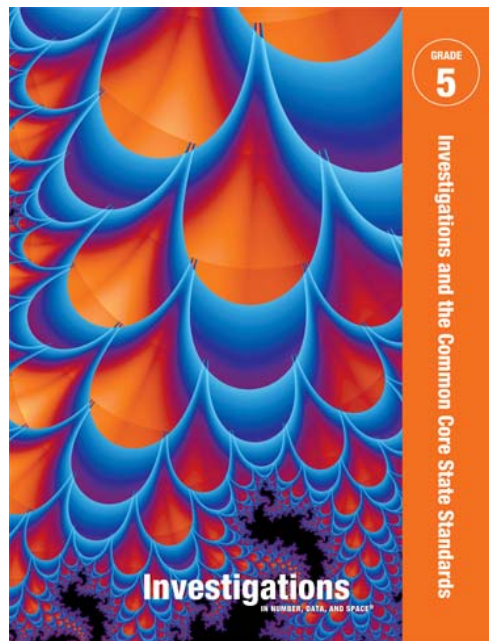


ARKANSAS DEPARTMENT OF EDUCATION
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SCOTT FORESMAN
Investigations
IN NUMBER, DATA, AND SPACE®

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Common Core State Standards Correlation

and

**Common Core State Standards Comparison with
Arkansas Student Learning Expectations for Mathematics
Correlation**

Grade 5

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Two *Investigations in Number, Data and Space* Grade 5 correlations have been provided within this document.

- **Part 1** A Correlation of *Investigations in Number, Data and Space* Grade 5 to the Common Core State Standards for Mathematics (CCSS) **Part 1** pages 1-8
- **Part 2** A Correlation of *Investigations in Number, Data and Space* Grade 5 to the Common Core State Standards Comparison with Arkansas Student Learning Expectations for Mathematics **Part 2** pages 9-30

The correlation in Part 2 is included at the request of the Arkansas Department of Education and shows how both sets of criteria intersect and align to common content. Please note the CCSS introduces some content at different grade levels, as a result, several grade levels of the Arkansas Curriculum Framework were aligned to and were included at a single grade level. Consequently, the correlation reflects this shift to other levels.

Thank you in advance for your time and consideration of *Investigations* for Arkansas elementary students.

Part 1

A Correlation of *Investigations In Number, Data, and Space* © 2012
to the Common Core State Standards for Mathematics

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Part 1

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Common Core State Standards for Mathematics Grade 5	Investigations in Number, Data, and Space ©2012 Grade 5
Operations And Algebraic Thinking 5.OA	
Write and interpret numerical expressions.	
1. Use parentheses, brackets, or braces in numerical expressions, and evaluate expressions with these symbols. [5.OA.1.]	U1 Sessions: 1.1, 1.4, 1.7, 2.1 U1 ICCG: 2.4A U2 ICCG: 1.5A, 2.4A U6 ICCG: 3A.8, 3A.9 U8 Sessions: 2.2, 2.3
2. Write simple expressions that record calculations with numbers, and interpret numerical expressions without evaluating them. [5.OA.2.]	U1 Sessions: 1.1, 1.2, 1.3, 1.4, 1.5, 1.6, 1.7 U1 ICCG: 2.4A U7 Sessions: 1.1, 1.2, 1.3, 1.4 U8 Sessions: 2.1, 2.2, 2.3, 2.5, 2.6
Analyze patterns and relationships.	
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. [5.OA.3.]	U8 Sessions: 1.1, 1.2, 1.3, 1.4, 1.5, 2.3, 2.4, 2.5, 2.6, 2.7, 2.8
Number and Operations in Base Ten 5.NBT	
Understand the place value system.	
1. 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 1/10 of what it represents in the place to its left. [5.NBT.1.]	U3 Sessions: 1.1, 1.2, 1.3, 1.4, 1.5, 3.1, 3.2, 3.5 U6 Sessions: 1.1, 1.2 U6 ICCG: 3A.8, 3A.9
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. [5.NBT.2.]	U1 Sessions: 2.3, 2.4, 2.5, 3.2, 3.3 U6 ICCG: 3A.1, 3A.5

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U1 Number Puzzles and Multiple Towers

U2 Prisms and Pyramids

U3 Thousands of Miles, Thousands of Seats

U4 What's That Portion?

U5 Measuring Polygons

U6 Decimals on Grids and Number Lines

U7 How Many People? How Many Teams?

U8 Growth Patterns

U9 How Long Can You Stand on One Foot?

