

Grade 4 Proficiency Scale

I can apply place-value concepts to show an understanding of multi-digit whole numbers within 1,000,000.

Reporting Category: Math 4.1.1

Exceeds Standard	4	I am able to transfer this learning to more complex content and thinking, including deeper conceptual understanding and applications that go beyond what is explicitly taught in class.
At Standard Proficient	3	<p>A. I can read and write whole numbers in expanded, standard, and word form through 1,000,000.</p> <p>B. I can compare two multi-digit numbers through 1,000,000 using symbols.</p> <p>C. I can round multi-digit numbers (through 1,000,000) to any place.</p> <p>D. I can demonstrate an understanding that in a multi-digit number, a digit in one place represents ten times what it represents in the place to its right.</p>
Approaching Standard	2	<p>A-D. I can recognize or recall academic vocabulary including: <i>standard form, word form, expanded form, digit, place, place value, ones, tens, hundreds, thousands, ten thousands, hundred thousands, millions, period, compare, inequality, greater than (>), less than (<), equal to (=), round, friendly number, times, greater, less, powers of ten</i></p> <p>A. I can perform basic processes such as: -Write a multi-digit whole number in standard form (up to six digits). -Read a multi-digit whole number written in standard form (up to six digits). -Show or explain that expanded form is a sum of the values represented by each place value. -Identify the place and the value of a digit in a given 6 digit number. -Represent numbers through 1,000,000 using models.</p> <p>B. I can perform basic processes such as: -Compare multi-digit numbers having up to six digits using <, >, and = symbols. -Explain how to write comparisons using <, >, and = symbols. -Explain that an equal sign means that the expressions on each side have the same value. -Compare the relative sizes of different place values. -Accurately place multi-digit numbers on a number line model.</p> <p>C. I can perform basic processes such as: -Apply and explain rules for rounding multi-digit numbers. -Accurately place multi-digit numbers on a number line marked in intervals appropriate to a given rounding task. -In the context of a given rounding task, identify the interval between which a target number lies.</p> <p>D. I can perform basic processes such as: -Understand and describe the base ten place value system in terms of powers of ten. -Identify the place and the value of a digit in a given 6 digit number. -Represent numbers through 1,000,000 using models.</p>
Not at Standard	1	I demonstrate partial or no success with this standard and related content/skills.

Grade 4 Proficiency Scale

I can use place value and properties of operations to add and subtract multi-digit whole numbers.

Reporting Category: Math 4.1.2

Exceeds Standard	4	I am able to transfer this learning to more complex content and thinking, including deeper conceptual understanding and applications that go beyond what is explicitly taught in class.
At Standard Proficient	3	<p>A. I can add multi-digit whole numbers within 1,000,000.</p> <p>B. I can subtract multi-digit numbers within 1,000,000.</p>
Approaching Standard	2	<p>A-B. I can recognize or recall academic vocabulary including: <i>addition, sum, total, addends, properties (identity, associative, commutative), subtraction, difference, compare, regroup, standard algorithm, expression, variable, equation, inequality, reasonable, estimate, round</i></p> <p>A. I can perform basic processes such as:</p> <ul style="list-style-type: none"> -Add numbers (up to 1,000,000) using increasingly efficient strategies (e.g. Friendly Numbers, Give & Take (Compensation), and standard algorithm). -Model addition using base ten area pieces and open number lines. -Assess the reasonableness of answers to addition problems by using mental computation, rounding, or other estimation strategies. -Round whole numbers to a given place using rounding rules or number line models. -Explain that multi-digit numbers can be added together by adding like place values. -Explain the properties of addition. -Use mental math to find 10, 100, or 1000 more than a number. -Fluently add within 20. <p>B. I can perform basic processes such as:</p> <ul style="list-style-type: none"> -Subtract numbers (up to 1,000,000) using increasingly efficient strategies (e.g. Take Away/Removal, Differencing, Constant Difference, and standard algorithm). -Model subtraction using base ten area pieces and open number lines. -Assess the reasonableness of answers to subtraction problems by using mental computation, rounding, or other estimation strategies. -Round whole numbers to a given place using rounding rules or number line models. -Decompose and compose place values of the minuend to make groups of 10s, 100s, 1000s, etc. -Describe a subtraction problem as an unknown addend problem. -Use mental math to find 10, 100, or 1000 less than a number. -Fluently subtract within 20.
Not at Standard	1	I demonstrate partial or no success with this standard and related content/skills.

