Correlation of Mathematics Florida Standards (MAFS) to i-Ready Diagnostic & Instruction Mathematics Lessons

Grade K

Mathematics Florida Standards (MAFS)	Aligned Lessons
MAFS.K.CC.1.1 Count to 100 by ones . . .	Counting and Ordering to 100 Counting On: 1 to 100
MAFS.K.CC.1.1 Count to 100 by ones and by tens.	Numerals and Counting to 10* Counting with One-to-One Correspondence* Counting Objects in a Set* Counting to 20* Counting On* Counting and Ordering to 20* Counting and Ordering to 30*
MAFS.K.CC.1.2 Count forward beginning from a given number within the known sequence (instead of having to begin at 1).	Counting On Counting On: 1 to 100
MAFS.K.CC.1.3 Read and write numerals from 0 to 20. Represent a number of objects with a written numeral 0-20 (with 0 representing a count of no objects).	Numerals and Counting to 10* Counting with One-to-One Correspondence* Counting Objects in a Set* Counting to 20* Counting and Ordering to 20 Counting and Ordering to 30*
MAFS.K.CC.2.4.a When counting objects, say the number names in the standard order,	Numerals and Counting to 10

**This lesson is related to the aligned standard*

Mathematics Florida Standards (MAFS)	Aligned Lessons
pairing each object with one and only one number name and each number name with one and only one object.	Counting with One-to-One Correspondence Counting and Ordering to 20 Counting and Ordering to 30 Counting and Ordering to 100
MAFS.K.CC.2.4.b Understand that the last number name said tells the number of objects counted. The number of objects is the same regardless of their arrangement or the order in which they were counted.	Numerals and Counting to 10 Counting with One-to-One Correspondence Counting Objects in a Set Counting and Ordering to 20 Counting and Ordering to 30 Counting and Ordering to 100
MAFS.K.CC.2.4.c Understand that each successive number name refers to a quantity that is one larger.	One More One Less*
MAFS.K.CC.2.5 Count to answer "how many?" questions about as many as 20 things arranged in a line, a rectangular array, or a circle, or as many as 10 things in a scattered configuration; given a number from 1-20, count out that many objects.	Numerals and Counting to 10 Counting with One-to-One Correspondence Counting Objects in a Set Counting to 20 Counting and Ordering to 20 Counting and Ordering to 30 Counting and Ordering to 100*

Grade K (continued)

Mathematics Florida Standards (MAFS)	Aligned Lessons
MAFS.K.CC.3.6 Identify whether the number of objects in one group is greater than, less than, or equal to the number of objects in another group, e.g., by using matching and counting strategies.	Comparing Sets
MAFS.K.CC.3.7 Compare two numbers between 1 and 10 presented as written numerals.	Comparing Sets* Comparing Numbers to 100 Using Symbols*
MAFS.K.G.1.1 . . . Describe the relative positions of these objects using terms such as above, below, beside, in front of, behind, and next to.	Spatial Relationships
MAFS.K.G.1.1 Describe objects in the environment using names of shapes, . . .	Identifying Two-Dimensional Shapes
MAFS.K.G.1.1 Describe objects in the environment using names of shapes, and describe the relative positions of these objects using terms such as above, below, beside, in front of, behind, and next to.	Identifying Three-Dimensional Shapes
MAFS.K.G.1.2 Correctly name shapes regardless of their orientations or overall size.	Identifying Two-Dimensional Shapes Identifying Three-Dimensional Shapes
MAFS.K.G.1.3 Identify shapes as two-dimensional (lying in a plane, "flat") or three-dimensional ("solid").	Identifying Two-Dimensional Shapes* Identifying Three-Dimensional Shapes Classifying Plane Shapes by Attributes* Attributes of Three-Dimensional Shapes*
MAFS.K.G.2.4 Analyze and compare . . . three-dimensional shapes, in different sizes and orientations, using informal language to describe their similarities, differences, parts (e.g., number of sides and	Identifying Three-Dimensional Shapes Attributes of Three-Dimensional Shapes

Grade K (continued)

Mathematics Florida Standards (MAFS)	Aligned Lessons
vertices/"corners") and other attributes (e.g., having sides of equal length).	
MAFS.K.G.2.4 Analyze and compare two- . . . dimensional shapes, in different sizes and orientations, using informal language to describe their similarities, differences, parts (e.g., number of sides and vertices/"corners") and other attributes (e.g., having sides of equal length).	Identifying Two-Dimensional Shapes Comparing Two-Dimensional Shapes Classifying Plane Shapes by Attributes
MAFS.K.G.2.5 Model shapes in the world by building shapes from components (e.g., sticks and clay balls) and drawing shapes.	Identifying Two-Dimensional Shapes* Identifying Three-Dimensional Shapes*
MAFS.K.G.2.6 Compose simple shapes to form larger shapes.	Decomposing Two-Dimensional Shapes
MAFS.K.MD.1.2 Directly compare two objects with a measurable attribute in common, to see which object has "more of"/"less of" the attribute, and describe the difference.	Comparing Length*
MAFS.K.MD.1.a Express the length of an object as a whole number of length units, by laying multiple copies of a shorter object (the length unit) end to end; understand that the length measurement of an object is the number of same-size length units that span it with no gaps or overlaps.	Measuring Length in Inches with a Ruler
MAFS.K.MD.2.3 Classify objects into given categories; count the numbers of objects in each category and sort the categories by count.	Sorting and Counting
MAFS.K.NBT.1.1 Compose and decompose numbers from 11 to 19 into ten ones and some further ones, e.g., by using objects or drawings, and record each composition or decomposition by a drawing or equation (e.g., 18 = 10 + 8); understand	Grouping into Tens and Ones* Regrouping Tens As Ones*

Mathematics Florida Standards (MAFS)	Aligned Lessons
that these numbers are composed of ten ones and one, two, three, four, five, six, seven, eight, or nine ones.	
MAFS.K.OA.1.1 Represent . . . subtraction with . . . equations.	Taking Away to Subtract Addition Number Sentences Subtraction Concepts: Separation Subtraction Concepts: Part-Part-Whole Subtraction Concepts: Comparison Counting Back to Subtract
MAFS.K.OA.1.1 Represent . . . subtraction with objects . . . or equations.	Counting Back to Subtract 1, 2, or 3 Using Length to Represent Subtraction
MAFS.K.OA.1.1 Represent addition . . . with . . . equations.	Addition Facts for 10 Adding Three Numbers
MAFS.K.OA.1.1 Represent addition . . . with objects . . . or equations.	Joining Sets to Add Counting On to Add
MAFS.K.OA.1.1 Represent addition . . . with objects, . . . drawings, . . . or equations.	Addition Facts
MAFS.K.OA.1.1 Represent addition and subtraction with objects, . . . drawings, . . . [and] acting out situations . . .	Acting Out Addition and Subtraction
MAFS.K.OA.1.2 Solve . . . subtraction word problems, . . . e.g., by using objects or drawings to represent the problem.	Taking Away to Subtract Counting Back to Subtract
MAFS.K.OA.1.2 Solve addition . . . word problems, . . . e.g., by using objects or drawings to represent the problem.	Joining Sets to Add Counting On to Add

Grade K (continued)

Mathematics Florida Standards (MAFS)	Aligned Lessons
MAFS.K.OA.1.2 Solve addition and subtraction word problems, and add and subtract within 10, e.g., by using objects or drawings to represent the problem.	Acting Out Addition and Subtraction Using a Number Line to Add and Subtract Addition Number Sentences* Counting On to Solve Addition Problems* Addition Facts: Doubles* Subtraction Concepts: Separation* Subtraction Concepts: Part-Part-Whole * Subtraction Concepts: Comparison* Counting Back to Subtract 1, 2, or 3* Using Length to Represent Subtraction* Adding Three Numbers*
MAFS.K.OA.1.4 For any number from 1 to 9, find the number that makes 10 when added to the given number, e.g., by using objects or drawings, and record the answer with a drawing or equation.	Composing and Decomposing with 5 As a Benchmark* Composing and Decomposing with 10 As a Benchmark Complements of 10 Addition Facts for 10
MAFS.K.OA.1.5 Fluently . . . subtract within 5.	Taking Away to Subtract Counting Back to Subtract
MAFS.K.OA.1.5 Fluently add . . . within 5.	Joining Sets to Add

**This lesson is related to the aligned standard*

Grade K (continued)

Mathematics Florida Standards (MAFS)	Aligned Lessons
	Counting On to Add
MAFS.K.OA.1.5 Fluently add and subtract within 5.	Acting Out Addition and Subtraction Using a Number Line to Add and Subtract Addition Number Sentences* Counting On to Solve Addition Problems* Addition Facts: Doubles* Subtraction Concepts: Separation* Subtraction Concepts: Part-Part-Whole * Subtraction Concepts: Comparison* Counting Back to Subtract 1, 2, or 3* Using Length to Represent Subtraction* Addition and Subtraction Fact Families*
MAFS.K.OA.1.a Use . . . subtraction within 10 to solve word problems involving both addends unknown, e.g., by using objects, drawings, and equations with symbols for the unknown numbers to represent the problem.	Taking Away to Subtract Counting Back to Subtract
MAFS.K.OA.1.a Use addition . . . within 10 to solve word problems involving both addends unknown, e.g., by using objects, drawings, and equations with symbols for the unknown numbers to represent the problem.	Joining Sets to Add
MAFS.K.OA.1.a Use addition and subtraction within 10 to solve word	Acting Out Addition and Subtraction *

Grade K (continued)

Mathematics Florida Standards (MAFS)	Aligned Lessons
problems involving both addends unknown, e.g., by using objects, drawings, and equations with symbols for the unknown numbers to represent the problem.	Counting On to Add*

Grade 1

Mathematics Florida Standards (MAFS)	Aligned Lessons
MAFS.1.G.1.1 Distinguish between defining attributes (e.g., triangles are closed and three-sided) versus non-defining attributes (e.g., color, orientation, overall size); build and draw shapes to possess defining attributes.	Identifying Two-Dimensional Shapes* Comparing Two-Dimensional Shapes* Identifying Three-Dimensional Shapes* Classifying Plane Shapes by Attributes* Attributes of Three-Dimensional Shapes*
MAFS.1.G.1.2 Compose two-dimensional shapes (rectangles, squares, trapezoids, triangles, half-circles, and quarter-circles) . . . to create a composite shape, and compose new shapes from the composite shape.	Decomposing Two-Dimensional Shapes Concepts of Fractions in Two-Dimensional Shapes Concepts of Area in Two-Dimensional Shapes
MAFS.1.G.1.3 Partition circles and rectangles into two and four equal shares, describe the shares using the words halves, fourths, and quarters . . .	Fraction of a Whole: Halves and Fourths
MAFS.1.G.1.3 Partition circles and rectangles into two and four equal shares, describe the shares using the words halves, fourths, and quarters, and use the phrases half of, fourth of, and quarter of . . .	Fraction Concepts: Part of a Whole
MAFS.1.G.1.3 Partition circles and rectangles into two and four equal shares, describe the shares using the words halves, fourths, and quarters, and use the phrases half of, fourth of, and quarter of. Describe the whole as two of, or four of the shares. Understand for these examples that decomposing into more equal shares creates smaller shares.	Fraction of a Set: Halves and Fourths Fractions: Part of a Whole in Real-World Problems* Fraction of a Set: Halves, Thirds, Fourth, Eighths*

**This lesson is related to the aligned standard*

Grade 1 (continued)

Mathematics Florida Standards (MAFS)	Aligned Lessons
MAFS.1.MD.1.1 Order three objects by length; compare the lengths of two objects indirectly by using a third object.	Compare Lengths* Measuring Length in Inches with a Ruler*
MAFS.1.MD.1.a.a Recognize that the ruler is a tool that can be used to measure the attribute of length.	Inches, Feet, and Yards* Centimeters and Meters* Measuring Length in Inches with a Ruler*
MAFS.1.MD.1.a.b Understand the importance of the zero point and end point and that the length measure is the span between two points.	Measuring Length in Inches with a Ruler*
MAFS.1.MD.1.a.c Recognize that the units marked on a ruler have equal length intervals and fit together with no gaps or overlaps. These equal interval distances can be counted to determine the overall length of an object.	Inches, Feet, and Yards* Centimeters and Meters* Measuring Length in Inches with a Ruler*
MAFS.1.MD.2.3 Tell . . . time in hours and half-hours using analog and digital clocks.	Measuring Time
MAFS.1.MD.2.3 Tell and write time in hours and half-hours using analog and digital clocks.	Telling Time to 5 Minutes* Telling Time to 15 Minutes*
MAFS.1.MD.2.a.a Identify the value of coins (pennies, nickels, dimes . . .).	Pennies, Nickels, and Dimes
MAFS.1.MD.2.a.a Identify the value of coins (pennies, nickels, dimes, quarters).	Coin Values
MAFS.1.MD.2.a.b Compute the value of combinations of coins (pennies and/or dimes).	Coin Values*
MAFS.1.MD.2.a.c Relate the value of pennies, dimes, and quarters to the dollar (e.g., There are 100 pennies or ten dimes or four quarters in one dollar.)	Coin Values* Pennies, Nickels, and Dimes*

