### Changes

2021-2022 2022-2023

| 5.N.2.2 Represent decimals | 5.N.2.2 Represent decimals |
| --- | --- |
| 5.N.1.2 Divide multi-digit numbers | 5.N.2.3 Compare and order decimals and fractions |
| 5.N.1.3 Remainders | 5.N.2.4 Equivalent fractions |
| 5.N.2.3 Compare and order decimals and fractions | 5.N.3.3 Add and subtract fractions |
| 5.N.2.4 Equivalent fractions | 5.N.1.2 Divide multi-digit numbers |
| 5.N.3.3 Add and subtract fractions | 5.N.1.3 Remainders |
| 5.A.1.1 Number Patterns | 5.A.1.1 Number Patterns |
| 5.A.2.1 Expressions with Variables | 5.A.2.1 Expressions with Variables |
| 5.GM.1.1 Triangles | 5.GM.1.1 Triangles |
| 5.GM.1.2 Volume | 5.GM.2.1 Volume |
| 5.GM.2.3 Perimeter | 5.GM.2.3 Perimeter |

### 

### 

### **Resources for Any Unit**

### 

| [Virtual Manipulatives from Didax](https://www.didax.com/math/virtual-manipulatives.html) - No-cost, ad-free manipulatives to use in your browser. These are drag-and-drop and can also be embedded in Canvas. [Click here](https://www.didax.com/pub/media/pdf/Embed_Codes_for_Didax_Virtual_Manipulatives.pdf) for embed codes. | [Printable Manipulatives](https://hcpss.instructure.com/courses/106/pages/resource-bank) - These are non-editable pdfs of template resources that you can use with lessons, centers, or other instructional activities. | [Virtual Manipulative from Toy Theater](https://toytheater.com/category/teacher-tools/virtual-manipulatives/) - Can be made full screen, so useful for SmartBoards and TVs | [Manipulative Apps from The Math Learning Center](https://www.mathlearningcenter.org/apps) - Can be used as an iPad app or as a Chrome Extension | [Station Teaching Lesson Plan Template](https://www.modelteaching.com/education-resource-item/listing/station-teaching-lesson-plan-template) [Open Ended Math Activities for the Primary Classroom](https://www.modelteaching.com/education-resource-item/listing/open-ended-math-activities-for-the-primary-classroom) |
| --- | --- | --- | --- | --- |

### 

### [OSTP Item Specs](https://sde.ok.gov/sites/default/files/documents/files/OK_21-22_TIS_Math_G5_ADA.pdf)

### 

### [OK Math Frameworks](http://okmathframework.pbworks.com/w/page/111584224/5th%20Grade%20Introduction)

### **By the end of the year, 5th graders will be able to:**

| **Math Strand** | **Specific Skill** |
| --- | --- |
| Numbers and Operations | * Represent, read, and write decimals to the thousandths place * Compare decimals, fractions, and mixed numbers * Generate equivalent decimals, fractions, and mixed numbers * Add and subtract fractions with unlike denominators * Divide multi-digit numbers by 2-digit numbers * Express remainders as fractions and decimals |
| Algebraic Reasoning | * Use tables to describe patterns and rules of change * Generate equivalent expressions and use order of operations * Identify the x- and y-axis and graph points on Quadrant 1 of a coordinate plane |
| Geometry and Measurement | * Describe, classify, and construct triangles * Describe and classify 3-dimensional shapes * Find the volume of rectangular prisms * Find the perimeter of polygons and shapes with curves |
| Data and Probability | * Calculate mean, median, mode, and range for a data set * Create and analyze line and double-bar graphs |

### 

### 

| **Quarter 1 Duration: 43 Days (2022-2023)** | | |
| --- | --- | --- |
| **Standard** | **Key Understandings** | **Common Student Misconceptions** |
| [5.N.2.2](http://okmathframework.pbworks.com/w/page/112100590/5-N-2-2)  Decimals and Place Value | * Use appropriate mathematical vocabulary * Read decimals using fractional language and write decimals in fractional form, as well as in expanded notation * Identify the equivalent forms for a given number; i.e. multiple choice, matching, constructed response * Create written, expanded, and standard forms of a number * When writing decimal numbers in expanded form, they can be written as decimals or fractions. * Every movement in a place value is either multiplying or dividing by a group of 10. | * That there can be more than a value of 9 in one place value. Mmust understand that “value” begins with zero, and include digits 0-9. * They can say the word “And” in other places of a number in addition to representing the decimal point. Teachers must encourage procedural fluency in conceptual understanding for students to NOT say or use “And” except when representing the decimal. * Student applies the alternate conception “Write the numbers you hear” when writing numbers in standard form given the number in words.   + When asked to write the number five hundred eleven thousand in standard form, the student writes 500,11,000 with or without commas.   + When asked to write the number sixty-two hundredths, student writes 62.00 or 6200. |
| [5.N.2.3](http://okmathframework.pbworks.com/w/page/112100593/5-N-2-3)  Compare and Order Fractions & Decimals | * Compare and order decimals, fractions, and mixed numbers * Find appropriate increments between whole numbers to locate decimals, fractions, and mixed numbers on a number line * Use benchmark numbers (0,¼, ⅓, ½, ⅔, ¾, 1) to help them compare and order fractions, and mixed numbers * Understand place value to help them compare and order decimals * Read a number line segment even if it doesn’t show 0 | * Think that mixed numbers are larger than fractions greater than one because mixed numbers contain a whole number part and whole numbers are larger than fractions * Think fractions have to be less than 1 * Overgeneralize the idea that “the bigger the denominator, the smaller the part” by ignoring numerators when comparing fractions * Not use benchmark numbers like 0, ¼, 1/2, ¾, and 1 to compare fractions because they have restricted their understanding of fractions to part-whole situations and do not think of the fractions as numbers * Think that decimals are bigger than fractions because fractions are really small things * Believes that two decimals can always be compared by looking at how many digits they have * Misuse the use of zero as a placeholder * Think that decimals with more digits are larger because they have more numbers |
| [5.N.2.4](http://okmathframework.pbworks.com/w/page/112100602/5-N-2-4)  Equivalent Fractions & Decimals | * Recognize and generate equivalent decimals in various contexts up to the thousandths place * Understand that adding zeros to the end of a decimal does not change the value * Recognize and generate equivalent fractions using benchmark denominators of halves, thirds, fourths, fifths, sixths, eighths, tenths, and twelfths. * Recognize and generate equivalent mixed numbers in various forms * Convert fractions to mixed numbers and mixed numbers to fractions * Convert between decimals and fractions/mixed numbers * Use division to convert fractions to decimal equivalents up to the thousandths place | * Think that decimals and fractions are different types of numbers therefore, you cannot convert a fraction to a decimal * Overgeneralize fraction notation or decimal notation and confuse the two. EX. 1/4 = 1.4 or 1/4 = 0.4 * Restrict interpretation of fractions inappropriately and might not understand that different fractions that name the same amount are equivalent * Misapply additive ideas when finding equivalent fractions   + EX. 3/8 + 1/1 = 4/9 because 3 + 1 = 4 and 8 + 1 = 9 * Think that doubling the size of the denominator doubles the size of the fraction |
| Supporting Standards | [5.N.2.1](http://okmathframework.pbworks.com/w/page/112100677/5-GM-2-1) Represent decimal fractions using a variety of models (e.g., 10 by 10 grids, rational number wheel, base-ten blocks, meter stick) and make connections between fractions and decimals. | |
| **Item Specs**  **Strand 5.N.1** | **Emphasis:**  • Translate among different representations of decimals and fractions.  • Demonstrate knowledge of the connections among rational numbers represented as fractions and decimals.  • Represent, read, and write decimals using place value.  • Compare and order fractions and decimals, including mixed numbers.  • Recognize and generate equivalent decimals, fractions, and mixed numbers.  **Stimulus Attributes:**  • Test items may include rational number wheels, pictures, models, fraction strips, diagrams, tables, graphs, number lines, base-10 blocks, 10 × 10 grids, cubes, sticks, other counting manipulatives, and meter sticks. | **Format:**  • Read decimals in words  • Write decimals as words  • Write decimals using place value  • Represent decimals and using place value  • Represent decimals using a variety of models  • Identify connections among representations of decimals  • Organize representations of decimals  • Translate among representations of decimals  • Recognize and generate equivalent forms of fractions and decimals  • Generate equivalent fractions  • Locate fractions and decimals on a number line  **Content Limits:**  • Limit whole numbers to seven digits  • Limit to not-repeating decimals through the thousandths place  • Limit fractions to halves, thirds, fourths, fifths, eighths, and tenths in items that include both decimals and fractions  • Limit comparison to three objects  • Limit ordering to four objects |

