## Mathematics <br> Standards Based Report Card 2023-2024 <br> 4th Grade

## Scoring Rubric:

3: Meets expectations
2: Approaching expectations
1: Beginning to learn expectations
Blank Box: Not assessed
IE: Insufficient evidence

| Math Priority Standards | Quarter $1$ | Quarter $2$ | Quarter 3 | Quarter 4 |
| :---: | :---: | :---: | :---: | :---: |
| Solves multi-step word problems using the four operations <br> 4.RA.A. 2 Solve multi-step whole number problems involving the four operations and variables and using estimation to interpret the reasonableness of the answer. The expectation of the student is to solve multi-step word problems posed with whole numbers and having whole-number answers using the four operations. Represent these problems using equations with a letter standing for the unknown quantity. Use estimation to assess reasonableness of answers. |  |  |  |  |

## Generate and analyze patterns.

4.RA.C.7 Use words or mathematical symbols to express a rule for a given pattern (e.g. , "starting at zero add three to each term; starting at three add two each time")

## Interprets remainders when dividing.

4.RA.A. 3 Solve whole number division problems involving variables in which remainders need to be interpreted, and justify the solution. (Represent these problems using equations with a letter standing for the unknown quantity. Use estimation to assess reasonableness of answers.

## Solve problems involving measurement and conversions.

4.GM.C. 7 Use the four operations to solve problems involving distances, intervals of time, liquid volume, weight of objects and money. The expectation of the student is to use the four operations to solve word problems involving distances, intervals of time, liquid volume, weight of objects and money, including problems involving simple fractions or decimals.

## Compares Fractions

4.NF.A. 3 Compare two fractions using the symbols $>,=$ or, $<$, and justify the solution. The expectation of the student is to compare two fractions with different numerators and different denominators. (e.g., by creating common denominators or numerators, or by comparing to a benchmark fraction such as $1 / 2$ ) Record the results of comparisons with symbols $>,=,<$, and justify the conclusions. (e.g., by using a visual fraction model)

## Adds and subtracts mixed numbers

4.NF.B. 6 Solve problems involving adding and subtracting fractions with mixed numbers with like denominators. The expectation of the student is to solve problems involving adding and subtracting fractions and mixed numbers with like denominators. (Sums and differences may be expressed in equivalent forms and simplified forms are not required.) (e.g., $1 / 4+2 / 4=3 / 4 ; 21 / 8+3 / 8=24 / 8 ; 31 / 3+2 \frac{2}{3}=53 / 3$ )

## Multiplies fractions by a whole number

4.NF.B. 8 Solve problems involving multiplication of a fraction by a whole number.

## Analyze Data

4.DS.A. 3 Analyze the data in a frequency table, line plot, bar graph, or picture graph. The expectation of the student is to analyze the data in a

| frequency table, line plot, bar graph or picture graph to include determining the mode and range. (At this grade level, fraction operations use only like <br> denominators.) |  |  |  |
| :--- | :--- | :--- | :--- |
| Compares decimals to the hundredths place <br> 4.NF.C.12 Compare two decimals to the hundredths place using the symbols $>$, , or, $<$, and justify the solution. The expectation of the student is to <br> compare two decimals to the hundredths place by reasoning about their size. Record the results of comparisons with symbols $>,=$ or $<$, and justify the <br> conclusions. (e.g., by using number lines, manipulatives or drawings) |  |  |  |
| Calculates area and perimeter of rectangles <br> 4.GM.C.8 Apply the area and perimeter formulas for rectangles to solve problems. (For this grade level, area problems involve whole-number side <br> lengths and division problems involve single digit divisors.) (e.g., find the width of a rectangular room given the area of the flooring and the length.) |  |  |  |
| Identify and estimate angles <br> 4.GM.B.4 Identify and estimate angles and their measure. Understand angles as geometric shapes that are formed wherever two rays share a common <br> endpoint, and understand angles are measured with reference to the degrees of a circle. |  |  |  |
| Classify two dimensional shapes <br> 4.GM.A.2 Classify two-dimensional shapes by their sides and/or angles. (e.g., acute equilateral triangle; if a quadrilateral has two pairs of parallel sides <br> it would be classified as a parallelogram) |  |  |  |


