

# Istation<sup>®</sup> Math

Correlation of Standards

## Wyoming Content and Performance Standards Mathematics

Grades 2-5



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# Istation Math Curriculum Correlated to Wyoming Content and Performance Standards for Mathematics

## Grade 2



Standards	Objectives	Istation Application*	Istation Teacher Resources*	MP Standards
<b>K-12 Standards for Mathematical Practices (MP)</b>				
As stated in the Wyoming Content and Performance Standards for Mathematics, "The Standards for Mathematical Practice describe varieties of expertise that mathematics educators at all levels should seek to develop in their students." Each Mathematical Practice standard is listed as applicable to the right of each Istation Math resource with the corresponding code, MP1-8.				
MP1	Make sense of problems and persevere in solving them.			
MP2	Reason abstractly and quantitatively.			
MP3	Construct viable arguments and critique the reasoning of others.			
MP4	Model with mathematics.			
MP5	Use appropriate tools strategically.			
MP6	Attend to precision.			
MP7	Look for and make use of structure.			
MP8	Look for and express regularity in repeated reasoning.			
<b>Operations and Algebraic Thinking (OA)</b>				
<b>Represent and solve problems involving addition and subtraction.</b>				
2.OA.A.1	Use addition and subtraction within 100 to solve one- and two-step word problems involving situations of adding to, taking from, putting together, taking apart, and comparing, with unknowns in all positions, by using drawings and equations with a symbol for the unknown number to represent the problem.	<b>Unit 32: Two-Step Problems – Addition and Subtraction – Unknowns at the End</b> <b>Unit 32: Two-Step Problems – Addition and Subtraction – Unknowns in the Middle</b>	<b>Unit 32: Build Multistep Equations (Darcy's Diner)</b> <b>Unit 32: Build Multistep Equations with Multiple Operations (Jewels by Jules)</b> <b>Unit 32: Solve Multistep Equations with Multiple Operations (Cason's Closet)</b> <b>ISIP Math: Working Backward to Problem-Solve</b> <b>ISIP Math: Ben's Aquatic Adventure</b> <b>ISIP Math: Problem Solving with Base 10 Models</b> <b>ISIP Math: Choosing the Operation</b>	MP1 MP2
<b>Add and subtract within 20.</b>				
2.OA.B.2	Fluently add and subtract within 20 using mental strategies. By end of Grade 2, know automatically all sums of two one-digit numbers based on strategies.	<b>Unit 31: Fact Families – Addition and Subtraction</b>	<b>Unit 31: Fact Families – Addition and Subtraction</b> <b>ISIP Math: Addition and Subtraction Fact Families</b> <b>ISIP Math: Fact Family Triangles</b> <b>ISIP Math: Math Mind Reader</b>	MP6 MP7
<b>Work with equal groups of objects to gain foundations for multiplication.</b>				
2.OA.C.4	Use addition to find the total number of objects arranged in rectangular arrays with up to 5 rows and up to 5 columns; write an equation to express the total as a sum of equal addends.	<b>Unit 32: Addition Arrays</b>	<b>Unit 32: Addition Arrays</b>	MP5 MP7 MP8