### 

| **Subject and Quarter:** Math - Quarter 1 | | **Grade:**  **5** |
| --- | --- | --- |
| **Standard** [5.N.2.2](http://okmathframework.pbworks.com/w/page/112100590/5-N-2-2) Represent, read and write decimals using place value to describe decimal numbers including fractional numbers as small as thousandths and whole numbers as large as millions. | | **Supporting Standards** [5.N.2.1](http://okmathframework.pbworks.com/w/page/112100677/5-GM-2-1) Represent decimal fractions using a variety of models (e.g., 10 by 10 grids, rational number wheel, base-ten blocks, meter stick) and make connections between fractions and decimals. |
| **Learning Goal** Represent, read and write decimals using place value | | |
| **Proficiency Scale** | | **Resources** |
| **Score**  **4.0** | Use deductive reasoning to demonstrate your understanding of place value that could include decimal numbers, fractional numbers as small as thousandths and whole numbers as large as millions. | **Essential Question**   * What are decimals and fractions and how can they be represented? * How do you read and write decimals? * What is the relationship between place values? * How do we add and subtract decimal numbers? |
| **Score**  **3.0** | Represent, read and write decimals using place value to describe decimal numbers including fractional numbers as small as thousandths and whole numbers as large as millions.  * Represent decimals using place value up to the thousandths place.   + Ex: .1 = 1/10, .01 = 1/100, .001 = 1/1000 * Read decimals using place value up to the thousandths place. * Write decimals using place value up to the thousandths place. * Write decimals in expanded form | **Assessments (Pre, Mid, Post)**  [Q1 Pre-Assessment](https://docs.google.com/document/d/1hSUs20jBn0vS4t6ywiQml8FtfXrwDqwCEdyhzX2iuGw/edit?usp=sharing) - \*\*\*not a data point for Infinite Campus  [Evidence 1](https://docs.google.com/document/d/1e-cw8UxNGrRS0leUryAaW-TK1GgVA2tzGiePPP1wR2Y/edit?usp=sharing)  [Evidence 2](https://drive.google.com/file/d/1hQS-v_902rxrKZ_7gTsRsLRnvWmD06qt/view?usp=sharing)  [Evidence 3](https://docs.google.com/document/d/1UTxpH6q905MkYbFeoLClhY16mSVwAb-5k0pVF8PlMhY/edit?usp=sharing)  [Optional Level 4](https://drive.google.com/file/d/1vnBmiuhqduwOTTwHeFEm-u9S0ZnoMdMt/view?usp=sharing) |
| **Score**  **2.0** | Represent, read, and write decimals to the hundredths place   * Read decimals using place value up to the hundredths place. * Write decimals using place value up to the hundredths place. * Recall and use vocabulary, including place value, tenths, hundredths, and digit. | **Lesson Resources**  **Big Ideas Lesson(s) - Chapter 1**  1.1 Place Value Patterns (p. 3-8)  1.3 Patterns and Powers of 10 (p. 15-20)  1.4 Decimals to Thousandths (p. 21-26)  1.5 Place Value with Decimals (p. 27-32)  [Representing Decimals](https://www.k-5mathteachingresources.com/support-files/representing-decimals.pdf)  [Place Value Compare](https://www.k-5mathteachingresources.com/support-files/place-value-compare.pdf)  [Decimal Place Value and fractions](https://drive.google.com/file/d/1RLgE96IbFLarjnczFuUUHqSzhHV81R1p/view?usp=sharing)  [Decimals and place value](https://drive.google.com/file/d/1sijD96GpAIPuAw-cl0a6zVi_cPj-GnN-/view?usp=sharing)  [Decimal Printables](https://drive.google.com/file/d/1Rbu8Xxq7E5Cq_228u6OnRHNiwKYceqcH/view?usp=sharing)  [Decimal Error Analysis](https://drive.google.com/file/d/1is00YEmPG2ntgtzSBvqfrd4hdS36801g/view?usp=sharing)  [Place Value Concentration](https://www.k-5mathteachingresources.com/support-files/place-value-concentration.pdf)  [Lesson 1.1 Extra Practice (pg 9 of pdf)](https://static.bigideasmath.com/protected/content/rbc/mod/mod_5thgrade_rbc_01.pdf) |
| **Score 1.0** | With help, the student has partial success at level 2 and 3 content. | **Academic Vocabulary**  Decimal, Fraction, Tenths, Hundredths, Thousandths, one-millions, place value, round, numerator, denominator |
| **RtI Support** | **Interventions**  Bridges in Mathematics - Volume 9 - Module 5 | **Enrichment** |

| **Vertical Alignment** | | |
| --- | --- | --- |
| **4th Grade:** [4.N.2.6](http://okmathframework.pbworks.com/w/page/112172305/4-N-2-6) Represent, read and write decimals up to at least the hundredths place in a variety of contexts including money. | **5th Grade**: [5.N.2.2](http://okmathframework.pbworks.com/w/page/112100590/5-N-2-2) Represent, read and write decimals using place value to describe decimal numbers including fractional numbers as small as thousandths and whole numbers as large as millions. | **6th Grade:** [6.N.1.1](http://okmathframework.pbworks.com/w/page/111429742/6-N-1-1) Represent integers with counters and on a number line and rational numbers on a number line, recognizing the concepts of opposites, direction, and magnitude; use integers and rational numbers in real-world and mathematical situations, explaining the meaning of 0 in each situation. |

### 

| **Subject and Quarter:** Math - Quarter 1 | | **Grade:**  **5** |
| --- | --- | --- |
| **Standard** [5.N.2.3](http://okmathframework.pbworks.com/w/page/112100593/5-N-2-3) Compare and order fractions and decimals, including mixed numbers and fractions less than one, and locate on a number line. \*\*\*Compare and order a combination of decimals and fractions without models and also locate them on a number line. | | **Supporting Standards**  [5.N.2.1](http://okmathframework.pbworks.com/w/page/112100677/5-GM-2-1) Represent decimal fractions using a variety of models (e.g., 10 by 10 grids, rational number wheel, base-ten blocks, meter stick) and make connections between fractions and decimals. |
| **Learning Goal** Compare and order fractions, decimals and mixed numbers | | |
| **Proficiency Scale** | | **Resources** |
| **Score**  **4.0** | N/A | **Essential Question**   * What are decimals and fractions and how can they be represented? * How do you read and write decimals? * What is the relationship between place values? |
| **Score**  **3.0** | Compare and order fractions and decimals, including mixed numbers and fractions less than one, and locate on a number line.  * Compare and order fractions with unlike denominators * Compare and order decimals with different place values. * Order mixed numbers. * Use benchmarks to locate fractions and decimals on a number line | **Assessments (Pre, Mid, Post)**  [Pre-Assessment](https://docs.google.com/document/d/1hSUs20jBn0vS4t6ywiQml8FtfXrwDqwCEdyhzX2iuGw/edit?usp=sharingoPv5SWbYC3ZjHgo_DG-hh3nshAD0jbecxYaA/edit?usp=sharing) - administered at beginning of Q1  [Evidence 1](https://drive.google.com/file/d/1hU2pPn5PAgjPFk9KGGlPyOOJtb-9JUxq/view?usp=sharing)  [Evidence 2](https://docs.google.com/document/d/12zxVY8i4tlBdq4JLWn6ye9YywPhAS3XoeyF5CFNAeIE/edit?usp=sharing)  [Evidence 3](https://docs.google.com/document/d/1Lvd7vZDa6aWvGe5hzIVQ2sCA8HB6ZX65JH8VHI0SMMQ/edit?usp=sharing)  \*\*\*Limit ordering to 4 numbers  \*\*\*Limit fractions to halves, thirds, fourths, fifths, eighths, and tenths in items that include both decimals and fractions |
| **Score**  **2.0** | Locate fractions, decimals, and mixed numbers on a number line.   * Compare and order fractions with like denominators * Compare and order decimals with the same place value * Locate decimals and fractions on a number line | **Lesson Resources**  1.6 Comparing Decimals (p. 33-39)  [Comparing/Ordering Fractions/Decimals/Mixed Numbers Task Cards](https://drive.google.com/file/d/1Te3B-xD2uZROKPmpIFJVfdKDtsd9vUl-/view?usp=sharing)  [Comparing Fractions War](https://drive.google.com/file/d/1JNB6MpSCJylC25znoNN1usiKVAeUXP9J/view?usp=sharing) |
| **Score 1.0** | With help, the student has partial success at level 2 and 3 content. | **Academic Vocabulary**  Compare, Order, Fraction, Decimal, Mixed Number, Number line, Numerator, Denominator |
| **RtI Support** | **Interventions**  Bridges in Mathematics - Volume 9 - Module 7 (Decimals)  Bridges in Mathematics - Volume 8 - Module 5 - 7 (Fractions) | **Enrichment** |

| **Vertical Alignment** | | |
| --- | --- | --- |
| **4th Grade:** [**4.N.2.7**](http://okmathframework.pbworks.com/w/page/112172308/4-N-2-7) Compare and order decimals and whole numbers using place value, a number line and models such as grids and base 10 blocks. | **5th Grade**: [5.N.2.3](http://okmathframework.pbworks.com/w/page/112100593/5-N-2-3) Compare and order fractions and decimals, including mixed numbers and fractions less than one, and locate on a number line | **6th Grade:** [**6.N.1.2**](http://okmathframework.pbworks.com/w/page/111429778/6-N-1-2)Compare and order positive rational numbers, represented in various forms, or integers using the symbols <, >, and =. |

