


# Introduction to the **Revised Mathematics TEKS**

NEW CONTENT, NEW OPPORTUNITIES  
TO LEARN: GAP ANALYSIS JOURNAL  
GRADES 3 - 5



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### Gap Analysis Notes Page

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## Grade 3 Curriculum and Instructional Gap Analysis Implementation Year 2014-2015

Revised TEKS (2012) Strands	Curriculum Gap Analysis <i>What new content moves into the grade 3 curriculum in 2014-2015?</i>	Instructional Gap Analysis <i>Considering previous years of instruction, what student expectations will a grade 3 student not have experienced by 2014-2015?</i>
<b>Number and Operations</b>	<ul style="list-style-type: none"> <li>• Compose and decompose numbers to 100,000 as a sum of so many ten thousands, so many thousands, so many hundreds, so many tens, and so many ones using <b>objects, pictorial models, and numbers</b>. 3(2)(A)</li> <li>• Describe the relationship in the base-10 place value system through the hundred thousands place. 3(2)(B)</li> <li>• Represent a number on a number line between consecutive multiples of ten and use words to describe relative size of numbers in order to round whole numbers. 3(2)(C)</li> <li>• Compare and order whole numbers to <b>100,000</b> and represent the comparison using symbols. 3(2)(D)</li> <li>• Represent fractions with denominators of 2, 3, 4, 6, or 8 using concrete objects, <b>pictorial models, including strip diagrams and number lines</b>. 3(3)(A)</li> <li>• Compose and decompose a fraction <math>a/b</math> with a numerator greater than zero and less than or equal to <math>b</math> as a sum of parts <math>1/b</math>. 3(3)(D)</li> <li>• Solve problems involving partitioning an object or set of objects among two or more recipients using pictorial representations of fractions with denominators of 2, 3, 4, 6, and 8. 3(3)(E)</li> <li>• Represent equivalent fractions with denominators of 2, 3, 4, 6, and 8 using objects and <b>pictorial models, including number lines</b>. 3(3)(F)</li> <li>• Explain that two fractions are equivalent if and only if they are both represented by the same point on the number line or represent the same portion of a same size whole for an area model. 3(3)(G)</li> <li>• Compare two fractions having the same numerator or denominator in problems by reasoning about their sizes and <b>justifying using symbols, words, objects and pictorial models</b>. 3(3)(H)</li> <li>• Solve <b>with fluency one-step and two-step problems</b> involving addition and subtraction within <b>1,000</b> using <b>place value, properties of operations, and the relationship between addition and subtraction</b>. 3(4)(A)</li> <li>• Recall facts to multiply up to 10 by 10 with automaticity and recall the corresponding division facts. 3(4)(F)</li> <li>• Determine if a number is even or odd using divisibility rules. 3(4)(I)</li> <li>• <b>Determine a quotient</b> using the relationship between multiplication and division. 3(4)(J)</li> <li>• Solve problems involving multiplication and division <b>less than 100</b> using strategies based on objects; <b>pictorial model, including arrays, area models, and equal groups; properties of operations; or recall of facts</b>. 3(4)(K)</li> </ul>	<ul style="list-style-type: none"> <li>• Compose and decompose numbers to <b>1,200</b> as a sum of so many thousands, so many hundreds, so many tens, and so many ones using concrete and <b>pictorial models</b>. 2(2)(A)</li> <li>• Use standard, word, and expanded form to represent number up to <b>1,200</b>. 2(2)(B)</li> <li>• Generate a number that is greater than or less than a given whole number up to 1,200. 2(2)(C)</li> <li>• Use place value to compare and order whole numbers to <b>1,200</b> using comparative language, numbers, and symbols. 2(2)(D)</li> <li>• Explain that the more fractional parts used to make a whole, the smaller the part; and the fewer the fractional parts, the larger the part. 2(3)(B)</li> <li>• Use concrete models to count fractional parts beyond one whole using words, and recognize how many parts it takes to equal one whole. 2(3)(C)</li> <li>• Recall basic facts to add and subtract <b>within 20 with automaticity</b>. 2(4)(A)</li> <li>• Solve one-step and multistep word problems involving addition and subtraction within 1,000 using a variety of strategies based on place value, including algorithms. 2(4)(C)</li> <li>• Generate and solve problem situations for a given number sentence involving addition and subtraction of whole number within 1,000. 2(4)(D)</li> </ul>