Grade 1 (continued)

Mathematics Florida Standards (MAFS)	Aligned Lessons
MAFS.1.MD.3.4 Organize, represent, and interpret data with up to three categories; ask and answer questions about the total number of data points, how many in each category, and how many more or less are in one category than in another.	Picture Graphs Picture Graphs and Bar Graphs*
MAFS.1.NBT.1.1 Count to 120, starting at any number less than 120. In this range, read and write numerals and represent a number of objects with a written numeral.	Numerals and Counting to 10* Counting with One-to-One Correspondence* Counting Objects in a Set* Counting to 20* Counting On* Counting and Ordering to 20* Counting and Ordering to 30* Counting and Ordering to 100* Counting On: 1 to 100* Place Value: Hundreds, Tens, and Ones*
MAFS.1.NBT.2.2.a 10 can be thought of as a bundle of ten ones - called a "ten."	Counting by 10s* Grouping into Tens and Ones Grouping Objects by 2s or 5s to 100*
MAFS.1.NBT.2.2.b The numbers from 11 to 19 are composed of a ten and one, two, three, four, five, six, seven, eight, or nine ones.	Grouping into Tens and Ones Regrouping Tens As Ones

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Grade 1 (continued)

Mathematics Florida Standards (MAFS)	Aligned Lessons
MAFS.1.NBT.2.2.c The numbers 10, 20, 30, 40, 50, 60, 70, 80, 90 refer to one, two, three, four, five, six, seven, eight, or nine tens (and 0 ones).	Counting by 10s* Grouping into Tens and Ones Grouping Objects by 2s or 5s to 100*
MAFS.1.NBT.2.2.d Decompose two-digit numbers in multiple ways (e.g., 64 can be decomposed into 6 tens and 4 ones or into 5 tens and 14 ones).	Grouping into Tens and Ones* Regrouping Tens As Ones* Place Value: Hundreds, Tens, and Ones*
MAFS.1.NBT.2.3 Compare two two-digit numbers based on meanings of the tens and ones digits, recording the results of comparisons with the symbols >, =, and <.	Comparing Numbers to 100 Using Symbols
MAFS.1.NBT.3.4 Add within 100 . . . using . . . strategies based on place value . . . Understand that in adding two-digit numbers, one adds tens and tens, ones and ones; and sometimes it is necessary to compose a ten.	Two-Digit Sums and Estimation
MAFS.1.NBT.3.4 Add within 100 . . . using concrete models . . . and strategies based on place value . . . Understand that in adding two-digit numbers, one adds tens and tens, ones and ones; and sometimes it is necessary to compose a ten.	Adding Two-Digit Numbers Two-Digit Sums with Base-Ten Models
MAFS.1.NBT.3.4 Add within 100, including . . . adding a two-digit number and a multiple of 10, using . . . strategies based on place value . . . Understand that in adding two-digit numbers, one adds tens and tens, ones and ones; and sometimes it is necessary to compose a ten.	Adding a Two-Digit Number and a Multiple of 10
MAFS.1.NBT.3.4 Add within 100, including adding a two-digit number and a one-digit number . . . using . . . strategies	Adding a Two-Digit Number and a One-Digit Number

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Mathematics Florida Standards (MAFS)	Aligned Lessons
based on place value . . . Understand that in adding two-digit numbers, one adds tens and tens, ones and ones; and sometimes it is necessary to compose a ten.	
MAFS.1.NBT.3.4 Add within 100, including adding a two-digit number and a one-digit number . . . using . . . strategies based on place value [and] properties of operations . . .	Mental Addition of Two-Digit and One-Digit Numbers
MAFS.1.NBT.3.4 Add within 100, including adding a two-digit number and a one-digit number, and adding a two-digit number and a multiple of 10, 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. Understand that in adding two-digit numbers, one adds tens and tens, ones and ones; and sometimes it is necessary to compose a ten.	Joining Sets to Add* Acting Out Addition and Subtraction * Using a Number Line to Add and Subtract* Addition Number Sentences* Counting On to Solve Addition Problems* Addition Facts: Doubles* Addition and Subtraction Fact Families* Counting On to Add* Adding Three Numbers* Addition Facts: Doubles Plus One or Minus One* Addition Facts: Using Sums of 10* Adding Three or More Numbers* Relating Addition and Subtraction Facts *

Grade 1 (continued)

Mathematics Florida Standards (MAFS)	Aligned Lessons
MAFS.1.NBT.3.5 Given a two-digit number, mentally find . . . 10 less than the number, without having to count . . .	Subtracting 10 from a Two-Digit Number
MAFS.1.NBT.3.5 Given a two-digit number, mentally find 10 more . . . than the number, without having to count . . .	Adding a Two-Digit Number and a Multiple of 10
MAFS.1.NBT.3.6 Subtract multiples of 10 in the range 10-90 from multiples of 10 in the range 10-90 (positive or zero differences), 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.	Subtracting 10 from a Two-Digit Number* Subtracting Two-Digit Numbers* Subtracting Two-Digit Numbers and Estimating Differences*
MAFS.1.OA.1.1 Use . . . subtraction within 20 to solve word problems involving situations of . . . taking from . . . taking apart, and comparing, with unknowns in all positions, e.g., by using objects, drawings, and equations with a symbol for the unknown number to represent the problem.	Subtraction Concepts: Comparison Using Length to Represent Subtraction
MAFS.1.OA.1.1 Use . . . subtraction within 20 to solve word problems involving situations of . . . taking from [and] taking apart . . . with unknowns in all positions, e.g., by using objects, drawings, and equations with a symbol for the unknown number to represent the problem.	Subtraction Concepts: Separation Subtraction Concepts: Part-Part-Whole Counting Back to Subtract 1, 2, or 3 Subtraction Facts: Counting Back Subtraction Facts: Counting Up
MAFS.1.OA.1.1 Use addition . . . within 20 to solve word problems involving situations of adding to [and] putting together . . . with unknowns in all positions, e.g., by	Addition Number Sentences Counting On to Solve Addition Problems

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Mathematics Florida Standards (MAFS)	Aligned Lessons
using objects, drawings, and equations with a symbol for the unknown number to represent the problem.	Addition Facts Adding Three Numbers
MAFS.1.OA.1.1 Use addition and subtraction within 20 to solve word problems involving situations of adding to, taking from, putting together, taking apart, and comparing, with unknowns in all positions, e.g., by using objects, drawings, and equations with a symbol for the unknown number to represent the problem.	Joining Sets to Add* Taking Away to Subtract* Acting Out Addition and Subtraction * Using a Number Line to Add and Subtract* Addition Facts for 10* Addition Facts: Doubles* Counting On to Add* Counting Back to Subtract* Subtraction in Separation Situations* Subtraction in Part-Part-Whole Situations* Subtraction in Comparison Situations* Solve Two-Step Problems*
MAFS.1.OA.1.2 Solve word problems that call for addition of three whole numbers whose sum is less than or equal to 20, e.g., by using objects, drawings, and equations with a symbol for the unknown number to represent the problem.	Adding Three Numbers Adding Three or More Numbers
MAFS.1.OA.2.3 Apply properties of operations as strategies to add and subtract.	Adding Three Numbers*

Mathematics Florida Standards (MAFS)	Aligned Lessons
MAFS.1.OA.2.4 Understand subtraction as an unknown-addend problem.	Addition and Subtraction Fact Families* Subtraction Facts: Counting Up* Relating Addition and Subtraction Facts *
MAFS.1.OA.3.5 Relate counting to . . . subtraction . . .	Counting Back to Subtract 1, 2, or 3 Counting Back to Subtract Subtraction Facts: Counting Back Subtraction Facts: Counting Up
MAFS.1.OA.3.5 Relate counting to addition . . . (e.g., by counting on 2 to add 2).	Counting On to Solve Addition Problems Counting On to Add
MAFS.1.OA.3.5 Relate counting to addition and subtraction (e.g., by counting on 2 to add 2).	Acting Out Addition and Subtraction Using a Number Line to Add and Subtract Counting Back: 100 to 1* Counting Backward*
MAFS.1.OA.3.6 . . . Subtract within 20, demonstrating fluency for . . . subtraction within 10 . . .	Counting Back to Subtract 1, 2, or 3 Counting Back to Subtract Subtraction Facts: Counting Back Subtraction Facts: Counting Up
MAFS.1.OA.3.6 Add . . . within 20, demonstrating fluency for addition . . . within 10. Use strategies such as . . . creating equivalent but easier or known sums (e.g., adding 6 + 7 by creating the known equivalent 6 + 6 + 1 = 12 + 1 = 13).	Addition Facts: Doubles Plus One or Minus One

Grade 1 (continued)

Mathematics Florida Standards (MAFS)	Aligned Lessons
MAFS.1.OA.3.6 Add . . . within 20, demonstrating fluency for addition . . . within 10. Use strategies such as . . . making ten (e.g., 8 + 6 = 8 + 2 + 4 = 10 + 4 = 14) . . .	Addition Facts: Using Sums of 10
MAFS.1.OA.3.6 Add . . . within 20, demonstrating fluency for addition . . . within 10. Use strategies such as counting on . . .	Counting On to Solve Addition Problems Counting On to Add
MAFS.1.OA.3.6 Add and subtract within 20, demonstrating fluency for addition and subtraction within 10 . . .	Acting Out Addition and Subtraction Using a Number Line to Add and Subtract
MAFS.1.OA.3.6 Add and subtract within 20, demonstrating fluency for addition and subtraction within 10. Use strategies such as . . . using the relationship between addition and subtraction e.g., (knowing that 8 + 4 = 12, one knows 12 - 8 = 4) . . .	Addition and Subtraction Fact Families Relating Addition and Subtraction Facts
MAFS.1.OA.3.6 Add and subtract within 20, demonstrating fluency for addition and subtraction within 10. Use strategies such as counting on; making ten (e.g., 8 + 6 = 8 + 2 + 4 = 10 + 4 = 14); decomposing a number leading to a ten (e.g., 13 - 4 = 13 - 3 - 1 = 10 - 1 = 9); using the relationship between addition and subtraction (e.g., knowing that 8 + 4 = 12, one knows 12 - 8 = 4); and creating equivalent but easier or known sums (e.g., adding 6 + 7 by creating the known equivalent 6 + 6 + 1 = 12 + 1 = 13).	Addition Facts: Doubles*
MAFS.1.OA.4.7 Understand the meaning of the equal sign . . .	Joining Sets to Add Taking Away to Subtract Counting Back to Subtract

**This lesson is related to the aligned standard*

Grade 1 (continued)

Mathematics Florida Standards (MAFS)	Aligned Lessons
MAFS.1.OA.4.8 Determine the unknown whole number in an addition . . . equation relating to three whole numbers.	Addition Facts Addition Facts for 10

Grade 2

Mathematics Florida Standards (MAFS)	Aligned Lessons
MAFS.2.G.1.1 . . . Identify triangles, quadrilaterals, pentagons, hexagons, . . .	Classifying Polygons
MAFS.2.G.1.1 Recognize . . . shapes having specified attributes, such as a given number of angles or a given number of equal faces. Identify triangles, quadrilaterals, pentagons, hexagons, and cubes.	Classifying Plane Shapes by Attributes
MAFS.2.G.1.1 Recognize and draw shapes having specified attributes, such as a given number of angles or a given number of equal faces. Identify triangles, quadrilaterals, pentagons, hexagons, and cubes.	Attributes of Three-Dimensional Shapes* Recognize and Draw Shapes Quadrilaterals* Classifying Triangles*
MAFS.2.G.1.2 Partition a rectangle into rows and columns of same-size squares and count to find the total number of them.	Concepts of Area in Two-Dimensional Shapes*
MAFS.2.G.1.3 Partition circles and rectangles into two, three, or four equal shares, describe the shares using the words halves, thirds, half of, a third of, etc., and describe the whole as two halves, three thirds, four fourths. Recognize that equal shares of identical wholes need not have the same shape.	Concepts of Fractions in Two-Dimensional Shapes Fraction of a Set: Halves and Fourths* Fraction of a Whole: Halves and Fourths* Fractions: Part of a Whole in Real-World Problems Fraction of a Whole: Denominators Through 12* Fraction of a Set: Halves, Thirds, Fourth, Eighths
MAFS.2.MD.1.1 Measure the length of an object to the nearest . . . centimeter . . . by	Using a Ruler: Centimeters

