Houghton Mifflin Harcourt

Correlation to the Oklahoma Academic Standards for Mathematics Grade 5

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Oklahoma Saxon Math ©2019
Grade 5

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correlated to the

Oklahoma Academic Standards for Mathematics (2016)
Grade 5

Citations	Standard	Descriptor
5.N.1 Divide multi-digit numbers and solve real-world and mathematical problems using arithmetic.		
New Concept Lessons: 27, 33, 34, 51, 54, 55, 59, 62, 64, 72, 73, 74, 77 92, 94, 96, 98, 101, 102, 103, 104 Oklahoma Success Lesson: 94 Part 1 Oklahoma Success Lesson: 104	5.N.1.1	Estimate solutions to division problems in order to assess the reasonableness of results.
New Concept Lessons: 9, 20, 22, 26, 34, 40, 42, 43, 50, 54, 58, 92, 94, 117, 118, 119	5.N.1.2	Divide multi-digit numbers, by one- and two-digit divisors, using efficient and generalizable procedures, based on knowledge of place value, including standard algorithms.
New Concept Lessons: 9, 20, 22, 26, 34, 40, 43, 58, 92, 117	5.N.1.3	Recognize that quotients can be represented in a variety of ways, including a whole number with a remainder, a fraction or mixed number, or a decimal and consider the context in which a problem is situated to select and interpret the most useful form of the quotient for the solution.
New Concept Lessons: 6, 8, 9, 10, 11, 13, 14, 16, 17, 18, 19, 20, 21, 22, 24, 26, 29, 34, 40, 42, 49, 50, 51, 54, 55, 56, 62, 72, 74, 77, 78, 80, 84, 85, 92, 94, 103, 112, 115 Investigation: 1, 4, 5, 6, 9, 11	5.N.1.4	Solve real-world and mathematical problems requiring addition, subtraction, multiplication, and division of multi-digit whole numbers. Use various strategies, including the inverse relationships between operations, the use of technology, and the context of the problem to assess the reasonableness of results.

Citations	Standard	Descriptor
5.N.2 Read, write, represent, and compare fractions and decimals; recognize and write equivalent fractions; convert between fractions and decimals; use fractions and decimals in real-world and mathematical situations.		
New Concept Lessons: 64, 65, 66, 67, 68, 69, 70, 71, 73, 99, 100, 102, 104, 106, 109, 110, 111, 117, 118, 119	5.N.2.1	Represent decimal fractions (e.g., 1/10, 1/100) using a variety of models (e.g., 10 by 10 grids, rational number wheel, base-ten blocks, meter stick) and make connections between fractions and decimals.
New Concept Lessons: 52, 64, 65, 66, 67, 68, 69, 70, 71, 73, 78, 99, 100, 102, 104, 106, 109, 110, 111, 117, 118, 119	5.N.2.2	Represent, read and write decimals using place value to describe decimal numbers including fractional numbers as small as thousandths and whole numbers as large as millions.
New Concept Lessons: 38, 39, 69, 106 Investigation 2, 3	5.N.2.3	Compare and order fractions and decimals, including mixed numbers and fractions less than one, and locate on a number line.
New Concept Lessons: 23, 37, 59, 67, 70, 71, 75, 79, 81, 90, 91, 100 Investigation 2, 3	5.N.2.4	Recognize and generate equivalent decimals, fractions, mixed numbers, and fractions less than one in various contexts.
5.N.3 Add and subtract fractions with like and unlike denominators, mixed numbers and decimals to solve real-world and mathematical problems.		
New Concept Lessons: 41, 43, 59, 62, 64, 67, 70, 73, 75, 91, 99, 100, 101, 102, 104, 106, 113, 116 Oklahoma Success Lesson: 101 Oklahoma Success Lesson: 104	5.N.3.1	Estimate sums and differences of fractions with like and unlike denominators, mixed numbers, and decimals to assess the reasonableness of the results.
New Concept Lessons: 41, 59, 63, 64, 73, 91, 99, 100, 102, 113, 116 Investigation: 2, 3	5.N.3.2	Illustrate addition and subtraction of fractions with like and unlike denominators, mixed numbers, and decimals using a variety of representations (e.g., fraction strips, area models, number lines, fraction rods).
New Concept Lessons: 41, 43, 59, 63, 73, 75, 91, 99, 101, 102, 113, 116 Investigation: 2, 3	5.N.3.3	Add and subtract fractions with like and unlike denominators, mixed numbers, and decimals, using efficient and generalizable procedures, including but not limited to standard algorithms in order to solve real-world and mathematical problems including those involving money, measurement, geometry, and data.

