

Grade 5 Math Proficiency Scale

I can use place value concepts to identify, represent, and compare decimals to thousandths.

Reporting Category: Math 5.1.1

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.
	3.5	I am beginning to transfer this learning to more complex content and thinking.
At Standard Proficient	3	A. I can read and write decimals to the thousandths place using base-ten numerals, word form, and expanded form. B. I can compare two decimals to thousandths based on meanings of the digits in each place using $>$, $=$, and $<$ symbols. C. I can round decimals to any place.
	2.5	I am proficient with most of the Level 2 content/skills related to this standard.
Approaching Standard	2	A-C. I can recognize or recall academic vocabulary including: <i>standard form, word form, expanded form, digit, place, place value, whole number, decimal number, decimal point, ones, tenths, hundredths, thousandths, compare, inequality, greater than ($>$), less than ($<$), equal to ($=$), round, friendly number, times, greater, less, pattern</i> A. I can perform basic processes such as: -Write a decimal number in standard form (to the thousandths place). -Read a decimal number written in standard form (to the thousandths place). -Show or explain that expanded form is a sum of the values represented by each place value. -Describe how a digit in one place represents 1/10 of what it represents in the place to the left. -Describe how a digit in one place represents 10 times of what it represents in the place to the right. -Identify the place and the value of a digit in a whole number or decimal number. -Describe equivalencies between decimal numbers using models, including metric measuring tools. -Represent decimal numbers using models. B. I can perform basic processes such as: -Compare decimal numbers to the thousandths place 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 decimal numbers on a number line model. C. I can perform basic processes such as: -Apply and explain rules for rounding decimal numbers to any place. -Accurately place decimal 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.
	1.5	I am beginning to demonstrate success with foundational content/skills related to this standard.
Not at Standard	1	I demonstrate partial or no success with this standard and related content/skills.

Grade 5 Math Proficiency Scale

I can explain patterns when multiplying and dividing by powers of 10.

Reporting Category: Math 5.1.2

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.
	3.5	I am beginning to transfer this learning to more complex content and thinking.
At Standard Proficient	3	A. I can explain patterns in the number of zeros of the product when multiplying a number by powers of 10 and explain patterns in the placement of the decimal point when a decimal is multiplied or divided by a power of 10.
	2.5	I am proficient with most of the Level 2 content/skills related to this standard.
Approaching Standard	2	<p>A. I can recognize or recall academic vocabulary including: <i>digit, place, place value, whole number, decimal number, decimal point, ones, tenths, hundredths, thousandths, exponents, base, power, powers of ten, pattern</i></p> <p>A. I can perform basic processes such as: -Multiply and divide decimal numbers by powers of ten and observe the placement of the decimal point in each case. -Multiply whole numbers by powers of ten and observe the number of zeros of the product in each case. -Understand and describe the base ten place value system in terms of powers of ten. -Represent powers of ten using exponents, understanding that an exponent denotes repeated multiplication of the base.</p>
	1.5	I am beginning to demonstrate success with foundational content/skills related to this standard.
Not at Standard	1	I demonstrate partial or no success with this standard and related content/skills.

Grade 5 Math Proficiency Scale

I can multiply multi-digit whole numbers using the standard algorithm with understanding.

Reporting Category: Math 5.1.3

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.
	3.5	I am beginning to transfer this learning to more complex content and thinking.
At Standard Proficient	3	A. I can multiply multi-digit whole numbers.
	2.5	I am proficient with most of the Level 2 content/skills related to this standard.
Approaching Standard	2	<p>A. I can recognize or recall academic vocabulary including: <i>whole number, place value, place, multiply, product, partial product, factors, rectangular array, area model, ratio table, equation, algorithm, properties of multiplication (commutative, associative, and distributive), reasonable, estimate</i></p> <p>A. I can perform basic processes such as: -Assess the reasonableness of answers to multiplication problems by using mental computation, rounding, or other estimation strategies. -Describe the relationship and connections between a computational strategy (such as Partial Products) and the standard algorithm. -Multiply multi-digit whole numbers using efficient strategies, including (but not limited to) Partial Products, Doubling & Halving, Half Ten, Over/Under Strategy. -Demonstrate multiplication of whole numbers using models including (but not limited to) base ten area pieces, arrays, area models, quick sketches, and ratio tables. -Explain the properties of multiplication (commutative, associative, distributive) and use expressions to represent these properties. -Fluently multiply within 100 using models and strategies.</p>
	1.5	I am beginning to demonstrate success with foundational content/skills related to this standard.
Not at Standard	1	I demonstrate partial or no success with this standard and related content/skills.