Mathematics Florida Standards (MAFS)	Aligned Lessons
selecting and using appropriate tools such as rulers . . .	
MAFS.2.MD.1.1 Measure the length of an object to the nearest inch . . . by selecting and using appropriate tools such as rulers . . .	Using a Ruler: Inches
MAFS.2.MD.1.1 Measure the length of an object to the nearest inch, foot, centimeter, or meter by selecting and using appropriate tools such as rulers, yardsticks, meter sticks, and measuring tapes.	Inches, Feet, and Yards* Centimeters and Meters* Measuring Length in Inches with a Ruler*
MAFS.2.MD.1.2 Describe the inverse relationship between the size of a unit and number of units needed to measure a given object.	Understand Measurement with Different Units
MAFS.2.MD.1.3 Estimate lengths using units of inches, feet, yards, centimeters, and meters.	Estimating Length
MAFS.2.MD.1.4 Measure to determine how much longer one object is than another, expressing the length difference in terms of a standard length unit.	Using a Ruler: Inches* Using a Ruler: Centimeters* Compare Lengths Measuring Length in Inches with a Ruler*
MAFS.2.MD.2.5 Use addition and subtraction within 100 to solve word problems involving lengths that are given in the same units, e.g., by using drawings (such as drawings of rulers) and equations with a symbol for the unknown number to represent the problem.	Using a Ruler: Inches* Solve Problems Involving Length
MAFS.2.MD.2.6 . . . Represent whole-number sums . . . within 100 on a number line diagram.	Adding a Two-Digit Number and a One-Digit Number

Mathematics Florida Standards (MAFS)	Aligned Lessons
MAFS.2.MD.2.6 Represent whole numbers as lengths from 0 on a number line diagram with equally spaced points corresponding to the numbers 0, 1, 2,..., and represent whole-number sums and differences within 100 on a number line diagram.	Counting Back to Subtract 1, 2, or 3* Solve Problems Involving Length
MAFS.2.MD.3.7 Tell and write time from analog and digital clocks to the nearest five minutes.	Telling Time to 5 Minutes Telling Time to 15 Minutes*
MAFS.2.MD.3.8.a Identify the value of coins and paper currency.	Coin Values Counting Coin Values
MAFS.2.MD.3.8.b Compute the value of any combination of coins within one dollar.	Counting Coin Values
MAFS.2.MD.3.8.c Compute the value of any combinations of dollars (e.g., If you have three ten-dollar bills, one five-dollar bill, and two one-dollar bills, how much money do you have?).	Counting Coin Values
MAFS.2.MD.3.8.d Relate the value of pennies, nickels, dimes, and quarters to other coins and to the dollar (e.g., There are five nickels in one quarter. There are two nickels in one dime. There are two and a half dimes in one quarter. There are twenty nickels in one dollar).	Counting Coin Values*
MAFS.2.MD.4.9 Generate measurement data by measuring lengths of several objects to the nearest whole unit, or by making repeated measurements of the same object. Show the measurements by making a line plot, where the horizontal scale is marked off in whole-number units.	Using a Ruler: Inches* Using a Ruler: Centimeters* Line plot and measuring length Measuring Length in Inches with a Ruler* Line Plots*

Mathematics Florida Standards (MAFS)	Aligned Lessons
MAFS.2.MD.4.10 Draw a picture graph . . . to represent a data set with up to four categories. Solve simple put-together, take-apart, and compare problems using information presented in a bar graph.	Picture Graphs
MAFS.2.MD.4.10 Draw a picture graph and a bar graph (with single-unit scale) to represent a data set with up to four categories. . . .	Scaled Pictographs and Bar Graphs
MAFS.2.MD.4.10 Draw a picture graph and a bar graph (with single-unit scale) to represent a data set with up to four categories. Solve simple put-together, take-apart, and compare problems using information presented in a bar graph.	Picture Graphs and Bar Graphs
MAFS.2.NBT.1.1.a 100 can be thought of as a bundle of ten tens - called a "hundred."	Place Value: Hundreds, Tens, and Ones Place Value to 1,000* Place Value and Writing Numbers in Standard Form*
MAFS.2.NBT.1.1.b The numbers 100, 200, 300, 400, 500, 600, 700, 800, 900 refer to one, two, three, four, five, six, seven, eight, or nine hundreds (and 0 tens and 0 ones).	Place Value: Hundreds, Tens, and Ones* Place Value to 1,000*
MAFS.2.NBT.1.2 . . . Skip-count by . . . 10s . . .	Counting by 10s
MAFS.2.NBT.1.2 . . . Skip-count by 5s . . .	Counting by 5s
MAFS.2.NBT.1.2 . . . Skip-count by 5s, 10s, . . .	Grouping Objects by 2s or 5s to 100
MAFS.2.NBT.1.2 Count within 1000; skip-count by 5s, 10s, and 100s.	Counting and Ordering to 100* Counting On: 1 to 100*
MAFS.2.NBT.1.3 . . . Write numbers to 1000 using . . . expanded form.	Place Value to 1,000

Mathematics Florida Standards (MAFS)	Aligned Lessons
MAFS.2.NBT.1.3 . . . Write numbers to 1000 using base-ten numerals . . . and expanded form.	Place Value: Hundreds, Tens, and Ones
MAFS.2.NBT.1.3 Read and write numbers to 1000 using base-ten numerals, number names, and expanded form.	Counting and Ordering to 100* Grouping into Tens and Ones* Place Value and Writing Numbers in Standard Form* Number Words 0-120*
MAFS.2.NBT.1.4 Compare two three-digit numbers based on meanings of the hundreds, tens, and ones digits, using >, =, and < symbols to record the results of comparisons.	Comparing Numbers to 100 Using Symbols* Comparing and Ordering Three-Digit Numbers Comparing and Ordering Numbers to 1,000 Comparing and Ordering Numbers to 100,000*
MAFS.2.NBT.2.5 Fluently . . . subtract within 100 using strategies based on place value . . .	Subtracting 10 from a Two-Digit Number Subtracting a One-Digit Number from a Two-Digit Number Subtracting Two-Digit Numbers and Estimating Differences Subtracting Two-Digit Numbers
MAFS.2.NBT.2.5 Fluently add . . . within 100 using strategies based on place value . . .	Adding a Two-Digit Number and a One-Digit Number Adding a Two-Digit Number and a Multiple of 10

Mathematics Florida Standards (MAFS)	Aligned Lessons
	Adding Two-Digit Numbers Mental Addition of Two-Digit and One-Digit Numbers Two-Digit Sums and Estimation Two-Digit Sums with Base-Ten Models
MAFS.2.NBT.2.5 Fluently add and subtract within 100 using strategies based on place value, properties of operations, and/or the relationship between addition and subtraction.	Relating Addition and Subtraction Facts *
MAFS.2.NBT.2.6 Add . . . two-digit numbers using strategies based on place value and properties of operations.	Adding Two-Digit Numbers Two-Digit Sums with Base-Ten Models
MAFS.2.NBT.2.6 Add up to four two-digit numbers using strategies based on place value and properties of operations.	Adding a Two-Digit Number and a Multiple of 10* Two-Digit Sums and Estimation* Add Up to Four Two-Digit Numbers
MAFS.2.NBT.2.7 . . . Subtract within 1000, using concrete models or . . . strategies based on place value . . . Understand that in adding or subtracting three-digit numbers, one adds or subtracts hundreds and hundreds, tens and tens, ones and ones; and sometimes it is necessary to compose or decompose tens or hundreds.	Subtracting Three-Digit Numbers Subtracting to Solve Real-World Problems
MAFS.2.NBT.2.7 Add . . . within 1000, using concrete models . . . and strategies based on place value . . . Understand that in adding or subtracting three-digit numbers, one adds or subtracts hundreds and hundreds, tens and tens, ones and ones;	Adding Three-Digit Numbers

Mathematics Florida Standards (MAFS)	Aligned Lessons
and sometimes it is necessary to compose or decompose tens or hundreds.	
MAFS.2.NBT.2.7 Add and subtract within 1000, 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. Understand that in adding or subtracting three-digit numbers, one adds or subtracts hundreds and hundreds, tens and tens, ones and ones; and sometimes it is necessary to compose or decompose tens or hundreds.	Adding a Two-Digit Number and a Multiple of 10* Adding Two-Digit Numbers* Two-Digit Sums and Estimation* Two-Digit Sums with Base-Ten Models*
MAFS.2.NBT.2.8 Mentally add 10 or 100 to a given number 100-900, and mentally subtract 10 or 100 from a given number 100-900.	Adding a Two-Digit Number and a Multiple of 10* Subtracting 10 from a Two-Digit Number* Add or Subtract 10 or 100
MAFS.2.NBT.2.9 Explain why addition and subtraction strategies work, using place value and the properties of operations.	Adding a Two-Digit Number and a One-Digit Number* Adding a Two-Digit Number and a Multiple of 10* Adding Two-Digit Numbers* Subtracting 10 from a Two-Digit Number* Mental Addition of Two-Digit and One-Digit Numbers* Two-Digit Sums and Estimation* Two-Digit Sums with Base-Ten Models*

Mathematics Florida Standards (MAFS)	Aligned Lessons
	Adding Three-Digit Numbers* Subtracting a One-Digit Number from a Two-Digit Number* Subtracting Two-Digit Numbers and Estimating Differences* Subtracting Two-Digit Numbers* Subtracting Three-Digit Numbers*
MAFS.2.OA.1.1 Use . . . subtraction within 100 to solve one- and two-step word problems involving situations of . . . comparing . . . with unknowns in all positions, e.g., by using drawings and equations with a symbol for the unknown number to represent the problem.	Subtraction in Comparison Situations
MAFS.2.OA.1.1 Use . . . subtraction within 100 to solve one- and two-step word problems involving situations of . . . taking from . . . [and] taking apart . . . with unknowns in all positions, e.g., by using drawings and equations with a symbol for the unknown number to represent the problem.	Subtraction in Separation Situations Subtraction in Part-Part-Whole Situations Subtracting a One-Digit Number from a Two-Digit Number Subtracting Two-Digit Numbers and Estimating Differences Subtracting Two-Digit Numbers
MAFS.2.OA.1.1 Use . . . subtraction within 100 to solve one- and two-step word problems involving situations of adding to [and] . . . putting together . . . with unknowns in all positions, e.g., by using drawings and equations with a symbol	Subtracting 10 from a Two-Digit Number

Mathematics Florida Standards (MAFS)	Aligned Lessons
for the unknown number to represent the problem.	
MAFS.2.OA.1.1 Use addition . . . within 100 to solve one- and two-step word problems involving situations of adding to [and] . . . putting together . . . with unknowns in all positions, e.g., by using drawings and equations with a symbol for the unknown number to represent the problem.	Adding a Two-Digit Number and a One-Digit Number Adding a Two-Digit Number and a Multiple of 10 Adding Two-Digit Numbers Mental Addition of Two-Digit and One-Digit Numbers Two-Digit Sums and Estimation Two-Digit Sums with Base-Ten Models
MAFS.2.OA.1.1 Use addition . . . within 100 to solve one- and two-step word problems involving situations of adding to, taking from, putting together, taking apart, and comparing, with unknowns in all positions, e.g., by using drawings and equations with a symbol for the unknown number to represent the problem.	Adding Three or More Numbers
MAFS.2.OA.1.1 Use addition and subtraction within 100 to solve one- and two-step word problems involving situations of adding to, taking from, putting together, taking apart, and comparing, with unknowns in all positions, e.g., by using drawings and equations with a symbol for the unknown number to represent the problem.	Addition Number Sentences* Counting On to Solve Addition Problems* Addition Facts* Addition Facts for 10* Addition Facts: Doubles* Subtraction Concepts: Separation*

Mathematics Florida Standards (MAFS)	Aligned Lessons
	Subtraction Concepts: Part-Part-Whole * Subtraction Concepts: Comparison* Counting Back to Subtract 1, 2, or 3* Using Length to Represent Subtraction* Addition and Subtraction Fact Families* Adding Three Numbers* Addition Facts: Doubles Plus One or Minus One* Addition Facts: Using Sums of 10* Subtraction Facts: Counting Back* Subtraction Facts: Counting Up* Review Addition and Subtraction Fact Families* Relating Addition and Subtraction Facts * Solve Two-Step Problems Numerical Patterns and Relationships* Problem Solving and Number Sense*
MAFS.2.OA.1.a Determine the unknown whole number in an equation relating four or more whole numbers.	Review Addition and Subtraction Fact Families* Relating Addition and Subtraction Facts *

Grade 2 (continued)

Mathematics Florida Standards (MAFS)	Aligned Lessons
	Solve Two-Step Problems* Problem Solving and Number Sense* Equations and Numerical Relationships
MAFS.2.OA.2.2 Fluently add and subtract within 20 using mental strategies. By end of Grade 2, know from memory all sums of two one-digit numbers.	Addition and Subtraction Fact Families Review Addition and Subtraction Fact Families Relating Addition and Subtraction Facts Numerical Patterns and Relationships*
MAFS.2.OA.3.3 Determine whether a group of objects (up to 20) has an odd or even number of members, e.g., by pairing objects or counting them by 2s . . .	Odd and Even Numbers
MAFS.2.OA.3.3 Determine whether a group of objects (up to 20) has an odd or even number of members, e.g., by pairing objects or counting them by 2s; write an equation to express an even number as a sum of two equal addends.	Understand Patterns*
MAFS.2.OA.3.4 Use addition to find the total number of objects arranged in rectangular arrays with up to 5 rows and up to 5 columns; write an equation to express the total as a sum of equal addends.	Add Using Arrays Multiplication Concepts: Arrays*