| Priority Standard | 4.RA.A. 2 Solve multi-step whole number problems involving the four operations and variables and using estimation to interpret the reasonableness of the answer. The expectation of the student is to solve multi-step word problems posed with whole numbers and having whole-number answers using the four operations. Represent these problems using equations with a letter standing for the unknown quantity. Use estimation to assess reasonableness of answers. <br> Report Card: Solves multi-step word problems using the four operations |
| :---: | :---: |
| Learning Targets | - I can determine the operation(s) I need to use to solve multi-step word problems. (MP6) <br> - I can add and subtract within 1,000,000 including regrouping. (MP2)(MP3) <br> - I can solve multi-digit multiplication problems. (MP2)(MP3) <br> - I can interpret remainders when solving word problems and defend my reasoning. (MP2)(MP3) <br> - I can write equations for word problems with a letter (variable) standing for the unknown. (MP1) <br> - I can assess the reasonableness of answers using different strategies. (MP3) |
| Common Misconceptions | - Apply the incorrect operation or misapply the correct operation <br> - Complete only part of the problem or ignore or forget to apply essential information in the problem <br> - Uses information that's not needed <br> - Forget to label answer or don't know correct label to use <br> - Doesn't understand reasonableness of solution <br> - Inaccurately regroups <br> - Inaccurately solves multi-digit multiplication problems <br> - Doesn't understand how to use the remainder when recording the solution <br> - Doesn't understand how to identify the unknown using a variable |
| Meeting the Standard 3 | Approaching the Standard <br> Beginning to Learn <br> 2 |
| Student can accurately determine the operations used when evaluating how to solve a multi-step word problem. Student consistently solves word problems to find the correct answer while using variables to represent the equation. | Student can accurately determine the operations used when solving multi-step word problems with some errors in computation. Student struggles to accurately explain their solution. Student may struggle when using variables. <br> Student needs support in solving multi-step word problems. Student is unable to explain their thinking when working toward solutions. |
| Previous Level | write equations for two step problems using whole numbers and the four operations, use letters to represent unknown quantities, know from memory all products of two one-digit numbers. |
| Next Level | write and interpret numerical expressions with brackets, parentheses, and braces <br> perform all four operations with multi-digit whole numbers and with decimals to hundredths subtraction and explain their reasoning used. using concrete models or drawings and strategies based on place value, properties of operations, and/or the relationship between addition and subtraction <br> fluently multiply multi-digit whole numbers using the standard algorithm <br> find whole number quotients with up to four digit dividends and two digit divisors using strategies based on place value, relationship between multiplication and division, and explain using equations, rectangular arrays, and/or area models. <br> *The standard algorithm for division does not need to be mastered until 6th grade. |


| Priority Standard | 4.RA.C. 7 Use words or mathematical symbols to express a rule for a given pattern (e.g. , "starting at zero add three to each term; starting at three add two each time" with one operation) <br> Report Card: Generate and analyze patterns |  |
| :---: | :---: | :---: |
| Learning Targets | - I can use mathematical vocabulary to express a <br> - I can write an equation to match a pattern or a rule | mathematical pattern (MP8) e (MP8) |
| Common Misconceptions | - Student may incorrectly use a wrong operation fo <br> - Student may not see the whole pattern (repeated) <br> - Student may not see how a table (input/output) m | the pattern rule to correctly apply a rule ay help in finding the pattern |
| Meeting the Standard 3 | Approaching the Standard 2 | Beginning to Learn 1 |
| Students can consistently and accurately explain and write an expression to match a pattern that contains one operation. | Students can explain or write an expression to match a pattern that contains one operation. Student may also be able to explain and write an expression for some operational pattern types but not all (i.e. addition or subtraction patterns but not able to see multiplicative patterns) | Students inconsistently explain or write an expression to match a pattern that contains one operation. Students need support to determine which operation is being performed in an arithmetic sequence. |
| Previous Level | In 3rd grade, students used words or explanations to complete patterns. |  |
| Next Level | Students will use this knowledge in 5th grade to generate multiple patterns involving more than one operation. |  |


