

Mathematics

Number Sense

Read and write whole numbers in the millions.				
1.1 Read and write whole numbers in the millions.				
5 - Advanced	4 - Proficient	3 - Basic	2 - Below Basic	1 - Far Below Basic
<p>Student often exceeds the grade level standards and produces work that demonstrates a thorough knowledge of grade level standards.</p> <p>Student consistently demonstrates the ability to:</p> <ul style="list-style-type: none"> • read and write whole numbers to one billion and above in standard, expanded, word, and short word form, • identify place values to the billions place and above. 	<p>Student regularly demonstrates proficient performance of the grade level standards and produces work that demonstrates adequate knowledge of grade level standards.</p> <p>Student demonstrates the ability to:</p> <ul style="list-style-type: none"> • read and write whole numbers through 999,999,999 in standard, expanded, word, and short word form, • identify place values up to the hundred millions place. 	<p>Student often demonstrates basic performance on grade level standards and produces work that demonstrates partial knowledge of grade level standards.</p> <p>With direct instruction and teacher support, student often demonstrates the ability to:</p> <ul style="list-style-type: none"> • read and write whole numbers through 999,999,999 in standard, expanded, word, and short word form, • identify place values up to the hundred millions place. <p>Student may be able to:</p> <ul style="list-style-type: none"> • count and read whole numbers through 999,999,999, • write whole numbers through 100,000 in standard, expanded, word, and short word form, • identify place value to the 100,000 place. 	<p>Student often demonstrates below basic performance on grade level standards and produces work that demonstrates a limited knowledge of grade level standards.</p> <p>With direct instruction and teacher support, student may demonstrate limited ability to:</p> <ul style="list-style-type: none"> • read and write whole numbers through 999,999,999 in standard, expanded, word, and short word form, • identify place values up to the hundred millions place. <p>Student may be able to:</p> <ul style="list-style-type: none"> • count and read whole numbers up to 10,000, • write numbers to 10,000 in standard, expanded, word, and short word form, • identify place value to the 100,000 place. 	<p>Student is not meeting grade level standards and produces work that demonstrates little knowledge of grade level standards.</p> <p>With direct instruction and teacher support, student may be unable to:</p> <ul style="list-style-type: none"> • read and write whole numbers through 999,999,999 in standard, expanded, word, and short word form, • identify place values up to the hundred millions place. <p>Student may be able to:</p> <ul style="list-style-type: none"> • count and read whole numbers up to 10,000, • write numbers to 10,000 in standard, expanded, word, and short word form, • identify place value to the 100,000 place.
Rubric has not changed-continue to work towards proficiency				
Number Sense - Fourth Grade, Fourth Quarter				

Order and compare whole numbers and decimals to two decimal places.

1.2 Order and compare whole numbers and decimals to two decimal places.

5 - Advanced	4 - Proficient	3 - Basic	2 - Below Basic	1 - Far Below Basic
<p>Student often exceeds the grade level standards and produces work that demonstrates a thorough knowledge of grade level standards.</p> <p>Student consistently demonstrates the ability to:</p> <ul style="list-style-type: none"> order and compare whole numbers to one billion and above, compare amounts of money. 	<p>Student regularly demonstrates proficient performance of the grade level standards and produces work that demonstrates adequate knowledge of grade level standards.</p> <p>Student demonstrates the ability to:</p> <ul style="list-style-type: none"> order and compare whole numbers through 999,999,999, compare amounts of money. 	<p>Student often demonstrates basic performance on grade level standards and produces work that demonstrates partial knowledge of grade level standards.</p> <p>With direct instruction and teacher support, student often demonstrates the ability to:</p> <ul style="list-style-type: none"> order and compare whole numbers through 999,999,999, compare amounts of money. 	<p>Student often demonstrates below basic performance on grade level standards and produces work that demonstrates a limited knowledge of grade level standards.</p> <p>With direct instruction and teacher support, student may demonstrate limited ability to:</p> <ul style="list-style-type: none"> order and compare whole numbers through 999,999,999, compare amounts of money. <p>Students may be able to:</p> <ul style="list-style-type: none"> order and compare whole numbers through 99,999. compare amounts of money. 	<p>Student is not meeting grade level standards and produces work that demonstrates little knowledge of grade level standards.</p> <p>With direct instruction and teacher support, student may be unable to:</p> <ul style="list-style-type: none"> order and compare whole numbers through 999,999,999, compare amounts of money. <p>Students may be able to:</p> <ul style="list-style-type: none"> order and compare whole numbers through 9,999. compare amounts of money.

Rubric has not changed – continue to work towards proficiency.