Grade 5 Math Proficiency Scale

I can divide multi-digit numbers by up to two-digit divisors using a variety of strategies.

Reporting Category: Math 5.1.4

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.
	3.5	I am beginning to transfer this learning to more complex content and thinking.
At Standard Proficient	3	A. I can find whole-number quotients of whole numbers with up to four-digit dividends and two-digit divisors.
	2.5	I am proficient with most of the Level 2 content/skills related to this standard.
Approaching Standard	2	<p>A. I can recognize or recall academic vocabulary including: <i>whole number, place value, place, divide, quotient, partial quotient, dividend, divisor, rectangular array, area model, ratio table, equation, properties of multiplication (commutative, associative, and distributive), reasonable, estimate</i></p> <p>A. I can perform basic processes such as: -Assess the reasonableness of answers to division problems by using mental computation, rounding, or other estimation strategies. -Find quotients of multi-digit whole numbers using efficient strategies, including (but not limited to) Partial Quotients, Multiply to Divide, Over Division, and Equivalent Ratios. -Multiply multi-digit whole numbers using efficient strategies; related these strategies and related models to division of whole numbers (the inverse operation). -Demonstrate multiplication and division of whole numbers using models including (but not limited to) base ten area pieces, arrays, area models, quick sketches, and ratio tables. -Explain the properties of multiplication (commutative, associative, distributive) and use expressions to represent these properties. -Fluently multiply and divide within 100 using models and strategies.</p>
	1.5	I am beginning to demonstrate success with foundational content/skills related to this standard.
Not at Standard	1	I demonstrate partial or no success with this standard and related content/skills.

Grade 5 Math Proficiency Scale

I can add and subtract decimal numbers to hundredths.

Reporting Category: Math 5.1.5

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.
	3.5	I am beginning to transfer this learning to more complex content and thinking.
At Standard Proficient	3	A. I can add and subtract decimal numbers to the hundredths place.
	2.5	I am proficient with most of the Level 2 content/skills related to this standard.
Approaching Standard	2	<p>A. I can recognize or recall academic vocabulary including: <i>whole number, decimal number, place value, place, tenths, hundredths, decimal fraction, fraction, mixed number, equivalent, add, sum, addend, subtract, difference, minuend, subtrahend, equation, algorithm, reasonable, estimate</i></p> <p>A. I can perform basic processes such as:</p> <ul style="list-style-type: none"> -Assess the reasonableness of answers by using mental computation, rounding, or other estimation strategies. -Subtract decimal numbers using efficient strategies based on an understanding of whole numbers and fractions, including (but not limited to) Take Away/Removal, Differencing, Constant Difference, and standard algorithm. -Add decimal numbers using efficient strategies based on an understanding of whole numbers and fractions, including (but not limited to) Friendly Numbers, Give & Take (Compensation), and standard algorithm. -Demonstrate addition and subtraction of decimal numbers using models including base ten area pieces, decimal grids, money value pieces, and open number lines. -Explain the properties of addition (commutative, associative) and use expressions to represent these properties. -Represent decimal numbers with models (e.g. base ten area pieces, decimal grids, money value pieces, clocks).
	1.5	I am beginning to demonstrate success with foundational content/skills related to this standard.
Not at Standard	1	I demonstrate partial or no success with this standard and related content/skills.

Grade 5 Math Proficiency Scale

I can multiply and divide decimal numbers to hundredths.