| Priority Standard | 4.RA.A. 3 Solve whole number division problems involving variables in which remainders need to be interpreted, and justify the solution. (Represent these problems using equations with a letter standing for the unknown quantity. Use estimation to assess reasonableness of answers. <br> Report Card: Interprets remainders when dividing |  |
| :---: | :---: | :---: |
| Learning Targets | - I can use place value strategies, properties of op division to solve division problems up to four digit <br> - I can illustrate and explain division of up to four-dig blocks, equations, arrays, or area models. (MP8) <br> - I can check the reasonableness of my quotient usin <br> - I can use area models, partial products, and find <br> - I can interpret the meaning of the remainder in | ations, or the relationship of multiplication and dividends and one digit divisors. (MP8) it dividends and one-digit divisors using base-10 <br> ng the inverse operation of multiplication. (MP1) partial quotients to divide. <br> the context of a problem. |
| Common Misconceptions | - Using incorrect place value for one of the partial <br> - Students may not have included the remainder in <br> - Students may have added the remainder to the <br> - Students may have multiplied partial products incor | otients. <br> e answer <br> tient <br> ectly (basic facts) |
| Meeting the Standard 3 | Approaching the Standard 2 | Beginning to Learn 1 |
| Students can consistently and accurately illustrate, explain, and interpret remainders for division problems(up to 4 digit dividends and one digit divisors) using various strategies, which can include equations, rectangular arrays, and/or area models. | Students can solve division problems with some errors. Students can sometimes illustrate and explain division problems, but may sometimes misinterpret a remainder given a problem situation. | Students consistently misinterprets remainders given a problem situation. Students may also inconsistently illustrate and explain division problems (up to 4 digit dividends and one digit divisors) using various strategies, which can include equations, rectangular arrays, and/or area models. |
| Previous Level | In 3rd grade, students gained a conceptual understanding of whole numbers as a number of equal groups or as a number of objects in each group. They became fluent with basic multiplication and division facts, learned how division and multiplication are related, and worked with fact families of related multiplication and division facts. |  |
| Next Level | In 5th grade, students will find quotients of dividends with up to four digits and divisors with up to two digits. *Students are not expected to master the standard algorithm for division until 6th grade. |  |


| Priority Standard | 4.GM.C. 7 Use the four operations to solve problems involving distances, intervals of time, liquid volume, weight of objects and money. The expectation of the student is to use the four operations to solve word problems involving distances, intervals of time, liquid volume, weight of objects and money, including problems involving simple fractions or decimals. <br> Report Card: Solve problems involving measurement and conversions |
| :---: | :---: |
| Learning Targets | - I can describe the approximate sizes of units within one measurement system (metric, customary, time, etc.) (MP5)(MP6) <br> - I can compare larger and smaller units within the same measurement system. (MP5)(MP6) <br> - I can convert a given measurement into an equivalent unit when going from a larger to a smaller unit. (MP6)(MP7) <br> - I know the units for measuring time, length, weight, mass, and volume in the customary and metric systems of measurement. <br> - I can solve measurement word problems involving distances, time, mass, and money. (MP1)(MP6) <br> - I can construct a number story incorporating distance, time, mass, or money. (MP1)(MP6) (MP2) <br> - I can represent measurement quantities using diagrams with a measurement scale, such as a number line. (MP5)(MP6)(MP2) <br> - I can make sense of real world problems involving distances, intervals of time, liquid volumes, masses of objects, and money. (MP1) <br> Teacher Note: km, lb, oz, mL, sec, gallons, cups, quarts, and pints are all new to 4th grade standards students do not have prior knowledge of using these measurement units |
| Common Misconceptions | - Apply the incorrect operation or misapply the correct operation <br> - Complete only part of the problem or ignore or forget to apply essential information in the problem <br> - Uses information that's not needed <br> - Forget to label answer or don't know correct label to use <br> - Doesn't understand reasonableness of solution <br> - Doesn't understand how to use the remainder when recording the solution <br> - Doesn't understand how to identify the unknown using a variable <br> - Confuse units or conversion factors or make a conversion mistake <br> - Apply an operation before first converting to the same unit |
| Meeting the Standard $3$ | Approaching the Standard <br> Beginning to Learn <br> 2 |
| Student can use a variety of strategies to accurately solve and explain their solution to word problems involving distance, time, liquid volumes, mass, and money, including simple fractions and decimals and problems that require expressing measurements given in a larger unit in terms of a smaller unit. | Student can sometimes use a variety of Student is inconsistent in solving word problems <br> strategies to accurately solve and explain their <br> solution to word problems involving distance, time, <br> involving distance, time, liquid volumes, mass, and <br> liquid volumes, mass, and money, including <br> moneluding simple fractions and decimals in the <br> simple fractions and decimals in the same units. <br> same units.  |
| Previous Level | common measurement units, time intervals and elapsed time, how to measure using different units, word problems using all four operations with masses or volumes using the same units |
| Next Level | convert units of measurement, including use of division, from smaller units to larger units to solve problems |


