

**Northpoint Horizons**  
**Math Elevations**  
**Correlated to the**  
**New York State Learning Standards for Mathematics**

Grade 4

This document provides examples of the extensive math directives offered throughout the *Math Elevations* program that meet the New York State Learning Standards for Mathematics. The n/a signifies the standards that are not directly met for this grade level.

New York State Learning Standards	<i>Math Elevations</i> Level "D" (Grade 4) Teacher's Guide Examples/Lessons
<b>Problem Solving Strand</b>	
<b>Students will build new mathematical knowledge through problem solving.</b>	
4.PS.1 Explore, examine, and make observations about a social problem or mathematical situation	Unit 2 – Lesson 3: <i>Making Change</i> pp. 40-41 Lesson 4: <i>Column Subtraction (I)</i> pp. 42-43
4.PS.2 Understand that some ways of representing a problem are more helpful than others	Unit 2 – Lesson 6: <i>Column Addition (II)</i> pp. 46-47 Unit 3 – Lesson 4: <i>Multiplication by Two-Digit Numbers</i> pp. 60-61 Unit 6 – Lesson 7: <i>Weight</i> pp. 120-121
4.PS.3 Interpret information correctly, identify the problem, and generate possible solutions	Unit 2 – Lesson 7: <i>Column Subtraction (II)</i> pp. 46-47 Lesson 8: <i>Word Problems (Five-Digit Numbers)</i> pp. 50-51
<b>Students will solve problems that arise in mathematics and in other contexts.</b>	
4.PS.4 Act out or model with manipulatives activities involving mathematical content from literature	The activities that are provided in the student workbook and software materials present students with the tools and manipulatives to apply their knowledge in activities involving mathematical content from literature.
4.PS.5 Formulate problems and solutions from everyday situations	Unit 1 – Lesson 2: <i>Comparing Numbers</i> pp. 20-21 Unit 8 – Lesson 3: <i>Pictographs</i> pp. 148-149

New York State Learning Standards	<i>Math Elevations</i> Level "D" (Grade 4) Teacher's Guide Examples/Lessons
4.PS.6 Translate from a picture/diagram to a numeric expression	Unit 6 – Lesson 1: <i>Perimeter of Squares and Rectangles</i> pp. 108-109 Unit 8 – Lesson 4: <i>Bar Graphs</i> pp. 150-151
4.PS.7 Represent problem situations in oral, written, concrete, pictorial, and graphical forms	Unit 7 – Lesson 4: <i>Symmetry</i> pp. 132-133 Unit 8 – Lesson 5: <i>Line Graphs</i> pp. 152-153
4.PS.8 Select an appropriate representation of a problem	Unit 3 – Lesson 7: <i>Long Division (Three-Digit ÷ One-Digit Numbers)</i> pp. 66-67 Unit 8 – Lesson 7: <i>Determining Possible Outcomes</i> pp. 156-157
<b>Students will apply and adapt a variety of appropriate strategies to solve problems.</b>	
4.PS.9 Use trial and error to solve problems	Unit 6 – Lesson 3: <i>Area and Perimeter of Irregular Polygons</i> pp. 112-113 Unit 8 – Lesson 7: <i>Determining Possible Outcomes</i> pp. 156-157
4.PS.10 Use process of elimination to solve problems	Unit 5 – Lesson 2: <i>Solving Open Sentences (Addition and Subtraction)</i> pp. 92-93 Lesson 3: <i>Solving Open Sentences (Multiplication and Division)</i> pp. 94-95
4.PS.11 Make pictures/diagrams of problems	Unit 7 – Lesson 1: <i>Types of Angles</i> pp. 126-127 Unit 8 – Lesson 6: <i>Venn Diagrams</i> pp. 154-155
4.PS.12 Use physical objects to model problems	Unit 6 – Lesson 3: <i>Area and Perimeter of Irregular Polygons</i> pp. 112-113 Lesson 7: <i>Weight</i> pp. 120-121
4.PS.13□□Work in collaboration with others to solve problems□□	Unit 1 – Lesson 7: <i>Comparing and Rounding Decimals</i> pp. 30-31 Unit 6 – Lesson 1: <i>Perimeter of Squares and Rectangles</i> pp. 108-109

