North Caldwell
Grade 5
Table of Contents

Curriculum

NJ Student Learning Standards
(NJSLS)

2024-25 Excel Calendar

2024-25 Monthly Calendar

Supplements

# North Caldwell Mathematics

## Grade Level: 5

## Contents


1. Instructional Materials p. 1
2. Supplemental Resources p. 1
3. Interdisciplinary Connections p. 2
4. New Jersey Student Learning Standards Grade 5 Critical Areas p. 3
5. Connecting the Standards for Mathematical Content to the Standards for Mathematical Practice/Standards for Mathematical Practice pp. 4-6
6. New Jersey Student Learning Standards, Resources, Assessment pp. 7-21
7. Career Readiness, Life Literacies, and Key Skills p. 22
8. Computer Science and Design Thinking p. 23
9. Differentiation Strategies
    a. Students with Disabilities/ Students at Risk of School Failure p. 24
    b. Gifted and Talented p. 25
    c. English Language Learners p. 25


## Instructional Materials

**Everyday Mathematics 4th Edition**
**© McGraw-Hill Education 2014**
**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 5

Planning My School Lunch for a Week (Connections: Math, Health/Nutrition (2.2.5.N.2), Digital Media (1.2.5.PR4c), and Technology)
SWBAT:

- Select foods that will result in healthy, nutritionally balanced lunches
- Create tables and charts to represent nutritional facts
- Estimate and calculate calorie intake and food costs
- Find averages
- Used data to make decisions use technology to communicate findings

## New Jersey Student Learning Standards (NJSLS)

In Grade 5, instructional time should focus on three critical areas: (1) developing fluency with addition and subtraction of fractions, and developing understanding of the multiplication of fractions and of division of fractions in limited cases (unit fractions divided by whole numbers and whole numbers divided by unit fractions); (2) extending division to 2-digit divisors, integrating decimal fractions into the place value system and developing understanding of operations with decimals to hundredths, and developing fluency with whole number and decimal operations; and (3) developing understanding of volume.

(1) Students apply their understanding of fractions and fraction models to represent the addition and subtraction of fractions with unlike denominators as equivalent calculations with like denominators. They develop fluency in calculating sums and differences of fractions and make reasonable estimates of them. Students also use the meaning of fractions, of multiplication and division, and the relationship between multiplication and division to understand and explain why the procedures for multiplying and dividing fractions make sense. (Note: this is limited to the case of dividing unit fractions by whole numbers and whole numbers by unit fractions.)

(2) Students develop understanding of why division procedures work based on the meaning of base-ten numerals and properties of operations. They finalize fluency with multi-digit addition, subtraction, multiplication, and division. They apply their understandings of models for decimals, decimal notation, and properties of operations to add and subtract decimals to hundredths. They develop fluency in these computations and make reasonable estimates of their results. Students use the relationship between decimals and fractions, as well as the relationship between finite decimals and whole numbers (i.e., a finite decimal multiplied by an appropriate power of 10 is a whole number), to understand and explain why the procedures for multiplying and dividing finite decimals make sense. They compute products and quotients of decimals to hundredths efficiently and accurately.

(3) Students recognize volume as an attribute of three-dimensional space. They understand that volume can be measured by finding the total number of same-size units of volume required to fill the space without gaps or overlaps. They understand that a 1-unit by 1-unit by 1-unit cube is the standard unit for measuring volume. They select appropriate units, strategies, and tools for solving problems that involve estimating and measuring volume. They decompose three-dimensional shapes and find volumes of right rectangular prisms by viewing them as decomposed into layers of arrays of cubes. They measure necessary attributes of shapes in order to determine volumes to solve real world and mathematical problems.

## 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 $7 \times 8$ 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 $2 \times 7$ 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 and Algebraic Thinking
### A. Write and interpret numerical expressions.

**5.OA.A.1** Use parentheses, brackets, or braces in numerical expressions, and evaluate expressions with these symbols.

**5.OA.A.2** Write simple expressions that record calculations with numbers and interpret numerical expressions without evaluating them. *For example, express the calculation "add 8 and 7, then multiply by 2" as 2 × (8 + 7). Recognize that 3 × (18932 + 921) is three times as large as 18932 + 921, without having to calculate the indicated sum or product.*

| Understandings | Essential Questions |
|---|---|
| Students will understand…<br>• the order of operations affects the value of the answer. | • Why is there an order to follow to compute answers? |

| Knowledge | Skills |
|---|---|
| Students will know . . .<br>• the order of operations is as follows:<br>  • parentheses<br>  • exponents<br>  • multiplication and division, left to right<br>  • addition and subtraction, left to right. | Students will be able to . . .<br>• use the order of operations to find answers to expressions.<br>• write simple expressions that record calculations with numbers.<br>• interpret numerical expressions without evaluating them. |

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

**Assessment**

| Formative Assessment | Summative Assessment |
|---|---|
| • Exit tickets<br>• Math boxes | • Unit assessment |

## Operations and Algebraic Thinking
### B. Analyze patterns and relationships.

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

| Understandings | Essential Questions |
|---|---|
| Students will understand…<br>• patterns can be put together to generate new patterns. | • How are the coordinate points related to patterns? |
| **Knowledge** | **Skills** |
| Students will know . . .<br>• that to determine if there is a pattern present in a set of numbers, one can look for constant change between the variables. | Students will be able to . . .<br>• generate patterns from other patterns.<br>• graph ordered pairs generated by the pattern on a coordinate plane. |

**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:** 4-9, 5-6, 7-10, 7-11, 7-12, 7-13, 8-2, 8-9 (6-10, 6-14, 7-14, 8-6, 8-10, 8-12)

**Assessment**

| Formative Assessment | Summative Assessment |
|---|---|
| • Exit tickets<br>• Math boxes | • Unit assessment |

## Numbers and Operations in Base Ten

### A. Understand the place value system.

**5.NBT.A.1** Recognize that in a multi-digit number, a digit in one place represents 10 times as much as it represents in the place to its right and 1/10 of what it represents in the place to its left.

**5.NBT.A.2** Explain patterns in the number of zeros of the product when multiplying a number by powers of 10, and explain patterns in the placement of the decimal point when a decimal is multiplied or divided by a power of 10. Use whole-number exponents to denote powers of 10.

**5.NBT.A.3** Read, write, and compare decimals to thousandths.

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

**5.NBT.A.4** Use place value understanding to round decimals to any place.

| Understandings | Essential Questions |
|---|---|
| Students will understand…<br>• each place in the place-value system has a limit to the value which can be placed there.<br>• the same relationship exists between any two adjacent places in the place-value system.<br>• placement of a number into a place in the place-value system has a significant effect on its value. | • How does the location of a number in a place-value system affect the value of the number?<br>• How is place value used to round numbers?<br>• What is the significance of the decimal point? |
| **Knowledge** | **Skills** |
| Students will know . . .<br>• when the value in a place exceeds the limit, it must change places.<br>• in a multi-digit number, a digit in one place represents 10 times as much as it represents in the place to its right and 1/10 of what it represents in the place to its left.<br>• place-value understanding is needed to round decimals to any place.<br>• the place to examine in order to round numbers, including decimals. | Students will be able to . . .<br>• read and write decimals to thousandths using base-ten numerals, number names, and expanded form.<br>• compare two decimals to thousandths.<br>• use >, =, and < symbols to record the results of comparisons. |

### 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, 2-1, 2-2, 2-3, 2-4, 2-5, 2-7, 2-8, 2-9, 2-10, 2-12, 2-13, 3-2, 3-5, 3-9, 3-10, 3-13, 3-14, 4-1, 4-2, 4-3, 4-4, 4-5, 4-7, 4-8, 4-9, 4-11, 4-12, 4-13, 4-14, 5-1, 5-3, 5-4, 5-5, 5-6, 5-8, 5-9, 5-10, 6-1, 6-2, 6-3, 6-4, 6-6, 6-7, 6-9, 6-10, 6-11, 6-12, 6-13, 7-2, 7-3, 7-5, 7-12, 8-1, 8-4, 8-5, 8-7, 8-8, 8-10, 8-11, 8-12 (1-2, 1-4, 1-8, 1—13, 2-3, 2-6, 2-7, 2-8, 2-8, 2-11, 2-12, 3-1, 3-3, 3-4, 3-5, 3-6, 3-7, 3-8, 3-10, 3-15, 4-5, 4-6, 4-7, 4-9, 4-11, 4-12, 4-13, 4-14, 5-1, 5-2, 5-3, 5-5, 5-6, 5-7, 5-8, 5-10, 5-11, 5-13, 5-15, 6-2, 6-3, 6-4, 6-5, 6-6, 6-8, 6-11, 6-13, 7-1, 7-8, 7-10, 7-14, 8-2, 8-9) |

| Assessment | |
| --- | --- |
| Formative Assessment<br>• Exit tickets<br>• Math boxes | Summative Assessment<br>• Unit assessment |

## Numbers and Operations in Base 10

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

**5.NBT.B.5** With accuracy and efficiency, multiply multi-digit whole numbers using the standard algorithm.

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

**5.NBT.B.7** Add, subtract, multiply, and divide decimals to hundredths, using concrete models or drawings and strategies based on place value, properties of operations, and/or the relationship between addition and subtraction; relate the strategy to a written method and explain the reasoning used.

| Understandings | Essential Questions |
|---|---|
| Students will understand…<br>• rectangles have an area that represents the product of the two dimensions. | • How are products and quotients related? |
| **Knowledge** | **Skills** |
| Students will know . . .<br>• multi-digit computation is just an extension of single-digit computations. | Students will be able to . . .<br>• fluently multiply multi-digit whole numbers using the standard algorithm.<br>• find whole-number quotients of whole numbers with up to four-digit dividends and two-digit divisors.<br>• illustrate and explain calculations by using equations, rectangular arrays, and/or area models.<br>• add, subtract, multiply, and divide decimals to hundredths. |

**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:** 1-2, 1-7, 1-11, 2-4, 2-5, 2-6, 2-7, 2-8, 2-9, 2-10, 2-11, 2-12, 2-13, 3-1, 3-2, 3-3, 3-4, 3-5, 3-6, 3-9, 3-12, 3-14, 4-4, 4-7, 4-11, 4-12, 4-13, 4-14, 5-1, 5-3, 5-7, 5-8, 5-9, 5-12, 6-4, 6-5, 6-6, 6-8, 6-9, 6-10, 6-11, 6-12, 6-13, 7-4, 7-6, 7-7, 7-12, 7-13, 8-1, 8-2, 8-3, 8-5, 8-6, 8-7, 8-8, 8-9, 8-10 (1-8, 1-13, 2-10, 2-11, 2-12, 2-13, 3-3, 3-4, 3-5, 3-7, 3-8, 3-9, 3-11, 3-12, 3-13, 3-14, 4-1, 4-2, 4-3, 4-5, 4-6, 4-7, 4-8, 4-11, 4-12, 4-14, 5-1, 5-2, 5-3, 5-4, 5-5, 5-6, 5-7, 5-8, 5-10, 5-11, 5-13, 5-14, 5-15, 6-2, 6-3, 6-4, 6-8, 7-1, 7-2, 7-3, 7-5, 7-8, 7-9, 7-10, 7-11, 8-1, 8-11, 8-12, 8-13)