| Priority Standard | 4.NF.A. 3 Compare two fractions using the symbols >, = or, <, and justify the solution. The expectation of the student is to compare two fractions with different numerators and different denominators. (e.g., by creating common denominators or numerators, or by comparing to a benchmark fraction such as $1 / 2$ ) Record the results of comparisons with symbols $>,=,<$, and justify the conclusions. ( e.g., by using a visual fraction model) <br> Report Card: Compares fractions |  |
| :---: | :---: | :---: |
| Learning Targets | - I know that I can only compare two fractions if they refer to the same whole. <br> - I can reason about the numbers in a fraction when comparing them. (MP2) (Ex. In the fraction $1 / 8$, I know that the 8 does not equal 8 , but eighths.) <br> - I can compare two fractions with different numerators or denominators using appropriate mathematical symbols (>,<,=). (MP1)(MP6) <br> - I can prove my fractions comparisons using visual models. (MP3)(MP5) <br> - I can use benchmark fractions to compare fractions. <br> - I can generate equivalent fractions <br> Teacher Note: Grade 4 expectations in this domain are limited to fractions with denominators 2, 3, 4, 5, 6, 8, 10, 12, and 100. |  |
| Common Misconceptions | - Students may not understand the reason for com (numerators). <br> - Students may not understand when it is approp <br> - Students may compare only the numerators or <br> - Students may use an incorrect equivalent fract <br> - Students may confuse the symbols < and > . <br> - Students may place fractions on a number line | aring fractions with the same number of parts <br> to use a benchmark fraction. the denominators. o compare the original fractions. <br> rrectly. |
| Meeting the Standard 3 | Approaching the Standard 2 | Beginning to Learn 1 |
| Student can consistently and accurately compare two fractions with different numerators and different denominators by creating common denominators or numerators, comparing to a benchmark fraction (such as $1 / 2$ ), or using a visual model and are able to justify their conclusions. | Student can sometimes compare two fractions accurately with different numerators and different denominators. Student struggles to use a variety of methods such as creating common denominators or numerators, comparing to a benchmark fraction (such as $1 / 2$ ), or using a visual model and are able to justify their conclusions. | Student inaccurately compares two fractions with different numerators and different denominators by creating common denominators or numerators, comparing to a benchmark fraction (such as $1 / 2$ ), or using visual models and are able to justify their conclusions. |
| Previous Level | In 3rd grade, students used models to compare two fractions with the same numerator or the same denominator by reasoning about their size. |  |
| Next Level | In 5th grade, students will apply the understanding of fraction comparison when they learn to compare decimals. |  |