New York State Learning Standards	<i>Math Elevations</i> Level "D" (Grade 4) Teacher's Guide Examples/Lessons
4.PS.14□□Make organized lists to solve numerical problems	Unit 1 – Lesson 2: <i>Comparing Numbers</i> pp. 20-21 Unit 8 – Lesson 1: <i>Data Handling</i> pp. 144-145 Lesson 4: <i>Bar Graphs</i> pp. 150-151
4.PS.15□□Make charts to solve numerical problems □□	Unit 1 – Lesson 2: <i>Comparing Numbers</i> pp. 20-21 Unit 8 – Lesson 8: <i>Probability</i> pp. 158-159
4.PS.16□□Analyze problems by identifying relationships□□	Unit 3 – Lesson 8: <i>Word Problems</i> pp. 68-69 Unit 4 – Lesson 7: <i>Addition and Subtraction of Mixed Numbers</i> pp. 84-85
4.PS.17 □□Analyze problems by identifying relevant versus irrelevant information□□□□	Unit 3 – Lesson 8: <i>Word Problems</i> pp. 68-69
4.PS.18□□Analyze problems by observing patterns□□	Unit 5 – Lesson 4: <i>Functional Relationships</i> pp. 96-97 Lesson 5: <i>Linear Functions</i> pp. 98-99 Unit 8 – Lesson 2: <i>Mode and Mean</i> pp. 146-147
4.PS.19□□State a problem in their own words□□	Unit 2 – Lesson 1: <i>Mental Addition and Subtraction</i> pp. 36-37 Unit 3 – Lesson 4: <i>Multiplication by Two-Digit Numbers</i> pp. 60-61
<b>Students will monitor and reflect on the process of mathematical problem solving.</b>	
4.PS.20□□Determine what information is needed to solve a problem □□□□	Unit 3 – Lesson 8: <i>Word Problems</i> pp. 68-69 Unit 6 – Lesson 2: <i>Area of Squares and Rectangles</i> pp. 110-111
4.PS.21□□Discuss with peers to understand a problem situation□□	Unit 3 – Lesson 1: <i>Mental Multiplication</i> pp. 54-55 Unit 6 – Lesson 6: <i>Capacity Conversions</i> pp. 118-119

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4.PS.22□□Discuss the efficiency of different representations of a problem□□	Unit 4 – Lesson 3: <i>Converting Between Improper Fractions and Mixed Numbers</i> pp. 76-77 Unit 5 – Lesson 3: <i>Solving Open Sentences</i> pp. 94-95
4.PS.23□□Verify results of a problem □□□□	Unit 3 – Lesson 6: <i>Long Division (Two-Digit ÷ One-Digit Numbers)</i> pp. 64-65 Unit 4 – Lesson 7: <i>Addition and Subtraction of Mixed Numbers</i> pp. 84-85 Unit 6 – Lesson 3: <i>Area and Perimeter of Irregular Polygons</i> pp. 112-113
4.PS.24□□Recognize invalid approaches □□	Unit 2 – Lesson 8: <i>Word Problems (Five-Digit Numbers)</i> pp. 50-51
4.PS.25□□Determine whether a solution is reasonable in the context of the original problem□□	Unit 2 – Lesson 7: <i>Column Subtraction</i> pp. 48-49 Unit 3 – Lesson 4: <i>Multiplication by Two-Digit Numbers</i> pp. 60-61 Unit 6 – Lesson 2: <i>Area of Squares and Rectangles</i> pp. 110-111
<b>Reasoning and Proof Strand</b>	
<b>Students will recognize reasoning and proof as fundamental aspects of mathematics.</b>	
4.RP.1□□Use representations to support mathematical ideas	Unit 6 – Lesson 1: <i>Perimeter of Squares and Rectangles</i> pp. 108-109 Unit 8 – Lesson 5: <i>Line Graphs</i> pp. 152-153
4.RP.2□□Determine whether a mathematical statement is true or false and explain why□□	Unit 5 – Lesson 2: <i>Solving Open Sentences (Addition and Subtraction)</i> pp. 92-93 Lesson 3: <i>Solving Open Sentences (Multiplication and Division)</i> pp. 94-95
<b>Students will make and investigate mathematical conjectures.</b>	
4.RP.3□□Investigate the use of knowledgeable guessing by generalizing mathematical ideas □□□□	Unit 8 – Lesson 7: <i>Determining Possible Outcomes</i> pp. 156-157 Lesson 8: <i>Probability</i> pp. 158-159