# Istation Math Curriculum Correlated to Wyoming Content and Performance Standards for Mathematics

## Grade 2



Standards	Objectives	Istation Application*	Istation Teacher Resources*	MP Standards
<b>Number and Operations in Base Ten (NBT)</b>				
<b>Understand place value.</b>				
2.NBT.D.1	Understand that the three digits of a three-digit number represent amounts of hundreds, tens, and ones; and demonstrate that:	<b>Unit 30: Writing Standard Form from Expanded Form</b> <b>Unit 30: Writing Expanded Form from Standard Form</b> <b>Unit 30: Writing Word Form from Expanded and Standard Form</b>	<b>Unit 30: Building Numbers Using Base 10 Blocks</b> <b>Unit 30: Writing Expanded Form from Standard</b> <b>Unit 30: Writing Word Form from Expanded and Standard</b> <b>ISIP Math: Same Number, Different Ways</b> <b>ISIP Math: Place Value Pair-Up</b> <b>ISIP Math: Race to the Cube</b> <b>ISIP Math: Partitioning</b> <b>ISIP Math: Creating Numbers with Base 10 Blocks</b> <b>ISIP Math: Place Value Cups</b> <b>ISIP Math: Writing Standard Form from Expanded Form</b>	MP5 MP6 MP7
	A. 100 can be thought of as a bundle of ten tens – called a “hundred.”			
	B. The numbers 100, 200, 300, 400, 500, 600, 700, 800, 900 refer to one, two, three, four, five, six, seven, eight, or nine hundreds (and 0 tens and 0 ones).			
	C. Three-digit numbers can be decomposed in multiple ways (e.g. 524 can be decomposed as 5 hundreds, 2 tens and 4 ones or 4 hundreds, 12 tens, and 4 ones, etc.)			
2.NBT.D.2	Skip-count by 10s and 100s within 1000 starting at any given number.		<b>ISIP Math: Skip Counting</b>	MP6 MP7
2.NBT.D.3	Read and write numbers to 1000 using base-ten numerals, number names, and expanded form.	<b>Unit 30: Writing Standard Form from Expanded Form</b> <b>Unit 30: Writing Expanded Form from Standard Form</b> <b>Unit 30: Writing Word Form from Expanded and Standard Form</b>	<b>Unit 30: Writing Expanded Form from Standard</b> <b>Unit 30: Writing Word Form from Expanded and Standard</b> <b>ISIP Math: Same Number, Different Ways</b> <b>ISIP Math: Place Value Pair-Up</b> <b>ISIP Math: Partitioning</b> <b>ISIP Math: Place Value Cups</b> <b>ISIP Math: Writing Standard Form from Expanded Form</b>	MP6 MP7
2.NBT.D.4	Compare pairs of three-digit numbers based on meanings of the hundreds, tens, and ones digits, using the words “is greater than”, “is equal to”, “is less than”, and with the symbols $>$ , $=$ , and $<$ to record the results of these comparisons.	<b>Unit 30: Comparing Whole Numbers with Language and Symbols</b> <b>Unit 30: Comparing Two Three-Digit Numbers</b> <b>Unit 30: Comparing Two Three-Digit Numbers with Zeroes</b>	<b>Unit 30: Comparison Symbols</b> <b>Unit 30: Comparison – Three-Digit Numbers</b> <b>ISIP Math: Steps for Comparing Three-Digit Numbers</b>	MP6 MP7

**Istation Math Curriculum Correlated to Wyoming Content and Performance Standards for Mathematics**  
Grade 2



Standards	Objectives	Istation Application*	Istation Teacher Resources*	MP Standards
<b>Use place value understanding and properties of operations to add and subtract.</b>				
2.NBT.E.5	Add and subtract within 100 using strategies based on place value, properties of addition, and/or the relationship between addition and subtraction.	<b>Unit 31: Adding with Regrouping Using Concrete Models</b> <b>Unit 31: Subtracting with Regrouping Using Concrete Models</b> <b>Unit 31: Adding with Regrouping – Partitioning</b> <b>Unit 31: Subtracting with Regrouping – Partitioning</b> <b>Unit 31: Adding on a Number Line</b> <b>Unit 31: Subtracting on a Number Line</b> <b>Unit 31: Fact Families – Addition and Subtraction</b>	<b>Unit 31: Adding with Regrouping – Concrete</b> <b>Unit 31: Subtracting with Regrouping – Concrete</b> <b>Unit 31: Adding Using Partitioning</b> <b>Unit 31: Subtracting Using Partitioning</b> <b>Unit 31: Adding on a Number Line</b> <b>Unit 31: Subtracting on a Number Line</b> <b>Unit 31: Fact Families – Addition and Subtraction</b> <b>ISIP Math: Addition and Subtraction Fact Families</b> <b>ISIP Math: Fact Family Triangles</b> <b>ISIP Math: Break Apart to Add</b> <b>ISIP Math: Race to the Cube</b> <b>ISIP Math: Using Arrow Paths to Add and Subtract</b> <b>ISIP Math: Math Mind Reader</b> <b>ISIP Math: Partitioning</b>	MP6 MP7
2.NBT.E.7	Add and subtract within 1000, using concrete models or drawings and strategies based on place value, properties of addition, and/or the relationship between addition and subtraction: A. Relate the strategy to a written method and explain the reasoning used. B. Understand that in adding or subtracting three-digit numbers, add or subtract hundreds and hundreds, tens and tens, ones and ones. C. Understand that sometimes it is necessary to compose or decompose tens or hundreds.	<b>Unit 31: Adding with Regrouping Using Concrete Models</b> <b>Unit 31: Subtracting with Regrouping Using Concrete Models</b> <b>Unit 31: Adding with Regrouping – Partitioning</b> <b>Unit 31: Subtracting with Regrouping – Partitioning</b> <b>Unit 31: Adding on a Number Line</b> <b>Unit 31: Subtracting on a Number Line</b> <b>Unit 31: Fact Families – Addition and Subtraction</b>	<b>Unit 31: Adding with Regrouping – Concrete</b> <b>Unit 31: Subtracting with Regrouping – Concrete</b> <b>Unit 31: Adding Using Partitioning</b> <b>Unit 31: Subtracting Using Partitioning</b> <b>Unit 31: Adding on a Number Line</b> <b>Unit 31: Subtracting on a Number Line</b> <b>Unit 31: Fact Families – Addition and Subtraction</b> <b>ISIP Math: Break Apart to Add</b> <b>ISIP Math: Race to the Cube</b> <b>ISIP Math: Using Arrow Paths to Add and Subtract</b> <b>ISIP Math: Partitioning</b> <b>ISIP Math: Skip Counting</b>	MP6 MP7