Mathematics Florida Standards (MAFS)	Aligned Lessons
MAFS.3.G.1.1 . . . Recognize rhombuses, rectangles, and squares as examples of quadrilaterals . . .	Quadrilaterals
MAFS.3.G.1.1 Understand that shapes in different categories (e.g., rhombuses, rectangles, and others) may share attributes (e.g., having four sides), and that the shared attributes can define a larger category (e.g., quadrilaterals). . . .	Classifying Polygons
MAFS.3.G.1.2 Partition shapes into parts with equal areas. Express the area of each part as a unit fraction of the whole.	Divide Shapes Into Parts with Equal Areas Fractions: Part of a Whole in Real-World Problems* Fraction of a Whole: Denominators Through 12*
MAFS.3.MD.1.1 . . . Measure time intervals in minutes. . .	Elapsed Time to the Minute
MAFS.3.MD.1.1 Tell . . . time to the nearest minute . . .	Telling Time to the Minute
MAFS.3.MD.1.1 Tell and write time to the nearest minute and measure time intervals in minutes. Solve word problems involving addition and subtraction of time intervals in minutes, e.g., by representing the problem on a number line diagram.	Elapsed Time* Telling Time to 5 Minutes* Telling Time to 15 Minutes* Estimating Time: Choosing Units* Solve Problems About Time Finding Elapsed Time to Solve Problems* Estimating Time: Minutes *
MAFS.3.MD.1.2 Measure and estimate . . . masses of objects using standard units of	Solve Problems about Mass

Mathematics Florida Standards (MAFS)	Aligned Lessons
grams (g), kilograms (kg) . . . Add, subtract, multiply, or divide to solve one-step word problems involving masses . . . that are given in the same units.	
MAFS.3.MD.1.2 Measure and estimate liquid volumes . . . using standard units . . . liters (l). Add, subtract, multiply, or divide to solve one-step word problems involving . . . volumes that are given in the same units.	Solve Problems About Liquid Volume
MAFS.3.MD.1.2 Measure and estimate liquid volumes and masses of objects using standard units of grams (g), kilograms (kg), and liters (l). Add, subtract, multiply, or divide to solve one-step word problems involving masses or volumes that are given in the same units.	Measuring Weight with a Scale*
MAFS.3.MD.2.3 Draw a scaled picture graph and a scaled bar graph to represent a data set with several categories. . . .	Scaled Pictographs and Bar Graphs
MAFS.3.MD.2.3 Draw a scaled picture graph and a scaled bar graph to represent a data set with several categories. Solve one- and two-step "how many more" and "how many less" problems using information presented in scaled bar graphs.	Picture Graphs and Bar Graphs Interpreting Bar Graphs and Pictographs
MAFS.3.MD.2.4 Generate measurement data by measuring lengths using rulers marked with halves and fourths of an inch. Show the data by making a line plot, where the horizontal scale is marked off in appropriate units-whole numbers, halves, or quarters.	Using a Ruler: Inches* Measure Length and Plot Data on Line Plots Using a Ruler: Centimeters or Inches* Interpreting Line Plots
MAFS.3.MD.3.5.a A square with side length 1 unit, called "a unit square," is said	Concepts of Area in Two-Dimensional Shapes*

Mathematics Florida Standards (MAFS)	Aligned Lessons
to have "one square unit" of area, and can be used to measure area.	Understand Area Using Area for Multiplication: Facts for 3, 4, and 5* Understanding Area and Surface Area*
MAFS.3.MD.3.5.b A plane figure which can be covered without gaps or overlaps by n unit squares is said to have an area of n square units.	Understand Area Using Area for Multiplication: Facts for 3, 4, and 5* Understanding Area and Surface Area*
MAFS.3.MD.3.6 Measure areas by counting unit squares (square cm, square m, square in, square ft, and improvised units).	Concepts of Area in Two-Dimensional Shapes* Understand Area Understanding Area and Surface Area*
MAFS.3.MD.3.7.a Find the area of a rectangle with whole-number side lengths by tiling it, and show that the area is the same as would be found by multiplying the side lengths.	Concepts of Area in Two-Dimensional Shapes* Add and Multiply to Find Area Understanding Area and Surface Area
MAFS.3.MD.3.7.b . . . Represent whole-number products as rectangular areas in mathematical reasoning.	Multiplication Fact Review Using Area for Multiplication: Facts for 3, 4, and 5 Using Area for Multiplication: Facts for 6, 7, and 8
MAFS.3.MD.3.7.b Multiply side lengths to find areas of rectangles with whole-number side lengths in the context of solving real world and mathematical problems . . .	Understanding Area and Surface Area

Grade 3 (continued)

Mathematics Florida Standards (MAFS)	Aligned Lessons
MAFS.3.MD.3.7.b Multiply side lengths to find areas of rectangles with whole-number side lengths in the context of solving real world and mathematical problems, and represent whole-number products as rectangular areas in mathematical reasoning.	Add and Multiply to Find Area
MAFS.3.MD.3.7.c Use tiling to show in a concrete case that the area of a rectangle with whole-number side lengths a and b + c is the sum of a × b and a × c. Use area models to represent the distributive property in mathematical reasoning.	Add and Multiply to Find Area Using Area for Multiplication: Facts for 6, 7, and 8
MAFS.3.MD.3.7.d Recognize area as additive. Find areas of rectilinear figures by decomposing them into non-overlapping rectangles and adding the areas of the non-overlapping parts, applying this technique to solve real world problems.	Concepts of Area in Two-Dimensional Shapes Add and Multiply to Find Area
MAFS.3.MD.4.8 Solve real world and mathematical problems involving perimeters of polygons, including finding the perimeter given the side lengths . . .	Understanding Perimeter
MAFS.3.MD.4.8 Solve real world and mathematical problems involving perimeters of polygons, including finding the perimeter given the side lengths, finding an unknown side length . . .	Connect Area and Perimeter
MAFS.3.NF.1.1 Understand a fraction 1/b as the quantity formed by 1 part when a whole is partitioned into b equal parts; understand a fraction a/b as the quantity formed by a parts of size 1/b.	Understand What a Fraction Is* Fractions: Part of a Whole in Real-World Problems Fraction of a Whole: Denominators Through 12

**This lesson is related to the aligned standard*

Grade 3 (continued)

Mathematics Florida Standards (MAFS)	Aligned Lessons
MAFS.3.NF.1.2.a Represent a fraction 1/b on a number line diagram by defining the interval from 0 to 1 as the whole and partitioning it into b equal parts. Recognize that each part has size 1/b and that the endpoint of the part based at 0 locates the number 1/b on the number line.	Understand Fractions on a Number Line
MAFS.3.NF.1.2.b Represent a fraction a/b on a number line diagram by marking off a lengths 1/b from 0. Recognize that the resulting interval has size a/b and that its endpoint locates the number a/b on the number line.	Understand Fractions on a Number Line
MAFS.3.NF.1.3.a Understand two fractions as equivalent (equal) if they are the same size, or the same point on a number line.	Find Equivalent Fractions
MAFS.3.NF.1.3.b Recognize and generate simple equivalent fractions, (e.g., 1/2 = 2/4, 4/6 = 2/3). Explain why the fractions are equivalent, e.g., by using a visual fraction model.	Find Equivalent Fractions
MAFS.3.NF.1.3.c Express whole numbers as fractions, and recognize fractions that are equivalent to whole numbers.	Find Equivalent Fractions Understand Mixed Numbers*
MAFS.3.NF.1.3.d Compare two fractions with the same numerator or the same denominator by reasoning about their size. Recognize that comparisons are valid only when the two fractions refer to the same whole. Record the results of comparisons with the symbols >, =, or <, and justify the conclusions, e.g., by using a visual fraction model.	Understand Comparing Fractions Fractions: Part of a Whole in Real-World Problems*
MAFS.3.NBT.1.1 Use place value understanding to round whole numbers to the nearest 10 or 100.	Adding Three-Digit Numbers* Use Place Value to Round Numbers

**This lesson is related to the aligned standard*

Mathematics Florida Standards (MAFS)	Aligned Lessons
	Rounding to the Nearest 10, 100, or 1,000* Subtracting Multi-Digit Numbers *
MAFS.3.NBT.1.2 Fluently . . . subtract within 1000 using strategies and algorithms based on place value . . .	Subtracting Three-Digit Numbers
MAFS.3.NBT.1.2 Fluently add . . . within 1000 using strategies and algorithms based on place value . . .	Adding Three-Digit Numbers
MAFS.3.NBT.1.2 Fluently add and subtract within 1000 using strategies and algorithms based on place value, properties of operations, and/or the relationship between addition and subtraction.	Addition Facts: Doubles Plus One or Minus One* Addition Facts: Using Sums of 10* Adding Three or More Numbers* Mental Addition of Two-Digit and One-Digit Numbers* Two-Digit Sums and Estimation* Two-Digit Sums with Base-Ten Models* Subtracting a One-Digit Number from a Two-Digit Number* Money Problems: Addition and Subtraction* Subtracting Two-Digit Numbers and Estimating Differences* Subtracting Two-Digit Numbers* Add and subtract within 1000

Grade 3 (continued)

Mathematics Florida Standards (MAFS)	Aligned Lessons
	Money Problems: Addition, Subtraction, Multiplication* Adding Multi-Digit Numbers* Subtracting Multi-Digit Numbers *
MAFS.3.NBT.1.3 Multiply one-digit whole numbers by multiples of 10 in the range 10-90 (e.g., 9 × 80, 5 × 60) using strategies based on place value and properties of operations.	Multiply by Multiples of 10
MAFS.3.OA.1.1 Interpret products of whole numbers, e.g., interpret 5 × 7 as the total number of objects in 5 groups of 7 objects each.	Understand Multiplication, Part 1 Understand Multiplication, Part 2 Multiplication Fact Review Multiplication Concepts: Equal Groups Multiplication Sentences and Equal Groups Multiplication Concepts: Arrays
MAFS.3.OA.1.2 Interpret whole-number quotients of whole numbers, e.g., interpret 56 ÷ 8 as the number of objects in each share when 56 objects are partitioned equally into 8 shares, or as a number of shares when 56 objects are partitioned into equal shares of 8 objects each.	Understand Division, Part 1 Understand Division, Part 2 Division Concepts: Sharing Equal Groups
MAFS.3.OA.1.3 Use . . . division within 100 to solve word problems in situations involving equal groups . . . e.g., by using drawings and equations with a symbol for the unknown number to represent the problem.	Understand Division, Part 1 Division Concepts: Sharing Equal Groups Relating Division to Multiplication

**This lesson is related to the aligned standard*

Mathematics Florida Standards (MAFS)	Aligned Lessons
MAFS.3.OA.1.3 Use multiplication . . . within 100 to solve word problems in situations involving . . . arrays . . . e.g., by using drawings and equations with a symbol for the unknown number to represent the problem.	Multiplication Concepts: Arrays
MAFS.3.OA.1.3 Use multiplication . . . within 100 to solve word problems in situations involving equal groups, . . . e.g., by using drawings and equations with a symbol for the unknown number to represent the problem.	Multiplication Concepts: Skip Counting Using Area for Multiplication: Facts for 3, 4, and 5 Using Area for Multiplication: Facts for 6, 7, and 8 Division Concepts: Area and Facts for 3, 4, and 5 Division Concepts: Area and Facts for 6, 7, and 8
MAFS.3.OA.1.3 Use multiplication and division within 100 to solve word problems in situations involving equal groups . . . e.g., by using drawings and equations with a symbol for the unknown number to represent the problem.	Multiplication and Division Fact Families
MAFS.3.OA.1.3 Use multiplication and division within 100 to solve word problems in situations involving equal groups, arrays, and measurement quantities, e.g., by using drawings and equations with a symbol for the unknown number to represent the problem.	Solve One-Step Word Problems Using Multiplication and Division Multiplying Two-Digit Numbers by One-Digit Numbers* Dividing Whole Numbers* Review Multiplying Two-Digit Numbers by One-Digit Numbers*

