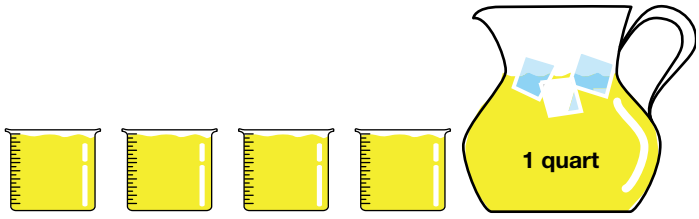
LETTER HOME

Fractions and Ratios

Dear Family Member:

Fractions and ratios are used to describe the relationship between two numbers. Sometimes a fraction shows the relationship of a part to a whole, such as $\frac{3}{4}$ of a whole pizza or $\frac{1}{2}$ of all the students in a classroom. Other times, fractions—called ratios—are used to describe a relationship between two quantities.

In this unit, students explore these kinds of relationships using equivalent fractions, words, tables, and graphs. They will use ratios to describe a fair share of cookies, calculate the cost of muffins, and estimate the speed at which they walk. Students will also use ratios to convert between different-sized units of measure within a standard measurement system.



4 cups to 1 quart

$$\frac{4 \text{ cups}}{1 \text{ quart}}$$

You can help your child to learn more about fractions and ratios with the following activity:

Look for Fractions and Ratios. Point out places where ratios are used outside of school. Examples may include adding 1 cup of sugar for every two quarts of lemonade; or using the ratio $\frac{1 \text{ foot}}{12 \text{ inches}}$ will help you convert measurements between feet and inches.

Math Facts and Mental Math

This unit continues a systematic review and assessment of the multiplication and division facts.

Multiplication Facts. Students review the multiplication facts for square numbers to maintain and increase fluency and to learn to apply multiplication strategies to larger numbers.

You can help your child review these facts using the flash cards that are sent home or by making a set of flash cards from index cards or scrap paper. Study facts in small groups each night and focus only on those facts that your child needs to learn. As your child goes through the flash cards, put the cards in three stacks: Facts I Know Quickly, Facts I Can Figure Out, and Facts I Need to Learn.

For Facts I Need to Learn, work on strategies for figuring them out. If there are many multiplication facts that your child still needs to learn, divide them into smaller groups of facts. Choose groups of facts that lend themselves to the use of the same strategy and focus on one group at a time.

For Facts I can Figure Out, use the flash cards to practice the facts for fluency.

For Facts I Know Quickly, help your child use mental math strategies to multiply 10s and 100s. You can also help your child extend and deepen their understanding by asking him or her to choose a multiplication fact that was difficult to learn and describe strategies used for learning the fact.

Division Facts. Students review the division facts for the square numbers to maintain and increase fluency and to learn and apply multiplication and division strategies to larger numbers.

You can help your child review these facts using the flash cards that are sent home or by making a set of flash cards from index cards or scrap paper. Study facts in small groups each night. As your child goes through the flash cards put the cards into three stacks: Facts I Know Quickly, Facts I Can Figure Out, and Facts I Need to Learn.

For the Facts I Need to Learn, work on strategies for figuring them out. Good strategies include:

Turn-around facts. To solve $36 \div 6$: I know $6 \times 6 = 36$, so $36 \div 6 = 6$.

Reasoning from known facts. To solve $64 \div 8$: $32 \div 8 = 4$, so $64 \div 8$ is double 4; $64 \div 8 = 8$.

For Facts I Can Figure Out, use the flash cards to practice the facts for fluency.

For Facts I Know Quickly, help your child use mental math strategies to divide 10s and 100s:

$$810 \div 9 = 90;\ 25{,}000 \div 500 = 50;\ 4900 \div 70 = 70.$$

Thank you for taking time to talk with your child about what he or she is learning in math.

Sincerely,