Grade 4 Proficiency Scale

I can use place value and properties of operations to multiply and divide multi-digit whole numbers.

Reporting Category: Math 4.1.3

Exceeds Standard	4	I am able to transfer this learning to more complex content and thinking, including deeper conceptual understanding and applications that go beyond what is explicitly taught in class.
At Standard Proficient	3	<p>A. I can multiply a whole number of up to four digits by a one-digit number.</p> <p>B. I can multiply 2 two-digit numbers.</p> <p>C. I can divide up to four-digit dividends by one-digit divisors with answers written as whole number quotients and remainders.</p>
Approaching Standard	2	<p>A-C. I can recognize or recall academic vocabulary including: <i>multiply, product, factor, total, division, divisor, dividend, quotient, remainder, expression, variable, equation, reasonable, properties of multiplication (identity, associative, commutative), array, tile array, area model, quick sketch, reasonable, estimate, round</i></p> <p>A-B. I can perform basic processes such as:</p> <ul style="list-style-type: none"> -Multiply 2 two-digit numbers using efficient strategies, including (but not limited to) Partial Products, Doubling & Halving, and the Over/Under Strategy. -Multiply whole numbers up to 4 digits by a one-digit number using efficient strategies, including (but not limited to) Partial Products, Doubling & Halving, Half Ten, and the Over/Under Strategy. -Demonstrate multiplication of whole numbers using models such as base ten area and linear pieces, arrays, area models, quick sketches, and ratio tables. -Assess the reasonableness of answers to multiplication problems by using mental computation, rounding, or other estimation strategies. -Round whole numbers to a given place using rounding rules or number line models. -Explain the properties of multiplication (identity, associative, and commutative). -Multiply one-digit numbers by multiples of ten. -Fluently multiply within 100 using models and strategies. -Fluently add multi-digit numbers. <p>C. I can perform basic processes such as:</p> <ul style="list-style-type: none"> -Divide whole number dividends up to 4 digits by a one-digit divisor using strategies, including (but not limited to) Partial Quotients, Multiply to Divide, Over Division, and Equivalent Ratios. -Demonstrate division of whole numbers using models such as base ten area and linear pieces, arrays, area models, quick sketches, and ratio tables. -Assess the reasonableness of answers to division problems by using mental computation, rounding, or other estimation strategies. -Round whole numbers to a given place using rounding rules or number line models. -Describe a division problem as a method of finding an unknown factor (e.g. the answer to the problem 64 divided by 4 is the answer to the question "how many times does 4 go into 64?"). -Describe the inverse relationship between multiplication and division. -Fluently multiply and divide within 100 using models and strategies. -Fluently subtract multi-digit numbers.

Grade 4 Proficiency Scale

I can use place value and properties of operations to multiply and divide multi-digit whole numbers.

Reporting Category: Math 4.1.3

Not at Standard	1	I demonstrate partial or no success with this standard and related content/skills.
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Grade 4 Proficiency Scale

I can recognize and generate equivalent fractions.

Reporting Category: Math 4.2.1

Exceeds Standard	4	I am able to transfer this learning to more complex content and thinking, including deeper conceptual understanding and applications that go beyond what is explicitly taught in class.
At Standard Proficient	3	A. I can recognize and generate equivalent fractions.
Approaching Standard	2	<p>A. I can recognize or recall academic vocabulary including: <i>fraction, numerator, denominator, equivalent, partition, justify</i></p> <p>A. I can perform basic processes such as:</p> <ul style="list-style-type: none"> -Generate equivalent fractions using strategies such as (but not limited to) using models (egg cartons, geoboards, pattern blocks, money), drawings (area models, number lines), or by multiplying a given fraction by a fraction equivalent to 1. -Recognize and describe equivalent fractions when represented with models such as number lines, egg cartons, rulers, circle graphs, and folded models. -Use fraction notation (x/y) to represent fractional parts of a whole (or set). -Partition a number line into equal parts. -Partition shapes into equal parts using drawings, manipulatives, folded models, etc.
Not at Standard	1	I demonstrate partial or no success with this standard and related content/skills.

Grade 4 Proficiency Scale

I can compare fractions and justify my conclusions.