Mathematics Florida Standards (MAFS)	Aligned Lessons
MAFS.3.OA.1.4 Determine the unknown whole number in a multiplication or division equation relating three whole numbers.	Understand Division, Part 1* Equations and Numerical Relationships Understand Multiplication*
MAFS.3.OA.2.5 Apply properties of operations as strategies to multiply . . .	Break Apart a Number to Multiply Using Area for Multiplication: Facts for 6, 7, and 8 Properties of Multiplication
MAFS.3.OA.2.5 Apply properties of operations as strategies to multiply and divide.	Use Order and Grouping to Multiply
MAFS.3.OA.2.6 Understand division as an unknown-factor problem.	Using Fact Families to Solve Division Problems Multiplication and Division Fact Families*
MAFS.3.OA.3.7 Fluently . . . divide within 100, using strategies such as the relationship between multiplication and division (e.g., knowing that 8 ÷ 5 = 40, one knows 40 ÷ 5 = 8) . . .	Understand Division, Part 1 Relating Division to Multiplication
MAFS.3.OA.3.7 Fluently multiply . . . within 100 . . . By the end of Grade 3, know from memory all products of two one-digit numbers.	Multiplication Fact Review
MAFS.3.OA.3.7 Fluently multiply and divide within 100, using strategies such as the relationship between multiplication and division (e.g., knowing that 8 × 5 = 40, one knows 40 ÷ 5 = 8) or properties of operations. By the end of Grade 3, know from memory all products of two one-digit numbers.	Solve One-Step Word Problems Using Multiplication and Division* Multiplication Concepts: Skip Counting Using Area for Multiplication: Facts for 3, 4, and 5

Mathematics Florida Standards (MAFS)	Aligned Lessons
	Using Area for Multiplication: Facts for 6, 7, and 8 Division Concepts: Area and Facts for 3, 4, and 5 Division Concepts: Area and Facts for 6, 7, and 8 Dividing Whole Numbers* Review Multiplying Two-Digit Numbers by One-Digit Numbers*
MAFS.3.OA.3.7 Fluently multiply and divide within 100, using strategies such as the relationship between multiplication and division (e.g., knowing that 8 ÷ 5 = 40, one knows 40 ÷ 5 = 8) . . . By the end of Grade 3, know from memory all products of two one-digit numbers.	Multiplication and Division Fact Families
MAFS.3.OA.4.8 Solve two-step word problems using the four operations. . . .	Money Problems: Addition, Subtraction, Multiplication
MAFS.3.OA.4.8 Solve two-step word problems using the four operations. Represent these problems using equations with a letter standing for the unknown quantity. Assess the reasonableness of answers using mental computation and estimation strategies including rounding.	Two-Digit Sums and Estimation* Two-Digit Sums with Base-Ten Models* Adding Three-Digit Numbers* Subtracting Two-Digit Numbers and Estimating Differences* Subtracting Three-Digit Numbers* Solve One-Step Word Problems Using Multiplication and Division*

Grade 3 (continued)

Mathematics Florida Standards (MAFS)	Aligned Lessons
	Solve Two-Step Word Problems Using the Four Operations Solve Multi-Step Problems*
MAFS.3.OA.4.9 Identify arithmetic patterns (including patterns in the addition table or multiplication table), and explain them using properties of operations.	Describing and Extending Patterns* Understand Patterns

Grade 4

Mathematics Florida Standards (MAFS)	Aligned Lessons
MAFS.4.G.1.1 Draw points, lines, line segments, rays, angles (right, acute, obtuse), and perpendicular and parallel lines. Identify these in two-dimensional figures.	Lines and Angles* Classifying Angles *
MAFS.4.G.1.2 Classify two-dimensional figures based on the presence or absence of parallel or perpendicular lines, or the presence or absence of angles of a specified size. Recognize right triangles as a category, and identify right triangles.	Classifying Polygons* Quadrilaterals* Classifying Triangles* Classify Two-Dimensional Figures*
MAFS.4.G.1.3 Recognize a line of symmetry for a two-dimensional figure as a line across the figure such that the figure can be folded along the line into matching parts. Identify line-symmetric figures and draw lines of symmetry.	Concepts of Symmetry Line Symmetry
MAFS.4.MD.1.1 Know relative sizes of measurement units within one system of units including km, m, cm; kg, g; lb, oz.; l, ml; hr, min, sec. Within a single system of measurement, express measurements in a larger unit in terms of a smaller unit. Record measurement equivalents in a two-column table.	Express Measurements in Larger Units Comparing Feet, Yards, and Miles *
MAFS.4.MD.1.2 Use the four operations to solve word problems involving distances, intervals of time, and money, including problems involving simple fractions or decimals. Represent fractional quantities of distance and intervals of time using linear models.	Money Problems: Addition and Subtraction* Finding Elapsed Time to Solve Problems* Elapsed Time to the Minute* Estimating Time: Minutes * Adding and Subtracting Decimals to Solve Problems*

**This lesson is related to the aligned standard*

Mathematics Florida Standards (MAFS)	Aligned Lessons
	Adding and Subtracting Decimals With Money*
MAFS.4.MD.1.3 Apply the area . . . formula for rectangles in real world and mathematical problems.	Understanding Area and Surface Area
MAFS.4.MD.1.3 Apply the area and perimeter formulas for rectangles in real world and mathematical problems.	Understanding Perimeter*
MAFS.4.MD.2.4 Make a line plot to display a data set of measurements in fractions of a unit (1/2, 1/4, 1/8). Solve problems involving addition and subtraction of fractions by using information presented in line plots.	Interpreting Line Plots*
MAFS.4.MD.3.5.a An angle is measured with reference to a circle with its center at the common endpoint of the rays, by considering the fraction of the circular arc between the points where the two rays intersect the circle. An angle that turns through 1/360 of a circle is called a "one-degree angle," and can be used to measure angles.	Add and Subtract Angle Measures Using a Protractor
MAFS.4.MD.3.5.b An angle that turns through n one-degree angles is said to have an angle measure of n degrees.	Add and Subtract Angle Measures Using a Protractor
MAFS.4.MD.3.6 Measure angles in whole-number degrees using a protractor. Sketch angles of specified measure.	Using a Protractor
MAFS.4.MD.3.7 Recognize angle measure as additive. When an angle is decomposed into non-overlapping parts, the angle measure of the whole is the sum of the angle measures of the parts. Solve addition and subtraction problems to find unknown	Add and Subtract Angle Measures

Mathematics Florida Standards (MAFS)	Aligned Lessons
angles on a diagram in real world and mathematical problems, e.g., by using an equation with a symbol for the unknown angle measure.	
MAFS.4.NF.1.1 Explain why a fraction a/b is equivalent to a fraction (n × a)/(n × b) by using visual fraction models, with attention to how the number and size of the parts differ even though the two fractions themselves are the same size. Use this principle to recognize and generate equivalent fractions.	Find Equivalent Fractions* Equivalent Fractions
MAFS.4.NF.1.2 Compare two fractions with different numerators and different denominators, e.g., by creating common denominators or numerators, or by comparing to a benchmark fraction such as 1/2. Recognize that comparisons are valid only when the two fractions refer to the same whole. Record the results of comparisons with symbols >, =, or <, and justify the conclusions, e.g., by using a visual fraction model.	Compare Fractions Understand Adding and Subtracting Fractions* Comparing and Ordering Two Unlike Fractions Comparing and Ordering Three Unlike Fractions Finding the Least Common Denominator
MAFS.4.NF.2.3.a Understand addition and subtraction of fractions as joining and separating parts referring to the same whole.	Understand Adding and Subtracting Fractions Understand Mixed Numbers* Adding and Subtracting Unlike Fractions*
MAFS.4.NF.2.3.b Decompose a fraction into a sum of fractions with the same denominator in more than one way, recording each decomposition by an equation. Justify decompositions, e.g., by using a visual fraction model.	Understand Adding and Subtracting Fractions Understand Mixed Numbers*

Grade 4 (continued)

Mathematics Florida Standards (MAFS)	Aligned Lessons
MAFS.4.NF.2.3.c Add and subtract mixed numbers with like denominators, e.g., by replacing each mixed number with an equivalent fraction, and/or by using properties of operations and the relationship between addition and subtraction.	Understand Adding and Subtracting Fractions Understand Mixed Numbers* Add and Subtract Fractions* Add and Subtract Fractions in Word Problems* Rewriting Mixed Numbers and Fractions Greater than 1*
MAFS.4.NF.2.3.d Solve word problems involving addition and subtraction of fractions referring to the same whole and having like denominators, e.g., by using visual fraction models and equations to represent the problem.	Understand Adding and Subtracting Fractions* Understand Mixed Numbers* Add and Subtract Fractions Add and Subtract Fractions in Word Problems*
MAFS.4.NF.2.4.a Understand a fraction a/b as a multiple of 1/b.	Understand Fraction Multiplication Multiplying a Whole Number and a Fraction*
MAFS.4.NF.2.4.b Understand a multiple of a/b as a multiple of 1/b, and use this understanding to multiply a fraction by a whole number.	Understand Fraction Multiplication* Understand Products of Fractions* Multiplying a Whole Number and a Fraction*
MAFS.4.NF.2.4.c Solve word problems involving multiplication of a fraction by a whole number, e.g., by using visual fraction models and equations to represent the problem.	Understand Fraction Multiplication* Understand Products of Fractions*

Mathematics Florida Standards (MAFS)	Aligned Lessons
	Multiplying a Whole Number and a Fraction
MAFS.4.NF.3.5 Express a fraction with denominator 10 as an equivalent fraction with denominator 100, and use this technique to add two fractions with respective denominators 10 and 100.	Fractions as Tenths and Hundredths Adding and Subtracting Unlike Fractions*
MAFS.4.NF.3.6 Use decimal notation for fractions with denominators 10 or 100.	Renaming Fractions As Decimals
MAFS.4.NF.3.7 Compare two decimals to hundredths by reasoning about their size. Recognize that comparisons are valid only when the two decimals refer to the same whole. Record the results of comparisons with the symbols >, =, or <, and justify the conclusions, e.g., by using a visual model.	Comparing and Ordering Decimal Numbers Compare and Order Decimal Numbers with Number Lines
MAFS.4.NBT.1.1 Recognize that in a multi-digit whole number, a digit in one place represents ten times what it represents in the place to its right.	Place Value to 1,000 Place Value and Writing Numbers in Standard Form Understand Place Value*
MAFS.4.NBT.1.2 . . . Compare two multi-digit numbers based on meanings of the digits in each place, using >, =, and < symbols to record the results of comparisons.	Comparing and Ordering Numbers to 1,000 Compare and Order Whole Numbers Using Number Lines Comparing and Ordering Numbers to 100,000
MAFS.4.NBT.1.2 Read and write multi-digit whole numbers using base-ten numerals, number names, and expanded form. Compare two multi-digit numbers based on meanings of the digits in each place, using >, =, and < symbols to record the results of comparisons.	Understand Place Value*

Grade 4 (continued)

Mathematics Florida Standards (MAFS)	Aligned Lessons
MAFS.4.NBT.1.3 Use place value understanding to round multi-digit whole numbers to any place.	Use Place Value to Round Numbers* Rounding to the Nearest 10, 100, or 1,000
MAFS.4.NBT.2.4 Fluently . . . subtract multi-digit whole numbers using the standard algorithm.	Subtracting Multi-Digit Numbers
MAFS.4.NBT.2.4 Fluently add . . . multi-digit whole numbers using the standard algorithm.	Adding Multi-Digit Numbers
MAFS.4.NBT.2.4 Fluently add and subtract multi-digit whole numbers using the standard algorithm.	Adding Three-Digit Numbers* Subtracting Three-Digit Numbers* Divide Whole Numbers
MAFS.4.NBT.2.5 Multiply a whole number of up to four digits by a one-digit whole number, and multiply two two-digit numbers, using strategies based on place value and the properties of operations. Illustrate and explain the calculation by using equations, rectangular arrays, and/or area models.	Multiplying Two-Digit Numbers by One-Digit Numbers Multiply Two-Digit Numbers by Two-DIgit Numbers Review Multiplying Two-Digit Numbers by One-Digit Numbers Multiplying by Two-Digit Numbers
MAFS.4.NBT.2.6 Find whole-number quotients and remainders with up to four-digit dividends and one-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.	Relating Division to Multiplication Divide Whole Numbers Dividing Whole Numbers
MAFS.4.OA.1.1 Interpret a multiplication equation as a comparison, e.g., interpret	Understand Multiplication, Part 1*

Mathematics Florida Standards (MAFS)	Aligned Lessons
35 = 5 × 7 as a statement that 35 is 5 times as many as 7 and 7 times as many as 5. Represent verbal statements of multiplicative comparisons as multiplication equations.	Understand Multiplication, Part 2* Multiplication Concepts: Arrays* Using Area for Multiplication: Facts for 3, 4, and 5* Understand Multiplication
MAFS.4.OA.1.2 Multiply or divide to solve word problems involving multiplicative comparison, e.g., by using drawings and equations with a symbol for the unknown number to represent the problem, distinguishing multiplicative comparison from additive comparison.	Solve One-Step Word Problems Using Multiplication and Division* Relating Division to Multiplication* Multiplication and Division in Word Problems Dividing Whole Numbers* Multiplying by Two-Digit Numbers*
MAFS.4.OA.1.3 Solve multistep word problems posed with whole numbers and having whole-number answers using the four operations, including problems in which remainders must be interpreted. Represent these problems using equations with a letter standing for the unknown quantity. Assess the reasonableness of answers using mental computation and estimation strategies including rounding.	Adding Three-Digit Numbers* Subtracting Three-Digit Numbers* Understand Division, Part 1* Money Problems: Addition, Subtraction, Multiplication Solve Two-Step Word Problems Using the Four Operations* Using Area for Multiplication: Facts for 3, 4, and 5* Division Concepts: Area and Facts for 3, 4, and 5*