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3. Read, write, and compare decimals to thousandths. [5.NBT.3.]	
a. Read and write decimals to thousandths using base-ten numerals, number names, and expanded form, e.g., $347.392 = 3 \times 100 + 4 \times 10 + 7 \times 1 + 3 \times (1/10) + 9 \times (1/100) + 2 \times (1/1000)$. [5.NBT.3.a.]	U6 Sessions: 1.1, 1.2, 1.3, 1.4, 1.5, 1.10, 2.1, 2.2, 2.3, 2.4, 2.5, 2.6, 2.7, 2.8 U6 ICCG: 3A.1, 3A.2, 3A.3, 3A.4 U8 Sessions: 1.3, 1.4, 2.1, 2.2, 2.5, 2.6
b. Compare two decimals to thousandths based on meanings of the digits in each place, using $>$, $=$, and $<$ symbols to record the results of comparisons. [5.NBT.3.b.]	U6 Sessions: 1.1, 1.2, 1.3, 1.4, 1.5, 1.6, 1.9, 1.10, 2.1, 2.2, 2.3, 2.4, 2.5, 2.6, 2.7, 2.8 U8 Sessions: 1.3, 1.4, 2.1, 2.2, 2.5, 2.6
4. Use place value understanding to round decimals to any place. [5.NBT.4.]	U6 ICCG: 1.5A, 3A.1, 3A.2, 3A.3, 3A.4
Perform operations with multi-digit whole numbers and with decimals to hundredths.	
5. Fluently multiply multi-digit whole numbers using the standard algorithm. [5.NBT.5.]	U1 Sessions: 1.1, 1.2, 1.3, 1.4, 1.5, 1.6, 1.7, 2.1, 2.2, 2.3, 2.4, 2.5, 2.6, 2.7, 3.1, 3.2, 3.3, 3.8 U2 Sessions: 1.4, 1.5, 2.1, 2.2 U3 Sessions: 1.5, 2.1, 2.2, 2.3, 3.1, 3.3, 3.4 U6 Sessions: 1.5, 1.6, 1.9 U7 Sessions: 2.1, 2.2, 2.3, 2.4, 3.1, 3.2, 3.3, 3.4, 3.5, 3.6, 4.1, 4.2, 4.3, 4.4, 4.5 U9 Sessions: 1.3, 1.4 U9 ICCG: 1.5A, 1.6A
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. [5.NBT.6.]	U1 Sessions 3.1, 3.2, 3.3, 3.4, 3.5, 3.6, 3.7, 3.8 U2 Session 2.3 U3 Sessions 1.5, 2.1, 2.2, 3.1, 3.3, 3.4 U6 Sessions 1.7, 1.8 U7 Sessions 3.1, 3.2, 3.3, 3.4, 3.5, 3.6, 3.7, 4.1, 4.2, 4.3, 4.4, 4.5 U9 Sessions 1.3, 1.5A, 1.6A

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- U4** What's That Portion?
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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. [5.NBT.7.]	U6 Sessions: 2.1, 2.2, 2.3, 2.4, 2.5A, 2.5, 2.6, 2.7, 2.8 U6 ICCG: 3A.1, 3A.2, 3A.3, 3A.4, 3A.5, 3A.6, 3A.7
Number and Operations—Fractions 5.NF	
Use equivalent fractions as a strategy to add and subtract fractions.	
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. [5.NF.1.]	U6 Sessions: 2.1, 2.2, 2.3, 2.4, 2.5A, 2.5, 2.6, 2.7, 2.8 U6 ICCG: 3A.1, 3A.2, 3A.3, 3A.4, 3A.5, 3A.6, 3A.7
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. [5.NF.2.]	U4 Sessions: 3.3, 3.6, 3.7, 3.8, 3.9, 3.10 U7 Sessions: 1.1, 1.3
Apply and extend previous understandings of multiplication and division to multiply and divide fractions.	
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. [5.NF.3.]	U6 Sessions: 1.7, 1.8, 1.9, 1.10
4. Apply and extend previous understandings of multiplication to multiply a fraction or whole number by a fraction. [5.NF.4.]	

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a. 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 $a \times q \div b$. [5.NF.4.a.]	U4 ICCG: 4A.1, 4A.2, 4A.3, 4A.4, 4A.5, 4A.6, 4A.7
b. 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. [5.NF.4.b.]	U4 ICCG: 4A.6, 4A.7, 4A.9, 4A.10
5. Interpret multiplication as scaling (resizing), by: [5.NF.5.]	
a. 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. [5.NF.5.a.]	U4 ICCG: 4A.2, 4A.6
b. 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. [5.NF.5.b.]	U4 Sessions 4A.1, 4A.2, 4A.3
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. [5.NF.6.]	U4 Sessions 4A.1, 4A.2, 4A.3, 4A.7 U9 Sessions 1.5A, 1.6A
7. Apply and extend previous understandings of division to divide unit fractions by whole numbers and whole numbers by unit fractions. <i>(Students able to multiply fractions in general can develop strategies to divide fractions in general, by reasoning about the relationship between multiplication and division. But division of a fraction by a fraction is not a requirement at this grade.)</i> [5.NF.7.]	

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a. Interpret division of a unit fraction by a non-zero whole number, and compute such quotients. [5.NF.7.a.]	U4 ICCG: 4A.8, 4A.10
b. Interpret division of a whole number by a unit fraction, and compute such quotients. [5.NF.7.b.]	U4 ICCG: 4A.9, 4A.10
c. 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. [5.NF.7.c.]	U4 ICCG: 4A.8, 4A.9, 4A.10
Measurement and Data 5.MD	
Convert like measurement units within a given measurement system.	
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. [5.MD.1.]	U6 ICCG: 3A.8, 3A.9 U8 Session: 1.1
Represent and interpret data.	
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. [5.MD.2.]	U9 Sessions: 1.1, 1.2, 1.3, 1.4 U9 ICCG: 1.5A, 1.6A
Geometric measurement: understand concepts of volume and relate volume to multiplication and to addition.	
3. Recognize volume as an attribute of solid figures and understand concepts of volume measurement. [5.MD.3.]	