Reporting Category: Math 4.2.2

Exceeds Standard	4	I am able to transfer this learning to more complex content and thinking, including deeper conceptual understanding and applications that go beyond what is explicitly taught in class.
At Standard Proficient	3	A. I can compare two fractions with different numerators and different denominators using the symbols $>$, $=$, or $<$ and justify my conclusions. (Limit the denominators to 2, 3, 4, 5, 6, 8, 10, 12, and 100.)
Approaching Standard	2	A. I can recognize or recall academic vocabulary including: <i>numerator, denominator, equivalent, comparison, compare, justify, greater than, less than, equal to, symbols ($>$, $=$, $<$), inequality, benchmark fraction</i> A. I can perform basic processes such as: -Apply strategies for generating equivalent fractions to justify the comparison of two given fractions. -Compare fractions using knowledge of benchmark fractions and by determining which of the given fractions may be closer to zero, one-half, or one whole on a number line diagram. -Use the symbols ($>$, $=$, or $<$) and related vocabulary to compare two fractions. -Use number lines and partitioned models to represent and visually compare fractions. -Explain that portions of two or more shapes cannot be compared unless each of the shapes (the "wholes") are congruent.
Not at Standard	1	I demonstrate partial or no success with this standard and related content/skills.

Grade 4 Proficiency Scale

I can solve problems involving adding and subtracting fractions (and mixed numbers).

Reporting Category: Math 4.2.3

Exceeds Standard	4	I am able to transfer this learning to more complex content and thinking, including deeper conceptual understanding and applications that go beyond what is explicitly taught in class.
At Standard Proficient	3	<p>A. I can solve word problems involving addition and subtraction of fractions referring to the same whole or set and having like denominators.</p> <p>B. I can add and subtract fractions with a common denominator.</p> <p>C. I can add and subtract mixed numbers with a common denominator.</p> <p>D. I can decompose a fraction or a mixed number into a sum of fractions with the same denominator and justify the decomposition (e.g., by using a visual fraction model).</p> <p>(Limit the denominators to 2, 3, 4, 5, 6, 8, 10, 12, and 100.)</p>
Approaching Standard	2	<p>A-D. I can recognize or recall academic vocabulary including: <i>fraction, numerator, denominator, mixed number, improper fraction (fraction greater than 1), simplify, common denominator ("like" denominator), decompose, sum, difference, unit fraction, non-unit fraction, justify</i></p> <p>A-D. I can perform basic processes such as:</p> <ul style="list-style-type: none"> -Add or subtract fractions (including mixed numbers) having like denominators in the context of a word problem. (*Answers to <u>word problems</u> may require simplification.) -Decompose a fraction to convert an improper fraction to a mixed number. (e.g. $10/8 = 8/8 + 2/8 = 1 + 2/8 = 1 \frac{2}{8}$) -Decompose a fraction or mixed number into a sum of fractions having like denominators. (e.g. $5/8 = 1/8 + 1/8 + 3/8$) -Add or subtract mixed numbers having like denominators using models, drawings, or equations. (*Answers need not be simplified and subtraction will not require regrouping.) -Add or subtract fractions having like denominators using models, drawings, or equations. (*Answers need not be simplified.) -Identify/describe a fraction with a numerator greater than the denominator as a number greater than one. -Identify/describe a fraction with the same numerator and denominator as being equivalent to one. -Identify the unit fraction as one equal part of the whole, written as $1/y$.
Not at Standard	1	I demonstrate partial or no success with this standard and related content/skills.

Grade 4 Proficiency Scale

I can solve problems involving multiplication of a whole number by a unit and non-unit fraction.