Revised TEKS (2012) Strands	Curriculum Gap Analysis <i>What new content moves into the grade 3 curriculum in 2014-2015?</i>	Instructional Gap Analysis <i>Considering previous years of instruction, what student expectations will a grade 3 student not have experienced by 2014-2015?</i>
Algebraic Reasoning	<ul style="list-style-type: none"> <li>Represent one- and two- step problems involving addition and subtraction of whole numbers to 1,000 using pictorial models, <b>numbers lines</b>, and <b>equations</b>. 3(5)(A)</li> <li>Represent and solve one- and two-step multiplication and division problems within 100 using arrays, strip diagrams, and equations. 3(5)(B)</li> <li>Describe a multiplication expression as a comparison such as <math>3 \times 24</math> represents 3 times as much as 24. 3(5)(C)</li> <li>Determine the unknown whole number in a multiplication or division equation relating three whole numbers when the unknown is either a missing factor or product. 3(5)(D)</li> </ul>	<ul style="list-style-type: none"> <li>Use an understanding of place value to determine the number that is 10 or 100 more or less than a given number up to 1,200. 2(7)(B)</li> </ul>
Geometry and Measurement	<ul style="list-style-type: none"> <li>Classify and <b>sort</b> two and three-dimensional figures based on attributes. 3(6)(A)</li> <li>Determine the area of rectangles using multiplication. 3(6)(C)</li> <li>Decompose composite figures formed by rectangles to determine the area of the original figure using the additive property of area. 3(6)(D)</li> <li>Decompose two congruent two-dimensional figures into equal areas and express the area of each part as a unit fraction. 3(6)(E)</li> <li>Determine the perimeter of a polygon or a <b>missing length when given perimeter and remaining side lengths</b>. 3(7)(B)</li> <li><b>Solve problems</b> involving addition and subtraction of time intervals in minutes using pictorial models or tools. 3(7)(C)</li> <li>Determine when it is appropriate to use measurements of liquid volume (capacity) or weight. 3(7)(D)</li> <li>Determine liquid volume (capacity) or weight <b>using appropriate units and tools</b>. 3(7)(E)</li> </ul>	<ul style="list-style-type: none"> <li>Create two-dimensional shapes based on given attributes including the number of sides and vertices. 2(8)(A)</li> <li>Classify and sort three-dimensional solids based on attributes using formal geometric language. 2(8)(B)</li> <li>Classify polygons according to attributes including the number of sides and vertices. 2(8)(C)</li> <li>Compose two-dimensional shapes and three-dimensional solids with given properties or attributes. 2(8)(D)</li> <li>Describe the inverse relationship between the size of the unit and the number of units needed to equal the length of an object. 2(9)(B)</li> <li>Represent whole numbers as distances from any given location on a number line. 2(9)(C)</li> <li>Determine the length of an object to the nearest marked unit using ruler, yardsticks, meter sticks or measuring tapes. 2(9)(D)</li> <li>Read and write time to the nearest <b>one-minute increment</b> and distinguish between a.m. and p.m. 2(9)(G)</li> </ul>
Data Analysis	<ul style="list-style-type: none"> <li>Summarize a data set using a <b>frequency table, dot plot</b>, pictograph, or bar graph. 3(8)(A)</li> <li>Solve one- and two-step problems using data represented with a <b>frequency table, dot plot</b>, pictograph, or bar graph. 3(8)(B)</li> </ul>	<ul style="list-style-type: none"> <li>Write and solve one-step word problems involving addition or subtraction using data represented within pictographs and bar graphs. 2(10)(C)</li> </ul>
Personal financial literacy	<ul style="list-style-type: none"> <li>Explain the connection between human capital/labor and income. 3(9)(A)</li> <li>Describe the relationship between the availability or scarcity of resources and how that impacts cost. 3(9)(B)</li> <li>Identify the cost and benefits of planned and unplanned spending decisions. 3(9)(C)</li> <li>Explain that credit is used when wants or needs exceed the ability to pay and that it is the borrower's responsibility to pay it back to the lender, usually with interest. 3(9)(D)</li> <li>List reasons to save and explain the benefit of a savings plan, including for college. 3(9)(E)</li> <li>Identify decisions involving income, spending, saving, credit, and charitable giving. 3(9)(F)</li> </ul>	<ul style="list-style-type: none"> <li>Reference the Vertically Aligned TEKS Charts.</li> </ul>

**Grade 4 Curriculum and Instructional Gap Analysis  
Implementation Year 2014-2015**

Revised TEKS (2012) Strands	Curriculum Gap Analysis <i>What new content moves into the grade 4 curriculum in 2014-2015?</i>	Instructional Gap Analysis <i>Considering previous years of instruction, what student expectations will a grade 4 student not have experienced by 2014-2015?</i>
<b>Number and operations</b>	<ul style="list-style-type: none"> <li>• Interpret the value of each place-value position as ten times the position to the right and one-tenth of the value of the place to its left. 4(2)(A)</li> <li>• Round whole numbers to <b>hundred thousands place</b>. 4(2)(D)</li> <li>• Determine the corresponding decimal to the <b>tenths or hundredths place</b> of a specified point on a number line. 4(2)(H)</li> <li>• Represent a fraction <math>a/b</math> as a sum of fractions <math>1/b</math>. 4(3)(A)</li> <li>• Decompose fractions in more than one way into a sum of fractions with the same denominator using concrete and pictorial models and record results with symbolic representations. 4(3)(B)</li> <li>• Determine if two given fractions are equivalent using a variety of methods 4(3)(C)</li> <li>• Compare two fractions with different numerators and different denominators and represent the comparison using the symbols <math>&gt;</math>, <math>&lt;</math>, or <math>=</math>. 4(3)(D)</li> <li>• Represent and solve addition and subtraction of fractions with equal denominators using object and pictorial models that build to the number line and properties of operations. 4(3)(E)</li> <li>• Evaluate the reasonableness of sums and differences of fractions using benchmark fractions. 4(3)(F)</li> <li>• Add and subtract whole numbers and decimals to <b>hundredths place using the standard algorithm</b>. 4(4)(A)</li> <li>• Represent the product of 2 two-digit numbers using arrays, area models, or <b>equations</b> 4(4)(C)</li> <li>• Multiply up to a <b>four-digit number by a one-digit</b> number and two-digit by two-digit number. 4(4)(D)</li> <li>• Divide up to a <b>four-digit dividend by a one-digit divisor</b>. 4(4)(F)</li> <li>• Round to the nearest 10, 100 or 1,000 or use compatible numbers to estimate solutions to <b>addition, subtraction, multiplication, and division</b> problems. 4(4)(G)</li> <li>• Solve with <b>fluency</b> one- and two-step problems involving multiplication and division, <b>including interpreting remainders</b>. 4(4)(H)</li> </ul>	<ul style="list-style-type: none"> <li>• Compose and decompose numbers to 100,000 as a sum of so many ten thousands, so many thousands, so many hundreds, so many tens, and so many ones using <b>objects, pictorial models</b>, and numbers. 3(2)(A)</li> <li>• Describe the relationship in the base-10 place value system through the hundred thousands place. 3(2)(B)</li> <li>• Represent a number on a number line between consecutive multiples of ten and use words to describe relative size of numbers in order to round whole numbers. 3(2)(C)</li> <li>• Compare and order whole numbers to <b>100,000</b> and represent the comparison using symbols. 3(2)(D)</li> <li>• Represent fractions with denominators of 2, 3, 4, 6, or 8 using concrete objects, <b>pictorial models, including strip diagrams and number lines</b>. 3(3)(A)</li> <li>• Compose and decompose a fraction <math>a/b</math> with a numerator greater than zero and less than or equal to <math>b</math> as a sum of parts <math>1/b</math>. 3(3)(D)</li> <li>• Solve problems involving partitioning an object or set of objects among two or more recipients using pictorial representations of fractions with denominators of 2, 3, 4, 6, and 8. 3(3)(E)</li> <li>• Represent equivalent fractions with denominators of 2, 3, 4, 6, and 8 using objects and <b>pictorial models, including number lines</b>. 3(3)(F)</li> <li>• Explain that two fractions are equivalent if and only if they are both represented by the same point on the number line or represent the same portion of a same size whole for an area model. 3(3)(G)</li> <li>• Compare two fractions having the same numerator or denominator in problems by reasoning about their sizes and <b>justifying using symbols, words, objects and pictorial models</b>. 3(3)(H)</li> <li>• Solve <b>with fluency one-step and two-step problems</b> involving addition and subtraction within <b>1,000</b> using <b>place value, properties of operations, and the relationship between addition and subtraction</b>. 3(4)(A)</li> <li>• Recall facts to multiply up to 10 by 10 with automaticity and recall the corresponding division facts. 3(4)(F)</li> <li>• Determine if a number is even or odd using divisibility rules. 3(4)(I)</li> <li>• <b>Determine a quotient</b> using the relationship between multiplication and division. 3(4)(J)</li> <li>• Solve problems involving multiplication and division <b>less than 100</b> using strategies based on objects; <b>pictorial model, including arrays, area models, and equal groups: properties of operations; or recall of facts</b>. 3(4)(K)</li> </ul>

