

Unit 10

Family Letter

Reveal
MATH[®]

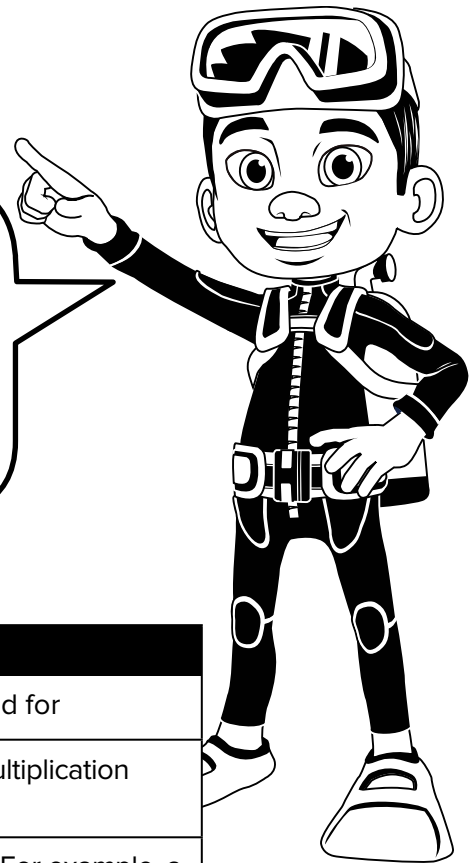
Dear Family,

In this unit, *Use Properties and Strategies to Multiply and Divide*, your child will learn strategies to multiply three factors or multiples of 10. Your child will also learn how to solve two-step problems involving any of the four operations and how to determine if an answer is reasonable.

STEM Career Kid for this Unit

Hi, I'm Hiro.

I want to be an ocean engineer. I will use math in my job when I determine how far sea turtles travel. I'll show students how I use strategies and properties of multiplication and division in my work.



What math terms will your child use?

Term	Student Understanding
unknown	a missing number, or the number to be solved for
factor	one of the numbers multiplied together in a multiplication equation
multiple	the product of a number and another number; For example, a multiple of 10 is the product of 10 and another number.

What can your child do at home?

Help your child become comfortable with solving two-step word problems involving any of the four operations. When reading word problems, encourage your child to identify the first and second step of the word problem. Help them look for clues to determine which operation to use.



What Will Students Learn in This Unit?

Identifying and Applying Patterns in Multiplication

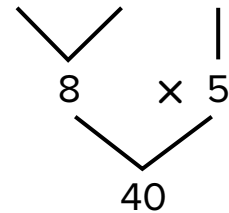
Your child will look for patterns on the multiplication fact table. Students will identify patterns and the relationship between products and factors. They will use patterns to determine if a product is even or odd. They will look for doubles. For example, the product of 6×5 can be found by doubling the product of 3×5 . The multiplication fact table shows that $6 \times 5 = 3 \times 5 + 3 \times 5$.

×	0	1	2	3	4	5
0	0	0	0	0	0	0
1	0	1	2	3	4	5
2	0	2	4	6	8	10
3	0	3	6	9	12	15
4	0	4	8	12	16	20
5	0	5	10	15	20	25
6	0	6	12	18	24	30

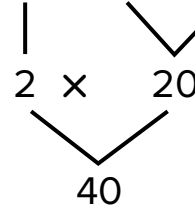
Multiplying Three Factors

Your child will practice grouping three factors in different ways. Grouping the factors in different ways does not change the product.

Example: $2 \times 4 \times 5 = ?$



$2 \times 4 \times 5 = ?$



Finding Products of Multiples of 10

Your child will multiply by multiples of 10. Students will use place value, known facts, decomposition, and patterns to find the product of a 1-digit number and a multiple of 10.

Example:

$$8 \times 80 = ?$$

$$8 \times 8 \text{ tens} = 64 \text{ tens, or } 640$$

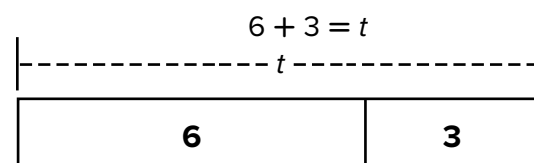
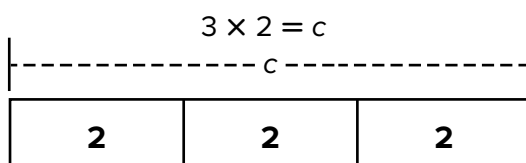
$$\text{So, } 8 \times 80 = 640.$$

Solving Two-Step Word Problems with Any Operation

Your child will solve two-step word problems involving any of the four operations. Students learn how to use equations and representations to aid in solving problems. They will use letters to represent the unknown number in equations.

Example:

Lukas buys 3 envelopes with 2 trading cards in each envelope. He has 3 trading cards at home. How many trading cards does he have in all?



Lukas has 9 trading cards.