Reporting Category: Math 4.2.4

Exceeds Standard	4	I am able to transfer this learning to more complex content and thinking, including deeper conceptual understanding and applications that go beyond what is explicitly taught in class.
At Standard Proficient	3	<p>A. I can solve word problems involving multiplication of a whole number by a fraction.</p> <p>B. I can multiply a whole number by a unit fraction.</p> <p>C. I can multiply a whole number by a non-unit fraction.</p> <p>(Limit the denominators to 2, 3, 4, 5, 6, 8, 10, 12, and 100.)</p>
Approaching Standard	2	<p>A-C. I can recognize or recall academic vocabulary including: <i>fraction, numerator, denominator, mixed number, improper fraction (fraction greater than 1), simplify, common denominator ("like" denominator), decompose, sum, unit fraction, non-unit fraction, justify</i></p> <p>A-C. I can perform basic processes such as:</p> <ul style="list-style-type: none"> -Multiply a whole number and a fraction in the context of a word problem. (*Answers to <u>word problems</u> may require simplification.) -Apply the relationship between multiplication and repeated addition as a strategy for multiplying whole numbers and fractions. -Multiply a whole number by a non-unit fraction using fraction models, drawings, and equations. (*Answers need not be simplified or written as a mixed number.) -Multiply a whole number by a unit fraction using fraction models, drawings, and equations. (*Answers need not be simplified or written as a mixed number.) -Interpret multiplying a whole number by a fraction in the context of determining "the fraction of a set." -Identify/describe a fraction with a numerator greater than the denominator as a number greater than one. -Identify/describe a fraction with the same numerator and denominator as being equivalent to one. -Identify the unit fraction as one equal part of the whole, written as $1/y$.
Not at Standard	1	I demonstrate partial or no success with this standard and related content/skills.

Grade 4 Proficiency Scale

I can apply an understanding of decimal fractions to add unlike fractions and compare decimals.

Reporting Category: Math 4.2.5

Exceeds Standard	4	I am able to transfer this learning to more complex content and thinking, including deeper conceptual understanding and applications that go beyond what is explicitly taught in class.
At Standard Proficient	3	<p>A. I can add two fractions with denominators of 10 and 100.</p> <p>B. I can compare two decimals to hundredths using the symbols $>$, $=$, or $<$ and justify my conclusions.</p>
Approaching Standard	2	<p>A-B. I can recognize or recall academic vocabulary including: <i>fraction, numerator, denominator, common denominator ("like denominator"), decimal fraction, decimal, decimal notation, tenths, hundredths, compare, justify, greater than, less than, equal to, symbols ($>$, $=$, $<$), inequality</i></p> <p>A. I can perform basic processes such as:</p> <ul style="list-style-type: none"> -Apply an understanding of equivalence to add two fractions having denominators of 10 and 100. -Add two fractions having denominators of 10 and 100 using models or drawings. -Express a fraction with denominator 10 as an equivalent fraction with denominator 100 using models (base ten area pieces or number lines) or by multiplying a given fraction by a fraction equivalent to 1 (10/10). -Recognize and describe equivalent fractions when represented with models or drawings. <p>B. I can perform basic processes such as:</p> <ul style="list-style-type: none"> -Compare two decimal numbers to hundredths using symbols ($>$, $=$, or $<$) and related vocabulary. -Apply an understanding of equivalence to compare two decimal numbers. -Use models such as base ten area pieces or number lines to represent and visually compare decimal numbers. -Use decimal notation to represent fractions with denominators of 10 or 100. -Model a decimal number with base ten area pieces or decimal grids.
Not at Standard	1	I demonstrate partial or no success with this standard and related content/skills.

4th Grade Math Proficiency Scale

I can represent and solve word problems involving whole numbers and the four operations.

Reporting Category: Math 4.3.1

Exceeds Standard	4	I am able to transfer this learning to more complex content and thinking, including deeper conceptual understanding and applications that go beyond what is explicitly taught in class.
At Standard Proficient	3	<p>A. I can multiply or divide to solve word problems involving multiplicative comparison.</p> <p>B. I can solve multi-step word problems involving the four operations posed with whole numbers and represent these problems using equations with a symbol or letter standing for the unknown quantity.</p>
Approaching Standard	2	<p>A. I can recognize or recall academic vocabulary including: <i>multiplication, multiply, factor, product, division, divide, dividend, divisor, quotient, operation, multiplicative, additive, compare, more, less, equation, quantity, symbol, unknown, variable, reasonableness</i></p> <p>A. I can perform basic processes such as: -Use estimation or self-checking strategies to assess the reasonableness of an answer. -Represent multiplication and division word problems with models, drawings, and equations. -Distinguish between multiplicative comparison from additive comparison by analyzing the relationship among quantities within a word problem or mathematical situation. -Interpret a multiplication equation as a comparison (e.g. 3×5 is the same as 3 times as big as 5). -Represent multiplicative comparisons as multiplication equations (e.g. 3 times as big as five is $3 \times 5 = 15$). -Demonstrate multiplication and division fluency with facts through 100.</p> <p>B. I can recognize or recall academic vocabulary including: <i>operation, add, sum, subtract, difference, multiply, product, divide, quotient, equation, quantity, symbol, unknown, variable, reasonableness</i></p> <p>B. I can perform basic processes such as: -Use estimation or self-checking strategies to assess the reasonableness of an answer. -Represent and solve multi-step word problems involving the four operations with models, drawings, equations and computation strategies. -Understand that some division word problems result in a remainder that must be interpreted yielding a final answer that is a whole number. -Represent one-step and multi-step word problems using equations with a letter standing for an unknown quantity. -Identify key words within a word problem that may indicate relationships between quantities or suggest the use of certain operations. -Use the order of operations to evaluate numerical expressions or solve multi-step equations both with and without grouping symbols. -Identify the missing symbol (+, -, x, /, =, <, >) that makes a number sentence true (single-digit divisor only). -Fluently add, subtract, multiply, and divide.</p>

