

A SAMPLE OF WHAT YOUR CHILD WILL BE LEARNING

- Quickly and accurately multiplying multi-digit whole numbers
- Dividing numbers with up to four digits by two digit numbers
- Using exponents to express powers of 10 (in 10^2 , 2 is the exponent)
- Reading, writing, and comparing decimals to the thousandths place
- Adding, subtracting, multiplying, and dividing decimals to the hundredths place
- Writing and interpreting mathematical expressions using symbols such as parentheses. For example, “add 8 and 7, then multiply by 2” can be written as $2 \times (8 + 7)$
- Adding and subtracting fractions with unlike denominators by converting them to fractions with matching denominators
- Multiplying fractions by whole numbers and other fractions
- Dividing fractions by whole numbers and whole numbers by fractions
- Analyzing and determining relationships between numerical patterns
- Measuring volume using multiplication and addition

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

- Look for word problems in real life. For example, if you used about $\frac{2}{3}$ of a $\frac{3}{4}$ cup measure of vegetable stock, then how much stock did you use? About how much is left?
- Use the length, width, and depth of a garden plot to determine how many bags of garden soil to buy.
- Do arithmetic with decimals, for example when balancing a checkbook.
- Use everyday objects to allow your child to explore the concept of fractions. For example, have your child divide a candy bar (or a healthy snack) between three people. Ask “How much does each person receive?” (Each person would receive $\frac{1}{3}$.) Suppose there are three candy bars that you plan to share with two friends. Have your child describe the amount that each person will receive.

5th Grade

Parent Resource

Mathematics



COMMON CORE STATE STANDARDS



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EXAMPLES OF USE AND UNDERSTANDING OF PLACE VALUE

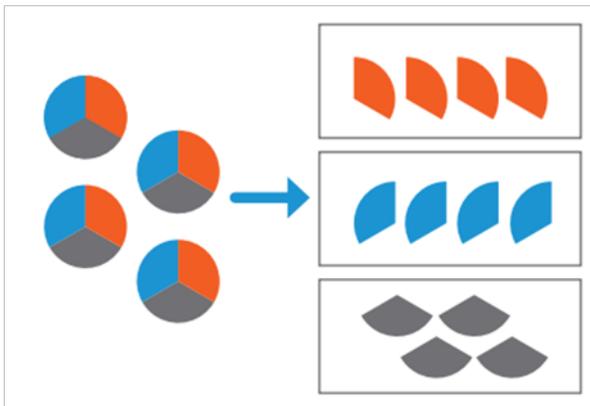
Students use place value understanding to figure out that, based on where the digits are located within the number, 0.115 is less than 0.151.



Students recognize that a 5 in the thousandths place is only one tenth the value of a 5 in the hundredths place.

EXAMPLES OF WORKING WITH FRACTIONS

Students will use pictures such as this to see that $4 \div 3$ is the same as dividing 4 objects equally among 3 shares, or having 4 thirds ($\frac{4}{3}$).



Understanding how to divide objects into equal shares prepares students for the division of fractions.

Fractions

4th Grade Mathematics

- Break down a fraction into smaller fractions with the same denominator, or bottom number, in more than one way ($\frac{3}{8} = \frac{1}{8} + \frac{1}{8} + \frac{1}{8} = \frac{2}{8} + \frac{1}{8}$).
- 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.

5th Grade Mathematics

- Interpret a fraction as division of the numerator by the denominator.
- Add and subtract fractions with different denominators.
- Multiply a fraction by a whole number or another fraction.
- Divide fractions by whole numbers and whole numbers by fractions.

6th Grade Mathematics

- Divide fractions by fractions using visual models and equations to show the problem.

Place Value

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 $<$.

5th Grade Mathematics

- Use place value understanding to round decimals to any place.
- Recognize that in a multi-digit number, a digit in one place represents 10 times as much as it represents in the place to its right and $\frac{1}{10}$ of what it represents in the place to its left.
- Read, write, and compare decimals based on the meanings of the digits in the tenths, hundredths, and thousandths place, using the symbols $>$, $=$, and $<$.

6th Grade Mathematics

- Understand that positive and negative numbers are used together to describe quantities having opposite directions or values.
- Understand a rational number (fraction, decimal, and percent) as a point on the number line.
- Understand ordering and absolute value of rational numbers.