

Grade 4 Math Learning Map

Prioritized Standard: MGSE4.G.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. *Geometry - Draw and identify lines and angles, and classify shapes by properties of their lines and angles.*

	Proficiency Scale
4.0	<p>In addition to score 3.0 performance, the student demonstrates in-depth inferences and applications that go beyond what was taught. For example, the student will:</p> <p><u>Learning Target 1:</u> Research the inclusive definition of a trapezoid (the definition used by the Georgia Standards of Excellence, but NOT used by Common Core), and justify why using this definition makes sense mathematically</p>
3.5	In addition to score 3.0 performance, partial success at score 4.0 content
3.0	<p>The student will</p> <p><u>Learning Target 1:</u> 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</p> <p><u>Learning Target 2:</u> Recognize right triangles as a category, and identify right triangles</p> <p>The student exhibits no major errors or omissions.</p>
2.5	No major errors or omissions regarding score 2.0 content and partial success at score 3.0
2.0	<p>There are no major errors or omissions regarding the simpler details and processes.</p> <p>The student will recognize or recall specific vocabulary:</p> <p><u>Learning Target 1:</u> parallel, perpendicular, acute, obtuse, right, isosceles, scalene, equilateral</p> <p>However, the student exhibits major errors or omissions regarding the more complex ideas and processes.</p>
1.5	Partial success at score 2.0 content and major errors or omissions regarding score 3.0 content
1.0	With help, partial success at score 2.0 and score 3.0
0.5	With help, partial success at score 2.0 content but not at score 3.0 content
0.0	Even with help, no success

Grade 4 Math Learning Map

Prioritized Standard: MGSE4.MD.2 Use the four operations to solve word problems involving distances, intervals of time, liquid volumes, masses of objects, and money, including problems involving simple fractions or decimals, and problems that require expressing measurements given in a larger unit in terms of a smaller unit. Represent measurement quantities using diagrams such as number line diagrams that feature a measurement scale. *Measurement and Data - Solve problems involving measurement and conversion of measurements from a larger unit to a smaller unit.*

Proficiency Scale	
4.0	<p>In addition to score 3.0 performance, the student demonstrates in-depth inferences and applications that go beyond what was taught. For example, the student will:</p> <p><u>Learning Target 1:</u> Solve real-world word problems in which measurements are converted from customary to metric and metric to customary (using a conversion table)</p> <p><u>Learning Target 2:</u> Solve multi-step word problems involving units of measurement within one system and provide support with a mathematical explanation that justifies the answer</p>
3.5	In addition to score 3.0 performance, partial success at score 4.0 content
3.0	<p>The student will</p> <p><u>Learning Target 1:</u> Use the four operations to solve word problems involving distances including problems involving simple fractions or decimals, and problems that require expressing measurements given in a larger unit in terms of a smaller unit. Represent measurement quantities using diagrams such as number line diagrams that feature a measurement scale</p> <p><u>Learning Target 2:</u> Use the four operations to solve word problems involving intervals of time, including problems involving simple fractions or decimals, and problems that require expressing measurements given in a larger unit in terms of a smaller unit. Represent measurement quantities using diagrams such as number line diagrams that feature a measurement scale</p> <p><u>Learning Target 3:</u> Use the four operations to solve word problems involving liquid volumes, including problems involving simple fractions or decimals, and problems that require expressing measurements given in a larger unit in terms of a smaller unit. Represent measurement quantities using diagrams such as number line diagrams that feature a measurement scale</p> <p><u>Learning Target 4:</u> Use the four operations to solve word problems involving masses of objects, including problems involving simple fractions or decimals, and problems that require expressing measurements given in a larger unit in terms of a smaller unit. Represent measurement quantities using diagrams such as number line diagrams that feature a measurement scale</p> <p><u>Learning Target 5:</u> Use the four operations to solve word problems involving money, including problems involving simple fractions or decimals, and problems that require expressing measurements given in a larger unit in terms of a smaller unit. Represent measurement quantities using diagrams such as number line diagrams that feature a measurement scale</p> <p>The student exhibits no major errors or omissions.</p>
2.5	No major errors or omissions regarding score 2.0 content and partial success at score 3.0

