

Boyd County Schools



Mathematics Curriculum Framework

Fifth Grade

Fifth Grade Math Curriculum Overview

Unit 1	Place Value	Weeks 1-4
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Benchmark 4 Week 32		

UNIT 1: Place Value

Week 1	Week 2	Week 3	Week 4
<p>Standards</p> <p>5. NBT.1 Recognize that in a multi-digit number, a digit in one's place represents 10 times as much as it represents in the place to its right and 1/10 of what it represents in the place to its left.</p> <p>5.NBT.2 Explain patterns in the number of zeros of the product when multiplying a number by powers of 10, and explain patterns in the placement of the decimal point when a decimal is multiplied or divided by a power of 10. Use whole-number exponents to denote powers of 10.</p> <p>5.NBT.3 Read, write, and compare decimals to thousandths.</p> <ul style="list-style-type: none">a. Read and write decimals to thousandths using base-ten numerals, number names, and expanded form, e.g., $347.392 = 3 \times 100 + 4 \times 10 + 7 \times 1 + 3 \times (1/10) + 9 \times (1/100) + 2 \times (1/1000)$.b. Compare two decimals to thousandths based on meanings of the digits in each place, using $>$, $=$, and $<$ symbols to record the results of comparisons. <p>5.NBT.4 Use place value understanding to round decimals to any place.</p>			
<p>Learning Targets</p> <p>5.NBT.1</p> <p>I can compare the value of digits based on their placement in a given number and explain my thinking. (The value of 3 in 435 is 30 or 3 tens. The value of 3 in 365 is 300 or 3 hundreds. 300 is ten times greater than 30 and 30 is 1/10 of 300.)</p> <p>I can use models including a place value chart and base 10 blocks to support discussions.</p> <p>I can use numeral cards, playing cards, dice and money to generate numbers, including decimals to compare the values of various places.</p> <p>5. NBT.2</p> <p>I can explore multiplication of whole numbers and decimal numbers by Powers of 10 (10; 100; 1,000; 10,000) using concrete materials, pictures, numbers, and words.</p> <p>I can describe patterns I find and justify why those patterns work.</p> <p>I can write Powers of 10 using exponential notation.</p> <p>5. NBT.3a</p> <p>I can recognize and name place values for base-ten numerals to the thousands place using place value charts and expanded form.</p> <p>I can demonstrate understanding of decimal place values: (Tenth 0.1 1/10 of one whole; Hundredth 0.01 1/100 of one whole; Thousandth 0.001 1/1000 of one whole)</p> <p>I can read and write decimals (to thousandths) using numerals, words, and expanded form.</p> <p>5. NBT.3b</p> <p>I can demonstrate understanding of the equivalence of decimal numbers and fractions by connecting models to reading and writing equivalent numbers. $0.5 = 5/10$</p>			

I can demonstrate understanding of equivalent decimal numbers by generating list of equivalent decimals with different place values. $0.3 = 0.30 = 0.300$

I cannot use a place value chart to compare decimals by comparing the digits in each decimal place.

I can explain their reasoning when comparing decimal numbers using objects, pictures, numbers, and words.

5. NBT.4

I can use place value understanding and number line models to round decimal numbers to a given place.

I can examine the various situations to determine where to round in a given situation.

I can give clear explanations to justify my thinking when rounding decimal numbers.

Vocabulary

benchmark, compare, decimal number, expanded form, exponent, exponential notation, hundredth, pattern, place value, power, round, tenth, and thousandth

Special Considerations

Resources

Illustrative Mathematics Tasks

- [5.NBT.1 Kipton's Scale](#)
- [5.NBT.1 Millions and Billions of People](#)
- [5.NBT.1 Tenths and Hundredths](#)
- [5.NBT.1 Which Number is it?](#)
- [5.NBT.2 Multiplying Decimals by Ten](#)
- [5.NBT.2 Marta's Multiplication Error](#)
- [5.NBT.3 Are these equivalent to 9.52?](#)
- [5.NBT.3 Comparing Decimals on a Number Line](#)
- [5.NBT.3 Placing Thousandths on a Number Line](#)
- [5.NBT.3b Drawing Pictures to Illustrate Decimal Comparisons](#)
- [5.NBT.4 Rounding to Tenths and Hundredths](#)