# Istation Math Curriculum Correlated to Wyoming Content and Performance Standards for Mathematics

## Grade 2



Standards	Objectives	Istation Application*	Istation Teacher Resources*	MP Standards
2.NBT.E.9	Explain why addition and subtraction strategies work, using place value and the properties of addition. (Explanations may be supported by drawings, objects, or written form.)	<b>Unit 31: Adding with Regrouping Using Concrete Models</b> <b>Unit 31: Subtracting with Regrouping Using Concrete Models</b> <b>Unit 31: Adding with Regrouping – Partitioning</b> <b>Unit 31: Subtracting with Regrouping – Partitioning</b> <b>Unit 31: Adding on a Number Line</b> <b>Unit 31: Subtracting on a Number Line</b> <b>Unit 31: Fact Families – Addition and Subtraction</b>	<b>Unit 31: Adding with Regrouping – Concrete</b> <b>Unit 31: Subtracting with Regrouping – Concrete</b> <b>Unit 31: Adding Using Partitioning</b> <b>Unit 31: Subtracting Using Partitioning</b> <b>Unit 31: Adding on a Number Line</b> <b>Unit 31: Subtracting on a Number Line</b> <b>Unit 31: Fact Families – Addition and Subtraction</b> <b>ISIP Math: Addition and Subtraction Fact Families</b> <b>ISIP Math: Fact Family Triangles</b> <b>ISIP Math: Break Apart to Add</b> <b>ISIP Math: Race to the Cube</b> <b>ISIP Math: Using Arrow Paths to Add and Subtract</b> <b>ISIP Math: Math Mind Reader</b> <b>ISIP Math: Partitioning</b>	MP3 MP7
<b>Measurement and Data (MD)</b>				
<b>Measure and estimate lengths in standard units.</b>				
2.MD.F.1	Measure the length of an object by selecting and using appropriate tools such as rulers, yardsticks, meter sticks, and measuring tapes.	<b>Unit 34: Choose Units and Measure Lengths</b>	<b>Unit 34: Choosing Units of Linear Measurement</b> <b>Unit 34: Inches</b> <b>ISIP Math: Appropriate Tools for Linear Measurement</b> <b>ISIP Math: How to Use Linear Measurement Tools</b> <b>ISIP Math: Measuring Objects</b> <b>ISIP Math: Ruler Relay</b>	MP5 MP6
2.MD.F.2	Measure the same object or distance using a standard unit of one length and then a standard unit of a different length. Explain how the two measurements relate to the size of the unit chosen.		<b>ISIP Math: Unit Relationships</b>	MP3 MP5 MP6
2.MD.F.4	Measure in standard length to determine how much longer one object is than another.		<b>ISIP Math: Ruler Relay</b>	MP5 MP6
<b>Relate addition and subtraction to length.</b>				
2.MD.G.5	Use addition and subtraction within 100 to solve word problems involving lengths that are given in the same units.		<b>ISIP Math: The Benevolent Ruler</b>	MP2 MP4 MP7
2.MD.G.6	Use a number line diagram with equally spaced points to: A. Represent whole-number sums and differences within 100 on a number line diagram. B. Locate multiple of 10 before and after a given number within 100.	<b>Unit 31: Adding on a Number Line</b> <b>Unit 31: Subtracting on a Number Line</b>	<b>Unit 31: Adding on a Number Line</b> <b>Unit 31: Subtracting on a Number Line</b> <b>ISIP Math: Skip Counting</b>	MP5 MP7
<b>Work with time and money.</b>				
2.MD.H.7	Tell and write time from analog and digital clocks in five minute increments using a.m. and p.m.	<b>Unit 34: Tell Time to the Nearest Five Minutes</b>	<b>Unit 34: Time to the Nearest Five Minutes</b> <b>Unit 34: Time – AM and PM</b> <b>Unit 34: Time to the Quarter Hour</b>	MP5 MP6