Grade 4 Math Learning Map

Prioritized Standard: MGSE4.MD.2 Use the four operations to solve word problems involving distances, intervals of time, liquid volumes, masses of objects, and money, including problems involving simple fractions or decimals, and problems that require expressing measurements given in a larger unit in terms of a smaller unit. Represent measurement quantities using diagrams such as number line diagrams that feature a measurement scale. *Measurement and Data - Solve problems involving measurement and conversion of measurements from a larger unit to a smaller unit.*

	Proficiency Scale
2.0	<p>There are no major errors or omissions regarding the simpler details and processes.</p> <p>The student will recognize or recall specific vocabulary:</p> <p><u>Learning Target 1:</u> customary unit, yard, ounce, ton, metric unit, millimeter, meter, gram, kilogram, milliliter, liter</p> <p>The student will perform basic processes:</p> <p><u>Learning Target 2:</u> Recall relative size of metric measurements within one system of units including km, m, cm; kg, g; l, ml; <u>Learning Target 3:</u> Recall relative size of customary measurements including gallons, cups, quarts, pints/ ft., yd., in./ ounces, pounds <u>Learning Target 4:</u> Recall relative size of time measurements including: hours, minutes, seconds</p> <p>However, the student exhibits major errors or omissions regarding the more complex ideas and processes.</p>
1.5	Partial success at score 2.0 content and major errors or omissions regarding score 3.0 content
1.0	With help, partial success at score 2.0 and score 3.0
0.5	With help, partial success at score 2.0 content but not at score 3.0 content
0.0	Even with help, no success

Grade 4 Math Learning Map

Prioritized Standard: MGSE4.NBT.1 Recognize that in a multi-digit whole number, a digit in any one place represents ten times what it represents in the place to its right. For example, recognize that $700 \div 70 = 10$ by applying concepts of place value and division. *Number and Operations in Base Ten - Generalize place value understanding for multi-digit whole numbers.*

	Proficiency Scale
4.0	<p>In addition to score 3.0 performance, the student demonstrates in-depth inferences and applications that go beyond what was taught. For example, the student will:</p> <p><u>Learning Target 1:</u> 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 (MGSE5.NBT.1)</p>
3.5	In addition to score 3.0 performance, partial success at score 4.0 content
3.0	<p>The student will</p> <p><u>Learning Target 1:</u> Recognize that in a multi-digit whole number, a digit in any one place represents ten times what it represents in the place to its right</p> <p>The student exhibits no major errors or omissions.</p>
2.5	No major errors or omissions regarding score 2.0 content and partial success at score 3.0
2.0	<p>There are no major errors or omissions regarding the simpler details and processes.</p> <p>The student will recognize or recall specific vocabulary:</p> <p><u>Learning Target 1:</u> place value, digit</p> <p>The student will perform basic processes:</p> <p><u>Learning Target 2:</u> Understand that the three digits of a three-digit number represent amounts of hundreds, tens, and ones</p> <p>However, the student exhibits major errors or omissions regarding the more complex ideas and processes.</p>
1.5	Partial success at score 2.0 content and major errors or omissions regarding score 3.0 content
1.0	With help, partial success at score 2.0 and score 3.0
0.5	With help, partial success at score 2.0 content but not at score 3.0 content
0.0	Even with help, no success

Grade 4 Math Learning Map

Prioritized Standard: MGSE4.NBT.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. *Number and Operations in Base Ten - Generalize place value understanding for multi-digit whole numbers.*