| **Subject and Quarter:** Math - Quarter 1 | | **Grade:**  **5** |
| --- | --- | --- |
| **Standard** [5.N.2.4](http://okmathframework.pbworks.com/w/page/112100602/5-N-2-4) Recognize and generate equivalent decimals, fractions, mixed numbers, and fractions less than one in various contexts \*\*\*Not only will they be required to do this within the same form (ex. Decimal to decimal, mixed number to mixed number,) they will be required to find equivalents across forms (ex. Decimal to fraction.) | | **Supporting Standards** 5.N.2.1 Represent decimal fractions using a variety of models (e.g., 10 by 10 grids, rational number wheel, base-ten blocks, meter stick) and make connections between fractions and decimals |
| **Learning Goal** Recognize and generate equivalent decimals, fractions, and mixed numbers | | |
| **Proficiency Scale** | | **Resources** |
| **Score**  **4.0** | Create models to demonstrate equivalence between decimals and fractions | **Essential Question**   * What are decimals and fractions and how can they be represented? * How do you read and write decimals? * What is the relationship between place values? |
| **Score**  **3.0** | Recognize and generate equivalent decimals, fractions, mixed numbers, and fractions less than one in various contexts  * Convert fractions to mixed numbers and mixed numbers to fractions * Convert between decimals and fractions/mixed numbers * Recognize and generate equivalent decimals in various contexts up to the thousandths place * Use division to convert fractions to decimal equivalents up to the thousandths place * Recognize and generate equivalent fractions using benchmark denominators of halves, thirds, fourths, fifths, sixths, eighths, tenths, and twelfths. | **Assessments (Pre, Mid, Post)**  [Pre-Assessment](https://docs.google.com/document/d/1hSUs20jBn0vS4t6ywiQml8FtfXrwDqwCEdyhzX2iuGw/edit?usp=sharingoPv5SWbYC3ZjHgo_DG-hh3nshAD0jbecxYaA/edit?usp=sharing) - administered at beginning of Q1  [Evidence 1](https://drive.google.com/file/d/100XKPyCQncfS0w3zviOC7YcEsbImAiCd/view?usp=sharing)  [Evidence 2](https://docs.google.com/document/d/1D_53Bwebmm8oG8xgAiRvfoYgE8f38UrihF8n1z0xuPs/edit) - administer at midpoint  [Evidence 3](https://docs.google.com/document/d/1Y_-G67CLqJTgGvWB2ucvOnp09gvrUkWK81pOozgUx7E/edit) |
| **Score**  **2.0** | * Understand that adding zeros to the end of a decimal does not change the value * Recall and use specific vocabulary, including equivalent, numerator, denominator, improper fraction, mixed number, and place value | **Lesson Resources**  [Decimal Scoot](https://drive.google.com/file/d/1hU5z0-m91Fu0ZvtVHOCsdPYFb3nvYKwZ/view?usp=sharing)  [Snow Globe Equivalent Fractions](https://drive.google.com/file/d/1Fn-rIhx0ShT8YjqgUuWtZ2dcGIHczx-c/view?usp=sharing)  [Equivalent Fractions Jigsaw](https://nrich.maths.org/content/id/5467/Fractions%20Jigsaw.pdf)  [Fraction Wall](https://nrich.maths.org/4519) - possible level 4? |
| **Score 1.0** | With help, the student has partial success at level 2 and 3 content. | **Academic Vocabulary**  Equivalent, Fraction, Decimal, Mixed Numbers, Numerator, Denominator, Decimal Fraction |
| **RtI Support** | **Interventions**  Bridges in Mathematics - Volume 8 - Module 5 - 7 (Fractions) | **Enrichment** |

| **Vertical Alignment** | | |
| --- | --- | --- |
| **4th Grade:** [4.N.2.1](http://okmathframework.pbworks.com/w/page/112172290/4-N-2-1) Represent and rename equivalent fractions using fraction models (e.g. parts of a set, area models, fraction strips, number lines). | **5th Grade**: [5.N.2.4](http://okmathframework.pbworks.com/w/page/112100602/5-N-2-4) Recognize and generate equivalent decimals, fractions, mixed numbers, and fractions less than one in various contexts | **6th Grade:** [6.N.1.4](http://okmathframework.pbworks.com/w/page/111429820/6-N-1-4) Determine equivalencies among fractions, decimals, and percents. Select among these representations to solve problems. |

### 

### 

| **Quarter 2 - Duration: 38 Days (2022-2023)** | | |
| --- | --- | --- |
| **Standard** | **Key Understandings** | **Common Student Misconceptions** |
| [5.N.3.3](http://okmathframework.pbworks.com/w/page/112100617/5-N-3-3)  Add & Subtract Fractions | * Find common denominators to add or subtract fractions and mixed numbers of benchmark denominator parts (halves, thirds, fourths, fifths, sixths, eighths, tenths, and twelfths) * Recognize equivalent fractions in sum or difference (i.e. 2/4 is equivalent to 1/2) * Consider place value when adding decimals up to the thousandths place * Apply addition and subtraction of fractions and decimals to real world situations i.e. money, measurement, data, and geometry | * Think when adding fractions, generalize the procedure for multiplication of fractions by adding the numerators and adding the denominators. * Think when adding two fractions, add the numerators and multiplying the denominators. * Think when subtracting mixed numbers, always subtracting the smaller whole number from the larger whole number and subtracting the smaller fraction from the larger fraction. * Add or subtract decimals without considering place value. Student lines numbers up starting at the right side just like whole numbers. * Believe that zeros placed to the right of the decimal number changes the value of the number. |
| [5.N.1.2](http://okmathframework.pbworks.com/w/page/111920398/5-N-1-2)  Divide Multi-Digit Numbers | * Understand place value in division. * Have more than one strategy to divide. * Fluently multiply in order to help with the division process, * Use the correct vocabulary of dividends, divisors, quotients, and remainders. * Understand how to use inverse operations to check their answer. * Divide a fraction less than one to create a decimal equivalent up to the thousandths place. | * Believe that division makes the answer smaller. For example, when you divide, the answer (quotient) is smaller than the starting amount (dividend). While this is true when dividing a whole number by a smaller whole number, it is not true when the divisor is greater than the dividend. * Think the standard algorithm for division is a set of steps to be memorized. * Have overspecialized their knowledge of multiplication or division facts and restricted it to “fact tests” or one particular problem format. * Think that division is commutative, for example 5 ÷ 3 = 3 ÷ 5. * Think that the divisor must be less than the dividend. ⅘ = 4 divided by 5 |
| [5.N.1.3](http://okmathframework.pbworks.com/w/page/111920407/5-N-1-3)  Represent Quotient Remainders | * Understand and interpret the quotient. * Write the quotient with a remainder as a whole number, a fraction, or decimal. * Find equivalent numbers by adding a decimal and 0’s if needed after the whole number to complete the division problem. * Select the most appropriate remainder for a given situation. * Understand that there are certain contexts that you can not have a remainder. * Understand that interpreting remainder includes how much is left over and how much you need to make another whole | * Apply a procedure that results in remainders that are expressed as “R#” or “remainder #” for all situations, even those for which such a result does not make sense. * Think that decimal quotients can also have remainders. |
| Supporting Standards | [5.N.1.1](http://okmathframework.pbworks.com/w/page/111920395/5-N-1-1) Estimate solutions to division problems in order to assess the reasonableness of results  [5.N.1.4](http://okmathframework.pbworks.com/w/page/111920413/5-N-1-4) Solve real-world and mathematical problems requiring addition, subtraction, multiplication, and division of multi-digit whole numbers. Use various strategies, including the inverse relationships between operations, the use of technology, and the context of the problem to assess the reasonableness of results.  [5.N.3.1](http://okmathframework.pbworks.com/w/page/112100611/5-N-3-1) Estimate sums and differences of fractions with like and unlike denominators, mixed numbers, and decimals to assess the reasonableness of the results  [5.N.3.2](http://okmathframework.pbworks.com/w/page/112100614/5-N-3-2) Illustrate addition and subtraction of fractions with like and unlike denominators, mixed numbers, and decimals using a variety of representations (e.g., fraction strips, area models, number lines, fraction rods).  [5.N.3.4](http://okmathframework.pbworks.com/w/page/112100623/5-N-3-4) Find 0.1 more than a number and 0.1 less than a number. Find 0.01 more than a number and 0.01 less than a number. Find 0.001 more than a number and 0.001 less than a number. | |
| **Item Specs**  **Strand**  **5.N.1. and**  **5.N.3** | **Emphasis:**  • Estimate solutions to division problems.  • Determine the reasonableness of solutions to arithmetic problems.  • Use the context of a problem to determine the best format to represent a quotient.  • Solve real-world and mathematical problems requiring addition, subtraction, multiplication, and division of multi-digit whole numbers.  **Stimulus Attributes:**  Test items may include tables, charts, pictures, counters, graphs, base-10 blocks, cubes, and other counting manipulatives. | **Format:**  • Use estimation of quotients  • Divide multi-digit whole numbers by one- and two-digit divisors with and without remainders expressed as whole numbers or fractions  • Use addition, subtraction, multiplication, or division to solve real-world problems  • Assess the reasonableness of results  • Identify and interpret the context of a problem to find the best form of a quotient for the solution  **Content Limits:**  • Limit divisors to up to two digits  • Limit dividends to two or three digits  • Limit items to three-digit by three-digit multiplication  • Limit to operations on whole numbers  • Limit decimal quotients to hundredths  • Limit real-world and mathematical contexts to age appropriate situations |