# Istation Math Curriculum Correlated to Wyoming Content and Performance Standards for Mathematics

## Grade 2



Standards	Objectives	Istation Application*	Istation Teacher Resources*	MP Standards
2.MD.H.8	Solve word problems up to \$10 involving dollar bills, quarters, dimes, nickels, and pennies, using \$ (dollars) and ¢ (cents) symbols appropriately.		<b>Unit 32: Money Word Problems (Retail Riddles)</b>	MP2 MP5 MP6
<b>Represent and interpret data.</b>				
2.MD.I.10	Use data to: A. Draw a picture graph and a bar graph (with single-unit scale) to represent a data set with up to four categories. B. Solve simple put-together, take-apart, and compare problems using information presented in a bar graph.	<b>Unit 33: Solve Problems Using Information Presented in Picture Graphs</b> <b>Unit 33: Solve Problems Using Information Presented in Bar Graphs</b>	<b>Unit 33: Solving Picture Graph Problems</b> <b>Unit 33: Solving Bar Graph Problems</b>	MP2 MP4 MP5
<b>Geometry (G)</b>				
<b>Reason with shapes and their attributes.</b>				
2.G.J.3	Partition circles and rectangles into two, three, or four equal shares by: A. Describing the shares using the words <i>halves</i> , <i>thirds</i> , <i>half of</i> , <i>a third of</i> , etc., B. Describing the whole as two halves, three thirds, four fourths. C. Recognizing that equal shares of identical wholes need not have the same shape.	<b>Unit 32: Partitioning to Identify Halves, Thirds, and Fourths</b> <b>Unit 32: Equal Shares of Identical Wholes</b>	<b>Unit 32: Identifying Halves, Thirds, Fourth</b> <b>Unit 32: Equal Shares of Identical Wholes</b>	MP6 MP7 MP8
<i>*Includes content released through January 2019.</i>				
End of Grade 2				

