

Family Letter

Dear Family,

In this unit and the next, your child will be practicing basic multiplications and divisions. *Math Expressions* incorporates studying, practicing, and testing of the basic multiplications and divisions in class. Your child is also expected to practice at home.

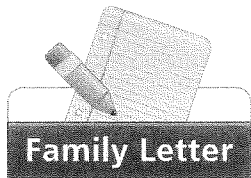
Homework Helper Your child will have math homework almost every day. He or she needs a Homework Helper. The helper may be anyone — you, an older brother or sister (or other family member), a neighbor, or a friend. Please decide who the main Homework Helper will be and ask your child to tell the teacher tomorrow. Make a specific time for homework and provide your child with a quiet place to work.

Study Plans Each day your child will fill out a study plan, indicating which basic multiplications and divisions he or she will study that evening. When your child has finished studying (practicing), his or her Homework Helper should sign the study plan.

1-1	Name _____	Date _____
Homework		
Study Plan		
		_____ Homework Helper

Practice Charts Each time a new number is introduced, students' homework will include a practice chart. To practice, students can cover the products with a pencil or a strip of heavy paper. They will say the multiplications, sliding the pencil or paper down the column to see each product after saying it. Students can also start with the last problem in a column and slide up. It is important that your child studies count-bys and multiplications at least 5 minutes every night. Your child can also use these charts to practice division on the mixed up column by covering the first factor.

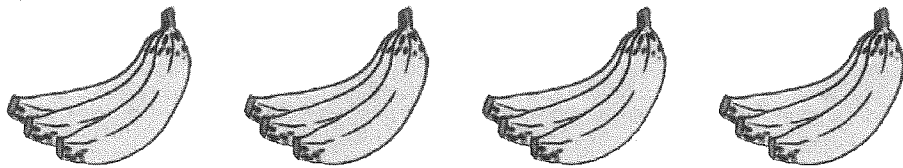
	In Order	Mixed Up
5s	$1 \times 5 = 5$	$9 \times 5 = 45$
	$2 \times 5 = 10$	$5 \times 5 = 25$
	$3 \times 5 = 15$	$2 \times 5 = 10$
	$4 \times 5 = 20$	$7 \times 5 = 35$
	$5 \times 5 = 25$	$4 \times 5 = 20$
	$6 \times 5 = 30$	$6 \times 5 = 30$
	$7 \times 5 = 35$	$10 \times 5 = 50$
	$8 \times 5 = 40$	$8 \times 5 = 40$
	$9 \times 5 = 45$	$1 \times 5 = 5$
	$10 \times 5 = 50$	$3 \times 5 = 15$



Family Letter

To help students understand the concept of multiplication, the *Math Expressions* program presents three ways to think about multiplication.

- **Repeated groups:** Multiplication can be used to find the total in repeated groups of the same size. In early lessons, students circle the group size in repeated-groups equations to help keep track of which factor is the group size and which is the number of groups.



4 groups of bananas

$$4 \times \textcircled{3} = 3 + 3 + 3 + 3 = 12$$

- **Arrays:** Multiplication can be used to find the total number of items in an *array*—an arrangement of objects into rows and columns.



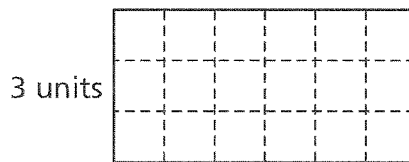
5 columns

2 rows

2-by-5 array

$$2 \text{ rows of pennies} = 2 \times 5 = 10$$

- **Area:** Multiplication can be used to find the area of a rectangle.



3 units

6 units

$$\text{Area: } 3 \text{ units} \times 6 \text{ units} = 18 \text{ square units}$$

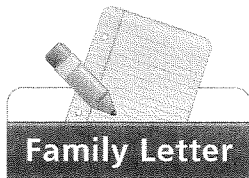
Please call if you have any questions or comments.

Thank you.

Sincerely,
Your child's teacher



This unit includes the Common Core Standards for Mathematical Content for Operations and Algebraic Thinking, 3.OA.1, 3.OA.2, 3.OA.3, 3.OA.4, 3.OA.5, 3.OA.6, 3.OA.7, 3.OA.9, Measurement and Data, 3.MD.5a, 3.MD.5b, 3.MD.7a, 3.MD.7b, 3.MD.7c, 3.MD.7d, and all Mathematical Practices.



Family Letter

Dear Family,

In addition to practice charts for the basic multiplications and divisions for each of the numbers 1 through 10, your child will bring home a variety of other practice materials over the next several weeks.