Not at Standard	1	I demonstrate partial or no success with this standard and related content/skills.
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4th Grade Math Proficiency Scale

I can find factors and multiples of numbers within 100.

Reporting Category: Math 4.3.2

Exceeds Standard	4	I am able to transfer this learning to more complex content and thinking, including deeper conceptual understanding and applications that go beyond what is explicitly taught in class.
At Standard Proficient	3	<p>A. I can find all factor pairs for a whole number between 1 and 100.</p> <p>B. I can determine whether a given number between 1 and 100 is a multiple of a given one-digit number.</p> <p>C. I can determine whether a given number between 1 and 100 is prime or composite.</p>
Approaching Standard	2	<p>A-C. I can recognize or recall academic vocabulary including: <i>multiplication, division, factor(s), array, odd, even, multiple, skip count, prime number, composite number</i></p> <p>A-C. I can perform basic processes such as:</p> <ul style="list-style-type: none"> -Demonstrate multiplication (and division) fluency with facts through 100. -Find multiples of a number using models (e.g. equal groups of objects, number lines) and/or additive strategies (e.g. skip counting, repeated addition). -Understand that a whole number is a multiple of each of its factors. -Represent a composite number and its factor pairs with an array using objects (tiles) or drawings. -Represent a prime number (n) with an array having dimensions ($n \times 1$) using objects (tiles) or drawings. -Model multiplication using a rectangular array with the understanding that the numbers being multiplied are represented by the dimensions of the rectangle and that the product of those numbers is represented by the area of the rectangle.
Not at Standard	1	I demonstrate partial or no success with this standard and related content/skills.

4th Grade Math Proficiency Scale

I can demonstrate fluency with multiplication and division facts.

Reporting Category: Math 4.3.3

Exceeds Standard	4	I am able to transfer this learning to more complex content and thinking, including deeper conceptual understanding and applications that go beyond what is explicitly taught in class.
At Standard Proficient	3	A. I can fluently multiply and divide within 100.
Approaching Standard	2	<p>A. I can recognize or recall academic vocabulary including: factor, product, dividend, divisor, quotient, fact family, related fact, properties of multiplication (commutative, associative, distributive, identity), array, ratio table, strategy, efficient</p> <p>A. I can perform basic processes such as: -Solve multiplication equations within 100 and division equations within 100 with efficiency and accuracy. (Student should be able to give correct answer in about 3 seconds.) -Describe and evaluate the strategies used to solve multiplication and division problems or the strategies used by others. -Use increasingly efficient methods to multiply and divide, including strategies based on multiplication properties and multiplicative thinking (e.g. Zero facts, Ones facts, Double facts, Double Double facts, Double Double Double facts, Tens facts, Half-Tens facts, Tens Minus One Set facts, ratio tables, and more). -Multiply and divide using strategies based on counting and additive thinking (e.g. counting groups of objects, skip counting, repeated addition, repeated subtraction, and more). -Represent multiplication and division using models, drawings, and equations.</p>
Not at Standard	1	I demonstrate partial or no success with this standard and related content/skills.

4th Grade Math Proficiency Scale

I can draw and identify lines and angles, as well as classify two-dimensional figures by the properties of these features.

