



Progress Report Guide

Fifth Grade

Academic Progress Key:	Descriptor(s):
C = Consistently observed:	This student consistently and independently meets expectations.
G = Generally observed:	This student generally meets expectations.
N = Needs prompting:	This student meets expectations with assistance and redirecting.
R = Rarely observed:	This student rarely meets expectations.
4 = Exceeding Standards at trimester:	In addition to Score 3 performance, the student demonstrates in-depth inferences and/or applications.
3.5 = Meeting Standards at trimester:	In addition to Score 3 performance, the student demonstrates partial success at inferences and applications.
3 = Meeting Standards at trimester:	The student knows and applies the simple or complex information and/or processes that were explicitly taught. There are no major errors or omissions.
2.5 = Progressing toward Standards at trimester:	The student knows and can apply simpler details and processes. The student demonstrates partial knowledge of the more complex ideas and processes.
2 = Progressing toward Standards at trimester:	The student knows simpler details and processes. There are major errors or omissions regarding the more complex ideas and processes.
1 = Below toward Standards at trimester:	With help, the student demonstrates a partial understanding of some of the simpler and complex details and processes.
NE = Not Evaluated at this time M = Modified	

Work Habits, Study and Social Skills – *Behaviors that Promote Learning*

- Cooperates and interacts positively with others
- Participates appropriately
- Shows respect for property
- Chooses appropriate times to interact with peers
- Follows directions (written and oral)
- Is prepared with materials and ready to work
- Meets homework requirements
- Organizes workspace and materials
- Makes productive use of class time
- Works independently
- Produces quality work
- Writes legibly

Reading Standards

English Language Arts

Reading Literature

Key Ideas and Details

- Quote accurately from a text when explaining what the text says explicitly and when drawing inferences from the text.
- Determine a theme of a story, drama, or poem from details in the text, including how characters in a story or drama respond to challenges or how the speaker in a poem reflects upon a topic; summarize the text.
- Compare and contrast two or more characters, settings, or events in a story or drama, drawing on specific details in the text (e.g., how characters interact).

Craft and Structure

- Determine the meaning of words and phrases as they are used in a text, including figurative language such as metaphors and similes.
- Explain how a series of chapters, scenes, or stanzas fits together to provide the overall structure of a particular story, drama, or poem.
- Describe how a narrator's or speaker's point of view influences how events are described.

Integration of Knowledge and Ideas:

- Analyze how visual and multimedia elements contribute to the meaning, tone, or beauty of a text (e.g., graphic novel, multimedia presentation of fiction, folktale, myth, poem).
- Compare and contrast stories in the same genre (e.g., mysteries and adventure stories) on their approaches to similar themes and topics.

Range of Reading and Level of Complexity:

- By the end of the year, read and comprehend literature, including stories, dramas, and poetry, at the high end of the grades 4-5 text complexity band independently and proficiently.

Reading Informational Text

Key Ideas and Details

- Quote accurately from a text when explaining what the text says explicitly and when drawing inferences from the text.
- Determine two or more main ideas of a text and explain how they are supported by key details; summarize the text.
- Explain the relationships or interactions between two or more individuals, events, ideas, or concepts in a historical, scientific, or technical text based on specific information in the text.

Craft and Structure

- Determine the meaning of general academic and domain-specific words and phrases in a text relevant to a *grade 5 topic or subject area*.
- Compare and contrast the overall structure (e.g., chronology, comparison, cause/effect, problem/solution) of events, ideas, concepts, or information in two or more texts.
- Analyze multiple accounts of the same event or topic, noting important similarities and differences in the point of view they represent.

Integration of Knowledge and Ideas

- Draw on information from multiple print or digital sources, demonstrating the ability to locate an answer to a question quickly or to solve a problem efficiently.
- Explain how an author uses reasons and evidence to support particular points in a text, identifying which reasons and evidence support which point(s).
- Integrate information from several texts on the same topic in order to write or speak about the subject knowledgeably.

continued

Reading Standards

English Language Arts

Range of Reading and Level of Complexity

- By the end of the year, read and comprehend informational texts, including history/social studies, science, and technical texts, at the high end of the grades 4-5 text complexity band independently and proficiently.