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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. [5.MD.3.a.]	U2 Sessions: 1.1, 1.2, 2.1 U2 ICCG: 1.5A, 2.4A
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.3.b.]	U2 Sessions: 1.1, 1.2, 2.1 U2 ICCG: 1.5A, 2.4A
4. Measure volumes by counting unit cubes, using cubic cm, cubic in, cubic ft, and improvised units. [5.MD.4.]	U2 Sessions: 1.1, 2.1, 2.2, 2.3 U2 ICCG: 2.4A
5. Relate volume to the operations of multiplication and addition and solve real world and mathematical problems involving volume. [5.MD.5.]	
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. [5.MD.5.a.]	U2 Sessions: 1.2, 1.3, 1.4, 1.5, 1.6, 1.7, 2.1, 2.2, 2.3 U2 ICCG: 2.4A
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. [5.MD.5.b.]	U2 Sessions: 1.2, 2.1, 2.3 U2 ICCG: 1.5A, 2.4A
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. [5.MD.5.c.]	U2 ICCG: 1.5A
Geometry 5.G	
Graph points on the coordinate plane to solve real-world and mathematical problems.	

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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.1.]	U8 Sessions: 1.1, 1.2, 1.3, 1.4, 1.5, 2.1, 2.3, 2.4, 2.5, 2.6, 2.7, 2.8
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. [5.G.2.]	U8 Sessions: 1.1, 1.2, 1.3, 1.4, 1.5, 2.3, 2.4, 2.5, 2.6, 2.7, 2.8
Classify two-dimensional figures into categories based on their properties.	
3. Understand that attributes belonging to a category of two-dimensional figures also belong to all subcategories of that category. [5.G.3]	U5 Sessions 1.1, 1.2, 1.3, 1.4, 1.5, 1.6, 1.7
4. Classify two-dimensional figures in a hierarchy based on properties. [5.G.4.]	U5 Sessions: 1.1, 1.2, 1.3, 1.4, 1.7

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Operations and Algebraic Thinking		
CC.5.OA.1 Write and interpret numerical expressions. Use parentheses, brackets, or braces in numerical expressions, and evaluate expressions with these symbols.	AR.5.NO.2.4 (NO.2.5.4) Number theory: Apply rules (conventions) for order of operations to whole numbers where the left to right computations are modified only by the use of parentheses	U1 Session 2.4A
	AR.6.NO.2.4 (NO.2.6.4) Number theory: Apply rules (conventions) for order of operations to whole numbers with and without parentheses	U1 ICCG 2.4A
CC.5.OA.2 Write and interpret numerical expressions. Write simple expressions that record calculations with numbers, and interpret numerical expressions without evaluating them.	AR.5.NO.3.3 (NO.3.5.3) Computational Fluency: Solve, with and without appropriate technology, two-step problems using a variety of methods and tools (i.e. objects, mental computation, paper and pencil)	U3 Sessions 3,2, 3.3, 3.4 U7 Sessions 3,4, 3.5, 4.1, 4.2, 4.4
	AR.5.NO.3.4 (NO.3.5.4) Estimation: Develop and use strategies to estimate the results of whole number computations and to judge the reasonableness of such results	U1 Session 2.3 U3 Session 1.4 U6 Sessions 2.3, 2.6 U7 Session 2.2
CC.5.OA.2 Write and interpret numerical expressions. Write simple expressions that record calculations with numbers, and interpret numerical expressions without evaluating them.	AR.6.NO.3.3 (NO.3.6.3) Computational Fluency: Solve, with and without appropriate technology, multi-step problems using a variety of methods and tools (i.e., objects, mental computation, paper and pencil)	U3 Sessions 3,2, 3.3, 3.4 U7 Sessions 3,4, 3.5, 4.1, 4.2, 4.4

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(Continued) CC.5.OA.2 Write and interpret numerical expressions. Write simple expressions that record calculations with numbers, and interpret numerical expressions without evaluating them.	AR.7.NO.3.2 (NO.3.7.2) Computational Fluency: Solve with and without appropriate technology, multi-step problems using a variety of methods and tools (i.e., objects, mental computation, paper and pencil)	U3 Sessions 3.2, 3.3, 3.4 U7 Sessions 3.4, 3.5, 4.1, 4.2, 4.4
	AR.8.NO.3.2 (NO.3.8.2) Computational Fluency: Solve, with and without appropriate technology, multi-step problems using a variety of methods and tools (i.e. objects, mental computation, paper and pencil)	U3 Sessions 3.2, 3.3, 3.4 U7 Sessions 3.4, 3.5, 4.1, 4.2, 4.4
CC.5.OA.3 Analyze patterns and relationships. 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.	AR.7.A.4.3 (A.4.7.3) Patterns, Relations and Functions: Interpret and write a rule for a two operation function table	U8 Sessions 1.3, 2.1, 2.3, 2.4
	AR.7.A.5.2 (A.5.7.2) Expressions, Equations and Inequalities: Solve simple linear equations using integers and graph on a coordinate plane	U8 Sessions 1.3, 1.4, 2.1, 2.2, 2.3, 2.4, 2.5, 2.6, 2.7, 2.8
	AR.3.A.4.4 (A.4.3.4) Recognize, describe and develop patterns: Use repeating and growing numeric or geometric patterns to solve problems	U8 Sessions 1.3, 1.4, 2.1, 2.2, 2.3, 2.4, 2.5, 2.6, 2.7, 2.8
	AR.7.A.4.2 (A.4.7.2) Patterns, Relations and Functions: Identify and extend patterns in real world situations	U8 Sessions 1.3, 1.4, 1.5, 2.1, 2.2, 2.3, 2.4, 2.5, 2.6, 2.7, 2.8