# Istation Math Curriculum Correlated to Wyoming Content and Performance Standards for Mathematics

## Grade 3



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MP1	Make sense of problems and persevere in solving them.			
MP2	Reason abstractly and quantitatively.			
MP3	Construct viable arguments and critique the reasoning of others.			
MP4	Model with mathematics.			
MP5	Use appropriate tools strategically.			
MP6	Attend to precision.			
MP7	Look for and make use of structure.			
MP8	Look for and express regularity in repeated reasoning.			
<b>Operations and Algebraic Thinking (OA)</b>				
<b>Represent and solve problems involving multiplication and division.</b>				
3.OA.A.1	Represent the concept of multiplication of whole numbers using models including, but not limited to, equal-sized groups ("groups of"), arrays, area models, repeated addition, and equal "jumps" on a number line.	<b>Unit 36: Multiply One-Digit Numbers Using Concrete Models</b> <b>Unit 36: Multiply <math>1 \times 1</math> Arrays</b>	<b>Unit 36: One-Digit by One-Digit Multiplication</b> <b>Unit 36: Multiplying Two One-Digit Numbers with Arrays</b> <b>ISIP Math: Relating Multiplication and Division</b> <b>Fact Practice: Multominoes; Tall Towers</b>	MP1 MP2 MP4 MP7
3.OA.A.2	Represent the concept of division of whole numbers (resulting in whole number quotients) using models including, but not limited to, partitioning, repeated subtraction, sharing, and inverse of multiplication.		<b>ISIP Math: Relating Multiplication and Division</b>	MP1 MP2 MP4 MP7
3.OA.A.3	Solve multiplication and division word problems within 100 using appropriate modeling strategies and equations.	<b>Unit 36: Two-Step Word Problems – All Operations</b>	<b>Unit 36: Two-Step Word Problems – All Operations</b> <b>ISIP Math: Multiplying with Three Factors</b> <b>ISIP Math: Strip Diagrams – Compare Problems</b> <b>ISIP Math: Doubling and Halving</b>	MP1 MP2 MP4 MP5
3.OA.A.4	Determine the unknown whole number in a multiplication or division equation relating three whole numbers when the unknown is a missing factor, product, dividend, divisor, or quotient. <i>(Students need not know formal terms.)</i>	<b>Unit 36: Fact Families – Multiplication and Division</b>	<b>Unit 36: Fact Families – Multiplication and Division</b> <b>ISIP Math: Practicing Fact Families</b> <b>ISIP Math: Relating Multiplication and Division</b> <b>ISIP Math: Strip Diagrams – Compare Problems</b> <b>ISIP Math: Using the Commutative Property of Multiplication</b>	MP1 MP2 MP4 MP7
<b>Understand properties of multiplication and the relationship between multiplication and division.</b>				
3.OA.B.5	Apply properties of multiplication as strategies to multiply and divide. <i>(Students need not use formal terms for these properties.)</i>	<b>Unit 36: Properties of Multiplication</b>	<b>ISIP Math: Using the Commutative Property of Multiplication</b> <b>ISIP Math: Multiplying with Three Factors</b>	MP1 MP2 MP4 MP7

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## Grade 3



Standards	Objectives	Istation Application*	Istation Teacher Resources*	MP Standards
3.OA.B.6	Understand division as an unknown-factor problem.	<b>Unit 36: Fact Families – Multiplication and Division</b>	<b>Unit 36: Fact Families – Multiplication and Division</b> <b>ISIP Math: Practicing Fact Families</b> <b>ISIP Math: Relating Multiplication and Division</b>	MP6 MP7
<b>Multiply and divide within 100.\</b>				
3.OA.C.7	Fluently multiply and divide with factors 1 - 10 using mental strategies. By end of Grade 3, know automatically all products of one-digit factors based on strategies.	<b>Unit 35: Arithmetic Patterns in Multiplication</b> <b>Unit 36: Multiplying One-Digit Numbers Using Concrete Models</b> <b>Unit 36: Fact Families – Multiplication and Division</b> <b>Unit 36: Two-Step Word Problems – All Operations</b> <b>Unit 36: Properties of Multiplication</b>	<b>Unit 35: Arithmetic Patterns in Multiplication</b> <b>Unit 36: One-Digit by One-Digit Multiplication</b> <b>Unit 36: Multiplying Two One-Digit Numbers with Arrays</b> <b>Unit 36: Two-Step Word Problems – All Operations</b> <b>Unit 36: Fact Families – Multiplication and Division</b> <b>Fact Practice Activities: Dice Blocks; Multominoes; Spider Queen’s Hidden Products; Spider Queen’s Spiders; Tall Towers; Wipe Out</b> <b>ISIP Math: Practicing Fact Families</b> <b>ISIP Math: Relating Multiplication and Division</b> <b>ISIP Math: Strip Diagrams: Compare Problems</b> <b>ISIP Math: Using the Commutative Property of Multiplication</b> <b>ISIP Math: Doubling and Halving</b>	MP1 MP7 MP8
<b>Solve problems involving the four operations, and identify and explain patterns in arithmetic.</b>				
3.OA.D.8	Solve two-step word problems (limited to the whole number system) using the four basic operations. Students should apply the Order of Operations when there are no parentheses to specify a particular order. A. Represent these problems using equations with a symbol standing for the unknown quantity. B. Assess the reasonableness of answers using mental computation and estimation strategies including rounding.	<b>Unit 36: Two-Step Word Problems – All Operations</b>	<b>Unit 35: Problem Solving without Numbers: Addition and Subtraction</b> <b>Unit 36: Problem Solving without Numbers: Multiplication and Division</b> <b>Unit 36: Two-Step Word Problems – All Operations</b>	MP1 MP2 MP3 MP4
3.OA.D.9	Identify arithmetic patterns and explain the relationships using properties of operations.	<b>Unit 35: Arithmetic Patterns in Multiplication</b>	<b>Unit 35: Arithmetic Patterns in Multiplication</b> <b>Unit 36: Fact Families – Multiplication and Division</b> <b>ISIP Math: Doubling and Halving</b> <b>ISIP Math: Practicing Fact Families</b> <b>ISIP Math: Relating Multiplication and Division</b> <b>ISIP Math: Using the Commutative Property of Multiplication</b>	MP1 MP2 MP7 MP8



