EUREKA MATH™ TIPS FOR PARENTS

KEY CONCEPT OVERVIEW

Lessons 26 through 33 focus on dividing three- and four-digit numbers by one-digit numbers, using different methods.

You can expect to see homework that asks your child to do the following:

- Divide by using place value disks, **long division**, and the **area model**.
- Check division work by using multiplication.
- Draw **tape diagrams** (see Sample Problem below) and solve division word problems, identifying whether the size of the groups or number of groups is unknown.
- Solve division word problems with **remainders**.

SAMPLE PROBLEM *(From Lesson 31)*

Solve the following problem. Draw a tape diagram to help you solve. Identify whether the group size or the number of groups is unknown.

A group of students equally shared 816 liters of water. If each student received 2 liters of water, how many students received water?

Number of groups unknown

$$\begin{array}{r} 4\,0\,8 \\ 2\overline{)\,8\,1\,6} \\ -\,8 \\ \hline 0\,1 \\ -\,\,0 \\ \hline 1\,6 \\ -\,1\,6 \\ \hline 0 \end{array}$$

408 ***students received water.***

Additional sample problems with detailed answer steps are found in the *Eureka Math Homework Helpers* books. Learn more at GreatMinds.org.

HOW YOU CAN HELP AT HOME

- Discuss with your child times when you might use division in everyday life. For example, you have $20 to spend on bagels. If each bagel costs $3, how many bagels can you buy? (6) Or, you have 37 orange slices to give to 8 soccer teammates. You want to give each of them 5 orange slices. Do you have enough? (No. You would need 40.)
- Take turns flipping a coin and creating word problems. If the coin lands on heads, create a word problem in which the size of the group is unknown (e.g., Sarah divided her 124 stickers equally among 4 of her friends. How many stickers will each of them get? (31)). If the coin lands on tails,

HOW YOU CAN HELP AT HOME
(CONTINUED)

create a word problem in which the number of groups is unknown (e.g., Sarah gave away a total of 124 stickers. If she gave each of her friends 31 stickers, how many friends received stickers? (4)). Challenge each other to solve the problems.

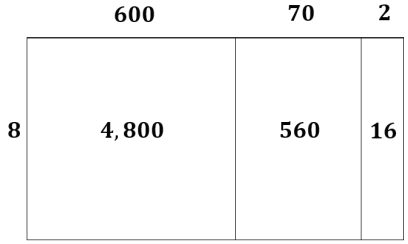
- Ask your child to draw and label a place value chart. Create a four-digit number on the chart, using cereal or raisins for disks. Ask your child to use his "disks" to demonstrate how to divide the number by 2, 3, or 4.

TERMS

Long division: A process taken to solve a division problem, also known as the standard algorithm for division.
Remainder: The number left over when a whole number is divided by another whole number. For example, 25 ÷ 6 = 4 with a remainder of 1.

MODELS

Area Model: A model used to help solve multiplication and division problems.



$$5,376 \div 8 = (4,800 \div 8) + (560 \div 8) + (16 \div 8)$$
$$= 600 + 70 + 2$$
$$= 672$$

Tape Diagram