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(Continued) CC.5.OA.3 Analyze patterns and relationships. 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.	AR.2.A.6.1 (A.6.2.1) Algebraic Models and Relationships: Use a chart or table to organize information and to understand relationships	U8 Sessions 1.1, 1.2, 1.3, 1.4, 1.5, 2.1, 2.2, 2.3, 2.4, 2.5, 2.6, 2.7, 2.8
Number and Operations in Base Ten		
CC.5.NBT.1 Understand the place value system. 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 1/10 of what it represents in the place to its left.	AR.3.NO.1.2 (NO.1.3.2) Whole Numbers: Use the place value structure of the base ten number system and be able to represent and compare whole numbers including thousands (using models, illustrations, symbols, expanded notation and problem solving)	U3 Sessions 1.1, 1.2, 1.3
	AR.4.NO.1.2 (NO.1.4.2) Whole Numbers: Use the place value structure of the base ten number system and be able to represent and compare whole numbers to millions (using models, illustrations, symbols, expanded notation and problem solving)	U3 Sessions 1.1, 1.2, 1.3
	AR.5.NO.1.2 (NO.1.5.2) Rational Numbers: Develop understanding of decimal place value using models	U3 Sessions 1.1, 1.2, 1.3

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<p>CC.5.NBT.2 Understand the place value system. 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>AR.7.NO.1.2 (NO.1.7.2) Rational Numbers: Demonstrate, with and without appropriate technology, an understanding of place value using powers of 10 and write numbers greater than one in scientific notation</p>	<p>Opportunities to address this topic may be found on the following pages: U3 Sessions 1.1, 1.2, 1.3</p>
	<p>AR.7.NO.1.3 (NO.1.7.3) Rational Numbers: Convert between scientific notation and standard notation using numbers greater than one.</p>	<p>An opportunity to address this topic may be found on the following pages: U3 Sessions 1.1, 1.2, 1.3</p>
<p>CC.5.NBT.3 Understand the place value system. Read, write, and compare decimals to thousandths.</p>	<p>AR.4.NO.1.6 (NO.1.4.6) Rational Numbers: Use the place value structure of the base ten number system and be able to represent and compare decimals to hundredths (using models, illustrations, symbols, expanded notation and problem solving)</p>	<p>U4 Session 1.1 U6 Sessions 1.1, 1.2, 1.3, 1.4, 1.5, 1.6, 1.10, 2.5</p>
	<p>AR.6.NO.1.3 (NO.1.6.3) Rational Numbers: Round and compare decimals to a given place value including thousandths</p>	<p>U6 Session 2.5 U6 ICCG 1.5A</p>
	<p>AR.5.NO.1.4 (NO.1.5.4) Rational Numbers: Round and compare decimals to a given place value (whole number, tenths, hundredths)</p>	<p>U6 Session 2.5 U6 ICCG 1.5A</p>

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(Continued) CC.5.NBT.3 Understand the place value system. Read, write, and compare decimals to thousandths.	AR.3.NO.1.6 (NO.1.3.6) Rational Numbers: Use the place value structure of the base ten number system and be able to represent and compare decimals to hundredths in money (using models, illustrations, symbols, expanded notation and problem solving)	U4 Session 1.1 U6 Sessions 1.1, 1.2, 1.3, 1.4, 1.5, 1.6, 1.10, 2.5
CC.5.NBT.3a Read and write decimals to thousandths using base-ten numerals, number names, and expanded form, e.g., $347.392 = 3 \times 100 + 4 \times 10 + 7 \times 1 + 3 \times (1/10) + 9 \times (1/100) + 2 \times (1/1000)$.	AR.4.NO.1.6 (NO.1.4.6) Rational Numbers: Use the place value structure of the base ten number system and be able to represent and compare decimals to hundredths (using models, illustrations, symbols, expanded notation and problem solving)	U4 Session 1.1 U6 Sessions 1.1, 1.2, 1.3, 1.4, 1.5, 1.6, 1.10, 2.5
CC.5.NBT.3b Compare two decimals to thousandths based on meanings of the digits in each place, using $>$, $=$, and $<$ symbols to record the results of comparisons.	AR.6.NO.1.3 (NO.1.6.3) Rational Numbers: Round and compare decimals to a given place value including thousandths	U6 Session 2.5 U6 ICCG 1.5A
	AR.3.NO.1.6 (NO.1.3.6) Rational Numbers: Use the place value structure of the base ten number system and be able to represent and compare decimals to hundredths in money (using models, illustrations, symbols, expanded notation and problem solving)	U4 Session 1.1 U6 Sessions 1.1, 1.2, 1.3, 1.4, 1.5, 1.6, 1.10, 2.5