Proficiency Scale	
4.0	<p>In addition to score 3.0 performance, the student demonstrates in-depth inferences and applications that go beyond what was taught. For example, the student will:</p> <p><u>Learning Target 1:</u> Read, write, and compare decimals to thousandths (MGSE5.NBT.3)</p>
3.5	In addition to score 3.0 performance, partial success at score 4.0 content
3.0	<p>The student will</p> <p><u>Learning Target 1:</u> Read and write multi-digit whole numbers using base-ten numerals <u>Learning Target 2:</u> Read and write multi-digit whole numbers using number names <u>Learning Target 3:</u> Read and write multi-digit whole numbers using expanded form <u>Learning Target 4:</u> Compare two multi-digit numbers based on meanings of the digits in each place, using $>$, $=$, and $<$ symbols to record the results of comparisons</p> <p>The student exhibits no major errors or omissions.</p>
2.5	No major errors or omissions regarding score 2.0 content and partial success at score 3.0
2.0	<p>There are no major errors or omissions regarding the simpler details and processes.</p> <p>The student will recognize or recall specific vocabulary:</p> <p><u>Learning Target 1:</u> expanded form, word form, standard form</p> <p>The student will perform basic processes:</p> <p><u>Learning Target 2:</u> Recognize symbols, such as $<$, $>$, and $=$; understand the meaning of said symbols without using numbers <u>Learning Target 3:</u> Understand the value of a digit based on its location in a whole number</p> <p>However, the student exhibits major errors or omissions regarding the more complex ideas and processes.</p>
1.5	Partial success at score 2.0 content and major errors or omissions regarding score 3.0 content
1.0	With help, partial success at score 2.0 and score 3.0
0.5	With help, partial success at score 2.0 content but not at score 3.0 content
0.0	Even with help, no success

Grade 4 Math Learning Map

Prioritized Standard: MGSE4.NBT.4 Fluently add and subtract multi-digit whole numbers using the standard algorithm. *Number and Operations in Base Ten - Use place value understanding and properties of operations to perform multi-digit arithmetic.*

Proficiency Scale	
4.0	<p>In addition to score 3.0 performance, the student demonstrates in-depth inferences and applications that go beyond what was taught. For example, the student will:</p> <p><u>Learning Target 1:</u> Create a real-world example where regrouping must occur</p>
3.5	In addition to score 3.0 performance, partial success at score 4.0 content
3.0	<p>The student will</p> <p><u>Learning Target 1:</u> Fluently add multi-digit whole numbers using the standard algorithm <u>Learning Target 2:</u> Fluently subtract multi-digit whole numbers using the standard algorithm</p> <p>The student exhibits no major errors or omissions.</p>
2.5	No major errors or omissions regarding score 2.0 content and partial success at score 3.0
2.0	<p>There are no major errors or omissions regarding the simpler details and processes.</p> <p>The student will recognize or recall specific vocabulary:</p> <p><u>Learning Target 1:</u> standard algorithm, multi-digit</p> <p>The student will perform basic processes:</p> <p><u>Learning Target 2:</u> Recall basic addition and subtraction facts using mental math strategies <u>Learning Target 3:</u> Demonstrate when regrouping is necessary</p> <p>However, the student exhibits major errors or omissions regarding the more complex ideas and processes.</p>
1.5	Partial success at score 2.0 content and major errors or omissions regarding score 3.0 content
1.0	With help, partial success at score 2.0 and score 3.0
0.5	With help, partial success at score 2.0 content but not at score 3.0 content
0.0	Even with help, no success

Grade 4 Math Learning Map

Prioritized Standard: MGSE4.NBT.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. *Number and Operations in Base Ten - Use place value understanding and properties of operations to perform multi-digit arithmetic.*

Proficiency Scale	
4.0	<p>In addition to score 3.0 performance, the student demonstrates in-depth inferences and applications that go beyond what was taught. For example, the student will:</p> <p><u>Learning Target 1:</u> Solve multi-step word problems involving multiplication of a whole number of up to four digits by a one-digit whole number</p>
3.5	In addition to score 3.0 performance, partial success at score 4.0 content
3.0	<p>The student will</p> <p><u>Learning Target 1:</u> Multiply a whole number of up to four digits by a one-digit whole number, 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</p> <p><u>Learning Target 2:</u> 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</p> <p>The student exhibits no major errors or omissions.</p>
2.5	No major errors or omissions regarding score 2.0 content and partial success at score 3.0
2.0	<p>There are no major errors or omissions regarding the simpler details and processes.</p> <p>The student will recognize or recall specific vocabulary:</p> <p><u>Learning Target 1:</u> place value, area model, properties, rectangular array</p> <p>The student will perform basic processes:</p> <p><u>Learning Target 2:</u> Multiply a whole number of up to three digits by a one-digit whole number</p> <p><u>Learning Target 3:</u> Demonstrate fluency of all single digit products</p> <p>However, the student exhibits major errors or omissions regarding the more complex ideas and processes.</p>
1.5	Partial success at score 2.0 content and major errors or omissions regarding score 3.0 content
1.0	With help, partial success at score 2.0 and score 3.0
0.5	With help, partial success at score 2.0 content but not at score 3.0 content
0.0	Even with help, no success

