North Caldwell
Grade 4
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Curriculum

NJ Student Learning Standards
(NJSLS)

2024-25 Excel Calendar

2024-25 Monthly Calendar

Supplements

North Caldwell Mathematics

Grade Level: 4

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Instructional Materials

Everyday Mathematics 4th Edition
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www.everydaymath.com

Supplemental Resources

- Illustrative Mathematics https://www.illustrativemathematics.org/
- National Council of Teachers of Mathematics http://www.nctm.org/
- NCTM Illuminations Resources for Teaching Math http://illuminations.nctm.org/

Interdisciplinary Connections

Mathematics is a unified body of knowledge whose concepts build upon each other. Connecting mathematical concepts includes linking ideas to related ideas learned previously.

Major emphasis should be given to ideas and concepts across mathematical content areas that help students see that mathematics is a web of closely connected ideas. Students need to connect their mathematical learning to appropriate real-world contexts. They need to create interest and maintain the interest after the novelty of the work has worn off.

Mathematics is the language of science and is greatly utilized in industry and business. It gives us the power to solve difficult real-world problems, but also helps us to understand how the universe operates.

Every mathematics teacher needs to make students unafraid of the subject by convincing the students of the usefulness of learning mathematics in their daily lives and for higher studies. The world today, which leans more and more heavily on Science and Technology, demands more from mathematics. Tomorrow's world will, no doubt, make still greater demands from mathematics.

Interdisciplinary Connections for Grade 4

Literacy:

~ *The Beautiful Oops*

- Read *The Beautiful Oops* by Barney Saltzberg.
- Discuss the story with students. Are mistakes okay to make? Why?
- Have students talk about a time when they made a mistake, but it turned out to be better than expected.

~ *Grandfather Tang's Story*

- Introduce lesson by reading *Grandfather Tang's Story* by Ann Tompert.
- Follow the attached lesson in the Supplemental Section.

~ *Great Estimations*

- Introduce lesson by reading *Great Estimations* by Bruce Goldstone
- Follow attached lesson in the Supplemental Section

~ *Zachary Zormer* Book

- Introduce lesson by reading *Zachary Zormer* by Joanne Reisberg
- Discuss the book as you read.

~Vocabulary Poster Project

- See the attached document in the Supplemental Section for directions and rubric.

New Jersey Student Learning Standards (NJSLS)

In Grade 4, instructional time should focus on three critical areas: (1) developing understanding and fluency with multi-digit multiplication, and developing understanding of dividing to find quotients involving multi-digit dividends; (2) developing an understanding of fraction equivalence, addition and subtraction of fractions with like denominators, and multiplication of fractions by whole numbers; (3) understanding that geometric figures can be analyzed and classified based on their properties, such as having parallel sides, perpendicular sides, particular angle measures, and symmetry.

(1) Students generalize their understanding of place value to 1,000,000, understanding the relative sizes of numbers in each place. They apply their understanding of models for multiplication (equal-sized groups, arrays, area models), place value, and properties of operations, in particular the distributive property, as they develop, discuss, and use efficient, accurate, and generalizable methods to compute products of multi-digit whole numbers. Depending on the numbers and the context, they select and accurately apply appropriate methods to estimate or mentally calculate products. They develop fluency with efficient procedures for multiplying whole numbers; understand and explain why the procedures work based on place value and properties of operations; and use them to solve problems. Students apply their understanding of models for division, place value, properties of operations, and the relationship of division to multiplication as they develop, discuss, and use efficient, accurate, and generalizable procedures to find quotients involving multi-digit dividends. They select and accurately apply appropriate methods to estimate and mentally calculate quotients, and interpret remainders based upon the context.

(2) Students develop understanding of fraction equivalence and operations with fractions. They recognize that two different fractions can be equal (e.g., $15/9 = 5/3$), and they develop methods for generating and recognizing equivalent fractions. Students extend previous understandings about how fractions are built from unit fractions, composing fractions from unit fractions, decomposing fractions into unit fractions, and using the meaning of fractions and the meaning of multiplication to multiply a fraction by a whole number.

(3) Students describe, analyze, compare, and classify two-dimensional shapes. Through building, drawing, and analyzing two-dimensional shapes, students deepen their understanding of properties of two-dimensional objects and the use of them to solve problems involving symmetry.

Connecting the Standards for Mathematical Content to the Standards for Mathematical Practice

The Standards for Mathematical Practice describe ways in which developing student practitioners of the discipline of mathematics increasingly ought to engage with the subject matter as they grow in mathematical maturity and expertise throughout the elementary, middle and high school years. Designers of curricula, assessments, and professional development should all attend to the need to connect the mathematical practices to mathematical content in mathematics instruction.

The Standards for Mathematical Content are a balanced combination of procedure and understanding. Expectations that begin with the word "understand" are often especially good opportunities to connect the practices to the content. Students who lack understanding of a topic may rely on procedures too heavily. Without a flexible base from which to work, they may be less likely to consider analogous problems, represent problems coherently, justify conclusions, apply the mathematics to practical situations, use technology mindfully to work with the mathematics, explain the mathematics accurately to other students, step back for an overview, or deviate from a known procedure to find a shortcut. In short, a lack of understanding effectively prevents a student from engaging in the mathematical practices.

In this respect, those content standards, which set an expectation of understanding, are potential "points of intersection" between the Standards for Mathematical Content and the Standards for Mathematical Practice. These points of intersection are intended to be weighted toward central and generative concepts in the school mathematics curriculum that most merit the time, resources, innovative energies, and focus necessary to qualitatively improve the curriculum, instruction, assessment, professional development, and student achievement in mathematics.

Standards for Mathematical Practice

The Standards for Mathematical Practice describe varieties of expertise that mathematics educators at all levels should seek to develop in their students. These practices rest on important "processes and proficiencies" with longstanding importance in mathematics education. The first of these are the NCTM process standards of problem solving, reasoning and proof, communication, representation, and connections. The second are the strands of mathematical proficiency specified in the National Research Council's report *Adding It Up*: adaptive reasoning, strategic competence, conceptual understanding (comprehension of mathematical concepts, operations and relations), procedural fluency (skill in carrying out procedures flexibly, accurately, efficiently and appropriately), and productive disposition (habitual inclination to see mathematics as sensible, useful, and worthwhile, coupled with a belief in diligence and one's own efficacy).

1. Make sense of problems and persevere in solving them.

Mathematically proficient students start by explaining to themselves the meaning of a problem and looking for entry points to its solution. They analyze givens, constraints, relationships, and goals. They make conjectures about the form and meaning of the solution and plan a solution pathway rather than simply jumping into a solution attempt. They consider analogous problems and try special cases and simpler forms of the original problem in order to gain insight into its solution. They monitor and evaluate their progress and change course if necessary. Older students might, depending on the context of the problem, transform algebraic expressions or change the viewing window on their graphing calculator to get the information they need. Mathematically proficient students can explain correspondences between equations, verbal descriptions, tables, and graphs or draw diagrams of important features and relationships, graph data, and search for regularity or trends. Younger students might rely on using concrete objects or pictures to help conceptualize and solve a problem. Mathematically proficient students check their answers to problems using a different method, and they continually ask themselves, "Does this make sense?" They can understand the approaches of others to solving complex problems and identify correspondences between different approaches.

2. Reason abstractly and quantitatively.
Mathematically proficient students make sense of quantities and their relationships in problem situations. They bring two complementary abilities to bear on problems involving quantitative relationships: the ability to *decontextualize*—to abstract a given situation and represent it symbolically and manipulate the representing symbols as if they have a life of their own, without necessarily attending to their referents—and the ability to *contextualize*, to pause as needed during the manipulation process in order to probe into the referents for the symbols involved. Quantitative reasoning entails habits of creating a coherent representation of the problem at hand; considering the units involved; attending to the meaning of quantities, not just how to compute them; and knowing and flexibly using different properties of operations and objects.

3. Construct viable arguments and critique the reasoning of others.
Mathematically proficient students understand and use stated assumptions, definitions, and previously established results in constructing arguments. They make conjectures and build a logical progression of statements to explore the truth of their conjectures. They are able to analyze situations by breaking them into cases and can recognize and use counterexamples. They justify their conclusions, communicate them to others, and respond to the arguments of others. They reason inductively about data, making plausible arguments that take into account the context from which the data arose. Mathematically proficient students are also able to compare the effectiveness of two plausible arguments, distinguish correct logic or reasoning from that which is flawed, and—if there is a flaw in an argument—explain what it is. Elementary students can construct arguments using concrete referents such as objects, drawings, diagrams, and actions. Such arguments can make sense and be correct, even though they are not generalized or made formal until later grades. Later, students learn to determine domains to which an argument applies. Students at all grades can listen or read the arguments of others, decide whether they make sense, and ask useful questions to clarify or improve the arguments.

4. Model with mathematics.
Mathematically proficient students can apply the mathematics they know to solve problems arising in everyday life, society, and the workplace. In early grades, this might be as simple as writing an addition equation to describe a situation. In middle grades, a student might apply proportional reasoning to plan a school event or analyze a problem in the community. By high school, a student might use geometry to solve a design problem or use a function to describe how one quantity of interest depends on another. Mathematically proficient students who can apply what they know are comfortable making assumptions and approximations to simplify a complicated situation, realizing that these may need revision later. They are able to identify important quantities in a practical situation and map their relationships using such tools as diagrams, two-way tables, graphs, flowcharts and formulas. They can analyze those relationships mathematically to draw conclusions. They routinely interpret their mathematical results in the context of the situation and reflect on whether the results make sense, possibly improving the model if it has not served its purpose.

5. Use appropriate tools strategically.
Mathematically proficient students consider the available tools when solving a mathematical problem. These tools might include pencil and paper, concrete models, a ruler, a protractor, a calculator, a spreadsheet, a computer algebra system, a statistical package, or dynamic geometry software. Proficient students are sufficiently familiar with tools appropriate for their grade or course to make sound decisions about when each of these tools might be helpful, recognizing both the insight to be gained and their limitations. For example, mathematically proficient high school students analyze graphs of functions and solutions generated using a graphing calculator. They detect possible errors by strategically using estimation and other mathematical knowledge. When making mathematical models, they know that technology can enable them to visualize the results of varying assumptions, explore consequences, and compare predictions with data. Mathematically proficient students at various grade levels are able to identify relevant external mathematical resources, such as digital content located on a website, and use them to pose or solve problems. They are able to use technological tools to explore and deepen their understanding of concepts.

6. Attend to precision.
Mathematically proficient students try to communicate precisely to others. They try to use clear definitions in discussion with others and in their own reasoning. They state the meaning of the symbols they choose, including using the equal sign consistently and appropriately. They are careful about specifying units of measure, and labeling axes to clarify the correspondence with quantities in a problem. They calculate accurately and efficiently, express numerical answers with a degree of precision appropriate for the problem context. In the elementary grades, students give carefully formulated explanations to each other. By the time they reach high school they have learned to examine claims and make explicit use of definitions.

7. Look for and make use of structure.
Mathematically proficient students look closely to discern a pattern or structure. Young students, for example, might notice that three and seven more is the same amount as seven and three more, or they may sort a collection of shapes according to how many sides the shapes have. Later, students will see 7×8 equals the well-remembered $7 \times 5 + 7 \times 3$, in preparation for learning about the distributive property. In the expression $x^2 + 9x + 14$, older students can see the 14 as 2×7 and the 9 as $2 + 7$. They recognize the significance of an existing line in a geometric figure and can use the strategy of drawing an auxiliary line for solving problems. They also can step back for an overview and shift perspective. They can see complicated things, such as some algebraic expressions, as single objects or as being composed of several objects. For example, they can see $5 - 3(x - y)^2$ as 5 minus a positive number times a square and use that to realize that its value cannot be more than 5 for any real numbers x and y.

8. Look for and express regularity in repeated reasoning.
Mathematically proficient students notice if calculations are repeated and look both for general methods and for shortcuts. Upper elementary students might notice when dividing 25 by 11 that they are repeating the same calculations over and over again, and conclude they have a repeating decimal. By paying attention to the calculation of slope as they repeatedly check whether points are on the line through (1, 2) with slope 3, middle school students might abstract the equation $(y - 2)/(x - 1) = 3$. Noticing the regularity in the way terms cancel when expanding $(x - 1)(x + 1)$, $(x - 1)(x^2 + x + 1)$, and $(x - 1)(x^3 + x^2 + x + 1)$ might lead them to the general formula for the sum of a geometric series. As they work to solve a problem, mathematically proficient students maintain oversight of the process, while attending to the details. They continually evaluate the reasonableness of their intermediate results.

Operations & Algebraic Thinking

A. Use the four operations with whole numbers to solve problems.

4.OA.A.1 Interpret a multiplication equation as a comparison, e.g., interpret $35 = 5 \times 7$ as a statement that 35 is 5 times as many as 7 and 7 times as many as 5. Represent verbal statements of multiplicative comparisons as multiplication equations.

4.OA.A.2 Multiply or divide to solve word problems involving multiplicative comparison, e.g., by using drawings and equations with a symbol for the unknown number to represent the problem, distinguishing multiplicative comparison from additive comparison.[1]

4.OA.A.3 Solve multi-step word problems posed with whole numbers and having whole-number answers using the four operations, including problems in which remainders must be interpreted. Represent these problems using equations with a letter standing for the unknown quantity. Assess the reasonableness of answers using mental computation and estimation strategies including rounding.