**Assessment**

| Formative Assessment | Summative Assessment |
|---|---|
| • Exit tickets<br>• Math boxes | • Unit assessment |

## Number and Operations – Fractions

### A. Use equivalent fractions as a strategy to add and subtract fractions.

**5.NF.A.1** Add and subtract fractions with unlike denominators (including mixed numbers) by replacing given fractions with equivalent fractions in such a way as to produce an equivalent sum or difference of fractions with like denominators. *For example, 2/3 + 5/4 = 8/12 + 15/12 = 23/12. (In general, a/b + c/d = (ad + bc)/bd.)*

**5.NF.A.2** Solve word problems involving addition and subtraction of fractions referring to the same whole, including cases of unlike denominators, e.g., by using visual fraction models or equations to represent the problem. Use benchmark fractions and number sense of fractions to estimate mentally and assess the reasonableness of answers. *For example, recognize an incorrect result 2/5 + 1/2 = 3/7, by observing that 3/7 < 1/2.*

| Understandings | Essential Questions |
|---|---|
| Students will understand…<br>• fractions must have common denominators in order to be added or subtracted. | • When would one use addition or subtraction of fractions? |
| **Knowledge** | **Skills** |
| Students will know . . .<br>• that a common denominator is a common multiple of the two denominators (usually the least common one).<br>• that when adding fractions, the common denominators do not get added together, only the numerators do. | Students will be able to . . .<br>• add and subtract fractions with unlike denominators (including mixed numbers).<br>• solve word problems involving addition and subtraction of fractions referring to the same whole, including cases of unlike denominators.<br>• use benchmark fractions and number sense of fractions to estimate mentally and assess the reasonableness of answers. |

**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:** 1-2, 1-4, 3-4, 3-6, 3-7, 3-9, 3-10, 3-11, 3-12, 4-2, 4-3, 4-8, 5-1, 5-2, 5-3, 5-4, 5-11, 6-4, 6-5, 6-7, 7-1, 7-5, 7-6, 7-9, 8-2, 8-8 (2-10, 2-14, 3-13, 3-14, 4-1, 4-3, 4-4, 4-5, 4-6, 4-7, 4-10, 4-11, 4-13, 4-15, 5-5, 5-6, 5-7, 5-8, 5-9, 5-10, 5-12, 5-13, 5-14, 6-1, 6-2, 6-3, 6-6, 6-8, 6-11, 6-13, 7-2, 7-3, 7-4, 7-6, 7-8, 7-11, 7-13)

**Assessment**

| Formative Assessment | Summative Assessment |
|---|---|
| • Exit tickets<br>• Math boxes | • Unit assessment |

## Numbers and Operations – Fractions

### B. Apply and extend previous understandings of multiplication and division to multiply and divide fractions.

**5.NF.B.3** Interpret a fraction as division of the numerator by the denominator (i.e. $a/b = a \div b$). Solve word problems involving division of whole numbers leading to answers in the form of fractions or mixed numbers, e.g., by using visual fraction models or equations to represent the problem. *For example, interpret 3/4 as the result of dividing 3 by 4, noting that 3/4 multiplied by 4 equals 3, and that when 3 wholes are shared equally among 4 people each person has a share of size 3/4. If 9 people want to share a 50-pound sack of rice equally by weight, how many pounds of rice should each person get? Between what two whole numbers does your answer lie?*

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

a. Interpret the product $(a/b) \times q$ as a parts of a partition of $q$ into $b$ equal parts; equivalently, as the result of a sequence of operations $a \times q \div b$. *For example, use a visual fraction model to show (2/3) × 4 = 8/3, and create a story context for this equation. Do the same with (2/3) × (4/5) = 8/15. (In general, (a/b) × (c/d) = ac/bd.)*

b. Find the area of a rectangle with fractional side lengths by tiling it with unit squares of the appropriate unit fraction side lengths, and show that the area is the same as would be found by multiplying the side lengths. Multiply fractional side lengths to find areas of rectangles, and represent fraction products as rectangular areas.

**5.NF.B.5** Interpret multiplication as scaling (resizing), by:

a. Comparing the size of a product to the size of one factor on the basis of the size of the other factor, without performing the indicated multiplication.

b. Explaining why multiplying a given number by a fraction greater than 1 results in a product greater than the given number (recognizing multiplication by whole numbers greater than 1 as a familiar case); explaining why multiplying a given number by a fraction less than 1 results in a product smaller than the given number; and relating the principle of fraction equivalence $a/b = (n \times a)/(n \times b)$ to the effect of multiplying $a/b$ by 1.

**5.NF.B.6** Solve real world problems involving multiplication of fractions and mixed numbers, e.g., by using visual fraction models or equations to represent the problem.

**5.NF.B.7** Apply and extend previous understandings of division to divide unit fractions by whole numbers and whole numbers by unit fractions.[1]

a. Interpret division of a unit fraction by a non-zero whole number, and compute such quotients. *For example, create a story context for (1/3) ÷ 4, and use a visual fraction model to show the quotient. Use the relationship between multiplication and division to explain that (1/3) ÷ 4 = 1/12 because (1/12) × 4 = 1/3.*

b. Interpret division of a whole number by a unit fraction, and compute such quotients. *For example, create a story context for 4 ÷ (1/5), and use a visual fraction model to show the quotient. Use the relationship between multiplication and division to explain that 4 ÷ (1/5) = 20 because 20 × (1/5) = 4.*

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

[1] Students able to multiply fractions in general can develop strategies to divide fractions in general, by reasoning about the relationship between multiplication and division. But division of a fraction by a fraction is not a requirement at this grade.

(Continued on next page)

| Understandings | Essential Questions |
|---|---|
| Students will understand…<br>• a fraction is division of the numerator by the denominator ($a/b = a \div b$).<br>• when multiplying by a fraction less than one, the product will be smaller than the first factor.<br>• when multiplying by a fraction greater than one, the product will be larger than the first factor. | • What does it mean to divide by a fraction?<br>• Why would one need to divide by a fraction? |
| **Knowledge** | **Skills** |
| Students will know . . .<br>• the relative size of the answer based on the sizes of the factors. | Students will be able to . . .<br>• solve word problems involving division of whole numbers.<br>• multiply a fraction or whole number by a fraction.<br>• find the area of a rectangle with fractional side lengths by tiling it with unit squares of the appropriate unit fraction side lengths.<br>• show that the area from tiles is the same as would be found by multiplying the side lengths.<br>• multiply fractional side lengths to find areas of rectangles, and represent fraction products as rectangular areas.<br>• solve real world problems involving multiplication of fractions and mixed numbers.<br>• divide unit fractions by whole numbers and whole numbers by unit fractions.<br>• interpret division of a unit fraction by a non-zero whole number.<br>• interpret division of a whole number by a unit fraction.<br>• solve real world problems involving division of unit fractions by non-zero whole numbers and division of whole numbers by unit fractions. |
| **Standards for Mathematical Practice** | |
| 1. Make sense of problems and persevere in solving them.<br>2. Reason abstractly and quantitatively.<br>3. Construct viable arguments and critique the reasoning of others. | 4. Model with mathematics.<br>6. Attend to precision.<br>7. Look for and make use of structure.<br>8. Look for and express regularity in repeated reasoning. |
| **Resources** | |
| • **Everyday Mathematics 4 Lessons:** 1-1, 1-2, 1-3, 1-4, 1-6, 3-1, 3-2, 3-3, 3-4, 3-5, 3-6, 3-8, 3-10, 3-11, 3-12, 3-13, 3-14, 4-1, 4-2, 4-3, 4-4, 4-5, 4-6, 4-8, 4-9, 4-12, 4-14, 5-1, 5-2, 5-3, 5-4, 5-5, 5-6, 5-7, 5-8, 5-9, 5-10, 5-11, 5-12, 5-13, 5-14, 6-2, 6-4, 6-5, 6-6, 6-7, 6-8, 6-10, 6-12, 6-13, 7-1, 7-2, 7-3, 7-4, 7-5, 7-6, 7-7, 7-8, 7-9, 7-10, 7-11, 7-12, 8-1, 8-2, 8-3, 8-6, 8-7, 8-8, 8-9, 8-10 (1-5, 1-7, 1-9, 1-10, 1-11, 1-12, 2-1, 2-3, 2-10, 2-14, 3-2, 3-4, 3-13, 3-14, 4-1, 4-3, 4-4, 4-5, 4-6, 4-7, 4-9, 4-10, 4-15, 5-1, 5-5, 5-6, 5-7, 5-8, 5-9, 5-10, 5-11, 5-12, 5-13, 5-14, 5-15, 6-1, 6-3, 6-4, 6-5, 6-6, 6-7, 6-8, 6-9, 6-10, 6-11, 6-12, 6-13, 6-14, 7-1, 7-2, 7-3, 7-4, 7-5, 7-6, 7-7, 7-8, 7-9, 7-10, 7-11, 7-12, 7-13, 7-14, 8-1, 8-2, 8-3, 8-4, 8-5, 8-6, 8-7, 8-8, 8-9, 8-11, 8-12, 8-13) | |
| **Assessment** | |
| Formative Assessment<br>• Exit tickets<br>• Math boxes | Summative Assessment<br>• Unit assessment |

## Measurement

### A. Convert like measurement units within a given measurement system.

**5.M.A.1** Convert among different-sized standard measurement units within a given measurement system (e.g., convert 5 cm to 0.05 m), and use these conversions in solving multi-step, real world problems.

| Understandings | Essential Questions |
|---|---|
| Students will understand…<br>• measurement units vary in the customary system differently than in the metric system.<br>• understanding place value helps one to understand the metric system. | • Why would one need to convert measurements from one unit to another?<br>• How does one know whether the new answer should be a bigger or smaller number of units? |
| **Knowledge** | **Skills** |
| Students will know . . .<br>• every step in the metric system involves a power of 10, e.g. 10 cm = 1 decimeter, 10 mm = 1 cm, etc.)<br>• customary equivalents. | Students will be able to . . .<br>• convert among different-sized standard measurement units within a given measurement system.<br>• solve real-world problems involving conversions. |

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

**Assessment**

| Formative Assessment | Summative Assessment |
|---|---|
| • Exit tickets<br>• Math boxes | • Unit assessment |

## Measurement

### B. Geometric measurement: understand concepts of volume and relate volume to multiplication and to addition.

**5.M.B.2** Recognize volume as an attribute of solid figures and understand concepts of volume measurement.

a. A cube with side length 1 unit, called a "unit cube," is said to have "one cubic unit" of volume, and can be used to measure volume.
b. A solid figure which can be packed without gaps or overlaps using $n$ unit cubes is said to have a volume of $n$ cubic units.