Reporting Category: Math 5.1.6

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.
	3.5	I am beginning to transfer this learning to more complex content and thinking.
At Standard Proficient	3	A. I can multiply and divide decimals to the hundredths place.
	2.5	I am proficient with most of the Level 2 content/skills related to this standard.
Approaching Standard	2	<p>A. I can recognize or recall academic vocabulary including: <i>whole number, decimal number, place value, place, tenths, hundredths, decimal fraction, fraction, mixed number, equivalent, multiply, product, partial product, factors, divide, quotient, partial quotient, dividend, divisor, rectangular array, area model, ratio table, equation, algorithm, properties of multiplication (commutative, associative, and distributive), reasonable, estimate</i></p> <p>A. I can perform basic processes such as:</p> <ul style="list-style-type: none"> -Assess the reasonableness of answers by using mental computation, rounding, or other estimation strategies. -Find quotients of decimal numbers (no decimal divisors) using efficient strategies based on place value and an understanding of whole numbers and fractions, properties of operations, or the relationship between multiplication and division. -Multiply decimal numbers using efficient strategies based on an understanding of whole numbers and fractions, including (but not limited to) Partial Products, Doubling & Halving, Half-Ten, Over/Under Strategy, and standard algorithm. -Demonstrate multiplication and division with decimal numbers using models including (but not limited to) base ten area pieces, arrays, area models, money value pieces, and ratio tables. -Multiply and divide decimal numbers by powers of ten and observe the placement of the decimal point in each case. -Multiply whole numbers by powers of ten and observe the number of zeros of the product in each case. -Explain the properties of multiplication (commutative, associative, distributive) and use expressions to represent these properties. -Represent decimal numbers with models (e.g. base ten area pieces, decimal grids, money value pieces, clocks).
	1.5	I am beginning to demonstrate success with foundational content/skills related to this standard.
Not at Standard	1	I demonstrate partial or no success with this standard and related content/skills.

Grade 5 Math Proficiency Scale

I can apply an understanding of equivalence to solve problems that involve adding and subtracting fractions (including mixed numbers).

Reporting Category: Math 5.2.1

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.
	3.5	I am beginning to transfer this learning to more complex content and thinking.
At Standard Proficient	3	A. I can add and subtract fractions (including mixed numbers) with unlike denominators. (*Answers must be simplified or written as a mixed number.)
	2.5	I am proficient with most of the Level 2 content/skills related to this standard.
Approaching Standard	2	<p>A. I can recognize or recall academic vocabulary including: <i>whole number, fraction, numerator, denominator, mixed number, improper fraction (fraction greater than 1), equivalent fraction, decompose, factor, simplify, common denominator ("like" denominator), "unlike" denominators, multiple, least common multiple, sum, difference</i></p> <p>A. I can perform basic processes such as:</p> <ul style="list-style-type: none"> -Add or subtract fractions (including mixed numbers) having unlike denominators in the context of a word problem. -Use benchmark fractions and number sense of fractions to estimate sums or differences and assess the reasonableness of answers. -Add or subtract fractions (including mixed numbers) having unlike denominators by replacing the given fractions with equivalent fractions. -Add or subtract fractions (including mixed numbers) having unlike denominators using multiple methods, including (but not limited to) double number lines, clocks, and ratio tables. -Apply strategies based on models, equivalency, and/or multiples to generate two or more fractions sharing a common denominator. -Simplify a fraction using an understanding of equivalent fractions and factors. -Decompose a mixed number to create an equivalent value involving an improper fraction. (e.g. $2 \frac{1}{4} = 1 \frac{5}{4} = \frac{9}{4}$) -Decompose a fraction to convert an improper fraction to a mixed number. (e.g. $\frac{10}{8} = \frac{8}{8} + \frac{2}{8} = 1 + \frac{2}{8} = 1 \frac{2}{8}$) -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.
	1.5	I am beginning to demonstrate success with foundational content/skills related to this standard.
Not at Standard	1	I demonstrate partial or no success with this standard and related content/skills.

Grade 5 Math Proficiency Scale

I can apply previous understandings of multiplication to solve problems that involve multiplying a fraction or whole number by a fraction.