Grade 4 Math Learning Map

Prioritized Standard: MGSE4.NBT.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. *Number and Operations in Base Ten - Use place value understanding and properties of operations to perform multi-digit arithmetic.*

	Proficiency Scale
4.0	<p>In addition to score 3.0 performance, the student demonstrates in-depth inferences and applications that go beyond what was taught. For example, the student will:</p> <p><u>Learning Target 1:</u> Create, solve, and justify multi-step real-world word problems including division problems where remainders will be interpreted</p>
3.5	In addition to score 3.0 performance, partial success at score 4.0 content
3.0	<p>The student will</p> <p><u>Learning Target 1:</u> 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 calculations by using equations, rectangular arrays, and/or area models</p> <p>The student exhibits no major errors or omissions.</p>
2.5	No major errors or omissions regarding score 2.0 content and partial success at score 3.0
2.0	<p>There are no major errors or omissions regarding the simpler details and processes.</p> <p>The student will recognize or recall specific vocabulary:</p> <p><u>Learning Target 1:</u> dividend, divisor, remainder, quotient</p> <p>The student will perform basic processes:</p> <p><u>Learning Target 2:</u> Find whole number quotients without remainders <u>Learning Target 3:</u> Create equal groups based on place value understanding <u>Learning Target 4:</u> Recall basic division facts</p> <p>However, the student exhibits major errors or omissions regarding the more complex ideas and processes.</p>
1.5	Partial success at score 2.0 content and major errors or omissions regarding score 3.0 content
1.0	With help, partial success at score 2.0 and score 3.0
0.5	With help, partial success at score 2.0 content but not at score 3.0 content
0.0	Even with help, no success

Grade 4 Math Learning Map

Prioritized Standard: MGSE4.NF.1 Explain why two or more fractions are equivalent $a/b = n \times a/n \times b$ ex: $\frac{1}{4} = 3 \times \frac{1}{3} \times \frac{1}{4}$ by using usual fraction models. Focus attention on how the number and size of the parts differ even though the fractions themselves are the same size. Use this principle to recognize and generate equivalent fractions. *Number and Operations – Fractions - Extend understanding of fraction equivalence and ordering.*

Proficiency Scale	
4.0	<p>In addition to score 3.0 performance, the student demonstrates in-depth inferences and applications that go beyond what was taught. For example, the student will:</p> <p><u>Learning Target 1:</u> Extend denominator options beyond 2, 3, 4, 5, 6, 8, 10, 12, and 100 for students to model, sketch, and create equivalent fractions</p>
3.5	In addition to score 3.0 performance, partial success at score 4.0 content
3.0	<p>The student will</p> <p><u>Learning Target 1:</u> Explain why two or more fractions are equivalent $a/b = n \times a/n \times b$ ex: $\frac{1}{4} = 3 \times \frac{1}{3} \times \frac{1}{4}$ by using visual fraction models. Focus attention on how the number and size of the parts differ even though the fractions themselves are the same size</p> <p><u>Learning Target 2:</u> Recognize and generate equivalent fractions</p> <p>The student exhibits no major errors or omissions.</p>
2.5	No major errors or omissions regarding score 2.0 content and partial success at score 3.0
2.0	<p>There are no major errors or omissions regarding the simpler details and processes.</p> <p>The student will recognize or recall specific vocabulary:</p> <p><u>Learning Target 1:</u> equivalent, equivalent fraction, compose, decompose, unit fraction, whole fraction, fraction</p> <p>The student will perform basic processes:</p> <p><u>Learning Target 2:</u> Partition shapes into 2, 3, 4, 5, 6, 8, 10, 12, or 100 equal parts, and visually demonstrate that equivalent shaded regions represent the same portion of the whole</p> <p>However, the student exhibits major errors or omissions regarding the more complex ideas and processes.</p>
1.5	Partial success at score 2.0 content and major errors or omissions regarding score 3.0 content
1.0	With help, partial success at score 2.0 and score 3.0
0.5	With help, partial success at score 2.0 content but not at score 3.0 content
0.0	Even with help, no success