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CC.5.NBT.4 Understand the place value system. Use place value understanding to round decimals to any place.	AR.5.NO.1.4 (NO.1.5.4) Rational Numbers: Round and compare decimals to a given place value (whole number, tenths, hundredths)	U6 Session 2.5 U6 ICCG 1.5A
	AR.6.NO.1.3 (NO.1.6.3) Rational Numbers: Round and compare decimals to a given place value including thousandths	U6 Session 2.5 U6 ICCG 1.5A
CC.5.NBT.5 Perform operations with multi-digit whole numbers and with decimals to hundredths. Fluently multiply multi-digit whole numbers using the standard algorithm.	AR.5.NO.3.1 (NO.3.5.1) Computational Fluency: Develop and use a variety of algorithms with computational fluency to perform whole number operations using addition and subtraction (up to five-digit numbers), multiplication (up to three-digit x two-digit), division (up to two-digit divisor) interpreting remainders, including real world problems	U1 Sessions 2.1, 2.2, 2.3, 2.4, 2.5, 2.6, 2.7, 3.1, 3.2, 3.3, 3.4, 3.5, 3.6, 3.7 U3 Sessions 1.4, 1.5, 2.1, 2.2, 2.3, 2.4, 2.5, 3.1, 3.2, 3.3, 3.4, 3.5 U7 Sessions 1.4, 3.1, 3.2, 3.3, 3.4, 3.5, 3.6, 3.7, 4.1, 4.2, 4.3, 4.4, 4.5
	AR.6.NO.3.1 (NO.3.6.1) Computational Fluency: Apply, with and without appropriate technology, algorithms with computational fluency to perform whole number operations (+, -, x, /)	U1 Sessions 2.1, 2.2, 2.3, 2.4, 2.5, 2.6, 2.7, 3.1, 3.2, 3.3, 3.4, 3.5, 3.6, 3.7 U3 Sessions 1.4, 1.5, 2.1, 2.2, 2.3, 2.4, 2.5, 3.1, 3.2, 3.3, 3.4, 3.5

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<p>CC.5.NBT.6 Perform operations with multi-digit whole numbers and with decimals to hundredths. 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.</p>	<p>AR.4.NO.2.4 (NO.2.4.4) Whole Number Operations: Represent and explain division as measurement and partitive division including equal groups, related rates, price, rectangular arrays (area model), combinations and multiplicative comparison</p>	<p>U1 Sessions 3.1, 3.2, 3.3, 3.4, 3.5, 3.6, 3.7 U7 Sessions 1.4, 3.1, 3.2, 3.3, 3.4, 3.5, 3.6, 3.7</p>
	<p>AR.5.NO.3.1 (NO.3.5.1) Computational Fluency: Develop and use a variety of algorithms with computational fluency to perform whole number operations using addition and subtraction (up to five-digit numbers), multiplication (up to three-digit x two-digit), division (up to two-digit divisor) interpreting remainders, including real world problems</p>	<p>U1 Sessions 2.1, 2.2, 2.3, 2.4, 2.5, 2.6, 2.7, 3.1, 3.2, 3.3, 3.4, 3.5, 3.6, 3.7 U3 Sessions 1.4, 1.5, 2.1, 2.2, 2.3, 2.4, 2.5, 3.1, 3.2, 3.3, 3.4, 3.5 U7 Sessions 1.4, 3.1, 3.2, 3.3, 3.4, 3.5, 3.6, 3.7, 4.1, 4.2, 4.3, 4.4, 4.5</p>
<p>CC.5.NBT.7 Perform operations with multi-digit whole numbers and with decimals to hundredths. 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.</p>	<p>AR.5.NO.3.2 (NO.3.5.2) Computational Fluency: Develop and use algorithms: -- to add and subtract numbers containing decimals (up to thousandths place), -- to multiply decimals (hundredths x tenths), -- to divide decimals by whole number divisors, -- to add and subtract fractions with like denominators</p>	<p>U6 Sessions 1.4, 1.5, 2.1, 2.2, 2.3, 2.4, 2.5 U6 ICCG 2.5A, 3A.1, 3A.2, 3A.3, 3A.4, 3A.5, 3A.6, 3A.7</p>

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Number and Operations—Fractions		
<p>CC.5.NF.1 Use equivalent fractions as a strategy to add and subtract fractions. 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. For example, $\frac{2}{3} + \frac{5}{4} = \frac{8}{12} + \frac{15}{12} = \frac{23}{12}$. (In general, $\frac{a}{b} + \frac{c}{d} = \frac{ad + bc}{bd}$.)</p>	<p>AR.5.NO.2.5 (NO.2.5.5) Understand Operations: Model addition, subtraction, and multiplication of fractions with like and unlike denominators and decimals</p>	<p>U4 Sessions 3.1, 3.2, 3.3, 3.4, 3.5, 3.6, 3.7, 3.8, 3.9, 3.10 U4 ICCG 4A.1, 4A.2, 4A.3, 4A.4, 4A.5, 4A.6, 4A.7 U6 Sessions 2.1, 2.2, 2.3, 2.4, 2.5, 2.6 U6 ICCG 2.5A, 3A.1, 3A.2, 3A.3, 3A.4, 3A.5, 3A.6, 3A.7</p>
<p>CC.5.NF.2 Use equivalent fractions as a strategy to add and subtract fractions. 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. For example, recognize an incorrect result $\frac{2}{5} + \frac{1}{2} = \frac{3}{7}$ by observing that $\frac{3}{7} < \frac{1}{2}$.</p>	<p>AR.5.NO.2.5 (NO.2.5.5) Understand Operations: Model addition, subtraction, and multiplication of fractions with like and unlike denominators and decimals</p>	<p>U4 Sessions 3.1, 3.2, 3.3, 3.4, 3.5, 3.6, 3.7, 3.8, 3.9, 3.10 U4 ICCG 4A.1, 4A.2, 4A.3, 4A.4, 4A.5, 4A.6, 4A.7 U6 Sessions 2.1, 2.2, 2.3, 2.4, 2.5, 2.6 U6 ICCG 3A.1, 3A.2, 3A.3, 3A.4, 3A.5, 3A.6, 3A.7</p>
	<p>AR.6.NO.3.4 (NO.3.6.4) Estimation: Estimate reasonable solutions to problem situations involving fractions and decimals</p>	<p>U6 Sessions 2.3, 2.6</p>