Round whole numbers through the millions to the nearest ten, hundred, thousand, ten thousand, or hundred thousand.

1.3 Round whole numbers through the millions to the nearest ten, hundred, thousand, ten thousand, or hundred thousand.

5 - Advanced	4 - Proficient	3 - Basic	2 - Below Basic	1 - Far Below Basic
<p>Student often exceeds the grade level standards and produces work that demonstrates a thorough knowledge of grade level standards.</p> <p>Student consistently demonstrates the ability to:</p> <ul style="list-style-type: none"> round whole numbers in the millions and above. 	<p>Student regularly demonstrates proficient performance of the grade level standards and produces work that demonstrates adequate knowledge of grade level standards.</p> <p>Student demonstrates the ability to:</p> <ul style="list-style-type: none"> round whole numbers through the millions. 	<p>Student often demonstrates basic performance on grade level standards and produces work that demonstrates partial knowledge of grade level standards.</p> <p>With direct instruction and teacher support, student often demonstrates the ability to:</p> <ul style="list-style-type: none"> round whole numbers through the millions. 	<p>Student often demonstrates below basic performance on grade level standards and produces work that demonstrates a limited knowledge of grade level standards.</p> <p>With direct instruction and teacher support, student may demonstrate limited ability to:</p> <ul style="list-style-type: none"> round whole numbers through the millions. 	<p>Student is not meeting grade level standards and produces work that demonstrates little knowledge of grade level standards.</p> <p>With direct instruction and teacher support, student may be unable to:</p> <ul style="list-style-type: none"> round whole numbers through the millions.

Rubric has not changed – continue to work towards proficiency.

Use concepts of negative numbers (e.g., on a number line, in counting, temperature, in "owing").				
1.8 Use concepts of negative numbers (e.g., on a number line, in counting, temperature, in "owing").				
5 - Advanced	4 - Proficient	3 - Basic	2 - Below Basic	1 - Far Below Basic
<p>Student often exceeds the grade level standards and produces work that demonstrates a thorough knowledge of grade level standards.</p> <p>Student consistently demonstrates the ability to:</p> <ul style="list-style-type: none"> • write an integer on a number line, • solve problems involving negative numbers using a number line. 	<p>Student regularly demonstrates proficient performance of the grade level standards and produces work that demonstrates adequate knowledge of grade level standards.</p> <p>Student demonstrates the ability to:</p> <ul style="list-style-type: none"> • write an integer on a number line, • solve problems involving negative numbers using a number line. 	<p>Student often demonstrates basic performance on grade level standards and produces work that demonstrates partial knowledge of grade level standards.</p> <p>With direct instruction and teacher support, student often demonstrates the ability to:</p> <ul style="list-style-type: none"> • write an integer on a number line, • solve problems involving negative numbers using a number line. 	<p>Student often demonstrates below basic performance on grade level standards and produces work that demonstrates a limited knowledge of grade level standards.</p> <p>With direct instruction and teacher support, student often demonstrates the limited ability to:</p> <ul style="list-style-type: none"> • write an integer on a number line, • solve problems involving negative numbers using a number line. 	<p>Student is not meeting grade level standards and produces work that demonstrates little knowledge of grade level standards.</p> <p>With direct instruction and teacher support, student may be unable to:</p> <ul style="list-style-type: none"> • write an integer on a number line, • solve problems involving negative numbers using a number line.

Rubric has not changed – continue to work towards proficiency.

Identify on a number line the relative position of positive fractions, positive mixed numbers, and positive decimals to two decimal places.

1.9 Identify on a number line the relative position of positive fractions, positive mixed numbers, and positive decimals to two decimal places.

5 - Advanced	4 - Proficient	3 - Basic	2 - Below Basic	1 - Far Below Basic
<p>Student often exceeds the grade level standards and produces work that demonstrates a thorough knowledge of grade level standards.</p> <p>Student consistently demonstrates the ability to:</p> <ul style="list-style-type: none"> • read and use a number line to find equivalent fractions, • read and use a number line to compare and order fractions with like or unlike denominators, • read and use a number line to write mixed numbers. 	<p>Student regularly demonstrates proficient performance of the grade level standards and produces work that demonstrates adequate knowledge of grade level standards.</p> <p>Student demonstrates the ability to:</p> <ul style="list-style-type: none"> • read and use a number line to find equivalent fractions, • read and use a number line to compare and order fractions with like or unlike denominators, • read and use a number line to write mixed numbers. 	<p>Student often demonstrates basic performance on grade level standards and produces work that demonstrates partial knowledge of grade level standards.</p> <p>With direct instruction and teacher support, student often demonstrates the ability to:</p> <ul style="list-style-type: none"> • read and use a number line to find equivalent fractions, • read and use a number line to compare and order fractions with like or unlike denominators, • read and use a number line to write mixed numbers. 	<p>Student often demonstrates below basic performance on grade level standards and produces work that demonstrates a limited knowledge of grade level standards.</p> <p>With direct instruction and teacher support, student often demonstrates the limited ability to:</p> <ul style="list-style-type: none"> • read and use a number line to find equivalent fractions, • read and use a number line to compare and order fractions with like or unlike denominators, • read and use a number line to write mixed numbers. 	<p>Student is not meeting grade level standards and produces work that demonstrates little knowledge of grade level standards.</p> <p>With direct instruction and teacher support, student may be unable to:</p> <ul style="list-style-type: none"> • read and use a number line to find equivalent fractions, • read and use a number line to compare and order fractions with like or unlike denominators, • read and use a number line to write mixed numbers.