Grade 4 Math Learning Map

Prioritized Standard: MGSE4.NF.3 Understand a fraction a/b with a numerator >1 as a sum of unit fractions $1/b$ *Number and Operations – Fractions - Build fractions from unit fractions by applying and extending previous understandings of operations on whole numbers.*

Proficiency Scale	
4.0	<p>In addition to score 3.0 performance, the student demonstrates in-depth inferences and applications that go beyond what was taught. For example, the student will:</p> <p>Learning Target 1: Create and solve real-world word problems involving addition or subtraction of mixed numbers and/or improper fractions</p>
3.5	In addition to score 3.0 performance, partial success at score 4.0 content
3.0	<p>The student will</p> <p>Learning Target 1: Understand addition and subtraction of fractions as joining and separating parts referring to the same whole (MGSE4.NF.3.a)</p> <p>Learning Target 2: 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. Examples: $3/8 = 1/8 + 1/8 + 1/8$; $3/8 = 1/8 + 2/8$; $2 \frac{1}{8} = 1 + 1 + 1/8 = 8/8 + 8/8 + 1/8$ (MGSE4.NF.3.b)</p> <p>Learning Target 3: 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 (MGSE4.NF.3.c)</p> <p>Learning Target 4: 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 (MGSE3.NF.3.d)</p> <p>The student exhibits no major errors or omissions.</p>
2.5	No major errors or omissions regarding score 2.0 content and partial success at score 3.0
2.0	<p>There are no major errors or omissions regarding the simpler details and processes.</p> <p>The student will recognize or recall specific vocabulary:</p> <p>Learning Target 1: visual fraction model, fraction bar, like denominators</p> <p>The student will perform basic processes:</p> <p>Learning Target 2: Represent partitioned shapes as fractions</p> <p>Learning Target 3: Model addition and subtraction of fractions with like denominators</p> <p>However, the student exhibits major errors or omissions regarding the more complex ideas and processes.</p>
1.5	Partial success at score 2.0 content and major errors or omissions regarding score 3.0 content
1.0	With help, partial success at score 2.0 and score 3.0
0.5	With help, partial success at score 2.0 content but not at score 3.0 content
0.0	Even with help, no success

Grade 4 Math Learning Map

Prioritized Standard: MGSE4.NF.4 Apply and extend previous understandings of multiplication to multiply a fraction by a whole number e.g., by using a visual such as a number line or area model. *Number and Operations – Fractions - Build fractions from unit fractions by applying and extending previous understandings of operations on whole numbers.*

	Proficiency Scale
4.0	<p>In addition to score 3.0 performance, the student demonstrates in-depth inferences and applications that go beyond what was taught. For example, the student will:</p> <p><u>Learning Target 1:</u> Create and solve real world word problems involving multiplication of whole numbers and mixed numbers and/or improper fractions</p>
3.5	In addition to score 3.0 performance, partial success at score 4.0 content
3.0	<p>The student will</p> <p><u>Learning Target 1:</u> Understand a fraction a/b as a multiple of $1/b$. For example, use a visual fraction model to represent $5/4$ as the product $5 \times (1/4)$, recording the conclusion by the equation $5/4 = 5 \times (1/4)$ (MGSE4.NF.4.a)</p> <p><u>Learning Target 2:</u> Understand a multiple of a/b as a multiple of $1/b$, and use this understanding to multiply a fraction by a whole number. For example, use a visual fraction model to express $3 \times (2/5)$ as $6 \times (1/5)$, recognizing this product as $6/5$. (In general, $n \times (a/b) = (n \times a)/b$.) (MGSE4.NF.4.b)</p> <p><u>Learning Target 3:</u> 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. For example, if each person at a party will eat $3/8$ of a pound of roast beef, and there will be 5 people at the party, how many pounds of roast beef will be needed? Between what two whole numbers does your answer lie? (MGSE4.NF.4.c)</p> <p>The student exhibits no major errors or omissions.</p>
2.5	No major errors or omissions regarding score 2.0 content and partial success at score 3.0
2.0	<p>There are no major errors or omissions regarding the simpler details and processes.</p> <p>The student will recognize or recall specific vocabulary:</p> <p><u>Learning Target 1:</u> area model, visual fraction models</p> <p>The student will perform basic processes:</p> <p><u>Learning Target 2:</u> Demonstrate the relationship between multiplication and repeated addition</p> <p>However, the student exhibits major errors or omissions regarding the more complex ideas and processes.</p>
1.5	Partial success at score 2.0 content and major errors or omissions regarding score 3.0 content
1.0	With help, partial success at score 2.0 and score 3.0
0.5	With help, partial success at score 2.0 content but not at score 3.0 content
0.0	Even with help, no success