Reporting Category: Math 5.2.2

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.
	3.5	I am beginning to transfer this learning to more complex content and thinking.
At Standard Proficient	3	A. I can multiply a fraction (including mixed numbers) by a fraction. (*Answers must be simplified or written as a mixed number.) B. I can demonstrate an understanding of multiplication by a fraction as scaling (resizing).
	2.5	I am proficient with most of the Level 2 content/skills related to this standard.
Approaching Standard	2	A-B. I can recognize or recall academic vocabulary including: <i>whole number, fraction, numerator, denominator, mixed number, improper fraction (fraction greater than 1), simplify, equivalent fraction, decompose, multiply, product, factor, length, unit fraction, rectangular array, area model, tiling, unit squares, properties of multiplication (commutative, associative, and distributive), scaling (resizing), scaling up, compare</i> A-B. I can perform basic processes such as: -Multiply a fraction (including mixed numbers) by a fraction in the context of a word problem. -Use number sense of fractions, including an understanding of scaling, to estimate products and assess the reasonableness of answers. -Predict and explain the effect of multiplying a given number by a fraction greater than 1, less than 1, or equal to 1. -Interpret multiplication as scaling (resizing) by comparing the size of a product to the size of one factor on the basis of the size of the other factor. -Multiply a fraction (including mixed numbers) by a fraction using strategies based on the properties of multiplication (commutative, associative, and distributive properties). -Multiply a fraction (including mixed numbers) by a fraction using diagrams or models (rectangular arrays and area models, number lines, coins, and/or geoboards). -Solve story problems involving division of whole numbers leading to answers in the form of fractions or mixed numbers. -Interpret a fraction as division of the numerator by the denominator ($a/b = a \times 1/b$ or $a \div b$). -Apply the relationship between multiplication and repeated addition as a strategy for multiplying whole numbers and fractions. -Multiply a whole number by a unit or non-unit fraction using fraction models, drawings, and equations. -Simplify a fraction using an understanding of equivalent fractions and factors. -Decompose a mixed number to create an equivalent value involving an improper fraction. (e.g. $2 \frac{1}{4} = 1 \frac{5}{4} = 9/4$) -Decompose a fraction to convert an improper fraction to a mixed number. (e.g. $10/8 = 8/8 + 2/8 = 1 + 2/8 = 1 \frac{2}{8}$) -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/describe a fraction with a numerator less than the denominator as a number less than one. -Identify the unit fraction as one equal part of the whole, written as $1/y$.
	1.5	I am beginning to demonstrate success with foundational content/skills related to this standard.
Not at Standard	1	I demonstrate partial or no success with this standard and related content/skills.

Grade 5 Math Proficiency Scale

I can apply previous understandings of division to solve problems that involve dividing unit fractions by whole numbers and whole numbers by unit fractions.

Reporting Category: Math 5.2.3

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.
	3.5	I am beginning to transfer this learning to more complex content and thinking.
At Standard Proficient	3	A. I can divide unit fractions by whole numbers and whole numbers by unit fractions. (*Answers must be simplified or written as a mixed number.)
	2.5	I am proficient with most of the Level 2 content/skills related to this standard.
Approaching Standard	2	<p>A. I can recognize or recall academic vocabulary including: <i>whole number, fraction, numerator, denominator, unit fraction, division as sharing, division as grouping, divide, quotient, divisor, dividend</i></p> <p>A. I can perform basic processes such as:</p> <ul style="list-style-type: none"> -Divide unit fractions by whole numbers and whole numbers by unit fractions in the context of a word problem. -Use number sense of fractions to estimate dividends and assess the reasonableness of answers. -Divide unit fractions by whole numbers and whole numbers by unit fractions using a number line or discrete objects. -Recognize expressions such as "$1/3 \div 4$" as an example of division as sharing, (e.g. Is it possible to divide $1/3$ into 4 equal shares?). -Recognize expressions such as "$4 \div 1/3$" as an example of division as grouping, (e.g. How many groups of one-third can you get from 4? How many thirds are there in 4?). -Distinguish between the "sharing" (partitive division/equal sharing) and "grouping" (quotative division/repeated subtraction) interpretations of division. -Represent unit fractions and whole numbers on a number line, bar diagram, or with discrete objects. -Identify the unit fraction as one equal part of the whole, written as $1/y$.
	1.5	I am beginning to demonstrate success with foundational content/skills related to this standard.
Not at Standard	1	I demonstrate partial or no success with this standard and related content/skills.