New York State Learning Standards	<i>Math Elevations</i> Level “D” (Grade 4) Teacher’s Guide Examples/Lessons
4.RP.4□□Make conjectures from a variety of representations□□	Unit 8 – Lesson 4: <i>Bar Graphs</i> pp. 150-151 Lesson 5: <i>Line Graphs</i> pp. 152–153
<b>Students will develop and evaluate mathematical arguments and proofs.</b>	
4.RP.5 □□Justify general claims or conjectures, using manipulatives, models, and expressions□□□□	Unit 4 – Lesson 3: <i>Converting Between Improper Fractions and Mixed Numbers</i> pp. 76-77 Unit 8 – Lesson 7: <i>Determining Possible Outcomes</i> pp. 156-157
4.RP.6□□Develop and explain an argument using oral, written, concrete, pictorial, and/or graphical forms□□	Unit 4 – Lesson 1: <i>Comparing and Ordering Fractions</i> pp. 72-73 Lesson 5: <i>Addition of Fractions with Like Denominators</i> pp. 80-81
4.RP.7□□Discuss, listen, and make comments that support or reject claims made by other students□□	Unit 3 – Lesson 7: <i>Long Division (Three-Digit ÷ One-Digit Numbers)</i> pp. 66-67 Unit 5 – Lesson 6: <i>Writing Simple Algebraic Equations</i> pp. 100-101
<b>Students will select and use various types of reasoning and methods of proof.</b>	
4.RP.8□□Support an argument by trying many cases□□□□	Unit 1 – Lesson 3: <i>Rounding</i> pp. 22-23 Unit 2 – Lesson 1: <i>Mental Addition and Subtraction</i> pp. 36-37
4.RP.9□□Disprove an argument by finding counterexamples□□	Unit 2 – Lesson 5: <i>Word Problems (Three- and Four-Digit Numbers)</i> pp. 44-45 Unit 4 – Lesson 5: <i>Addition of Fractions with Like Denominators</i> pp. 80-81
<b>Communication Strand</b>	
<b>Students will organize and consolidate their mathematical thinking through communication.</b>	
4.CM.1□□Understand and explain how to organize their thought process□□□□	Unit 2 – Lesson 1: <i>Mental Addition and Subtraction</i> pp. 36-37 Lesson 8: <i>Word Problems (Five-Digit Numbers)</i> pp. 50-51

New York State Learning Standards	<i>Math Elevations</i> Level "D" (Grade 4) Teacher's Guide Examples/Lessons
4.CM.2□□Verbally explain their rationale for strategy selection□□	Unit 4 – Lesson 1: <i>Comparing and Ordering Fractions</i> pp. 72-73 Lesson 6: <i>Subtraction of Fractions with Like Denominators</i> pp. 82-83
4.CM.3□□Provide reasoning both in written and verbal form□□	Unit 1 – Lesson 5: <i>Fractions as Part of a Set</i> pp. 26-27 Unit 5 – Lesson 4: <i>Functional Relationships</i> pp. 96-97
<b>Students will communicate their mathematical thinking coherently and clearly to peers, teachers, and others.</b>	
4.CM.4□□Organize and accurately label work □□□□	Unit 5 – Lesson 5: <i>Linear Functions</i> pp. 98-99 Unit 6 – Lesson 3: <i>Area and Perimeter of Irregular Polygons</i> pp. 112-113
4.CM.5□□Share organized mathematical ideas through the manipulation of objects, drawings, pictures, charts, graphs, tables, diagrams, models, symbols, and expressions in written and verbal form□□	Unit 1 – Lesson 2: <i>Comparing Numbers</i> pp. 20-21 Unit 8 – Lesson 4: <i>Bar Graphs</i> pp. 150-151
4.CM.6□□Answer clarifying questions from others□□	Unit 1 – Lesson 4: <i>Fractions as Part of a Whole</i> pp. 24-25 Unit 8 – Lesson 6: <i>Venn Diagrams</i> pp. 154-155
<b>Students will analyze and evaluate the mathematical thinking and strategies of others.</b>	
4.CM.7□□Restate mathematical solutions shared by other students □□□□	Unit 2 – Lesson 6: <i>Column Addition (II)</i> pp. 46-47 Unit 5 – Lesson 7: <i>Ordered Pairs</i> pp. 102-103
4.CM.8 □□Consider strategies used and solutions found in relation to their own work□□	Unit 2 – Lesson 8: <i>Word Problems (Five-Digit Numbers)</i> pp. 50-51 Unit 5 – Lesson 8: <i>Directions</i> pp. 104-105
<b>Students will use the language of mathematics to express mathematical ideas precisely.</b>	