**5.M.B.3** Measure volumes by counting unit cubes, using cubic cm, cubic in, cubic ft, and non-standard units.

**5.M.B.4** Relate volume to the operations of multiplication and addition and solve real world and mathematical problems involving volume.

a. Find the volume of a right rectangular prism with whole-number side lengths by packing it with unit cubes, and show that the volume is the same as would be found by multiplying the edge lengths, equivalently by multiplying the height by the area of the base. Represent threefold whole-number products as volumes, e.g., to represent the associative property of multiplication.
b. Apply the formulas $V = l \times w \times h$ and $V = B \times h$ for rectangular prisms to find volumes of right rectangular prisms with whole-number edge lengths in the context of solving real world and mathematical problems.
c. Recognize volume as additive. Find volumes of solid figures composed of two non-overlapping right rectangular prisms by adding the volumes of the non-overlapping parts, applying this technique to solve real world problems.

| Understandings | Essential Question |
|---|---|
| Students will understand…<br>• volume is an attribute of solid figures.<br>• the concept of volume measurement involves filling up space.<br>• volume is related to the operations of multiplication and addition.<br>• volume is additive. | • For what types of items can we measure volume? |

| Knowledge | Skills |
|---|---|
| Students will know . . .<br>• a cube with side length 1 unit, called a "unit cube," is said to have "one cubic unit" of volume, and can be used to measure volume.<br>• a solid figure which can be packed without gaps or overlaps using $n$ unit cubes is said to have a volume of $n$ cubic units. | Students will be able to . . .<br>• measure volumes by counting unit cubes, using cubic cm, cubic in, cubic ft, and improvised units.<br>• solve real world and mathematical problems involving volume.<br>• apply the formulas $V = l \times w \times h$ and $V = b \times h$ for rectangular prisms to find volumes of right rectangular prisms with whole-number edge lengths in the context of solving real world and mathematical problems.<br>• find volumes of solid figures composed of two non-overlapping right rectangular prisms by adding the volumes of the non-overlapping parts. |

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

| Resources |
|---|
| • **Everyday Mathematics 4 Lessons:** 1-5, 1-6, 1-7, 1-8, 1-9, 1-10, 1-11, 1-12, 2-1, 2-2, 2-6, 3-3, 3-13, 4-6, 4-13, 6-6, 6-7, 8-3, 8-4 (1-11, 2-3, 2-4, 2-5, 2-7, 2-8, 2-9, 2-11, 2-12, 2-13, 3-1, 3-5, 3-7, 3-11, 3-12, 4-2, 4-4, 4-8, 5-10, 5-15, 6-6, 7-10, 7-14) |

| Assessment | |
|---|---|
| Formative Assessment<br>• Exit tickets<br>• Math boxes | Summative Assessment<br>• Unit assessment |

# Data Literacy

## A. Understand and analyze data visualizations[1]

**5.DL.A.1** Understand how different visualizations can highlight different aspects of data. Ask questions and interpret data visualizations to describe and analyze patterns

**5.DL.A.2** Develop strategies to collect, organize and represent data of various types and from various sources. Communicate results digitally through a data visual (e.g. chart, storyboard, video presentations)

**5.DL.A.3** Collect and clean data to be analyzable (e.g., make sure each entry is formatted correctly, deal with missing or incomplete data.)

**5.DL.A.4** Using appropriate visualizations (i.e. double line plot, double bar graph), analyze data across samples.

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

| Understandings | Essential Q |
|---|---|
| Students will understand…<br>• | • |
| **Knowledge** | |
| Students will know . . .<br>• | |
| | |
| | |
| | |
| • T<br>• | |
| | |
| **Assessment** | |
| Formative | 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.

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

| Understandings | Essential Questions |
|---|---|
| Students will understand…<br>• data entries do not have to be only whole numbers.<br>• the scale on a line plot must be evenly spaced. | • What types of data can be graphed on a line plot with a fractional scale? |
| **Knowledge** | **Skills** |
| Students will know . . .<br>• there will still be a whole number of pieces of data even though there is a fractional scale. | Students will be able to . . .<br>• make a line plot to display a data set of measurements in fractions of a unit (1/2, 1/4, 1/8).<br>• use operations on fractions for this grade to solve problems involving 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:** 6-4, 6-5, 6-13, 7-1, 7-9, 8-8 (6-11, 7-6, 7-8, 8-2, 8-4)

**Assessment**

| Formative Assessment | Summative Assessment |
|---|---|
| • Exit tickets<br>• Math boxes | • Unit assessment |

## Geometry

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

**5.G.A.1** Use a pair of perpendicular number lines, called axes, to define a coordinate system, with the intersection of the lines (the origin) arranged to coincide with the 0 on each line and a given point in the plane located by using an ordered pair of numbers, called its coordinates. Understand that the first number indicates how far to travel from the origin in the direction of one axis, and the second number indicates how far to travel in the direction of the second axis, with the convention that the names of the two axes and the coordinates correspond (e.g., *x*-axis and *x*-coordinate, *y*-axis and *y*-coordinate).

**5.G.A.2** Represent real world and mathematical problems by graphing points in the first quadrant of the coordinate plane, and interpret coordinate values of points in the context of the situation.

| Understandings | Essential Questions |
|---|---|
| Students will understand…<br>• the first number in an ordered pair indicates how far to travel from the origin in the direction of one axis, and the second number indicates how far to travel in the direction of the second axis. | • Why would one graph on a coordinate plane? |
| **Knowledge** | **Skills** |
| Students will know . . .<br>• a pair of perpendicular number lines, called axes, define a coordinate system, with the intersection of the lines (the origin) arranged to coincide with the 0 on each line.<br>• a given point in the plane is located by using an ordered pair of numbers, called its coordinates.<br>• the names of the two axes and the coordinates correspond (e.g., *x*-axis and *x*-coordinate, *y*-axis and *y*-coordinate). | Students will be able to . . .<br>• graph points in the coordinate plane.<br>• represent real world and mathematical problems by graphing points in the first quadrant of the coordinate plane. |

**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:** 4-6, 4-7, 4-8, 4-9, 4-10, 4-11, 5-2, 5-6, 5-13, 6-1, 7-10, 7-11, 7-12, 7-13, 8-2, 8-10, 8-11, 8-12 (3-10, 3-15, 4-13, 5-1, 5-3, 5-11, 6-2, 6-4, 6-11, 6-13, 7-2, 7-4, 8-6)

**Assessment**

| Formative Assessment | Summative Assessment |
|---|---|
| • Exit tickets<br>• Math boxes | • Unit assessment |

## Geometry

### B. Classify two-dimensional figures into categories based on their properties.

**5.G.B.3** Understand that attributes belonging to a category of two-dimensional figures also belong to all subcategories of that category. For example, all rectangles have four right angles and squares are rectangles, so all squares have four right angles.

**5.G.B.4** Classify two-dimensional figures in a hierarchy based on properties.

| Understandings | Essential Questions |
|---|---|
| Students will understand…<br>• attributes belonging to a category of two-dimensional figures also belong to all subcategories of that category. | • How does one classify two-dimensional figures?<br>• Why would one need to classify a two-dimensional figure? |
| **Knowledge** | **Skills** |
| Students will know . . .<br>• the characteristics of figures. | Students will be able to . . .<br>• classify two-dimensional figures in a hierarchy based on properties. |

**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, 7-5, 7-6, 7-7, 7-8, 7-9, 8-3, 8-8, 8-11, 8-12 (6-10, 6-14, 7-12, 8-6, 8-10, 8-13)

**Assessment**

| Formative Assessment | Summative Assessment |
|---|---|
| • Exit tickets<br>• 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 5

| *2016 (Old) Standard* | *Revised 2023 Standard* |
|---|---|
| 5.NF.B.3 Interpret a fraction as division of the numerator by the denominator ($a/b = a \div b$). Solve word problems involving division of whole numbers leading to answers in the form of fractions or mixed numbers, e.g., by using visual fraction models or equations to represent the problem. *For example, interpret 3/4 as the result of dividing 3 by 4, noting that 3/4 multiplied by 4 equals 3, and that when 3 wholes are shared equally among 4 people each person has a share of size 3/4. If 9 people want to share a 50-pound sack of rice equally by weight, how many pounds of rice should each person get? Between what two whole numbers does your answer lie?* | 5.NF.B.3 Interpret a fraction as division of the numerator by the denominator ($a/b = a \div b$). Solve word problems involving division of whole numbers leading to answers in the form of fractions or mixed numbers, e.g., by using visual fraction models or equations to represent the problem. *For example, interpret 3/4 as the result of dividing 3 by 4, noting that 3/4 multiplied by 4 equals 3, and that when 3 wholes are shared equally among 4 people each person has a share of size 3/4. If 9 people want to share a 50-pound sack of rice equally by weight, how many pounds of rice should each person get? Between what two whole numbers does your answer lie?* |
| 5.NF.B.4c Solve real world problems involving division of unit fractions by non-zero whole numbers and division of whole numbers by unit fractions, e.g., by using visual fraction models and equations to represent the problem. *For example, how much chocolate will each person get if 3 people share 1/2 lb of chocolate equally? How many 1/3-cup servings are in 2 cups of raisins?* | 5.NF.B.4c Solve real world problems involving division of unit fractions by non-zero whole numbers and division of whole numbers by unit fractions, e.g., by using visual fraction models and equations to represent the problem. *For example, how much chocolate will each person get if 3 people share 1/2 lb of chocolate equally? How many 1/3-cup servings are in 2 cups of raisins?* |
| 5.MD Measurement and Data | 5.M Measurement |
| 5.MD.A.1 Convert among different-sized standard measurement units within a given measurement system (e.g., convert 5 cm to 0.05 m), and use these conversions in solving multi-step, real world problems. | 5.M.A.1 Convert among different-sized standard measurement units within a given measurement system (e.g., convert 5 cm to 0.05 m), and use these conversions in solving multi-step, real world problems. |
| 5.MD.C Geometric measurement: understand concepts of volume and relate volume to multiplication and to addition. | 5.M.B Geometric measurement: understand concepts of volume and relate volume to multiplication and to addition |
| 5.MD.C.3a Recognize volume as an attribute of solid figures and understand concepts of volume measurement. a. A cube with side length 1 unit, called a "unit cube," is said to have "one cubic unit" of volume, and can be used to measure volume. | 5.M.B.2a Recognize volume as an attribute of solid figures and understand concepts of volume measurement. a. A cube with side length 1 unit, called a "unit cube," is said to have "one cubic unit" of volume, and can be used to measure volume. |
| 5.MD.C.3b Recognize volume as an attribute of solid figures and understand concepts of volume measurement. b. A solid figure which can be packed without gaps or overlaps using *n* unit cubes is said to have a volume of *n* cubic units. | 5.M.B.2b Recognize volume as an attribute of solid figures and understand concepts of volume measurement. b. A solid figure which can be packed without gaps or overlaps using *n* unit cubes is said to have a volume of *n* cubic units. |
| 5.MD.C.4 Measure volumes by counting unit cubes, using cubic cm, cubic in, cubic ft, and non-standard units. | 5.M.B.3 Measure volumes by counting unit cubes, using cubic cm, cubic in, cubic ft, and non-standard units. |