Understandings	Essential Questions
Students will understand… • multiplication involving whole numbers (greater than 1) makes the answer become larger than either number. • when solving word problems, remainders must be interpreted.	• What types of problems involve multiplication and division in the answer?
Knowledge	**Skills**
Students will know . . . • sometimes one needs to multiply or divide numbers to find an answer.	Students will be able to . . . • Interpret a multiplication equation as a comparison, e.g., interpret 35 = 5 x 7 as a statement that 35 is 5 times as many as 7 and 7 times as many as 5. • Represent verbal statements of multiplicative comparisons as multiplication equations. • Multiply to solve word problems involving multiplicative comparison, e.g., by using drawings and equations with a symbol for the unknown number to represent the problem. • Divide to solve word problems involving multiplicative comparison, e.g., by using drawings and equations with a symbol for the unknown number to represent the problem. • Distinguish multiplicative comparison from additive comparison. • Solve multi-step word problems posed with whole numbers and having whole number answers using the four operations, including problems in which remainders must be interpreted. • Represent word problems using equations with a letter standing for the unknown quantity. • Assess the reasonableness of answers using mental computation and estimation strategies including rounding.

Standards for Mathematical Practice
1. Make sense of problems and persevere in solving them. 2. Reason abstractly and quantitatively. 3. Construct viable arguments and critique the reasoning of others. 4. Model with mathematics. 6. Attend to precision. 7. Look for and make use of structure. 8. Look for and express regularity in repeated reasoning.

Resources
• **Everyday Mathematics 4 Lessons:** 1-5, 1-6, 1-7, 1-9, 1-10, 2-6, 2-8, 2-9, 2-12, 3-4, 3-12, 4-1, 4-2, 4-8, 4-12, 5-3, 5-5, 5-6, 5-9, 5-13, 6-5, 6-6, 6-8, 6-11, 7-2, 7-7, 7-12, 8-1, 8-2, 8-4, 8-9, 8-10 (1-11, 1-12, 1-14, 2-6, 2-8, 2-9, 2-11, 2-12, 2-13, 3-1, 3-2, 3-3, 3-4, 3-5, 3-6, 3-7, 3-8, 3-10, 3-11, 3-13, 4-6, 4-9, 4-10, 4-11, 4-12, 5-1, 5-3, 5-10, 5-14, 6-1, 6-2, 6-3, 6-4, 6-8, 6-10, 6-11, 6-13, 6-14, 7-9, 8-6, 8-7, 8-8, 8-11, 8-13) • **Supplemental Lessons:** Binder pages 115, 182-194, 241-260

Assessment	
Formative Assessment • Exit tickets • Math boxes	Summative Assessment • Unit assessment

Operations & Algebraic Thinking
B. Gain familiarity with factors and multiples.

4.OA.B.4 Find all factor pairs for a whole number in the range 1–100. Recognize that a whole number is a multiple of each of its factors. Determine whether a given whole number in the range 1–100 is a multiple of a given one-digit number. Determine whether a given whole number in the range 1–100 is prime or composite.

Understanding	Essential Questions
Students will understand… • factors of a number are less than or equal to the number. • multiples of a number are greater than or equal to the number. • the determination of prime or composite is unrelated to the size of the number.	• Why do we need factors and multiples? • Why do we need to distinguish a number as being prime or composite? • How does finding factors or multiples of a number help us to solve problems?

Knowledge	Skills
Students will know . . . • a factor is one of 2 or more numbers that form a product when multiplied together . • a multiple is a number which is a product of some specified number and another number. • a prime number is a number that has only two factors, 1 and itself. • a composite number is a number that has more than 2 factors. • a whole number is a multiple of each of its factors.	Students will be able to . . . • Find all factor pairs for a whole number in the range 1 – 100. • Determine whether a given whole number in the range 1 – 100 is a multiple of a given one-digit number. • Determine whether a given whole number in the range 1 – 100 is prime or composite.

Standards for Mathematical Practice

1. Make sense of problems and persevere in solving them.
2. Reason abstractly and quantitatively.
3. Construct viable arguments and critique the reasoning of others.
4. Model with mathematics.
6. Attend to precision.
7. Look for and make use of structure.
8. Look for and express regularity in repeated reasoning.

Resources

- **Everyday Mathematics 4 Lessons:** 2-3, 2-4, 2-5, 2-8, 2-9, 2-13, 3-2, 3-4, 3-6, 3-11, 4-1, 4-2, 4-3, 6-1, 6-3, 6-7, 7-5 (2-6, 2-7, 2-12, 2-10, 3-1, 3-3, 3-5, 3-8, 3-9, 3-12, 4-6, 4-8, 4-11, 4-12, 4-13, 6-10, 6-14)
- **Supplemental Lessons:** Binder pages 50-60, 213-228

Assessment

Formative Assessment	Summative Assessment
• Exit tickets • Math boxes	• Unit assessment

Operations & Algebraic Thinking
C. Generate and analyze patterns

4.OA.C. 5 Generate a number or shape pattern that follows a given rule. Identify apparent features of the pattern that were not explicit in the rule itself. *For example, given the rule "Add 3" and the starting number 1, generate terms in the resulting sequence and observe that the terms appear to alternate between odd and even numbers. Explain informally why the numbers will continue to alternate in this way.*

Understanding	Essential Questions
Students will understand… • patterns have units that repeat over and over. • the unit in a pattern must be identified.	• How does recognizing a pattern help one to solve problems? • Why does one need to look for patterns?
Knowledge	**Skills**
Students will know . . . • pattern types, e.g., ABABAB… • patterns can be made from numbers, shapes, letters, etc.	Students will be able to . . . • Generate a pattern that follows a given rule. • Identify apparent features of the pattern that were not explicit in the rule itself.

Standards for Mathematical Practice

1. Make sense of problems and persevere in solving them.
2. Reason abstractly and quantitatively.
3. Construct viable arguments and critique the reasoning of others.
4. Model with mathematics.
6. Attend to precision.
7. Look for and make use of structure.
8. Look for and express regularity in repeated reasoning.

Resources

- **Everyday Mathematics 4 Lessons**: 1-8, 2-1, 2-4, 2-6, 2-13, 3-2, 3-4, 4-2, 6-1, 6-8, 7-9 (1-1, 1-3, 1-10, 1-14, 2-5, 2-11, 3-10, 6-1, 6-3, 7-5, 7-7, 7-11, 7-13)

Assessment

Formative Assessment	Summative Assessment
• Exit tickets • Math boxes	• Unit assessment

Numbers and Operations in Base Ten[1]

A. Generalize place value understanding for multi-digit whole numbers.

[1] Grade 4 expectations in this domain are limited to whole numbers less than or equal to 1,000,000.

4.NBT.A.1 Recognize that in a multi-digit whole number, a digit in one place represents ten times what it represents in the place to its right. *For example, recognize that 700 ÷ 70 = 10 by applying concepts of place value and division.*

4.NBT.A.2 Read and write multi-digit whole numbers using base-ten numerals, number names, and expanded form. Compare two multi-digit numbers based on meanings of the digits in each place, using >, =, and < symbols to record the results of comparisons.

4.NBT.A.3 Use place value understanding to round multi-digit whole numbers to any place.

Understanding	Essential Questions
Students will understand… • place value is used to round numbers. • place value can be used to compare and order numbers.	• What does knowing place value help us to do?
Knowledge	**Skills**
Students will know . . . • how a base-ten numeral is related to the numeral name and the expanded form. • that in a multi-digit whole number, a digit in one place represents ten times what it represents to its right.	Students will be able to . . . • read multi-digit whole numbers using base-ten numerals, numeral names, and expanded form. • write multi-digit whole numbers using base-ten numerals, numeral names, and expanded form. • compare two multi-digit numbers based on meanings of the digits in each place, using <, =, and > symbols. • use place-value understanding to round multi-digit whole numbers to any place.

Standards for Mathematical Practice

1. Make sense of problems and persevere in solving them.
2. Reason abstractly and quantitatively.
3. Construct viable arguments and critique the reasoning of others.
4. Model with mathematics.
6. Attend to precision.
7. Look for and make use of structure.
8. Look for and express regularity in repeated reasoning.

Resources

- **Everyday Mathematics 4 Lessons:** 1-1, 1-2, 1-3, 1-4, 1-5, 1-6, 1-7, 1-8, 1-9, 1-10, 1-11, 1-12, 1-13, 2-1, 2-2, 2-3, 2-4, 2-6, 2-7, 2-8, 3-1, 3-2, 3-3, 3-5, 3-6, 3-7, 3-8, 3-9, 3-10, 3-12, 3-13, 4-1, 4-2, 4-3, 4-5, 4-6, 4-7, 4-8, 4-10, 4-12, 4-13, 5-1, 5-7, 5-13, 6-1, 6-2, 6-4, 6-7, 7-3, 8-8 (1-1, 1-3, 1-8, 2-5, 2-7, 2-9, 2-11, 2-13, 3-1, 3-3, 3-8, 3-9, 3-11, 3-12, 3-13, 3-14, 4-1, 4-3, 4-9, 4-11, 8-9, 8-10)
- **Supplemental Lessons:** Binder pages 6-19, 160-185, 229-240

Assessment

Formative Assessment	Summative Assessment
• Exit tickets • Math boxes	• Unit assessment

Numbers and Operations in Base Ten[2]

B. Use place value understanding and properties of operations to perform multi-digit arithmetic.

[2] Grade 4 expectations in this domain are limited to whole numbers less than or equal to 1,000,000.

4.NBT.B.4 With accuracy and efficiency, add and subtract multi-digit whole numbers using the standard algorithm.

4.NBT.B.5 Multiply a whole number of up to four digits by a one-digit whole number, and multiply two two-digit numbers, using strategies based on place value and the properties of operations. Illustrate and explain the calculation by using equations, rectangular arrays, and/or area models.

4.NBT.B.6 Find whole-number quotients and remainders with up to four-digit dividends and one-digit divisors, using strategies based on place value, the properties of operations, and/or the relationship between multiplication and division. Illustrate and explain the calculation by using equations, rectangular arrays, and/or area models.

Understanding	Essential Questions
Students will understand… • the standard algorithm is one way to get the answer to an addition or subtraction problem. • one should use an alternate algorithm to check the answer to a problem. • place value helps to understand the appropriate size of an answer.	• How are strategies useful in solving computation problems? • Why does it help to know inverse relationships?
Knowledge	**Skills**
Students will know . . . • addition and subtraction are inverse operations. • multiplication and division are inverse operations.	Students will be able to . . . • fluently add multi-digit whole numbers using the standard algorithm. • fluently subtract multi-digit whole numbers using the standard algorithm. • multiply a whole number of up to four digits by a one-digit whole number. • multiply two two-digit numbers. • find whole-number quotients and remainders with up to four-digit dividends and one-digit divisors. • illustrate and explain calculations by using equations, rectangular arrays, and/or area models.

Standards for Mathematical Practice

1. Make sense of problems and persevere in solving them.
2. Reason abstractly and quantitatively.
3. Construct viable arguments and critique the reasoning of others.
4. Model with mathematics.
6. Attend to precision.
7. Look for and make use of structure.
8. Look for and express regularity in repeated reasoning.

Resources
Everyday Mathematics 4 Lessons: 1-1 to 1-13, 2-1 to 2-5, 2-7 to 2-10, 2-12, 2-13, 3-3, 3-4, 3-8, 3-10, 4-1 to 4-13, 5-1, 5-5, 5-7, 5-8, 5-12, 5-13, 6-1 to 6-11, 6-13, 7-1, 7-3 to 7-9, 7-12, 8-1, 8-2, 8-4, 8-6 to 8-13 (1-2, 1-4, 1-8, 1-14, 2-4, 2-5, 2-6, 2-8, 2-11, 3-1, 3-2, 3-3, 3-5, 3-6, 3-7, 3-9 to 3-14, 4-1, 4-5, 4-13, 5-2 to 5-4, 5-6, 5-8 to 5-11, 5-13, 5-14, 6-1, 6-3, 6-5, 6-8, 6-9, 6-12, 7-2, 7-4, 7-6, 7-8, 7-10 to 7-13, 8-2, 8-5, 8-6, 8-7, 8-9, 8-10, 8-11, 8-14) **Supplemental Lessons:** Binder pages 42-49, 58-60, 160-185, 241-260

Assessment	
Formative Assessment • Exit tickets • Math boxes	Summative Assessment • Unit assessment

Number & Operations – Fractions[3]

A. Extend understanding of fraction equivalence and ordering.

[3] Grade 4 expectations in this domain are limited to fractions with denominators 2, 3, 4, 5, 6, 8, 10, 12, and 100.

4.NF.A.1 Explain why a fraction a/b is equivalent to a fraction $(n \times a)/(n \times b)$ by using visual fraction models, with attention to how the number and size of the parts differ even though the two fractions themselves are the same size. Use this principle to recognize and generate equivalent fractions.

4.NF.A.2 Compare two fractions with different numerators and different denominators, e.g., by creating common denominators or numerators, or by comparing to a benchmark fraction such as 1/2. Recognize that comparisons are valid only when the two fractions refer to the same whole. Record the results of comparisons with symbols >, =, or <, and justify the conclusions, e.g., by using a visual fraction model.

Understanding	Essential Questions
Students will understand… • equivalent fractions represent the same amount of a whole. • fraction comparisons are only valid when they refer to the same whole. • in order to find the fraction equivalent to one half, the numerator must be the denominator divided by 2; or the denominator must be 2 times the numerator.	• Why does one need to use fractions? • Why does one need to find equivalent fractions?
Knowledge	**Skills**
Students will know . . . • the same number must multiply the numerator and denominator in order for fractions to be equivalent. • 1/2 can be used as a benchmark to compare fractions. • "<" means less than; ">" means greater than; and "=" means equal to.	Students will be able to . . . • identify equivalent fractions. • generate equivalent fractions. • explain fractions that are equivalent through visual models. • compare two fractions using a benchmark fraction. • compare two fractions using common numerators or denominators.