Grade 4 Math Learning Map

Prioritized Standard: MGSE4.NF.6 Use decimal notation for fractions with denominators 10 or 100. For example, rewrite 0.62 as 62/100; describe a length as 0.62 meters; locate 0.62 on a number line diagram. *Number and Operations – Fractions - Understand decimal notation for fractions, and compare decimal fractions.*

Proficiency Scale	
4.0	<p>In addition to score 3.0 performance, the student demonstrates in-depth inferences and applications that go beyond what was taught. For example, the student will:</p> <p><u>Learning Target 1:</u> Use decimal notation for benchmark fractions including $\frac{1}{4}$, $\frac{1}{3}$, $\frac{3}{4}$, etc.</p> <p><u>Learning Target 2:</u> Create a real-world word problem in which a decimal would need to be changed to a fraction or a fraction to a decimal. Solve and justify steps in the solution</p>
3.5	In addition to score 3.0 performance, partial success at score 4.0 content
3.0	<p>The student will</p> <p><u>Learning Target 1:</u> Use decimal notation for fractions with denominator 10</p> <p><u>Learning Target 2:</u> Use decimal notation for fractions with denominator 100. For example, rewrite 0.62 as 62/100; describe a length as 0.62 meters; locate 0.62 on a number line diagram</p> <p>The student exhibits no major errors or omissions.</p>
2.5	No major errors or omissions regarding score 2.0 content and partial success at score 3.0
2.0	<p>There are no major errors or omissions regarding the simpler details and processes.</p> <p>The student will recognize or recall specific vocabulary:</p> <p><u>Learning Target 1:</u> decimal, decimal fraction, decimal point</p> <p>The student will perform basic processes:</p> <p><u>Learning Target 2:</u> Model decimals on a hundreds grid</p> <p><u>Learning Target 3:</u> Write tenths and hundredths using decimal notation</p> <p>However, the student exhibits major errors or omissions regarding the more complex ideas and processes.</p>
1.5	Partial success at score 2.0 content and major errors or omissions regarding score 3.0 content
1.0	With help, partial success at score 2.0 and score 3.0
0.5	With help, partial success at score 2.0 content but not at score 3.0 content
0.0	Even with help, no success

Grade 4 Math Learning Map

Prioritized Standard: MGSE4.NF.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. *Number and Operations – Fractions - Understand decimal notation for fractions, and compare decimal fractions.*

Proficiency Scale	
4.0	<p>In addition to score 3.0 performance, the student demonstrates in-depth inferences and applications that go beyond what was taught. For example, the student will:</p> <p>Learning Target 1: Read and write decimals to thousandths using base-ten numerals, number names, and expanded form, e.g., $347.392 = 3 \times 100 + 4 \times 10 + 7 \times 1 + 3 \times (1/10) + 9 \times (1/100) + 2 \times (1/1000)$ (MGSE5.NBT.3.a)</p> <p>Learning Target 2: Compare two decimals to thousandths based on meanings of the digits in each place, using $>$, $=$, and $<$ symbols to record the results of comparisons (MGSE5.NBT.3.b)</p>
3.5	In addition to score 3.0 performance, partial success at score 4.0 content
3.0	<p>The student will</p> <p>Learning Target 1: 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</p> <p>The student exhibits no major errors or omissions.</p>
2.5	No major errors or omissions regarding score 2.0 content and partial success at score 3.0
2.0	<p>There are no major errors or omissions regarding the simpler details and processes.</p> <p>The student will recognize or recall specific vocabulary:</p> <p>Learning Target 1: hundredths, visual model</p> <p>The student will perform basic processes:</p> <p>Learning Target 2: Compare decimals to the tenths place using $>$, $<$, or $=$</p> <p>However, the student exhibits major errors or omissions regarding the more complex ideas and processes.</p>
1.5	Partial success at score 2.0 content and major errors or omissions regarding score 3.0 content
1.0	With help, partial success at score 2.0 and score 3.0
0.5	With help, partial success at score 2.0 content but not at score 3.0 content
0.0	Even with help, no success