Revised TEKS (2012) Strands	Curriculum Gap Analysis <i>What new content moves into the grade 4 curriculum in 2014-2015?</i>	Instructional Gap Analysis <i>Considering previous years of instruction, what student expectations will a grade 4 student not have experienced by 2014-2015?</i>
<b>Algebraic reasoning</b>	<ul style="list-style-type: none"> <li>Represent multistep problems with whole numbers using strip diagrams and an equation with a letters standing for the unknown quantity. 4(5)(A) Note: This SE has added specificity with the strip diagram that may or may not have been used by students.</li> <li>Represent problems using an input-output table and numerical expressions to generate a number pattern that follows a given rule representing the relationship of the values in the resulting sequence and their position in the sequence. 4(5)(B) Note: This SE has added specificity with the input-output table and numerical expressions that may or may not have been used by students.</li> </ul>	<ul style="list-style-type: none"> <li>Represent one- and two- step problems involving addition and subtraction of whole numbers to 1,000 using pictorial models, <b>numbers lines</b>, and <b>equations</b>. 3(5)(A)</li> <li>Represent and solve one- and two-step multiplication and division problems within 100 using arrays, strip diagrams, and equations. 3(5)(B)</li> <li>Describe a multiplication expression as a comparison such as 3 x 24 represents 3 times as much as 24. 3(5)(C)</li> <li>Determine the unknown whole number in a multiplication or division equation relating three whole numbers when the unknown is either a missing factor or product. 3(5)(D)</li> </ul>
<b>Geometry and measurement</b>	<ul style="list-style-type: none"> <li>Use models to determine formulas for perimeter and area of a rectangle. 4(5)(C)</li> <li>Solve problems related to perimeter and area of rectangles. 4(5)(D)</li> <li>Identify <b>points, lines, line segments, rays, angles</b>, and perpendicular and parallel lines. 4(6)(A)</li> <li>Apply knowledge of right angles to <b>identify acute, right and obtuse triangles</b> 4(6)(C)</li> <li>Illustrate the measure of an angle as the part of a circle whose center is at the vertex of the angle. 4(7)(A)</li> <li>Illustrate degrees as the units used to measure an angle, where 1/360 of an circle is 1 degree and an angle “cuts” n/360 out of any circle whose centers is at the angle’s vertex has a measure of n degrees. 4(7)(B)</li> <li>Determine the approximate measure of angles in degrees using a protractor. 4(7)(C)</li> <li>Draw an angle with a given measure. 4(7)(D)</li> <li>Determine the measure of an unknown angle formed by two non-overlapping adjacent angles given one or both angle measures. 4(7)(E)</li> <li>Identify relative sizes of measurement units with the customary and <b>metric</b> systems. 4(8)(A)</li> <li>Convert measurements within the <b>metric</b> system. 4(8)(B)</li> <li>Solve problems that deal with measurements of length, <b>intervals of time</b>, liquid volume, mass, and <b>money</b> using addition, subtraction, multiplication, or division. 4(8)(C)</li> </ul>	<ul style="list-style-type: none"> <li>Classify and <b>sort</b> two and three-dimensional figures based on attributes. 3(6)(A)</li> <li>Determine the area of rectangles using multiplication. 3(6)(C)</li> <li>Decompose composite figures formed by rectangles to determine the area of the original figure using the additive property of area. 3(6)(D)</li> <li>Decompose two congruent two-dimensional figures into equal areas and express the area of each part as a unit fraction. 3(6)(E)</li> <li>Determine the perimeter of a polygon or a <b>missing length when given perimeter and remaining side lengths</b>. 3(7)(B)</li> <li><b>Solve problems</b> involving addition and subtraction of time intervals in minutes using pictorial models or tools. 3(7)(C)</li> <li>Determine when it is appropriate to use measurements of liquid volume (capacity) or weight. 3(7)(D)</li> <li>Determine liquid volume (capacity) or weight <b>using appropriate units and tools</b>. 3(7)(E)</li> </ul>
<b>Data analysis</b>	<ul style="list-style-type: none"> <li>Represent data on a frequency table, dot plot, or stem and leaf plots marked with whole numbers and fractions. 4(9)(A)</li> <li>Solve one- and two-step problems using data in whole number, decimal, and fraction form in a frequency table, dot plots, or stem and leaf plot. 4(9)(B)</li> </ul>	<ul style="list-style-type: none"> <li>Summarize a data set using a <b>frequency table, dot plot, pictograph, or bar graph</b>. 3(8)(A)</li> <li>Solve one- and two-step problems using data represented with a <b>frequency table, dot plot, pictograph, or bar graph</b>. 3(8)(B)</li> </ul>
<b>Personal financial literacy</b>	<ul style="list-style-type: none"> <li>Distinguish between fixed and variable expenses. 4(10)(A)</li> <li>Calculate profit in a given situation. 4(10)(B)</li> <li>Compare the advantages and disadvantages of various saving options. 4(10)(C)</li> <li>Describe how to allocate a weekly allowance among spending, saving, and sharing. 4(10)(D)</li> <li>Describe the basic purpose of financial institutions. 4(10)(E)</li> </ul>	<ul style="list-style-type: none"> <li>Reference the Vertically Aligned TEKS Charts.</li> </ul>

