

A SAMPLE OF WHAT YOUR CHILD WILL BE LEARNING

- Understanding and explaining what it means to multiply or divide numbers
- Multiplying all one-digit numbers from memory (knowing times table)
- Multiplying one-digit numbers by multiples of 10 (such as 20, 30, 40)
- Solving two-step word problems using addition, subtraction, multiplication, and division
- Understanding the concept of area
- Relating the measurement of area to multiplication and division
- Understanding fractions as numbers
- Understanding and identifying a fraction as a number on a number line
- Comparing the size of two fractions
- Expressing whole numbers as fractions and identifying fractions that are equal to whole numbers (for example, recognizing that $\frac{3}{1}$ and 3 are the same number)
- Measuring weights and volumes and solving word problems involving these measurements
- Representing and interpreting data

MATHEMATICAL PRACTICES

1. Make sense of problems and persevere in solving them.
2. Reason abstractly and quantitatively.
3. Construct viable arguments and critique the reasoning of others.
4. Model with mathematics.
5. Use appropriate tools strategically.
6. Attend to precision.
7. Look for and make use of structure.
8. Look for and express regularity in repeated reasoning.

TALK TO YOUR CHILD'S TEACHER

Keep conversations focused on concepts your child will be learning.

Ask to see a sample of your child's work and ask the teacher questions such as:

- Is my child at the level where he/she should be at this point of the school year?
- Where is my child excelling?
- What do you think is giving my child the most trouble? How can I help my child improve in this area?
- What can I do to help my child with upcoming work?

ACTIVITIES FOR HOME TO SUPPORT LEARNING

- Notice those everyday occasions when you find yourself using your times tables—such as to determine how many days there are in four weeks. Ask your child for the answer.
- Use everyday objects to allow your child to explore the concept of fractions. For example, use measuring cups to have students demonstrate how many $\frac{1}{3}$'s are in a whole, how many $\frac{1}{4}$ cups you need to make $1\frac{1}{4}$ cups, and how many times you have to refill a $\frac{1}{2}$ cup measure to make $1\frac{1}{2}$ cups.
- Involve your child when you notice yourself using division to “work backward” in the times tables—such as determining how many candies each child will get if 36 candies are shared equally among nine children at a party, or determining how many six-inch lengths can be cut from a string 18 inches long.

3rd Grade

Parent Resource

Mathematics



COMMON CORE STATE STANDARDS



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EXAMPLES OF USE AND UNDERSTANDING OF PLACE VALUE

Students understand that 15 tens = 5 tens + 10 tens (or 1 hundred).

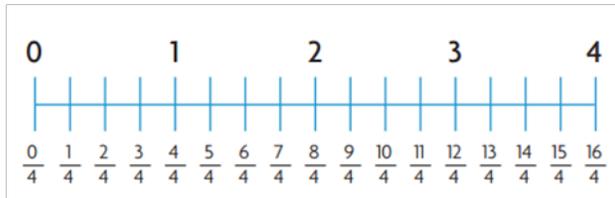
$$5 \times 30 = 5 \text{ groups of 3 tens} = 15 \text{ tens}$$

$$\begin{array}{c} 15 \\ \text{tens} \end{array} = \begin{array}{c} 1 \\ \text{hundreds} \end{array} \begin{array}{c} 5 \\ \text{tens} \end{array} \begin{array}{c} 0 \\ \text{ones} \end{array}$$

Students use their understanding of place value as a strategy for multiplying one-digit numbers by multiples of ten. This prepares them to multiply two multi-digit numbers in 4th grade.

EXAMPLES OF WORKING WITH FRACTIONS

Using a number line helps students think of a fraction as a number.



Students begin to understand that fractions are sometimes the same quantity as a whole number ($8/4 = 2$) and whole numbers can be expressed as fractions ($3 = 12/4$).

Fractions

2nd Grade Mathematics

- Break circles and rectangles into two, three, or four equal parts.
- Describe parts of a whole using the words halves, thirds, half of, a third of, etc.
- Describe a whole as two halves, three thirds, four fourths.

3rd Grade Mathematics

- Determine a fraction's place on a number line by defining the length from 0 to 1 as the whole and "cutting it" into equal parts.
- Understand two fractions as equal if they are the same size or at the same point on a number line.
- Compare the size of two different fractions of the same size object. For example, which is bigger, $1/8$ of a pizza or $1/6$ of that same pizza?

4th Grade Mathematics

- Break down a fraction into smaller fractions with the same denominator, or bottom number, in more than one way ($3/8 = 1/8 + 1/8 + 1/8 = 2/8 + 1/8$).
- Explain why a fraction is equal to another fraction.
- Add and subtract mixed numbers (whole numbers mixed with fractions, such as $1\frac{1}{5}$) with the same denominators.
- Multiply a fraction by a whole number.

Place Value

2nd Grade Mathematics

- Understand that 100 can be thought of as a bundle of ten tens--called a "hundred."
- Understand that the three digits of a three-digit number represent amounts of hundred, tens, and ones (place value).
- Add and subtract numbers through 1,000 using what students have learned about place value.

3rd Grade Mathematics

- Use place value understanding to round whole numbers to the nearest 10 or 100.
- Quickly and accurately add and subtract numbers through 1,000.
- Use place value understanding to multiply and divide numbers up through 100.
- Multiply one-digit whole numbers by multiples of 10 between 10 and 90. For example, 9×80 or 5×60 .

4th Grade Mathematics

- Use place value understanding to round multi-digit whole numbers to any place.
- Use place value understanding to find the product of two multi-digit numbers.
- Recognize that in a multi-digit whole number, a digit in one place represents ten times what it represents in the place to its right.
- Compare two multi-digit numbers based on the meanings of the digits in each place, using the symbols $>$, $=$, and $<$.