Standards for Mathematical Practice

1. Make sense of problems and persevere in solving them.
2. Reason abstractly and quantitatively.
3. Construct viable arguments and critique the reasoning of others.
4. Model with mathematics.
6. Attend to precision.
7. Look for and make use of structure.
8. Look for and express regularity in repeated reasoning.

Resources

- **Everyday Mathematics 4 Lessons:** 3-1, 3-2, 3-3, 3-4, 3-5, 3-6, 3-7, 3-8, 3-9, 3-11, 3-13, 4-9, 4-11, 5-1, 5-2, 5-4, 5-5, 5-7, 5-8, 5-11, 6-4, 6-6, 6-7, 6-8, 6-11, 6-12, 7-2, 7-7, 7-10, 7-13, 8-5, 8-9, 8-10, 8-11, 8-13 (2-10, 2-14, 3-5, 3-7, 3-12, 4-1, 4-2, 4-3, 4-4, 4-5, 4-7, 5-1, 5-2, 5-3, 5-4, 5-6, 5-9, 6-5, 6-10, 6-14, 7-10, 7-14, 8-6, 8-14)
- **Supplemental Lessons:** Biner pages 101-115, 116-138

Assessment

Formative Assessment	Summative Assessment
• Exit tickets • Math boxes	• Unit assessment

Number & Operations – Fractions[3]

B. Build fractions from unit fractions by applying and extending previous understandings of operations on whole numbers.

[3] Grade 4 expectations in this domain are limited to fractions with denominators 2, 3, 4, 5, 6, 8, 10, 12, and 100.

4.NF.B.3 Understand a fraction a/b with $a > 1$ as a sum of fractions $1/b$.

a. Understand addition and subtraction of fractions as joining and separating parts referring to the same whole.

b. Decompose a fraction into a sum of fractions with the same denominator in more than one way, recording each decomposition by an equation. Justify decompositions, e.g., by using a visual fraction model. *Examples: 3/8 = 1/8 + 1/8 + 1/8 ; 3/8 = 1/8 + 2/8 ; 2 1/8 = 1 + 1 + 1/8 = 8/8 + 8/8 + 1/8.*

c. Add and subtract mixed numbers with like denominators, e.g., by replacing each mixed number with an equivalent fraction, and/or by using properties of operations and the relationship between addition and subtraction.

d. Solve word problems involving addition and subtraction of fractions referring to the same whole and having like denominators, e.g., by using visual fraction models and equations to represent the problem.

4.NF.B.4 Apply and extend previous understandings of multiplication to multiply a fraction by a whole number.

a. Understand a fraction a/b as a multiple of $1/b$. *For example, use a visual fraction model to represent 5/4 as the product 5 × (1/4), recording the conclusion by the equation 5/4 = 5 × (1/4).*

b. Understand a multiple of a/b as a multiple of 1/b, and use this understanding to multiply a fraction by a whole number. *For example, use a visual fraction model to express 3 × (2/5) as 6 × (1/5), recognizing this product as 6/5. (In general, n × (a/b) = (n × a)/b.)*

c. Solve word problems involving multiplication of a fraction by a whole number, e.g., by using visual fraction models and equations to represent the problem. *For example, if each person at a party will eat 3/8 of a pound of roast beef, and there will be 5 people at the party, how many pounds of roast beef will be needed? Between what two whole numbers does your answer lie?*

Understanding	Essential Questions
Students will understand… • a fraction (with a numerator greater than 1) is made up of unit fractions, e.g. 3/7 = 1/7 + 1/7 + 1/7. • addition and subtraction of fractions is joining and separating parts referring to the same whole. • a fraction a/b is a multiple of $1/b$. • a multiple of a/b is a multiple of 1/b.	• What operations are allowed with fractions? • When would one need to add, subtract, multiply, or divide a fraction?
Knowledge	**Skills**
Students will know . . . • fractions must have common denominators in order to be added or subtracted. • when adding or subtracting fractions with like denominators, one must add or subtract the numerators and keep the denominator the same. • mixed numbers are multiples of fractions.	Students will be able to . . . • decompose a fraction into the sum of fractions in more than one way. • justify decompositions. • add mixed numbers with like denominators. • subtract mixed numbers with like denominators. • solve word problems involving addition and subtraction of fractions referring to the same whole and having like denominators. • multiply a fraction by a whole number. • solve word problems involving multiplication of a fraction by a whole number.

Standards for Mathematical Practice
1. Make sense of problems and persevere in solving them. 2. Reason abstractly and quantitatively. 3. Construct viable arguments and critique the reasoning of others. 4. Model with mathematics. 6. Attend to precision. 7. Look for and make use of structure. 8. Look for and express regularity in repeated reasoning.

Resources
• **Everyday Mathematics 4 Lessons:** 3-8, 5-1 to 5-10, 5-13, 6-1, 6-3, 6-5, 6-6, 6-9, 6-12, 6-13, 7-1 to -13, 8-1, 8-2, 8-4 to 8-13 (2-10, 2-14, 4-10, 4-14, 5-5, 5-6, 5-9, 5-11 to 5-13, 6-2, 6-4 to 6-10, 6-14, 7-1, 7-2 to 7-5, 7-7 to 7-11, 7-13, 7-14, 8-1 to 8-4, 8-6, 8-9, 8-10, 8-12, 8-13, 8-14) • **Supplemental Lessons:** Binder pages 138, 195-201, 204-218, 261-279, 293-324

Assessment	
Formative Assessment • Exit tickets • Math boxes	Summative Assessment • Unit assessment

Number & Operations – Fractions[3]

C. Understand decimal notation for fractions and compare decimal fractions.

[3] Grade 4 expectations in this domain are limited to fractions with denominators 2, 3, 4, 5, 6, 8, 10, 12, and 100.

4.NF.C.5 Express a fraction with denominator 10 as an equivalent fraction with denominator 100, and use this technique to add two fractions with respective denominators 10 and 100.[2] *For example, express 3/10 as 30/100, and add 3/10 + 4/100 = 34/100.*

4.NF.C.6 Use decimal notation for fractions with denominators 10 or 100. *For example, rewrite 0.62 as 62/100; describe a length as 0.62 meters; locate 0.62 on a number line diagram.*

4.NF.C.7 Compare two decimals to hundredths by reasoning about their size. Recognize that comparisons are valid only when the two decimals refer to the same whole. Record the results of comparisons with the symbols >, =, or <, and justify the conclusions, e.g., by using a visual model.

[2] Students who can generate equivalent fractions can develop strategies for adding fractions with unlike denominators in general. But addition and subtraction with unlike denominators in general is not a requirement at this grade.

Understanding	Essential Questions
Students will understand… • decimals and fractions are related. • fractions with a denominator of 10 or 100 can be written in decimal form. • comparisons of decimals are valid only when the two decimals refer to the same whole.	• Why does one need to change a fraction to a decimal? • When is it easier to use the decimal form of a fraction? • Why would decimal forms of a fraction need to be compared?
Knowledge	**Skills**
Students will know . . . • the decimal point location is related to the size of the denominator when the denominator is a multiple of 10. • decimal forms of numbers are easiest to find when the denominator is a multiple of 10.	Students will be able to . . . • find a fraction with a denominator of 100 for a fraction with a denominator of 10. • add two fractions with respective denominators 10 and 100. • write fractions with denominators 10 or 100 in decimal form. • compare two decimals to hundredths by reasoning about their size. • compare two decimals using the symbols >, =, or <, and justify the conclusions.

Standards for Mathematical Practice

1. Make sense of problems and persevere in solving them.
2. Reason abstractly and quantitatively.
3. Construct viable arguments and critique the reasoning of others.
4. Model with mathematics.
6. Attend to precision.
7. Look for and make use of structure.
8. Look for and express regularity in repeated reasoning.

Resources

- **Everyday Mathematics 4 Lessons:** 3-8, 3-9, 3-10, 3-11, 3-12, 3-13, 4-7, 4-10, 4-13, 5-3, 5-4, 5-5, 5-8, 6-6, 6-7, 6-13, 7-11, 7-12, 8-7, 8-13 (4-5, 4-7, 5-2, 5-4, 5-6, 5-8, 5-11, 5-13, 6-2, 6-4, 6-9, 6-11, 6-12, 7-6, 7-8, 7-10, 7-14, 8-5, 8-6, 8-8, 8-9)
- **Supplemental Lessons:** Binder pages 95-100, 181, 204-211

Assessment

Formative Assessment	Summative Assessment
• Exit tickets • Math boxes	• Unit assessment

Measurement

A. Solve problems involving measurement and conversion of measurement from a larger unit to a smaller unit.

4.M.A.1 Know relative sizes of measurement units within one system of units including km, m , cm, mm; kg, g; lb, oz.; l, ml; hr, min, sec. Within a single system of measurement, express measurements in a larger unit in terms of a smaller unit. Record measurement equivalents in a two-column table. *For example, know that 1 ft is 12 times as long as 1 in. Express the length of a 4 ft snake as 48 in. Generate a conversion table for feet and inches listing the number pairs (1, 12), (2, 24), (3, 36), ...*

4.M.A.2 Use the four operations to solve word problems involving distances, intervals of time, liquid volumes, masses of objects, and money, including problems involving simple fractions or decimals, and problems that require expressing measurements given in a larger unit in terms of a smaller unit. Represent measurement quantities using diagrams such as number line diagrams that feature a measurement scale.

4.M.A.3 Apply the area and perimeter formulas for rectangles in real world and mathematical problems. *For example, find the width of a rectangular room given the area of the flooring and the length, by viewing the area formula as a multiplication equation with an unknown factor.*

Understandings	Essential Questions
Students will understand… • the size of the unit used to measure has an effect on the number of units in the answer. • area and perimeter measure different things therefore the types of label on the answers are different. • the region covered by square units in an array is the same as the area of the rectangle.	• What can be measured? • Why does one need to measure things?
Knowledge	**Skills**
Students will know . . . • relative sizes of measurement units within one system of units including km, m, cm, mm; kg, g; lb, oz.; l, ml; hr, min, sec. • the larger the unit used to measure, the smaller the number of units in the answer and vice versa. • area of a rectangle is equal to the length x the width (A = l x w)	Students will be able to . . • express measurements in a larger unit in terms of a smaller unit. • record measurement equivalents in a two-column table. • find the area of a rectangle using the formula. • find the perimeter of a rectangle using the formula.

Standards for Mathematical Practice

1. Make sense of problems and persevere in solving them.
2. Reason abstractly and quantitatively.
3. Construct viable arguments and critique the reasoning of others.
4. Model with mathematics.
5. Use appropriate tools strategically.
6. Attend to precision.
7. Look for and make use of structure.
8. Look for and express regularity in repeated reasoning.

Resources
• **Everyday Mathematics 4 Lessons:** 1-10, 1-13, 2-2, 2-6, 2-7, 2-10, 3-1, 3-8, 3-11 to 3-13, 4-1, 4-3 to 4-8, 4-11, 5-5, 5-7, 5-8, 5-12, 6-2, 6-3, 6-6, 6-12, 7-1, 7-2, 7-5, 7-8 to 7-13, 8-2, 8-4 to 8-11 (1-10, 1-13, 1-14, 2-1 to 2-7, 2-9, 2-11 to 2-13, 3-1 to 3-4, 3-6, 3-10, 4-1 to 4-5, 4-8, 5-1 to 5-7, 5-9, 5-10 to 5-14, 6-4, 6-8, 7-3, 7-4, 7-10, 7-13, 7-14, 8-1, 8-2, 8-3, 8-5, 8-9, 8-12, 8-13) • **Supplemental Lessons:** Binder pages 42-49, 138, 160-181, 229-240, 261-266, 293-294, 299-312

Assessment	
Formative Assessment • Exit tickets • Math boxes	Summative Assessment • Unit assessment

Measurement

A. Geometric measurement: understand concepts of angle and measure angles.

4.M.B.4 Recognize angles as geometric shapes that are formed wherever two rays share a common endpoint, and understand concepts of angle measurement:

a. An angle is measured with reference to a circle with its center at the common endpoint of the rays, by considering the fraction of the circular arc between the points where the two rays intersect the circle. An angle that turns through 1/360 of a circle is called a "one-degree angle," and can be used to measure angles.

b. An angle that turns through *n* one-degree angles is said to have an angle measure of *n* degrees.

4.M.B.5 Measure angles in whole-number degrees using a protractor. Sketch angles of specified measure.

4.M.B.6 Recognize angle measure as additive. When an angle is decomposed into non-overlapping parts, the angle measure of the whole is the sum of the angle measures of the parts. Solve addition and subtraction problems to find unknown angles on a diagram in real world and mathematical problems, e.g., by using an equation with a symbol for the unknown angle measure.

Understanding	Essential Questions
Students will understand… • the measure of an angle is the measure of the turn.	• Why would one need to measure an angle?
Knowledge	**Skills**
Students will know . . . • that an angle is formed wherever two rays share a common endpoint. • angle measure is additive. • an angle decomposed into non-overlapping parts is the sum of the measure of each parts. • an angle is measured with reference to a circle with its center at the common endpoint of the rays, by considering the fraction of the circular arc between the points where the two rays intersect the circle. • an angle that turns through 1/360 of a circle is called a "one-degree angle," and can be used to measure angles. • an angle that turns through *n* one-degree angles is said to have an angle measure of *n* degrees.	Students will be able to . . . • measure angles in whole-number degrees using a protractor. • sketch angles of specified measure. • solve addition and subtraction problems to find unknown angles on a diagram in real world and mathematical problems.