## Grade 5 Curriculum and Instructional Gap Analysis Implementation Year (2014-2015)

Revised TEKS (2012) Strands	Curriculum Gap Analysis  <i>What new content moves into the grade 5 curriculum in 2014-2015?</i>	Instructional Gap Analysis  <i>Considering previous years of instruction, what student expectations will a grade 5 student not have experienced by 2014-2015?</i>
<i>Number and operations</i>	<ul style="list-style-type: none"> <li>• Multiply with <b>fluency</b> a three-digit by a two-digit number using the standard algorithm. 5(3)(B)</li> <li>• Solve with proficiency for quotients of up to <b>4 digit dividends by a 2 digit</b> divisor. 5(3)(C)</li> <li>• Use models to represent products of decimals to the hundredths. 5(3)(D)</li> <li>• Solve for products of decimals to the hundredths. 5(3)(E)</li> <li>• Use models to represent quotients of decimals to the hundredths. 5(3)(F)</li> <li>• Solve for quotients of decimals to the hundredths. 5(3)(G)</li> <li>• Represent and solve addition and subtraction of fractions with unequal denominators. 5(3)(H)</li> <li>• Represent and solve multiplication of a whole number and a fraction. 5(3)(I)</li> <li>• Use models to represent division of a unit fraction by a whole number and division of a whole number by a unit fraction. 5(3)(J)</li> <li>• Add and subtract positive <b>rational numbers</b> fluently. 5(3)(K) <b>Note: This now includes adding and subtracting fractions with unequal denominators.</b></li> <li>• Divide whole numbers by unit fractions and unit fractions by whole numbers. 5(3)(L)</li> </ul>	<ul style="list-style-type: none"> <li>• Explain that two fractions are equivalent if and only if they are both represented by the same point on a number line or represent the same portion of a same size whole for an area model. 3(3)(G)</li> <li>• Interpret the value of each place-value position as ten times the position to the right and one-tenth of the value of the place to its left. 4(2)(A)</li> <li>• Round whole numbers to <b>hundred thousands place</b>. 4(2)(D)</li> <li>• Determine the corresponding decimal to the <b>tenths or hundredths place</b> of a specified point on a number line. 4(2)(H)</li> <li>• Represent a fraction <math>a/b</math> as a sum of fractions <math>1/b</math>. 4(3)(A)</li> <li>• Decompose a fraction in more than one way into a sum of fractions with the same denominator using concrete and pictorial models and record results with symbolic representations. 4(3)(B)</li> <li>• Determine if two given fractions are equivalent using a variety of methods. 4(3)(C)</li> <li>• Compare two fractions with different numerators and different denominators and represent the comparison using the symbols <math>&gt;</math>, <math>&lt;</math>, or <math>=</math>. 4(3)(D)</li> <li>• Represent and solve addition and subtraction of fractions with equal denominators using object and pictorial models that build to the number line and properties of operations. 4(3)(E)</li> <li>• Evaluate the reasonableness of sums and differences of fractions using benchmark fractions. 4(3)(F)</li> <li>• Add and subtract whole numbers and decimals to <b>hundredths place using the standard algorithm</b>. 4(4)(A)</li> <li>• Represent the product of 2 two-digit numbers using arrays, area models, or <b>equations</b> 4(4)(C)</li> <li>• Multiply up to a <b>four-digit number by a one-digit</b> number and two-digit by two-digit number. 4(4)(D)</li> <li>• Divide up to a <b>four-digit dividend by a one-digit divisor</b>. 4(4)(F)</li> <li>• Round to the nearest 10, 100 or 1,000 or use compatible numbers to estimate solutions to <b>addition, subtraction, multiplication, and division</b> problems. 4(4)(G)</li> <li>• Solve with <b>fluency</b> one- and two-step problems involving multiplication and division, <b>including interpreting remainders</b>. 4(4)(H)</li> </ul>
<i>Algebraic reasoning</i>	<ul style="list-style-type: none"> <li>• Generate additive and/or multiplicative number patterns given a rule and graph. 5(4)(C)</li> <li>• Recognize additive vs. multiplicative number patterns from tables or <b>graphs</b>. 5(4)(D)</li> <li>• Describe the meaning of parentheses and brackets in a numeric expression. 5(4)(E)</li> <li>• Simplify numerical expressions using order of operations with up to two levels of grouping and without exponents. 5(4)(F)</li> <li>• Solve problems involving perimeter, area, volume <b>using appropriate rational numbers</b>. 5(4)(H)</li> </ul>	<ul style="list-style-type: none"> <li>• Represent multistep problems with whole numbers using strip diagrams and an equation with a letters standing for the unknown quantity. 4(5)(A) Note: This SE has added specificity with the strip diagram that may or may not have been used by students.</li> <li>• Represent problems using an input-output table and numerical expressions to generate a number pattern that follows a given rule representing the relationship of the values in the resulting sequence and their position in the sequence. 4(5)(B) Note: This SE has added specificity with the input-output table and numerical expressions that may or may not have been used by students.</li> </ul>