Citations	Standard	Descriptor
New Concept Lessons: 66, 67, 68, 69, 70, 73, 99, 102, 106 Oklahoma Success Lesson: 99	5.N.3.4	Find 0.1 more than a number and 0.1 less than a number. Find 0.01 more than a number and 0.01 less than a number. Find 0.001 more than a number and 0.001 less than a number.
5.A.1 Describe and graph patterns of change created through numerical patterns.		
New Concept Lessons: 1, 2, 12, 15, 93, 98, 108 Investigation: 4, 5, 6, 7, 9	5.A.1.1	Use tables and rules of up to two operations to describe patterns of change and make predictions and generalizations about real-world and mathematical problems.
New Concept Lessons: 88, 105 Investigation: 6, 8	5.A.1.2	Use a rule or table to represent ordered pairs of whole numbers and graph these ordered pairs on a coordinate plane, identifying the origin and axes in relation to the coordinates.
5.A.2 Understand and interpret expressions, equations, and inequalities involving variables and whole numbers, and use them to represent and evaluate real-world and mathematical problems.		
New Concept Lessons: 6, 15, 17, 18, 24, 51, 56, 86 Oklahoma Success Lesson: 51	5.A.2.1	Generate equivalent numerical expressions and solve problems involving whole numbers by applying the commutative, associative, and distributive properties and order of operations (no exponents).
New Concept Lessons: 10, 11, 14, 16, 18, 21, 26, 35, 53, 72, 78, 103, 114 Oklahoma Success Lesson: 98 Investigation: 1	5.A.2.2	Determine whether an equation or inequality involving a variable is true or false for a given value of the variable.
New Concept Lessons: 10, 11, 14, 16, 18, 21, 26, 35, 53, 72, 78, 103, 114 Oklahoma Success Lesson: 74 Part 78 Investigation: 1	5.A.2.3	Evaluate expressions involving variables when values for the variables are given.

Citations	Standard	Descriptor
5.GM.1 Describe, classify, and draw representations of two- and three-dimensional figures.		
New Concept Lessons: 32, 36, 53, 88, 89, 105 Investigation: 12	5.GM.1.1	Describe, classify and construct triangles, including equilateral, right, scalene, and isosceles triangles. Recognize triangles in various contexts.
New Concept Lessons: 83, 89, 103	5.GM.1.2	Describe and classify three-dimensional figures including cubes, rectangular prisms, and pyramids by the number of edges, faces or vertices as well as the shapes of faces.
New Concept Lessons: 103	5.GM.1.3	Recognize and draw a net for a three-dimensional figure (e.g., cubes, rectangular prisms, pyramids).
5.GM.2 Understand how the volume of rectangular prisms and surface area of shapes with polygonal faces are determined by the dimensions of the object and that shapes with varying dimensions can have equivalent values of surface area or volume.		
New Concept Lessons: 18, 78, 103 Oklahoma Success Lesson: 103 Part 1	5.GM.2.1	Recognize that the volume of rectangular prisms can be determined by the number of cubes (n) and by the product of the dimensions of the prism ($a \times b \times c = n$). Know that rectangular prisms of different dimensions (p, q, and r) can have the same volume if $a \times b \times c = p \times q \times r = n$.
New Concept Lessons: 103 Oklahoma Success Lesson: 103 Part 2	5.GM.2.2	Recognize that the surface area of a three-dimensional figure with rectangular faces with whole numbered edges can be found by finding the area of each component of the net of that figure. Know that three-dimensional shapes of different dimensions can have the same surface area.
New Concept Lessons: 32, 53 Oklahoma Success Lesson: 36 Oklahoma Success Lesson: 94 Part 2	5.GM.2.3	Find the perimeter of polygons and create arguments for reasonable values for the perimeter of shapes that include curves.

5.GM.3 Understand angle and length as measurable attributes of real-world and mathematical objects. Use various tools to measure angles and lengths.		
Citations	**Standard**	**Descriptor**
New Concept Lessons: 31, 61 Investigation: 10	5.GM.3.1	Measure and compare angles according to size.
New Concept Lessons: 44	5.GM.3.2	Choose an appropriate instrument and measure the length of an object to the nearest whole centimeter or 1/16-inch.
New Concept Lessons: 74, 75 Oklahoma Success Lesson: 74 Part 1	5.GM.3.3	Recognize and use the relationship between inches, feet, and yards to measure and compare objects.
New Concept Lessons: 65, 66, 74 Oklahoma Success Lesson: 65 Oklahoma Success Lesson: 74 Part 2	5.GM.3.4	Recognize and use the relationship between millimeters, centimeters, and meters to measure and compare objects.
5.D.1 Display and analyze data to find the range and measures of central tendency (mean, median, and mode).		
New Concept Lessons: 74, 84, 98 Investigation: 5	5.D.1.1	Find the measures of central tendency (mean, median, or mode) and range of a set of data. Understand that the mean is a "leveling out" or central balance point of the data.
New Concept Lessons: 93 Investigation: 5, 6, 7	5.D.1.2	Create and analyze line and double-bar graphs with whole numbers, fractions, and decimals increments.