Mathematics Florida Standards (MAFS)	Aligned Lessons
	Division Concepts: Area and Facts for 6, 7, and 8* Equations and Numerical Relationships* Adding Multi-Digit Numbers* Subtracting Multi-Digit Numbers * Multiplying Two-Digit Numbers by One-Digit Numbers* Relating Division to Multiplication* Solve Multi-Step Problems Dividing Whole Numbers* Multiplying by Two-Digit Numbers* Four-Digit Dividends*
MAFS.4.OA.1.a Determine whether an equation is true or false by using comparative relational thinking.	Equations and Inequalities*
MAFS.4.OA.1.b Determine the unknown whole number in an equation relating four whole numbers using comparative relational thinking.	Review Addition and Subtraction Fact Families* Problem Solving and Number Sense* Equations and Numerical Relationships* Multiplication and Division in Word Problems*
MAFS.4.OA.2.4.a Find all factor pairs for a whole number in the range 1-100.	Finding Factors

Grade 4 (continued)

Mathematics Florida Standards (MAFS)	Aligned Lessons
	Identifying Factors
MAFS.4.OA.2.4.b Recognize that a whole number is a multiple of each of its factors. Determine whether a given whole number in the range 1-100 is a multiple of a given one-digit number.	Finding Multiples* Identifying Multiples*
MAFS.4.OA.2.4.c Determine whether a given whole number in the range 1-100 is prime or composite.	Prime and Composite Numbers
MAFS.4.OA.3.5 Generate a number . . . pattern that follows a given rule. . . .	Applying a Function Rule to Complete a Table Using a Function Table
MAFS.4.OA.3.5 Generate a number or shape pattern that follows a given rule. Identify apparent features of the pattern that were not explicit in the rule itself.	Number and Shape Patterns Analyze Patterns and Relationships* Describing Numerical Relationships*

Grade 5

Mathematics Florida Standards (MAFS)	Aligned Lessons
MAFS.5.G.1.1 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).	Understand the Coordinate Plane Polygons in the Coordinate Plane*
MAFS.5.G.1.2 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.	Understand the Coordinate Plane Analyze Patterns and Relationships* Polygons in the Coordinate Plane*
MAFS.5.G.2.3 Understand that attributes belonging to a category of two-dimensional figures also belong to all subcategories of that category.	Quadrilaterals Classifying Triangles Classify Two-Dimensional Figures
MAFS.5.G.2.4 Classify and organize two-dimensional figures into Venn diagrams based on the attributes of the figures.	Classify Two-Dimensional Figures*
MAFS.5.MD.1.1 Convert among different-sized standard measurement units (i.e., km, m, cm; kg, g; lb, oz.; l, ml; hr, min, sec) 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.	Solve Word Problems Involving Measurement Solve Word Problems Involving Conversions

**This lesson is related to the aligned standard*

Mathematics Florida Standards (MAFS)	Aligned Lessons
MAFS.5.MD.2.2 Make a line plot to display a data set of measurements in fractions of a unit (1/2, 1/4, 1/8). Use operations on fractions for this grade to solve problems involving information presented in line plots.	Interpreting Line Plots Line plots with fractions
MAFS.5.MD.3.3.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.	Understanding Volume* Understand and Measure Volume* Review Volume*
MAFS.5.MD.3.3.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.	Understanding Volume* Understand and Measure Volume Review Volume*
MAFS.5.MD.3.4 Measure volumes by counting unit cubes, using cubic cm, cubic in, cubic ft, and improvised units.	Understanding Volume* Understand and Measure Volume Review Volume*
MAFS.5.MD.3.5.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.	Understanding Volume* Understand and Measure Volume Find Volume of Rectangular Prisms Using Formulas Review Volume* Volume with Fractional Length*
MAFS.5.MD.3.5.b 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	Understanding Volume* Understand and Measure Volume

Mathematics Florida Standards (MAFS)	Aligned Lessons
in the context of solving real world and mathematical problems.	Find Volume of Rectangular Prisms Using Formulas* Review Volume Volume with Fractional Length*
MAFS.5.MD.3.5.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.	Understanding Volume* Find Volume of Rectangular Prisms Using Formulas Review Volume* Volume with Fractional Length*
MAFS.5.NF.1.1 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.	Understand Adding and Subtracting Fractions* Add and Subtract Fractions Add and Subtract Fractions in Word Problems* Adding and Subtracting Unlike Fractions*
MAFS.5.NF.1.2 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 . . .	Adding and Subtracting Unlike Fractions
MAFS.5.NF.1.2 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	Add and Subtract Fractions* Add and Subtract Fractions in Word Problems

Mathematics Florida Standards (MAFS)	Aligned Lessons
fractions to estimate mentally and assess the reasonableness of answers.	
MAFS.5.NF.2.3 Interpret a fraction as division of the numerator by the denominator (a/b = a ÷ 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.	Renaming Fractions As Decimals* Fractions as Division
MAFS.5.NF.2.4.a Interpret the product (a/b) × q as a parts of a partition of q into b equal parts; equivalently, as the result of a sequence of operations a × q ÷ b.	Multiplying a Whole Number and a Fraction* Multiplying Fractions*
MAFS.5.NF.2.4.b . . . Represent fraction products as rectangular areas.	Multiplying a Whole Number and a Fraction
MAFS.5.NF.2.4.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.	Understanding Area and Surface Area* Multiply Fractions to Find Area Multiplying Fractions* Concepts of Area and Perimeter*
MAFS.5.NF.2.5.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.	Understand Multiplication as Scaling* Multiplying a Whole Number and a Fraction* Multiplying Fractions*
MAFS.5.NF.2.5.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	Understand Multiplication as Scaling Multiplying a Whole Number and a Fraction*

Mathematics Florida Standards (MAFS)	Aligned Lessons
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×a)/(n×b) to the effect of multiplying a/b by 1.	Multiplying Fractions*
MAFS.5.NF.2.6 Solve real world problems involving multiplication of fractions and mixed numbers, e.g., by using visual fraction models or equations to represent the problem.	Understand Products of Fractions* Multiplying a Whole Number and a Fraction Multiplying Fractions
MAFS.5.NF.2.7.a Interpret division of a unit fraction by a non-zero whole number, and compute such quotients.	Understand Division with Unit Fractions Dividing Fractions* Division of Fractions*
MAFS.5.NF.2.7.b Interpret division of a whole number by a unit fraction, and compute such quotients.	Understand Division with Unit Fractions Dividing Fractions* Division of Fractions*
MAFS.5.NF.2.7.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.	Divide Unit Fractions in Word Problems Dividing Fractions* Division of Fractions*
MAFS.5.NBT.1.1 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.	Renaming Fractions As Decimals* Understand Place Value
MAFS.5.NBT.1.2 Explain patterns in the number of zeros of the product when multiplying a number by powers of 10, and	Multiplication and Division of Decimals by Positive Powers of Ten*

Mathematics Florida Standards (MAFS)	Aligned Lessons
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.	
MAFS.5.NBT.1.3.a Read and write decimals to thousandths using base-ten numerals, number names, and expanded form, e.g., 347.392 = 3 × 100 + 4 × 10 + 7 × 1 + 3 × (1/10) + 9 × (1/100) + 2 × (1/1000).	Renaming Fractions As Decimals* Read and Write Decimals
MAFS.5.NBT.1.3.b Compare two decimals to thousandths based on meanings of the digits in each place, using >, =, and < symbols to record the results of comparisons.	Compare and Order Decimal Numbers with Number Lines
MAFS.5.NBT.1.4 Use place value understanding to round decimals to any place.	Round decimals Adding and Subtracting Decimals With Money* Multiplication of Decimals*
MAFS.5.NBT.2.5 Fluently multiply multi-digit whole numbers using the standard algorithm.	Multiplying by Two-Digit Numbers
MAFS.5.NBT.2.6 Find whole-number quotients of whole numbers with . . . four-digit dividends and two-digit divisors, using strategies based on place value . . . and . . . the relationship between multiplication and division . . .	Division of Whole Numbers
MAFS.5.NBT.2.6 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	Divide Whole Numbers* Dividing Whole Numbers* Multiplication and Division of Decimals by Positive Powers of Ten*

Mathematics Florida Standards (MAFS)	Aligned Lessons
calculation by using equations, rectangular arrays, and/or area models.	
MAFS.5.NBT.2.7 . . . Divide decimals to hundredths, using concrete models or drawings and strategies based on place value, properties of operations . . . ; relate the strategy to a written method and explain the reasoning used.	Divide Decimals
MAFS.5.NBT.2.7 . . . Multiply . . . decimals to hundredths, using concrete models or drawings and strategies based on place value, properties of operations . . . ; relate the strategy to a written method and explain the reasoning used.	Multiply Decimals
MAFS.5.NBT.2.7 Add [and] subtract. . . 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.	Add and Subtract Decimals
MAFS.5.OA.1.1 Use parentheses, brackets, or braces in numerical expressions, and evaluate expressions with these symbols.	Write and Evaluate Expressions Numerical Expressions and Order of Operations Algebraic Expressions
MAFS.5.OA.1.2 Write simple expressions that record calculations with numbers . . .	Numerical Expressions and Order of Operations
MAFS.5.OA.1.2 Write simple expressions that record calculations with numbers, and interpret numerical expressions without evaluating them.	Write and Evaluate Expressions
MAFS.5.OA.2.3 Generate two numerical patterns using two given rules. Identify apparent relationships between	Analyze Patterns and Relationships

Mathematics Florida Standards (MAFS)	Aligned Lessons
corresponding terms. Form ordered pairs consisting of corresponding terms from the two patterns, and graph the ordered pairs on a coordinate plane.	Applying a Function Rule to Complete a Table* Using a Function Table* Coordinate Plane and Absolute Value*

Grade 6

Mathematics Florida Standards (MAFS)	Aligned Lessons
MAFS.6.EE.1.1 Write and evaluate numerical expressions involving whole-number exponents.	Numerical Expressions and Order of Operations
MAFS.6.EE.1.2.a Write expressions that record operations with numbers and with letters standing for numbers.	Algebraic Expressions
MAFS.6.EE.1.2.b Identify parts of an expression using mathematical terms (sum, term, product, factor, quotient, coefficient); view one or more parts of an expression as a single entity.	Algebraic Expressions
MAFS.6.EE.1.2.c Evaluate expressions at specific values of their variables . . . Perform arithmetic operations, including those involving whole-number exponents, in the conventional order when there are no parentheses to specify a particular order (Order of Operations).	Algebraic Expressions
MAFS.6.EE.1.3 Apply the properties of operations to generate equivalent expressions.	Equivalent Expressions
MAFS.6.EE.1.4 Identify when two expressions are equivalent (i.e., when the two expressions name the same number regardless of which value is substituted into them).	Equivalent Expressions
MAFS.6.EE.2.5 . . . Use substitution to determine whether a given number in a specified set makes an . . . inequality true.	Solving Inequalities
MAFS.6.EE.2.5 . . . Use substitution to determine whether a given number in a specified set makes an equation . . . true.	Solving Equations
MAFS.6.EE.2.5 Understand solving an equation or inequality as a process of answering a question: which values from a specified set, if any, make the equation	Using Equations to Solve Problems*

Mathematics Florida Standards (MAFS)	Aligned Lessons
or inequality true? Use substitution to determine whether a given number in a specified set makes an equation or inequality true.	
MAFS.6.EE.2.6 Use variables to represent numbers and write expressions when solving a real-world or mathematical problem; understand that a variable can represent an unknown number, or, depending on the purpose at hand, any number in a specified set.	Algebraic Expressions
MAFS.6.EE.2.7 Solve real-world and mathematical problems by writing and solving equations of the form x + p = q and px = q for cases in which p, q and x are all nonnegative rational numbers.	Using Equations to Solve Problems Equations and Inequalities*
MAFS.6.EE.2.8 Write an inequality of the form x > c or x < c to represent a constraint or condition in a real-world or mathematical problem. Recognize that inequalities of the form x > c or x < c have infinitely many solutions; represent solutions of such inequalities on number line diagrams.	Solving Inequalities
MAFS.6.EE.3.9 . . . Analyze the relationship between the dependent and independent variables using . . . tables, and relate these to the equation.	Applying a Function Rule to Complete a Table
MAFS.6.EE.3.9 Use variables to represent two quantities in a real-world problem that change in relationship to one another; write an equation to express one quantity, thought of as the dependent variable, in terms of the other quantity, thought of as the independent variable. Analyze the relationship between the dependent and independent variables using graphs and tables, and relate these to the equation.	Writing Function Rules Relationships Between Variables in Equations

Grade 6 (continued)