Standards for Mathematical Practice

1. Make sense of problems and persevere in solving them.
2. Reason abstractly and quantitatively.
3. Construct viable arguments and critique the reasoning of others.
4. Model with mathematics.
5. Use appropriate tools strategically.
6. Attend to precision.
7. Look for and make use of structure.
8. Look for and express regularity in repeated reasoning.

Resources

- **Everyday Mathematics 4 Lessons:** 5-10, 5-11, 6-9, 6-10, 6-11, 7-4, 7-12, 8-2, 8-3, 8-11 (6-1, 6-3, 6-13, 7-1, 7-2, 7-3, 7-4, 7-6, 7-8, 7-10, 7-14, 8-1, 8-5, 8-7, 8-9, 8-10, 8-12, 8-14)

Assessment

Formative Assessment	Summative Assessment
• Exit tickets • Math boxes	• Unit assessment

Data Literacy

A. Organize data and understand visualizations[1]

4.DL.A.1 Create data-based questions, generate ideas based on the questions, and then refine the questions.

4.DL.A.2 Develop strategies to collect various types of data and organize data digitally.

4.DL.A.3 Understand that subsets of data can be selected and analyzed for a particular purpose.

4.DL.A.4 Analyze visualizations of a single data set, share explanations and draw conclusions that the data supports.

[1] Analysis of data and visualizations at this grade excludes ratio, rate, proportion and percentages. These concepts are introduced in Grade 6.

Understanding	Essen... s
Students will understand… •	•
Knowledge	
Students will know . . .	
	ces
• Text • Supp	
Assessment	
Formative A...ment	Summative Assessment

These Data Literacy standards are very vague and can be interpreted many ways. These new standards will not be in effect until 2025. I have multiple calls in to the state to clarify these and no one as of yet has returned my call. When I receive clarification, this cluster will be completed and sent to you. If you have any questions, please email me at nancy@conquermathematics.com.

Thanks,

Nancy Schultz

Data Literacy

B. Represent and interpret data.

4.DL.B.5 Make a line plot to display a data set of measurements in fractions of a unit (1/2, 1/4, 1/8). Solve problems involving addition and subtraction of fractions by using information presented in line plots. *For example, from a line plot find and interpret the difference in length between the longest and shortest specimens in an insect collection.*

Understanding	Essential Questions
Students will understand… • a line plot is a visual display of data used to help see trends in the data.	• When would a line plot be used? • Why does one need to display data graphically?
Knowledge	**Skills**
Students will know . . . • the scale of a line plot must be equally spaced as in a number line. • the scale of a line plot can contain fractions.	Students will be able to . . • make a line plot to display a data set of measurements in fractions of a unit (1/2, 1/4, 1/8). • solve problems involving addition and subtraction of fractions by using information presented in line plots.

Standards for Mathematical Practice

1. Make sense of problems and persevere in solving them.
2. Reason abstractly and quantitatively.
3. Construct viable arguments and critique the reasoning of others.
4. Model with mathematics.
5. Use appropriate tools strategically.
6. Attend to precision.
7. Look for and make use of structure.
8. Look for and express regularity in repeated reasoning.

Resources

- **Everyday Mathematics 4 Lessons:** 5-9, 7-13, 8-5 (1-11, 4-10, 4-14, 6-6, 6-8, 6-10, 6-14, 7-5, 7-7, 8-6)

Assessment

Formative Assessment	Summative Assessment
• Exit tickets • Math boxes	• Unit assessment

Geometry

A. Draw and identify lines and angles and classify shapes by properties of their lines and angles.

4.G.A.1 Draw points, lines, line segments, rays, angles (right, acute, obtuse), and perpendicular and parallel lines. Identify these in two-dimensional figures.

4.G.A.2 Classify two-dimensional figures based on the presence or absence of parallel or perpendicular lines, or the presence or absence of angles of a specified size. Recognize right triangles as a category and identify right triangles.

4.G.A.3 Recognize a line of symmetry for a two-dimensional figure as a line across the figure such that the figure can be folded along the line into matching parts. Identify line-symmetric figures and draw lines of symmetry.

Understanding	Essential Questions
Students will understand… • characteristics of a figure enables one to identify it by a name.	• Why does one need to classify shapes? • Why does one need to identify lines of symmetry?
Knowledge	**Skills**
Students will know . . . • a right triangle is a category of triangles. • a line of symmetry is such that the figure can be folded along the line into matching parts.	Students will be able to . . . • draw points, lines, line segments, rays, angles (right, acute, obtuse), and perpendicular and parallel lines. • identify these in two-dimensional figures. • classify two-dimensional figures based on properties of parallel and perpendicular lines and sizes of angles. • identify right triangles. • identify line-symmetric figures. • draw lines of symmetry.

Standards for Mathematical Practice

1. Make sense of problems and persevere in solving them.
2. Reason abstractly and quantitatively.
3. Construct viable arguments and critique the reasoning of others.
4. Model with mathematics.
5. Use appropriate tools strategically.
6. Attend to precision.
7. Look for and make use of structure.
8. Look for and express regularity in repeated reasoning.

Resources

- **Everyday Mathematics 4 Lessons:** 1-11, 1-12, 2-7, 2-10, 2-11, 2-12, 3-10, 3-12, 4-4, 5-10, 5-11, 5-12, 6-9, 6-10, 6-11, 8-2, 8-4, 8-8 (1-13, 2-1, 2-2, 2-3, 2-4, 2-5, 2-6, 2-8, 3-2, 3-4, 3-5, 3-6, 3-7, 3-8, 3-9, 3-12, 4-5, 4-7, 4-9, 4-10, 4-12, 4-14, 5-6, 5-8, 5-14, 6-6, 6-8, 6-13, 7-1, 7-2, 7-3, 7-4, 7-6, 7-8, 7-10, 7-14)
- **Supplemental Lessons:** Binder pages 20-41, 61-94, 280-292, 325-328

Assessment

Formative Assessment	Summative Assessment
• Exit tickets • Math boxes	• Unit assessment

Career Readiness, Life Literacies, and Key Skills

Career Readiness, Life Literacies, and Key Skills

Rapid advancements in technology and subsequent changes in the economy have created opportunities for individuals to compete and connect on a global scale. In this increasingly diverse and complex world, the successful entrepreneur or employee must not only possess the requisite education for specific industry pathways but also employability skills necessary to collaborate with others and manage resources effectively in order to establish and maintain stability and independence. This document outlines concepts and skills necessary for New Jersey's students to thrive in an ever-changing world. Intended for integration throughout all K–12 academic and technical content areas, the New Jersey Student Learning Standards- Career Readiness, Life Literacies, and Key Skills (NJSLS-CLKS) provides the framework for students to learn the concepts, skills, and practices essential to the successful navigation of career exploration and preparation, personal finances and digital literacy.

Mission

Career readiness, life literacies, and key skills education provides students with the necessary skills to make informed career and financial decisions, engage as responsible community members in a digital society, and to successfully meet the challenges and opportunities in an interconnected global economy.

Vision

An education in career readiness, life literacies, and key skills fosters a population that:

•Continually self-reflects and seeks to improve the essential life and career practices that lead to success;

•Uses effective communication and collaboration skills and resources to interact with a global society;

•Possesses financial literacy and responsibility at home and in the broader community;

•Plans, executes, and alters career goals in response to changing societal and economic conditions; and

•Seeks to attain skill and content mastery to achieve success in a chosen career path.

Career Readiness, Life Literacies, and Key Skills Standards

- 9.4.5.CI.3: Participate in a brainstorming session with individuals with diverse perspectives to expand one's thinking about a topic of curiosity.
- 9.4.5.CT.1: Identify and gather relevant data that will aid in the problem-solving process.
- 9.4.5.CT.3: Describe how digital tools and technology may be used to solve problems.
- 9.4.5.CT.4: Apply critical thinking and problem-solving strategies to different types of problems such as personal, academic, community and global.
- 9.4.5.IML.3: Represent the same data in multiple visual formats in order to tell a story about the data.

Computer Science and Design Thinking

Computer Science and Design Thinking
New approaches necessary for solving the critical challenges that we face as a society will require harnessing the power of technology and computing. Rapidly changing technologies and the proliferation of digital information have permeated and radically transformed learning, working, and everyday life. To be well-educated, global-minded individuals in a computing-intensive world, students must have a clear understanding of the concepts and practices of computer science. As education systems adapt to a vision of students who are not just computer users but also computationally literate creators who are proficient in the concepts and practices of computer science and design thinking, engaging students in computational thinking and human-centered approaches to design through the study of computer science and technology serves to prepare students to ethically produce and critically consume technology.

Mission
Computer science and design thinking education prepares students to succeed in today's knowledge-based economy by providing equitable and expanded access to high-quality, standards-based computer science and technological design education.

Vision
All students have equitable access to a rigorous computer science and design thinking education. Students will benefit from opportunities to engage in high-quality technology programs that foster their ability to:
• develop and apply computational and design thinking to address real-world problems and design creative solutions;

• engage as collaborators, innovators, and entrepreneurs on a clear pathway to success through postsecondary education and careers;

• navigate the dynamic digital landscape to become healthy, productive, 21st century global-minded individuals; and

• participate in an inclusive and diverse computing culture that appreciates and incorporates perspectives from people of different genders, ethnicities, and abilities.

Computer Science and Design Thinking Standards

- **8.1.5.IC.1:** Identify computing technologies that have impacted how individuals live and work and describe the factors that influenced the changes.
- **8.1.5.IC.2:** Identify possible ways to improve the accessibility and usability of computing technologies to address the diverse needs and wants of users.
- **8.1.5.DA.1:** Collect, organize, and display data in order to highlight relationships or support a claim.
- **8.1.5.DA.3:** Organize and present collected data visually to communicate insights gained from different views of the data.
- **8.1.5.AP.1:** Compare and refine multiple algorithms for the same task and determine which is the most appropriate.
- **8.1.5.AP.4:** Break down problems into smaller, manageable sub-problems to facilitate program development.
- **8.1.5.AP.5:** Modify, remix, or incorporate pieces of existing programs into one's own work to add additional features or create a new program.
- **8.2.5.ED.2:** Collaborate with peers to collect information, brainstorm to solve a problem, and evaluate all possible solutions to provide the best results with supporting sketches or models.
- **8.2.5.ITH.4:** Describe a technology/tool that has made the way people live easier or has led to a new business or career.

Differentiation Strategies

Students with Disabilities/ Students at Risk of School Failure

(For students with disabilities, appropriate accommodations, instructional adaptations, and/or modifications should be determined by the IEP or 504 team)

Modifications for Classroom

- Pair visual prompts with verbal presentations
- Ask students to restate information, directions, and assignments.
- Give repetition and practice exercises
- Model skills/techniques to be mastered
- Give extended time to complete class work
- Provide copy of class notes
- Determine if preferential seating would be beneficial
- Provide access to a computer
- Provide copies of textbooks for home
- Provide access to books on tape/CD/digital media, as available and appropriate
- Assign a peer helper in the class setting
- Provide oral reminders and check student work during independent work time
- Assist student with long- and short-term planning of assignments
- Encourage student to proofread assignments and tests
- Provide regular parent/school communication

Modifications for Homework and Assignments

- Provide extended time to complete assignments
- Break down assignments
- Provide the student with clearly stated (written) expectations and grading criteria for assignments
- Implement RAFT activities as they pertain to the types/modes of communication (role, audience, format, topic)

Modifications for Assessments

- Provide extended time on classroom tests and quizzes
- Provide alternate setting as needed
- Restate, reread, and clarify directions/questions
- Distribute study guide for classroom tests
- Establish procedures for accommodations /modifications for assessments

Differentiation Strategies

Gifted and Talented

(content, process, product and learning environment)

- Allow students to pursue independent projects based on their individual interests
- Provide enrichment activities that include more advanced material
- Allow team-teaching opportunities and collaboration
- Set individual goals
- Conduct research and provide presentation of appropriate topics
- Design surveys to generate and analyze data to be used in discussion.
- Use Higher-Level Questioning Techniques
- Provide assessments at a higher level of thinking

English Language Learners

Modifications for Classroom

- Pair visual prompts with verbal presentations
- Provide repetition and practice
- Model skills/techniques to be mastered

Modifications for Homework/Assignments

- Provide Native Language Translation (peer, online assistive technology, translation device, bilingual dictionary)
- Provide extended time for assignment completion as needed
- Highlight key vocabulary
- Use graphic organizers

