Unit **8**
Family Letter

Reveal **MATH**®

Dear Family,

In this unit, Divide Decimals, your child will learn how to represent and perform division of two decimal numbers, and between one decimal number and one whole number.

STEM Career Kid for this Unit

Hi, I'm Saffron.

I want to be a pastry chef. I will use math in my job when I determine how much of each ingredient I need to use for a recipe. I'll show students how I will divide decimals in my work.

What math terms will your child use?

Term	Student Understanding
power of 10	A number such as 10, 100, or 1,000 that results from using only 10 as a factor; for example, 1,000 is a power of 10 because $10 \times 10 \times 10 = 1,000$.
quotient	The result of a division problem
compatible numbers	Used in estimating quotients; find numbers that are near the dividend and the divisor that make use of a basic fact

What can your child do at home?

Math @ Home Activity

Help your child develop fluency with the different representations used to show division with decimals. After each lesson, create a small poster that displays the information learned in that lesson. Allow your child to include notes about the things they find important. Label the different steps used in each of the representations and processes, and revisit the posters often.

What Will Students Learn in this Unit?

Division of Decimals by a Whole Number

Your child will learn how to use an equivalent representation to divide a decimal by a whole number.

Find the quotient $1.38 \div 6$.

Write an equivalent representation.

138 hundredths $\div$ 6 = b

138 hundredths $\div$ 6 = 23 hundredths

So $1.38 \div 6 = 0.23$.

Divide a Whole Number by a Decimal

Your child will learn how to use powers of 10 to write an equivalent division problem so that the divisor is a whole number.

Solve $8 \div 0.4 = h$

Use a power of 10 so that the divisor, 0.4, is a whole number:

$0.4 \times 10 = 4$

Multiply the dividend by the same power of 10: $8 \times 10 = 80$

Write an equivalent equation with the new dividend and divisor:

$80 \div 4 = h$

Since $80 \div 4 = 20$, it must be that $8 \div 0.4 = 20$.

Divide a Decimal by a Decimal

Your child will learn how to use powers of 10 to divide a decimal by a decimal.

Solve $48.8 \div 0.8 = h$

Use a power of 10 so that the divisor, 0.8, is a whole number:

$0.8 \times 10 = 8$

Multiply the dividend by the same power of 10: $48.8 \times 10 = 488$

Write an equivalent equation with the new dividend and divisor:

$488 \div 8 = h$

Since $488 \div 8 = 61$, it must be that $48.8 \div 0.8 = 61$.