# Istation Math Curriculum Correlated to Wyoming Content and Performance Standards for Mathematics

## Grade 3



Standards	Objectives	Istation Application*	Istation Teacher Resources*	MP Standards
<b>Number and Operations in Base Ten (NBT)</b>				
<b>Use place value understanding and properties of operations to perform multi-digit arithmetic (a range of algorithms may be used).</b>				
3.NBT.E.1	Use place value understanding to round whole numbers to the nearest 10 or 100.	<b>Unit 35: Rounding to the Nearest Ten</b> <b>Unit 35: Rounding to the Nearest Hundred</b>	<b>Unit 35: Rounding – Nearest Ten</b> <b>Unit 35: Rounding – Nearest Hundred</b> <b>Unit 35: Rounding – Nearest Ten, Hundred, Thousand</b> <b>Unit 35: Rounding within Three- and Four-Digit Numbers – Number Line</b>	MP6
3.NBT.E.2	Fluently add and subtract within 1000 using strategies and algorithms based on place value, properties of operations, and/or the relationship between addition and subtraction.	<b>Unit 36: Two-Step Word Problems – All Operations</b>	<b>Unit 36: Two-Step Word Problems – All Operations</b>	MP1 MP2
3.NBT.E.3	Multiply one-digit whole numbers by multiples of 10 in the range 10-90 (e.g., $9 \times 80$ , $5 \times 60$ ) using strategies based on place value and properties of multiplication.	<b>Unit 35: Arithmetic Patterns in Multiplication</b>	<b>Unit 35: Arithmetic Patterns in Multiplication</b>	MP1 MP2 MP8
<b>Number and Operations – Fractions (NF)</b>				
<b>Develop understanding of fractions as numbers. (Limited to denominators 2, 3, 4, 6, and 8) *use horizontal fractions</b>				
3.NF.F.1	Understand a fraction $1/b$ as the quantity formed by 1 part when a whole is partitioned into $b$ equal parts; understand a fraction $a/b$ as the quantity formed by $a$ parts of size $1/b$ .	<b>Unit 37: Fractions Equivalent to One</b> <b>Unit 37: Fractions Equivalent to Whole Numbers</b> <b>Unit 37: Mixed Numbers</b> <b>Unit 37: Using Fraction Bars or Number Lines to Find Many Equivalent Fractions</b> <b>Unit 37: Using Fraction Bars or Number Lines to Determine If Two Fractions Are Equivalent</b>	<b>Unit 37: Fractions Equivalent to One</b> <b>Unit 37: Fractions Equivalent to Whole Numbers</b> <b>Unit 37: Mixed Numbers on a Number Line</b> <b>Unit 37: Many Equivalent Fractions</b> <b>Unit 37: Identifying Equivalent Fractions</b> <b>Unit 37: Expressing Equivalent Fractions with Denominators of 10 and 100</b> <b>Unit 37: Using Models to Identify Equivalent Fractions</b> <b>ISIP Math: Fractions in Problem Situations</b> <b>ISIP Math: Recognizing Fractions in Different Forms</b> <b>ISIP Math: Writing Fractions – Symbolic Notation</b> <b>ISIP Math: Identifying Equivalent Fractions Using Area Models</b>	MP2 MP6 MP7