Grade 4

2016 (Old) Standard	*Revised 2023 Standard*
4.OA.A.3 Solve multistep word problems posed with whole numbers and having whole-number answers using the four operations, including problems in which remainders must be interpreted. Represent these problems using equations with a letter standing for the unknown quantity. Assess the reasonableness of answers using mental computation and estimation strategies including rounding.	4.OA.A.3 Solve multistep word problems posed with whole numbers and having whole-number answers using the four operations, including problems in which remainders must be interpreted. Represent these problems using equations with a letter standing for the unknown quantity. Assess the reasonableness of answers using mental computation and estimation strategies including rounding.
4.NBT.B.4 Use place value understanding and properties of operations to perform multi-digit arithmetic. 4. Fluently add and subtract multi-digit whole numbers using the standard algorithm	4.NBT.B.4 Use place value understanding and properties of operations to perform multi-digit arithmetic. 4. With accuracy and efficiency, add and subtract multi-digit whole numbers using the standard algorithm.
4.NF.C.5 Express a fraction with denominator 10 as an equivalent fraction with denominator 100, and use this technique to add two fractions with respective denominators 10 and 100. *For example, express 3/10 as 30/100, and add 3/10 + 4/100 = 34/100.*	4.NF.C.5 Express a fraction with denominator 10 as an equivalent fraction with denominator 100, and use this technique to add two fractions with respective denominators 10 and 100. *For example, express 3/10 as 30/100, and add 3/10 + 4/100 = 34/100.* (Clarification: Students who can generate equivalent fractions can develop strategies for adding fractions with unlike denominators in general. But addition and subtraction with unlike denominators in general is not a requirement at this grade.)
4.MD Measurement and Data	4.M Measurement
4.MD.A.1 Know relative sizes of measurement units within one system of units including km, m, cm. mm; kg, g; lb, oz.; l, ml; hr, min, sec. Within a single system of measurement, express measurements in a larger unit in terms of a smaller unit. Record measurement equivalents in a two column table. *For example, know that 1 ft is 12 times as long as 1 in. Express the length of a 4 ft snake as 48 in. Generate a conversion table for feet and inches listing the number pairs (1, 12), (2, 24), (3, 36), ...*	4.M.A.1 Know relative sizes of measurement units within one system of units including km, m, cm. mm; kg, g; lb, oz.; l, ml; hr, min, sec. Within a single system of measurement, express measurements in a larger unit in terms of a smaller unit. Record measurement equivalents in a two column table. *For example, know that 1 ft is 12 times as long as 1 in. Express the length of a 4 ft snake as 48 in. Generate a conversion table for feet and inches listing the number pairs (1, 12), (2, 24), (3, 36), ...*
4.MD.A.2 Use the four operations to solve word problems involving distances, intervals of time, liquid volumes, masses of objects, and money, including problems involving simple fractions or decimals, and problems that require expressing measurements given in a larger unit in terms of a smaller unit. Represent measurement quantities using diagrams such as number line diagrams that feature a measurement scale.	4.M.A.2 Use the four operations to solve word problems involving distances, intervals of time, liquid volumes, masses of objects, and money, including problems involving simple fractions or decimals, and problems that require expressing measurements given in a larger unit in terms of a smaller unit. Represent measurement quantities using diagrams such as number line diagrams that feature a measurement scale.

4.MD.A.3 Apply the area and perimeter formulas for rectangles in real world and mathematical problems. *For example, find the width of a rectangular room given the area of the flooring and the length, by viewing the area formula as a multiplication equation with an unknown factor.*	4.M.A.3 Apply the area and perimeter formulas for rectangles in real world and mathematical problems. *For example, find the width of a rectangular room given the area of the flooring and the length, by viewing the area formula as a multiplication equation with an unknown factor.*
4.MD.C Geometric Measurement: understand concepts of angle and measure angles	4.M.B Geometric Measurement: understand concepts of angle and measure angles
4.MD.C.5a An angle is measured with reference to a circle with its center at the common endpoint of the rays, by considering the fraction of the circular arc between the points where the two rays intersect the circle. An angle that turns through 1/360 of a circle is called a "one- degree angle," and can be used to measure angles.	4.M.B.4a An angle is measured with reference to a circle with its center at the common endpoint of the rays, by considering the fraction of the circular arc between the points where the two rays intersect the circle. An angle that turns through 1/360 of a circle is called a "one- degree angle," and can be used to measure angles.
4.MD.C.5b An angle that turns through *n* one-degree angles is said to have an angle measure of *n* degrees.	4.M.B.4b An angle that turns through *n* one-degree angles is said to have an angle measure of *n* degrees.
4.MD.C.6 Measure angles in whole-number degrees using a protractor. Sketch angles of specified measure.	4.M.B.5 Measure angles in whole-number degrees using a protractor. Sketch angles of specified measure.
4.MD.C.7 Recognize angle measure as additive. When an angle is decomposed into non-overlapping parts, the angle measure of the whole is the sum of the angle measures of the parts. Solve addition and subtraction problems to find unknown angles on a diagram in real world and mathematical problems, e.g., by using an equation with a symbol for the unknown angle measure.	4.M.B.6 Recognize angle measure as additive. When an angle is decomposed into non-overlapping parts, the angle measure of the whole is the sum of the angle measures of the parts. Solve addition and subtraction problems to find unknown angles on a diagram in real world and mathematical problems, e.g., by using an equation with a symbol for the unknown angle measure.
	4.DL Data Literacy Domain
	4.DL.A Organize data and understand visualizations
	4.DL.A.1 Create data-based questions, generate ideas based on the questions, and then refine the questions.
	4. DL.A.2 Develop strategies to collect various types of data and organize data digitally.
	4.DL.A.3 Understand that subsets of data can be selected and analyzed for a particular purpose.
	4.DL.A.4 Analyze visualizations of a single data set, share explanations and draw conclusions that the data supports.
4.MD.B Represent and Interpret Data	4.DL.B Represent and Interpret Data

4.MD.B.4 Make a line plot to display a data set of measurements in fractions of a unit (1/2, 1/4, 1/8). Solve problems involving addition and subtraction of fractions by using information presented in line plots. *For example, from a line plot find and interpret the difference in length between the longest and shortest specimens in an insect collection.*	4.DL.B.5 Make a line plot to display a data set of measurements in fractions of a unit (1/2, 1/4, 1/8). Solve problems involving addition and subtraction of fractions by using information presented in line plots. *For example, from a line plot find and interpret the difference in length between the longest and shortest specimens in an insect collection.*

In Grade 4, instruction focuses broadly on three critical areas:

(1) developing understanding and accuracy and efficiency, with multi-digit multiplication, and developing understanding of dividing to find quotients involving multi-digit dividends;

(2) developing an understanding of fraction equivalence, addition and subtraction of fractions with like denominators, and multiplication of fractions by whole numbers;

(3) understanding that geometric figures can be analyzed and classified based on their properties, such as having parallel sides, perpendicular sides, particular angle measures, and symmetry.

Critical Areas

(1) Students generalize their understanding of place value to 1,000,000, understanding the relative sizes of numbers in each place. They apply their understanding of models for multiplication (equal-sized groups, arrays, area models), place value, and properties of operations, in particular the distributive property, as they develop, discuss, and use efficient, accurate, and generalizable methods to compute products of multi-digit whole numbers. Depending on the numbers and the context, they select and accurately apply appropriate methods to estimate or mentally calculate products. They develop fluency with efficient procedures for multiplying whole numbers; understand and explain why the procedures work based on place value and properties of operations; and use them to solve problems. Students apply their understanding of models for division, place value, properties of operations, and the relationship of division to multiplication as they develop, discuss, and use efficient, accurate, and generalizable procedures to find quotients involving multi-digit dividends. They select and accurately apply appropriate methods to estimate and mentally calculate quotients, and interpret remainders based upon the context.

(2) Students develop understanding of fraction equivalence and operations with fractions. They recognize that two different fractions can be equal (e.g., $15/9 = 5/3$), and they develop methods for generating and recognizing equivalent fractions. Students extend previous understandings about how fractions are built from unit fractions, composing fractions from unit fractions, decomposing fractions into unit fractions, and using the meaning of fractions and the meaning of multiplication to multiply a fraction by a whole number.

(3) Students describe, analyze, compare, and classify two-dimensional shapes. Through building, drawing, and analyzing two-dimensional shapes, students deepen their understanding of properties of two-dimensional objects and the use of them to solve problems involving symmetry.

Grade 4 Overview

Domain	Cluster Headings
Operations and Algebraic Thinking	• Use the four operations with whole numbers to solve problems. • Gain familiarity with factors and multiples. • Generate and analyze patterns.
Number and Operations in Base Ten	• Generalize place value understanding for multi-digit whole numbers. • Use place value understanding and properties of operations to perform multi-digit arithmetic.
Number and Operations - Fractions	• Extend understanding of fraction equivalence and ordering. • Build fractions from unit fractions by applying and extending previous understandings of operations on whole numbers. • Understand decimal notation for fractions and compare decimal fractions.
Measurement	• Solve problems involving measurement and conversion of measurements from a larger unit to a smaller unit. • Geometric measurement: understand concepts of angle and measure angles.
Data Literacy	• Organize data and understand data visualizations. • Represent and interpret data.
Geometry	Draw and identify lines and angles, and classify shapes by properties of their lines and angles.

Operations and Algebraic Thinking 4.OA

A. Use the four operations with whole numbers to solve problems

1. Interpret a multiplication equation as a comparison, e.g., interpret $35 = 5 \times 7$ as a statement that 35 is 5 times as many as 7 and 7 times as many as 5. Represent verbal statements of multiplicative comparisons as multiplication equations.

2. Multiply or divide to solve word problems involving multiplicative comparison, e.g., by using drawings and equations with a symbol for the unknown number to represent the problem, distinguishing multiplicative comparison from additive comparison.[1]

3. Solve multi-step word problems posed with whole numbers and having whole-number answers using the four operations, including problems in which remainders must be interpreted. Represent these problems using equations with a letter standing for the unknown quantity. Assess the reasonableness of answers using mental computation and estimation strategies including rounding.

B. Gain familiarity with factors and multiples

1. Find all factor pairs for a whole number in the range 1–100. Recognize that a whole number is a multiple of each of its factors. Determine whether a given whole number in the range 1–100 is a multiple of a given one-digit number. Determine whether a given whole number in the range 1–100 is prime or composite.

C. Generate and analyze patterns

2. Generate a number or shape pattern that follows a given rule. Identify apparent features of the pattern that were not explicit in the rule itself. For example, given the rule "Add 3" and the starting number 1, generate terms in the resulting sequence and observe that the terms appear to alternate between odd and even numbers. Explain informally why the numbers will continue to alternate in this way.

[1] See Glossary, Table 2.

Number and Operations in Base Ten[1] 4.NBT

A. Generalize place value understanding for multi-digit whole numbers

1. Recognize that in a multi-digit whole number, a digit in one place represents ten times what it represents in the place to its right. For example, recognize that $700 \div 70 = 10$ by applying concepts of place value and division.
2. Read and write multi-digit whole numbers using base-ten numerals, number names, and expanded form. Compare two multi-digit numbers based on meanings of the digits in each place, using $>$, $=$, and $<$ symbols to record the results of comparisons.
3. Use place value understanding to round multi-digit whole numbers to any place.

B. Use place value understanding and properties of operations to perform multi-digit arithmetic

4. With accuracy and efficiency, add and subtract multi-digit whole numbers using the standard algorithm.
5. Multiply a whole number of up to four digits by a one-digit whole number, and multiply two two-digit numbers, using strategies based on place value and the properties of operations. Illustrate and explain the calculation by using equations, rectangular arrays, and/or area models.
6. Find whole-number quotients and remainders with up to four-digit dividends and one-digit divisors, using strategies based on place value, the properties of operations, and/or the relationship between multiplication and division. Illustrate and explain the calculation by using equations, rectangular arrays, and/or area model.

[1] Grade 4 expectations in this domain are limited to whole numbers less than or equal to 1,000,000.

Number and Operations - Fractions[1] 4.NF

A. Extend understanding of fractions equivalence and ordering

1. Explain why a fraction $\frac{a}{b}$ is equivalent to a fraction $\frac{(n \times a)}{(n \times b)}$ by using visual fraction models, with attention to how the number and size of the parts differ even though the two fractions themselves are the same size. Use this principle to recognize and generate equivalent fractions.

2. Compare two fractions with different numerators and different denominators, e.g., by creating common denominators or numerators, or by comparing to a benchmark fraction such as $\frac{1}{2}$.

   Recognize that comparisons are valid only when the two fractions refer to the same whole. Record the results of comparisons with symbols >, =, or <, and justify the conclusions, e.g., by using a visual fraction model.

B. Build fractions from unit fractions by applying and extending previous understandings of operations on whole numbers

1. Understand a fraction $\frac{a}{b}$ with $a > 1$ as a sum of fractions $\frac{1}{b}$.

   a. Understand addition and subtraction of fractions as joining and separating parts referring to the same whole.

   b. Decompose a fraction into a sum of fractions with the same denominator in more than one way, recording each decomposition by an equation. Justify decompositions, e.g., by using a visual fraction model. Examples: $\frac{3}{8} = \frac{1}{8} + \frac{1}{8} + \frac{1}{8}$; $\frac{3}{8} = \frac{1}{8} + \frac{2}{8}$; $2\frac{1}{8} = 1 + 1 + \frac{1}{8} = \frac{8}{8} + \frac{8}{8} + \frac{1}{8}$.

[1] Grade 4 expectations in this domain are limited to fractions with denominators 2, 3, 4, 5, 6, 8, 10, 12 and 100. Visual fraction models include tape diagrams, number lines, and area models (See Glossary). Set models, including those defined as the whole, are excluded at this grade.

c. Add and subtract mixed numbers with like denominators, e.g., by replacing each mixed number with an equivalent fraction, and/or by using properties of operations and the relationship between addition and subtraction.

d. Solve word problems involving addition and subtraction of fractions referring to the same whole and having like denominators, e.g., by using visual fraction models and equations to represent the problem.