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4.CM.9□□□ Increase their use of mathematical vocabulary and language when communicating with others□□□□	In the <i>Math Elevations Teacher Guide</i> , Math Content Vocabulary is listed in the left margin of each lesson (also listed in Spanish). Students and teachers use these terms throughout the lessons. On each unit introduction page there is a listing of key vocabulary and definitions. In the student book there is a glossary of all math vocabulary for Units 1-8.
4.CM.10□□□ Describe objects, relationships, solutions and rationale using appropriate vocabulary□□□□	Unit 4 – Lesson 5: <i>Addition of Fractions with Like Denominators</i> pp. 80-81 Unit 7 – Lesson 1: <i>Types of Angles</i> pp. 126-127
4.CM.11□□□ Decode and comprehend mathematical visuals and symbols to construct meaning□□	Unit 1 – Lesson 2: <i>Comparing Numbers</i> pp. 20-21 Unit 5 – Lesson 5: <i>Linear Functions</i> pp. 98-99
<b>Connections Strand</b>	
<b>Students will recognize and use connections among mathematical ideas.</b>	
4.CN.1□□□ Recognize, understand, and make connections in their everyday experiences to mathematical ideas□□□□	Unit 1 – Lesson 8: <i>Problem Solving</i> pp. 32-33 Unit 4 – Lesson 7: <i>Addition and Subtraction of Mixed Numbers</i> pp. 84-85
4.CN.2□□□ Compare and contrast mathematical ideas□□□□□□□□	Unit 2 – Lesson 5: <i>Word Problems (Three- and Four-Digit Numbers)</i> pp. 44-45 Unit 3 – Lesson 2: <i>Patterns of Calculations</i> pp. 56-57
4.CN.3□□□ Connect and apply mathematical information to solve problems□□	Unit 3 – Lesson 2: <i>Patterns of Calculations</i> pp. 56-57 Lesson 8: <i>Word Problems</i> pp. 68-69
<b>Students will understand how mathematical ideas interconnect and build on one another to produce a coherent whole.</b>	

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4.CN.4□□ Understand multiple representations and how they are related□□□□	Unit 3 – Lesson 3: <i>Multiplication by One-Digit Numbers</i> pp. 58-59 Unit 4 – Lesson 2: <i>Equivalent Fractions</i> pp. 74-75
4.CN.5□□ Model situations with objects and representations and be able to make observations□□□□	Unit 2 – Lesson 3: <i>Making Change</i> pp. 40-41 Unit 4 – Lesson 2: <i>Equivalent Fractions</i> pp. 74-75
<b>Students will recognize and apply mathematics in contexts outside of mathematics.</b>	
4.CN.6□□ Recognize the presence of mathematics in their daily lives□□□□	Unit 1 – Lesson 2: <i>Comparing Numbers</i> pp. 20-21 Unit 8 – Lesson 3: <i>Pictographs</i> pp. 148-149
4.CN.7□□ Apply mathematics to solve problems that develop outside of mathematics□□□□	Unit 8 – Lesson 6: <i>Venn Diagrams</i> pp. 154-155 Lesson 8: <i>Probability</i> pp. 158-159
4.CN.8□□ Recognize and apply mathematics to other disciplines	Unit 6 – Lesson 6: <i>Capacity Conversions</i> pp. 118-119 Unit 8 – Lesson 5: <i>Line Graphs</i> pp. 152-153
<b>Representation Strand</b>	
<b>Students will create and use representations to organize, record, and communicate mathematical ideas.</b>	
4.R.1□□ Use verbal and written language, physical models, drawing charts, graphs, tables, symbols, and equations as representations □□□□	Unit 6 – Lesson 8: <i>Appropriate Units</i> pp. 122-123 Unit 8 – Lesson 1: <i>Data Handling</i> pp. 144-145
4.R.2□□ Share mental images of mathematical ideas and understandings□□□□	Unit 2 – Lesson 1: <i>Mental Addition and Subtraction</i> pp. 36-37 Unit 3 – Lesson 1: <i>Mental Multiplication</i> pp. 54-55
4.R.3□□ Recognize and use external mathematical representations□□	Unit 7 – Lesson 2: <i>Parallel and Perpendicular Lines</i> pp. 128-129 Unit 8 – Lesson 2: <i>Mode and Mean</i> pp. 146-147