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Estimate and compute the sum or difference of whole numbers and positive decimals two places.				
2.1 Estimate and compute the sum or difference of whole numbers and positive decimals to two places.				
5 - Advanced	4 - Proficient	3 - Basic	2 - Below Basic	1 - Far Below Basic
<p>Student often exceeds the grade level standards and produces work that demonstrates a thorough knowledge of grade level standards.</p> <p>Student consistently demonstrates the ability to:</p> <ul style="list-style-type: none"> • round whole numbers in order to estimate sums or differences, • round dollar amounts in order to estimate sums or differences, • compute the sums or differences of whole numbers and decimals, • round decimals to the hundreds place, • compute the sum or difference of money. 	<p>Student regularly demonstrates proficient performance of the grade level standards and produces work that demonstrates adequate knowledge of grade level standards.</p> <p>Student demonstrates the ability to:</p> <ul style="list-style-type: none"> • round whole numbers in order to estimate sums or differences, • round dollar amounts in order to estimate sums or differences, • compute the sums or differences of whole numbers and decimals, • round decimals to the hundreds place, • compute the sum or difference of money. 	<p>Student often demonstrates basic performance on grade level standards and produces work that demonstrates partial knowledge of grade level standards.</p> <p>With direct instruction and teacher support, student often demonstrates the ability to:</p> <ul style="list-style-type: none"> • round whole numbers in order to estimate sums or differences, • round dollar amounts in order to estimate sums or differences, • compute the sums or differences of whole numbers and decimals, • round decimals to the hundreds place, • compute the sum or difference of money. <p>Student may be able to:</p> <ul style="list-style-type: none"> • find the sum or difference of two numbers up to 10,000 with regrouping. 	<p>Student often demonstrates below basic performance on grade level standards and produces work that demonstrates a limited knowledge of grade level standards.</p> <p>With direct instruction and teacher support, student may demonstrate limited ability to:</p> <ul style="list-style-type: none"> • round whole numbers in order to estimate sums or differences, • round dollar amounts in order to estimate sums or differences, • compute the sums or differences of whole numbers and decimals, • round decimals to the hundreds place, • compute the sum or difference of money. <p>Student may be able to:</p> <ul style="list-style-type: none"> • find the sum or difference of two numbers up to 10,000 without regrouping. 	<p>Student is not meeting grade level standards and produces work that demonstrates little knowledge of grade level standards.</p> <p>With direct instruction and teacher support, student may be unable to:</p> <ul style="list-style-type: none"> • round whole numbers in order to estimate sums or differences, • round dollar amounts in order to estimate sums or differences, • compute the sums or differences of whole numbers and decimals, • round decimals to the hundreds place, • compute the sum or difference of money. <p>Student may be able to:</p> <ul style="list-style-type: none"> • compute sums but not differences.

Solve problems involving multiplication of multi-digit numbers by two-digit numbers.