Revised TEKS (2012) Strands	Curriculum Gap Analysis <i>What new content moves into the grade 5 curriculum in 2014-2015?</i>	Instructional Gap Analysis <i>Considering previous years of instruction, what student expectations will a grade 5 student not have experienced by 2014-2015?</i>
<i>Geometry and Measurement</i>	<ul style="list-style-type: none"> <li>• Classify 2-dimensional figures in a hierarchy of sets &amp; subsets using graphic organizers. 5(5)(A)</li> <li>• Unit conversions within the same system <b>using appropriate rational numbers</b>. 5(7)(A)</li> <li>• Graph ordered pairs of <b>rational numbers</b> in the first quadrant. 5(8)(C)</li> </ul>	<ul style="list-style-type: none"> <li>• Use models to determine formulas for perimeter and area of a rectangle. 4(5)(C)</li> <li>• Solve problems related to perimeter and area of rectangles. 4(5)(D)</li> <li>• Identify <b>points, lines, line segments, rays, angles,</b> and perpendicular and parallel lines. 4(6)(A)</li> <li>• Apply knowledge of right angles to <b>identify acute, right and obtuse triangles</b> 4(6)(C)</li> <li>• Illustrate the measure of an angle as the part of a circle whose center is at the vertex of the angle. 4(7)(A)</li> <li>• Illustrate degrees as the units used to measure an angle, where <math>\frac{1}{360}</math> of a circle is 1 degree and an angle “cuts” <math>\frac{n}{360}</math> out of any circle whose centers is at the angle’s vertex has a measure of n degrees. 4(7)(B)</li> <li>• Determine the approximate measure of angles in degrees using a protractor. 4(7)(C)</li> <li>• Draw an angle with a given measure. 4(7)(D)</li> <li>• Determine the measure of an unknown angle formed by two non-overlapping adjacent angles given one or both angle measures. 4(7)(E)</li> <li>• Identify relative sizes of measurement units with the customary and <b>metric</b> systems. 4(8)(A)</li> <li>• Convert measurements within the <b>metric</b> system. 4(8)(B)</li> <li>• Solve problems that deal with measurements of length, <b>intervals of time</b>, liquid volume, mass, and <b>money</b> using addition, subtraction, multiplication, or division. 4(8)(C)</li> </ul>
<i>Data analysis</i>	<ul style="list-style-type: none"> <li>• Represent categorical data with bar graphs or <b>frequency tables</b>, and numerical data with <b>dot plots or stem and leaf plots</b>. 5(9)(A)</li> <li>• Represent discrete paired data on a scatter plot. 5(9)(B)</li> <li>• Solve one- and two-step problems using data from a frequency table, dot plot, bar graph, stem and leaf plot, or scatter plot. 5(9)(C)</li> </ul>	<ul style="list-style-type: none"> <li>• Represent data on a frequency table, dot plot, or stem and leaf plots marked with whole numbers and fractions. 4(9)(A)</li> <li>• Solve one- and two-step problems using data in whole number, decimal, and fraction form in a frequency table, dot plots, or stem and leaf plot. 4(9)(B)</li> </ul>
<i>Personal financial literacy</i>	<ul style="list-style-type: none"> <li>• Define income tax, payroll tax, sales tax, and property tax. 5(10)(A)</li> <li>• Explain the difference between gross income and net income. 5(10)(B)</li> <li>• Identify the advantages and disadvantages of different methods of payment. 5(10)(C)</li> <li>• Develop a system for keeping and using financial records. 5(10)(D)</li> <li>• Describe actions that might be taken to balance a budget when expenses exceed income. 5(10)(E)</li> <li>• Balance a simple budget. 5(10)(F)</li> </ul>	<ul style="list-style-type: none"> <li>• Reference the Vertically Aligned TEKS Charts.</li> </ul>

### Stations Reflection Sheet

	Grade _____	Grade _____	Grade _____
	Rephrase the TEKS in your own words:  What vocabulary is new?	Rephrase the TEKS in your own words:  What vocabulary is new?	Rephrase the TEKS in your own words:  What vocabulary is new?
<b>K</b> What do you know about this concept?			
<b>W</b> What do you want to learn about this concept?			
<b>L</b> What did you learn about this concept?			
Additional Investigations or Questions			