Grade 5 Math Proficiency Scale

I can write, interpret, and evaluate numerical expressions using order of operations.

Reporting Category: Math 5.3.1

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.
	3.5	I am beginning to transfer this learning to more complex content and thinking.
At Standard Proficient	3	<p>A. I can use multiple grouping symbols (parentheses, brackets, or braces) in numerical expressions and evaluate expressions containing these symbols.</p> <p>B. I can write simple expressions that model calculations with numbers and interpret numerical expressions without evaluating them.</p>
	2.5	I am proficient with most of the Level 2 content/skills related to this standard.
Approaching Standard	2	<p>A-B. I can recognize or recall academic vocabulary including: <i>numerical expression (in contrast to <u>equation</u>), evaluate, operation, order of operations, add, sum of, subtract, difference of, multiply, product of, divide, quotient of, quantity, grouping symbol, parentheses, brackets, braces, properties of multiplication (commutative, associative, and distributive), interpret, compare</i></p> <p>A. I can perform basic processes such as: -Use grouping symbols to write an expression that represents a solution path for a given multi-step mathematical or real-world problem (e.g. finding the volume of a rectangular prism). -Use the order of operations to evaluate numerical expressions with and without grouping symbols. -Explain the properties of multiplication (commutative, associative, and distributive). -Fluently add, subtract, multiply, and divide.</p> <p>B. I can perform basic processes such as: -Compare two numerical expressions (without solving them) based on an understanding of number sense, quantity, and mathematical operations. -Write an expression (with or without grouping symbols) that represents a solution path for a given mathematical situation involving multiple steps. -Identify key phrases that indicate relationships between quantities or suggest the use of certain operations (e.g. <i>sum of, quantity of, product of</i>). -Understand how the order of operations and grouping symbols are used to ensure a consistent approach to evaluating expressions.</p>
	1.5	I am beginning to demonstrate success with foundational content/skills related to this standard.
Not at Standard	1	I demonstrate partial or no success with this standard and related content/skills.

Grade 5 Math Proficiency Scale

I can generate two patterns and analyze the relationships between them.

Reporting Category: Math 5.3.2

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.
	3.5	I am beginning to transfer this learning to more complex content and thinking.
At Standard Proficient	3	A. I can generate two numerical patterns using two given rules. B. I can identify relationships between corresponding terms of two patterns with the same starting numbers that follow different rules.
	2.5	I am proficient with most of the Level 2 content/skills related to this standard.
Approaching Standard	2	A-B. I can recognize or recall academic vocabulary including: <i>pattern, rule, table of values, term, corresponding term, sequence, coordinate plane, x-axis, y-axis, origin, coordinate points, ordered pair, x-coordinate, y-coordinate</i> A-B. I can perform basic processes such as: -Identify and describe the relationship between corresponding terms of two numerical patterns using appropriate math vocabulary and, when appropriate, within the context of a given mathematical or real-world problem. -When appropriate, illustrate the relationship between corresponding terms of two numerical patterns by graphing both patterns on the coordinate plane. -When appropriate, interpret the terms of a numerical pattern as coordinate points (ordered pairs) graphed on the coordinate plane. -Represent the terms of one or two numerical patterns using a table of values. -Generate a numerical pattern that follows a given rule and identify specific terms within that pattern.
	1.5	I am beginning to demonstrate success with foundational content/skills related to this standard.
Not at Standard	1	I demonstrate partial or no success with this standard and related content/skills.

Grade 5 Math Proficiency Scale

I can graph points on the coordinate plane and interpret these points when solving real-world and mathematical problems.