### 

| **Subject and Quarter:** Math - Quarter 2 | | **Grade:**  **5** |
| --- | --- | --- |
| **Standard** [5.N.3.3](http://okmathframework.pbworks.com/w/page/112100617/5-N-3-3) Add and subtract fractions with like and unlike denominators, mixed numbers, and decimals, using efficient and generalizable procedures, including but not limited to standard algorithms in order to solve real-world and mathematical problems including those involving money, measurement, geometry, and data. | | **Supporting Standards** [5.N.3.1](http://okmathframework.pbworks.com/w/page/112100611/5-N-3-1) Estimate sums and differences of fractions with like and unlike denominators, mixed numbers, and decimals to assess the reasonableness of the results  [5.N.3.2](http://okmathframework.pbworks.com/w/page/112100614/5-N-3-2) Illustrate addition and subtraction of fractions with like and unlike denominators, mixed numbers, and decimals using a variety of representations (e.g., fraction strips, area models, number lines, fraction rods). [5.N.3.4](http://okmathframework.pbworks.com/w/page/112100623/5-N-3-4) Find 0.1 more than a number and 0.1 less than a number. Find 0.01 more than a number and 0.01 less than a number. Find 0.001 more than a number and 0.001 less than a number. |
| **Learning Goal** Add and subtract fractions, decimals and mixed numbers | | |
| **Proficiency Scale** | | **Resources** |
| **Score**  **4.0** | Use flexible thinking strategies to solve multi-step problems involving mixed numbers and decimals and multiple operations. | **Essential Question**   * How can estimation help determine reasonableness? * How do we add and subtract decimal numbers? * How does understanding fractions on a number line help with determining reasonableness of an answer? * How do we add or subtract fractions to answer real-world problems? |
| **Score**  **3.0** | Add and subtract fractions with like and unlike denominators, mixed numbers, and decimals, using efficient and generalizable procedures to solve real-world and mathematical problems  * Add and subtract fractions and mixed numbers with unlike denominators using models (e.g., fraction strips, area models, number lines, fraction rods) and the standard algorithm * Add and subtract decimals with different place values using models (e.g. base ten blocks, area models, number lines) and the standard algorithm * Solve decimal and fraction problems involving money, measurement, geometry, and data | **Assessments (Pre, Mid, Post)**  [Pre Assessment](https://docs.google.com/document/d/1jl345cdTg_sAW_VJWZ1sfuF6VMLLol0S-a78AQgq3_s/edit?usp=sharing) - administer at beginning of Q2  [Evidence 1 (Decimals)](https://docs.google.com/document/d/1OUTDlnizi8Qj62L0s8i7T-bM7-5uySfA7u6dMwGjD40/edit)  [Evidence 2 (Fractions)](https://docs.google.com/document/d/1mkroNBSIrezVdYzu2VSmV4Hk_zvCR3Z7uEsclRfCB7s/edit)  [Evidence 3](https://docs.google.com/document/d/1xhofn1NJ7ABQIC60FNMWNjSwoHdFAHQEPwl4XIkiuNc/edit)  \*\*\*Reducing fractions is a “nice to know” but not a “must know” in this grade level. Students can be exposed to the concept, but it should not be assessed. |
| **Score**  **2.0** | Use generalized procedures to solve add and subtract decimals and basic fractions   * Add and subtract fractions and mixed numbers with like denominators * Add and subtract decimals with the same place value * Recall and use vocabulary, including: sum, difference, like and unlike denominator, place values (from thousandths to millions) * Find the least common multiple of two numbers | **Lesson Resources**  8.1 Simplest Form (p. 367-372)  8.2 Estimate sums and differences of Fractions (p. 373-378)  8.3 Find Common Denominators (p. 379-384)  8.4 Add Fractions with Unlike Denominators (p. 385-390)  8.5 Subtract Fractions with Unlike Denominators (p. 391-396)  8.6 Add Mixed Numbers (p. 397-402)  8.7 Subtract Mixed Numbers (p. 403-408)  8.8 Problem Solving: Fractions (p. 409-414)  [Create Equivalent Fractions to Add Unlike Fractions](https://www.k-5mathteachingresources.com/support-files/create-equivalent-fractions-to-add-unlike-fractions.pdf)  [Add and Compare](https://www.k-5mathteachingresources.com/support-files/add-and-compare.pdf) |
| **Score 1.0** | With help, the student has partial success at level 2 and 3 content. | **Academic Vocabulary**  Addition, Subtraction, Fraction, Mixed Number, Decimal, Numerator, Denominator |
| **RtI Support** | **Interventions**  Bridges in Mathematics - Volume 8 - Module 8, 9, 11, 12 (Fractions)  Volume 9 - Module 6 and 8 (Decimals) | **Enrichment** |

| **Vertical Alignment** | | |
| --- | --- | --- |
| **4th Grade:** [4.N.2.4](http://okmathframework.pbworks.com/w/page/112172299/4-N-2-4) Use fraction models to add and subtract fractions with like denominators in real-world and mathematical situations. | **5th Grade**: [5.N.3.3](http://okmathframework.pbworks.com/w/page/112100617/5-N-3-3) Add and subtract fractions with like and unlike denominators, mixed numbers, and decimals, using efficient and generalizable procedures, including but not limited to standard algorithms in order to solve real-world and mathematical problems including those involving money, measurement, geometry, and data. | **6th Grade:** [6.N.4.3](http://okmathframework.pbworks.com/w/page/111603532/6-N-4-3) Multiply and divide fractions and decimals using efficient and generalizable procedures. |

| **Subject and Quarter:** Math - Quarter 2 | | **Grade: 5** |
| --- | --- | --- |
| **Standard** [5.N.1.2](http://okmathframework.pbworks.com/w/page/111920398/5-N-1-2) Divide multi-digit numbers, by one- and two-digit divisors, using efficient and generalizable procedures, based on knowledge of place value, including standard algorithms. | | **Supporting Standards** [5.N.1.1](http://okmathframework.pbworks.com/w/page/111920395/5-N-1-1) Estimate solutions to division problems in order to assess the reasonableness of results |
| **Learning Goal** Divide multi-digit numbers by 1 and 2 digit divisors | | |
| **Proficiency Scale** | | **Resources** |
| **Score**  **4.0** | Demonstrate an in-depth understanding of how place value factors into the standard algorithm for division. | **Essential Question**   * How can the outcome of division be communicated? * What information can be gathered from division? * How can we represent and solve real-world situations using all operations and unknowns? |
| **Score**  **3.0** | Divide multi-digit numbers, by one- and two-digit divisors, using efficient and generalizable procedures, based on knowledge of place value, including standard algorithms.  * Divide 3 and 4 digit numbers by two digit divisors * Estimate to determine if quotients are reasonable * Use inverse operations to check solutions to division problems | **Assessments (Pre, Mid, Post)**  Assessments are found in the math Google Drive under priority standards assessment.  [Pre-Assessment](https://docs.google.com/document/d/1pr-cCTAty5dvRnJjhF5lD7Fmell2cHfD3r736FeX2XY/edit?usp=sharing)  [Evidence 1](https://docs.google.com/document/d/1gWhOCv0mqCA6nGy7cfQIKzeou-XxMnufqvz3iHWw4tE/edit?usp=sharing) (Single Digit Divisors)  [Evidence 2](https://docs.google.com/document/d/1S2xbBP3XbhotXwW6ndyhzbxraET6Ks91KAn9Lbj-vrM/edit?usp=sharing) - add question about examining and correcting an error  [Evidence 3](https://docs.google.com/document/d/1mGxGBfM7HKH7lFlMwFreIXHQxWWUjByVMjlJw_P6xzc/edit?usp=sharing)  \*\*\*Do not need to assess multiplication fact fluency |
| **Score**  **2.0** | Divide 3 and 4 digit numbers by one digit divisors   * Fluently multiply facts to 10 * Recall and use vocabulary, including: place value, divisor, dividend, quotient, and remainder * Identify place value of a digit | **Lesson Resources**  6.1 Relating X to division (p. 237-242)  6.2 Division patterns (p. 243-248)  6.3 Estimating quotients (p. 249-254)  6.4 Divide by One Digit Numbers (p. 255-260)  6.7 Divide 3-digit numbers by 2-digit numbers (p. 273-278)  6.8 Divide 4-digit numbers by 2-digit numbers (p. 279-291)  [Division Tic Tac Toe](https://drive.google.com/file/d/15YHKghwcbUUrf0P-MC_-6QM06ueYBvIn/view?usp=sharing)  [Long Division Scavenger Hunt](https://drive.google.com/file/d/1Ai8HmfeYWYbckjcWd0i4vrO_B0atcIxf/view?usp=sharing)  [Long Division Riddles](https://drive.google.com/file/d/185G6IKVEArO3eyd-z84q8rqRRmYKDHfx/view?usp=sharing)  [Single Digit Divisor Word Problems](https://drive.google.com/file/d/1YTiRLDC1MvskjntGZavz3ezoy05Qc7oY/view?usp=sharing)  [Estimating Quotients Practice](https://drive.google.com/file/d/1rYDJ9DmSlJ20PlYOBYCEVgvFpgUgnOnC/view?usp=sharing)  [Error Analysis long division](https://drive.google.com/file/d/1G2ksZbghXaffieG3cf-HxD7PPlPe4cIU/view?usp=sharing)  [Bump Estimating Quotients Game](https://drive.google.com/file/d/1CSGJmWsnbnjJxnD8QsyTlxYf_iTkjjcN/view?usp=sharing)  [Division Task cards](https://drive.google.com/file/d/1G0cK7oY0hMRdI5ETNP634ZiaFUKI6j9n/view?usp=sharing)  [Birthday Party Estimation and division](https://drive.google.com/file/d/1hejB8xQkbiESqrJqGARVF3zkm-RnBKmL/view?usp=sharing)  [Division Strategy: Multiplying Up](https://www.k-5mathteachingresources.com/support-files/division-strategy-multiplying-up.pdf)  [Estimate the Quotient](https://www.k-5mathteachingresources.com/support-files/estimate-the-quotient-3-digit-divided-by-2-digit.pdf)  Video Links:  <https://youtu.be/6Ij98BwDcOg>  <https://youtu.be/YGTtpNxr8ls> |
| **Score 1.0** | * With help, the student has partial success at level 2 and 3 content. | **Academic Vocabulary**  Dividend, Divisor, Quotient, Reasonableness, Estimate, Compatible numbers, Round, Divisible, Factor, Multiple |
| **RtI Support** | **Interventions**  Bridges in Mathematics - Volume 6 - Module 9 - 12 | **Enrichment**  [Division Choice Board](https://drive.google.com/file/d/1rl0cWLOhBIKgzS3Qi3yK9Hg5olR2ocRY/view?usp=sharing) |