Grade 4 Math Learning Map

Prioritized Standard: MGSE4.OA.2 Multiply or Divide to solve word problems involving multiplicative comparison. Use drawings and equations with a symbol or letter for the unknown number to represent the problem, distinguishing multiplicative comparison from additive comparison. *Operations and Algebraic Thinking - Use the four operations with whole numbers to solve problems.*

Proficiency Scale	
4.0	<p>In addition to score 3.0 performance, the student demonstrates in-depth inferences and applications that go beyond what was taught. For example, the student will:</p> <p><u>Learning Target 1:</u> Create, solve, and explain multiplicative comparison problems that could occur in the real world</p>
3.5	In addition to score 3.0 performance, partial success at score 4.0 content
3.0	<p>The student will</p> <p><u>Learning Target 1:</u> Multiply or divide to solve word problems involving multiplicative comparison <u>Learning Target 2:</u> Use drawings and equations with a symbol or letter for the unknown number to represent the problem, distinguishing multiplicative comparison from additive comparison</p> <p>The student exhibits no major errors or omissions.</p>
2.5	No major errors or omissions regarding score 2.0 content and partial success at score 3.0
2.0	<p>There are no major errors or omissions regarding the simpler details and processes.</p> <p>The student will recognize or recall specific vocabulary:</p> <p><u>Learning Target 1:</u> multiplicative comparison, additive comparison, equation</p> <p>The student will perform basic processes:</p> <p><u>Learning Target 2:</u> Solve one step multiplication or division problems</p> <p>However, the student exhibits major errors or omissions regarding the more complex ideas and processes.</p>
1.5	Partial success at score 2.0 content and major errors or omissions regarding score 3.0 content
1.0	With help, partial success at score 2.0 and score 3.0
0.5	With help, partial success at score 2.0 content but not at score 3.0 content
0.0	Even with help, no success

Grade 4 Math Learning Map

Prioritized Standard: MGSE4.OA.3 Solve multistep word problems 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 symbol or letter standing for the unknown quantity. Assess the reasonableness of answers using mental computation and estimation strategies including rounding. *Operations and Algebraic Thinking - Use the four operations with whole numbers to solve problems.*

	Proficiency Scale
4.0	<p>In addition to score 3.0 performance, the student demonstrates in-depth inferences and applications that go beyond what was taught. For example, the student will:</p> <p><u>Learning Target 1:</u> Create a real-world multi-step algebraic word problem using the four operations, including interpretations of remainders. Justify the reasonableness of the answers using specific criteria and strategies such as mental computation, and estimation strategies including rounding</p>
3.5	In addition to score 3.0 performance, partial success at score 4.0 content
3.0	<p>The student will</p> <p><u>Learning Target 1:</u> Solve multi-step word problems with whole numbers and having whole-number answers using the four operations, including problems in which remainders must be interpreted</p> <p><u>Learning Target 2:</u> Represent multi-step word problems using equations with a symbol or letter standing for the unknown quantity</p> <p><u>Learning Target 3:</u> Assess the reasonableness of answers using mental computation and estimation strategies including rounding</p> <p>The student exhibits no major errors or omissions.</p>
2.5	No major errors or omissions regarding score 2.0 content and partial success at score 3.0
2.0	<p>There are no major errors or omissions regarding the simpler details and processes.</p> <p>The student will recognize or recall specific vocabulary:</p> <p><u>Learning Target 1:</u> estimation, rounding, unknown quantity</p> <p>The student will perform basic processes:</p> <p><u>Learning Target 2:</u> Represent simple word problems using equations with a symbol or letter standing for the unknown quantity</p> <p><u>Learning Target 3:</u> Solve one-step word problems with whole numbers using the four operations</p> <p><u>Learning Target 4:</u> Interpret remainders</p> <p>However, the student exhibits major errors or omissions regarding the more complex ideas and processes.</p>
1.5	Partial success at score 2.0 content and major errors or omissions regarding score 3.0 content
1.0	With help, partial success at score 2.0 and score 3.0
0.5	With help, partial success at score 2.0 content but not at score 3.0 content
0.0	Even with help, no success