3.3 Solve problems involving multiplication of multi-digit numbers by two-digit numbers.

5 - Advanced	4 - Proficient	3 - Basic	2 - Below Basic	1 - Far Below Basic
<p>Student often exceeds the grade level standards and produces work that demonstrates a thorough knowledge of grade level standards.</p> <p>Student consistently demonstrates the ability to:</p> <ul style="list-style-type: none"> multiply mentally when both factors are multiples of 10 or 100, multiply by two-digit numbers with regrouping, multiply numbers of three or more digits by two-digit numbers with regrouping. 	<p>Student regularly demonstrates proficient performance of the grade level standards and produces work that demonstrates adequate knowledge of grade level standards.</p> <p>Student demonstrates the ability to:</p> <ul style="list-style-type: none"> multiply mentally when both factors are multiples of 10 or 100, multiply by two-digit numbers with regrouping, multiply three-digit numbers by two-digit numbers with regrouping. 	<p>Student often demonstrates basic performance on grade level standards and produces work that demonstrates partial knowledge of grade level standards.</p> <p>With direct instruction and teacher support, student often demonstrates the ability to:</p> <ul style="list-style-type: none"> multiply mentally when both factors are multiples of 10 or 100, multiply by two-digit numbers with regrouping, <p>Student may be able to:</p> <ul style="list-style-type: none"> multiply three-digit numbers by two-digit numbers with regrouping. 	<p>Student often demonstrates below basic performance on grade level standards and produces work that demonstrates a limited knowledge of grade level standards.</p> <p>With direct instruction and teacher support, student often demonstrates the limited ability to:</p> <ul style="list-style-type: none"> multiply mentally when both factors are multiples of 10 or 100, <p>Student may be able to:</p> <ul style="list-style-type: none"> multiply by two-digit numbers with regrouping, multiply three-digit numbers by two-digit numbers with regrouping. 	<p>Student is not meeting grade level standards and produces work that demonstrates little knowledge of grade level standards.</p> <p>With direct instruction and teacher support, student may be unable to:</p> <ul style="list-style-type: none"> multiply mentally when both factors are multiples of 10 or 100, multiply by two-digit numbers with regrouping, multiply three-digit numbers by two-digit numbers with regrouping.

Rubric has not changed – continue to work towards proficiency.

Solve problems involving division of multi-digit numbers by one-digit numbers.

3.4 Solve problems involving division of multi-digit numbers by one-digit numbers.

5 - Advanced	4 - Proficient	3 - Basic	2 - Below Basic	1 - Far Below Basic
<p>Student often exceeds the grade level standards and produces work that demonstrates a thorough knowledge of grade level standards.</p> <p>Student consistently demonstrates the ability to:</p> <ul style="list-style-type: none"> • divide two-digit dividends by one-digit divisors with and without remainders (no regrouping), • divide two-digit dividends by one-digit divisors with and without remainders when regrouping is necessary, • divide mentally using basic facts and patterns, • divide three-digit dividends by one-digit divisors (with and without remainders), • divide three-digit dividends by one-digit divisors (zeros in the quotient), 	<p>Student regularly demonstrates proficient performance of the grade level standards and produces work that demonstrates adequate knowledge of grade level standards.</p> <p>Student demonstrates the ability to:</p> <ul style="list-style-type: none"> • divide two-digit dividends by one-digit divisors with and without remainders (no regrouping), • divide two-digit dividends by one-digit divisors with and without remainders when regrouping is necessary, • divide mentally using basic facts and patterns, • divide three-digit dividends by one-digit divisors (with and without remainders), 	<p>Student often demonstrates basic performance on grade level standards and produces work that demonstrates partial knowledge of grade level standards.</p> <p>With direct instruction and teacher support, student often demonstrates the ability to:</p> <ul style="list-style-type: none"> • divide two-digit dividends by one-digit divisors with and without remainders (no regrouping), • divide two-digit dividends by one-digit divisors with and without remainders when regrouping is necessary, • divide mentally using basic facts and patterns. <p>Student may be able to:</p> <ul style="list-style-type: none"> • divide three-digit dividends by one-digit divisors (with and without remainders), 	<p>Student often demonstrates below basic performance on grade level standards and produces work that demonstrates a limited knowledge of grade level standards.</p> <p>With direct instruction and teacher support, student often demonstrates the limited ability to:</p> <ul style="list-style-type: none"> • divide two-digit dividends by one-digit divisors with and without remainders (no regrouping), • divide two-digit dividends by one-digit divisors with and without remainders when regrouping is necessary, • divide mentally using basic facts and patterns. <p>Student may be able to:</p> <ul style="list-style-type: none"> • divide three-digit dividends by one-digit divisors (with and without remainders), 	<p>Student is not meeting grade level standards and produces work that demonstrates little knowledge of grade level standards.</p> <p>With direct instruction and teacher support, student may be unable to:</p> <ul style="list-style-type: none"> • divide two-digit dividends by one-digit divisors with and without remainders (no regrouping), • divide two-digit dividends by one-digit divisors with and without remainders when regrouping is necessary, • divide mentally using basic facts and patterns, • divide three-digit dividends by one-digit divisors (with and without remainders),

Solve problems involving division of multi-digit numbers by one-digit numbers.

