

Unit 4

Family Letter

Reveal
MATH[®]

Dear Family,

In this unit, *Use Patterns to Multiply by 0, 1, 2, 5, and 10*, your child will learn how to recall multiplication facts involving 2, 5, 10, 1, and 0. Your child will learn how to connect a given multiplication fact with its related division fact.

STEM Career Kid for this Unit

Hi, I'm Grace.

I want to be computer programmer. I will use math in my job when I create code for mathematics games. I will show students how I will use multiplication facts in my work.



What math terms will your child use?

Term	Student Understanding
product	the answer when two or more numbers are multiplied
skip count	create a series of numbers by adding the same number each time
equal groups	groups that have the same number of objects



What can your child do at home?

Help your child use multiplication patterns with 2, 5, 10, 1, and 0. Use common items such as pairs of socks or fingers on one hand. Ask questions such as “How many socks are in 8 pairs of socks?” Have your child explain the pattern.

What Will Students Learn in This Unit?

Identifying Patterns When Multiplying

Students will use their knowledge of multiplying to help identify patterns that will aid their learning. Students will also learn that they can use patterns in factors and products to check the reasonableness of an answer.

Recalling Multiplication Facts with 2

Students will learn that one strategy they can implement when multiplying by 2 is to make equal groups of 2.

Recalling Multiplication Facts with 5 and 10

Students will learn the connection between multiplying by 5 and multiplying by 10: the product of 10 and a number is double the product of 5 and the same number. Using dimes to multiply by 10 is an easy way to provide extra practice for your child.

$$5 \times 6 = 30 \qquad 10 \times 6 = 60 \qquad 60 \text{ is double the product of } 5 \times 6, \text{ or } 30.$$

Recalling Multiplication Facts with 1

Students are encouraged to use presentations to support their learning of this concept. For example, if there are 5 dogs at the dog park, a picture might help your child understand that there is a total of 5 dog collars, illustrating $5 \text{ dogs} \times 1 \text{ collar per dog} = 5 \text{ dog collars in all}$.

Recalling Multiplication Facts with 0

Students will learn that they can use patterns to recall multiplication facts with 0. They will learn that when multiplying by 0 the product is always 0.

Solve Problems Involving Equal Groups

Students will learn that for situations involving equal groups they can use multiplication or division equations to represent and solve a problem. For example, student may be asked “Five friends share 35 strawberries equally. How many strawberries does each friend get?” The multiplication equation $5 \times ? = 35$ or the division equation $35 \div 5 = ?$ can be used to solve the problem.