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4.R.4□□Use standard and nonstandard representations with accuracy and detail□□	Unit 6 – Lesson 2: <i>Area of Squares and Rectangles</i> pp. 110-111 Lesson 5: <i>Measuring Capacity</i> pp. 116-117
<b>Students will select, apply, and translate among mathematical representations to solve problems.</b>	
4.R.5□□Understand similarities and differences in representations.□□□□	Unit 4 – Lesson 2: <i>Equivalent Fractions</i> pp. 74-75 Unit 6 – Lesson 6: <i>Capacity Conversions</i> pp. 118-119
4.R.6□□Connect mathematical representations with problem solving□□□□	Unit 2 – Lesson 8: <i>Word Problems (Five-Digit Numbers)</i> pp. 50-51 Unit 3 – Lesson 8: <i>Word Problems</i> pp. 68-69
4.R.7□□Construct effective representations to solve problems□□	Unit 2 – Lesson 3: <i>Making Change</i> pp. 40-41 Unit 4 – Lesson 1: <i>Comparing and Ordering Fractions</i> pp. 72-73
<b>Students will use representations to model and interpret physical, social, and mathematical phenomena.</b>	
4.R.8□□Use mathematics to show and understand physical phenomena (e.g., estimate and represent the number of apples in a tree)□□□□	Unit 6 – Lesson 7: <i>Weight</i> pp. 120-121 Unit 7 – Lesson 8: <i>Volume</i> pp. 140-141
4.R.9□□Use mathematics to show and understand social phenomena (e.g., determine the number of buses required for a field trip)□□□□	Unit 2 – Lesson 3: <i>Making Change</i> pp. 40-41 Lesson 5: <i>Word Problems (Three- and Four-Digit Numbers)</i> pp. 44-45
4.R.10□□Use mathematics to show and understand mathematical phenomena (e.g., use a multiplication grid to solve odd and even number problems)□□	Unit 3 – Lesson 3: <i>Multiplication by One-Digit Numbers</i> pp. 58-59 Unit 5 – Lesson 5: <i>Linear Functions</i> pp. 98-99
<b>Number Sense and Operations Strand</b>	
<b>Students will understand numbers, multiple ways of representing numbers, relationships among numbers, and number systems.</b>	
4.N.1□□Skip count by 1,000's □□□□	This standard is covered in Grade 3 (Level C) of the <i>Math Elevations</i> program.