3.4 Solve problems involving division of multi-digit numbers by one-digit numbers.

5 - Advanced	4 - Proficient	3 - Basic	2 - Below Basic	1 - Far Below Basic
Student consistently demonstrates the ability to: <ul style="list-style-type: none"> divide greater numbers (three- and four-digit quotients). 	Student demonstrates the ability to: <ul style="list-style-type: none"> divide three-digit dividends by one-digit divisors (zeros in the quotient), divide greater numbers (three- and four-digit quotients). 	With direct instruction and teacher support , student often demonstrates the ability to: <ul style="list-style-type: none"> divide three-digit dividends by one-digit divisors (zeros in the quotient), divide greater numbers (three- and four-digit quotients). 	With direct instruction and teacher support , student often demonstrates the limited ability to: <ul style="list-style-type: none"> divide three-digit dividends by one-digit divisors (zeros in the quotient), divide greater numbers (three- and four-digit quotients). 	With direct instruction and teacher support , student may be unable to: <ul style="list-style-type: none"> divide three-digit dividends by one-digit divisors (zeros in the quotient), divide greater numbers (three- and four-digit quotients).

Rubric has not changed – continue to work towards proficiency.

Algebra and Functions

Simplify expressions and equations that may include variables or symbols

- 1.1 Use letters, boxes, or other symbols to stand for any number in simple expressions or equations (e.g. demonstrate an understanding and the use of the concept of a variable).
- 1.4 Use and interpret formulas (e.g., area= length X width or $A=LW$) to answer questions about quantities and their relationships.
- 1.5 Understand that an equation such as $y = 3x + 5$ is a prescription for determining a second number when a first number is given.

5 - Advanced	4 - Proficient	3 - Basic	2 - Below Basic	1 - Far Below Basic
<p>Student often exceeds the grade level standards and produces work that demonstrates a thorough knowledge of grade level standards.</p> <p>Student consistently demonstrates the ability to:</p> <ul style="list-style-type: none"> • write and simplify expressions and equations with a variable, • write and evaluate addition and subtraction expressions containing variables, • evaluate expressions and equations that use symbols, • evaluate equations with two variables, • evaluate equations with two variables in a function table. 	<p>Student regularly demonstrates proficient performance of the grade level standards and produces work that demonstrates adequate knowledge of grade level standards.</p> <p>Student demonstrates the ability to:</p> <ul style="list-style-type: none"> • write and simplify expressions and equations with a variable, • write and evaluate addition and subtraction expressions containing variables, • evaluate expressions and equations that use symbols, • evaluate equations with two variables, • evaluate equations with two variables in a function table. 	<p>Student often demonstrates basic performance on grade level standards and produces work that demonstrates partial knowledge of grade level standards.</p> <p>With direct instruction and teacher support, student often demonstrates the ability to:</p> <ul style="list-style-type: none"> • write and simplify expressions and equations with a variable, • write and evaluate addition and subtraction expressions containing variables, • evaluate expressions and equations that use symbols, • evaluate equations with two variables, • evaluate equations with two variables in a function table. 	<p>Student often demonstrates below basic performance on grade level standards and produces work that demonstrates a limited knowledge of grade level standards.</p> <p>With direct instruction and teacher support, student may demonstrate limited ability to:</p> <ul style="list-style-type: none"> • write and simplify expressions and equations with a variable, • write and evaluate addition and subtraction expressions containing variables, • evaluate expressions and equations that use symbols, • evaluate equations with two variables, • evaluate equations with two variables in a function table. 	<p>Student is not meeting grade level standards and produces work that demonstrates little knowledge of grade level standards.</p> <p>With direct instruction and teacher support, student may be unable to:</p> <ul style="list-style-type: none"> • write and simplify expressions and equations with a variable, • write and evaluate addition and subtraction expressions containing variables, • evaluate expressions and equations that use symbols, • evaluate equations with two variables, • evaluate equations with two variables in a function table.

Rubric has not changed – continue to work towards proficiency.