| | |
|---|---|
| 5.MD.C.5a Relate volume to the operations of multiplication and addition and solve real world and mathematical problems involving volume. a. Find the volume of a right rectangular prism with whole-number side lengths by packing it with unit cubes, and show that the volume is the same as would be found by multiplying the edge lengths, equivalently by multiplying the height by the area of the base. Represent threefold whole-number products as volumes, e.g., to represent the associative property of multiplication. | 5.M.B.4a Relate volume to the operations of multiplication and addition and solve real world and mathematical problems involving volume. a. Find the volume of a right rectangular prism with whole-number side lengths by packing it with unit cubes, and show that the volume is the same as would be found by multiplying the edge lengths, equivalently by multiplying the height by the area of the base. Represent threefold whole-number products as volumes, e.g., to represent the associative property of multiplication. |
| 5.MD.C.5b Relate volume to the operations of multiplication and addition and solve real world and mathematical problems involving volume. b. Apply the formulas $V = l \times w \times h$ and $V = B \times h$ for rectangular prisms to find volumes of right rectangular prisms with whole number edge lengths in the context of solving real world and mathematical problems. | 5.M.B.4b Relate volume to the operations of multiplication and addition and solve real world and mathematical problems involving volume. b. Apply the formulas $V = l \times w \times h$ and $V = B \times h$ for rectangular prisms to find volumes of right rectangular prisms with whole number edge lengths in the context of solving real world and mathematical problems. |
| 5.MD.C.5c Relate volume to the operations of multiplication and addition and solve real world and mathematical problems involving volume. c. Recognize volume as additive. Find volumes of solid figures composed of two non- overlapping right rectangular prisms by adding the volumes of the non-overlapping parts, applying this technique to solve real world problems. | 5.M.B.4c Relate volume to the operations of multiplication and addition and solve real world and mathematical problems involving volume. c. Recognize volume as additive. Find volumes of solid figures composed of two non- overlapping right rectangular prisms by adding the volumes of the non-overlapping parts, applying this technique to solve real world problems. |
| | 5.DL Data Literacy Domain |
| | 5.DL.A Understand and analyze data visualizations. |
| | 5.DL.A.1 Understand how different visualizations can highlight different aspects of data. Ask questions and interpret data visualizations to describe and analyze patterns. |
| | 5.DL.A.2 Develop strategies to collect, organize and represent data of various types and from various sources. Communicate results digitally through a data visual (e.g. chart, storyboard, video representation). |
| | 5.DL.A.3 Collect and clean data to be analyzable (e.g., make sure each entry is formatted correctly, deal with missing or incomplete data). |
| | 5.DL.A.4 Using appropriate visualizations (i.e. double line plot, double bar graph), analyze data across samples. |
| 5.MD.B Represent and interpret data | 5.DL.B Represent and interpret data |

| | |
|---|---|
| 5.MD.B.2 Make a line plot to display a data set of measurements in fractions of a unit (1/2, 1/4, 1/8). Use operations on fractions for this grade to solve problems involving information presented in line plots. *For example, given different measurements of liquid in identical beakers, find the amount of liquid each beaker would contain if the total amount in all the beakers were redistributed equally.* | 5.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). Use operations on fractions for this grade to solve problems involving information presented in line plots. *For example, given different measurements of liquid in identical beakers, find the amount of liquid each beaker would contain if the total amount in all the beakers were redistributed equally.* |
| 5.G.A.2 Represent real world and mathematical problems by graphing points in the first quadrant of the coordinate plane, and interpret coordinate values of points in the context of the situation. | 5.G.A.2 Represent real world and mathematical problems by graphing points in the first quadrant of the coordinate plane, and interpret coordinate values of points in the context of the situation. |

In Grade 5, instruction focuses broadly on three critical areas:

(1) developing accuracy and efficiency with addition and subtraction of fractions, and developing understanding of the multiplication of fractions and of division of fractions in limited cases (unit fractions divided by whole numbers and whole numbers divided by unit fractions);

(2) extending division to 2-digit divisors, integrating decimal fractions into the place value system and developing understanding of operations with decimals to hundredths, and developing accuracy and efficiency with whole number and decimal operations; and

(3) developing understanding of volume.

## Critical Areas

(1) Students apply their understanding of fractions and fraction models to represent the addition and subtraction of fractions with unlike denominators as equivalent calculations with like denominators. They develop accuracy and efficiency in calculating sums and differences of fractions, and make reasonable estimates of them. Students also use the meaning of fractions, of multiplication and division, and the relationship between multiplication and division to understand and explain why the procedures for multiplying and dividing fractions make sense. (Note: this is limited to the case of dividing unit fractions by whole numbers and whole numbers by unit fractions.)

(2) Students develop understanding of why division procedures work based on the meaning of base-ten numerals and properties of operations. They finalize accuracy and efficiency with multi-digit addition, subtraction, and multiplication. They apply their understandings of models for decimals, decimal notation, and properties of operations to add and subtract decimals to hundredths. They develop fluency in these computations, and make reasonable estimates of their results. Students use the relationship between decimals and fractions, as well as the relationship between finite decimals and whole numbers (i.e., a finite decimal multiplied by an appropriate power of 10 is a whole number), to understand and explain why the procedures for multiplying and dividing finite decimals make sense. They compute products and quotients of decimals to hundredths efficiently and accurately.

(3) Students recognize volume as an attribute of three-dimensional space. They understand that volume can be measured by finding the total number of same-size units of volume required to fill the space without gaps or overlaps. They understand that a 1-unit by 1-unit by 1-unit cube is the standard unit for measuring volume. They select appropriate units, strategies, and tools for solving problems that involve estimating and measuring volume. They decompose three-dimensional shapes and find volumes of right rectangular prisms by viewing them as decomposed into layers of arrays of cubes. They measure necessary attributes of shapes in order to determine volumes to solve real world and mathematical problems.

## Grade 5 Overview

| Domain | Cluster Headings |
|---|---|
| Operations and Algebraic Thinking | • Write and interpret numerical expressions.<br>• Analyze patterns and relationships. |
| Number and Operations in Base Ten | • Understand the place value system.<br>• Perform operations with multi-digit whole numbers and with decimals to hundredths. |
| Number and Operations - Fractions | • Use equivalent fractions as a strategy to add and subtract fractions.<br>• Apply and extend previous understandings of multiplication and division to multiply and divide fractions. |
| Measurement | • Convert like measurement units within a given measurement system.<br>• Geometric measurement: understand concepts of volume and relate volume to multiplication and to addition. |
| Data Literacy | • Understand and analyze data visualizations.<br>• Represent and interpret data. |
| Geometry | • Graph points on the coordinate plane to solve real-world and mathematical problems.<br>• Classify two-dimensional figures into categories based on their properties. |

## Operations and Algebraic Thinking 5.OA

### A. Write and interpret numerical expressions

1. Use parentheses, brackets, or braces in numerical expressions, and evaluate expressions with these symbols.

2. Write simple expressions that record calculations with numbers, and interpret numerical expressions without evaluating them. For example, express the calculation "add 8 and 7, then multiply by 2" as $2 \times (8+7)$. Recognize that $3 \times (18932+921)$ is three times as large as $18932+921$ without having to calculate the indicated sum or product.

### B. Analyze patterns and relationships

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

## Number and Operations in Base Ten 5.NBT

### A. Understand the place value system

1. Recognize that in a multi-digit number, a digit in one place represents 10 times as much as it represents in the place to its right and $\frac{1}{10}$ of what it represents in the place to its left.

2. Explain patterns in the number of zeros of the product when multiplying a number by powers of 10, and explain patterns in the placement of the decimal point when a decimal is multiplied or divided by a power of 10. Use whole-number exponents to denote powers of 10.

3. Read, write, and compare decimals to thousandths.

a. Read and write decimals to thousandths using base-ten numerals, number names, and expanded form, e.g., $347.392 = 3\times100 + 4\times10 + 7\times1 + 3\times(\frac{1}{10}) + 9\times(\frac{1}{100}) + 2\times(\frac{1}{1000})$.

b. Compare two decimals to thousandths based on meanings of the digits in each place, using >, =, and < symbols to record the results of comparisons.

4. Use place value understanding to round decimals to any place.

### B. Perform operations with multi-digit whole numbers & with decimals to hundredths

5. With accuracy and efficiency, multiply multi-digit whole numbers using the standard algorithm.

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

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

## Number and Operations — Fractions[1] 5.NF

### A. Use equivalent fractions as a strategy to add and subtract fractions

1. Add and subtract fractions with unlike denominators (including mixed numbers) by replacing given fractions with equivalent fractions in such a way as to produce an equivalent sum or difference of fractions with like denominators. For example, $\frac{2}{3} + \frac{5}{4} = \frac{8}{12} + \frac{15}{12} = \frac{23}{12}$. (In general, $\frac{a}{b} + \frac{c}{d} = \frac{(ad+bc)}{bd}$).

[1] 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.

2. Solve word problems involving addition and subtraction of fractions referring to the same whole, including cases of unlike denominators, e.g., by using visual fraction models or equations to represent the problem. Use benchmark fractions and number sense of fractions to estimate mentally and assess the reasonableness of answers. For example, recognize an incorrect result $\frac{2}{5}+\frac{1}{2}=\frac{3}{7}$, by observing that $\frac{3}{7}<\frac{1}{2}$.

## B. Apply and extend previous understandings of multiplication and division to multiply and divide fractions

3. Interpret a fraction as division of the numerator by the denominator (i.e., $\frac{a}{b}=a\div b$). Solve word problems involving division of whole numbers leading to answers in the form of fractions or mixed numbers, e.g., by using visual fraction models or equations to represent the problem. For example, interpret $\frac{3}{4}$ as the result of dividing 3 by 4, noting that $\frac{3}{4}$ multiplied by 4 equals 3, and that when 3 wholes are shared equally among 4 people each person has a share of size $\frac{3}{4}$. If 9 people want to share a 50-pound sack of rice equally by weight, how many pounds of rice should each person get? Between what two whole numbers does your answer lie?