New York State Learning Standards	<i>Math Elevations</i> Level "D" (Grade 4) Teacher's Guide Examples/Lessons
4.N.2□□Read and write whole numbers to 10,000□□□□	Unit 1 – Lesson 1: <i>Large Numbers</i> pp. 18-19
4.N.3□□Compare and order numbers to 10,000□□	Unit 1 – Lesson 2: <i>Comparing Numbers</i> pp. 20-21
4.N.4□□Understand the place value structure of the base ten number system: □□10 ones = 1 ten□□10 tens = 1 hundred□□10 hundreds = 1 thousand□□10 thousands = 1 ten thousand □□□□□□□□	Unit 1 – Lesson 1: <i>Large Numbers</i> pp. 18-19 Lesson 8: <i>Problem Solving</i> pp. 32-33
4.N.5□□Recognize equivalent representations for numbers up to four digits and generate them by decomposing and composing numbers□□	Unit 1 – Lesson 3: <i>Rounding</i> pp. 22-23
4.N.6□□Understand, use, and explain the associative property of multiplication □□	Unit 3 – Lesson 3: <i>Multiplication by One-Digit Numbers</i> pp. 58-59 Lesson 4: <i>Multiplication by Two-Digit Numbers</i> pp. 60-61
4.N.7□□Develop an understanding of fractions as locations on number lines and as divisions of whole numbers□□□□	Unit 4 – Lesson 3: <i>Converting Between Improper Fractions and Mixed Numbers</i> pp. 76-77
4.N.8□□Recognize and generate equivalent fractions (halves, fourths, thirds, fifths, sixths, and tenths) using manipulatives, visual models, and illustrations□□	Unit 4 – Lesson 2: <i>Equivalent Fractions</i> pp. 74-75
4.N.9□□Use concrete materials and visual models to compare and order unit fractions or fractions with the same denominator (with and without the use of a number line) □□	Unit 4 – Lesson 1: <i>Comparing and Ordering Fractions</i> pp. 72-73
4.N.10□□Develop an understanding of decimals as part of a whole□□	Unit 1 – Lesson 6: <i>Fractions as Decimals</i> pp. 28-29 Unit 4 – Lesson 4: <i>Fractions and Mixed Numbers as Decimals</i> pp. 78-79
4.N.11□□Read and write decimals to hundredths, using money as a context□□	Unit 2 – Lesson 3: <i>Making Change</i> pp. 40-41 Lesson 8: <i>Word Problems (Five-Digit Numbers)</i> pp. 50-51
4.N.12□□Use concrete materials and visual models to compare and order decimals (less than 1) to the hundredths place in the context of money□□	Unit 2 – Lesson 7: <i>Column Subtraction</i> pp. 48-49
4.N.13□□Develop an understanding of the properties of odd/even numbers as a result of multiplication□□□□	Unit 3 – Lesson 3: <i>Multiplication by One-Digit Numbers</i> pp. 58-59

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<b>Students will understand meanings of operations and procedures, and how they relate to one another.</b>	
4.N.14□□Use a variety of strategies to add and subtract numbers up to 10,000□□□□	Unit 2 – Lesson 1: <i>Mental Addition and Subtraction</i> pp. 36-37 Lesson 2: <i>Column Addition (I)</i> pp. 38-39
4.N.15□□Select appropriate computational and operational methods to solve problems□□□□	Unit 2 – Lesson 8: <i>Word Problems (Five-Digit Numbers)</i> pp. 50-51 Unit 3 – Lesson 8: <i>Word Problems</i> pp. 68-69
4.N.16□□Understand various meanings of multiplication and division□□	Unit 3 – Multiplication and Division Lessons 1-8 pp. 54-69
4.N.17□□Use multiplication and division as inverse operations to solve problems□□	Unit 3 – Lesson 5: <i>Division with Remainders</i> pp. 62-63
4.N.18□□Use a variety of strategies to multiply two-digit numbers by one-digit numbers (with and without regrouping)□□	Unit 3 – Lesson 3: <i>Multiplying by One-Digit Numbers</i> pp. 58-59
4.N.19□□Use a variety of strategies to multiply two-digit numbers by two-digit numbers (with and without regrouping) □□	Unit 3 – Lesson 4: <i>Multiplying by Two-Digit Numbers</i> pp. 60-61
4.N.20□□Develop fluency in multiplying and dividing multiples of 10 and 100 up to 1,000□□	Unit 3 – Lesson 1: <i>Mental Multiplication</i> pp. 54-55 Lesson 2: <i>Patterns of Calculations</i> pp. 56-57
4.N.21□□Use a variety of strategies to divide two-digit dividends by one-digit divisors (with and without remainders)□□	Unit 3 – Lesson 6: <i>Long Division (Two-Digit ÷ One-Digit Numbers)</i> pp. 64-65
4.N.22□□Interpret the meaning of remainders□□	Unit 3 – Lesson 5: <i>Division with Remainders</i> pp. 62-63
4.N.23 □□Add and subtract proper fractions with common denominators□□	Unit 4 – Lesson 5: <i>Addition of Fractions with Like Denominators</i> pp. 80-81 Lesson 6: <i>Subtraction of Fractions with Like Denominators</i> pp. 82-83
4.N.24□□Express decimals as an equivalent form of fractions to tenths and hundredths □□	Unit 4 – Lesson 4: <i>Fractions and Mixed Numbers as Decimals</i> pp. 78-79
4.N.25□□Add and subtract decimals to tenths and hundredths using a hundreds chart □□	Unit 2 – Lesson 7: <i>Column Subtraction (II)</i> pp. 48-49 Lesson 8: <i>Word Problems (Five-Digit Numbers)</i> pp. 50-51