3-Act Math

Assessments

UNIT 2: Multiplication and Division with Whole Numbers

Week 5	Week 6	Week 7	Week 8
Standards 5.NBT.5 Fluently multiply multi-digit whole numbers using the standard algorithm. 5.NBT.6 Find whole-number quotients of whole numbers with up to four-digit dividends and two-digit divisors, using strategies based on place value, the properties of operations, and/or the relationship between multiplication and division. Illustrate and explain the calculation by using equations, rectangular arrays, and/or area models.			
Learning Targets 5.NBT.5 I can connect previous work with the meaning of multiplication to activities and problem solving situations asking if my answer is reasonable by estimating and calculating and exact product. I can use the standard algorithm to multiply multi-digit numbers. 5.NBT.6 I can divide 4 digit divides by 2 digit divisors using strategies based on place value, properties of operations and the relationship between multiplication and division. I can connect previous experience with division to dividing by multiples of 10 Using place value and estimation. I can develop strategies for division by multiples of 10. I can explain my reasoning are using equations, rectangular arrays, and area models. I can use rounding and estimation to divide by any two digit numbers. I can solve problems that include various division situations.			
Vocabulary algorithm, area model, dividend, divisor, estimate, factor, factor pair, fluency, multiple, partial product, partial quotient, product, quotient, remainder, strategy			
Special Considerations			
Resources Illustrative Mathematics Tasks <ul style="list-style-type: none">• 5.NBT.5 Elmer’s Multiplication Error• 5.NBT.6 Minutes and Days 3-Act Math <ul style="list-style-type: none">• Tomato-Tomato			

- [Sugar Cubes](#)

Assessments

KDE Formative Assessment Lessons (FALS)

- [Division and Interpreting Remainders](#)

Week 9

Students take the benchmark assessment. Use the data from the benchmark to direct re-teaching you may need to do during this week.

UNIT 3: Order of Operations

Week 10

Week 11

Standards

5.OA.1 Use parentheses, brackets, or braces in numerical expressions, and evaluate expressions with these symbols.

5.OA.2 Write simple expressions that record calculations with numbers, and interpret numerical expressions without evaluating them. For example, express the calculation “add 8 and 7, then multiply by 2” as $2 \times (8 + 7)$. Recognize that $3 \times (18932 + 921)$ is three times as large as $18932 + 921$, without having to calculate the indicated sum or product.

Learning Targets

5.OA.A.1

I can solve problems and equations that include parentheses.

I can solve problems and equation that employ order of operations.

I can explain my thinking as I use order of operations to solve a variety of problems.

5.OA.A.2

I can, given a mathematical expression in words, write the numerical expression. (Three times six added to seven would be written $7 + 3 \times 6$)

I can, given a numerical expression, translate it into words. ($12 - (14/7)$ could be read as the quotient of 14 and 7 subtracted from 12)

Vocabulary

braces, brackets, expression, operation, parentheses, quantity, sum, difference, product, quotient

Special Considerations

Resources

Illustrative Mathematics Tasks

- [5.OA. Picturing Factors in Different Orders](#)
- [5.OA. Why Do We Need Orders of Operations?](#)
- [5.OA.1 Bowling for Numbers](#)
- [5.OA.1 Using Operations and Parenthesis](#)
- [5.OA.1 Watch Out for Parenthesis 1](#)
- [5.OA.2 Comparing Products](#)
- [5.OA.2 Seeing is Believing](#)