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

   a. Interpret the product $\left(\frac{a}{b}\right)\times q$ as $a$ parts of a partition of $q$ into $b$ equal parts; equivalently, as the result of a sequence of operations $a\times q\div b$. For example, use a visual fraction model to show $\left(\frac{2}{3}\right)\times 4=\frac{8}{3}$, and create a story context for this equation. Do the same with $\left(\frac{2}{3}\right)\times\left(\frac{4}{5}\right)=\frac{8}{15}$. (In general, $\left(\frac{a}{b}\right)\times\left(\frac{c}{d}\right)=\left(\frac{ab}{bd}\right)$).

   b. Find the area of a rectangle with fractional side lengths by tiling it with unit squares of the appropriate unit fraction side lengths, and show that the area is the same as would

be found by multiplying the side lengths. Multiply fractional side lengths to find areas of rectangles, and represent fraction products as rectangular areas.

5. Interpret multiplication as scaling (resizing), by:

   a. Comparing the size of a product to the size of one factor on the basis of the size of the other factor, without performing the indicated multiplication.

   b. Explaining why multiplying a given number by a fraction greater than 1 results in a product greater than the given number (recognizing multiplication by whole numbers greater than 1 as a familiar case); explaining why multiplying a given number by a fraction less than 1 results in a product smaller than the given number; and relating the principle of fraction equivalence $\frac{a}{b} = \frac{(n \times a)}{(n \times b)}$ to the effect of multiplying $\frac{a}{b}$ by 1.

6. Solve real world problems involving multiplication of fractions and mixed numbers, e.g., by using visual fraction models or equations to represent the problem.

7. Apply and extend previous understandings of division to divide unit fractions by whole numbers and whole numbers by unit fractions.[1]

   a. Interpret division of a unit fraction by a non-zero whole number, and compute such quotients. For example, create a story context for $\left(\frac{1}{3}\right) \div 4$, and use a visual fraction model to show the quotient. Use the relationship between multiplication and division to explain that $\left(\frac{1}{3}\right) \div 4 = \frac{1}{12}$ because $\frac{1}{12} \times 4 = \frac{1}{3}$.

   b. Interpret division of a whole number by a unit fraction, and compute such quotients. For example, create a story context for $4 \div \left(\frac{1}{5}\right)$, and use a visual fraction model to show the quotient. Use the relationship between multiplication and division to explain that $44 \div (\frac{1}{5}) = 20$ because $20 \times (\frac{1}{5}) = 4$.

[1] Students able to multiply fractions in general can develop strategies to divide fractions in general, by reasoning about the relationship between multiplication and division. But division of a fraction by a fraction is not a requirement at this grade.

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

## Measurement 5.M

### A. Convert like measurement units within a given measurement system

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

### B. Geometric measurement: understand concepts of volume and relate volume to multiplication and to addition

1. Recognize volume as an attribute of solid figures and understand concepts of volume measurement.
   a. A cube with side length 1 unit, called a "unit cube," is said to have "one cubic unit" of volume, and can be used to measure volume.
   b. A solid figure which can be packed without gaps or overlaps using *n* unit cubes is said to have a volume of *n* cubic units.
2. Measure volumes by counting unit cubes, using cubic cm, cubic in, cubic ft, and non-standard units.
3. Relate volume to the operations of multiplication and addition and solve real world and mathematical problems involving volume.
   a. Find the volume of a right rectangular prism with whole-number side lengths by packing it with unit cubes, and show that the volume is the same as would be found by

multiplying the edge lengths, equivalently by multiplying the height by the area of the base. Represent threefold whole-number products as volumes, e.g., to represent the associative property of multiplication.

b. Apply the formulas $V = l \times w \times h$ and $V = B \times h$ for rectangular prisms to find volumes of right rectangular prisms with whole number edge lengths in the context of solving real world and mathematical problems.

c. Recognize volume as additive. Find volumes of solid figures composed of two non-overlapping right rectangular prisms by adding the volumes of the non-overlapping parts, applying this technique to solve real world problems.

## Data Literacy 5.DL

### A. Understand and analyze data visualizations[1]

1. Understand how different visualizations can highlight different aspects of data. Ask questions and interpret data visualizations to describe and analyze patterns.

2. Develop strategies to collect, organize and represent data of various types and from various sources. Communicate results digitally through a data visual (e.g. chart, storyboard, video presentation).

3. Collect and clean data to be analyzable (e.g., make sure each entry is formatted correctly, deal with missing or incomplete data).

4. Using appropriate visualizations (i.e. double line plot, double bar graph), analyze data across samples.

### B. Represent and interpret data

Make a line plot to display a data set of measurements in fractions of a unit (½, ¼, ⅛). Use operations on fractions for this grade to solve problems involving information presented in line plots. For example, given different measurements of liquid in identical beakers, find the amount of liquid each beaker would contain if the total amount in all the beakers were redistributed equally.

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

## Geometry 5.G

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

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

2. Represent real world and mathematical problems by graphing points in the first quadrant of the coordinate plane, and interpret coordinate values of points in the context of the situation.

### B. Classify two-dimensional figures into categories based on their properties

3. Understand that attributes belonging to a category of two-dimensional figures also belong to all subcategories of that category. For example, all rectangles have four right angles and squares are rectangles, so all squares have four right angles.

4. Classify two-dimensional figures in a hierarchy based on properties.

| Day # | 2024-25 Date | Days Off | Lesson Number | North Caldwell Grade 5 Lessons | NJ Student Learning Standards |
|---|---|---|---|---|---|
| | 1-Sep | Sun | | | |
| | 2-Sep | Labor Day | | | |
| | 3-Sep | | | | |
| 1 | 4-Sep | First Day for Students | | Buffer Day - No Switching | |
| 2 | 5-Sep | | | Buffer Day - First Day Activities | |
| 3 | 6-Sep | | | Order of Operations | 5.OA.1 |
| | 7-Sep | Sat | | | |
| | 8-Sep | Sun | | | |
| 4 | 9-Sep | | | Order of Operations | 5.OA.1 |
| 5 | 10-Sep | | | Order of Operations | 5.OA.1 |
| 6 | 11-Sep | | | Exponents | 5.OA.1 |
| 7 | 12-Sep | | | Exponent Battle Game | 5.OA.1 |
| 8 | 13-Sep | | 1.1 | Translating Expressions | 5.OA..1, 5.NBT.1, 5.M.A.1 |
| | 14-Sep | Sat | | | |
| | 15-Sep | Sun | | | |
| 9 | 16-Sep | | 1.1 | Translating Expressions | 5.OA..1, 5.NBT.1, 5.M.A.1 |
| 10 | 17-Sep | | 1.1 | Project Day | 5.OA..1, 5.NBT.1, 5.M.A.1 |
| 11 | 18-Sep | | 1.2 | Area of a Rectabgle, Part 1 | 5.NF.4, 5.NF.4b |
| 12 | 19-Sep | | 1.3 | Quilt Area Day 1 | 5.NF.4, 5.NF.4b, 5.M.A.1 |
| 13 | 20-Sep | | | Buffer | |
| | 21-Sep | Sat | | | |
| | 22-Sep | Sun | | | |
| 14 | 23-Sep | | 1.3 | Quilt Area Day 2 | 5.NF.4, 5.NF.4b, 5.M.A.1 |
| 15 | 24-Sep | | 1.4 | Area of a Rectangle, Part 2 | 5.NF.4, 5.NF.4b |
| 16 | 25-Sep | | 1.5 | Introduction to Volume | 5.M.B.2, 5.M.B.3 |
| 17 | 26-Sep | | 1.7 | Measuring Volume by Counting Cubes | 5.M.B.2, 5.M.B.2a, 5.M.B.2b, 5.M.B.3 |
| 18 | 27-Sep | | | Buffer | |
| | 28-Sep | Sat | | | |
| | 29-Sep | Sun | | | |
| 19 | 30-Sep | | 1.8 | Measuring Volume by Iterating Layers | 5.M.B.2, 5.M.B.2a, 5.M.B.2b, 5.M.B.3 |
| 20 | 1-Oct | | 1.9 | Two Formulas for Volume | 5.M.B.2, 5.M.B.2a, 5.M.B.2b, 5.M.B.3, 5.M.B.4, 5.M.B.4a, 5.M.B.4b |
| 21 | 2-Oct | | 1.11 | Volume Explorations | 5.OA.1, 5.M.A.1, 5.M.B.4, 5.M.B.4a, 5.M.B.4b, 5.M.B.4c |
| | 3-Oct | Rosh Hashanah - Closed | | | |
| 22 | 4-Oct | | 1.11 | Volume Explorations | 5.OA.1, 5.M.A.1, 5.M.B.4, 5.M.B.4a, 5.M.B.4b, 5.M.B.4c |
| | 5-Oct | Sat | | | |
| | 6-Oct | Sun | | | |
| 23 | 7-Oct | | 1.11 | Volume Explorations | 5.OA.1, 5.M.A.1, 5.M.B.4, 5.M.B.4a, 5.M.B.4b, 5.M.B.4c |
| 24 | 8-Oct | | | Buffer | |

| | | | | | |
|---|---|---|---|---|---|
| 25 | 9-Oct | | 1.13 | Unit 1 Progress Check | 5.OA.1, 5.OA.2, 5.NF.4, 5.NF.4b, 5.M.B.2, 5.M.B.2a, 5.M.B.2b, 5.M.B.3, 5.M.B.4, 5.M.B.4a, 5.M.B.4b, 5.M.B.4c |
| 26 | 10-Oct | | 2.1 | Understanding Place Value | 5.NBT.1 |
| 27 | 11-Oct | | 2.1 | Understanding Place Value (Session One Day) | 5.NBT.1 |
| | 12-Oct | Sat | | | |
| | 13-Oct | Sun | | | |
| 28 | 14-Oct | | 2.1 | Understanding Place Value (Session One Day) | 5.NBT.1 |
| 29 | 15-Oct | | 2.1 | Understanding Place Value (Session One Day) | 5.NBT.1 |
| 30 | 16-Oct | | 2.2 | Exponents and Powers of 10 | 5.NBT.1, 5.NBT.2 |
| 31 | 17-Oct | | 2.3 | Applying Powers of 10 | 5.NBT.2 |
| 32 | 18-Oct | | | Buffer | |
| | 19-Oct | Sat | | | |
| | 20-Oct | Sun | | | |
| 33 | 21-Oct | | 2.3 | Applying Powers of 10 | 5.NBT.2 |
| 34 | 22-Oct | Conf. Dismiss 12:45pm | | Buffer | |
| 35 | 23-Oct | PD Dismiss 12:45pm | 2.4 | U.S. Traditional Multiplication, Part 1/ Part 2 | 5.NBT.5 |
| 36 | 24-Oct | Conf. Dismiss 12:45pm | 2.7 | U.S. Traditional Multiplication, Part 3 | 5.OA.2, 5.NBT.5 |
| 37 | 25-Oct | | | Buffer | |
| | 26-Oct | Sat | | | |
| | 27-Oct | Sun | | | |
| 38 | 28-Oct | | 2.8 | U.S. Traditional Multiplication, Part 4 | 5.NBT.5 |
| 39 | 29-Oct | | 2.8 | U.S. Traditional Multiplication, Part 4 | 5.NBT.5 |
| 40 | 30-Oct | | 2.6 | Applications: Unit Conversions | 5.OA.1, 5.OA.2, 5.NBT.5, 5.M.A.1 |
| 41 | 31-Oct | Halloween | | Buffer | |
| | 1-Nov | Diwali | | Closed | |
| | 2-Nov | Sat | | | |
| | 3-Nov | Sun | | | |
| 42 | 4-Nov | | 2.10. | A Mental Division Strategy | 5.NBT.2, 5.NBT.6 |
| 43 | 5-Nov | Election Day | | | |
| 44 | 6-Nov | | 2.10. | A Mental Division Strategy | 5.NBT.2, 5.NBT.6 |
| | 7-Nov | NJEA | | | |
| | 8-Nov | NJEA | | | |
| | 9-Nov | Sat | | | |
| | 10-Nov | Sun | | | |
| 45 | 11-Nov | | | One-Digit Divisors | 5.NBT.6 |
| 46 | 12-Nov | | | One-Digit Divisors | 5.NBT.6 |
| 47 | 13-Nov | | | One-Digit Divisors | 5.NBT.6 |
| 48 | 14-Nov | | | Two-Digit Divisors | 5.NBT.6 |
| 49 | 15-Nov | | | Two-Digit Divisors | 5.NBT.6 |
| | 16-Nov | Sat | | | |

