount of rainfall for the month." Your child will learn how to find a type of average called the median and use it to represent data collected about the students in the class.

Your child will also investigate the relationship between the arm span and height of students in class. Can we predict the height of a new student if we know his or her arm span? To investigate this question, your child will measure classmates' arm spans and heights. Your child will organize this data, make and interpret a 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 words "average" and "median." They may appear on food labels, in weather reports, 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 to you about the *Arm Span vs. Height* Lab. Ask what your child was investigating, how he or she went about it, and what your child found out.



Height is one of the variables students measure in this unit.

Math Facts and Mental Math

Addition Facts. In this unit, students review the addition facts and are assessed for fluency. This review will help identify students' needs. Help your child by using the activities below.

Students should have developed strategies for solving the addition facts in the earlier years. The addition facts were reviewed and sorted into groups by strategy. See Figure 1.

Group	Addition Facts	Strategy Used
A	$0 + 1, 1 + 1, 2 + 1, 3 + 1, 0 + 2, 2 + 2, 3 + 2, 4 + 2$	Counting and Zero
B	$3 + 0, 4 + 0, 4 + 1, 5 + 1, 6 + 1, 5 + 2, 6 + 2, 5 + 3, 7 + 1, 1 + 8$	Counting and Zero
C	$1 + 9, 2 + 7, 2 + 8, 2 + 9, 3 + 6, 3 + 7, 3 + 8, 4 + 6, 4 + 7, 5 + 5, 5 + 6$	Making Tens
D	$3 + 3, 3 + 4, 4 + 4, 4 + 5, 6 + 6, 6 + 7, 7 + 7, 7 + 8, 8 + 8, 10 + 9, 10 + 10$	Using Doubles
E	$5 + 7, 8 + 4, 8 + 5, 9 + 3, 9 + 4, 9 + 5, 10 + 1, 10 + 2, 10 + 3$	Using Tens
F	$8 + 6, 9 + 6, 9 + 7, 10 + 4, 10 + 5, 10 + 6, 10 + 7, 10 + 8, 9 + 8, 9 + 9$	Using Tens

Figure 1: Addition Facts Groups as reviewed in earlier grades

If needed, you can help your child review these facts using the flash cards that are sent home or by making a set of flash cards from index cards or scrap paper. Study the facts in small groups each night. As your child goes through the flash cards, put the cards in three stacks: Facts I Know Quickly, Facts I Can Figure Out, and Facts I Need to Learn.

For Facts I Need to Learn, work on strategies for figuring them out.

For Facts I Can Figure Out, use the flash cards to practice the facts for fluency.

For Facts I Know Quickly, help your child use strategies to solve problems like these using mental math:

Adding 10s, 100s and 1000s: $9000 + 7000$; $130 + 40 + 60$; $10,000 + 4000$; $565 + 20 + 30$

Multidigit plus one-digit problems: $347 + 8$ (practices $7 + 8$); $565 + 8$ (practices $5 + 8$);

$434 + 5$ (practices $4 + 5$)

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,