# Vertical Cohort Group Gap Analysis Matrices

Vertical Cohort Group Gap Analysis Matrix  
**Grade 3: Number and Operations**

	2013-2014 TEKS	2014-2015 Revised TEKS (2012) in effect
Prior to Grade 3	<ul style="list-style-type: none"> <li>• Compose and decompose numbers to <b>1,200</b> as a sum of so many thousands, so many hundreds, so many tens, and so many ones using concrete and <b>pictorial models</b>. 2(2)(A)</li> <li>• Use standard, word, and expanded form to represent number up to <b>1,200</b>. 2(2)(B)</li> <li>• Generate a number that is greater than or less than a given whole number up to 1,200. 2(2)(C)</li> <li>• Use place value to compare and order whole numbers to <b>1,200</b> using comparative language, numbers, and symbols. 2(2)(D)</li> <li>• Explain that the more fractional parts used to make a whole, the smaller the part; and the fewer the fractional parts, the larger the part. 2(3)(B)</li> <li>• Use concrete models to count fractional parts beyond on whole using words, and recognize how many parts it takes to equal one whole. 2(3)(C)</li> <li>• Recall basic facts to add and subtract <b>within 20 with automaticity</b>. 2(4)(A)</li> <li>• Solve one-step and multistep word problems involving addition and subtraction within 1,000 using a variety of strategies based on place value, including algorithms. 2(4)(C)</li> <li>• Generate and solve problem situations for a given number sentence involving addition and subtraction of whole number within 1,000. 2(4)(D)</li> </ul>	
Grade 3		<ul style="list-style-type: none"> <li>• Compose and decompose numbers to 100,000 as a sum of so many ten thousands, so many thousands, so many hundreds, so many tens, and so many ones using <b>objects, pictorial models, and numbers</b>. 3(2)(A)</li> <li>• Describe the relationship in the base-10 place value system through the hundred thousands place. 3(2)(B)</li> <li>• Represent a number on a number line between consecutive multiples of ten and use words to describe relative size of numbers in order to round whole numbers. 3(2)(C)</li> <li>• Compare and order whole numbers to <b>100,000</b> and represent the comparison using symbols. 3(2)(D)</li> <li>• Represent fractions with denominators of 2, 3, 4, 6, or 8 using concrete objects, <b>pictorial models, including strip diagrams and number lines</b>. 3(3)(A)</li> <li>• Compose and decompose a fraction <math>a/b</math> with a numerator greater than zero and less than or equal to <math>b</math> as a sum of parts <math>1/b</math>. 3(3)(D)</li> <li>• Solve problems involving partitioning an object or set of objects among two or more recipients using pictorial representations of fractions with denominators of 2, 3, 4, 6, and 8. 3(3)(E)</li> <li>• Represent equivalent fractions with denominators of 2, 3, 4, 6, and 8 using objects and <b>pictorial models, including number lines</b>. 3(3)(F)</li> <li>• Explain that two fractions are equivalent if and only if they are both represented by the same point on the number line or represent the same portion of a same size whole for an area model. 3(3)(G)</li> <li>• Compare two fractions having the same numerator or denominator in problems by reasoning about their sizes and <b>justifying using symbols, words, objects and pictorial models</b>. 3(3)(H)</li> <li>• Solve with <b>fluency one-step and two-step problems</b> involving addition and subtraction within <b>1,000</b> using <b>place value, properties of operations, and the relationship between addition and subtraction</b>. 3(4)(A)</li> <li>• Recall facts to multiply up to 10 by 10 with automaticity and recall the corresponding division facts. 3(4)(F)</li> <li>• Determine if a number is even or odd using divisibility rules. 3(4)(I)</li> <li>• <b>Determine a quotient</b> using the relationship between multiplication and division. 3(4)(J)</li> <li>• Solve problems involving multiplication and division <b>less than 100</b> using strategies based on objects; <b>pictorial model, including arrays, area models, and equal groups: properties of operations; or recall of facts</b>. 3(4)(K)</li> </ul>



Grade 4		<ul style="list-style-type: none"><li>• Interpret the value of each place-value position as ten times the position to the right and one-tenth of the value of the place to its left. 4(2)(A)</li><li>• Round whole numbers to <b>hundred thousands place</b>. 4(2)(D)</li><li>• Determine the corresponding decimal to the <b>tenths or hundredths place</b> of a specified point on a number line. 4(2)(H)</li><li>• Represent a fraction <math>a/b</math> as a sum of fractions <math>1/b</math>. 4(3)(A)</li><li>• Decompose fractions in more than one way into a sum of fractions with the same denominator using concrete and pictorial models and record results with symbolic representations. 4(3)(B)</li><li>• Determine if two given fractions are equivalent using a variety of methods 4(3)(C)</li><li>• Compare two fractions with different numerators and different denominators and represent the comparison using the symbols <math>&gt;</math>, <math>&lt;</math>, or <math>=</math>. 4(3)(D)</li><li>• Represent and solve addition and subtraction of fractions with equal denominators using object and pictorial models that build to the number line and properties of operations. 4(3)(E)</li><li>• Evaluate the reasonableness of sums and differences of fractions using benchmark fractions. 4(3)(F)</li><li>• Add and subtract whole numbers and decimals to <b>hundredths place using the standard algorithm</b>. 4(4)(A)</li><li>• Represent the product of 2 two-digit numbers using arrays, area models, or <b>equations</b> 4(4)(C)</li><li>• Multiply up to a <b>four-digit number by a one-digit</b> number and two-digit by two-digit number. 4(4)(D)</li><li>• Divide up to a <b>four-digit dividend by a one-digit divisor</b>. 4(4)(F)</li><li>• Round to the nearest 10, 100 or 1,000 or use compatible numbers to estimate solutions to <b>addition, subtraction</b>, multiplication, and division problems. 4(4)(G)</li><li>• Solve with <b>fluency</b> one- and two-step problems involving multiplication and division, <b>including interpreting remainders</b>. 4(4)(H)</li></ul>
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Vertical Cohort Group Gap Analysis Matrix  
**Grade 4: Number and Operations**