| | | | | | |
|---|---|---|---|---|---|
| | 17-Nov | Sun | | | |
| 50 | 18-Nov | | | Two-Digit Divisors | 5.NBT.6 |
| 51 | 19-Nov | | 2.13 | Interpreting the Remainder | 5.NBT.6 |
| 52 | 20-Nov | | 2.13 | Interpreting the Remainder | 5.NBT.6 |
| 53 | 21-Nov | | 2.13 | Interpreting the Remainder | 5.NBT.6 |
| 54 | 22-Nov | | | Buffer | |
| | 23-Nov | Sat | | | |
| | 24-Nov | Sun | | | |
| 55 | 25-Nov | | 2.14 | Unit 2 Progress Check | 5.OA.1, 5.OA.2, 5.NBT.1, 5.NBT.2, 5.NBT.5, 5.NBT.6, 5.M.A.1 |
| 56 | 26-Nov | | | Project Day | |
| 57 | 27-Nov | Dismiss 12:45 pm | | Buffer | |
| | 28-Nov | Thanksgiving | | | |
| | 29-Nov | Closed | | | |
| | 30-Nov | Sat | | | |
| | 1-Dec | Sun | | | |
| 58 | 2-Dec | | | Fraction Review Day | |
| 59 | 3-Dec | | 3.1 | Connecting Fractions and Division, Part 1 | 5.NF.3 |
| 60 | 4-Dec | | 3.2 | Connecting Fractions and Division, Part 2 | 5.NF.3 |
| 61 | 5-Dec | | 3.2 | Connecting Fractions and Division, Part 2 | 5.NF.3 |
| 62 | 6-Dec | | | Buffer | |
| | 7-Dec | Sat | | | |
| | 8-Dec | Sun | | | |
| 63 | 9-Dec | | 3.2 | Connecting Fractions and Division, Part 2 | 5.NF.3 |
| 64 | 10-Dec | | 3.4 | Fractions on a Number Line | 5.NF.2, 5.NF.3 |
| 65 | 11-Dec | | 3.4 | Fractions on a Number Line | 5.NF.2, 5.NF.3 |
| 66 | 12-Dec | | 3.3 | Applications: Interpreting Remainders | 5.NF.3 |
| 67 | 13-Dec | | | Buffer | |
| | 14-Dec | Sat | | | |
| | 15-Dec | Sun | | | |
| 68 | 16-Dec | | 3.6 | Fraction Estimation with Number Sense | 5.NF.2 |
| 69 | 17-Dec | | 3.6 | Fraction Estimation with Number Sense | 5.NF.2 |
| 70 | 18-Dec | | 3.7 | Fraction Estimation with Benchmarks | 5.NF.2 |
| 71 | 19-Dec | | | Buffer | |
| 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 | | | Buffer | |
| 74 | 3-Jan | | 3.7 | Fraction Estimation with Benchmarks | 5.NF.2 |
| | 4-Jan | Sat | | | |
| | 5-Jan | Sun | | | |
| 75 | 6-Jan | | | Buffer | |
| 76 | 7-Jan | | 3.8 | Renaming Fractions and Mixed Numbers | 5.NF.3 |
| 77 | 8-Jan | | 3.8 | Renaming Fractions and Mixed Numbers | 5.NF.3 |
| 78 | 9-Jan | | 3.8 | Renaming Fractions and Mixed Numbers | 5.NF.3 |
| 79 | 10-Jan | | 3.9 | Introduction to Adding and Subtracting Fractions and Mixed Numbers | 5.NF.2 |
| | 11-Jan | Sat | | | |
| | 12-Jan | Sun | | | |
| 80 | 13-Jan | | 3.9 | Introduction to Adding and Subtracting Fractions and Mixed Numbers | 5.NF.2 |
| 81 | 14-Jan | | 3.9 | Introduction to Adding and Subtracting Fractions and Mixed Numbers | 5.NF.2 |
| 82 | 15-Jan | | 3.10. | Exploring Addition of Fractions with Unlike Denominators | 5.NF.1, 5.NF.2 |
| 83 | 16-Jan | | 3.10. | Exporing Addition of Fractions with Unlike Denominators | 5.NF.1, 5.NF.3 |
| 84 | 17-Jan | | | Buffer | |
| | 18-Jan | Sat | | | |
| | 19-Jan | Sun | | | |
| 85 | 20-Jan | MLK Day - Dismiss 12:45pm | | Buffer | |
| 86 | 21-Jan | | | Fraction Shoes | |
| 87 | 22-Jan | | | Fraction Shoes | |
| 88 | 23-Jan | | 3.12 | Solving Fractions Number Stories | 5.NF.1, 5.NF.2, 5.NF.3 |
| 89 | 24-Jan | | 3.13 | Fraction-Of Problems, Part 1 | 5.NF.4, 5.NF.4a, 5.NF.6 |
| | 25-Jan | Sat | | | |
| | 26-Jan | Sun | | | |
| 90 | 27-Jan | | 3.14 | Fraction-Of Problems, Part 2 | 5.NF.4, 5.NF.4a, 5.NF.6 |
| 91 | 28-Jan | | | Fraction-Of Problems (Skittles) | 5.NF.4, 5.NF.4a, 5.NF.6 |
| 92 | 29-Jan | | | Buffer | |
| 93 | 30-Jan | | | Buffer | |
| 94 | 31-Jan | | 3.15 | Unit 3 Progress Check | 5.NBT.6, 5.NF.1, 5.NF.2, 5.NF.3, 5.NF.4, 5.NF.4a, 5.NF.6 |
| | 1-Feb | Sat | | | |
| | 2-Feb | Sun | | | |
| 95 | 3-Feb | | 4.1 | Decimal Place Value | 5.NBT.1, 5.NBT.3, 5.NBT.3a |
| 96 | 4-Feb | | 4.1 | Decimal Place Value | 5.NBT.1, 5.NBT.3, 5.NBT.3a |
| 97 | 5-Feb | | 4.2 | Representing Decimals through Thousandths | 5.NBT.1, 5.NBT.3, 5.NBT.3a |
| 98 | 6-Feb | | 4.2 | Representing Decimals through Thousandths | 5.NBT.1, 5.NBT.3, 5.NBT.3a |

| | | | | | |
|---|---|---|---|---|---|
| 99 | 7-Feb | | | Buffer | |
| | 8-Feb | Sat | | | |
| | 9-Feb | Sun | | | |
| 100 | 10-Feb | | | Project Day | |
| 101 | 11-Feb | | 4.3 | Representing Decimals in Expanded Form | 5.NBT.1, 5.NBT.3, 5.NBT.3a |
| 102 | 12-Feb | | 4.4 | Comparing and Ordering Decimals | 5.NBT.1, 5.NBT.3, 5.NBT.3a, 5.NBT.3b |
| 103 | 13-Feb | | 4.4 | Comparing and Ordering Decimals | 5.NBT.1, 5.NBT.3, 5.NBT.3a, 5.NBT.3b |
| 104 | 14-Feb | 12:45 Dismissal | | Buffer | |
| | 15-Feb | Sat | | | |
| | 16-Feb | Sun | | | |
| | 17-Feb | Presidents' Day | | | |
| | 18-Feb | Winter Break | | | |
| 105 | 19-Feb | | 4.5 | Rounding Decimals | 5.NBT.1, 5.NBT.3, 5.NBT.3a, 5.NBT.3b, 5.NBT.4 |
| 106 | 20-Feb | | 4.5 | Rounding Decimals | 5.NBT.1, 5.NBT.3, 5.NBT.3a, 5.NBT.3b, 5.NBT.4 |
| 107 | 21-Feb | | | Project Day | |
| | 22-Feb | Sat | | | |
| | 23-Feb | Sun | | | |
| 108 | 24-Feb | | 4.6 | Introduction to the Coordinate System | 5.G.1 |
| 109 | 25-Feb | | 4.9 | Solving Problems on a Coordinate Grid, Part 2 | 5.OA.3, 5.G.1, 5.G.2 |
| 110 | 26-Feb | | 4.11 | Addition and Subtraction of Decimals with Hundredths Grids | 5.NBT.3, 5.NBT.3a, 5.NBT.7 |
| 111 | 27-Feb | | 4.12 | Decimal Addition Algorithms | 5.NBT.4, 5.NBT.7 |
| 112 | 28-Feb | | | Buffer | |
| | 1-Mar | Sat | | | |
| | 2-Mar | Sun | | | |
| 113 | 3-Mar | | 4.13 | Decimal Subtraction Algorithms | 5.NBT.4, 5.NBT.7 |
| 114 | 4-Mar | | 4.14 | Addition and Subtraction of Money | 5.NBT.7 |
| 115 | 5-Mar | | | Decimal Menu Activity | |
| 116 | 6-Mar | | | Decimal Menu Activity | |
| 117 | 7-Mar | | | Buffer | |
| | 8-Mar | Sat | | | |
| | 9-Mar | Sun | | | |
| 118 | 10-Mar | | | Buffer | |
| 119 | 11-Mar | | 4.15 | Unit 4 Progress Check | 5.NBT.1, 5.NBT.3, 5.NBT.3a, 5.NBT.3b, 5.NBT.4, 5.NBT.7, 5.G.1, 5.G.2 |
| 120 | 12-Mar | | 5.1 | Using Equivalent Fractions to Find Common Denominators | 5.NF.1, 5.NF.2 |
| 121 | 13-Mar | | 5.2 | More Strategies for Finding Common Denominators | 5.NF.1 |
| 122 | 14-Mar | | 5.2 | More Strategies for Finding Common Denominators | 5.NF.1 |
| | 15-Mar | Sat | | | |
| | 16-Mar | Sun | | | |
| 123 | 17-Mar | | 5.3 | Addition of Fractions and Mixed Numbers | 5.NF.1, 5.NF.2 |
| 124 | 18-Mar | | 5.4 | Subtraction of Fractions and Mixed Numbers | 5.NF.1, 5.NF.2 |
| 125 | 19-Mar | | | Adding and Subraction of Mixed Numbers | 5.NF.1, 5.NF.2 |
| 126 | 20-Mar | | 5.5 | Connecting Fraction-Of Problems to Multiplication | 5.NF.4, 5.NF.4a, 5.NF.5, 5.NF.5a, 5.NF.5b, 5.NF.6 |