| **Vertical Alignment** | | |
| --- | --- | --- |
| **4th Grade:** [5.N.1.2](http://okmathframework.pbworks.com/w/page/111920398/5-N-1-2) Divide multi-digit numbers, by one- and two-digit divisors, using efficient and generalizable procedures, based on knowledge of place value, including standard algorithms. | **5th Grade**: [5.N.1.2](http://okmathframework.pbworks.com/w/page/111920398/5-N-1-2) Divide multi-digit numbers, by one- and two-digit divisors, using efficient and generalizable procedures, based on knowledge of place value, including standard algorithms. | **6th Grade:** Strand ends in 5th grade. Moves to integers and dividing/multiplying fractions and decimals. |

| **Subject and Quarter:** Math - Q2/Q3 | | **Grade:**  **5** |
| --- | --- | --- |
| **Standard** [5.N.1.3](http://okmathframework.pbworks.com/w/page/111920407/5-N-1-3) Recognize that quotients can be represented in a variety of ways, including a whole number with a remainder, a fraction or mixed number, or a decimal and consider the context in which a problem is situated to select and interpret the most useful form of the quotient for the solution. \*\*\*Introduce in Q2 but assess in Q3 | | **Supporting Standards** [5.N.1.4](http://okmathframework.pbworks.com/w/page/111920413/5-N-1-4) Solve real-world and mathematical problems requiring addition, subtraction, multiplication, and division of multi-digit whole numbers. Use various strategies, including the inverse relationships between operations, the use of technology, and the context of the problem to assess the reasonableness of results.  [5.N.1.1](http://okmathframework.pbworks.com/w/page/111920395/5-N-1-1) Estimate solutions to division problems in order to assess the reasonableness of results. |
| **Learning Goal** Recognize that quotients can be represented in a variety of ways | | |
| **Proficiency Scale** | | **Resources** |
| **Score**  **4.0** | Analyze errors in reasoning for problems involving interpretation of the most useful form of quotients and remainders for given situations. | **Essential Question**   * How can the outcome of division be communicated? * How can we represent and solve real-world situations using all operations and unknowns? |
| **Score**  **3.0** | Recognize that quotients can be represented in a variety of ways, including a whole number with a remainder, a fraction or mixed number, or a decimal and consider the context in which a problem is situated to select and interpret the most useful form of the quotient for the solution.  * Calculate the quotient of a whole number with a fraction remainder (ex. 38 4 = 9 ½ ) * Calculate the quotient of a whole number with a decimal remainder (ex. 38 4 = 9.5) * Determine the most useful of remainder in the context of a real-world division problem | **Assessments (Pre, Mid, Post)**  [Pre-Assessment](https://docs.google.com/document/d/1jl345cdTg_sAW_VJWZ1sfuF6VMLLol0S-a78AQgq3_s/edit?usp=sharing)  [Evidence 1](https://docs.google.com/document/d/1MAKRqrA_pIJvVBR2iiabO0EvSoAtPU3E3QnBDKrsiSE/edit?usp=sharing)  [Evidence 2](https://docs.google.com/document/d/1-vDKC2e8ojJV4n63zvy8Gh1p2kBAxmfhLTRh5rHrutw/edit?usp=sharing)  [Evidence 3](https://docs.google.com/document/d/1R6U_fvTxT7Ss_eR6_OFJMGgSTg16vukKRr4jXAJwbbw/edit?usp=sharing) |
| **Score**  **2.0** | Calculate the quotient of a whole number with a remainder (ex. 38 4 = 9 R2) | **Lesson Resources**  6.9 Division Problem Solving (p.285-290)  [Interpreting the remainder #1](https://drive.google.com/file/d/1TaZTtUnS19ze2lKFHorr6ShuEBKZTyai/view?usp=sharing)  [Interpreting the remainder #2](https://drive.google.com/file/d/1p0EN3jhvCR1uNN1cx8XrlP6cIAI4i8lI/view?usp=sharing)  [Strategies for interpreting remainders](https://drive.google.com/file/d/1DpEl5o_VkxvzMh_GgUK2sppnwf7UjMfg/view?usp=sharing) |
| **Score 1.0** | With help, the student has partial success at level 2 and 3 content. | **Academic Vocabulary**  Quotient, Remainder, Fraction, Mixed Number, Decimal, Numerator, Denominator |
| **RtI Support** | **Interventions**  Bridges in Mathematics - Volume 7 - Module 4 and 7 | **Enrichment**  Performance Task Ch.6 (page 291-Volume 1) |

### 

| **Vertical Alignment** | | |
| --- | --- | --- |
| **4th Grade:** [4.N.1.6](http://okmathframework.pbworks.com/w/page/112172275/4-N-1-6) Use strategies and algorithms based on knowledge of place value, equality and properties of operations to divide 3-digit dividend by 1-digit whole number divisors. (e.g., mental strategies, standard algorithms, partial quotients, repeated subtraction, the commutative, associative, and distributive properties). | **5th Grade**: [5.N.1.3](http://okmathframework.pbworks.com/w/page/111920407/5-N-1-3) Recognize that quotients can be represented in a variety of ways, including a whole number with a remainder, a fraction or mixed number, or a decimal and consider the context in which a problem is situated to select and interpret the most useful form of the quotient for the solution. | **6th Grade:** Strand ends in 5th grade. Moves to integers and dividing/multiplying fractions and decimals. |

### 

### 

| **Quarter 3 Duration: 45 Days (2022-2023)** | | |
| --- | --- | --- |
| **Standard** | **Key Understandings** | **Common Student Misconceptions** |
| [5.A.1.1](http://okmathframework.pbworks.com/w/page/112100629/5-A-1-1)  Numerical Patterns & Tables | * Use a table to describe patterns of change. * Use rules with one or two operations to predict and generalize about real-world and mathematical problems. * Use rules with one or two operations to describe patterns of change. | * Solve problems from left to right no matter what the operations are. * Think that a variable can only stand for one particular number. * Think examining one set of input-output values is enough to describe a pattern or determine a rule. * Think the only way to describe a pattern is using the change between outputs rather than the change from an input to its corresponding output. * Think they cannot describe a pattern of change when input values are not consecutive. * Think rules describing patterns of change involve only addition and subtraction. |
| [5.A.2.1](http://okmathframework.pbworks.com/w/page/112100635/5-A-2-1)  Equivalent Expressions | * Understand the commutative property of addition and multiplication. * Understand the associative property of addition and multiplication . * Understand the distributive property. * Realize that the distributive property can be represented in multiple ways. * Use partial products. * Know that “PEMDAS” is a tool that they can use to help them solve a problem with more than one operation, but must understand that they read the equation from left to right and that. division/multiplication is completed with whichever comes first, and the same with subtraction/addition. * Solve expressions and equations with multiple operations correctly. | * Think numbers on the left of the equation have the operation followed by the equals sign and the answer on the right. If the answer is on the left followed by the equals sign and the operation is on the right, it is backwards and can't be solved (c = a+b). * Think they can string a series of numbers and operation signs together with several equals signs. EX. 8 + 4 = 12 + 5 = 17) * Think there is no connection between the arithmetic properties they already understand and the algebraic statements of the same properties. They understand 3+4 = 4+3 but not a+b = b+a is nonsensical. * Know the commutative and associative property of addition or multiplication but fails to apply it to simplify the “work” of addition or multiplication. * Misapply the commutative and associative properties in subtraction situations * Solve problems from left to right no matter what the operations are. * Not distribute multiplication to all terms in the parentheses. * Think “multiply before divide and add before subtract”, based on PEMDAS. |
| Supporting Standards | [5.A.1.2](http://okmathframework.pbworks.com/w/page/112100632/5-A-1-2) Use a rule or table to represent ordered pairs of whole numbers and graph these ordered pairs on a coordinate plane, identifying the origin and axes in relation to the coordinates.  [5.D.1.1](http://okmathframework.pbworks.com/w/page/112100716/5-D-1-1) Find the measures of central tendency (mean, median, or mode) and range of a set of data. Understand that the mean is a “leveling out” or central balance point of the data.  [5.D.1.2](http://okmathframework.pbworks.com/w/page/112100719/5-D-1-2) Create and analyze line and double-bar graphs with whole numbers, fractions, and decimals increments.  [5.A.2.2](http://okmathframework.pbworks.com/w/page/112100641/5-A-2-2) Determine whether an equation or inequality involving a variable is true or false for a given value of the variable.  [5.A.2.3](http://okmathframework.pbworks.com/w/page/112100647/5-A-2-3) Evaluate expressions involving variables when values for the variables are given. | |
| **Item Specs**  **Strand 5.A.1 and 5.A.2** | **Emphasis:**  • Use tables and rules to describe patterns of change.  • Relate a rule or table to ordered pairs.  • Make predictions and generalizations about patterns.  • Demonstrate a working knowledge of the location of points on a coordinate plane  • Apply the use of the properties of arithmetic and the order of operations to solve problems.  • Determine whether an equation or inequality is true or false for a given value of a variable.  • Evaluate an expression for a given value of a variable.  **Stimulus Attributes:**  • Test items may include number lines, patterns, counting manipulatives, base-10 blocks, cubes, coordinate graphs, two-dimensional geometric figures, geoboards, other geometric manipulatives, tables, graphs, charts, maps, data sets, diagrams, and other diagrams.  • Test items may include 10 blocks, cubes, other counting manipulatives, tables, graphs, sticks, number lines, charts, data sets, equivalency statements, algebraic expressions and equations, and strict and non-strict inequalities  **Format:**  • Use variables as unknowns  • Use variables as changing quantities  • Use variables in generalizations of patterns  • Use variables to describe general rules  • Identify the basic properties of arithmetic and use them to compute with whole numbers  • Identify mathematical and non-mathematical situations that are facilitated by the use of the arithmetic properties | • Identify the coordinates of an identified point on a coordinate plane or map  • Identify the point located at identified coordinates on a coordinate plane or map  • Identify the basic properties of arithmetic and use them to compute with whole numbers  • Use variables as unknowns  • Substitute numerical values for variables in algebraic expressions • Use the rules for order of operations with whole numbers to find the value of algebraic expressions  • Substitute a value for a variable and determine whether an equation or inequality is true or false  • Items may include parentheses  **Content Limits:**  • Limit patterns to an extension of, at most, four places  • Limit required operations to addition, subtraction, multiplication, and division  • Limit description of rules to one variable  • Limit to 2 operations in order of operations from left to right  • Limit numbers to three-digit whole numbers  • Limit situations to using two of the basic properties of arithmetic  • Limit ordered pairs on the coordinate plane to whole numbers  • Limit numbers to three-digit whole numbers  • Limit situations to using two of the basic properties of arithmetic  • Limit unknowns to 2-digit whole numbers  • Limit algebraic equations to one type of operation  • Limit operations to addition, subtraction, multiplication, and division  • Limit the number of variables in an expression to one  • Limit values of the variable to two-digit whole numbers  • Limit real-world and mathematical contexts to age appropriate situations |