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<p>(Continued) CC.5.NF.2 Use equivalent fractions as a strategy to add and subtract fractions. 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. For example, recognize an incorrect result $\frac{2}{5} + \frac{1}{2} = \frac{3}{7}$ by observing that $\frac{3}{7} < \frac{1}{2}$.</p>	<p>AR.7.NO.3.3 (NO.3.7.3) Estimation: Determine when an estimate is sufficient and use estimation to decide whether answers are reasonable in problems including fractions and decimals</p>	<p>U6 Sessions 2.3, 2.6</p>

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<p>CC.5.NF.3 Apply and extend previous understandings of multiplication and division to multiply and divide fractions. 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>AR.5.NO.1.1 (NO.1.5.1) Rational Numbers: Use models and visual representations to develop the concepts of the following: ---Fractions: parts of unit wholes, parts of a collection, locations on number lines, locations on ruler (benchmark fractions), divisions of whole numbers; - --Ratios: part-to-part (2 boys to 3 girls), part-to-whole (2 boys to 5 people); - --Percents: part-to-100</p>	<p>U4 Sessions 1.1, 1.2, 1.4, 2.2, 2.4, 3.1, 3.4, 3.5, 3.6</p>

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<p>CC.5.NF.4 Apply and extend previous understandings of multiplication and division to multiply and divide fractions. Apply and extend previous understandings of multiplication to multiply a fraction or whole number by a fraction.</p>	<p>AR.6.NO.2.5 (NO.2.6.5) Understand Operations: Model multiplication and division of fractions (including mixed numbers) and decimals using pictures and physical objects</p>	<p>U4 ICCG 4A.1, 4A.2, 4A.3, 4A.4, 4A.5, 4A.6, 4A.7, 4A.8, 4A.9, 4A.10 U6 ICCG 3A.1, 3A.2, 3A.3, 3A.4, 3A.5, 3A.6, 3A.7</p>
<p>CC.5.NF.4a 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, $(a/b) \times (c/d) = ac/bd$.)</p>	<p>AR.6.NO.2.5 (NO.2.6.5) Understand Operations: Model multiplication and division of fractions (including mixed numbers) and decimals using pictures and physical objects</p>	<p>U4 ICCG 4A.1, 4A.2, 4A.3, 4A.4, 4A.5, 4A.6, 4A.7, 4A.8, 4A.9, 4A.10 U6 ICCG 3A.1, 3A.2, 3A.3, 3A.4, 3A.5, 3A.6, 3A.7</p>
<p>CC.5.NF.4b 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>	<p>AR.4.M.13.10 (M.13.4.10) Area: Use strategies for finding the area of a rectangle</p>	<p>U5 Sessions 2.3, 2.4, 2.5, 2.6</p>

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<p>CC.5.NF.5 Apply and extend previous understandings of multiplication and division to multiply and divide fractions. Interpret multiplication as scaling (resizing) by:</p> <ul style="list-style-type: none"> - a. 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. -- b. 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>No matches in Arkansas Frameworks</p>	<p>U4 ICCG 4A.1, 4A.2, 4A.3, 4A.6</p>

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<p>CC.5.NF.6 Apply and extend previous understandings of multiplication and division to multiply and divide fractions. 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>AR.6.NO.2.5 (NO.2.6.5) Understand Operations: Model multiplication and division of fractions (including mixed numbers) and decimals using pictures and physical objects</p>	<p>U4 ICCG 4A.1, 4A.2, 4A.3, 4A.4, 4A.5, 4A.6, 4A.7, 4A.8, 4A.9, 4A.10 U6 Sessions 3A.1, 3A.2, 3A.3, 3A.4, 3A.5, 3A.6, 3A.7</p>
<p>CC.5.NF.7 Apply and extend previous understandings of multiplication and division to multiply and divide fractions. Apply and extend previous understandings of division to divide unit fractions by whole numbers and whole numbers by unit fractions. (Students able to multiply fractions in general can develop strategies to divide fractions in general, by reasoning about the relationship between multiplication and division. But division of a fraction by a fraction is not a requirement at this grade.)</p>	<p>AR.6.NO.2.5 (NO.2.6.5) Understand Operations: Model multiplication and division of fractions (including mixed numbers) and decimals using pictures and physical objects</p>	<p>U4 ICCG 4A.1, 4A.2, 4A.3, 4A.4, 4A.5, 4A.6, 4A.7, 4A.8, 4A.9, 4A.10 U6 ICCG 3A.1, 3A.2, 3A.3, 3A.4, 3A.5, 3A.6, 3A.7</p>

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<p>CC.5.NF.7a 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 $(1/12) \times 4 = 1/3$.</p>	<p>AR.6.NO.2.5 (NO.2.6.5) Understand Operations: Model multiplication and division of fractions (including mixed numbers) and decimals using pictures and physical objects</p>	<p>U4 ICCG 4A.1, 4A.2, 4A.3, 4A.4, 4A.5, 4A.6, 4A.7, 4A.8, 4A.9, 4A.10 U6 ICCG 3A.1, 3A.2, 3A.3, 3A.4, 3A.5, 3A.6, 3A.7</p>
<p>CC.5.NF.7b 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 $20 \times (1/5) = 4$.</p>	<p>AR.6.NO.2.5 (NO.2.6.5) Understand Operations: Model multiplication and division of fractions (including mixed numbers) and decimals using pictures and physical objects</p>	<p>U4 ICCG 4A.1, 4A.2, 4A.3, 4A.4, 4A.5, 4A.6, 4A.7, 4A.8, 4A.9, 4A.10 U6 ICCG 3A.1, 3A.2, 3A.3, 3A.4, 3A.5, 3A.6, 3A.7</p>