| | | | | | |
|---|---|---|---|---|---|
| 127 | 21-Mar | | | Buffer | |
| | 22-Mar | Sat | | | |
| | 23-Mar | Sun | | | |
| 128 | 24-Mar | | 5.6 | Multiplication of Fraction and Whole Numbers | 5.NF.3, 5.NF.4, 5.NF.4a, 5.NF.5, 5.NF.5a, 5.NF.6 |
| 129 | 25-Mar | Conf. Dismiss 12:45pm | 5.6 | Multiplication of Fraction and Whole Numbers | 5.NF.3, 5.NF.4, 5.NF.4a, 5.NF.5, 5.NF.5a, 5.NF.6 |
| 130 | 26-Mar | PD Dismiss 12:45pm | | Buffer | |
| 131 | 27-Mar | Conf. Dismiss 12:45pm | 5.7 | Fraction of Fractions | 5.NF.4, 5.NF.4a, 5.NF.4b, 5.NF.6 |
| 132 | 28-Mar | | 5.8 | Area Models for Fraction Multiplication | 5.NF.4, 5.NF.4a, 5.NF.4b, 5.NF.5, 5.NF.5b |
| | 29-Mar | Sat | | | |
| | 30-Mar | Sun | | | |
| 133 | 31-Mar | | 5.9 | Understanding an Algorithm for Fraction Multiplication | 5.NF.4, 5.NF.4b, 5.NF.5, 5.NF.5a, 5.NF.5b, 5.NF.6 |
| 134 | 1-Apr | | 5.12 | Fraction Multiplication Number Stories | 5.NF.4, 5.NF.5 |
| 135 | 2-Apr | | 7.1 | Multiplication of Mixed Numbers, Part 1 | 5.OA.2, 5.NF.1, 5.NF.4, 5.NF.4a, 5.NF.4b, 5.NF.5, 5.NF.5a, 5.NF.6 |
| 136 | 3-Apr | | 7.1 | Multiplication of Mixed Numbers, Part 1 | 5.OA.2, 5.NF.1, 5.NF.4, 5.NF.4a, 5.NF.4b, 5.NF.5, 5.NF.5a, 5.NF.6 |
| 137 | 4-Apr | | | Buffer | |
| | 5-Apr | Sat | | | |
| | 6-Apr | Sun | | | |
| 138 | 7-Apr | | 7.2 | Multiplication of Mixed Numbers, Part 2 | 5.NF.3, 5.NF.4, 5.NF.4a, 5.NF.4b, 5.NF.5, 5.NF.5a, 5.NF,5b, 5.NF.6 |
| 139 | 8-Apr | | 7.2 | Mutliplicaton of Mixed Numbers, Part 2 | 5.NF.3, 5.NF.4, 5.NF.4a, 5.NF.4b, 5.NF.5, 5.NF.5a, 5.NF,5b, 5.NF.6 |
| 140 | 9-Apr | | | Picking a Strategy | |
| 141 | 10-Apr | | | Picking a Strategy | |
| 142 | 11-Apr | | | Buffer | |
| | 12-Apr | Sat | | | |
| | 13-Apr | Sun | | | |
| 143 | 14-Apr | | 5.13 | Fraction Division, Part 1 | 5.NF.3, 5.NF.7, 5.NF.7a, 5.NF.7c |
| 144 | 15-Apr | | 5.13 | Fraction Division, Part 1 | 5.NF.3, 5.NF.7, 5.NF.7a, 5.NF.7c |
| 145 | 16-Apr | | 5.14 | Fraction Division, Part 2 | 5.NF.7, 5.NF.7a, 5.NF.7b, 7.NF.7c |
| 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 | | | Buffer | |
| 148 | 29-Apr | | 5.14 | Fraction Division, Part 2 | 5.NF.7, 5.NF.7a, 5.NF.7b, 7.NF.7c |
| 149 | 30-Apr | | | Picking a Strategy | |
| 150 | 1-May | | 5.15 | Unit 5 Progress Check | 5.NF.1, 5.NF.2, 5.NF.4, 5.NF.4a, 5.NF.4b, 5.NF.5, 5.NF.5a, 5.NF.5b, 5.NF.7, 5.NF.7a, 5.NF.7b, 5.NF.7c |
| 151 | 2-May | | | Project Day | |
| | 3-May | Sat | | | |
| | 4-May | Sun | | | |
| 152 | 5-May | | 6.1 | Multiplying and Dividing Decimals by Powers of 10 | 5.NBT.1, 5.NBT.2, 5.NBT.3, 5.NBT.3a |
| 153 | 6-May | | 6.1 | Multiplying and Dividing Decimals by Powers of 10 | 5.NBT.1, 5.NBT.2, 5.NBT.3, 5.NBT.3a |
| 154 | 7-May | | 6.3 | Application: Converting Measurements in the Metric System | 5.NBT.2, 5.M.A.1 |
| 155 | 8-May | | 6.3 | Application: Converting Measurements in the Metric System | 5.NBT.2, 5.M.A.1 |
| 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 | | 6.8 | Estimating Decimal **Products** | 5.OA.2, 5.NBT.7 |
| 163 | 20-May | | 6.9 | Multiplying Decimals | 5.NBT.2, 5.NBT.5, 5.NBT.7 |
| 164 | 21-May | | 6.9 | Multiplying Decimals | 5.NBT.2, 5.NBT.5, 5.NBT.7 |
| 165 | 22-May | | 6.9 | Multiplying Decimals | 5.NBT.2, 5.NBT.5, 5.NBT.7 |
| 166 | 23-May | | | Buffer | |
| | 24-May | Sat | | | |
| | 25-May | Sun | | | |
| | 26-May | Memorial Day | | | |
| 167 | 27-May | | | Buffer | |
| 168 | 28-May | | 6.8 | Estimating Decimal **Quotients** | 5.OA.2, 5.NBT.7 |
| 169 | 29-May | | 6.11 | Division of Decimals by Whole Numbers | 5.NBT.6, 5.NBT.7 |
| 170 | 30-May | | 6.11 | Division of Decimals by Whole Numbers | 5.NBT.6, 5.NBT.7 |
| | 31-May | Sat | | | |
| | 1-Jun | Sun | | | |
| 171 | 2-Jun | | 6.12 | Division of Decimals by Decimals | 5.NBT.6, 5.NBT.7 |
| 172 | 3-Jun | | 6.12 | Division of Decimals by Decimals | 5.NBT.6, 5.NBT.7 |
| 173 | 4-Jun | | | Picking a Strategy | |
| 174 | 5-Jun | | 6.14 | Unit 6 Progress Check | 5.NBT.2, 5.NBT.7, 5.NF.1, 5.NF.2, 5.M.A.1, 5.DL.B.5, 5.M.B.2, 5.M.B.4, 5.M.B.4b, 5.M.B.4c |
| 175 | 6-Jun | | | Buffer | |
| | 7-Jun | Sat | | | |

| | | | | | |
|---|---|---|---|---|---|
| | 8-Jun | Sun | | | |
| 176 | 9-Jun | | | Review Equivalent Fractions/Fractions on a # line | |
| 177 | 10-Jun | | | Review Adding & Subtracting Fractions | |
| 178 | 11-Jun | | | Review Adding & Subtracting Fractions | |
| 179 | 12-Jun | | | Review Multiplying & Dividing Fractions | |
| 180 | 13-Jun | | | Review Multiplying & Dividing Fractions | |
| | 14-Jun | Sat | | | |
| | 15-Jun | Sun | | | |
| 181 | 16-Jun | | | Math Games to Increase Fluency | |
| 182 | 17-Jun | | | Math Games to Increase Fluency | |
| 183 | 18-Jun | 12:45pm Dismissal | | Buffer | |
| 184 | 19-Jun | Last Day of school 12:45 Dis. | | Buffer | |

# September 2024

| Sun | Mon | Tue | Wed | Thu | Fri | Sat |
|---|---|---|---|---|---|---|
| 1 | 2<br>*Labor Day* | 3 | 4<br>**Buffer Day - No Switching** | 5<br>**Buffer Day - First Day Activities** | 6<br>**Order of Operations** | 7 |
| 8 | 9<br>Order of Operations | 10<br>Order of Operations | 11<br>Exponents | 12<br>Exponent Battle Game | 13<br>1.1 Translating Expressions | 14 |
| 15 | 16<br>1.1 Translating Expressions | 17<br>1.1 Project Day | 18<br>1.2 Area of a Rectabgle, Part 1 | 19<br>1.3 Quilt Area Day 1 | 20<br>Buffer | 21 |
| 22 | 23<br>1.3 Quilt Area Day 2 | 24<br>1.4 Area of a Rectangle, Part 2 | 25<br>1.5 Introduction to Volume | 26<br>1.7 Measuring Volume by Counting Cubes | 27<br>Buffer | 28 |
| 29 | 30<br>1.8 Measuring Volume by Iterating Layers | | | | | |

# October 2024

| Sun | Mon | Tue | Wed | Thu | Fri | Sat |
|---|---|---|---|---|---|---|
| | | **1**<br>1.9<br>Two Formulas for Volume | **2**<br>1.11<br>Volume Explorations | **3**<br>Closed<br>***Rosh Hashanah*** | **4**<br>1.11<br>Volume Explorations | **5** |
| **6** | **7**<br>1.11<br>Volume Explorations | **8**<br>Buffer | **9**<br>1.13<br>Unit 1 Progress Check | **10**<br>2.1<br>Understanding Place Value | **11**<br>2.1<br>Understanding Place Value (Session One Day) | **12**<br>***Yom Kippur*** |
| **13** | **14**<br>2.1<br>Understanding Place Value (Session One Day)<br>***Columbus Day*** | **15**<br>2.1<br>Understanding Place Value (Session One Day) | **16**<br>2.2<br>Understanding Place Value (Session One Day) | **17**<br>2.3<br>Applying Powers of 10 | **18**<br>Buffer | **19** |
| **20** | **21**<br>2.3<br>Applying Powers of 10 | **22**<br>Buffer | **23**<br>2.4<br>U.S. Traditional Multiplication, Part 1/ Part 2 | **24**<br>2.7<br>U.S. Traditional Multiplication, Part 3 | **25**<br>Buffer | **26** |
| **27** | **28**<br>2.8<br>U.S. Traditional Multiplication, Part 4 | **29**<br>2.8<br>U.S. Traditional Multiplication, Part 4 | **30**<br>2.6<br>Applications: Unit Conversions | **31**<br>Buffer<br>***Halloween*** | | |