Algebra and Functions - Fourth Grade, Fourth Quarter

Understand order of operation				
1.2 Interpret and evaluate mathematical expressions that now use parentheses.				
1.3 Use parentheses to indicate which operation to perform first when writing expressions containing more than two terms and different operations.				
5 - Advanced	4 - Proficient	3 - Basic	2 - Below Basic	1 - Far Below Basic
<p>Student often exceeds the grade level standards and produces work that demonstrates a thorough knowledge of grade level standards.</p> <p>Student consistently demonstrates the ability to:</p> <ul style="list-style-type: none"> • simplify expressions with parentheses, • identify the operation to compute first by using parentheses, • identify the associative properties through use of parentheses. 	<p>Student regularly demonstrates proficient performance of the grade level standards and produces work that demonstrates adequate knowledge of grade level standards.</p> <p>Student demonstrates the ability to:</p> <ul style="list-style-type: none"> • simplify expressions with parentheses, • identify the operation to compute first by using parentheses, • identify the associative properties through use of parentheses. 	<p>Student often demonstrates basic performance on grade level standards and produces work that demonstrates partial knowledge of grade level standards.</p> <p>With direct instruction and teacher support, student often demonstrates the ability to:</p> <ul style="list-style-type: none"> • simplify expressions with parentheses, • identify the operation to compute first by using parentheses, • identify the associative properties through use of parentheses. 	<p>Student often demonstrates below basic performance on grade level standards and produces work that demonstrates a limited knowledge of grade level standards.</p> <p>With direct instruction and teacher support, student may demonstrate limited ability to:</p> <ul style="list-style-type: none"> • simplify expressions with parentheses, • identify the operation to compute first by using parentheses, • identify the associative properties through use of parentheses. 	<p>Student is not meeting grade level standards and produces work that demonstrates little knowledge of grade level standards.</p> <p>With direct instruction and teacher support, student may be unable to:</p> <ul style="list-style-type: none"> • simplify expressions with parentheses, • identify the operation to compute first by using parentheses, • identify the associative properties through use of parentheses.

Rubric has not changed – continue to work towards proficiency.

Measurement and Geometry

Understand and solve area and perimeter.

- 1.0 Students understand perimeter and area:
 1.1 Measure the area of rectangular shapes by using appropriate units.
 1.2 Recognize that rectangles that have the same area can have different perimeters.
 1.3 Understand that rectangles that have the same perimeter can have different areas.
 1.4 Understand and use formulas to solve problems involving perimeters and areas of rectangles and squares. Use those formulas to find the areas of more complex figures by dividing the figures into basic shapes.

5 - Advanced	4 - Proficient	3 - Basic	2 - Below Basic	1 - Far Below Basic
<p>Student often exceeds the grade level standards and produces work that demonstrates a thorough knowledge of grade level standards.</p> <p>Student consistently demonstrates the ability to:</p> <ul style="list-style-type: none"> determine the perimeter and area of a rectangle, use a formula to determine the perimeter or area of a polygon, recognize that rectangles that have the same area can have different perimeters, understand that rectangles that have the same perimeter can have different areas, find the perimeters and areas of rectangles and squares by using formulas to solve more complex figures. 	<p>Student regularly demonstrates proficient performance of the grade level standards and produces work that demonstrates adequate knowledge of grade level standards.</p> <p>Student demonstrates the ability to:</p> <ul style="list-style-type: none"> determine the perimeter and area of a rectangle, use a formula to determine the perimeter or area of a polygon, recognize that rectangles that have the same area can have different perimeters, understand that rectangles that have the same perimeter can have different areas, find the perimeters and areas of rectangles and squares by using formulas to solve more complex figures. 	<p>Student often demonstrates basic performance on grade level standards and produces work that demonstrates partial knowledge of grade level standards.</p> <p>With direct instruction and teacher support, student often demonstrates the ability to:</p> <ul style="list-style-type: none"> determine the perimeter and area of a rectangle, use a formula to determine the perimeter or area of a polygon, recognize that rectangles that have the same area can have different perimeters, understand that rectangles that have the same perimeter can have different areas, find the perimeters and areas of rectangles and squares by using formulas to solve more complex figures. 	<p>Student often demonstrates below basic performance on grade level standards and produces work that demonstrates a limited knowledge of grade level standards.</p> <p>With direct instruction and teacher support, student may demonstrate limited ability to:</p> <ul style="list-style-type: none"> determine the perimeter and area of a rectangle, use a formula to determine the perimeter or area of a polygon, recognize that rectangles that have the same area can have different perimeters, understand that rectangles that have the same perimeter can have different areas, find the perimeters and areas of rectangles and squares by using formulas to solve more complex figures. 	<p>Student is not meeting grade level standards and produces work that demonstrates little knowledge of grade level standards.</p> <p>With direct instruction and teacher support, student may be unable to:</p> <ul style="list-style-type: none"> determine the perimeter and area of a rectangle, use a formula to determine the perimeter or area of a polygon, recognize that rectangles that have the same area can have different perimeters, understand that rectangles that have the same perimeter can have different areas, find the perimeters and areas of rectangles and squares by using formulas to solve more complex figures.

Plot and understand coordinates on a two-dimensional grid.