| Priority Standard | 4.NF.B. 6 Solve problems involving adding and subtracting fractions with mixed numbers with like denominators. The expectation of the student is to solve problems involving adding and subtracting fractions and mixed numbers with like denominators. (Sums and differences may be expressed in equivalent forms and simplified forms are not required.) (e.g., $1 / 4+2 / 4=3 / 4 ; 21 / 8+3 / 8=24 / 8 ; 31 / 3+22 / 3=5$ 3/3) <br> Report Card: Adds and subtracts mixed numbers |
| :---: | :---: |
| Learning Targets | - I know that a fraction with a numerator greater than 1 can be decomposed. (MP2) <br> - I know that a fraction with a numerator greater than 1 is built from unit fractions. (MP2) <br> - I know that addition of fractions is joining parts together that refer to the same whole. (MP2) <br> - I know that subtraction of fractions is separating parts that refer to the same whole. (MP2) <br> - I can decompose a fraction and a mixed number in more than one way .(MP2) <br> - I can prove my fraction and mixed number decomposition using equations and visual models. (MP3)(MP5)(MP8) <br> - I can add and subtract fractions with like denominators using a variety of strategies. (MP4) <br> - I can construct a story problem that incorporates adding and/or subtracting fractions with like denominators. (MP1) <br> - I can convert a mixed number into an equivalent fraction by using visual models. (MP2, MP5) <br> - I can add and subtract mixed numbers with like denominators using a variety of strategies such as number lines, visual models, real world models, converting mixed numbers to improper fractions, (MP2) <br> Teacher Note: Grade 4 expectations in this domain are limited to fractions with denominators 2, 3, 4, 5, 6, $8,10,12$, and 100. |
| Common Misconceptions | - Students may have added or subtracted both the numerators and the denominators <br> - Students may have used the incorrect operation to solve the equation <br> - Students may have inaccurately added or subtracted the whole numbers <br> - Interpret units on a number line incorrectly <br> - Students may not understand how to write a mixed number as a fraction greater than 1 (improper fraction). <br> - Students may think that the sum or difference of mixed numbers must be a mixed number. |
| Meeting the Standard 3 | Approaching the Standard <br> Beginning to Learn <br> 2 <br> 1 |
| Student can consistently and accurately add and subtract mixed numbers with like denominators using a variety of strategies such as number lines, visual models, real world models, or converting mixed numbers to improper fractions. | Student can sometimes add and subtract mixed numbers with like denominators. Student struggles using a variety of strategies such as number lines, visual models, real world models, or converting mixed numbers to improper fractions. <br> Student inaccurately adds and subtracts mixed numbers with like denominators. Student is unable to use a variety of strategies such as number lines, visual models, real world models, or converting mixed numbers to improper fractions. |
| Previous Level | fractions can be decomposed into other fractions, compare fractions on a number line, and find equivalent fractions. |
| Next Level | add and subtract fractions and mixed numbers with unlike denominators, multiply fractions with fractions or mixed numbers, and estimate products for reasonableness, divide fractions by whole numbers and whole numbers by unit fractions |


| Priority Standard | 4.NF.B. 8 Solve problems involving multiplication of a fraction by a whole number. Report Card: Multiplies fractions by a whole number |
| :---: | :---: |
| Learning Targets | - I know that multiplication is repeated addition. <br> - I know that a fraction with a numerator greater than 1 is a multiple of the unit fraction. <br> - I can multiply a fraction by a whole number. (MP2) <br> - I can represent fractions using various multiplication equations. (MP4) <br> - I can solve word problems involving multiplication of fractions by a whole number. (MP1) <br> - I can construct an argument explaining my strategy for how I solved my word problem using manipulatives, objects, drawings, and/or actions. (MP3) <br> - I can construct a story problem that incorporates multiplying a fraction by a whole number. (MP1) <br> - I can prove my multiplication is correct by using a visual model (MP3 |
| Common Misconceptions | - Students may make a basic multiplication fact error. <br> - Students may multiply the whole number by the denominator instead of the numerator. <br> - Students may multiply the whole number by the denominator and the numerator. <br> - Students may not make the connection between repeated addition and multiplication of a fraction by a whole number. |
| Meeting the Standard 3 | Approaching the Standard <br> Beginning to Learn <br> 2 <br> 1 |
| Students can consistently and accurately multiply a fraction by a whole number using a variety of strategies (manipulatives, drawings, and standard algorithm). Student can explain their thinking and construct an argument to support their answer. | Students can multiply a fraction by a whole number with some errors. Student may struggle to use visual and paper pencil strategies or is unable to form an argument to support their answer. <br> Students struggles to multiply a fraction by a whole number without teacher support. Student is unable to explain their thinking when working through problems. |
| Previous Level | In 3rd grade, students develop fluency with multiplication of single digit numbers. Student will also generate equivalent fractions. |
| Next Level | In 5th grade, students will multiply fractions with fractions or mixed numbers, and estimate products for reasonableness. Students will divide fractions by whole numbers and whole numbers by unit fractions. |