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<b>Students will compute accurately and make reasonable estimates.</b>	
4.N.26□□Round numbers less than 1,000 to the nearest tens and hundreds□□□□	Unit 1 – Lesson 3: <i>Rounding</i> pp. 22-23 Lesson 7: <i>Comparing and Rounding Decimals</i> pp. 30-31
4.N.27□□Check reasonableness of an answer by using estimation□□□□	Unit 2 – Lesson 2: <i>Column Addition (I)</i> pp. 38-39 Lesson 4: <i>Column Subtraction (II)</i> pp. 42-43
<b>Algebra Strand</b>	
<b>Students will represent and analyze algebraically a wide variety of problem solving situations.</b>	
4.A.1□□Evaluate and express relationships using open sentences with one operation□□□□	Unit 5 – Lesson 2: <i>Solving Open Sentences (Addition and Subtraction)</i> pp. 92-93 Lesson 3: <i>Solving Open Sentences (Multiplication and Division)</i> pp. 94-95
<b>Students will perform algebraic procedures accurately.</b>	
4.A.2□□Use the symbols $<$ , $>$ , $=$ , and $\neq$ (with and without the use of a number line) to compare whole numbers and unit fractions and decimals (up to hundredths)□□□□	Unit 1 – Lesson 2: <i>Comparing Numbers</i> pp. 20-21 Lesson 7: <i>Comparing and Rounding Decimals</i> pp. 30-31
4.A.3□□Find the value or values that will make an open sentence true, if it contains $<$ or $>$ □□	Unit 1 – Lesson 8: <i>Problem Solving</i> pp. 32-33
<b>Students will recognize, use, and represent algebraically patterns, relations, and functions.</b>	
4.A.4□□Describe, extend, and make generalizations about numeric ( ) and geometric patterns□□□□	Unit 5 – Lesson 4: <i>Functional Relationships</i> pp. 96-97 Lesson 5: <i>Linear Functions</i> pp. 98-99
4.A.5□□Analyze a pattern or a whole-number function and state the rule, given a table or an input/output box□□	Unit 5 – Lesson 4: <i>Functional Relationships</i> pp. 96-97 Lesson 5: <i>Linear Functions</i> pp. 98-99
<b>Geometry Strand</b>	
<b>Students will use visualization and spatial reasoning to analyze characteristics and properties of geometric shapes.</b>	
4.G.1□□Identify and name polygons, recognizing that their names are related to the number of sides and angles (triangle, quadrilateral, pentagon, hexagon, and octagon)□□□□	Unit 7 – Lesson 3: <i>Classifying Polygons</i> pp. 130-131