Reporting Category: Math 4.4.1

Exceeds Standard	4	I am able to transfer this learning to more complex content and thinking, including deeper conceptual understanding and applications that go beyond what is explicitly taught in class.
At Standard Proficient	3	<p>A. I can classify two-dimensional figures (including right triangles) based on the presence or absence of parallel lines, perpendicular lines, and/or angles of a specified size.</p> <p>B. I can draw geometric features such as points, lines, line segments, rays, angles, perpendicular lines, and/or parallel lines, as well as identify these features in two-dimensional figures.</p> <p>C. I can identify symmetrical two-dimensional figures and recognize (or draw) up to two lines of symmetry within a given figure.</p>

Approaching Standard	2	<p>A. I can recognize or recall academic vocabulary including: <i>two-dimensional figure, open/closed figure, regular/irregular figure, polygon, classify, hierarchy, triangle, right triangle, acute triangle, obtuse triangle, quadrilateral, trapezoid, parallelogram, rectangle, rhombus, square, pentagon, hexagon, octagon, attribute, parallel, perpendicular, congruent, side, vertex, right angle, acute angle, obtuse angle</i></p> <p>A. I can perform basic processes such as: -Explain and give examples of how two-dimensional figures may be classified using <i>increasingly more specific terms</i> within a hierarchy. -Explain and give examples of how a figure may belong to more than one category according to its various attributes (e.g. number of sides, side length, parallel and perpendicular sides, angle measure). -Identify and describe attributes such as number of vertices (corners) and types of angles (right, acute, obtuse) within figures. -Identify and describe attributes such as parallel and perpendicular sides within figures. -Identify and describe attributes such as number of sides and side length within figures. -Distinguish between defining attributes and non-defining attributes.</p> <p>B. I can recognize or recall academic vocabulary including: <i>two-dimensional figure, point, line, line segment, ray, angle, (acute, right, obtuse), vertex, parallel, perpendicular, congruent</i></p> <p>B. I can perform basic processes such as: -Draw and accurately label parallel and perpendicular lines; identify these features within a given two-dimensional figure or diagram. -Draw and accurately label acute angles, right angles, and obtuse angles; identify these features within a given two-dimensional figure or diagram. -Draw and accurately label points, lines, line segments, and rays; identify these features within a given two-dimensional figure or diagram. -Define and model geometric features using manipulatives (e.g. pattern blocks, geoboards, tiles, clocks).</p> <p>C. I can recognize or recall academic vocabulary including: <i>two-dimensional figure, symmetry, line of symmetry</i></p> <p>C. I can perform basic processes such as: -Determine whether a given two-dimensional figure is symmetrical and justify the decision. -Identify and/or draw a line of symmetry within a given two-dimensional figure. -Model line symmetry with manipulatives (e.g. pattern blocks, geoboards, mirrors) and drawings.</p>
Not at Standard	1	I demonstrate partial or no success with this standard and related content/skills.

Grade 4 Proficiency Scale

I can solve problems involving measurement and conversions from a larger unit to a smaller unit.