2.0 Students use two-dimensional coordinate grids to represent points and graph lines and simple figures:

2.1 Draw the points corresponding to linear relationships on graph paper.

2.2 Understand that the length of a horizontal line segment equals the difference of the x -coordinates.

2.3 Understand that the length of a vertical line segment equals the difference of the y -coordinates.

5 - Advanced	4 - Proficient	3 - Basic	2 - Below Basic	1 - Far Below Basic
<p>Student often exceeds the grade level standards and produces work that demonstrates a thorough knowledge of grade level standards.</p> <p>Student consistently demonstrates the ability to:</p> <ul style="list-style-type: none"> • use two -dimensional coordinate grids to plot points on a graph, using ordered pairs, • plot ordered pairs and draw a line to help you solve problems, • plot points with integer coordinates, • use coordinates to find the lengths of line segments. 	<p>Student regularly demonstrates proficient performance of the grade level standards and produces work that demonstrates adequate knowledge of grade level standards.</p> <p>Student demonstrates the ability to:</p> <ul style="list-style-type: none"> • use two -dimensional coordinate grids to plot points on a graph, using ordered pairs, • plot ordered pairs and draw a line to help you solve problems, • plot points with integer coordinates, • use coordinates to find the lengths of line segments. 	<p>Student often demonstrates basic performance on grade level standards and produces work that demonstrates partial knowledge of grade level standards.</p> <p>With direct instruction and teacher support, student often demonstrates the ability to:</p> <ul style="list-style-type: none"> • use two -dimensional coordinate grids to plot points on a graph, using ordered pairs, • plot ordered pairs and draw a line to help you solve problems, • plot points with integer coordinates, • use coordinates to find the lengths of line segments. 	<p>Student often demonstrates below basic performance on grade level standards and produces work that demonstrates a limited knowledge of grade level standards.</p> <p>With direct instruction and teacher support, student may demonstrate limited ability to:</p> <ul style="list-style-type: none"> • use two -dimensional coordinate grids to plot points on a graph, using ordered pairs, • plot ordered pairs and draw a line to help you solve problems, • plot points with integer coordinates, • use coordinates to find the lengths of line segments. 	<p>Student is not meeting grade level standards and produces work that demonstrates little knowledge of grade level standards.</p> <p>With direct instruction and teacher support, student may be unable to:</p> <ul style="list-style-type: none"> • use two -dimensional coordinate grids to plot points on a graph, using ordered pairs, • plot ordered pairs and draw a line to help you solve problems, • plot points with integer coordinates, • use coordinates to find the lengths of line segments.

Statistics, Data Analysis, and Probability

Collect, organize, and analyze data.				
1.1 Formulate survey questions; systematically collect and represent data on a number line; and coordinate graphs, tables, and charts.				
1.3 Interpret one- and two-variable data graphs to answer questions about a situation.				
5 - Advanced	4 - Proficient	3 - Basic	2 - Below Basic	1 - Far Below Basic
<p>Student often exceeds the grade level standards and produces work that demonstrates a thorough knowledge of grade level standards.</p> <p>Student consistently demonstrates the ability to:</p> <ul style="list-style-type: none"> • collect a survey and collect and organize information, • describe a data set using the mean, the median, and the mode, • read and interpret bar and line graphs that compare data. 	<p>Student regularly demonstrates proficient performance of the grade level standards and produces work that demonstrates adequate knowledge of grade level standards.</p> <p>Student demonstrates the ability to:</p> <ul style="list-style-type: none"> • collect a survey and collect and organize information, • describe a data set using the mean, the median, and the mode, • read and interpret bar and line graphs that compare data. 	<p>Student often demonstrates basic performance on grade level standards and produces work that demonstrates partial knowledge of grade level standards.</p> <p>With direct instruction and teacher support, student often demonstrates the ability to:</p> <ul style="list-style-type: none"> • collect a survey and collect and organize information, • describe a data set using the mean, the median, and the mode, • read and interpret bar and line graphs that compare data. 	<p>Student often demonstrates below basic performance on grade level standards and produces work that demonstrates a limited knowledge of grade level standards.</p> <p>With direct instruction and teacher support, student may demonstrate limited ability to:</p> <ul style="list-style-type: none"> • collect a survey and collect and organize information, • describe a data set using the mean, the median, and the mode, • read and interpret bar and line graphs that compare data. 	<p>Student is not meeting grade level standards and produces work that demonstrates little knowledge of grade level standards.</p> <p>With direct instruction and teacher support, student may be unable to:</p> <ul style="list-style-type: none"> • collect a survey and collect and organize information, • describe a data set using the mean, the median, and the mode, • read and interpret bar and line graphs that compare data.

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Make predictions based on probability.

2.0 Make predictions for simple probability situations:

2.1 Represent all possible outcomes for a simple probability situation in an organized way (e.g., tables, grids, tree diagrams).