Reading

Foundational Skills

Phonics and Word Recognition

- Know and apply grade-level phonics and word analysis skills in decoding words.
- Use combined knowledge of all letter-sound correspondences, syllabication patterns, and morphology (e.g., roots and affixes) to read accurately unfamiliar multisyllabic words in context and out of context.

Fluency

- Read with sufficient accuracy and fluency to support comprehension.
- Read grade-level text with purpose and understanding.
- Read grade-level prose and poetry orally with accuracy, appropriate rate, and expression on successive readings.
- Use context to confirm or self-correct word recognition and understanding, rereading as necessary.

Writing Standards

English Language Arts

Writing

Forms of writing assessed throughout the year

Opinion/Argument: Students build powerful arguments using carefully-weighted evidence, analysis, and rebuttal of counter-claims.

Informative/Explanatory: Students write through historical lenses and from primary sources, using writing structures to build focused research reports.

Narrative: Students write personal narratives, making purposeful choices about technique, structure and language they use to convey their meaning; Students write memoirs combining essay and narrative structures to convey significant insights and personal themes.

Writing

Opinion Structure

- Adequately introduces the topic or text and clearly states an opinion and reasons.
- Adequately groups related ideas into logically ordered paragraphs and sections to support the writer's purpose.
- Adequate use of transitional words and phrases to clarify relationships between and among ideas (e.g. consequently, specifically).
- Provides a concluding statement or section that restates the opinion and provides closure and synthesis.

Writing Standards

English Language Arts

Writing

Opinion Elaboration

- Adequately integrates relevant evidence, facts, and details to support reasons; some references may be general.
- Cites multiple sources in the text and in a bibliography.
- Vocabulary is generally appropriate for the audience and purpose.
- Adequate use of elaborative techniques (e.g. illustrations, text features, headings, etc.).

Writing

Informative/Explanatory Structure

- Adequately introduces a clear topic and provides a general observation or focus.
- Adequately groups related information into generally logical/appropriate paragraphs and sections.
- Adequately links ideas within and across categories of information using transitional words, phrases (e.g., in contrast, especially).
- Adequately provides a concluding statement or section that follows from the explanation or information presented.

Writing

Informative/Explanatory Elaboration

- Adequate evidence from sources is integrated (e.g. facts, definitions, concrete details, and quotations).
- Cites multiple sources in the text and in a bibliography.
- Precise, topic-specific vocabulary is generally appropriate for the audience and purpose.
- Adequate use of elaborative techniques (e.g. illustrations, text features, headings, multimedia, etc.).

Writing

Narrative Structure

- Adequately establishes a context, setting, narrator and/or characters.
- Adequate sequence of events from beginning to end.
- Makes adequate use of a variety of transitional words and phrases to show order of events.
- Provides an adequate conclusion that follows from the narrated experiences or events .

Writing

Narrative Elaboration

- Adequately uses narrative techniques such as dialogue, description.
- Experiences, characters, setting, and events are adequately developed.
- Adequate use of sensory, concrete, and figurative language.

Speaking and Listening Standards

English Language Arts

Speaking and Listening *Comprehension and Collaboration*

- Engage effectively in a range of collaborative discussions (one-on-one, in groups, and teacher-led) with diverse partners *on grade 5 topics and texts*, building on others' ideas and expressing their own clearly.
- Come to discussions prepared, having read or studied required material; explicitly draw on that preparation and other information known about the topic to explore ideas under discussion.
- Follow agreed-upon rules for discussions and carry out assigned roles.
- Pose and respond to specific questions by making comments that contribute to the discussion and elaborate on the remarks of others.
- Review the key ideas expressed and draw conclusions in light of information and knowledge gained from the discussions.
- Summarize a written text read aloud or information presented in diverse media and formats, including visually, quantitatively, and orally.
- Summarize the points a speaker makes and explain how each claim is supported by reasons and evidence.