Assessments

UNIT 4: Operations with Decimals

Week 12	Week 13	Week 14	Week 15
Standards 5.NBT.7 Add, subtract, multiply, and divide decimals to hundredths, using concrete models or drawings and strategies based on place value, properties of operations, and/or the relationship between addition and subtraction; relate the strategy to a written method and explain the reasoning used.			
Learning Targets 5.NBT.B.7 I can connect previous experiences with the meaning of addition and subtraction of whole numbers to addition and subtraction of decimal numbers using concrete models and place value structure. I can solve a variety of addition and subtraction problems involving decimal numbers. I can explain my reasoning using concrete models, pictures, words, and numbers. I can connect previous experiences with the meaning of multiplication and division of whole numbers to multiplication and division of decimals using estimation models and place value structure. I can describe place value patterns in multiplication problems.			

I can describe place value patterns in division problems.
I can solve a variety of multiplication and division problems involving decimal numbers.
I can explain my reasoning using models, pictures words, and the numbers.

Vocabulary

addition strategies, decimal, divide, division strategies, hundredths, multiplication strategies, multiply, place value, product, quotient, subtraction strategies, tenths, thousandths

Special Considerations

Resources

Illustrative Mathematics

- [The Value of Education](#)
- [What is \$23 \div 5\$?](#)

3-Act Math

- [Hanging By a Hair](#)
- [Granny Smith's Skins](#)
- [Straighten Up](#)
- [Gassed](#)

Assessments

KDE Formative Assessment Lessons (FALS)

- [Multiplication and Division with Decimals](#)

Week 16

Students take the benchmark assessment. Use the data from the benchmark to direct re-teaching you may need to do during this week.

UNIT 5: Addition and Subtraction Fractions

Week 17	Week 18	Week 19
<p>Standards</p> <p>5.NF.1 Add and subtract fractions with unlike denominators (including mixed numbers) by replacing given fractions with equivalent fractions in such a way as to produce an equivalent sum or difference of fractions with like denominators. <i>For example, $2/3 + 5/4 = 8/12 + 15/12 = 23/12$. (In general, $a/b + c/d = (ad + bc)/bd$.)</i></p> <p>5.NF.2 Solve word problems involving addition and subtraction of fractions referring to the same whole, including cases of unlike denominators, e.g., by using visual fraction models or equations to represent the problem. Use benchmark fractions and number sense of fractions to estimate mentally and assess the reasonableness of answers. <i>For example, recognize an incorrect result $2/5 + 1/2 = 3/7$, by observing that $3/7 < 1/2$.</i></p>		
<p>Learning Targets</p> <p>5. NF.1</p> <p>I can apply concepts of factors, multiples, equivalent fractions, and decomposition of fractions to find like denominators.</p> <p>I can add and subtract fractions and mixed numbers by finding common denominators.</p> <p>I can represent addition and subtraction of fractions, including mixed numbers and fractions greater than 1, with unlike denominators using concrete models, graphical models, and equations</p> <p>5. NF.2</p> <p>I can solve multi-step word problems involving addition and subtraction of fractions with like and unlike denominators using visual fraction models or equations.</p> <p>I can use benchmark fractions and number sense of fractions to estimate and assess reasonableness of answers.</p> <p>I can analyze the error in the solution of a multi-step word problem involving the addition and subtraction of fractions with unlike denominators, and justify the reasoning.</p> <p>Example: Charles got following addition problem wrong on his mathematics quiz. Write him a note explaining why the solution does not make sense.</p> <p>$3/5 + 7/9 = 8/14$</p> <p>Use benchmark fractions to reason that $3/5$ is a little more than $1/2$ and $7/9$ is very close to one whole, so the answer should be around $1\ 1/2$. Charlie's answer $8/14$ is only a little more than $1/2$, so it is not reasonable.</p>		
<p>Vocabulary</p> <p>denominator, difference, divisible, equivalent, factor, fraction, fraction greater than, like denominator, mixed number, multiple, numerator, reasonableness, sum, unlike denominator, whole number, estimate, factor, fraction</p>		