2. Apply and extend previous understandings of multiplication to multiply a fraction by a whole number.

a. Understand a fraction $\frac{a}{b}$ as a multiple of $\frac{1}{b}$. For example, use a visual fraction model to represent $\frac{5}{4}$ as the product $5\times\frac{1}{4}$, recording the conclusion by the equation $\frac{5}{4}=5\times(\frac{1}{4})$.

b. Understand a multiple of $\frac{a}{b}$ as a multiple of $\frac{1}{b}$, and use this understanding to multiply a fraction by a whole number. For example, use a visual fraction model to express $3\times(\frac{2}{5})$ as $6\times\frac{1}{5}$, recognizing this product as $\frac{6}{5}$. In general, $n\times\left(\frac{a}{b}\right)=\frac{(n\times a)}{b}$.

c. Solve word problems involving multiplication of a fraction by a whole number, e.g., by using visual fraction models and equations to represent the problem. For example, if each person at a party will eat $\frac{3}{8}$ of a pound of roast beef, and there will be 5 people at the party, how many pounds of roast beef will be needed? Between what two whole numbers does your answer lie?

C. Understand decimal notation for fractions and compare decimal fractions

3. Express a fraction with denominator 10 as an equivalent fraction with denominator 100, and use this technique to add two fractions with respective denominators 10 and 100. For example, express $\frac{3}{10}$ as $\frac{30}{100}$ and add $\frac{3}{10} + \frac{4}{100} = \frac{34}{100}$. (Clarification: Students who can generate equivalent fractions can develop strategies for adding fractions with unlike denominators in general. But addition and subtraction with unlike denominators in general is not a requirement at this grade.)

4. Use decimal notation for fractions with denominators 10 or 100. For example, rewrite 0.62 as $\frac{62}{100}$; describe a length as 0.62 meters; locate 0.62 on a number line diagram.

5. Compare two decimals to hundredths by reasoning about their size. Recognize that comparisons are valid only when the two decimals refer to the same whole. Record the results of comparisons with the symbols >, =, or <, and justify the conclusions, e.g., by using a visual model.

Measurement 4.M

A. Solve problems involving measurement and conversion of measurements from a larger unit to a smaller unit

1. Know relative sizes of measurement units within one system of units including km, m, cm. mm; kg, g; lb, oz.; l, ml; hr, min, sec. Within a single system of measurement, express measurements in a larger unit in terms of a smaller unit. Record measurement equivalents in a two-column table. For example, know that 1 ft is 12 times as long as 1 in. Express the length of a 4 ft snake as 48 in. Generate a conversion table for feet and inches listing the number pairs (1, 12), (2, 24), (3, 36), ...

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

3. Apply the area and perimeter formulas for rectangles in real world and mathematical problems. For example, find the width of a rectangular room given the area of the flooring and the length, by viewing the area formula as a multiplication equation with an unknown factor.

B. Geometric measurement: understand concepts of angle and measure angles

4. Recognize angles as geometric shapes that are formed wherever two rays share a common endpoint, and understand concepts of angle measurement:

   a. An angle is measured with reference to a circle with its center at the common endpoint of the rays, by considering the fraction of the circular arc between the points where the two rays intersect the circle. An angle that turns through $\frac{1}{360}$ th of a circle is called a "one-degree angle," and can be used to measure angles.

   b. An angle that turns through n one-degree angles is said to have an angle measure of n degrees.

5. Measure angles in whole-number degrees using a protractor. Sketch angles of specified measure.

6. Recognize angle measure as additive. When an angle is decomposed into non-overlapping parts, the angle measure of the whole is the sum of the angle measures of the parts. Solve addition and subtraction problems to find unknown angles on a diagram in real world and mathematical problems, e.g., by using an equation with a symbol for the unknown angle measure.

Data Literacy 4.DL

A. Organize data and understand data visualizations[1]

1. Create data-based questions, generate ideas based on the questions, and then refine the questions.

2. Develop strategies to collect various types of data and organize data digitally.

3. Understand that subsets of data can be selected and analyzed for a particular purpose.

4. Analyze visualizations of a single data set, share explanations and draw conclusions that the data supports.

B. Represent and interpret measurement data

5. Make a line plot to display a data set of measurements in fractions of a unit (½, ¼, ⅛). Solve problems involving addition and subtraction of fractions by using information presented in line plots. For example, from a line plot find and interpret the difference in length between the longest and shortest specimens in an insect collection.

Geometry

4.G

A. Draw and identify lines and angles, and classify shapes by properties of their lines and angles

1. Draw points, lines, line segments, rays, angles (right, acute, obtuse), and perpendicular and parallel lines. Identify these in two-dimensional figures.

2. Classify two-dimensional figures based on the presence or absence of parallel or perpendicular lines, or the presence or absence of angles of a specified size. Recognize right triangles as a category and identify right triangles.

3. Recognize a line of symmetry for a two-dimensional figure as a line across the figure such that the figure can be folded along the line into matching parts. Identify line-symmetric figures and draw lines of symmetry.

[1] Analysis of data and visualizations at this grade excludes ratio, rate, proportion and percentages. These concepts are introduced in Grade 6

Day #	2024-25 Date	Days Off	North Caldwell Grade 4 Lessons	Supplemental Resources/Notes	Binder Page #s	NJ Student Learning Standards
	1-Sep	Sun				
	2-Sep	Labor Day	Word Problem Notes- ALL word problems should be done this way. Do not try to categorize problems such as "change to more" or "comparison".		pp. 1-5	
	3-Sep					
1	4-Sep	First Day for Students	First Day of School - No switching classes			
2	5-Sep		Intro			
3	6-Sep		Calendar Math and classroom procedures etc.	Introduces base ten - include metric system - Done at the end of every month - only takes part of the class period		
	7-Sep	Sat				
	8-Sep	Sun				
4	9-Sep		1.1 Place Value in Whole Numbers			4.NBT.1, 4.NBT.2, 4.NBT.5
5	10-Sep		1.1 Place Value in Whole Numbers			4.NBT.1, 4.NBT.2, 4.NBT.5
6	11-Sep		1.2 Place-Value Concepts			4.NBT.1, 4.NBT.2
7	12-Sep		1.2 Place Value Concepts			4.NBT.1, 4.NBT.2
8	13-Sep		Buffer			
	14-Sep	Sat				
	15-Sep	Sun				
9	16-Sep		Rounding with Base-10 Blocks		pp. 6-9	
10	17-Sep		1.3 Formal Procedures for Rounding	Rounding on the Number Line, What's My Number?	pp. 10-19	4.NBT.2, 4.NBT.3
11	18-Sep		1.5 Estimation Strategies			4.OA.3, 4.NBT.3, 4.NBT.4
12	19-Sep		1.6 Guide to Solving Number Stories			4.OA.3, 4.NBT.4
13	20-Sep		1.6 Guide to Solving Number Stories			4.OA.3, 4.NBT.4
	21-Sep	Sat				

	22-Sep	Sun				
14	23-Sep		Introduction to POWs (Problem of the Week)			
15	24-Sep		1.7 /1.9 U.S. Traditional Addition and Subtraction			4.OA.3, 4.NBT.2, 4.NBT.4
16	25-Sep		1.11 Points, Line Segments, Lines, and Rays	What's the Point?, The Geometry of Letters	pp. 20-26	4.G.1
17	26-Sep		1.11 Points, Line Segments, Lines, and Rays- Game			4.G.1
18	27-Sep		Buffer			
	28-Sep	Sat				
	29-Sep	Sun				
19	30-Sep		1.12 Angles, Triangles, and Quadrilaterals	Calendar Math, Adding Angles	p. 27	4.G.1, 4.G.2
20	1-Oct		1.12 Angles, Triangles, and Quadrilaterals- Game			4.G.1, 4.G.2
21	2-Oct		Adding Products, Use unused supplements as additional resources		p. 28	
	3-Oct	Rosh Hashanah - Closed				
22	4-Oct		Buffer			
	5-Oct	Sat				
	6-Oct	Sun				
23	7-Oct		Show What You Know Review			
24	8-Oct		Unit 1 Show What You know (SWYK)	Unit 1 Assessment/Tasks	pp. 29-41	
25	9-Oct		Buffer - Extra day if needed for SWYK			
26	10-Oct		2.1 Square Number Patterns			4.OA.5, 4.NBT.5
27	11-Oct		2.2 The Area of Formula for Rectangles	Share and Show, Model Factors, Area & Perimeter	pp. 42-49	4.NBT.4, 4.M.A.3
	12-Oct	Sat				
	13-Oct	Sun				
28	14-Oct		2.3 Factors and Factor Pairs			4.OA.4, 4.NBT.5, 4.NBT.6
29	15-Oct		2.4 Multiples			4.OA.4, 4.OA.5, 4.NBT.5, 4.NBT.6
30	16-Oct		Prime & Composite 2-day lesson		pp. 50-57	4.OA.B.4

31	17-Oct		Prime & Composite 2-day lesson		pp. 50-57	4.OA.B.4
32	18-Oct		2.5 Prime and Composite Numbers	The Locker Game	pp. 58-60	4.OA.4, 4.NBT.5, 4.NBT.6
	19-Oct	Sat				
	20-Oct	Sun				
33	21-Oct		2.8 Multiplicative Comparisons			4.OA.1, 4.OA.2, 4.NBT.5
34	22-Oct	Conf. Dismiss 12:45pm	2.9 Multiplicative Comparison Number Stories			4.OA.1, 4.OA.2, 4.NBT.4, 4.NBT.5
35	23-Oct	PD Dismiss 12:45pm	2.9 Multiplicative Comparison Number Stories			4.OA.1, 4.OA.2, 4.NBT.4, 4.NBT.5
36	24-Oct	Conf. Dismiss 12:45pm	Buffer			
37	25-Oct		2.10 Classifying Triangles			4.G.2
	26-Oct	Sat				
	27-Oct	Sun				
38	28-Oct		Quadrilateral Hierarchy/Identifying Quads/What Shape Am I?/ Defining Attributes		pp. 61-74	4.G.1, 4.G.2
39	29-Oct		2.11 Classifying Quadrilaterals			4.G.1, 4.G.2
40	30-Oct		2.12 Finding Line Symmetry	Lines of Symmetry Supplement	pp. 75-86	4.G.3
41	31-Oct	Halloween	Buffer	Calendar Math		
	1-Nov	Diwali	Closed			
	2-Nov	Sat				
	3-Nov	Sun				
42	4-Nov		RICH MATH TASKS based upon Unit 2	Use unused supplements as additional resources	pp. 87-94	
43	5-Nov	Election Day	Math and Technology Integration - Symmetrical Gingerbread House			
44	6-Nov		Buffer			
	7-Nov	NJEA				
	8-Nov	NJEA				
	9-Nov	Sat				
	10-Nov	Sun				

45	11-Nov		Math and Technology Integration - Symmetrical Gingerbread House			
46	12-Nov		Math and Technology Integration - Symmetrical Gingerbread House			
47	13-Nov		Show What You Know Review Unit 2			
48	14-Nov		Unit 2 Show What You Know			
49	15-Nov		Buffer - Extra Day if needed for SWYK			
	16-Nov	Sat				
	17-Nov	Sun				
50	18-Nov		Equivalent Fractions (Area)		pp. 95-100	
51	19-Nov		3.1 Equal Sharing and Equivalence			
52	20-Nov		3.2 Fraction Circles and Equivalence			4.NF.1, 4.NF.2, 4.M.A.2
53	21-Nov		3.2 Fraction Circles and Equivalence			4.NF.1, 4.NF.2, 4.M.A.2
54	22-Nov		Buffer			
	23-Nov	Sat				
	24-Nov	Sun				
55	25-Nov		Fractions on a Number Line/Represent Fractions by Partitioning a Number Line	Connect to the Area Model	pp. 101-114	
56	26-Nov		3.3 Number Lines and Equivalence	Label Fractions	p. 115	4.OA.4, 4.OA.5, 4.NF.1
57	27-Nov	Dismiss 12:45 pm	Buffer	Calendar Math		
	28-Nov	Thanksgiving				
	29-Nov	Closed				
	30-Nov	Sat				
	1-Dec	Sun				
58	2-Dec		3.4 An Equivalent Fractions Rule			4.OA.4, 4.OA.5, 4.NF.1
59	3-Dec		Equivalent Fractions			4.NF.1, 4.NF.2
60	4-Dec		3.6 Comparing Fractions	EDM lesson		4.OA.4, 4.OA.5, 4.NF.1
61	5-Dec		Comparing Fractions - Supplements (prior content knowledge)	Same Denominator/Same Numerator	pp. 116-120	4.NF.1, 4.NF.2
62	6-Dec		Buffer			

	7-Dec	Sat				
	8-Dec	Sun				
63	9-Dec		Comparing Fractions - Supplements (new content)	Benchmark to 1/2, Complements to the Whole	pp. 121-128	4.NF.1, 4.NF.2
64	10-Dec		Comparing Fractions - Supplement	Comparing Pizzas/Comparing Fractions	pp. 129-137	4.NF.1, 4.NF.2
65	11-Dec		3.7 Comparing and Ordering Fractions			4.NF.1, 4.NF.2
66	12-Dec		3.7 Comparing and Ordering Fractions			
67	13-Dec		Buffer			
	14-Dec	Sat				
	15-Dec	Sun				
68	16-Dec		3.8/3.9 Modeling Tenths with Base-Ten Blocks/Modeling Decimals with Base-Ten Blocks			4.NF.1, 4.NF.2
69	17-Dec		3.9 Modeling Decimals			4.NF.2
70	18-Dec		3.10 Tenths and Hundredths	EDM Lesson		4.NF.2
71	19-Dec		3.10 Tenths and Hundredths	Benchmark Fractions & Decomposing Tenths and Hundredths	p. 138	4.NF.1, 4.NF.3, 4.NF.3b, 4.NF.6, 4.NF.7, 4.M.A.2
72	20-Dec		Buffer			
	21-Dec	Sat				
	22-Dec	Sun				
	23-Dec	Recess				
	24-Dec	Recess				
	25-Dec	Recess				
	26-Dec	Recess				
	27-Dec	Recess				
	28-Dec	Sat				
	29-Dec	Sun				
	30-Dec	Recess				
	31-Dec	Recess				
	1-Jan	New Year's Day				