Speaking and Listening *Presentation of Knowledge and Ideas*

- Report on a topic or text or present an opinion, sequencing ideas logically and using appropriate facts and relevant, descriptive details to support main ideas or themes; speak clearly at an understandable pace.
- Include multimedia components (e.g., graphics, sound) and visual displays in presentations when appropriate to enhance the development of main ideas or themes.
- Adapt speech to a variety of contexts and tasks, using formal English when appropriate to task and situation.

Language Standards

English Language Arts

Language Conventions of Standard English

- Demonstrate command of the conventions of standard English grammar and usage when writing or speaking.
- Explain the function of conjunctions, prepositions, and interjections in general and their function in particular sentences.
- Form and use the perfect (e.g., *I had walked*; *I have walked*; *I will have walked*) verb tenses.
- Use verb tense to convey various times, sequences, states, and conditions.
- Recognize and correct inappropriate shifts in verb tense.
- Use correlative conjunctions (e.g., *either/or*, *neither/nor*).
- Demonstrate command of the conventions of standard English capitalization, punctuation, and spelling when writing.
 - Use punctuation to separate items in a series.
 - Use a comma to separate an introductory element from the rest of the sentence.
 - Use a comma to set off the words *yes* and *no* (e.g., *Yes, thank you*), to set off a tag question from the rest of the sentence (e.g., *It's true, isn't it?*), and to indicate direct address (e.g., *Is that you, Steve?*).
 - Use underlining, quotation marks, or italics to indicate titles of works.
 - Spell grade-appropriate words correctly, consulting references as needed.

Language Knowledge of Language

- Use knowledge of language and its conventions when writing, speaking, reading, or listening.
- Expand, combine, and reduce sentences for meaning, reader/listener interest, and style.
- Compare and contrast the varieties of English (e.g., *dialects*, *registers*) used in stories, dramas, or poems.

Language Vocabulary Acquisition and Use

- Determine or clarify the meaning of unknown and multiple-meaning words and phrases based on *grade 5 reading and content*, choosing flexibly from a range of strategies.
 - Use context (e.g., cause/effect relationships and comparisons in text) as a clue to the meaning of a word or phrase.
 - Use common, grade-appropriate Greek and Latin affixes and roots as clues to the meaning of a word (e.g., *photograph*, *photosynthesis*).
 - Consult reference materials (e.g., dictionaries, glossaries, thesauruses), both print and digital, to find the pronunciation and determine or clarify the precise meaning of key words and phrases.
- Demonstrate understanding of figurative language, word relationships, and nuances in word meanings.
 - Interpret figurative language, including similes and metaphors, in context.
 - Recognize and explain the meaning of common idioms, adages, and proverbs.

continued

Language Standards

English Language Arts

- Use the relationship between particular words (e.g., synonyms, antonyms, homographs) to better understand each of the words.
- Acquire and use accurately grade-appropriate general academic and domain-specific words and phrases, including those that signal contrast, addition, and other logical relationships (e.g., *however*, *although*, *nevertheless*, *similarly*, *moreover*, *in addition*).

Mathematics Standards

Math

Operations and Algebraic Thinking

Write and interpret numerical expressions

- Use parentheses, brackets, or braces in numerical expressions, and evaluate expressions with these symbols.
- Write simple expressions that record calculations with numbers, and interpret numerical expressions without evaluating them. *For example, express the calculation “add 8 and 7, then multiply by 2” as $2 \times (8 + 7)$. Recognize that $3 \times (18932 + 921)$ is three times as large as $18932 + 921$, without having to calculate the indicated sum or product.*

Analyze patterns and relationships

- Generate two numerical patterns using two given rules. Identify apparent relationships between corresponding terms. Form ordered pairs consisting of corresponding terms from the two patterns, and graph the ordered pairs on a coordinate plane. *For example, given the rule “Add 3” and the starting number 0, and given the rule “Add 6” and the starting number 0, generate terms in the resulting sequences, and observe that the terms in one sequence are twice the corresponding terms in the other sequence. Explain informally why this is so.*

Mathematics Standards

Math

Numbers and Operations in Base Ten

Understand the place value system

- 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.
- 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. Use whole-number exponents to denote powers of 10.
- Read, write, and compare decimals to thousandths.
 - Read and write decimals to thousandths using base-ten numerals, number names, and expanded form, e.g., $347.392 = 3 \times 100 + 4 \times 10 + 7 \times 1 + 3 \times (1/10) + 9 \times (1/100) + 2 \times (1/1000)$.
 - Compare two decimals to thousandths based on meanings of the digits in each place, using $>$, $=$, and $<$ symbols to record the results of comparisons.
 - Use place value understanding to round decimals to any place.