New York State Learning Standards	<i>Math Elevations</i> Level "D" (Grade 4) Teacher's Guide Examples/Lessons
4.G.2□□Identify points and line segments when drawing a plane figure □□	Unit 7 – Lesson 3: <i>Classifying Polygons</i> pp. 130-131
4.G.3 □□Find perimeter of polygons by adding sides □□	Unit 6 – Lesson 1: <i>Perimeter of Squares and Rectangles</i> pp. 108-109 Lesson 3: <i>Area and Perimeter of Irregular Polygons</i> pp. 112-113
4.G.4□□Find the area of a rectangle by counting the number of squares needed to cover the rectangle □□	Unit 6 – Lesson 2: <i>Area of Squares and Rectangles</i> pp. 110-111
4.G.5 □□Define and identify vertices, faces, and edges of three-dimensional shapes □□	Unit 7 – Lesson 7: <i>Solid Figures</i> pp. 138-139
<b>Students will identify and justify geometric relationships, formally and informally.</b>	
4.G.6□□Draw and identify intersecting, perpendicular, and parallel lines □□□□	Unit 7 – Lesson 2: <i>Parallel and Perpendicular Lines</i> pp. 128-129
4.G.7□□Identify points and rays when drawing angles □□	Unit 7 – Lesson 1: <i>Types of Angles</i> pp. 126-127
4.G.8□□Classify angles as acute, obtuse, right, and straight□□	Unit 7 – Lesson 1: <i>Types of Angles</i> pp. 126-127
<b>Measurement Strand</b>	
<b>Students will determine what can be measured and how, using appropriate methods and formulas.</b>	
4.M.1□□Select tools and units (customary) appropriate for the length measured □□□□	Unit 6 – Lesson 4: <i>Metric Measurement</i> pp. 114-115 Lesson 8: <i>Appropriate Unit</i> pp. 122-123
4.M.2□□Use a ruler to measure to the nearest standard unit (whole, ½ and ¼ inches, whole feet, whole yards, whole centimeters, and whole meters) □□	Unit 6 – Lesson 4: <i>Metric Measurement</i> pp. 114-115
4.M.3□□Know and understand equivalent standard units of length: 12 inches = 1 foot 3 feet = 1 yard □□	Unit 6 – Lesson 8: <i>Appropriate Units</i> pp. 122-123
4.M.4□□Select tools and units appropriate to the mass of the object being measured (grams and kilograms) □□	Unit 6 – Lesson 7: <i>Weight</i> pp. 120-121
4.M.5□□Measure mass, using grams □□	Using Unit 6, Lesson 7, measuring mass using grams can be introduced by the teacher.
4.M.6□□Select tools and units appropriate to the capacity being measured (milliliters and liters) □□	Unit 6 – Lesson 6: <i>Capacity Conversions</i> pp. 118-119
4.M.7□□Measure capacity, using milliliters and liters □□	Unit 6 – Lesson 6: <i>Capacity Conversions</i> pp. 118-119
<b>Students will use units to give meaning to measurements.</b>	

New York State Learning Standards	<i>Math Elevations</i> Level "D" (Grade 4) Teacher's Guide Examples/Lessons
4.M.8□□Make change, using combined coins and dollar amounts □□□□	Unit 2 – Lesson 3: <i>Making Change</i> pp. 40-41
4.M.9□□Calculate elapsed time in hours and half hours, not crossing A.M./P.M. □□□□	Unit 1 – Lesson 8: <i>Problem Solving</i> pp. 32-33
4.M.10□□Calculate elapsed time in days and weeks, using a calendar □□	n/a
<b>Statistics and Probability Strand</b>	
<b>Students will collect, organize, display, and analyze data.</b>	
4.S.1□□Design investigations to address a question from given data□□□□	Unit 8 – Data Analysis, Statistics, and Probability Lessons 1-8 pp. 144-159
4.S.2□□Collect data using observations, surveys, and experiments and record appropriately□□□□	Unit 8 – Lesson 1: <i>Data Handling</i> pp. 144-145 Lesson 3: <i>Pictographs</i> pp. 148-149 Lesson 4: <i>Bar Graphs</i> pp. 150-151
4.S.3□□Represent data using tables, bar graphs, and pictographs□□□□	Unit 8 – Lesson 3: <i>Pictographs</i> pp. 148-149 Lesson 4: <i>Bar Graphs</i> pp. 150-151
4.S.4□□Read and interpret line graphs □□□□	Unit 8 – Lesson 5: <i>Line Graphs</i> pp. 152-153
<b>Students will make predictions that are based upon data analysis.</b>	
4.S.5□□Develop and make predictions that are based on data □□□□	Unit 8 – Lesson 6: <i>Venn Diagrams</i> pp. 154-155 Lesson 7: <i>Determining Possible Outcomes</i> pp. 156-157 Lesson 8: <i>Probability</i> pp. 158-159
4.S.6□□Formulate conclusions and make predictions from graphs□□	Unit 8 – Lesson 4: <i>Bar Graphs</i> pp. 150-151 Lesson 5: <i>Line Graphs</i> pp. 152-153