# November 2024

| Sun | Mon | Tue | Wed | Thu | Fri | Sat |
|---|---|---|---|---|---|---|
| | | | | | 1<br>Closed | 2 |
| 3 | 4<br>2.10<br>A Mental Division Strategy | 5<br>***Election Day*** | 6<br>2.10<br>A Mental Division Strategy | 7<br>Closed<br>***NJEA*** | 8<br>Closed<br>***NJEA*** | 9 |
| 10 | 11<br>One-Digit Divisors | 12<br>One-Digit Divisors | 13<br>One-Digit Divisors | 14<br>Two-Digit Divisors | 15<br>Two-Digit Divisors | 16 |
| 17 | 18<br>Two-Digit Divisors | 19<br>2.13<br>Interpreting the Remainder | 20<br>2.13<br>Interpreting the Remainder | 21<br>2.13<br>Interpreting the Remainder | 22<br>Buffer | 23 |
| 24 | 25<br>2.14<br>Unit 2 Progress Check | 26<br>Project Day | 27<br>Buffer | 28<br>Closed<br>***Thanksgiving*** | 29<br>Closed | 30 |

# December 2024

| Sun | Mon | Tue | Wed | Thu | Fri | Sat |
|---|---|---|---|---|---|---|
| 1 | 2<br>Fraction Review Day | 3<br>3.1<br>Connecting Fractions and Division, Part 1 | 4<br>3.2<br>Connecting Fractions and Division, Part 2 | 5<br>3.2<br>Connecting Fractions and Division, Part 2 | 6<br>Buffer | 7 |
| 8 | 9<br>3.2<br>Connecting Fractions and Division, Part 2 | 10<br>3.4<br>Fractions on a Number Line | 11<br>3.4<br>Fractions on a Number Line | 12<br>3.3<br>: Interpreting Remainders | 13<br>Buffer | 14 |
| 15 | 16<br>3.6<br>Fraction Estimation with Number Sense | 17<br>3.6<br>Fraction Estimation with Number Sense | 18<br>3.7<br>Fraction Estimation with Benchmarks | 19<br>Buffer | 20<br>Buffer | 21 |
| 22 | 23 | 24<br>Recess<br>***Christmas Eve*** | 25<br>Recess<br>***Christmas Day*** | 26<br>Recess<br>***Hanukkah*** | 27<br>Recess | 28 |
| 29 | 30<br>Recess | 31<br>Recess<br>***New Year's Eve*** | | | | |

North Caldwell Grade 5

# January 2025

| Sun | Mon | Tue | Wed | Thu | Fri | Sat |
|---|---|---|---|---|---|---|
| | | | **1**<br>Recess<br>***New Year's Day*** | **2**<br>Buffer | **3**<br>3.7<br>Fraction Estimation with Benchmarks | **4** |
| **5** | **6**<br>Buffer | **7**<br>3.8<br>Renaming Fractions and Mixed Numbers | **8**<br>3.8<br>Renaming Fractions and Mixed Numbers | **9**<br>3.8<br>Renaming Fractions and Mixed Numbers | **10**<br>3.9<br>Intro.to Adding and Subtracting Fractions and Mixed Numbers | **11** |
| **12** | **13**<br>3.9<br>Intro.to Adding and Subtracting Fractions and Mixed Numbers | **14**<br>3.9<br>Intro.to Adding and Subtracting Fractions and Mixed Numbers | **15**<br>3.10<br>Exploring Addition of Fractions with Unlike Denominators | **16**<br>3.10<br>Exploring Addition of Fractions with Unlike Denominators | **17**<br>Buffer | **18** |
| **19** | **20**<br>Buffer<br>***MLK Day*** | **21**<br>Fraction Shoes | **22**<br>Fraction Shoes | **23**<br>3.12<br>Solving Fractions Number Stories | **24**<br>3.13<br>Fraction-Of Problems, Part 1 | **25** |
| **26** | **27**<br>3.14<br>Fraction-Of Problems, Part 2 | **28**<br>Fraction-Of Problems (Skittles) | **29**<br>Buffer | **30**<br>Buffer | **31**<br>3.15<br>Unit 3 Progress Check | |

North Caldwell Grade 5

# February 2025

| Sun | Mon | Tue | Wed | Thu | Fri | Sat |
|---|---|---|---|---|---|---|
| | | | | | | 1 |
| 2 | 3<br>4.1<br>Decimal Place Value | 4<br>4.1<br>Decimal Place Value | 5<br>4.2<br>Representing Decimals through Thousandths | 6<br>4.2<br>Representing Decimals through Thousandths | 7<br>Buffer | 8 |
| 9 | 10<br>Project Day | 11<br>4.3<br>Representing Decimals in Expanded Form | 12<br>4.4<br>Comparing and Ordering Decimals | 13<br>4.4<br>Comparing and Ordering Decimals | 14<br>Buffer | 15 |
| 16 | 17<br>Closed<br>***Presidents' Day*** | 18<br>Closed | 19<br>4.5<br>Rounding Decimals | 20<br>4.5<br>Rounding Decimals | 21<br>Project Day | 22 |
| 23 | 24<br>4.6<br>Introduction to the Coordinate System | 25<br>4.9<br>Solving Problems on a Coordinate Grid, Part 2 | 26<br>4.11<br>Add. and Subtraction of Decimals with Hundredths Grids | 27<br>4.12<br>Decimal Addition Algorithms | 28<br>Buffer | |

# March 2025

| Sun | Mon | Tue | Wed | Thu | Fri | Sat |
|---|---|---|---|---|---|---|
| 2 | 3<br>4.13<br>Decimal Subtraction Algorithms | 4<br>4.14<br>Addition and Subtraction of Money | 5<br>Decimal Menu Activity | 6<br>Decimal Menu Activity | 7<br>Buffer | 1/8 |
| 9 | 10<br>Buffer | 11<br>4.15<br>Unit 4 Progress Check | 12<br>5.1<br>Using Equival. Fraction to Find Com. Denominators | 13<br>5.2<br>More Strategies for Finding Common Denominators | 14<br>5.2<br>More Strategies for Finding Common Denominators | 15 |
| 16 | 17<br>5.3<br>Addition of Fractions and Mixed Numbers | 18<br>5.4<br>Subtraction of Frac. and Mixed Numbers | 19<br>Adding and Subraction of Mixed Numbers | 20<br>5.5<br>Connecting Fraction-Of Problems to Multiplication | 21<br>Buffer | 22 |
| 23 | 24<br>5.6<br>Multiplication of Fraction and Whole Numbers | 25<br>5.6<br>Multiplication of Fraction and Whole Numbers | 26<br>5.6<br>Multiplication of Fraction and Whole Numbers | 27<br>5.7<br>Fraction of Fractions | 28<br>5.8<br>Area Models for Fraction Multiplication | 29 |
| 30 | 31<br>5.9<br>Understanding an Algor. for Frac. Multi. | | | | | |

North Caldwell Grade 5

# April 2025

| Sun | Mon | Tue | Wed | Thu | Fri | Sat |
|---|---|---|---|---|---|---|
| | | **1**<br>5.12<br>Fraction Multipli. Number Stories | **2**<br>7.1<br>Multiplication of Mixed #'s Part 1 | **3**<br>7.1<br>Multiplication of Mixed #'s Part 1 | **4**<br>Buffer | **5** |
| **6** | **7**<br>7.2<br>Multiplication of Mixed #'s, Part 2 | **8**<br>7.2<br>Multiplication of Mixed #'s, Part 2 | **9**<br>Picking a Strategy | **10**<br>Picking a Strategy | **11**<br>Buffer | ***12***<br>***Pass -over*** |
| **13** | **14**<br>5.13<br>Fraction Division, Part 1 | **15**<br>5.13<br>Fraction Division, Part 1 | **16**<br>5.14<br>Fraction Division, Part 2 | **17**<br>Buffer | **18**<br>Closed<br>***Good Friday*** | **19** |
| **20**<br>***Easter*** | **21**<br>Closed | **22**<br>Closed | **23**<br>Closed | **24**<br>Closed | **25**<br>Closed | **26** |
| **27** | **28**<br>Buffer | **29**<br>5.14<br>Fraction Division, Part 2 | **30** | | | |

North Caldwell Grade 5

# May 2025

| Sun | Mon | Tue | Wed | Thu | Fri | Sat |
|---|---|---|---|---|---|---|
| | | | | 1<br>5.15<br>Unit 5 Progress Check | 2<br>Project Day | 3 |
| 4 | 5<br>6.1<br>Multiplying and Dividing Decimals by Powers of 10 | 6<br>6.1<br>Multiplying and Dividing Decimals by Powers of 10 | 7<br>6.3<br>Application: Converting Measurements in the Metric System | 8<br>6.3<br>Application: Converting Measurements in the Metric System | 9<br>Buffer | 10 |
| 11 | 12<br>NJSLA | 13<br>NJSLA | 14<br>NJSLA | 15<br>NJSLA | 16<br>NJSLA | 17 |
| 18 | 19<br>6.8<br>Estimating Decimal **Products** | 20<br>6.9<br>Multiplying Decimals | 21<br>6.9<br>Multiplying Decimals | 22<br>6.9<br>Multiplying Decimals | 23<br>Buffer | 24 |
| 25 | 26<br>Closed<br>***Memorial Day*** | 27<br>Buffer | 28<br>6.8<br>Estimating Decimal **Quotients** | 29<br>6.11<br>Division of Decimals by Whole Numbers | 30<br>6.11<br>Division of Decimals by Whole Numbers | 31 |

# June 2025

| Sun | Mon | Tue | Wed | Thu | Fri | Sat |
|---|---|---|---|---|---|---|
| 1 | 2<br>6.12<br>Division of Decimals by Decimals | 3<br>6.12<br>Division of Decimals by Decimals | 4<br>Picking a Strategy | 5<br>6.14<br>Unit 6 Progress Check | 6<br>Buffer | 7 |
| 8 | 9<br>Review Equivalent Fractions/Fractions on a # line | 10<br>Review Adding & Subtracting Fractions | 11<br>Review Adding & Subtracting Fractions | 12<br>Review Multiplying & Dividing Fractions | 13<br>Review Multiplying & Dividing Fractions | 14 |
| 15 | 16<br>Math Games to Increase Fluency | 17<br>Math Games to Increase Fluency | 18<br>Buffer | 19<br>Buffer<br>Last Day<br>***Juneteenth*** | 20 | 21 |
| 22 | 23 | 24 | 25 | 26 | 27 | 28 |
| 29 | 30 | | | | | |

North Caldwell Grade 5