Perform operations with multi-digit whole numbers and with decimals to hundredths

- Fluently multiply multi-digit whole numbers using the standard algorithm.
- Find whole-number quotients of whole numbers with up to four-digit dividends and two-digit divisors, using strategies based on place value, the properties of operations, and/or the relationship between multiplication and division. Illustrate and explain the calculation by using equations, rectangular arrays, and/or area models.

- Add, subtract, multiply, and divide decimals to hundredths, using concrete models or drawings and strategies based on place value, properties of operations, and/or the relationship between addition and subtraction; relate the strategy to a written method and explain the reasoning used.

Math

Numbers and Operations – Fractions

Use equivalent fractions as a strategy to add and subtract fractions

- Add and subtract fractions with unlike denominators (including mixed numbers) by replacing given fractions with equivalent fractions in such a way as to produce an equivalent sum or difference of fractions with like denominators. *For example, $2/3 + 5/4 = 8/12 + 15/12 = 23/12$. (In general, $a/b + c/d = (ad + bc)/bd$.)*
- Solve word problems involving addition and subtraction of fractions referring to the same whole, including cases of unlike denominators, e.g., by using visual fraction models or equations to represent the problem. Use benchmark fractions and number sense of fractions to estimate mentally and assess the reasonableness of answers. *For example, recognize an incorrect result $2/5 + 1/2 = 3/7$, by observing that $3/7 < 1/2$.*

continued

Mathematics Standards

Apply and extend previous understandings of multiplication and division

- Interpret a fraction as division of the numerator by the denominator ($a/b = a \div b$). Solve word problems involving division of whole numbers leading to answers in the form of fractions or mixed numbers, e.g., by using visual fraction models or equations to represent the problem. *For example, interpret $3/4$ as the result of dividing 3 by 4, noting that $3/4$ multiplied by 4 equals 3, and that when 3 wholes are shared equally among 4 people each person has a share of size $3/4$. If 9 people want to share a 50-pound sack of rice equally by weight, how many pounds of rice should each person get? Between what two whole numbers does your answer lie?*
- Apply and extend previous understandings of multiplication to multiply a fraction or whole number by a fraction.
 - Interpret the product $(a/b) \times q$ as a parts of a partition of q into b equal parts; equivalently, as the result of a sequence of operations $a \times q \div b$. *For example, use a visual fraction model to show $(2/3) \times 4 = 8/3$, and create a story context for this equation. Do the same with $(2/3) \times (4/5) = 8/15$. (In general, $(a/b) \times (c/d) = (ac)/(bd)$.*
 - Find the area of a rectangle with fractional side lengths by tiling it with unit squares of the appropriate unit fraction side lengths, and show that the area is the same as would be found by multiplying the side lengths. Multiply fractional side lengths to find areas of rectangles, and represent fraction products as rectangular areas.
- 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, without performing the indicated multiplication.
 - Explaining why multiplying a given number by a fraction greater than 1 results in a product greater than the given number (recognizing multiplication by whole numbers greater than 1 as a familiar case); explaining why multiplying a given number by a fraction less than 1 results in a product smaller than the given number; and relating the principle of fraction equivalence $a/b = (n \times a)/(n \times b)$ to the effect of multiplying a/b by 1.
- Solve real world problems involving multiplication of fractions and mixed numbers, e.g., by using visual fraction models or equations to represent the problem.
- Apply and extend previous understandings of division to divide unit fractions by whole numbers and whole numbers by unit fractions.
 - Interpret division of a unit fraction by a non-zero whole number, and compute such quotients. *For example, create a story context for $(1/3) \div 4$, and use a visual fraction model to show the quotient. Use the relationship between multiplication and division to explain that $(1/3) \div 4 = 1/12$ because $(1/12) \times 4 = 1/3$.*
 - Interpret division of a whole number by a unit fraction, and compute such quotients. *For example, create a story context for $4 \div (1/5)$, and use a visual fraction model to show the quotient. Use the relationship between multiplication and division to explain that $4 \div (1/5) = 20$ because $20 \times (1/5) = 4$.*

