

5th Grade Math Continuum of Learning

GRADE: 5	Content Area: Math
Standard: Measurement and Data	
Key Idea: Convert like measurement units within a given measurement system	
Required Skills: a.) I can switch between different units of measurement and use them to solve real-life problems with many steps.	
Key Idea: Represent and interpret data.	
Required Skills: a.) I can make and understand a line plot to show measurement data in fractions like $\frac{1}{2}$, $\frac{1}{4}$, and $\frac{1}{8}$. b.) I can use math with fractions to solve problems using the data in the line plot	
Key Idea: Geometric measurement: understand concepts of volume and relate volume to multiplication and to addition	
Required Skills: a.) I can see that solid shapes have volume and understand how to measure it.	
Standard: Number and Operations in Base Ten	
Key Idea: Understand the place value system.	
Required Skills: a.) I can see that in a big number, each digit is 10 times bigger than the one to its right and $\frac{1}{10}$ the size of the one to its left. b.) I can notice patterns in the number of zeros when multiplying by 10, 100, etc. c.) I can explain how the decimal point moves when multiplying or dividing by 10, 100, etc. d.) I can read, write, and compare decimals up to thousandths.	
Key Idea: Perform operations with multi-digit whole numbers and with decimals to hundredths.	
Required Skills: a.) I can easily multiply big whole numbers using the regular method.	

- b.) I can find the answers to division problems with big numbers (up to four digits) divided by smaller numbers (up to two digits) using place value, math rules, and how multiplication and division are connected.
- c.) I can show and explain my work using equations, arrays, or area models.
- d.) I can add, subtract, multiply, and divide decimals up to hundredths using models or drawings and strategies
- e.) I can explain my method and reasoning in writing.

Standard: Number and Operations---Fractions

Key Idea: Use equivalent fractions as a strategy to add and subtract fractions.

Required Skills:

- a.) I can add and subtract fractions with different bottoms by changing them to have the same bottom.
- b.) I can solve word problems with fractions that have different bottoms but refer to the same whole.
- c.) I can use fraction pictures or equations to show the problem.
- d.) I can use common fractions and what I know about fractions to estimate and check my answers.

Key Idea: Apply and extend previous understandings of multiplication and division to multiply and divide fractions.

Required Skills:

- a.) I can interpret a fraction as division of the numerator by the denominator
- b.) I can use what I know about multiplication to multiply a fraction or a whole number by a fraction.

Standard: Operations and Algebraic Thinking

Key Idea: Write and interpret numerical expressions.

Required Skills:

- a.) I can parentheses, brackets, or braces in numerical expressions, and evaluate expressions with these symbols.
- b.) I can write easy math expressions to show calculations and understand them without solving.

Key Idea: Analyze patterns and relationships.

Required Skills:

- a.) I can create two number patterns using two rules.
- b.) I can find the relationships between the matching terms.
- c.) I can make ordered pairs from the matching terms and graph them on a coordinate plane.

Standard: Geometry
Key Idea: Graph points on the coordinate plane to solve real-world and mathematical problems.
Required Skills: a.) I can use two crossing number lines to make a coordinate system. The point where they meet is called the origin, and I can find a point using a pair of numbers called coordinates. b.) I can plot points in the first part of the coordinate plane to show real-world and math problems, and I can understand what the coordinates mean based on the situation.
Key Idea: Classify two-dimensional figures into categories based on their properties.
Required Skills: a.) I can understand that features of a category of two-dimensional shapes also apply to all smaller groups within that category. b.) I can sort two-dimensional shapes into groups based on their properties.