Mathematics Florida Standards (MAFS)	Aligned Lessons
MAFS.6.G.1.1 Find the area of right triangles . . .	Concepts of Area and Perimeter
MAFS.6.G.1.1 Find the area of right triangles, other triangles, special quadrilaterals, and polygons by composing into rectangles or decomposing into triangles and other shapes; apply these techniques in the context of solving real-world and mathematical problems.	Area of Parallelograms, Quadrilaterals, and Polygons
MAFS.6.G.1.2 Find the volume of a right rectangular prism with fractional edge lengths by packing it with unit cubes of the appropriate unit fraction edge lengths, and show that the volume is the same as would be found by multiplying the edge lengths of the prism. Apply the formulas V = l w h and V = b h to find volumes of right rectangular prisms with fractional edge lengths in the context of solving real-world and mathematical problems.	Volume with Fractional Length
MAFS.6.G.1.3 Draw polygons in the coordinate plane given coordinates for the vertices; use coordinates to find the length of a side joining points with the same first coordinate or the same second coordinate. Apply these techniques in the context of solving real-world and mathematical problems.	Polygons in the Coordinate Plane
MAFS.6.G.1.4 Represent three-dimensional figures using nets made up of rectangles and triangles, and use the nets to find the surface area of these figures. Apply these techniques in the context of solving real-world and mathematical problems.	Nets and Surface Area
MAFS.6.G.1.4 Represent three-dimensional figures using nets made up of rectangles and triangles. . .	Nets

Grade 6 (continued)

Mathematics Florida Standards (MAFS)	Aligned Lessons
MAFS.6.RP.1.1 Understand the concept of a ratio and use ratio language to describe a ratio relationship between two quantities.	Concept of Ratio Ratio Concepts
MAFS.6.RP.1.2 Understand the concept of a unit rate a/b associated with a ratio a:b with b # 0, and use rate language in the context of a ratio relationship.	Concept of Rate
MAFS.6.RP.1.3.a Make tables of equivalent ratios relating quantities with whole-number measurements, find missing values in the tables, and plot the pairs of values on the coordinate plane. Use tables to compare ratios.	Concept of Ratio Ratio Concepts*
MAFS.6.RP.1.3.b Solve unit rate problems including those involving unit pricing and constant speed.	Concept of Rate
MAFS.6.RP.1.3.c . . . Solve problems involving finding the whole, given a part and the percent.	Concept of Percent
MAFS.6.RP.1.3.c Find a percent of a quantity as a rate per 100 (e.g., 30% of a quantity means 30/100 times the quantity) . . .	Estimating and Calculating Percents
MAFS.6.RP.1.3.c Find a percent of a quantity as a rate per 100 (e.g., 30% of a quantity means 30/100 times the quantity); solve problems involving finding the whole, given a part and the percent.	Problem Solving with Ratio and Percent Percent Concepts*
MAFS.6.RP.1.3.e Understand the concept of Pi as the ratio of the circumference of a circle to its diameter.	Area and Circumference of a Circle*
MAFS.6.SP.1.1 Recognize a statistical question as one that anticipates variability in the data related to the question and accounts for it in the answers.	Understanding Statistics

**This lesson is related to the aligned standard*

Grade 6 (continued)

Mathematics Florida Standards (MAFS)	Aligned Lessons
MAFS.6.SP.1.2 Understand that a set of data collected to answer a statistical question has a distribution which can be described by its center, spread, and overall shape.	Understanding Statistics Understand Mean and MAD
MAFS.6.SP.1.3 Recognize that a measure of center for a numerical data set summarizes all of its values with a single number, while a measure of variation describes how its values vary with a single number.	Understand Mean and MAD
MAFS.6.SP.2.4 Display numerical data in plots on a number line, including . . . histograms . . .	Histograms
MAFS.6.SP.2.4 Display numerical data in plots on a number line, including . . . box plots.	Box Plots
MAFS.6.SP.2.4 Display numerical data in plots on a number line, including dot plots . . .	Dot Plots
MAFS.6.SP.2.4 Display numerical data in plots on a number line, including dot plots, histograms, and box plots.	Choosing Data Displays*
MAFS.6.SP.2.5.a Reporting the number of observations.	Box Plots*
MAFS.6.SP.2.5.b Describing the nature of the attribute under investigation, including how it was measured and its units of measurement.	Choosing Data Displays*
MAFS.6.SP.2.5.d Relating the choice of measures of center and variability to the shape of the data distribution and the context in which the data were gathered.	Choice of Measures of Center and Variability
MAFS.6.NS.1.1 . . . Compute quotients of fractions . . .	Dividing Fractions

**This lesson is related to the aligned standard*

Grade 6 (continued)

Mathematics Florida Standards (MAFS)	Aligned Lessons
MAFS.6.NS.1.1 Interpret and compute quotients of fractions, and solve word problems involving division of fractions by fractions, e.g., by using visual fraction models and equations to represent the problem.	Division of Fractions
MAFS.6.NS.2.2 Fluently divide multi-digit numbers using the standard algorithm.	Division of Whole Numbers* Four-Digit Dividends
MAFS.6.NS.2.3 Fluently . . . divide multi-digit decimals using the standard algorithm for each operation.	Division of Whole Numbers and Decimals Division of Decimals
MAFS.6.NS.2.3 Fluently . . . multiply . . . multi-digit decimals using the standard algorithm for each operation.	Multiplication of Decimals
MAFS.6.NS.2.3 Fluently add [and] subtract. . . multi-digit decimals using the standard algorithm for each operation.	Fluently add and subtract decimals
MAFS.6.NS.2.4 Find the greatest common factor of two whole numbers less than or equal to 100 . . .	Finding the Greatest Common Factor
MAFS.6.NS.2.4 Find the greatest common factor of two whole numbers less than or equal to 100 and the least common multiple of two whole numbers less than or equal to 12 . . .	Prime Factors
MAFS.6.NS.3.5 Understand that positive and negative numbers are used together to describe quantities having opposite directions or values (e.g., temperature above/below zero, elevation above/below sea level, credits/debits, positive/negative electric charge); use positive and negative numbers to represent quantities in real-world contexts, explaining the meaning of 0 in each situation.	Rational Numbers and Absolute Value

**This lesson is related to the aligned standard*

Grade 6 (continued)

Mathematics Florida Standards (MAFS)	Aligned Lessons
MAFS.6.NS.3.6.a Recognize opposite signs of numbers as indicating locations on opposite sides of 0 on the number line; recognize that the opposite of the opposite of a number is the number itself, e.g., -(-3) = 3, and that 0 is its own opposite.	Rational Numbers and Absolute Value
MAFS.6.NS.3.6.b Understand signs of numbers in ordered pairs as indicating locations in quadrants of the coordinate plane . . .	Plotting Ordered Pairs Review Plotting Ordered Pairs
MAFS.6.NS.3.6.b Understand signs of numbers in ordered pairs as indicating locations in quadrants of the coordinate plane; recognize that when two ordered pairs differ only by signs, the locations of the points are related by reflections across one or both axes.	Coordinate Plane and Absolute Value*
MAFS.6.NS.3.6.c . . . Find and position pairs of integers and other rational numbers on a coordinate plane.	Plotting Ordered Pairs Review Plotting Ordered Pairs Coordinate Plane and Absolute Value
MAFS.6.NS.3.6.c Find and position integers and other rational numbers on a horizontal or vertical number line diagram . . .	Rational Numbers and Absolute Value
MAFS.6.NS.3.7.a Interpret statements of inequality as statements about the relative position of two numbers on a number line diagram.	Rational Numbers and Absolute Value
MAFS.6.NS.3.7.b . . . explain statements of order for rational numbers in real-world contexts.	Rational Numbers and Absolute Value
MAFS.6.NS.3.7.c Understand the absolute value of a rational number as its distance from 0 on the number line; interpret	Rational Numbers and Absolute Value

**This lesson is related to the aligned standard*

Grade 6 (continued)

Mathematics Florida Standards (MAFS)	Aligned Lessons
absolute value as magnitude for a positive or negative quantity in a real-world situation.	
MAFS.6.NS.3.7.d Distinguish comparisons of absolute value from statements about order.	Rational Numbers and Absolute Value*
MAFS.6.NS.3.8 Solve . . . mathematical problems by graphing points in all four quadrants of the coordinate plane. . .	Plotting Ordered Pairs Review Plotting Ordered Pairs
MAFS.6.NS.3.8 Solve real-world and mathematical problems by graphing points in all four quadrants of the coordinate plane. Include use of coordinates and absolute value to find distances between points with the same first coordinate or the same second coordinate.	Coordinate Plane and Absolute Value

Mathematics Florida Standards (MAFS)	Aligned Lessons
MAFS.7.EE.1.1 Apply properties of operations as strategies to . . . factor . . . and expand linear expressions with rational coefficients.	Linear Expressions
MAFS.7.EE.1.1 Apply properties of operations as strategies to add, subtract, factor, and expand linear expressions with rational coefficients.	Equivalent Expressions
MAFS.7.EE.1.2 Understand that rewriting an expression in different forms in a problem context can shed light on the problem and how the quantities in it are related.	Linear Expressions*
MAFS.7.EE.2.3 Solve multi-step real-life and mathematical problems posed with positive and negative rational numbers in any form (whole numbers, fractions, and decimals), using tools strategically. Apply properties of operations to calculate with numbers in any form; convert between forms as appropriate; and assess the reasonableness of answers using mental computation and estimation strategies.	Problem Solving with Rational Numbers
MAFS.7.EE.2.4.a Solve word problems leading to equations of the form $px + q = r$ and $p(x + q) = r$, where p, q, and r are specific rational numbers. Solve equations of these forms fluently. Compare an algebraic solution to an arithmetic solution, identifying the sequence of the operations used in each approach.	Using Equations to Solve Problems Problem Solving with Equations
MAFS.7.EE.2.4.b Solve word problems leading to inequalities of the form $px + q > r$ or $px + q < r$, where p, q, and r are specific rational numbers. Graph the solution set of the inequality and interpret it in the context of the problem.	Problem Solving with Inequalities

Grade 7 (continued)

Mathematics Florida Standards (MAFS)	Aligned Lessons
MAFS.7.G.1.1 Solve problems involving scale drawings of geometric figures, including computing actual lengths and areas from a scale drawing and reproducing a scale drawing at a different scale.	Scale Drawings
MAFS.7.G.1.2 Draw (freehand, with ruler and protractor, and with technology) geometric shapes with given conditions. Focus on constructing triangles from three measures of angles or sides, noticing when the conditions determine a unique triangle, more than one triangle, or no triangle.	Polygons in the Coordinate Plane* Construction of Triangles
MAFS.7.G.1.3 Describe the two-dimensional figures that result from slicing three-dimensional figures, as in plane sections of right rectangular prisms and right rectangular pyramids.	Cross-sections of Prism and Pyramids
MAFS.7.G.2.4 Know the formulas for the area and circumference of a circle and use them to solve problems; give an informal derivation of the relationship between the circumference and area of a circle.	Area and Circumference of a Circle
MAFS.7.G.2.5 Use facts about supplementary, complementary, vertical, and adjacent angles in a multi-step problem to write and solve simple equations for an unknown angle in a figure.	Problem Solving with Angles
MAFS.7.G.2.6 Solve real-world and mathematical problems involving . . . surface area of . . . three-dimensional objects composed of . . . cubes and right prisms.	Surface Area of Composed Figures
MAFS.7.G.2.6 Solve real-world and mathematical problems involving . . . volume . . . of . . . three-dimensional objects composed of . . . cubes and right prisms.	Volume of Composed Figures

**This lesson is related to the aligned standard*

Grade 7 (continued)

Mathematics Florida Standards (MAFS)	Aligned Lessons
MAFS.7.G.2.6 Solve real-world and mathematical problems involving area . . . of two- . . . dimensional objects composed of triangles, quadrilaterals [and] polygons . . .	Area of Composed Figures
MAFS.7.RP.1.1 Compute unit rates associated with ratios of fractions, including ratios of lengths, areas and other quantities measured in like or different units.	Concept of Rate Ratios involving Complex Fractions
MAFS.7.RP.1.2.a Decide whether two quantities are in a proportional relationship, e.g., by testing for equivalent ratios in a table or graphing on a coordinate plane and observing whether the graph is a straight line through the origin.	Recognizing Proportional Relationships Representing Proportional Relationships*
MAFS.7.RP.1.2.b Identify the constant of proportionality (unit rate) in tables, graphs, equations, diagrams, and verbal descriptions of proportional relationships.	Recognizing Proportional Relationships Representing Proportional Relationships*
MAFS.7.RP.1.2.c Represent proportional relationships by equations.	Equations for Proportional Relationships
MAFS.7.RP.1.2.d Explain what a point (x, y) on the graph of a proportional relationship means in terms of the situation, with special attention to the points (0, 0) and (1, r) where r is the unit rate.	Equations for Proportional Relationships
MAFS.7.RP.1.3 Use proportional relationships to solve multistep ratio and percent problems.	Problem Solving with Proportional Relationships
MAFS.7.SP.1.1 Understand that statistics can be used to gain information about a population by examining a sample of the population; generalizations about a population from a sample are valid only if the sample is representative of that population. Understand that random	Random Samples Making Statistical Inferences

