Dear Third Grade Families,

We are about to begin our 3rd Module in Mathematics. In this letter, we will share a grade-specific overview of the year as well as information about our current module.

**Summary of the Year**

Our Third Grade students will be engaged in mathematics that will focus on:

(1) Developing understanding of multiplication and division and strategies for multiplication and division within 100;

(2) Developing understanding of fractions, especially unit fractions (fractions with numerator 1);

(3) Developing understanding of the structure of rectangular arrays and of area;

(4) Describing and analyzing two-dimensional shapes.

The learning goal for each student is to *achieve mastery by the end of the school year*. Along the way teachers and students will celebrate what the students can do now and identify what the students need to work on next.

**A Story of Units**

The yearly curriculum is broken into modules, or units, whose sequence is as follows:

Module 1: Properties of Multiplication and Division and Solving Problems with Units of 2 – 5 and 10

Module 2: Place Value and Problem Solving with Units of Measure

**Module 3: Multiplication and Division with Units of 0, 1, 6–9, and Multiples of 10**

Module 4: Multiplication and Area

Module 5: Fractions as Numbers on the Number Line

Module 6: Collecting and Displaying Data

Module 7: Geometry and Measurement Word Problems

Our curriculum will also address fluency with multiplying and dividing within 100 and adding and subtracting within 1000.

As your child begins a new module, you will receive information explaining the learning targets that are being addressed.

**Module 3: Overview**

Students learn the remaining multiplication and division facts in Module 3 as they continue to develop their understanding of multiplication and division strategies within 100 and use those strategies to solve two-step word problems. The “2, 3, 4, 5 and 10 facts” module (Module 1) and the “0, 1, 6, 7, 8, 9 and multiples of 10 facts” module (Module 3) both provide important, sustained time for work in understanding the structure of rectangular arrays to prepare students for area in Module 4. This work is necessary because students initially find it difficult to distinguish the different units in a grid (the third array in the picture below), count them and recognize that the count is related to multiplication. Tiling also supports a correct interpretation of the grid. Modules 1 and 3 slowly build up to the area model (the fourth model in the picture below) using rectangular arrays in the context of learning multiplication and division.

If at any time throughout Module 3 you have questions or concerns regarding your child’s progress, please feel free to contact his or her teacher.

Sincerely,

MUFSD 3rd Grade Teachers

**Module 3: Objectives**

The following objectives will be addressed in Module 3; however, many are ongoing and will reappear in future modules.

* Determine when to multiply and divide in word problems.
* Represent multiplication and division word problems using drawings and equations with unknowns in all positions.
* Solve word problems involving equal groups, arrays, and measurement quantities using drawings and equations.
* Determine the unknown number in multiplication and division problems.
* Explain the commutative, associative, and distributive property of multiplication.
* Apply the commutative, associative, and distributive properties to decompose, regroup, and/or reorder factors to make it easier to multiply two or more factors.
* Explain the relationship between multiplication and division.
* Turn a division problem into a multiplication problem with an unknown factor.
* Multiply any two numbers with a product within 100 with ease, by picking and using strategies that will get to the answer fairly quickly.
* Divide whole numbers with a divisor within 100 and with a whole number quotient with ease, by picking and using strategies that will get to the answer fairly quickly.
* Instantly recall from memory the product of any two one-digit numbers.
* Choose the correct operation to perform the first computation, and choose the correct operation to perform the second computation in order to solve two-step word problems.
* Write equations using a letter for the unknown number.
* Decide if answers are reasonable using mental math and estimation strategies including rounding.
* Multiply one-digit numbers by 10.
* Multiply one-digit numbers by multiples of 10 using strategies based on place value and operation properties.