

Third Grade Math



Course Overview

Third grade students continue to develop computational skills in addition, subtraction, multiplication, and division, and solve problems involving more complex mathematical concepts. Students will:

- Work with larger numbers and decimals
- Study place value and estimating using rounding
- Develop calculation skills using place value blocks to understand addition, subtraction, and regrouping

- Establish fluency with simple addition, subtraction, division, and multiplication number facts
- Study the basics of probability
- Use graphs and charts to understand how data can be represented visually
- Learn more about the basics of geometry
- Use strategies for solving word problems fractions

Course Outline

Place Value

- Read and write numbers through 999,999 in standard, expanded, and word name forms
- Compare and order numbers through 9,999
- Round whole numbers through 999,999 to the nearest ten, hundred, or thousand
- Skip count by 2, 3, 4, 5, and 10 to 100, and use skip counting to complete number patterns
- Compare money amounts through \$99.99
- Count money amounts with coins and bills through \$99.99 and make change
- Round money amounts through \$99.99 to the nearest dollar

Addition

- Add two-digit numbers with and without regrouping
- Use strategies to add more than two addends: look for tens and doubles, and count on
- Find up to two missing addends
- Estimate sums through 9,999 using rounding to the nearest ten or hundred
- Estimate sums through 9,999 using front-end estimation
- Add money amounts with sums up to and including \$99.99 with and without regrouping
- Estimate sums through \$99.99 to the nearest 10 cents or dollar
- Add three- and four-digit numbers with and without regrouping
- Add numbers with sums through 100 mentally, looking for patterns and breaking apart numbers to find tens

Subtraction

- Subtract two-, three-, and four-digit numbers with and without regrouping
- Estimate differences using rounding to the nearest ten, hundred, or thousand with numbers through 9,999

- Estimate differences using front-end estimation with numbers through 9,999
- Subtract money amounts with differences through \$99.99
- Estimate differences of money using rounding to the nearest ten cents, dollar, or ten dollars with money amounts through \$99.99
- Estimate differences of money using front-end estimation with money amounts through \$99.99

Multiplication Concepts and Facts

- State multiplication facts through 5
- Multiply money amounts with products through 45¢
- Find a missing factor in multiplication facts through 5
- Use the commutative property to solve multiplication facts through 5

Division Concepts and Facts

- Divide one- and two-digit dividends by 1, 2, 3, 4, and 5
- Divide money amounts with dividends through 45¢
- Use the inverse relationship between multiplication and division to solve problems with two-digit dividends and divisors through 5

Statistics and Probability

- Read, interpret, and make tally charts, pictographs, and bar graphs with up to six groups
- Make organized lists and tree diagrams to count arrangements of up to 6 objects
- Predict outcomes based on probability
- Find the probability of a simple event with probabilities expressed as fractions with denominators through eight

Measurement and Time

- Use English and metric units to measure length, weight, and capacity
- Use English and metric units to estimate length, weight, and capacity



- Choose the appropriate customary or metric unit of length, weight, and capacity
- Compare English or metric units of length, weight, and capacity
- Choose the appropriate tool for measuring length, capacity, or weight
- Use a map to estimate and find distances
- Read a thermometer and record temperatures in degrees Fahrenheit and Celsius
- Read and write time to the half hour, quarter hour, and minute
- Solve elapsed time problems
- Read and interpret a calendar

More Multiplication and Division Facts

- State multiplication facts through 9
- Multiply three one-digit factors with products through 81
- Divide one- and two-digit dividends by one-digit divisors
- Identify and write multiplication and division fact families through 9
- Identify and extend number patterns

Geometry

- Identify and compare attributes of plane figures: polygon, triangle, square, rectangle, pentagon, and hexagon
- Identify and compare attributes of space figures: cylinder, sphere, cube, pyramid, cone, and rectangular prism
- Measure and compute perimeter, area, and volume
- Identify congruent and similar figures
- Classify angles: right angle, acute angle, or obtuse angle
- Identify and draw lines, line segments, and rays
- Identify and draw parallel lines and intersecting lines
- Identify slides, flips, and turns and complete patterns using them
- Recognize lines of symmetry in plane figures
- Locate points and name ordered pairs on a coordinate grid

Multiply by One Digit

- Estimate multiplication products through 1,000 by rounding two- and three-digit factors to the nearest ten or hundred
- Estimate multiplication products through 1,000 by using front-end estimation
- Multiply two- and three-digit numbers by one-digit numbers with and without regrouping
- Estimate multiplication products through \$999 by rounding two- and three-digit factors to the nearest ten cents or dollar

- Estimate multiplication products through \$999 using front-end estimation
- Multiply money amounts with products through \$999

Divide by One Digit

- Use multiplication facts to estimate quotients with 2- and 3-digit dividends and 1-digit divisors
- Estimate quotients with 2- and 3-digit dividends and 1-digit divisors by rounding dividends to the nearest ten
- Divide 2-digit dividends by 1-digit divisors with and without remainders
- Estimate money quotients with 3- and 4-digit dividends and 1-digit divisors by rounding dividends to the nearest dollar

Fractions

- Recognize and write fractions through twelfths
- Compare fractions with like and unlike denominators through twelfths, and explain the reasoning
- Recognize and write equivalent fractions through twelfths, and explain the reasoning
- Estimate and write fractional parts of a whole or parts of a set
- Write mixed numbers in standard and word name forms
- Add and subtract fractions with like denominators through twelfths

Decimals

- Recognize and write fractions expressed as tenths and hundredths
- Recognize and write decimals expressed as tenths and hundredths
- Compare and order decimals through hundredths
- Add and subtract decimals and money amounts with and without regrouping
- Identify and use numerical patterns to solve problems

Moving On in Math

- Write numbers through 9,999,999 in standard, expanded, and word name forms
- Add and subtract five-digit numbers with regrouping
- Add money amounts with sums through \$999.99 with regrouping
- Explain divisibility rules for numbers divisible by 2, 5, and 10
- Find missing digits in addition, subtraction, and multiplication problems
- Solve problems using the order of operations
- Choose the correct operation to complete a number sentence
- Find the common factors of two numbers



- Divide two- and three-digit money amounts by a one-digit divisor without remainders
- Multiply money amounts through \$9.99 by a one-digit multiplier

Lesson Time and Scheduling

Total lessons: 160

Lesson Time: 60 minutes. You might choose to split the lessons into smaller segments. K¹²'s online lesson tracking system will allow you to pick up wherever you left off in any given lesson.

Standard Curriculum Items

Math Textbook, Grade 3

Base-10 Blocks

NOTE: List subject to change.