Special Considerations

Resources

Illustrative Mathematics

- [Measuring Cups](#)
- [To Multiply or not to multiply?](#)
- [To Multiply Or Not to Multiply, Variation 2](#)
- [Egyptian Fractions](#)
- [Do These Add Up?](#)
- [Salad Dressing](#)
- [Sharing Lunches](#)
- [Finding Common Denominators to Add](#)
- [Finding Common Denominators to Subtract](#)
- [Fractions on a Line Plot](#)
- [Jog-A-Thon](#)
- [Making S'Mores](#)
- [Mixed Numbers with Unlike Denominators](#)

Achieve the Core

- [Add Fractions with Unlike Units Using the Strategy of Creating Equivalent Fractions](#)
- [Leapfrog Fractions](#)

Assessments

KDE Formative Assessment Lessons (FALS)

- [Pizza with Friends](#)

UNIT 6: Multiplication and Division Fractions

Week 20	Week 21	Week 22	Week 23
<p>Kentucky Academic Standards</p> <p>5.NF.3 Interpret a fraction as division of the numerator by the denominator ($a/b = a \div b$). Solve word problems involving division of whole numbers leading to answers in the form of fractions or mixed numbers, e.g., by using visual fraction models or equations to represent the problem. For example, interpret $3/4$ as the result of dividing 3 by 4, noting that $3/4$ multiplied by 4 equals 3, and that when 3 wholes are shared equally among 4 people each person has a share of size $3/4$. If 9 people want to share a 50-pound sack of rice equally by weight, how many pounds of rice should each person get? Between what two whole numbers does your answer lie?</p> <p>5.NF.4 Apply and extend previous understandings of multiplication to multiply a fraction or whole number by a fraction.</p> <ol style="list-style-type: none">Interpret the product $(a/b) \times q$ as a parts of a partition of q into b equal parts; equivalently, as the result of a sequence of operations $a \times q \div b$. For example, use a visual fraction model to show $(2/3) \times 4 = 8/3$, and create a story context for this equation. Do the same with $(2/3) \times (4/5) = 8/15$. (In general, $(a/b) \times (c/d) = ac/bd$.)Find the area of a rectangle with fractional side lengths by tiling it with unit squares of the appropriate unit fraction side lengths, and show that the area is the same as would be found by multiplying the side lengths. Multiply fractional side lengths to find areas of rectangles, and represent fraction products as rectangular areas. <p>5.NF.5 Interpret multiplication as scaling (resizing), by:</p> <ol style="list-style-type: none">Comparing the size of a product to the size of one factor on the basis of the size of the other factor, without performing the indicated multiplication.Explaining why multiplying a given number by a fraction greater than 1 results in a product greater than the given number (recognizing multiplication by whole numbers greater than 1 as a familiar case); explaining why multiplying a given number by a fraction less than 1 results in a product smaller than the given number; and relating the principle of fraction equivalence $a/b = (n \times a)/(n \times b)$ to the effect of multiplying a/b by 1. <p>5.NF.6 Solve real world problems involving multiplication of fractions and mixed numbers, e.g., by using visual fraction models or equations to represent the problem.</p> <p>5.NF.7 Apply and extend previous understandings of division to divide unit fractions by whole numbers and whole numbers by unit fractions.</p> <ol style="list-style-type: none">Interpret division of a unit fraction by a non-zero whole number, and compute such quotients. For example, create a story context for $(1/3) \div 4$, and use a visual fraction model to show the quotient. Use the relationship between multiplication and division to explain that $(1/3) \div 4 = 1/12$ because $(1/12) \times 4 = 1/3$.Interpret division of a whole number by a unit fraction, and compute such quotients. For example, create a story context for $4 \div (1/5)$, and use a visual fraction model to show the quotient. Use the relationship between multiplication and division to explain that $4 \div (1/5) = 20$ because $20 \times (1/5) = 4$.Solve real world problems involving division of unit fractions by non-zero whole numbers and division of whole numbers by unit fractions, e.g., by using visual fraction models and equations to represent the problem. <i>For example, how much chocolate will each</i>			

person get if 3 people share $\frac{1}{2}$ lb of chocolate equally? How many $\frac{1}{3}$ -cup servings are in 2 cups of raisins?