- **Home Study Sheets:** A Home Study Sheet includes 3 or 4 practice charts on one page. Your child can use the Home Study Sheets to practice all the count-bys, multiplications, and divisions for a number or to practice just the ones he or she doesn't know for that number. The Homework Helper can then use the sheet to test (or retest) your child. The Homework Helper should check with your child to see which basic multiplications or divisions he or she is ready to be tested on. The helper should mark any missed problems lightly with a pencil.

If your child gets all the answers in a column correct, the helper should sign that column on the Home Signature Sheet. When signatures are on all the columns of the Home Signature Sheet, your child should bring the sheet to school.

Home Study Sheet A

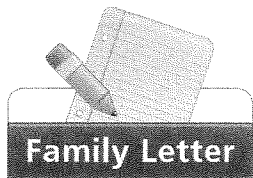
5s			2s		
Count-bys	Mixed Up \times	Mixed Up \div	Count-bys	Mixed Up \times	Mixed Up \div
$1 \times 5 = 5$	$2 \times 5 = 10$	$10 \div 5 = 2$	$1 \times 2 = 2$	$7 \times 2 = 14$	$20 \div 2 = 10$
$2 \times 5 = 10$	$9 \times 5 = 45$	$35 \div 5 = 7$	$2 \times 2 = 4$	$1 \times 2 = 2$	$2 \div 2 = 1$
$3 \times 5 = 15$	$1 \times 5 = 5$	$50 \div 5 = 10$	$3 \times 2 = 6$	$3 \times 2 = 6$	$6 \div 2 = 3$
$4 \times 5 = 20$	$5 \times 5 = 25$	$5 \div 5 = 1$	$4 \times 2 = 8$	$5 \times 2 = 10$	$16 \div 2 = 8$
$5 \times 5 = 25$	$7 \times 5 = 35$	$20 \div 5 = 4$	$5 \times 2 = 10$	$6 \times 2 = 12$	$12 \div 2 = 6$
$6 \times 5 = 30$	$3 \times 5 = 15$	$15 \div 5 = 3$	$6 \times 2 = 12$	$8 \times 2 = 16$	$4 \div 2 = 2$
$7 \times 5 = 35$	$10 \times 5 = 50$	$30 \div 5 = 6$	$7 \times 2 = 14$	$2 \times 2 = 4$	$10 \div 2 = 5$
$8 \times 5 = 40$	$6 \times 5 = 30$	$40 \div 5 = 8$	$8 \times 2 = 16$	$10 \times 2 = 20$	$8 \div 2 = 4$
$9 \times 5 = 45$	$4 \times 5 = 20$	$25 \div 5 = 5$	$9 \times 2 = 18$	$4 \times 2 = 8$	$14 \div 2 = 7$
$10 \times 5 = 50$	$8 \times 5 = 40$	$45 \div 5 = 9$	$10 \times 2 = 20$	$9 \times 2 = 18$	$18 \div 2 = 9$

4-3 Name _____ Date _____

Homework

Home Signature Sheet

	Count-Bys Homework Helper	Multiplications Homework Helper	Divisions Homework Helper
0			
1			



- **Home Check Sheets:** A Home Check Sheet includes columns of 20 multiplications and divisions in mixed order. These sheets can be used to test your student's fluency with basic facts.
- **Strategy Cards:** Students use Strategy Cards in class as flashcards, to play games, and to develop multiplication and division strategies.

Sample Multiplication Card

$3 \cdot 9$ 9×3	$\begin{array}{r} 3 \quad 9 \\ \times 9 \quad \times 3 \\ \hline 27 \quad 27 \\ 9 \quad 3 \\ 18 \quad 6 \\ 27 \quad 9 \\ \quad 12 \\ \quad 15 \\ \quad 18 \\ \quad 21 \\ \quad 24 \\ \quad 27 \end{array}$
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Sample Division Card

$3 \overline{)27}$ $27 \div 3$	$\begin{array}{r} 9 \quad 3 \\ 3 \overline{)27} \quad 9 \overline{)27} \\ 3 \quad 9 \\ 6 \quad 18 \\ 9 \quad 27 \\ 12 \\ 15 \\ 18 \\ 21 \\ 24 \\ 27 \end{array}$
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- **Games:** Near the end of this unit, students are introduced to games that provide multiplication and division practice.

Encourage your child to show you these materials and explain how they are used. Make sure your child spends time practicing multiplications and divisions every evening.

Please call if you have any questions or comments.

Thank you.

Sincerely,
Your child's teacher



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