Reporting Category: Math 5.4.1

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.
	3.5	I am beginning to transfer this learning to more complex content and thinking.
At Standard Proficient	3	A. I can represent real-world and mathematical problems by plotting points in a coordinate plane and interpret coordinate values of points in the context of the situation.
	2.5	I am proficient with most of the Level 2 content/skills related to this standard.
Approaching Standard	2	<p>A. I can recognize or recall academic vocabulary including: <i>coordinate plane, x-axis, y-axis, origin, coordinate points, ordered pair, x-coordinate, y-coordinate, intersect</i></p> <p>A. I can perform basic processes such as:</p> <ul style="list-style-type: none"> -Identify and describe the relationship between coordinate values and/or plotted points on a coordinate plane within the context of a given mathematical or real-world problem. -Refer to the scale shown on the x- and y-axis to determine the distance between two given points. -Use directional words (including cardinal directions of North, South, East, West) to describe the relative position of two given points. -Accurately determine the x- and y-coordinate of specific points plotted on a coordinate plane. -Accurately locate and plot point(s) on a coordinate plane when given an ordered pair (x, y). -Identify parts of the coordinate plane (x-axis, y-axis, and the origin) and the ordered pair (x-coordinate and y-coordinate).
	1.5	I am beginning to demonstrate success with foundational content/skills related to this standard.
Not at Standard	1	I demonstrate partial or no success with this standard and related content/skills.

Grade 5 Math Proficiency Scale

I can classify two-dimensional figures into categories based on their properties.

Reporting Category: Math 5.4.2

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.
	3.5	I am beginning to transfer this learning to more complex content and thinking.
At Standard Proficient	3	A. I can classify two-dimensional figures in a hierarchy based on their properties.
	2.5	I am proficient with most of the Level 2 content/skills related to this standard.
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, equilateral triangle, isosceles triangle, scalene 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>
	1.5	I am beginning to demonstrate success with foundational content/skills related to this standard.
Not at Standard	1	I demonstrate partial or no success with this standard and related content/skills.

Grade 5 Math Proficiency Scale

I can solve problems involving measurement and conversions within a given measurement system.

Reporting Category: Math 5.5.1

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.
	3.5	I am beginning to transfer this learning to more complex content and thinking.
At Standard Proficient	3	A. I can convert between different-sized measurement units within a given measurement system.
	2.5	I am proficient with most of the Level 2 content/skills related to this standard.
Approaching Standard	2	<p>A. I can recognize or recall academic vocabulary including: <i>measurement, length, distance, capacity, weight, mass, unit, convert, ratio table</i> <i>customary (U.S. standard) units: inch, foot, yard, mile, cup, pint, quart, gallon, ounce, pound, ton</i> <i>metric units: millimeter, centimeter, meter, kilometer, milliliter, liter, gram, kilogram</i> <i>time units: second, minute, hour, day, week, month, year, decade, century</i></p> <p>A. I can perform basic processes such as: -Identify units within a real-world or mathematical problem and make any necessary unit conversions leading to a reasonable solution. -Identify units featured in the context of data displayed in a chart, table, or graph and make any necessary conversions when interpreting this shared data. -Within a given measurement system, express measurements in a smaller unit in terms of a larger unit. -Within a given measurement system, express measurements in a larger unit in terms of a smaller unit. -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>
	1.5	I am beginning to demonstrate success with foundational content/skills related to this standard.
Not at Standard	1	I demonstrate partial or no success with this standard and related content/skills.