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CC.5.NF.7c 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. For example, how much chocolate will each 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?	AR.6.NO.2.5 (NO.2.6.5) Understand Operations: Model multiplication and division of fractions (including mixed numbers) and decimals using pictures and physical objects	U4 ICCG 4A.1, 4A.2, 4A.3, 4A.4, 4A.5, 4A.6, 4A.7, 4A.8, 4A.9, 4A.10 U6 ICCG 3A.1, 3A.2, 3A.3, 3A.4, 3A.5, 3A.6, 3A.7
Measurement and Data		
CC.5.MD.1 Convert like measurement units within a given measurement system. 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.	AR.6.M.12.2 (M.12.6.2) Attributes and Tools: Make conversions within the same measurement system in real world problems	U6 ICCG 3A.8, 3A.9
CC.5.MD.2 Represent and interpret data. 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.	AR.5.DAP.14.2 (DAP.14.5.2) Collect, organize and display data: Collect numerical and categorical data using surveys, observations and experiments that would result in bar graphs, line graphs, line plots and stem-and-leaf plots	U9 Sessions 1.1, 1.2, 1.3, 1.4, 2.1, 2.2, 2.3, 2.4, 3.1, 3.2, 3.3

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(Continued)	AR.5.DAP.14.3 (DAP.14.5.3) Collect, organize and display data: Construct and interpret frequency tables, charts, line plots, stem-and-leaf plots and bar graphs	U9 Sessions 1.1, 1.2, 1.3, 1.4, 2.1, 2.2, 2.3, 2.4, 3.1, 3.2, 3.3
CC.5.MD.3 Geometric measurement: understand concepts of volume and relate volume to multiplication and to addition. 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.	AR.2.M.13.14 (M.13.2.14) Volume: Compare and order containers of various shapes and sizes according to their volume	U2 Session 3.1
	AR.3.M.13.12 (M.13.3.12) Volume: Develop strategies for finding the volume (cubic units) of rectangular prisms and cubes using models	U2 Sessions 1.2, 1.5 U2 ICCG 1.5A
	AR.4.M.13.11 (M.13.4.11) Volume: Use strategies to find the volume (cubic units) of rectangular prisms and cubes	U2 Sessions 1.1, 1.2, 1.3, 1.4, 1.5 1.6, 2.1, 2.2, 2.3, 2.4 U2 ICCG 1.5A
CC.5.MD.4 Geometric measurement: understand concepts of volume and relate volume to multiplication and to addition. Measure volumes by counting unit cubes, using cubic cm, cubic in, cubic ft, and improvised units.	AR.3.M.13.12 (M.13.3.12) Volume: Develop strategies for finding the volume (cubic units) of rectangular prisms and cubes using models	U2 Sessions 1.2, 1.5 U2 ICCG 1.5A

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<p>CC.5.MD.5 Geometric measurement: understand concepts of volume and relate volume to multiplication and to addition. Relate volume to the operations of multiplication and addition and solve real world and mathematical problems involving volume.</p>	<p>AR.5.M.12.4 (M.12.5.4) Attributes and Tools: Understand when to use linear units to describe perimeter, square units to describe area or surface area, and cubic units to describe 1.5A, , in real world situations</p>	<p>U2 Sessions 1.1, 1.2, 1.3, 1.4, 1.5, 1.6, 2.1, 2.2, 2.3, 2.4, 3.4 U5 Sessions 2.3, 2.4, 2.5, 2.6 U8 Sessions 2.1, 2.3, 2.4</p>
	<p>AR.7.M.13.4 (M.13.7.4) Applications: Derive and use formulas for surface area and volume of prisms and cylinders and justify them using geometric models and common materials</p>	<p>U2 ICCG 1.5A</p>
	<p>AR.3.M.13.12 (M.13.3.12) Volume: Develop strategies for finding the volume (cubic units) of rectangular prisms and cubes using models</p>	<p>U2 Sessions 1.2, 1.5 U2 ICCG 1.5A</p>
<p>CC.5.MD.5a 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 three-fold whole-number products as volumes, e.g., to represent the associative property of multiplication.</p>	<p>AR.5.M.12.4 (M.12.5.4) Attributes and Tools: Understand when to use linear units to describe perimeter, square units to describe area or surface area, and cubic units to describe volume, in real world situations</p>	<p>U2 Sessions 1.1, 1.2, 1.3, 1.4, 1.5, 1.6, 2.1, 2.2, 2.3, 2.4, 3.4 U5 Sessions 2.3, 2.4, 2.5, 2.6 U8 Sessions 2.1, 2.3, 2.4</p>
	<p>AR.3.M.13.12 (M.13.3.12) Volume: Develop strategies for finding the volume (cubic units) of rectangular prisms and cubes using models</p>	<p>U2 Sessions 1.2, 1.5 U2 ICCG 1.5A</p>
	<p>AR.5.NO.2.2 (NO.2.5.2) Number theory: Identify commutative and associative properties</p>	<p>U1 Session 2.3</p>