continued

Mathematics Standards

- Solve real world problems involving division of unit fractions by non-zero whole numbers and division of whole numbers by unit fractions, e.g., by using visual fraction models and equations to represent the problem. *For example, how much chocolate will each person get if 3 people share $\frac{1}{2}$ lb of chocolate equally? How many $\frac{1}{3}$ -cup servings are in 2 cups of raisins?*

Math

Measurement and Data

Convert like measurement units within a given measurement system

- Convert among different-sized standard measurement units within a given measurement system (e.g., convert 5 cm to 0.05 m), and use these conversions in solving multi-step, real world problems.

Represent and interpret data

- Make a line plot to display a data set of measurements in fractions of a unit ($\frac{1}{2}$, $\frac{1}{4}$, $\frac{1}{8}$). Use operations on fractions for this grade to solve problems involving information presented in line plots. *For example, given different measurements of liquid in identical beakers, find the amount of liquid each beaker would contain if the total amount in all the beakers were redistributed equally.*

Geometric measurement: understand concepts of volume

- Recognize volume as an attribute of solid figures and understand concepts of volume measurement.
 - A cube with side length 1 unit, called a “unit cube,” is said to have “one cubic unit” of volume, and can be used to measure volume.
 - A solid figure which can be packed without gaps or overlaps using n unit cubes is said to have a volume of n cubic units.
- Measure volumes by counting unit cubes, using cubic cm, cubic in, cubic ft, and improvised units.
- Relate volume to the operations of multiplication and addition and solve real world and mathematical problems involving volume.
 - Find the volume of a right rectangular prism with whole-number side lengths by packing it with unit cubes, and show that the volume is the same as would be found by multiplying the edge lengths, equivalently by multiplying the height by the area of the base. Represent threefold whole-number products as volumes, e.g., to represent the associative property of multiplication.
 - Apply the formulas $V = l \times w \times h$ and $V = b \times h$ for rectangular prisms to find volumes of right rectangular prisms with whole-number edge lengths in the context of solving real world and mathematical problems.
 - Recognize volume as additive. Find volumes of solid figures composed of two non-overlapping right rectangular prisms by adding the volumes of the non-overlapping parts, applying this technique to solve real world problems.

Mathematics Standards

Math Geometry

Graph points on the coordinate plane to solve real-world and mathematical problems

- Use a pair of perpendicular number lines, called axes, to define a coordinate system, with the intersection of the lines (the origin) arranged to coincide with the 0 on each line and a given point in the plane located by using an ordered pair of numbers, called its coordinates. Understand that the first number indicates how far to travel from the origin in the direction of one axis, and the second number indicates how far to travel in the direction of the second axis, with the convention that the names of the two axes and the coordinates correspond (e.g., x -axis and x -coordinate, y -axis and y -coordinate).
- Represent real world and mathematical problems by graphing points in the first quadrant of the coordinate plane, and interpret coordinate values of points in the context of the situation.

Classify two-dimensional figures into categories based on their properties

- Understand that attributes belonging to a category of two-dimensional figures also belong to all subcategories of that category. *For example, all rectangles have four right angles and squares are rectangles, so all squares have four right angles.*
- Classify two-dimensional figures in a hierarchy based on properties.