Grade 5 Math Proficiency Scale

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

Reporting Category: Math 5.5.2

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.
	3.5	I am beginning to transfer this learning to more complex content and thinking.
At Standard Proficient	3	A. I can solve problems involving computation of fractions by using information presented in line plots. B. I can display and interpret data shown in tallies, tables, charts, pictographs, bar graphs, and line graphs. (Displays should include a title, appropriate scale, and labels.)
	2.5	I am proficient with most of the Level 2 content/skills related to this standard.
Approaching Standard	2	<p>A. 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>A. I can perform basic processes such as: -Use information from line plots to solve multi-step problems requiring strategies for computing with fractions. -Identify and interpret specific information shown on a given line plot in order to answer simple, one-step questions. -Explain that each symbol above the horizontal line (axis) of a line plot represents a single occurrence of a particular measurement value. -Identify and describe the components of a line plot used to represent a set of measurement data shown in fractions of a unit (axis, symbols, labels, title).</p> <p>B. I can recognize or recall academic vocabulary including: <i>data, category, unit, table, chart, tally, pictograph, symbol, key, bar graph, line graph, scale, horizontal axis, x-axis, vertical axis, y-axis, grid, point, intersect</i></p> <p>B. I can perform basic processes such as: -Use information from tables, charts, and graphs to solve multi-step word problems. -Identify key words that may indicate operations or relationships between quantities within a word problem. -Include all components of a bar or line graph to represent a given set of data (x-axis, y-axis, labels, title, grid, points). -Include all components of a pictograph to represent a given set of data (axis, labels, title, key, symbol). -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 pictographs, bar graphs or line graphs. -Identify the title, the labels of the x- and y-axis, and the measurement units featured in pictographs, bar graphs, or line graphs.</p>
	1.5	I am beginning to demonstrate success with foundational content/skills related to this standard.
Not at Standard	1	I demonstrate partial or no success with this standard and related content/skills.

Grade 5 Math Proficiency Scale

I can apply concepts of volume to solve real-world problems involving rectangular prisms.

Reporting Category: Math 5.5.3

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.
	3.5	I am beginning to transfer this learning to more complex content and thinking.
At Standard Proficient	3	<p>A. I can apply the formulas $Volume = length \times width \times height$ and $Volume = base \times height$ to find volumes of right rectangular prisms in the context of solving real-world and mathematical problems.</p> <p>B. I can find volumes of solid figures composed of two non-overlapping right rectangular prisms.</p>
	2.5	I am proficient with most of the Level 2 content/skills related to this standard.
Approaching Standard	2	<p>A-B. I can recognize or recall academic vocabulary including: <i>rectangular prism, three-dimensional figure, face, edge, dimensions, length, width, height, congruent, volume, unit cube, cubic unit, area, base, array, unit square, square unit, expression, properties of multiplication (commutative and associative), composite figure</i></p> <p>A-B. I can perform basic processes such as:</p> <ul style="list-style-type: none"> -Apply an understanding of volume to solve real-world and mathematical problems. -Recognize volume as additive and find the volume of solid figures composed of two non-overlapping rectangular prisms by adding the volumes of the non-overlapping parts. -Decompose a solid figure made of two non-overlapping rectangular prisms into two separate rectangular prisms using models or drawings. -Write expressions (with or without grouping symbols) to show how volume can be found by multiplying the edge lengths of a rectangular prism or by multiplying the height by the area of the base. -Represent threefold whole-number products as volumes using models or drawings. -Measure volume by counting unit cubes (e.g. cubic centimeters, cubic inches, cubic feet, or improvised units). -Understand that a solid figure that can be packed without gaps using n unit cubes has a volume of n cubic units. -Understand that volume can be measured with cubes having a side length of 1 unit, called a "unit cube." -Recognize volume as an attribute of three-dimensional (solid) figures. -Accurately multiply length and width to find the area of a rectangle. -Measure area by counting unit squares either with tile arrays or drawings on grid paper. -Determine the length and/or width of a two-dimensional figure in whole number units.
	1.5	I am beginning to demonstrate success with foundational content/skills related to this standard.
Not at Standard	1	I demonstrate partial or no success with this standard and related content/skills.

Grade 5 Math Proficiency Scale

I can make sense of problems.

Reporting Category: Math 5.6.1

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 5 Math Proficiency Scale

I can effectively model my mathematical thinking.

Reporting Category: Math 5.6.2

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 and evaluate the efficiency of those representations.
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 and evaluate the efficiency of those representations.
Not at Standard	1	I demonstrate partial or no success with the mathematical processes described above.

Grade 5 Math Proficiency Scale

I can solve problems with precision and persevere.

Reporting Category: Math 5.6.3

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 5 Math Proficiency Scale

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

Reporting Category: Math 5.6.4

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.