### 

| **Subject and Quarter:** Math - Quarter 3 | | **Grade:**  **5** |
| --- | --- | --- |
| **Standard** [5.A.1.1](http://okmathframework.pbworks.com/w/page/112100629/5-A-1-1) Use tables and rules of up to two operations to describe patterns of change and make predictions and generalizations about real-world and mathematical problems | | **Supporting Standards** [5.A.1.2](http://okmathframework.pbworks.com/w/page/112100632/5-A-1-2) Use a rule or table to represent ordered pairs of whole numbers and graph these ordered pairs on a coordinate plane, identifying the origin and axes in relation to the coordinates. |
| **Learning Goal** Use tables and rules of up to two operations to describe patterns of change | | |
| **Proficiency Scale** | | **Resources** |
| **Score**  **4.0** | Make connections between visual and numerical patterns to make predictions about real-world situations. | **Essential Question**   * How do we find patterns of change to make predictions and generalizations within data sets? * How do we work with equations and expressions to solve problems? * How do we create graphs from data sets to create visuals for the real world? |
| **Score**  **3.0** | Use tables and rules of up to two operations to describe patterns of change and make predictions and generalizations about real-world and mathematical problems.  * Determine the rule used in a table of up to two operations * Use patterns to make predictions about real-world situations. | **Assessments (Pre, Mid, Post)**   * [Evidence 1](https://docs.google.com/document/d/15lgPK6QA3pQCXUIvGYWACWi702j7PBbzEcWvALTI6tc/edit?usp=sharing) * [Evidence 2](https://docs.google.com/document/d/1czn3swmiOArwn-xBPYqopG208vdDBesTmsvRt9b_3tg/edit) * [Evidence 3](https://docs.google.com/document/d/1PWEzmSZd-m_uE6HtkF09u--uDBc29eq0eTDTLMU6Psc/edit?usp=sharing) [5.A.1.1 Evidence 1](https://docs.google.com/document/d/15lgPK6QA3pQCXUIvGYWACWi702j7PBbzEcWvALTI6tc/edit?usp=sharing) |
| **Score**  **2.0** | Identify patterns and determine the rule used in a table with one operation. | **Lesson Resources**  12.6 Numerical Patterns (p. 601-606)  12.7 Graph and Analyze Relationships (p. 607-612) |
| **Score 1.0** | With help, the student has partial success at level 2 and 3 content. | **Academic Vocabulary**  Table, rule, pattern, coordinate (ordered pair) , x- and y-axis, coordinate plane |
| **RtI Support** | **Interventions**  Bridges in Mathematics - Coordinate System Activities | **Enrichment** |

| **Vertical Alignment** | | |
| --- | --- | --- |
| **4th Grade:** [4.A.1.1](http://okmathframework.pbworks.com/w/page/112172326/4-A-1-1) Create an input/output chart or table to represent or extend a numerical pattern. [4.A.1.2](http://okmathframework.pbworks.com/w/page/112172332/4-A-1-2) Describe the single operation rule for a pattern from an input/output table or function machine involving any operation of a whole number. | **5th Grade**: [5.A.1.1](http://okmathframework.pbworks.com/w/page/112100629/5-A-1-1) Use tables and rules of up to two operations to describe patterns of change and make predictions and generalizations about real-world and mathematical problems | **6th Grade:** [6.A.1.2](http://okmathframework.pbworks.com/w/page/111603544/6-A-1-2) Represent relationships between two varying quantities involving no more than two operations with rules, graphs, and tables; translate between any two of these representations. |

### 

| **Subject and Quarter:** Math - Quarter 3 | | **Grade:**  **5** |
| --- | --- | --- |
| **Non-Reported Standards Taught in Q3** [5.A.1.2](http://okmathframework.pbworks.com/w/page/112100635/5-A-2-1) Use a rule or table to represent ordered pairs of whole numbers and graph these ordered pairs on a coordinate plane, identifying the origin and axes in relation to the coordinates. **\*\*\*Note:** In objective 5.A.1.2, students will graph ordered pairs from a rule or table on a coordinate plane. As they plot each point, students will be able to “see” the pattern as it develops. Patterns may occur as data sets or as tables. This will incorporate work in **quadrant one working with only positive numbers.**  [5.D.1.1](http://okmathframework.pbworks.com/w/page/112100716/5-D-1-1) Find the measures of central tendency (mean, median, or mode) and range of a set of data. Understand that the mean is a “leveling out” or central balance point of the data.  [5.D.1.2](http://okmathframework.pbworks.com/w/page/112100719/5-D-1-2) Create and analyze line and double-bar graphs with whole numbers, fractions, and decimals increments. | | |
| **Academic Vocabulary**  **X-axis**  **Y-axis**  **Ordered pair**  **Coordinate plane**  **Origin**  **Central tendency**  **Mean, Median, Mode, Range** | | **Lesson Resources**  12.1 Plot Points in a Coordinate Plane (p. 571-576)  12.2 Relate Points in a Coordinate Plane (p. 577-582)  12.4 Graph Data (p. 589-594)  12.5 Make and Interpret Line Graphs (p. 595-600)  12.6 Numerical Patterns (p. 601-606)  12.7 Graph and Analyze Relationships (p. 607-612) |

| **Vertical Alignment** | | |
| --- | --- | --- |
| **4th Grade:** Coordinate graphing strand begins in 5th grade | **5th Grade:** [5.A.1.2](http://okmathframework.pbworks.com/w/page/112100635/5-A-2-1) Use a rule or table to represent ordered pairs of **whole numbers** and graph these ordered pairs on a coordinate plane, identifying the origin and axes in relation to the coordinates. | **6th Grade:** [6.A.1.1](http://okmathframework.pbworks.com/w/page/111603541/6-A-1-1) Plot **integer- and rational-valued** (limited to halves and fourths) ordered-pairs as coordinates in all four quadrants and recognize the reflective relationships among coordinates that differ only by their signs. |
| Measures of central tendency begins in 5th grade | [5.D.1.1](http://okmathframework.pbworks.com/w/page/112100716/5-D-1-1) Find the measures of central tendency (mean, median, or mode) and range of a set of data. Understand that the mean is a “leveling out” or central balance point of the data. | [6.D.1.1](http://okmathframework.pbworks.com/w/page/111603613/6-D-1-1) Calculate the mean, median, and mode for a set of real-world data. [6.D.1.2](http://okmathframework.pbworks.com/w/page/111603616/6-D-1-2) Explain and justify which measure of central tendency (mean, median, or mode) would provide the most descriptive information for a given set of data. |
| [4.D.1.2](http://okmathframework.pbworks.com/w/page/112172416/4-D-1-2) Use tables, bar graphs, timelines, and Venn diagrams to display data sets. The data may include benchmark fractions or decimals ( 1/4 , 1/3 , 1/2 , 2/3 , 3/4, 0.25, 0.50, 0.75). | [5.D.1.2](http://okmathframework.pbworks.com/w/page/112100719/5-D-1-2) Create and analyze line and double-bar graphs with whole numbers, fractions, and decimals increments. | [6.D.1.3](http://okmathframework.pbworks.com/w/page/111603619/6-D-1-3) Create and analyze box and whisker plots exploring how each segment contains one quarter of the data. |