Fifth Grade Accelerated Math Ratios & Proportional Relationships

Understand ratio concepts and use ratio reasoning to solve problems

- Understand the concept of a ratio and use ratio language to describe a ratio relationship between two quantities. *For example, “The ratio of wings to beaks in the bird house at the zoo was 2:1, because for every 2 wings there was 1 beak.” “For every vote candidate A received, candidate C received nearly three votes.”*
- Understand the concept of a unit rate a/b associated with a ratio $a:b$ with $b \neq 0$, and use rate language in the context of a ratio relationship. *For example, “This recipe has a ratio of 3 cups of flour to 4 cups of sugar, so there is $3/4$ cup of flour for each cup of sugar.” “We paid \$75 for 15 hamburgers, which is a rate of \$5 per hamburger.”*
- Use ratio and rate reasoning to solve real-world and mathematical problems, e.g., by reasoning about tables of equivalent ratios, tape diagrams, double number line diagrams, or equations.
 - Make tables of equivalent ratios relating quantities with whole-number measurements, find missing values in the tables, and plot the pairs of values on the coordinate plane. Use tables to compare ratios.
 - Solve unit rate problems including those involving unit pricing and constant speed. *For example, if it took 7 hours to mow 4 lawns, then at that rate, how many lawns could be mowed in 35 hours? At what rate were lawns being mowed?*

continued

Mathematics Standards

- Find a percent of a quantity as a rate per 100 (e.g., 30% of a quantity means 30/100 times the quantity); solve problems involving finding the whole, given a part and the percent.
- Use ratio reasoning to convert measurement units; manipulate and transform units appropriately when multiplying or dividing quantities.

Fifth Grade Accelerated Math The Number System

Apply and extend previous understandings of multiplication and division to divide fractions by fractions

- Interpret and compute quotients of fractions, and solve word problems involving division of fractions by fractions, e.g., by using visual fraction models and equations to represent the problem. *For example, create a story context for $(2/3) \div (3/4)$ and use a visual fraction model to show the quotient; use the relationship between multiplication and division to explain that $(2/3) \div (3/4) = 8/9$ because $3/4$ of $8/9$ is $2/3$. (In general, $(a/b) \div (c/d) = ad/bc$.) How much chocolate will each person get if 3 people share $1/2$ lb of chocolate equally? How many $3/4$ -cup servings are in $2/3$ of a cup of yogurt? How wide is a rectangular strip of land with length $3/4$ mi and area $1/2$ square mi?*

Compute fluently with multi-digit numbers and find common factors and multiples

- Fluently divide multi-digit numbers using the standard algorithm.
- Fluently add, subtract, multiply, and divide multi-digit decimals using the standard algorithm for each operation.
- Find the greatest common factor of two whole numbers less than or equal to 100 and the least common multiple of two whole numbers less than or equal to 12. Use the distributive property to express a sum of two whole numbers 1-100 with a common factor as a multiple of a sum of two whole numbers with no common factor. *For example, express $36 + 8$ as $4(9 + 2)$.*

Apply and extend previous understandings of numbers to the system of rational numbers

- Understand that positive and negative numbers are used together to describe quantities having opposite directions or values (e.g., temperature above/below zero, elevation above/below sea level, credits/debits, positive/negative electric charge); use positive and negative numbers to represent quantities in real-world contexts, explaining the meaning of 0 in each situation.
- Understand a rational number as a point on the number line. Extend number line diagrams and coordinate axes familiar from previous grades to represent points on the line and in the plane with negative number coordinates.
- Recognize opposite signs of numbers as indicating locations on opposite sides of 0 on the number line; recognize that the opposite of the opposite of a number is the number itself, e.g., $-(-3) = 3$, and that 0 is its own opposite.
- Understand signs of numbers in ordered pairs as indicating locations in quadrants of the coordinate plane; recognize that when two ordered pairs differ only by signs, the locations of the points are related by reflections across one or both axes.
- Find and position integers and other rational numbers on a horizontal or vertical number line diagram; find and position pairs of integers and other

continued

Mathematics Standards

rational numbers on a coordinate plane.

- Understand ordering and absolute value of rational numbers.
 - Interpret statements of inequality as statements about the relative position of two numbers on a number line diagram. *For example, interpret $-3 > -7$ as a statement that -3 is located to the right of -7 on a number line oriented from left to right.*
 - Write, interpret, and explain statements of order for rational numbers in real-world contexts. *For example, write $-3^{\circ}\text{C} > -7^{\circ}\text{C}$ to express the fact that -3°C is warmer than -7°C .*
- Understand the absolute value of a rational number as its distance from 0 on the number line; interpret absolute value as magnitude for a positive or negative quantity in a real-world situation. *For example, for an account balance of -30 dollars, write $|-30| = 30$ to describe the size of the debt in dollars.*
- Distinguish comparisons of absolute value from statements about order. *For example, recognize that an account balance less than -30 dollars represents a debt greater than 30 dollars.*
- Solve real-world and mathematical problems by graphing points in all four quadrants of the coordinate plane. Include use of coordinates and absolute value to find distances between points with the same first coordinate or the same second coordinate.