73	2-Jan		3.13 Comparing Decimals	*3.11,3.12 being taught in Science,* Comparing Decimals, Comparing Fractions & Decimals	pp. 139-143	4.NF.6
74	3-Jan		RICH MATH TASKS based upon Unit 3	Money in the Piggy Bank, Use unused supplements as additional resources	pp. 144-159	4.NF.5,4.NF.6, 4.NF.7
	4-Jan	Sat				
	5-Jan	Sun				
75	6-Jan		Unit 3 SWYK Review			4.NF.5,4.NF.6, 4.NF.7
76	7-Jan		Unit 3 SWYK Review Day 2/Buffer			4.NF.5,4.NF.6, 4.NF.7
77	8-Jan		Unit 3 SWYK			4.NF.6, 4.NF.7, 4.M.A.2
78	9-Jan		Buffer - Unit 3 SWYK Extra day if needed	Calendar Math		
79	10-Jan		4.1 Extended Multiplication Facts			4.OA.2, 4.NBT.1, 4.NBT.5
	11-Jan	Sat				
	12-Jan	Sun				
80	13-Jan		4.2 Making Reasonable Estimates for Products			4.OA.3, 4.NBT.3, 4.NBT.4, 4.NBT.5
81	14-Jan		2-Digit by 2-Digit & 3-Digit by 1-Digit Multiplication		pp. 160-175	4.NBT.2, 4.NBT.4, 4.NBT.5, 4.M.A.3
82	15-Jan		4.3 Partitioning Rectangles/Area Model	Area of Combined Rectangles	pp. 176-181	4.NBT.2, 4.NBT.4, 4.NBT.5, 4.M.A.3
83	16-Jan		4.6 Introducing Partial-Products Multiplication			4.NBT.2, 4.NBT.4, 4.NBT.5, 4.M.A.3
84	17-Jan		Buffer			
	18-Jan	Sat				
	19-Jan	Sun				
85	20-Jan	MLK Day - Dismiss 12:45pm	4.6 Extra Day			4.NBT.2, 4.NBT.4, 4.NBT.5, 4.M.A.3
86	21-Jan		4.8 Money Number Stories			4.NBT.2, 4.NBT.4, 4.NBT.5, 4.M.A.1, 4.M.A.2

87	22-Jan		4.9 Partial-Products Multiplication			4.NBT.4, 4.NBT.5
88	23-Jan		4.9 Parital-Products Multiplication			4.NBT.4, 4.NBT.5
89	24-Jan		Buffer			
	25-Jan	Sat				
	26-Jan	Sun				
90	27-Jan		4.10 Multiplication Wrestling			4.NBT.2, 4.NBT.4, 4.NBT.5
91	28-Jan		4.11 Area Models for Rectangles and Rectilinear Figures			4.NBT.4, 4.NBT.5, 4.M.A.3
92	29-Jan		4.12 Multistep Multiplication Number Stories	Pocket Change	pp. 182-183	4.OA.3, 4.NBT.3, 4.NBT.4, 4.NBT.5
93	30-Jan		Traditional/Standard Multiplication Algorithm (this is a grade 5 standard - introduce but students do not need to master it)	Closest to 500, Closest to 1,000	pp. 184-185	
94	31-Jan		Buffer			
	1-Feb	Sat				
	2-Feb	Sun				
95	3-Feb		RICH MATH TASKS based upon Unit 4	Use unused supplements as additional resources	pp. 186-194	
96	4-Feb		Unit 4 SWYK Review			
97	5-Feb		Unit 4 SWYK	Students are allowed to use whatever method works for them on the SWYK		
98	6-Feb		Integration - Literacy - Introducing Fractions	Add and Subtract Fractions Through Data Literacy	pp. 195-198	
99	7-Feb		Buffer	Calendar Math		
	8-Feb	Sat				
	9-Feb	Sun				
100	10-Feb		5.1 Fraction Decomposition		pp. 199-200	4.NF.3, 4.NF.3b
101	11-Feb		5.2 The Whole for Fractions - Pattern Blocks		pp. 201-203	4.NF.3, 4.NF.3a, 4.NF.3b
102	12-Feb		5.2 The Whole for Fractions - EDM Lesson			4.NF.3, 4.NF.3a, 4.NF.3b

103	13-Feb		5.3 Adding Fractions			4.NF.3, 4.NF.3a, 4.NF.3b, 4.NF.3d
104	14-Feb	12:45 Dismissal	Buffer			
	15-Feb	Sat				
	16-Feb	Sun				
	17-Feb	Presidents' Day				
	18-Feb	Winter Break				
105	19-Feb		5.4 Adding Mixed Numbers			4.NF.3, 4.NF.3a, 4.NF.3b, 4.NF.3c, 4.NF.3d
106	20-Feb		5.5 Adding Tenths and Hundredths		pp. 204-211	4.NF.3, 4.NF.3a, 4.NF.5, 4.NF.6
107	21-Feb		Buffer			
	22-Feb	Sat				
	23-Feb	Sun				
108	24-Feb		5.5 Adding Tenths and Hundredths	EDM Lesson		4.NF.3, 4.NF.3a, 4.NF.5, 4.NF.6
109	25-Feb		5.7 Subtracting Fractions			4.NF.3, 4.NF.3a, 4.NF.3b, 4.NF.3d
110	26-Feb		5.8 Subtracting Mixed Numbers		p. 212	4.NF.3, 4.NF.3a, 4.NF.3b, 4.NF.3c, 4.NF.3d
111	27-Feb		5.8 Subtracting Mixed Numbers	EDM Lesson		4.NF.3, 4.NF.3a, 4.NF.3b, 4.NF.3c, 4.NF.3d
112	28-Feb		Buffer			
	1-Mar	Sat				
	2-Mar	Sun				
113	3-Mar		5.12 Creating Symmetric Figures	Review in Art		4.G.3
114	4-Mar		5.13 More Multistep Multiplication Number Stories	Multi-step story problems	pp. 213-216	4.OA.3, 4.NBT.3, 4.NBT.4, 4.NBT.5
115	5-Mar		5.13 More Multistep Multplication Number Stories			4.OA.3, 4.NBT.3, 4.NBT.4, 4.NBT.5
116	6-Mar		RICH MATH TASKS based upon Unit 5	Use unused supplements as additional resources	pp. 217-228	

117	7-Mar		Buffer			
	8-Mar	Sat				
	9-Mar	Sun				
118	10-Mar		Unit 5 SWYK Review			
119	11-Mar		Unit 5 SWYK			
120	12-Mar		Extra Day			
121	13-Mar		Math and Technology Integration - Place Value Depot	Project created by Lisa Linden		
122	14-Mar		Math and Technology Integration - Place Value Depot			
	15-Mar	Sat				
	16-Mar	Sun				
123	17-Mar		6.1 Extended Division Facts			4.NBT.1, 4.NBT.5, 4.NBT.6
124	18-Mar		6.2 Area: Finding Missing Side Lengths			4.NBT.4, 4.NBT.5, 4.NBT.6, 4.M.A.3
125	19-Mar		6.3 Strategies for Division			4.OA.4, 4.NBT.5, 4.NBT.6
126	20-Mar		6.4 Partial-Quotients - Using Area Model for Division	Area Model to Divide Partial Quot.	pp. 229-240	4.NBT.3, 4.NBT.4, 4.NBT.5, 4.NBT.6, 4.M.A.3
127	21-Mar		Buffer			
	22-Mar	Sat				
	23-Mar	Sun				
128	24-Mar		6.4 Partial-Quotients			4.NBT.3, 4.NBT.4, 4.NBT.5, 4.NBT.6, 4.M.A.3
129	25-Mar	Conf. Dismiss 12:45pm	6.4 Partial-Quotients Division Part 1			4.NBT.3, 4.NBT.4, 4.NBT.5, 4.NBT.6, 4.M.A.3
130	26-Mar	PD Dismiss 12:45pm	Buffer			
131	27-Mar	Conf. Dismiss 12:45pm	6.7 Partial-Quotients Division Part 2			4.OA.4, 4.NBT.2, 4.NBT.3, 4.NBT.4, 4.NBT.6
132	28-Mar		6.7 Partial-Quotients Division Part 2			4.OA.4, 4.NBT.2, 4.NBT.3, 4.NBT.4, 4.NBT.6
	29-Mar	Sat				

	30-Mar	Sun				
133	31-Mar		6.8 Expressing and Interpreting Remainders Day 1			4.OA.3, 4.NBT.6
134	1-Apr		6.8 Expressing and Interpreting Remainders Day 2	Word Problems- Interpret Remainders	pp. 241-258	4.OA.3, 4.NBT.6
135	2-Apr		Extra Division Day	Divisibility 2, Multi-Digit Division 1	pp. 259-260	
136	3-Apr		6.12 Number Stories with Fractions and Mixed Numbers	Adding and Subtracting Fractions	pp. 261-266	4.NF.3, 4.NF.3a, 4.NF.3b, 4.NF.3c, 4.NF.3d, 4.M.A.1, 4.M.A.2
137	4-Apr		Buffer			
	5-Apr	Sat				
	6-Apr	Sun				
138	7-Apr		6.12 Number Stories with Fractions and Mixed Numbers			4.NF.3, 4.NF.3a, 4.NF.3b, 4.NF.3c, 4.NF.3d, 4.M.A.1, 4.M.A.2
139	8-Apr		6.13 Extending Understandings of Whole Number Multiplication			4.NBT.5, 4.NF.4, 4.NF.4b, 4.NF.4c
140	9-Apr		RICH MATH TASKS based upon Unit 6	Use unused supplements as additional resources	pp. 267-279	
141	10-Apr		Angles Exploratory Day		pp. 280-292	
142	11-Apr		Buffer			
	12-Apr	Sat				
	13-Apr	Sun				
143	14-Apr		Unit 6 SWYK Review			
144	15-Apr		Unit 6 SWYK			
145	16-Apr		Unit 6 SWYK Extra Day if needed			
146	17-Apr		Buffer			
	18-Apr	Good Friday				
	19-Apr	Sat				
	20-Apr	Sun				
	21-Apr	Spring Break				
	22-Apr	Spring Break				
	23-Apr	Spring Break				
	24-Apr	Spring Break				

	25-Apr	Spring Break				
	26-Apr	Sat				
	27-Apr	Sun				
147	28-Apr		7.2 Exploring Fraction Multiplication Situations	Doubling Numerators and Denominators	pp. 293-294	4.NF.2, 4.M.A.1, 4.M.A.2
148	29-Apr		7.3 A Fraction as a Multiple of a Unit Fraction	Calendar Math, Multiples of Unit Fractions	pp. 295-297	4.NF.4, 4.NF.4a, 4.NF.4b, 4.NF.4c
149	30-Apr		7.4 Multipying Fractions by Whole Numbers			4.NF.4, 4.NF.4a, 4.NF.4b, 4.NF.4c
150	1-May		7.5 Multiplying Mixed Numbers by Whole Numbers Day 1	Multiply Mixed Number by Whole Number	p. 299	4.NF.4, 4.NF.4b, 4.NF.4c, 4.M.A.1, 4.M.A.2
151	2-May		Buffer			
	3-May	Sat				
	4-May	Sun				
152	5-May		7.5 Multipyling Mixed Numbers by Whole Numbers Day 2			4.NF.4, 4.NF.4b, 4.NF.4c, 4.M.A.1, 4.M.A.2
153	6-May		7.7 Multistep Division Number Stories			4.OA.3, 4.NBT.4, 4.NBT.6
154	7-May		7.9 Generating and Identifying Patterns	Pattern Predictions, Simple Patterns 2, Create a Pattern	pp. 300-307	4.OA.5, 4.NBT.6, 4.M.A.3
155	8-May		7.10 Solving Multistep Fraction Number Stories	Money Model	pp. 308-312	4.NF.2, 4.NF.4, 4.NF.4c, 4.M.A.1, 4.M.A.2
156	9-May		Buffer			
	10-May	Sat				
	11-May	Sun				
157	12-May		NJSLA			
158	13-May		NJSLA			
159	14-May		NJSLA			
160	15-May		NJSLA			
161	16-May		NJSLA			
	17-May	Sat				
	18-May	Sun				

162	19-May		7.12 Decimal Number Stories			4.NF.3, 4.NF.3a, 4.NF.3c, 4.NF.3d, 4.NF.4, 4.NF.4b, 4.NF.4c, 4.NF.6
163	20-May		UNIT 7 RICH MATH TASKS	Use unused supplements as additional resources	pp. 313-324	
164	21-May		Unit 7 SWYK Review			
165	22-May		Unit 7 SWYK			
166	23-May		Buffer			
	24-May	Sat				
	25-May	Sun				
	26-May	Memorial Day				
167	27-May		8.1 Extending Multistep Number Stories			4.OA.3, 4.NBT.4, 4.NBT.5, 4.NBT.6
168	28-May		8.4 Extending Line Symmetry	Recognize the Line of Symmetry/Symmetry in Shapes	pp. 325-328	4.G.3
169	29-May		8.5 Line Plots: 1/2, 1/4, and 1/8 inches			4.DL.B.5
170	30-May		Buffer			
	31-May	Sat				
	1-Jun	Sun				
171	2-Jun		8.6 Fractions and Perimeter			4.NF.3, 4.NF.4, 4.M.A.2, 4.M.A.3
172	3-Jun		8.7 More Decimal Number Stories	Calendar Math		4.NF.5, 4.NF.6
173	4-Jun		8.8 Area of Rectangles with Fractional Side Lengths			4.NF.3, 4.NF.4, 4.M.A.2, 4.M.A.3, 4.G.1, 4.G.2
174	5-Jun		8.9 More Fraction Multiplication Number Stories			4.NF.2
175	6-Jun		Buffer			
	7-Jun	Sat				
	8-Jun	Sun				
176	9-Jun		8.12 Applying Understandings of Place Value and Operations	Multiplication Decisions	p. 329	4.NBT.4