| **Subject and Quarter:** Math - Quarter 3 | | **Grade:**  **5** |
| --- | --- | --- |
| **Standard** [5.A.2.1](http://okmathframework.pbworks.com/w/page/112100647/5-A-2-3) Generate equivalent numerical expressions and solve problems involving whole numbers by applying the commutative, associative, and distributive properties and order of operations (no exponents). | | **Supporting Standards** [5.A.2.2](http://okmathframework.pbworks.com/w/page/112100641/5-A-2-2) Determine whether an equation or inequality involving a variable is true or false for a given value of the variable. [5.A.2.3](http://okmathframework.pbworks.com/w/page/112100647/5-A-2-3) Evaluate expressions involving variables when values for the variables are given. |
| **Learning Goal** Generate and evaluate expressions following the Order of Operations | | |
| **Proficiency Scale** | | **Resources** |
| **Score**  **4.0** | Manipulate numbers and operations to create problems that have desired solutions. | **Essential Question**   * How do we work with equations and expressions to solve problems? |
| **Score**  **3.0** | Generate equivalent numerical expressions and solve problems involving whole numbers.  * Use the Associative Property to generate equivalent expressions * Use the Commutative Property to generate equivalent expressions * Use the Distributive Property to generate equivalent expressions * Simplify numerical expressions by following the Order of Operations (not including exponents) * Evaluate algebraic expressions involving variables for any given value * Determine whether an equation or expression is true or false for a given value.   + Ex. If x = 4, does x + 6 - 2 = 8 | **Assessments (Pre, Mid, Post)**   * [Evidence 1](https://docs.google.com/document/d/12O94s5EKcIUNW41G4Nhuw6chBWlYuX-at3qBIfGZohs/edit?usp=sharing) * [Evidence 2](https://docs.google.com/document/d/1vPQELca1dG40Ws_VNly0ITPRhxp1Kiv__Vz6x6x0KE8/edit?usp=sharing) * [Evidence 3](https://docs.google.com/document/d/1U94nDjpJFMRK3pSbetmbv5yLAmhPBRNm6T7IFAKM9TU/edit?usp=sharing)   Level 4 Activities: [Order of Ops Target Game](https://myworldtheirway.com/2020/07/target-number-order-of-operations-math-card-game/), [Target Number Dash](https://www.fcusd.org/cms/lib/CA01001934/Centricity/Domain/10/5_Target_Number_Dash.pdf), [Template on this Page](http://www.cuppacocoa.com/math-game-target-number-2/) |
| **Score**  **2.0** | Identify properties used to generate variable expressions   * Identify if Commutative, Associative, or Distributive Properties were used when given equivalent expressions * Recall and use vocabulary, including numerical expression, algebraic expression, variable, Commutative Property, Associative Property, Distributive Property, simplify, and substitute | **Lesson Resources**  Ch. 2.1- Properties (p.54-56)  2.2-2.4- Order of Operations (p.61-76)  2.1 Number Properties (p. 53-58)  2.2 Order of Operations (p. 59-64)  2.3 Write Numerical Expressions (p. 65-70)  2.4 Evaluate Expressions with Grouping Symbols (p. 71-76) |
| **Score 1.0** | With help, the student has partial success at level 2 and 3 content. | **Academic Vocabulary**  Numerical expression, algebraic expression, variable, Commutative Property, Associative Property, Distributive Property, simplify, and substitute |
| **RtI Support** | **Interventions**  Bridges in Mathematics - Equations and Operations | **Enrichment** |

| **Vertical Alignment** | | |
| --- | --- | --- |
| **4th Grade:** [4.A.2.1](http://okmathframework.pbworks.com/w/page/112172344/4-A-2-1) Use number sense, properties of multiplication and the relationship between multiplication and division to solve problems and find values for the unknowns represented by letters and symbols that make number sentences true. | **5th Grade**: [5.A.2.1](http://okmathframework.pbworks.com/w/page/112100647/5-A-2-3) Generate equivalent numerical expressions and solve problems involving whole numbers by applying the commutative, associative, and distributive properties and order of operations (no exponents) | **6th Grade:** [6.A.2.1](http://okmathframework.pbworks.com/w/page/111603802/6-A-2-1) Generate equivalent expressions and evaluate expressions involving positive rational numbers by applying the commutative, associative, and distributive properties and order of operations to solve real-world and mathematical problems. |

### 

### 

| **Quarter 4 Duration: 42 Days (2022-2023)** | | |
| --- | --- | --- |
| **Standard** | **Key Understandings** | **Common Student Misconceptions** |
| [5.GM.1.1](http://okmathframework.pbworks.com/w/page/112100650/5-GM-1-1)  Classify Triangles | * Describe triangles based on their properties. * Recognize triangles in various contexts define equilateral, right, scalene, and isosceles triangles. * Use a straightedge and a protractor to construct triangles. | * Believe all shapes with three sides are only classified as triangles. * Think angle size is dependent on the length of the rays. * Think if you change the orientation of the triangle it’s properties change. |
| [5.GM.2.1](http://okmathframework.pbworks.com/w/page/112100677/5-GM-2-1)  Volume | * Find volume by counting unit cubes. * Find volume by the product of the dimensions of the prism, Length X Width X Height * Understand that rectangular prisms with different dimensions can have the same volume. | * Think units of measurement for perimeter, area, and volume are interchangeable. * Think volume can be found by determining the area of a single face on a prism and multiply that by the total number of faces. * Not understand the concept of volume and think volume is a result of plugging numbers into a formula. |
| [5.GM.2.3](http://okmathframework.pbworks.com/w/page/112124233/5-GM-2-3)  Perimeter | * Define a polygon. * Understand that the perimeter is the distance around the polygon. * Understand that units must be common in order to add. * Give an estimate of length to a curved line. * Use a nonstandard tool, ie. string, grid paper, etc to measure a curved line. * Reason why a given perimeter is valid or invalid. | * Try to use the formula for finding the perimeter of rectangular shapes on non-rectangular shapes. * Confuse area and perimeter * Overgeneralize the definition of perimeter situations.   + EX. Student interprets all “wall painting” problems as area. * Count the number of squares in the border instead of the edges of the squares when counting perimeter of dimensions of shapes drawn on a grid . * Lack “benchmarks” that allow them to estimate measures. |
| **Item Specs**  **Strand 5.GM.1**  **and**  **5.GM.2** | **Emphasis:**  • Describe, classify, and construct triangles.  • Describe and classify three-dimensional figures.  • Recognize and draw a net for a three-dimensional figure.  • Determine the volume of a rectangular prism.  • Determine the surface area of a three-dimensional figure with rectangular faces by finding the area of each component of the net of that figure.  • Find the perimeter of polygons and estimate the perimeter of a curved shape.  **Stimulus Attributes:**  • Test items may include illustrations of the following: tables, graphs, protractors, two-dimensional geometric shapes, three-dimensional geometric shapes, geoboards, and other geometric manipulatives.  • Test items may include rectangular prisms, other geometric solids, diagrams of rectangles or squares, dot grids, geoboards, and other geometric manipulatives. | **Format:**  • Identify, compare, and analyze attributes of triangles  • Construct triangles based on given attributes  • Classify triangles by their attributes  • Identify, compare, and analyze attributes of three-dimensional figures  • Classify three-dimensional figures by their attributes  • Recognize and draw a net for a three-dimensional figure  • Determine the surface area of rectangular prisms using a net of the prism  • Identify and apply strategies for determining volume and surface area of other three dimensional solids  • Find the perimeter of a polygon  • Determine the number of square tiles that would be needed to build a rectangle of a certain area or perimeter  • Compare the dimensions and volumes of different rectangular prisms  • Compare the dimensions and surface area of different three-dimensional shapes  • Estimate the perimeter of a curved shape  **Content Limits:**  • Triangles can include equilateral, right, scalene, and isosceles  • Three-dimensional figures can include cubes, rectangular prisms, and pyramids  • Limit solids to rectangular prisms and three-dimensional shapes that have rectangular faces  • Limit dimensions of figures to whole numbers |

### 

### 

| **Subject and Quarter:** Math - Quarter 4 | | **Grade:**  **5** |
| --- | --- | --- |
| **Standard** [5.GM.1.1](http://okmathframework.pbworks.com/w/page/112100650/5-GM-1-1) Describe, classify and construct triangles, including equilateral, right, scalene, and isosceles triangles. Recognize triangles in various contexts | | **Supporting Standards** [5.GM.3.1](http://okmathframework.pbworks.com/w/page/112100698/5-GM-3-1) Measure and compare angles according to size |
| **Learning Goal** Describe, classify, and construct triangles and recognize them in various contexts | | |
| **Proficiency Scale** | | **Resources** |
| **Score**  **4.0** | N/A | **Essential Question**   * How can we identify similarities and differences in geometric figures? * How can you collect information about 2-D shapes? * What information can you gather from measuring? |
| **Score**  **3.0** | Describe, classify and construct triangles, including equilateral, right, scalene, and isosceles triangles. Recognize triangles in various contexts  * Describe and classify triangles in terms of their sides and angle measures * Classify and recognize different types of triangles in the real world * Use a straightedge and a protractor to construct triangles. | **Assessments (Pre, Mid, Post)**   * [Evidence 1](https://docs.google.com/document/d/1EF0m7KsHst_K7L_xKj3CnAoB4WrCnmX8hA3vwEj2cvY/edit?usp=sharing) * [Evidence 2](https://docs.google.com/document/d/1HZBh9RHhqHF-GIzj0x-_SjRlgR4AyU4VgphJ3jMK7NQ/edit?usp=sharing) * [Evidence 3](https://docs.google.com/document/d/154_2IT0xDPWngMnIPdWhWd7YXh0-JPsW4Lea5GkpSFw/edit?usp=sharing)   *NEED TO MAKE SCORING GUIDES FOR THESE*  *\*\*\*Constructing triangles is a “nice to do” if time permits. It’s not a must do and doesn’t need to be assessed.* |
| **Score**  **2.0** | Describe the similarities and differences between two-dimensional shapes   * Recognize acute, obtuse, and right angles | **Lesson Resources**  Triangles - page 659-664 |
| **Score 1.0** | With help, the student has partial success at level 2 and 3 content. | **Academic Vocabulary**  Congruent, Equilateral Triangle, Scalene Triangle, Isosceles Triangle, Right Angle, Obtuse Angle, Acute Angle, Straight Angle |
| **RtI Support** | **Interventions**  Bridges in Mathematics - Geometry, Triangles and More - Classifying Triangles | **Enrichment** |