Fifth Grade Accelerated Math Expressions & Equations

Apply and extend previous understandings of arithmetic to algebraic expressions

- Write and evaluate numerical expressions involving whole-number exponents.
- Write, read, and evaluate expressions in which letters stand for numbers.
 - Write expressions that record operations with numbers and with letters standing for numbers. *For example, express the calculation “Subtract y from 5” as $5 - y$.*
 - Identify parts of an expression using mathematical terms (sum, term, product, factor, quotient, coefficient); view one or more parts of an expression as a single entity. *For example, describe the expression $2(8 + 7)$ as a product of two factors; view $(8 + 7)$ as both a single entity and a sum of two terms.*
- Evaluate expressions at specific values of their variables. Include expressions that arise from formulas used in real-world problems. Perform arithmetic operations, including those involving whole-number exponents, in the conventional order when there are no parentheses to specify a particular order (Order of Operations). *For example, use the formulas $V = s^3$ and $A = 6s^2$ to find the volume and surface area of a cube with sides of length $s = 1/2$.*
- Apply the properties of operations to generate equivalent expressions. *For example, apply the distributive property to the expression $3(2 + x)$ to produce the equivalent expression $6 + 3x$; apply the distributive property to the expression $24x + 18y$ to produce the equivalent expression $6(4x + 3y)$; apply properties of operations to $y + y + y$ to produce the equivalent expression $3y$.*

continued

Mathematics Standards

- Identify when two expressions are equivalent (i.e., when the two expressions name the same number regardless of which value is substituted into them). *For example, the expressions $y + y + y$ and $3y$ are equivalent because they name the same number regardless of which number y stands for.*

Reason about and solve one-variable equations and inequalities

- Understand solving an equation or inequality as a process of answering a question: which values from a specified set, if any, make the equation or inequality true? Use substitution to determine whether a given number in a specified set makes an equation or inequality true.
- Use variables to represent numbers and write expressions when solving a real-world or mathematical problem; understand that a variable can represent an unknown number, or, depending on the purpose at hand, any number in a specified set.
- Solve real-world and mathematical problems by writing and solving equations of the form $x + p = q$ and $px = q$ for cases in which p , q and x are all nonnegative rational numbers.
- Write an inequality of the form $x > c$ or $x < c$ to represent a constraint or condition in a real-world or mathematical problem. Recognize that inequalities of the form $x > c$ or $x < c$ have infinitely many solutions; represent solutions of such inequalities on number line diagrams.

Represent and analyze quantitative relationships between dependent and independent variables

- Use variables to represent two quantities in a real-world problem that change in relationship to one another; write an equation to express one quantity, thought of as the dependent variable, in terms of the other quantity, thought of as the independent variable. Analyze the relationship between

the dependent and independent variables using graphs and tables, and relate these to the equation. *For example, in a problem involving motion at constant speed, list and graph ordered pairs of distances and times, and write the equation $d = 65t$ to represent the relationship between distance and time.*

Fifth Grade Accelerated Math Geometry

Solve real-world and mathematical problems involving area, surface area, and volume

- Find the area of right triangles, other triangles, special quadrilaterals, and polygons by composing into rectangles or decomposing into triangles and other shapes; apply these techniques in the context of solving real-world and mathematical problems.
- Find the volume of a right rectangular prism with fractional edge lengths by packing it with unit cubes of the appropriate unit fraction edge lengths, and show that the volume is the same as would be found by multiplying the edge lengths of the prism. Apply the formulas $V = lwh$ and $V = bh$ to find volumes of right rectangular prisms with fractional edge lengths in the context of solving real-world and mathematical problems.
- Draw polygons in the coordinate plane given coordinates for the vertices; use coordinates to find the length of a side joining points with the same first coordinate or the same second coordinate. Apply these techniques in the context of solving real-world and mathematical problems.

continued

Mathematics Standards

- Represent three-dimensional figures using nets made up of rectangles and triangles, and use the nets to find the surface area of these figures. Apply these techniques in the context of solving real-world and mathematical problems.