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<p>CC.5.MD.5b Apply the formulas $V = (l)(w)(h)$ and $V = (b)(h)$ 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.</p>	<p>AR.7.M.13.4 (M.13.7.4) Applications: Derive and use formulas for surface area and volume of prisms and cylinders and justify them using geometric models and common materials</p>	<p>U2 ICCG 1.5A</p>
	<p>AR.4.M.13.11 (M.13.4.11) Volume: Use strategies to find the volume (cubic units) of rectangular prisms and cubes</p>	<p>U2 Sessions 1.2, 1.5 U2 ICCG 1.5A</p>
<p>CC.5.MD.5c 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.</p>	<p>AR.7.M.13.4 (M.13.7.4) Applications: Derive and use formulas for surface area and volume of prisms and cylinders and justify them using geometric models and common materials</p>	<p>U2 ICCG 1.5A</p>

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Geometry		
<p>CC.5.G.1 Graph points on the coordinate plane to solve real-world and mathematical problems. 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).</p>	<p>AR.3.G.10.1 (G.10.3.1) Coordinate Geometry: Locate and identify points on a coordinate grid and name the ordered pair (quadrant one only) using common language and geometric vocabulary (horizontal and vertical)</p>	<p>U8 Sessions 1.1, 1.2, 1.3, 1.4, 1.5, 2.1, 2.2, 2.3, 2.4, 2.5, 2.6, 2.7, 2.8</p>
	<p>AR.4.G.10.1 (G.10.4.1) Coordinate Geometry: Locate and identify points on a coordinate grid and name the ordered pair (quadrant one only) using common language and geometric vocabulary (horizontal and vertical)</p>	<p>U8 Sessions 1.1, 1.2, 1.3, 1.4, 1.5, 2.1, 2.2, 2.3, 2.4, 2.5, 2.6, 2.7, 2.8</p>
	<p>AR.5.G.10.1 (G.10.5.1) Coordinate Geometry: Use geometric vocabulary (horizontal/x-axis, vertical/y-axis, ordered pairs) to describe the location and plot points in Quadrant I</p>	<p>U8 Sessions 1.1, 1.2, 1.3, 1.4, 1.5, 2.1, 2.2, 2.3, 2.4, 2.5, 2.6, 2.7, 2.8</p>
	<p>AR.7.A.6.2 (A.6.7.2) Algebraic Models and Relationships: Represent, with and without appropriate technology, linear equations by plotting and graphing points in the coordinate plane using all four quadrants given data in a table from a real world situation</p>	<p>Presented in first quadrant: U8 Sessions 1.3, 1.4, 1.5, 2.1, 2.3, 2.4, 2.5, 2.6, 2.7, 2.8</p>

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<p>CC.5.G.2 Graph points on the coordinate plane to solve real-world and mathematical problems. 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.</p>	<p>AR.5.G.10.1 (G.10.5.1) Coordinate Geometry: Use geometric vocabulary (horizontal/x-axis, vertical/y-axis, ordered pairs) to describe the location and plot points in Quadrant I</p>	<p>U8 Sessions 1.1, 1.2, 1.3, 1.4, 1.5, 2.1, 2.2, 2.3, 2.4, 2.5, 2.6, 2.7, 2.8</p>
	<p>AR.7.A.6.2 (A.6.7.2) Algebraic Models and Relationships: Represent, with and without appropriate technology, linear equations by plotting and graphing points in the coordinate plane using all four quadrants given data in a table from a real world situation</p>	<p>Presented in first quadrant: U8 Sessions 1.3, 1.4, 1.5, 2.1, 2.3, 2.4, 2.5, 2.6, 2.7, 2.8</p>
<p>CC.5.G.3 Classify two-dimensional figures into categories based on their properties. 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.</p>	<p>AR.2.G.8.3 (G.8.2.3) Characteristics and Properties-Two Dimensional: Identify, classify and describe two-dimensional geometric figures (rectangle [including square], triangle and circle) using concrete objects drawings, and computer graphics</p>	<p>U5 Sessions 1.1, 1.2, 1.3, 1.4, 1.5, 1.6, 1.7 U5 ICCG 2.7A</p>
	<p>AR.9-12.R.G.4.1 (R.4.G.1) Explore and verify the properties of quadrilaterals</p>	<p>U5 Sessions 1.2, 1.3, 1.4, 1.5, 1.6, 1.7</p>

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CC.5.G.4 Classify two-dimensional figures into categories based on their properties. Classify two-dimensional figures in a hierarchy based on properties.	AR.5.G.8.1 (G.8.5.1) Characteristics of Geometric Shapes: Identify and model regular and irregular polygons including decagon	U5 Sessions 1.1, 1.2, 1.3, 1.4, 1.5, 1.6, 1.7
	AR.Geo.R.G.4.2 (R.4.G.2) Solve problems using properties of polygons: -- sum of the measures of the interior angles of a polygon, -- interior and exterior angle measure of a regular polygon or irregular polygon, -- number of sides or angles of a polygon	U5 Sessions 1.1, 1.2, 1.3, 1.4, 1.5, 1.6, 1.7 U5 ICCG 2.7A
	AR.9-12.R.G.4.1 (R.4.G.1) Explore and verify the properties of quadrilaterals	U5 Sessions 1.2, 1.3, 1.4, 1.5, 1.6, 1.7

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