| Priority Standard | 4.DS.A. 3 Analyze the data in a frequency table, line plot, bar graph, or picture graph. The expectation of the student is to analyze the data in a frequency table, line plot, bar graph or picture graph to include determining the mode and range. (At this grade level, fraction operations use only like denominators.) Report card: Analyze Data |  |
| :---: | :---: | :---: |
| Learning Targets | - I can ask questions about the data collected using mathematical vocabulary (MP6) <br> - I can analyze the data in a frequency table, line plot, bar graph or picture graphs (mP6 MP8) <br> - I can interpret what I learned from the data to answer questions. (MP1) <br> - I can find the mode in a set of data <br> - I can find the range in a set of dat |  |
| Common Misconceptions | - When creating their own graphs or charts, students may struggle to line up pictures or tally's resulting in false conclusions such as which category has more or less. |  |
| Meeting the Standard $3$ | Approaching the Standard 2 | Beginning to Learn 1 |
| Student is able to independently draw conclusions and accurately solve problems about the data using picture graphs, bar graphs, line plots, and frequency tables. | Student can solve problems using a picture graph, bar graph, line plots, and frequency tables, but may need support to draw conclusions about the graphs. Or, student may be able to solve and draw conclusions with some types of graphs but not all. | Student needs support to draw conclusions and solve problems about the data using picture graphs, bar graphs, line plots, and frequency tables. |
| Next Level | - Finding Mean, median, and mode <br> - Analyzing data in the first quadrant grid |  |


| PriorityStandard | 4.NF.C. 12 Compare two decimals to the hundredths place using the symbols >, $=$ or, $<$, and justify the solution. The expectation of the student is to compare two decimals to the hundredths place by reasoning about their size. Record the results of comparisons with symbols >, $=$ or <, and justify the conclusions. (e.g., by using number lines, manipulatives or drawings) <br> Report Card: Compares decimals to the hundredths place |  |
| :---: | :---: | :---: |
| Learning Targets | - I know that the same amount can be written as both <br> - I can explain the relationship between decimals and <br> - I can use decimals to describe fractions with den <br> - I can use a number line to explain the relationship <br> - I can compare two decimals to the hundredths pla (MP4)(MP6) <br> - I can prove my decimal comparisons using mode hundreds grid, or place value chart. (MP3) | oth a fraction and a decimal. <br> and fractions. (MP3) <br> ominators with 10 and 100. (MP3)(MP7) <br> between equivalent fractions and decimals (MP2) ace using appropriate mathematical symbols (>,<,=). <br> Is which could include an area model, a number line, |
| Common Misconceptions | - Count tick marks on a number line incorrectly <br> - Students may think that the tenths have two digit two digits to the left of the decimal point. <br> - Use a decimal point to relace a fraction bar. <br> - Students may not know where the decimal point | to the right of the decimal point because tens have <br> hould be placed |
| Meeting the Standard 3 | Approaching the Standard 2 | Beginning to Learn 1 |
| Students can consistently and accurately compare two decimals to the hundredths by using the symbols >, =, or <, and by justifying their conclusions using visual models such as an area model, number line, hundreds grid, or place value chart. | Students can compare two decimals to the hundredths by using the symbols >, $=$, or <, but sometimes make errors when addressing misconceptions. Student struggles to justify their conclusions using visual models such as an area model, number line, hundreds grid, or place value chart. | Student needs support in comparing decimals using comparing symbols. Student needs more support in using visual models to build an understanding of comparing numbers. |
| Previous Level | In 3rd grade, students develop equivalent fractions using visual models, multiplication, and division to find equivalent fractions and have an understanding of unit fractions. Students also used the symbols >,<, and = to compare fractions. |  |
| Next Level | In 5th grade, students will read, write, compare, round, and perform all four operations with decimals. |  |


| Priority Standard | 4.GM.C. 8 Apply the area and perimeter formulas for rectangles to solve problems. (For this grade level, area problems involve whole-number side lengths and division problems involve single digit divisors.) (e.g., find the width of a rectangular room given the area of the flooring and the length.) Report Card: Calculates area and perimeter of rectangles |  |
| :---: | :---: | :---: |
| Learning Targets | - I can use area and perimeter formulas to solve problems. (MP8) <br> - I can represent the context of an area and perimeter word problem using models. (MP1)(MP4)(MP8) <br> - I can construct an argument explaining my strategy using drawings or manipulatives. (MP3) <br> - I can relate area to multiplication strategies. (MP3) |  |
| Common Misconceptions | - Students may use the perimeter formula to find the area, or the area formula to find the perimeter <br> - Students may think that doubling the length and width will result in doubling the area <br> - Miscount the length or width of a rectangle shown on the grid <br> - Add length and width but forget to multiply by 2 to find the perimeter |  |
| Meeting the Standard 3 | Approaching the Standard 2 | Beginning to Learn 1 |
| Student can consistently and accurately apply the area and perimeter formulas for rectangles in real world and mathematical problems. | Student can apply the area or perimeter formulas for rectangles in real world and mathematical problems with some errors, | Student struggles to apply an understanding of area and perimeter when working with real world and mathematical problems. |
| Previous Level | In 3rd grade, students began developing their understanding of perimeter and area with visual models and related these concepts to multiplication. Students also found perimeter given side lengths or found an unknown side length. |  |
| Next Level | In 5th grade, students will use their understanding of area to develop and solve problems involving volume of solid figures. |  |