	2013-2014 TEKS	2014-2015 Revised TEKS (2012) in effect
Prior to Grade 4	<ul style="list-style-type: none"> <li>• Compose and decompose numbers to 100,000 as a sum of so many ten thousands, so many thousands, so many hundreds, so many tens, and so many ones using <b>objects, pictorial models</b>, and numbers. 3(2)(A)</li> <li>• Describe the relationship in the base-10 place value system through the hundred thousands place. 3(2)(B)</li> <li>• Represent a number on a number line between consecutive multiples of ten and use words to describe relative size of numbers in order to round whole numbers. 3(2)(C)</li> <li>• Compare and order whole numbers to <b>100,000</b> and represent the comparison using symbols. 3(2)(D)</li> <li>• Represent fractions with denominators of 2, 3, 4, 6, or 8 using concrete objects, <b>pictorial models, including strip diagrams and number lines</b>. 3(3)(A)</li> <li>• Compose and decompose a fraction <math>a/b</math> with a numerator greater than zero and less than or equal to <math>b</math> as a sum of parts <math>1/b</math>. 3(3)(D)</li> <li>• Solve problems involving partitioning an object or set of objects among two or more recipients using pictorial representations of fractions with denominators of 2, 3, 4, 6, and 8. 3(3)(E)</li> <li>• Represent equivalent fractions with denominators of 2, 3, 4, 6, and 8 using objects and <b>pictorial models, including number lines</b>. 3(3)(F)</li> <li>• Explain that two fractions are equivalent if and only if they are both represented by the same point on the number line or represent the same portion of a same size whole for an area model. 3(3)(G)</li> <li>• Compare two fractions having the same numerator or denominator in problems by reasoning about their sizes and <b>justifying using symbols, words, objects and pictorial models</b>. 3(3)(H)</li> <li>• Solve <b>with fluency one-step and two-step problems</b> involving addition and subtraction within <b>1,000</b> using <b>place value, properties of operations, and the relationship between addition and subtraction</b>. 3(4)(A)</li> <li>• Recall facts to multiply up to 10 by 10 with automaticity and recall the corresponding division facts. 3(4)(F)</li> <li>• Determine if a number is even or odd using divisibility rules. 3(4)(I)</li> <li>• <b>Determine a quotient</b> using the relationship between multiplication and division. 3(4)(J)</li> <li>• Solve problems involving multiplication and division less than <b>100</b> using strategies based on objects; <b>pictorial model, including arrays, area models, and equal groups: properties of operations; or recall of facts</b>. 3(4)(K)</li> </ul>	



<p style="text-align: center;"><b>Grade 4</b></p>		<ul style="list-style-type: none"><li>• Interpret the value of each place-value position as ten times the position to the right and one-tenth of the value of the place to its left. 4(2)(A)</li><li>• Round whole numbers to <b>hundred thousands place</b>. 4(2)(D)</li><li>• Determine the corresponding decimal to the <b>tenths or hundredths place</b> of a specified point on a number line. 4(2)(H)</li><li>• Represent a fraction <math>a/b</math> as a sum of fractions <math>1/b</math>. 4(3)(A)</li><li>• Decompose fractions in more than one way into a sum of fractions with the same denominator using concrete and pictorial models and record results with symbolic representations. 4(3)(B)</li><li>• Determine if two given fractions are equivalent using a variety of methods 4(3)(C)</li><li>• Compare two fractions with different numerators and different denominators and represent the comparison using the symbols <math>&gt;</math>, <math>&lt;</math>, or <math>=</math>. 4(3)(D)</li><li>• Represent and solve addition and subtraction of fractions with equal denominators using object and pictorial models that build to the number line and properties of operations. 4(3)(E)</li><li>• Evaluate the reasonableness of sums and differences of fractions using benchmark fractions. 4(3)(F)</li><li>• Add and subtract whole numbers and decimals to <b>hundredths place using the standard algorithm</b>. 4(4)(A)</li><li>• Represent the product of 2 two-digit numbers using arrays, area models, or <b>equations</b> 4(4)(C)</li><li>• Multiply up to a <b>four-digit number by a one-digit</b> number and two-digit by two-digit number. 4(4)(D)</li><li>• Divide up to a <b>four-digit dividend by a one-digit divisor</b>. 4(4)(F)</li><li>• Round to the nearest 10, 100 or 1,000 or use compatible numbers to estimate solutions to <b>addition, subtraction</b>, multiplication, and division problems. 4(4)(G)</li><li>• Solve with <b>fluency</b> one- and two-step problems involving multiplication and division, <b>including interpreting remainders</b>. 4(4)(H)</li></ul>
<p style="text-align: center;">Grade 5</p>		<ul style="list-style-type: none"><li>• Multiply with <b>fluency</b> a three-digit by a two-digit number using the standard algorithm. 5(3)(B)</li><li>• Solve with proficiency for quotients of up to <b>4 digit dividends by a 2 digit</b> divisor. 5(3)(C)</li><li>• Use models to represent products of decimals to the hundredths. 5(3)(D)</li><li>• Solve for products of decimals to the hundredths. 5(3)(E)</li><li>• Use models to represent quotients of decimals to the hundredths. 5(3)(F)</li><li>• Solve for quotients of decimals to the hundredths. 5(3)(G)</li><li>• Represent and solve addition and subtraction of fractions with unequal denominators. 5(3)(H)</li><li>• Represent and solve multiplication of a whole number and a fraction. 5(3)(I)</li><li>• Use models to represent division of a unit fraction by a whole number and division of a whole number by a unit fraction. 5(3)(J)</li><li>• Add and subtract positive <b>rational numbers</b> fluently. 5(3)(K) <b>Note: This now includes adding and subtracting fractions with unequal denominators.</b></li><li>• Divide whole numbers by unit fractions and unit fractions by whole numbers. 5(3)(L)</li></ul>

