In Grade 4, instructional time is focused on three important areas: (1) developing understanding and fluency with multi-digit multiplication, and developing understanding of dividing to find quotients involving multi-digit dividends; (2) developing an understanding of fraction equivalence, addition and subtraction of fractions with like denominators, and multiplication of fractions by whole numbers; (3) understanding that geometric figures can be analyzed and classified based on their properties, such as having parallel sides, perpendicular sides, particular angle measures, and symmetry. Students will use addition, subtraction, multiplication and division to solve word problems involving measurement of volume, mass and time. Activities in these areas include:

* Accurately adding and subtracting whole numbers up to 1 million
* Solving multi-step word problems posed with whole numbers and having whole-number answers using the four operations, including problems in which remainders must be interpreted
* Solving problems involving measurement and conversion of measurements form a larger unit to a smaller unit
* Multiplying and dividing multi-digit numbers
* Extending understanding of fraction equivalence and ordering by comparing the size of two fractions with different numerators and denominators
* Creating equivalent fractions
* Adding and subtracting fractions with the same denominator
* Building fractions from unit fractions
* Connecting addition and subtraction of whole numbers to multiplying fractions by whole numbers
* Converting fractions with denominators of 10 or 100 into decimals
* Representing and interpreting data
* Comparing two decimals to hundredths using the symbols >, =, or <.

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| **NYS Mathematics Learning Standards Major Emphasis in Grade 4** | **Required Fluency** |
| * Operations and Algebraic Thinking
* Use the four operations with whole numbers to solve problems
 | * Add and subtract within 1,000,000
 |
| * Number and Operations in Base 10
* Generalize place value understanding for multi-digit whole numbers
* Use place value understanding and properties of operations to perform multi-digit arithmetic
 |  |
| * Number and Operations- Fractions
* Extend understanding of fraction equivalence and ordering
* Build fractions from unit fractions by applying and extending previous understandings of operations on whole numbers
* Understand decimal notation for fractions and compare decimal fractions
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Additional information about how to support your child in Grade 4 in Mathematics can be found [by clicking here.](https://www.cgcs.org/site/Default.aspx?PageID=244)