| Power Standard | 4.GM.B. 4 Identify and estimate angles and their measure. Understand angles as geometric shapes that are formed wherever two rays share a common endpoint, and understand angles are measured with reference to the degrees of a circle. <br> Report Card: Identify and estimate angles |  |
| :---: | :---: | :---: |
| Learning Targets | - I can draw points, lines (parallel \& perpendicular), line segments, rays, and angles (right, acute, obtuse). (MP5, MP6) <br> - I can identify points, lines, line segments, rays, and angles in other shapes. (MP7) <br> - I can measure angles and classify them based on their measurements (right, acute, obtuse). (MP5) |  |
| Common Misconceptions | - Student may confuse, incorrectly identify, or ignore some attributes of different figures <br> - Student may not recognize angles greater than or less than ninety degress <br> - Think that a figure cannot have both parallel and perpendicular sides. <br> - Assume if all sides of a figure are same in length, all angles have the same measure. <br> - Think an obtuse or a right triangle is acute because it has more acute angles. |  |
| Meeting the Standard 3 | Approaching the Standard $2$ | Beginning to Learn 1 |
| Student can consistently and accurately identify or estimate angles (right, acute, obtuse) formed by two rays or as parts of geometric shapes. | Student sometimes mis-identify or inaccurately estimate angles (right, acute, obtuse) formed by two rays or as parts of geometric shapes. (May only be able to identify two types of angles.) | Student consistently mis-identify or inaccurately estimates angles (right, acute, obtuse) formed by two rays or as parts of geometric shapes. (May only be able to identify one type of angle.) |
| Previous Level | In 3rd grade, students classified geometric figures according to properties such as the presence or absence of right angles and relationships between sides (e.g. opposite sides of equal length). Students also learned to express the area of each part of a partitioned shape as a unit fraction of a whole. |  |
| Next Level | In 5th grade, students will categorize polygons based on their attributes and relate the categories in a hierarchy. |  |


| Power Standard | 4.GM.A. 2 Classify two-dimensional shapes by their sides and/or angles. (e.g., acute equilateral triangle; if a quadrilateral has two pairs of parallel sides it would be classified as a parallelogram) <br> Report Card: Classify two- dimensional shapes |  |
| :---: | :---: | :---: |
| Learning Targets | - I can draw points, lines (parallel \& perpendicular), line segments, rays, and angles (right, acute, obtuse). (MP5, MP6) <br> - I can identify points, lines, line segments, rays, and angles in other shapes. (MP7) <br> - I can create clues to describe a two-dimensional figure based on its attributes. (MP1)(MP6) <br> - I can measure angles and classify them based on their measurements (right, acute, obtuse). (MP5) |  |
| Common Misconceptions | - Student may confuse, incorrectly identify, or <br> - Think that a figure cannot have both paralle <br> - Assume if all sides of a figure are the same <br> - Think an obtuse or a right triangle is acute | e some attributes of different figures perpendicular sides. ngth, all angles have the same measure. se it has more acute angles. |
| Meeting the Standard 3 | Approaching the Standard 2 | Beginning to Learn 1 |
| Student can consistently and accurately classify two-dimensional figures using their side and angle relationships knowing that some shapes may belong in more than one category. | Student can sometimes classify two-dimensional figures using their side and angle relationships. Or students may sometimes not recognize that some shapes can be in more than one category. | Student need support to classify two-dimensional figures using their side and angle relationships. Student need support to know that some shapes may belong in more than one category. |
| Previous Level | In 3rd grade, students classified geometric figures according to properties such as the presence or absence of right angles and relationships between sides (e.g. opposite sides of equal length). Students also learned to express the area of each part of a partitioned shape as a unit fraction of a whole. |  |
| Next Level | In 5th grade, students will categorize polygons based on their attributes and relate the categories in a hierarchy. |  |