**This lesson is related to the aligned standard*

Mathematics Florida Standards (MAFS)	Aligned Lessons
sampling tends to produce representative samples and support valid inferences.	
MAFS.7.SP.1.2 Use data from a random sample to draw inferences about a population with an unknown characteristic of interest. Generate multiple samples (or simulated samples) of the same size to gauge the variation in estimates or predictions.	Making Statistical Inferences
MAFS.7.SP.2.3 Informally assess the degree of visual overlap of two numerical data distributions with similar variabilities, measuring the difference between the centers by expressing it as a multiple of a measure of variability.	Using Mean and Mean Absolute Deviation to Compare Data* Using Measures of Center and Variability to Compare Data*
MAFS.7.SP.2.4 Use measures of center and measures of variability for numerical data from random samples to draw informal comparative inferences about two populations.	Using Mean and Mean Absolute Deviation to Compare Data* Using Measures of Center and Variability to Compare Data*
MAFS.7.SP.3.5 Understand that the probability of a chance event is a number between 0 and 1 that expresses the likelihood of the event occurring. Larger numbers indicate greater likelihood. A probability near 0 indicates an unlikely event, a probability around 1/2 indicates an event that is neither unlikely nor likely, and a probability near 1 indicates a likely event.	Probability Concepts
MAFS.7.SP.3.6 Approximate the probability of a chance event by collecting data on the chance process that produces it and observing its long-run relative frequency, and predict the approximate relative frequency given the probability.	Experimental Probability
MAFS.7.SP.3.7.a Develop a uniform probability model by assigning equal	Probability Models

Mathematics Florida Standards (MAFS)	Aligned Lessons
probability to all outcomes, and use the model to determine probabilities of events.	
MAFS.7.SP.3.7.b Develop a probability model (which may not be uniform) by observing frequencies in data generated from a chance process.	Experimental Probability
MAFS.7.SP.3.8.a Understand that, just as with simple events, the probability of a compound event is the fraction of outcomes in the sample space for which the compound event occurs.	Probability of Compound Events
MAFS.7.SP.3.8.b Represent sample spaces for compound events using methods such as organized lists, tables and tree diagrams. For an event described in everyday language (e.g., "rolling double sixes"), identify the outcomes in the sample space which compose the event.	Probability of Compound Events
MAFS.7.SP.3.8.c Design and use a simulation to generate frequencies for compound events.	Simulations of Compound Events
MAFS.7.NS.1.1.a Describe situations in which opposite quantities combine to make 0.	Rational Numbers and Absolute Value* Addition and Subtraction of Positive and Negative Integers
MAFS.7.NS.1.1.b Understand p + q as the number located a distance |q| from p, in the positive or negative direction depending on whether q is positive or negative. Show that a number and its opposite have a sum of 0 (are additive inverses). Interpret sums of rational numbers by describing real-world contexts.	Coordinate Plane and Absolute Value* Addition and Subtraction of Positive and Negative Integers* Understanding Adding and Subtracting Positive and Negative Numbers Addition and Subtraction of Rational Numbers

Mathematics Florida Standards (MAFS)	Aligned Lessons
MAFS.7.NS.1.1.c Understand subtraction of rational numbers as adding the additive inverse, p - q = p + (-q). Show that the distance between two rational numbers on the number line is the absolute value of their difference, and apply this principle in real-world contexts.	Coordinate Plane and Absolute Value* Addition and Subtraction of Positive and Negative Integers* Understanding Adding and Subtracting Positive and Negative Numbers
MAFS.7.NS.1.1.d Apply properties of operations as strategies to add and subtract rational numbers.	Addition and Subtraction of Rational Numbers
MAFS.7.NS.1.2.a Understand that multiplication is extended from fractions to rational numbers . . . Interpret products of rational numbers by describing real-world contexts.	Multiplication and Division of Positive and Negative Integers
MAFS.7.NS.1.2.a Understand that multiplication is extended from fractions to rational numbers by requiring that operations continue to satisfy the properties of operations, particularly the distributive property, leading to products such as (-1) (-1) = 1 and the rules for multiplying signed numbers. Interpret products of rational numbers by describing real-world contexts.	Multiplication and Division of Rational Numbers
MAFS.7.NS.1.2.b Understand that integers can be divided, provided that the divisor is not zero, and every quotient of integers (with non-zero divisor) is a rational number. If p and q are integers, then -(p/q) = (-p)/ q = p/(-q). Interpret quotients of rational numbers by describing real-world contexts.	Multiplication and Division of Positive and Negative Integers Multiplication and Division of Rational Numbers
MAFS.7.NS.1.2.c Apply properties of operations as strategies to multiply and divide rational numbers.	Multiplication and Division of Positive and Negative Integers* Multiplication and Division of Rational Numbers

Grade 7 (continued)

Mathematics Florida Standards (MAFS)	Aligned Lessons
MAFS.7.NS.1.2.d Convert a rational number to a decimal using long division; know that the decimal form of a rational number terminates in 0s or eventually repeats.	Expressing Fractions as Decimals
MAFS.7.NS.1.3 Solve real-world and mathematical problems involving the four operations with rational numbers.	Problem Solving with Rational Numbers Multiplication and Division of Rational Numbers* Addition and Subtraction of Rational Numbers*

Mathematics Florida Standards (MAFS)	Aligned Lessons
MAFS.8.EE.1.1 Know and apply the properties of integer exponents to generate equivalent numerical expressions.	Properties of Integer Exponents
MAFS.8.EE.1.2 Use square root and cube root symbols to represent solutions to equations of the form $x^2 = p$ and $x^3 = p$, where p is a positive rational number. Evaluate square roots of small perfect squares and cube roots of small perfect cubes. Know that #2 is irrational.	Square Roots and Cube Roots
MAFS.8.EE.1.3 Use numbers expressed in the form of a single digit times an integer power of 10 to estimate very large or very small quantities, and to express how many times as much one is than the other.	Scientific Notation
MAFS.8.EE.1.4 Perform operations with numbers expressed in scientific notation, including problems where both decimal and scientific notation are used. Use scientific notation and choose units of appropriate size for measurements of very large or very small quantities (e.g., use millimeters per year for seafloor spreading). Interpret scientific notation that has been generated by technology.	Operations with Numbers Expressed in Scientific Notation
MAFS.8.EE.2.5 Graph proportional relationships, interpreting the unit rate as the slope of the graph. Compare two different proportional relationships represented in different ways.	Representing Proportional Relationships
MAFS.8.EE.2.6 Use similar triangles to explain why the slope m is the same between any two distinct points on a non-vertical line in the coordinate plane; derive the equation $y = mx$ for a line through the origin and the equation $y = mx + b$ for a line intercepting the vertical axis at b.	Linear Functions* Linear Equations and Slope

Mathematics Florida Standards (MAFS)	Aligned Lessons
MAFS.8.EE.3.7.a Give examples of linear equations in one variable with one solution, infinitely many solutions, or no solutions. Show which of these possibilities is the case by successively transforming the given equation into simpler forms, until an equivalent equation of the form x = a, a = a, or a = b results (where a and b are different numbers).	Solving Linear Equations
MAFS.8.EE.3.7.b Solve linear equations with rational number coefficients, including equations whose solutions require expanding expressions using the distributive property and collecting like terms.	Solving Linear Equations with Rational Coefficients
MAFS.8.EE.3.8.a Understand that solutions to a system of two linear equations in two variables correspond to points of intersection of their graphs, because points of intersection satisfy both equations simultaneously.	Systems of Linear Equations Solving Systems of Linear Equations Algebraically*
MAFS.8.EE.3.8.b Solve systems of two linear equations in two variables algebraically, and estimate solutions by graphing the equations. Solve simple cases by inspection.	Systems of Linear Equations Solving Systems of Linear Equations Algebraically
MAFS.8.F.1.1 Understand that a function is a rule that assigns to each input exactly one output. The graph of a function is the set of ordered pairs consisting of an input and the corresponding output.	Concept of a Function
MAFS.8.F.1.2 Compare properties of two functions each represented in a different way (algebraically, graphically, numerically in tables, or by verbal descriptions).	Linear Functions, Rate of Change and Initial Value Properties of Functions Using a Graph to Analyze a Functional Relationship

Mathematics Florida Standards (MAFS)	Aligned Lessons
MAFS.8.F.1.3 Interpret the equation y = mx + b as defining a linear function, whose graph is a straight line; give examples of functions that are not linear.	Linear Functions
MAFS.8.F.2.4 Construct a function to model a linear relationship between two quantities. Determine the rate of change and initial value of the function from a description of a relationship or from two (x, y) values, including reading these from a table or from a graph. Interpret the rate of change and initial value of a linear function in terms of the situation it models, and in terms of its graph or a table of values.	Linear Functions, Rate of Change and Initial Value
MAFS.8.F.2.5 Describe qualitatively the functional relationship between two quantities by analyzing a graph (e.g., where the function is increasing or decreasing, linear or nonlinear). Sketch a graph that exhibits the qualitative features of a function that has been described verbally.	Using a Graph to Analyze a Functional Relationship
MAFS.8.G.1.1.a Verify experimentally the properties of rotations, reflections, and translations: Lines are taken to lines, and line segments to line segments of the same length.	Properties of Translations and Reflections Properties of Rotations
MAFS.8.G.1.1.b Verify experimentally the properties of rotations, reflections, and translations: Angles are taken to angles of the same measure.	Properties of Translations and Reflections Properties of Rotations
MAFS.8.G.1.1.c Verify experimentally the properties of rotations, reflections, and translations: Parallel lines are taken to parallel lines.	Properties of Translations and Reflections Properties of Rotations
MAFS.8.G.1.2 Understand that a two-dimensional figure is congruent to another if the second can be obtained from the first	Properties of Translations and Reflections

Mathematics Florida Standards (MAFS)	Aligned Lessons
by a sequence of rotations, reflections, and translations; given two congruent figures, describe a sequence that exhibits the congruence between them.	Properties of Rotations
MAFS.8.G.1.3 Describe the effect of dilations, translations, rotations, and reflections on two-dimensional figures using coordinates.	Properties of Translations and Reflections Properties of Rotations
MAFS.8.G.1.4 Understand that a two-dimensional figure is similar to another if the second can be obtained from the first by a sequence of rotations, reflections, translations, and dilations; given two similar two-dimensional figures, describe a sequence that exhibits the similarity between them.	Properties of Dilations
MAFS.8.G.1.5 Use informal arguments to establish facts about . . . the angles created when parallel lines are cut by a transversal . . .	Geometric Properties involving Angles
MAFS.8.G.1.5 Use informal arguments to establish facts about the angle sum and exterior angle of triangles . . .	Angle Sums Properties
MAFS.8.G.2.6 Explain a proof of the Pythagorean Theorem and its converse.	The Pythagorean Theorem
MAFS.8.G.2.7 Apply the Pythagorean Theorem to determine unknown side lengths in right triangles in real-world and mathematical problems in two and three dimensions.	The Pythagorean Theorem
MAFS.8.G.2.8 Apply the Pythagorean Theorem to find the distance between two points in a coordinate system.	Applications of the Pythagorean Theorem
MAFS.8.G.3.9 Know the formulas for the volumes of cones, cylinders, and spheres	Volume of Cylinders, Cones, and Spheres.

Mathematics Florida Standards (MAFS)	Aligned Lessons
and use them to solve real-world and mathematical problems.	
MAFS.8.SP.1.1 Construct and interpret scatter plots for bivariate measurement data to investigate patterns of association between two quantities. Describe patterns such as clustering, outliers, positive or negative association, linear association, and nonlinear association.	Scatter Plots
MAFS.8.SP.1.2 Know that straight lines are widely used to model relationships between two quantitative variables. For scatter plots that suggest a linear association, informally fit a straight line, and informally assess the model fit by judging the closeness of the data points to the line.	Linear Models
MAFS.8.SP.1.3 Use the equation of a linear model to solve problems in the context of bivariate measurement data, interpreting the slope and intercept.	Problem Solving with Linear Models
MAFS.8.SP.1.4 Understand that patterns of association can also be seen in bivariate categorical data by displaying frequencies and relative frequencies in a two-way table. Construct and interpret a two-way table summarizing data on two categorical variables collected from the same subjects. Use relative frequencies calculated for rows or columns to describe possible association between the two variables.	Associations Between Two Categorical Variables
MAFS.8.NS.1.1 Know that numbers that are not rational are called irrational. Understand informally that every number has a decimal expansion; for rational numbers show that the decimal expansion repeats eventually, and convert a decimal	Expressing Fractions as Decimals* Rational and Irrational Numbers

Mathematics Florida Standards (MAFS)	Aligned Lessons
expansion which repeats eventually into a rational number.	
MAFS.8.NS.1.2 Use rational approximations of irrational numbers to compare the size of irrational numbers, locate them approximately on a number line diagram, and estimate the value of expressions (e.g., $\#^2$).	Rational and Irrational Numbers Approximating Irrational Numbers