Reporting Category: Math 4.5.1

Exceeds Standard	4	I am able to transfer this learning to more complex content and thinking, including deeper conceptual understanding and applications that go beyond what is explicitly taught in class.
At Standard Proficient	3	<p>A. I can use the four operations to solve word problems involving distances, intervals of time (such as elapsed time), liquid volumes, masses of objects; money; and problems that require measurement conversions.</p> <p>B. I can express measurements in a larger unit in terms of a smaller unit within a single system of measurement (including customary units, metric units, and time units).</p> <p>C. I can apply the area and perimeter formulas for rectangles in real-world and mathematical problems.</p>
Approaching Standard	2	<p>A-B. I can recognize or recall academic vocabulary including: <i>measurement, length, capacity, weight, mass, time, elapsed time, unit, convert, ratio table</i> <i>customary (U.S. standard) units: inch, foot, yard, cup, pint, quart, gallon, ounce, pound</i> <i>metric units: centimeter, meter, kilometer, milliliter, liter, gram, kilogram</i> <i>time units: second, minute, hour, day, week, month, year</i></p> <p>A-B. I can perform basic processes such as:</p> <ul style="list-style-type: none"> -Use estimation or self-checking strategies to assess the reasonableness of an answer. -Represent and solve word problems involving the four operations with models, drawings, equations, and computation strategies. -Identify units within a real-world or mathematical problem and make any necessary unit conversions leading to a reasonable solution. -Identify key words within a word problem that may indicate relationships between quantities or suggest the use of certain operations. -Identify key details such as start/end times and elapsed time within word problems. -Use models such as manipulatives, clocks, number lines, and fractional jumps to represent elapsed time. -Identify time (analog and digital) as the amount of minutes before or after the hour, including time phrases such as <i>half past, quarter after, quarter to</i>. -Convert measurement units using a ratio table (or similar strategy). -Describe exact equivalencies between units within a given system of measurement. (*A table of equivalencies will be provided.) -Understand the relative size of measurement units within each system of measurement. <p>C. I can recognize or recall academic vocabulary including: <i>area, perimeter, rectangle, length, width, square unit, unit square, array, area model, linear unit</i></p> <p>C. I can perform basic processes such as:</p> <ul style="list-style-type: none"> -Before solving, interpret the context of a real-world or mathematical problem to distinguish between the concepts of area and perimeter. -Define area and write equations to determine area by accurately multiplying the length and width of a rectangle. (Whole numbers only and formulas will be provided.) -Using the definition of perimeter, write an equation to find an unknown side length. -Define perimeter and write equations to calculate the perimeter of a figure by accurately summing the lengths of each side. (Whole numbers only and formulas will be provided.) -Recognize that, by definition, opposite sides of a rectangle are equal in length.

Not at Standard	1	I demonstrate partial or no success with this standard and related content/skills.
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Grade 4 Proficiency Scale

I can represent and interpret data using tables, graphs, and line plots.

Reporting Category: Math 4.5.2

Exceeds Standard	4	I am able to transfer this learning to more complex content and thinking, including deeper conceptual understanding and applications that go beyond what is explicitly taught in class.
At Standard Proficient	3	<p>A. I can translate information from one type of display to another, including tables, charts, bar graphs, or pictographs.</p> <p>B. I can solve problems involving addition and subtraction of fractions (or mixed numbers) by using information presented in line plots.</p>
Approaching Standard	2	<p>A. I can recognize or recall academic vocabulary including: <i>data, category, unit, table, chart, bar graph, scale, pictograph, symbol, key</i></p> <p>A. I can perform basic processes such as: -Include all components of a pictograph to represent a given set of data (axis, labels, title, key, symbol). -Include all components of a bar graph to represent a given set of data (x-axis, y-axis, labels, title). -Organize a set of data and, when necessary, determine the appropriate scale for the x-axis and/or y-axis. -Identify and interpret specific information shown in a given table, chart, or graph in order to answer simple, one-step questions. -Identify the key or scale to correctly interpret data represented in bar graphs or pictographs. -Identify the title, the labels of the x- and y-axis, and the measurement units featured in bar graphs or pictographs.</p> <p>B. I can recognize or recall academic vocabulary including: <i>data, measurement, unit, fraction of a unit, line plot, horizontal axis, x-axis, symbol, key</i></p> <p>B. I can perform basic processes such as: -Use information from line plots to solve multi-step problems requiring strategies for adding and subtracting with fractions and mixed numbers. -Identify and interpret specific information shown on a given line plot in order to answer simple, one-step questions. -Accurately plot data points in accordance with a set of collected measurement data, recognizing that each symbol above the horizontal line (axis) of a line plot represents a single occurrence of a particular measurement value. -Include all components of a line plot to represent a set of measurement data (axis, label, title). -Organize a set of measurement data (reported in halves, fourth, or eighths of a unit) into different categories.</p>
Not at Standard	1	I demonstrate partial or no success with this standard and related content/skills.

Grade 4 Proficiency Scale

I can measure angles and solve problems involving adjacent angles.