| **Vertical Alignment** | | |
| --- | --- | --- |
| **4th Grade:** [4.GM.1.3](http://okmathframework.pbworks.com/w/page/112172368/4-GM-1-3) Given two three-dimensional shapes, identify similarities, and differences. | **5th Grade**: [5.GM.1.1](http://okmathframework.pbworks.com/w/page/112100650/5-GM-1-1) Describe, classify and construct triangles, including equilateral, right, scalene, and isosceles triangles. Recognize triangles in various contexts. | **6th Grade:** [6.GM.2.2](http://okmathframework.pbworks.com/w/page/111603583/6-GM-2-2) Develop and use the fact that the sum of the interior angles of a triangle is 180 ̊ to determine missing angle measures in a triangle. |

| **Subject and Quarter:** Math - Quarter 4 | | **Grade:**  **5** |
| --- | --- | --- |
| **Standard** [5.GM.2.1](http://okmathframework.pbworks.com/w/page/112100677/5-GM-2-1) Recognize that the volume of rectangular prisms can be determined by the number of cubes and by the product of the dimensions of the prism. Know that rectangular prisms of different dimensions can have the same volume. | | **Supporting Standards** [5.GM.2.2](http://okmathframework.pbworks.com/w/page/112100683/5-GM-2-2) Recognize that the surface area of a three-dimensional figure with rectangular faces with whole numbered edges can be found by finding the area of each component of the net of that figure. Know that three-dimensional shapes of different dimensions can have the same surface area. [5.GM.1.2](http://okmathframework.pbworks.com/w/page/112100656/5-GM-1-2) Describe and classify three-dimensional figures including cubes, rectangular prisms, and pyramids by the number of edges, faces or vertices as well as the shapes of faces. [5.GM.1.3](http://okmathframework.pbworks.com/w/page/112100665/5-GM-1-3) Recognize and draw a net for a three-dimensional figure (e.g., cubes, rectangular prisms, pyramids). |
| **Learning Goal** Recognize and determine the volume of a rectangular prism and cubes. | | |
| **Proficiency Scale** | | **Resources** |
| **Score**  **4.0** | Determine the possible dimensions of a rectangular prism when given the total volume. | **Essential Question**   * How does volume occur in the real world? * What information can you gather from three-dimensional forms? |
| **Score**  **3.0** | Recognize that the volume of rectangular prisms can be determined by the number of cubes and by the product of the dimensions of the prism. Know that rectangular prisms of different dimensions can have the same volume.  * Determine the volume of a rectangular prism by finding the product of the dimensions of the prism (V = *l* x *w* x *h*). * Demonstrate that rectangular prisms with different dimensions can have the same volume. * Use correct units when calculating volume (ex. ) | **Assessments (Pre, Mid, Post)**   * [Evidence 1](https://docs.google.com/document/d/16ptptwFBfdQpx8dPzKNWeBVr49Hiw2a5T_HsHEBDtZ8/edit?usp=sharing) * [Evidence 2](https://docs.google.com/document/d/1Dv-k63UJZFG6ncXDcdctx7MMnEgKgwTVZUaD1LyFd_w/edit?usp=sharing) * [Evidence 3](https://docs.google.com/document/d/1zM6ytJqH2klmNFnoST-KtXupViuDw8LY-iltixOaaQU/edit?usp=sharing) |
| **Score**  **2.0** | Determine the volume of rectangular prism by counting the number of unit cubes that can fit inside | **Lesson Resources**  Chapter 13 - Only covers volume, no surface area |
| **Score 1.0** | With help, the student has partial success at level 2 and 3 content. | **Academic Vocabulary**  Rectangular prism, unit cube, volume |
| **RtI Support** | **Interventions** | **Enrichment** |

| **Vertical Alignment** | | |
| --- | --- | --- |
| **4th Grade:** [4.GM.2.3](http://okmathframework.pbworks.com/w/page/112172383/4-GM-2-3) Using a variety of tools and strategies, develop the concept that the volume of rectangular prisms with whole-number edge lengths can be found by counting the total number of same-sized unit cubes that fill a shape without gaps or overlaps. Use appropriate measurements such as cm3. | **5th Grade**: [5.GM.2.1](http://okmathframework.pbworks.com/w/page/112100677/5-GM-2-1) Recognize that the volume of rectangular prisms can be determined by the number of cubes and by the product of the dimensions of the prism. Know that rectangular prisms of different dimensions can have the same volume. | **7th Grade (Vol and SA skip 6th grade):** [7.GM.1.1](http://okmathframework.pbworks.com/w/page/112218550/7-GM-1-1) Using a variety of tools and strategies, develop the concept that surface area of a rectangular prism with rational-valued edge lengths can be found by wrapping the figure with same-sized square units without gaps or overlap. Use appropriate measurements such as cm2. [7.GM.1.2](http://okmathframework.pbworks.com/w/page/112218553/7-GM-1-2) Using a variety of tools and strategies, develop the concept that the volume of rectangular prisms with rational-valued edge lengths can be found by counting the total number of same-sized unit cubes that fill a shape without gaps or overlaps. Use appropriate measurements such as cm3. |

| **Subject and Quarter:** Math - Quarter 4 | | **Grade:**  **5** |
| --- | --- | --- |
| **Standard** [5.GM.2.3](http://okmathframework.pbworks.com/w/page/112124233/5-GM-2-3) Find the perimeter of polygons and create arguments for reasonable values for the perimeter of shapes that include curves. | | **Supporting Standards** [5.GM.3.1](http://okmathframework.pbworks.com/w/page/112100698/5-GM-3-1) Measure and compare angles according to size. [5.GM.3.2](http://okmathframework.pbworks.com/w/page/112100704/5-GM-3-2) Choose an appropriate instrument and measure the length of an object to the nearest whole centimeter or 1/16-inch. [5.GM.3.3](http://okmathframework.pbworks.com/w/page/112100707/5-GM-3-3) Recognize and use the relationship between inches, feet, and yards to measure and compare objects. [5.GM.3.4](http://okmathframework.pbworks.com/w/page/112100710/5-GM-3-4) Recognize and use the relationship between millimeters, centimeters, and meters to measure and compare objects. |
| **Learning Goal** Find the perimeter of polygons and reasonable values for perimeter of shapes with curves | | |
| **Proficiency Scale** | | **Resources** |
| **Score**  **4.0** | Determine missing measurements of a polygon when given its perimeter and information about its remaining sides and angle measures | **Essential Question**   * How do we communicate the outcome of measurement? * What information can we gather from measuring? |
| **Score**  **3.0** | Find the perimeter of polygons and create arguments for reasonable values for the perimeter of shapes that include curves.  * Find the perimeter of polygons with straight edges by finding the sum of the side lengths. * Use estimation to find the approximate perimeter of shapes that have curves. | **Assessments (Pre, Mid, Post)**   * [Evidence 1](https://docs.google.com/document/d/1G5WNXkDzl6HpT_Tb_10GuYSFKpdPxF_N4VYKdubRvw4/edit?usp=sharing) * [Evidence 2](https://docs.google.com/document/d/1C3GJUVE2UAkR1MJd3tyZgJtrGwPdbPnjUMFesUjV81A/edit?usp=sharing) * [Evidence 3](https://docs.google.com/document/d/1uPxAtFVTSTRynuSi6mIY8aSyStkViO8TV2ZDG_QN0mc/edit?usp=sharing) * [Level 4 Opportunity](https://drive.google.com/file/d/1r5FVt5CutK9PEMryVn6GfZsxD8-jNELD/view?usp=sharing)   \*\*\*Nonstandard measurement does not need to be assessed. Practice in class. Or could practice in class and test question could be explaining how to use a nonstandard measuring tool to find the length of a curved side |
| **Score**  **2.0** | Demonstrate basic knowledge about polygons and perimeter   * Define a polygon * Use a nonstandard tool, ie. string, grid paper, etc to measure a curved line. * Understand that units must be the common in order to find the perimeter of a polygon | **Lesson Resources** |
| **Score 1.0** | With help, the student has partial success at level 2 and 3 content. | **Academic Vocabulary**  Perimeter, polygons, inches, feet, yard, millimeter, centimeter, meter |
| **RtI Support** | **Interventions**  Bridges in Mathematics - Measuring Perimeter | **Enrichment** |

| **Vertical Alignment** | | |
| --- | --- | --- |
| **3rd Grade (Perimeter skips 4th grade):** [3.GM.2.1](http://okmathframework.pbworks.com/w/page/112827349/3-GM-2-1) Find perimeter of polygon, given whole number lengths of the sides, in real-world and mathematical situations. | **5th Grade**: [5.GM.2.3](http://okmathframework.pbworks.com/w/page/112124233/5-GM-2-3) Find the perimeter of polygons and create arguments for reasonable values for the perimeter of shapes that include curves. | **6th Grade:** [6.GM.1.3](http://okmathframework.pbworks.com/w/page/111603574/6-GM-1-3) Find the area of right triangles, other triangles, special quadrilaterals, and polygons that can be decomposed into triangles and other shapes to solve real-world and mathematical problems. [7.GM.2.2](http://okmathframework.pbworks.com/w/page/112218562/7-GM-2-2) Find the area and perimeter of composite figures to solve real-world and mathematical problems. |