Vertical Cohort Group Gap Analysis Matrix  
**Grade 5: Number and Operations**

	2013-2014 TEKS	2014-2015 Revised TEKS (2012) in effect
Prior to Grade 5	<ul style="list-style-type: none"> <li>• Explain that two fractions are equivalent if and only if they are both represented by the same point on a number line or represent the same portion of a same size whole for an area model. 3(3)(G)</li> <li>• Interpret the value of each place-value position as ten times the position to the right and one-tenth of the value of the place to its left. 4(2)(A)</li> <li>• Round whole numbers to <b>hundred thousands place</b>. 4(2)(D)</li> <li>• Determine the corresponding decimal to the <b>tenths or hundredths place</b> of a specified point on a number line. 4(2)(H)</li> <li>• Represent a fraction <math>a/b</math> as a sum of fractions <math>1/b</math>. 4(3)(A)</li> <li>• Decompose a fraction in more than one way into a sum of fractions with the same denominator using concrete and pictorial models and record results with symbolic representations. 4(3)(B)</li> <li>• Determine if two given fractions are equivalent using a variety of methods. 4(3)(C)</li> <li>• Compare two fractions with different numerators and different denominators and represent the comparison using the symbols <math>&gt;</math>, <math>&lt;</math>, or <math>=</math>. 4(3)(D)</li> <li>• Represent and solve addition and subtraction of fractions with equal denominators using object and pictorial models that build to the number line and properties of operations. 4(3)(E)</li> <li>• Evaluate the reasonableness of sums and differences of fractions using benchmark fractions. 4(3)(F)</li> <li>• Add and subtract whole numbers and decimals to <b>hundredths place using the standard algorithm</b>. 4(4)(A)</li> <li>• Represent the product of 2 two-digit numbers using arrays, area models, or <b>equations</b> 4(4)(C)</li> <li>• Multiply up to a <b>four-digit number by a one-digit</b> number and two-digit by two-digit number. 4(4)(D)</li> <li>• Divide up to a <b>four-digit dividend by a one-digit divisor</b>. 4(4)(F)</li> <li>• Round to the nearest 10, 100 or 1,000 or use compatible numbers to estimate solutions to <b>addition, subtraction, multiplication, and division</b> problems. 4(4)(G)</li> <li>• Solve with <b>fluency</b> one- and two-step problems involving multiplication and division, <b>including interpreting remainders</b>. 4(4)(H)</li> </ul>	
Grade 5		<ul style="list-style-type: none"> <li>• Multiply with <b>fluency</b> a three-digit by a two-digit number using the standard algorithm. 5(3)(B)</li> <li>• Solve with proficiency for quotients of up to <b>4 digit dividends by a 2 digit</b> divisor. 5(3)(C)</li> <li>• Use models to represent products of decimals to the hundredths. 5(3)(D)</li> <li>• Solve for products of decimals to the hundredths. 5(3)(E)</li> <li>• Use models to represent quotients of decimals to the hundredths. 5(3)(F)</li> <li>• Solve for quotients of decimals to the hundredths. 5(3)(G)</li> <li>• Represent and solve addition and subtraction of fractions with unequal denominators. 5(3)(H)</li> <li>• Represent and solve multiplication of a whole number and a fraction. 5(3)(I)</li> <li>• Use models to represent division of a unit fraction by a whole number and division of a whole number by a unit fraction. 5(3)(J)</li> <li>• Add and subtract positive <b>rational numbers</b> fluently. 5(3)(K)  <b>Note: This now includes adding and subtracting fractions with unequal denominators.</b></li> <li>• Divide whole numbers by unit fractions and unit fractions by whole numbers. 5(3)(L)</li> </ul>





Grade 6		<ul style="list-style-type: none"><li>• Use a visual representation to describe the relationship between whole numbers, integers, and rational numbers. 6(2)(A)</li><li>• Identify a number, its opposite, and its absolute value. 6(2)(B)</li><li>• Locate, compare, and order integers and rational numbers using a number line. 6(2)(C)</li><li>• Order a set of rational numbers arising from mathematical and real-world contexts. 6(2)(D)</li><li>• Extend representations for division to include fraction notation such as <math>a/b</math> represents the same number as <math>a \div b</math> where <math>b \neq 0</math>. 6(2)(E)</li><li>• Add, subtract, multiply, and divide integers with and without models. 6(3)(C), 6(3)(D)</li><li>• Multiply and divide <b>positive rational numbers</b>. This includes <b>fractions and decimals</b>. 6(3)(A), 6(3)(B), 6(3)(E)</li></ul>
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Vertical Cohort Group Gap Analysis Matrix

**Grade:** \_\_\_\_\_ **Strand:** \_\_\_\_\_

	2013-2014 TEKS	2014-2015 Revised TEKS (2012) in effect
Prior to Grade _____		
<b>Grade</b> _____		
Grade _____		

## Action Plan

Action Needed	Who is responsible for this action?	Possible Questions	Target Date	Needed Resources
	<input type="checkbox"/> Me			
	<input type="checkbox"/> Campus			
	<input type="checkbox"/> District			
	<input type="checkbox"/> Me			
	<input type="checkbox"/> Campus			
	<input type="checkbox"/> District			
	<input type="checkbox"/> Me			
	<input type="checkbox"/> Campus			
	<input type="checkbox"/> District			
	<input type="checkbox"/> Me			
	<input type="checkbox"/> Campus			
	<input type="checkbox"/> District			
Notes:				