Reporting Category: Math 4.5.3

Exceeds Standard	4	I am able to transfer this learning to more complex content and thinking, including deeper conceptual understanding and applications that go beyond what is explicitly taught in class.
At Standard Proficient	3	<p>A. Using a protractor, I can measure angles in whole-number degrees and sketch angles of a specified measure.</p> <p>B. I can solve addition and subtraction problems to find unknown angles on a diagram in real-world and mathematical problems.</p>
Approaching Standard	2	<p>A-B. I can recognize or recall academic vocabulary including: <i>angle, ray, endpoint, vertex, degree(s), one-degree angle, rotation, circle, protractor, zero angle, acute angle, right angle, obtuse angle, straight angle, interior angle</i></p> <p>A-B. I can perform basic processes such as:</p> <ul style="list-style-type: none"> -Apply an understanding of angle measure to solve addition and subtraction problems to find unknown angles on a diagram in real-world and mathematical problems. -Understand that the measure of an angle composed of adjacent, non-overlapping angles is additive. -Accurately sketch angles of a specified measure using a protractor. -Accurately measure angles in whole-number degrees using a protractor. -Understand that an angle that turns through $\frac{1}{360}$ of a circle is called a "one-degree angle" and that a "one-degree angle" can be used to measure other angles. -Utilize non-standard tools (e.g. pattern blocks, the clock face, colored tiles, geoboards) to measure and classify angles. -Identify and describe zero angles, acute angles, obtuse angles, and straight angles within figures or diagrams. -Identify and describe benchmark angles of 90 degrees (right angle) and 180 degrees (straight angle).
Not at Standard	1	I demonstrate partial or no success with this standard and related content/skills.

Grade 4 Proficiency Scale

I can make sense of problems.

Reporting Category: Math 4.6.1

Exceeds Standard	4	I am able to transfer these mathematical processes to more complex content and thinking, including problems and applications that go beyond what is explicitly taught in class.
At Standard Proficient	3	A. I can make sense of a problem and choose among several effective strategies to solve it using objects, drawings, operations, or mental math. B. I can evaluate the reasonableness of my solution within the context of the problem.
Approaching Standard	2	A. With support, I can make sense of a problem and choose among several effective strategies to solve it using objects, drawings, operations, or mental math. B. With support, I can evaluate the reasonableness of my solution within the context of the problem.
Not at Standard	1	I demonstrate partial or no success with the mathematical processes described above.

Grade 4 Proficiency Scale

I can effectively model my mathematical thinking.

Reporting Category: Math 4.6.2

Exceeds Standard	4	I am able to transfer these mathematical processes to more complex content and thinking, including problems and applications that go beyond what is explicitly taught in class.
At Standard Proficient	3	A. I can accurately model problem situations in multiple ways including (but not limited to) objects, drawings, charts, lists, graphs, or equations. B. I can describe how multiple representations of the same problem situation are related.
Approaching Standard	2	A. With support, I can accurately model problem situations in multiple ways including (but not limited to) objects, drawings, charts, lists, graphs, or equations. B. With support, I can describe how multiple representations of the same problem situation are related.
Not at Standard	1	I demonstrate partial or no success with the mathematical processes described above.

Grade 4 Proficiency Scale

I can solve problems with precision and persevere.

Reporting Category: Math 4.6.3

Exceeds Standard	4	I am able to transfer these mathematical processes to more complex content and thinking, including problems and applications that go beyond what is explicitly taught in class.
At Standard Proficient	3	A. I can be precise when I communicate my mathematical thinking, solve problems, and complete measurement tasks. B. I can persevere by trying alternate problem solving strategies when my first answer seems unreasonable or out of reach.
Approaching Standard	2	A. With support, I can be precise when I communicate my mathematical thinking, solve problems, and complete measurement tasks. B. With support, I can persevere by trying alternate problem solving strategies when my first answer seems unreasonable or out of reach.
Not at Standard	1	I demonstrate partial or no success with the mathematical processes described above.

Grade 4 Proficiency Scale

I can explain my thinking and critique the reasoning of others.

Reporting Category: Math 4.6.4

Exceeds Standard	4	I am able to transfer these mathematical processes to more complex content and thinking, including problems and applications that go beyond what is explicitly taught in class.
At Standard Proficient	3	A. I can effectively explain or represent my solution to a problem using appropriate mathematical language, models, drawings, and/or equations. B. I can respectfully listen to the solutions of others and evaluate the reasonableness or efficiency of the shared approach.
Approaching Standard	2	A. With support, I can effectively explain or represent my solution to a problem using appropriate mathematical language, models, drawings, and/or equations. B. With support, I can respectfully listen to the solutions of others and evaluate the reasonableness or efficiency of the shared approach.
Not at Standard	1	I demonstrate partial or no success with the mathematical processes described above.