Represent and interpret data.

5.MD.2 Make a line plot to display a data set of measurements in fractions of a unit ($\frac{1}{2}$, $\frac{1}{4}$, $\frac{1}{8}$). Use operations on fractions for this grade to solve problems involving information presented in line plots. *For example, given different measurements of liquid in identical beakers, find the amount of liquid each beaker would contain if the total amount in all the beakers were redistributed equally.*

Learning Targets

5.NF.3

I can explain that fractions ($\frac{a}{b}$) can be represented as a division of the numerator by the denominator ($a \div b$). For example, $\frac{5}{3} = 5 \div 3$.

I can express why $a \div b$ can be represented by the fraction $\frac{a}{b}$.

I can solve word problems involving the division of whole numbers (including situations resulting in a fractional quotient) and tell between what two whole numbers the answer lies.

5.NF.4.a

I can multiply a fraction by a whole number by using a visual fraction model and create a story context for the problem.

I can multiply a fraction by a fraction by using a visual fraction model and create a story context for the problem.

5.NF.4.b

I can find the area of a rectangle with fractional side lengths by tiling it with unit squares of the appropriate unit fraction side lengths.

I can find the area of a rectangle with fractional sides by multiplying the side lengths.

5.NF.5.a

I can compare the size of a product to the size of one factor based on the size of the other factor, without performing the indicated multiplication. For example, $\frac{1}{3} \times 4$ will be less than four but greater than one third.

5.NF.5.b

I can explain why multiplying a given number by a fraction greater than one results in a product greater than the given number.

I can explain why multiplying a given number by a fraction less than one results in a product smaller than the given number.

5.NF.6

I can solve real world problems involving multiplication of fractions and mixed numbers by using visual fraction models or equations to represent the problem.

5.NF.7.a

I can solve problems involving division of a unit fraction by a whole number using a visual fraction model.

I can create a story for a division of a unit fraction by a whole number problem.

I can use the relationship of multiplication and division to make sense of fraction division problems (unit fraction by a whole number).

5.NF.7.b

I can solve problems involving division of a whole number by a unit fraction.

I can create a story for a division of a whole number by a unit fraction problem.

I can use the relationship of multiplication and division to make sense of fraction division problems (whole number by a unit fraction).

5.NF.7.c

I can solve real world problems involving division of a unit fraction by a whole number using visual models and equations.

I can solve real world problems involving division of a whole number by a unit fraction using visual models and equations.

5.MD.B.2

I can construct a line plot using data in fractions ($\frac{1}{2}$, $\frac{1}{4}$, $\frac{1}{8}$).

I can solve problems using operations on fractions from the information presented in the line plot.

Vocabulary

Special Considerations

Resources

Illustrative Mathematics

- [Converting Fractions of a Unit into a Smaller Unit](#)
- [How Much Pie?](#)
- [Sharing Lunches](#)
- [What is \$23 \div 5\$?](#)
- [Connor and Makayla Discuss Multiplication](#)
- [Cornbread Fundraiser](#)
- [Cross Country Training](#)
- [Folding Strips of Paper](#)
- [Mrs. Gray's Homework Assignment](#)
- [Connecting the Area Model to Context](#)
- [Chavone's Bathroom Tiles](#)
- [New Park](#)
- [Calculator Trouble](#)
- [Comparing a Number and a Product](#)
- [Comparing Heights of Buildings](#)
- [Fundraising](#)
- [Grass Seedlings](#)
- [Reasoning about Multiplication](#)
- [Running a Mile](#)
- [Scaling Up and Down](#)
- [Drinking Juice](#)
- [Half of a Recipe](#)
- [Making Cookies](#)
- [New Park](#)