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<p>Student often exceeds the grade level standards and produces work that demonstrates a thorough knowledge of grade level standards.</p> <p>Student consistently demonstrates the ability to:</p> <ul style="list-style-type: none"> • write the probability of an event in words and as a fraction, • use probability to make predictions, • show all the possible outcomes of a probability experiment (e.g., tree diagram), • use data and probability to solve problems. 	<p>Student regularly demonstrates proficient performance of the grade level standards and produces work that demonstrates adequate knowledge of grade level standards.</p> <p>Student demonstrates the ability to:</p> <ul style="list-style-type: none"> • write the probability of an event in words and as a fraction, • use probability to make predictions, • show all the possible outcomes of a probability experiment (e.g., tree diagram), • use data and probability to solve problems. 	<p>Student often demonstrates basic performance on grade level standards and produces work that demonstrates partial knowledge of grade level standards.</p> <p>With direct instruction and teacher support, student often demonstrates the ability to:</p> <ul style="list-style-type: none"> • write the probability of an event in words and as a fraction, • use probability to make predictions, • show all the possible outcomes of a probability experiment (e.g., tree diagram), • use data and probability to solve problems. 	<p>Student often demonstrates below basic performance on grade level standards and produces work that demonstrates a limited knowledge of grade level standards.</p> <p>With direct instruction and teacher support, student may demonstrate limited ability to:</p> <ul style="list-style-type: none"> • write the probability of an event in words and as a fraction, • use probability to make predictions, • show all the possible outcomes of a probability experiment (e.g., tree diagram), • use data and probability to solve problems. 	<p>Student is not meeting grade level standards and produces work that demonstrates little knowledge of grade level standards.</p> <p>With direct instruction and teacher support, student may be unable to:</p> <ul style="list-style-type: none"> • write the probability of an event in words and as a fraction, • use probability to make predictions, • show all the possible outcomes of a probability experiment (e.g., tree diagram), • use data and probability to solve problems.

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Mathematical Reasoning

Problem Solve		page 1 of 2		
1.1	Analyze problems by identifying relationships, distinguishing relevant from irrelevant information, sequencing and prioritizing information, and observing patterns.			
2.2	Apply strategies and results from simpler problems to more complex problems.			
2.3	Use a variety of methods, such as words, numbers, symbols, charts, graphs, tables, diagrams, and models, to explain mathematical reasoning.			
2.4	Express the solution clearly and logically by using the appropriate mathematical notation and terms and clear language; support solutions with evidence in both verbal and symbolic work.			
2.6	Make precise calculations and check the validity of the results from the context of the problem.			
5 - Advanced	4 - Proficient	3 - Basic	2 - Below Basic	1 - Far Below Basic
<p>Student often exceeds the grade level standards and produces work that demonstrates a thorough knowledge of grade level standards.</p> <p>Student consistently demonstrates the ability to:</p> <ul style="list-style-type: none"> • determine the appropriate operation (e.g. identifying relationships, distinguishing relevant from irrelevant information, sequencing and prioritizing information, and observing patterns), • determine the appropriate strategy, 	<p>Student regularly demonstrates proficient performance of the grade level standards and produces work that demonstrates adequate knowledge of grade level standards.</p> <p>Student demonstrates the ability to:</p> <ul style="list-style-type: none"> • determine the appropriate operation (e.g. identifying relationships, distinguishing relevant from irrelevant information, sequencing and prioritizing information, and observing patterns), • determine the appropriate strategy, 	<p>Student often demonstrates basic performance on grade level standards and produces work that demonstrates partial knowledge of grade level standards.</p> <p>With direct instruction and teacher support, student often demonstrates the ability to:</p> <ul style="list-style-type: none"> • determine the appropriate operation (e.g. identifying relationships, distinguishing relevant from irrelevant information, sequencing and prioritizing information, and observing patterns), • determine the appropriate strategy, 	<p>Student often demonstrates below basic performance on grade level standards and produces work that demonstrates a limited knowledge of grade level standards.</p> <p>With direct instruction and teacher support, student may demonstrate limited ability to:</p> <ul style="list-style-type: none"> • determine the appropriate operation (e.g. identifying relationships, distinguishing relevant from irrelevant information, sequencing and prioritizing information, and observing patterns), • determine the appropriate strategy, 	<p>Student is not meeting grade level standards and produces work that demonstrates little knowledge of grade level standards.</p> <p>With direct instruction and teacher support, student may be unable to:</p> <ul style="list-style-type: none"> • determine the appropriate operation (e.g. identifying relationships, distinguishing relevant from irrelevant information, sequencing and prioritizing information, and observing patterns), • determine the appropriate strategy,

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Problem Solve

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