Fifth Grade Accelerated Math *Statistics and Probability*

Develop understanding of statistical variability

- Recognize a statistical question as one that anticipates variability in the data related to the question and accounts for it in the answers. *For example, “How old am I?” is not a statistical question, but “How old are the students in my school?” is a statistical question because one anticipates variability in students’ ages.*
- Understand that a set of data collected to answer a statistical question has a distribution which can be described by its center, spread, and overall shape.
- Recognize that a measure of center for a numerical data set summarizes all of its values with a single number, while a measure of variation describes how its values vary with a single number.

Summarize and describe distributions

- Display numerical data in plots on a number line, including dot plots, histograms, and box plots.
- Summarize numerical data sets in relation to their context, such as by:
 - Reporting the number of observations.
 - Describing the nature of the attribute under investigation, including how it was measured and its units of measurement.

- Giving quantitative measures of center (median and/or mean) and variability (interquartile range and/or mean absolute deviation), as well as describing any overall pattern and any striking deviations from the overall pattern with reference to the context in which the data were gathered.
- Relating the choice of measures of center and variability to the shape of the data distribution and the context in which the data were gathered.

Science Standards

Science

Concepts/Inquiry

Student knows and applies the skills, processes, and nature of scientific inquiry.

Structure and Properties of Matter:

www.nextgenscience.org/topic-arrangement/5structure-and-properties-matter

Matter and Energy in Organisms and Ecosystems:

www.nextgenscience.org/topic-arrangement/5matter-and-energy-organisms-and-ecosystems

Earth's Systems:

www.nextgenscience.org/topic-arrangement/5earth%E2%80%99s-systems

Space Systems: Stars and the Solar System:

www.nextgenscience.org/topic-arrangement/5space-systems-stars-and-solar-system

3-5.Engineering Design:

www.nextgenscience.org/topic-arrangement/3-5engineering-design

Social Studies Standards

Social Studies

Concepts

US History (pre-colonial period to Independence)

In fifth grade, students use their understanding of social studies concepts and cause and-effect relationships to study the development of the United States up to 1791. By applying what they know from civics, economics and geography, students learn the ideals, principles, and systems that shaped this country's founding. They conclude the fifth grade by applying their understanding of the country's founding and the ideals in the nation's fundamental documents to issues of importance to them today. This learning forms the foundation and understanding of social studies concepts that will provide students with the ability to examine their role in the community, state, nation, and world.

Art Standards

Art

Participation

Due to the subjectivity of art, MISD art teachers assess primarily on student participation using the following academic progress key:

C = Consistently Observed: This student consistently and independently meets expectations.

G = Generally Observed: This student generally meets expectations.

N = Needs Prompting: This student meets expectations with assistance and redirecting.

R = Rarely Observed: This student rarely meets expectations.

Music Standards

Music

Concepts and Skills

- Student understands and applies knowledge and skills
- Student demonstrates thinking skills using artistic processes of creating, performing, and responding
- Student communicates through music
- Student makes connections within and across the arts to other disciplines, life, cultures, and work

Music

Participation

Student exhibits responsible personal and social behavior that respects self and others in musical settings.

Physical Education Standards

PE

Skills

Student develops fundamental and complex movement skills, as developmentally appropriate

- Locomotor
- Non-Locomotor
- Manipulatives

PE

Sportsmanship

Student exhibits responsible personal and social behavior that respects self and others in physical activity settings

- Participation
- Attitude

Elementary World Language Program

Spanish

Learner Engagement

Student exhibits responsible personal and social behavior that respects self and others in the Spanish classroom.

- Student interaction with teacher and peers.
- Positive attitude.
- Adhering to classroom expectations.
- Active participation.