177	10-Jun		RICH MATH TASKS based upon Unit 8	Use unused supplements as additional resources	pp. 330-348	
178	11-Jun		Unit 8 SWYK Review			
179	12-Jun		Unit 8 SWYK			
180	13-Jun		Buffer			
	14-Jun	Sat				
	15-Jun	Sun				
181	16-Jun		Geometry Dash Project			
182	17-Jun		Geometry Dash Project			
183	18-Jun	12:45pm Dismissal	Geometry Dash Project			
184	19-Jun	Last Day of school 12:45 Dis.	Geometry Dash Project			

September 2024

Sun	Mon	Tue	Wed	Thu	Fri	Sat
1	2 *Labor Day*	3	4 First Day of School	5 Introduction	6 Calendar Math and Classroom Procedures- See Excel	7
8	9 1.1 Place Value in Whole Numbers	10 1.1 Place Value in Whole Numbers	11 1.2 Place Value Concepts	12 1.2 Place Value Concepts	13 Buffer	14
15	16 Rounding with Base-10 Blocks *pp. 6-9*	17 1.3 Formal Procedures for Rounding/ Rounding on a #line/ What's my Number? *pp. 10-19*	18 1.5 Estimation Strategies	19 1.6 Guide to Solving Number Stories	20 1.6 Guide to Solving Number Stories	21
22	23 Introduction to POWs (Problem of the Week)	24 1.7/1.9 US Traditional Addition and Subtraction	25 1.11 Points Line Segments, Lines & Rays/ What's the Point? The Letters of Geometry *pp. 20-26*	26 1.11 Points Line Segments, Lines & Rays - Game	27 Buffer	28
29	30 1.12 Angles, Triangles, and Quadrilaterals/ Calendar Math/ Adding Angles *p. 27*					

Word problem notes: pp 1-5

North Caldwell Grade 4

October 2024

Sun	Mon	Tue	Wed	Thu	Fri	Sat
		1 1.12 Angles, Triangles, and Quadrilaterals/ Calendar Math- Game	2 Adding Products, Use Unused Supplements as Additional Resources *p. 28*	3 No School *Rosh Hashanah*	4 Buffer	5
6	7 Show What You Know Review	8 Unit 1 Show What You Know (SWYK)/ Unit 1 Assessment/Task *pp. 29-41*	9 Buffer – Extra Day if needed for SWYK	10 2.1 Square Number Patterns	11 2.2 The Area of Formula Rectangles/ Share and Show/Model Factors, Area and Perimeter *pp. 42-49*	12 *Yom Kippur*
13	14 2.3 Factors and Factor Pairs *Columbus Day*	15 2.4 Multiples	16 Prime and Composite *pp.50-57*	17 Prime and Composite *pp. 50-57*	18 2.5 Prime and Composite Numbers/The Locker Game *pp. 58-60*	19
20	21 2.8 Multiplicative Comparisons	22 2.9 Multiplicative Comparison Number Stories *Conf Dismiss 12:45*	23 2.9 Multiplicative Comparison Number Stories *PD Dismiss 12:45*	24 Buffer *Conf Dismiss 12:45*	25 2.10 Classifying Triangles	26
27	28 Quadrilateral Hierarchy/ID Quads/What Shape an I?/ Defining Attributes *pp. 61-74*	29 2.11 Classifying Quadrilaterals	30 2.12 Finding Line Symmetry/Lines of Symmetry Supplement *pp. 75-86*	31 Buffer/Calendar Math *Halloween*		

November 2024

Sun	Mon	Tue	Wed	Thu	Fri	Sat
					1 No School *Diwali*	2
3	4 RICH MATH TASKS Based on Unit/Unused Supplements *pp. 87-94*	5 Math & Technology Integration- Symmetrical Gingerbread House *Election Day*	6 Buffer	7 No School	8 No School	9
10	11 Math & Technology Integration- Symmetrical Gingerbread House	12 Math & Technology Integration- Symmetrical Gingerbread House	13 Show What you Know Review Unit 2	14 Unit 2 Show What you Know	15 Buffer – Extra Day if Needed for SWYK	16
17	18 Equivalent Fractions *pp. 95-100*	19 3.1 Equal Sharing and Equivalence	20 3.2 Fraction Circles and Equivalence	21 3.2 Fraction Circles and Equivalence	22 Buffer	23
24	25 Fractions on a Number Line/ Represent Fractions by Partitioning a Number Line *pp. 101-114*	26 3.3 Number Lines and Equivalence/Label Fractions *p. 115*	27 Buffer/Calendar Math *12:45 Dismissal*	28 No School *Thanksgiving*	29 No School	30

December 2024

Sun	Mon	Tue	Wed	Thu	Fri	Sat
1	2 3.4 An Equivalent Fractions Rule	3 Equivalent Fractions	4 3.6 Comparing Fractions	5 Comparing Fractions/ Supplements- Same Denominator/Same Numerator *pp. 116-120*	6 Buffer	7
8	9 Comparing Fractions/ Benchmark to ½, Complements to the Whole *pp. 121-128*	10 Comparing Pizzas/Comparing Fractions *pp. 129-137*	11 3.7 Comparing and Ordering Fractions	12 3.7 Comparing and Ordering Fractions	13 Buffer	14
15	16 3.8/3.9 Modeling Tenths w/ Base-10 blocks/ Modeling Decimals with Base-10	17 3.9 Modeling Decimals	18 3.10 Tenths and Hundredths/ EDM lesson	19 3.10 Tenths and Hundredths *p. 138*	20 Buffer	21
22	23 No School	24 No School ***Christmas Eve***	25 No School ***Christmas Day***	26 No School ***Hanukkah***	27 No School	28
29	30 No School	31 No School ***New Year's Eve***				

January 2025

Sun	Mon	Tue	Wed	Thu	Fri	Sat
			1 No School *New Year's Day*	2 3.13 Comparing Decimals- See Excel *pp. 139-143*	3 RICH MATH TASK Based on Unit 3/Money in the Piggy Bank *pp. 144-159*	4
5	6 Unit 3 SWYK Review	7 Unit 3 SWYK Review Day 2/ Buffer	8 Unit 3 SWYK	9 Buffer/Unit 3 SWYK Extra Day if Needed/ Calendar Math	10 4.1 Extended Multiplication Facts	11
12	13 4.2 Making Reasonable Estimates for Products	14 2-Digit by 2-Digit & 3-Digit by 1-Digit Multiplication *pp. 160-175*	15 4.3 Partitioning Rectangles/ Area Model/Area of Combined Rectangle *pp. 176-181*	16 4.6 Introducing Partial-Products Multiplication	17 Buffer	18
19	20 4.6 Extra Day *MLK Day*	21 4.8 Money Number Stories	22 4.9 Partial-Products Multiplication	23 4.9 Partial Products Multiplication	24 Buffer	25
26	27 4.10 Multiplication Wresting	28 4.11 Area Models for Rectangles and Rectilinear Figures	29 4.12 Multistep Multiplication Number Stories/ Pocket Change *pp. 182-183*	30 Traditional/Standard Mult Alg – See Excel/ Closest to 500, Closest to 1000 *pp. 184-185*	31 Buffer	

February 2025

Sun	Mon	Tue	Wed	Thu	Fri	Sat
						1
2	3 RICH MATH TASKS Based on Unit 4 *pp. 186-194*	4 Unit 4 SWYK Review	5 Unit 4 SWYK See Excel	6 Integration – Literacy – Intro Fraction/ Add & Subtraction Through Data Literacy *pp. 195-198*	7 Buffer/ Calendar Math	8
9	10 5..1 Fraction Decomposition *pp. 199-200*	11 5.2 The Whole for Fractions - Pattern Blocks *pp. 201-203*	12 5.2 The Whole for Fractions – EDM Lesson	13 5.3 Adding Fractions	14 Buffer	15
16	17 No School ***Presidents' Day***	18 No School	19 5.4 Adding Mixed Numbers	20 5.5 Adding Tenths and Hundredths *pp. 204-211*	21 Buffer	22
23	24 5.5 Adding Tenths and Hundredths	25 5.7 Subtracting Fractions	26 5.8 Subtracting Mixed Numbers *p. 212*	27 5.8 Subtracting Mixed Numbers	28 Buffer	

March 2025

Sun	Mon	Tue	Wed	Thu	Fri	Sat
2	3 5.12 Creating Symmetric Figures/Review in Art	4 5.13 More Multistep Multiplication Number Stories *pp. 213-216*	5 5.13 More Multistep Multiplication Number Stories	6 RICH MATH TASKS Based on Unit 5 *pp. 217-228*	7 Buffer	1/8
9	10 Unit 5 SWYK Review	11 Unit 5 SWYK	12 Extra Day	13 Math and Technology Integration – Place Value Depot	14 Math and Technology Integration – Place Value Depot	15
16	17 6.1 Extended Division Facts	18 6.2 Area: Finding Missing Side Lengths	19 6.3 Strategies for Division	20 6.4 Partial- Quotients – Using Area Models for Division/ Area Model to Divide/ Partial Quotient *pp. 229-240*	21 Buffer	22
23	24 6.4 Partial-Quotients	25 6.4 Partial Quotients Division Part 1	26 Buffer	27 6.7 Partial-Quotients Division Part 2	28 6.7 Partial-Quotients Division Part 2	29
30	31 6.8 Expressing And Interpreting Remainders Day 1					

April 2025

Sun	Mon	Tue	Wed	Thu	Fri	Sat
		1 6.8 Express & Interpret Remainders Day 2/ WP Interpret Remainders *pp. 241-258*	2 Extra Division Day/ Divisibility 2 – Multi-Digit Division 1 *pp. 259-260*	3 6.12 Number Stories w/ Fractions and Mixed Numbers/ Add & Subtract Fractions *pp. 261-266*	4 Buffer	5
6	7 6.12 Number Stories w/ Fractions and Mixed Numbers	8 6.13 Extending Understandings of Whole Number Multiplication	9 RICH MATH TASKS Based on Unit 6/ Unused Supplements *pp. 267-279*	10 Angles Exploration Day *pp. 280-292*	11 Buffer	*12* *Pass -over*
13	14 Unit 6 SWYK Review	15 Unit 6 SWYK	16 Unit 6 SWYK Extra Day	17 Buffer	18 No School *Good Friday*	19
20 *Easter*	21 No School	22 No School	23 No School	24 No School	25 No School	26
27	28 7.2 Exploring Fraction Multiply Situations/ Doubling Numerators & Denominators *pp. 293-294*	29 7.3 Fract as a Multiple of a Unit Fract/ Calendar Math/ Multiple of Unit Fract *pp. 295-297*	30 7.4 Multiplying Fractions by Whole Numbers			

May 2025

Sun	Mon	Tue	Wed	Thu	Fri	Sat
				1 7.5 Multiplying Mixed Numbers by Whole Numbers Day 1 *p. 299*	2 Buffer	3
4	5 7.5 Multiplying Mixed Numbers by Whole Numbers Day 2	6 7.7 Multistep Division Number Stories	7 7.9 Generate & Identify Patterns/ Pattern Predictions/ Simple Patterns 2/Create a Pattern *pp. 300-307*	8 7.10 Solving Multistep Fraction Number Stories/Money Model *pp. 308-312*	9 Buffer	10
11	12 NJSLA	13 NJSLA	14 NJSLA	15 NJSLA	16 NJSLA	17
18	19 7.12 Decimal Number Stories	20 Unit 7 RICH MATH TASK/Use Unused Supplements *pp. 313-324*	21 Unit 7 SWYK Review	22 Unit 7 SWYK	23 Buffer	24
25	26 No School *Memorial Day*	27 8.1 Extending Multistep Number Stories	28 8.4 Extending Line Symmetry/Recognize Line of Symmetry/ Symmetry in Shapes *pp. 325-328*	29 8.5 Line Plots: 1/2, 1/4 and 1/8 inches	30 Buffer	31

June 2025

Sun	Mon	Tue	Wed	Thu	Fri	Sat
1	2 8.6 Fractions and Perimeter	3 8.7 More Decimal Number Stories/ Calendar Math	4 8.8 Area of Rectangles with Fractional Side Lengths	5 8.9 More Fraction Multiplication Number Stories	6 Buffer	7
8	9 8.12 Apply Understanding of Place Value and Operations/ Mult Decisions *p. 329*	10 RICH MATH TASKS Based Upon Unit 8/ Unused Supplements *pp. 330-348*	11 Unit 8 SWYK Review	12 Unit 8 SWYK	13 Buffer	14
15	16 Geometry Dash Project	17 Geometry Dash Project	18 Geometry Dash Project	19 Geometry Dash Project *Juneteenth*	20	21
22	23	24	25	26	27	28
29	30					