- [Running to School](#)
- [To Multiply or not to multiply?](#)
- [To Multiply Or Not to Multiply, Variation 2](#)
- [Painting a room](#)
- [How many marbles?](#)
- [Origami Stars](#)
- [Salad Dressing](#)
- [Standing in Line](#)
- [Fractions on a Line Plot](#)

3 Act Math

- [How Much Dew](#)
- [Let It Flow](#)

Assessments

Week 24

Students take the benchmark assessment. Use the data from the benchmark to direct re-teaching you may need to do during this week.

UNIT 7: Geometry

Week 25

Week 26

Week 27

Standards

5.OA.3 Generate two numerical patterns using two given rules. Identify apparent relationships between corresponding terms. Form ordered pairs consisting of corresponding terms from the two patterns, and graph the ordered pairs on a coordinate plane. *For example, given the rule “Add 3” and the starting number 0, and given the rule “Add 6” and the starting number 0, generate terms in the resulting sequences, and observe that the terms in one sequence are twice the corresponding terms in the other sequence. Explain informally why this is so.*

Graph points on the coordinate plane to solve real-world and mathematical problems.

5.G.1 Use a pair of perpendicular number lines, called axes, to define a coordinate system, with the intersection of the lines (the origin) arranged to coincide with the 0 on each line and a given point in the plane located by using an ordered pair of numbers, called its coordinates.

Understand that the first number indicates how far to travel from the origin in the direction of one axis, and the second number indicates how far to travel in the direction of the second axis, with the convention that the names of the two axes and the coordinates correspond (e.g., x-axis and x-coordinate, y-axis and y-coordinate).

5.G.2. Represent real world and mathematical problems by graphing points in the first quadrant of the coordinate plane, and interpret

coordinate values of points in the context of the situation.

Classify two-dimensional figures into categories based on their properties.

5.G.3 Understand that attributes belonging to a category of two dimensional figures also belong to all subcategories of that category. For example, all rectangles have four right angles and squares are rectangles, so all squares have four right angles.

5.G.4 Classify two-dimensional figures in a hierarchy based on properties.

Learning Targets

OA.B.3

I can generate two numerical patterns using two given rules and identify the patterns and relationships between both patterns.

I can form ordered pairs from the two patterns and graph them on a coordinate plane.

G.A.1

I can locate coordinates on a coordinate grid by using an ordered pair of numbers.

I can understand the first number of an ordered pair indicates how far to travel from the origin in the direction of one axis and the second number indicates how far to travel in the direction of the second axis.

G.A.2

I can represent real world and mathematical problems by graphing points in the first quadrant of the coordinate plane.

I can interpret the coordinate values of points in the context of the situation.

G.B.3

I can compare and describe the geometric attributes of two-dimensional figures.

I can categorize two-dimensional figures according to their individual and shared geometric (defining) attributes.

HINT: Geometric (defining) attributes include properties of sides (i.e., parallel, perpendicular, congruent), properties of angles (i.e., type, measurement, congruent), and properties of symmetry (i.e., point and line).

I can explain the reasoning for the determined categories.

I can select two-dimensional figures belonging to a given subcategory.

G.B.4

I can investigate properties of shapes, then sort and classify two-dimensional figures in a hierarchy based on property.

I can use graphic organizers such as flow charts to compare and contrast the attributes of geometric shapes.

Vocabulary

Special Considerations

Resources

Illustrative Mathematics

- [Battle Ship Using Grid Paper](#)
- [Meerkat Coordinate Plane Task](#)
- [Always, Sometimes, Never](#)
- [What do these shapes have in Common?](#)
- [What is a Trapezoid? \(Part 2\)](#)

Assessments

UNIT 8: Measurement and Volume

Week 28	Week 29	Week 30	Week 31
Standards			
Convert like measurement units within a given measurement system.			
5.MD.1 Convert among different-sized standard measurement units within a given measurement system (e.g., convert 5 cm to 0.05 m), and use these conversions in solving multi-step, real world problems.			
Geometric measurement: understand concepts of volume and relate volume to multiplication and to addition.			
5.MD.3 Recognize volume as an attribute of solid figures and understand concepts of volume measurement.			
a. A cube with side length 1 unit, called a “unit cube,” is said to have “one cubic unit” of volume, and can be used to measure volume.			
b. A solid figure which can be packed without gaps or overlaps using n unit cubes is said to have a volume of n cubic units.			
5.MD.4 Measure volumes by counting unit cubes, using cubic cm, cubic in, cubic ft, and improvised units.			
5.MD.5 Relate volume to the operations of multiplication and addition and solve real world and mathematical problems involving volume.			
a. Find the volume of a right rectangular prism with whole-number side lengths by packing it with unit cubes, and show that the volume is the same as would be found by multiplying the edge lengths, equivalently by multiplying the height by the area of the base. Represent threefold whole-number products as volumes, e.g., to represent the associative property of multiplication.			
b. Apply the formulas $V = l \times w \times h$ and $V = b \times h$ for rectangular prisms to find volumes of right rectangular prisms with whole number edge lengths in the context of solving real world and mathematical problems.			
c. Recognize volume as additive. Find volumes of solid figures composed of two non-overlapping right rectangular prisms by adding the volumes of the non-overlapping parts, applying this technique to solve real world problems.			
Learning Targets			
5.MD.1			
I can convert different size standard measurement units within the same measurement system.			
I can solve word problems involving conversions of metric and customary units.			
I can use vocabulary associated with the metric and customary conversions.			
5.MD.3			
I can recognize volume as an attribute of three dimensional space.			
I can explain that a cube with 1 unit side length is “one cubic unit” of volume.			
I can explain a process for finding the volume of a solid figure by filling it with unit cubes without gaps and overlaps.			
5.MD.4			

I can measure volumes by counting unit cubes, using cubic centimeter, cubic inch, cubic feet, and improve units.

I can measure the volume of a hollow three-dimensional figure (i.e., rectangular prism and cube) by filling it with unit cubes without gaps and counting the number of unit cubes.

I can use unit cubes to create two different rectangular prisms with one given volume.

5.MD.5

I can relate finding the product of three numbers (length, width, and height) to finding volume.

I can use the formula for area to develop an understanding of volume.

I can relate the associative property of multiplication to finding volume.

I can calculate volume of rectangular prisms and cubes, with whole number edge lengths, using the formula for volume ($V = lwh$ or $V = Bh$) in *real world and mathematical problems*.

I can label appropriate units of measure for volume.

I can decompose a composite solid into non-overlapping rectangular prisms to find the volume of the solid by finding the sum of the volumes of each of the decomposed prisms.

I can determine a missing dimension of a rectangular prism given two dimensions and the volume.

I can generate possible dimensions of a rectangular prism when given the volume.

I can solve real world problems involving volume.

Vocabulary

Special Considerations

Resources

Illustrative Math

- [Converting Fractions of a Unit into a Smaller Unit](#)
- [Minutes and Days](#)
- [Box of Clay](#)
- [Breaking Apart Composite Solids](#)
- [You Can Multiply Three Numbers in Any Order](#)
- [Using Volume to Understand the Associative Property of Multiplication](#)
- [Cari's Aquarium](#)
- [Breaking Apart Composite Solids](#)

3-Act Math

- [The Fish Tank](#)
- [Got Cubes](#)
- [Packing Sugar](#)
- [Overflow](#)

Assessments

KDE Formative Assessment Lessons (FALS)

- [Metric Comparison and Conversions](#)
- [Volume](#)

Week 32

Students take the benchmark assessment. Use the data from the benchmark to direct re-teaching you may need to do during this week.