# Istation Math Curriculum Correlated to Wyoming Content and Performance Standards for Mathematics

## Grade 3



Standards	Objectives	Istation Application*	Istation Teacher Resources*	MP Standards
3.NF.F.2	Understand and represent fractions on a number line diagram.	<b>Unit 37: Fractions Equivalent to One</b> <b>Unit 37: Fractions Equivalent to Whole Numbers</b> <b>Unit 37: Mixed Numbers</b> <b>Unit 37: Using Fraction Bars or Number Lines to Find Many Equivalent Fractions</b> <b>Unit 37: Using Fraction Bars or Number Lines to Determine If Two Fractions Are Equivalent</b>	<b>Unit 37: Fractions Equivalent to One</b> <b>Unit 37: Fractions Equivalent to Whole Numbers</b> <b>Unit 37: Mixed Numbers on a Number Line</b> <b>Unit 37: Many Equivalent Fractions</b> <b>Unit 37: Identifying Equivalent Fractions</b>	MP2 MP4 MP5 MP6 MP7
	A. Represent a fraction $1/b$ on a number line diagram by defining the interval from 0 to 1 as the whole and partitioning it into $b$ equal parts. Recognize that each part has size $1/b$ and that the endpoint of the part based at 0 locates the number $1/b$ on the number line. B. Represent a fraction $a/b$ on a number line diagram by marking off a lengths $1/b$ from 0. Recognize that the resulting interval has size $a/b$ and that its endpoint locates the number $a/b$ on the number line.			
3.NF.F.3	Explain equivalence of fractions in special cases, and compare fractions by reasoning about their size.	<b>Unit 37: Fractions Equivalent to One</b> <b>Unit 37: Fractions Equivalent to Whole Numbers</b> <b>Unit 37: Mixed Numbers</b> <b>Unit 37: Using Fraction Bars or Number Lines to Find Many Equivalent Fractions</b> <b>Unit 37: Using Fraction Bars or Number Lines to Determine If Two Fractions Are Equivalent</b> <b>Unit 37: Comparing Fractions with Same Denominators</b> <b>Unit 37: Comparing Fractions with Same Numerators</b>	<b>Unit 37: Fractions Equivalent to One</b> <b>Unit 37: Fractions Equivalent to Whole Numbers</b> <b>Unit 37: Mixed Numbers on a Number Line</b> <b>Unit 37: Many Equivalent Fractions</b> <b>Unit 37: Identifying Equivalent Fractions</b> <b>Unit 37: Expressing Equivalent Fractions with Denominators of 10 and 100</b> <b>Unit 37: Using Models to Identify Equivalent Fractions</b> <b>Unit 37: Fractions with Same Numerators</b> <b>Unit 37: Fractions with Like Denominators</b> <b>Unit 37: Whole Numbers and Fractions – Symbols</b> <b>ISIP Math: Comparing Fractions</b> <b>ISIP Math: Comparing Fractions Using Models</b> <b>ISIP Math: Identifying Equivalent Fractions Using Area Models</b>	MP1 MP2 MP3 MP5 MP6 MP7
	A. Understand two fractions as equivalent (equal) if they are the same size or the same point on a number line.			
	b. Recognize and generate simple equivalent fractions. Explain why the fractions are equivalent.			
	C. Express whole numbers as fractions, and recognize fractions that are equivalent to whole numbers.			
d. Compare two fractions with the same numerator or the same denominator by reasoning about their size. Recognize that comparisons are valid only when the two fractions refer to the same whole. Record the results of comparisons with the symbols $>$ , $=$ , or $<$ , and justify the conclusions.				

# Istation Math Curriculum Correlated to Wyoming Content and Performance Standards for Mathematics

## Grade 3



Standards	Objectives	Istation Application*	Istation Teacher Resources*	MP Standards
<b>Measurement and Data (MD)</b>				
<b>Solve problems involving measurement and estimation of intervals of time, liquid volumes, and masses of objects.</b>				
3.MD.G.1	Use analog clocks to tell and write time to the nearest minute and measure time intervals in minutes. Solve word problems involving addition and subtraction of time intervals in minutes.	<b>Unit 39: Elapsed Time on a Number Line</b>	<b>Unit 39: Elapsed Time Within One Hour</b> <b>Unit 39: Elapsed Time Across Hours</b>	MP1 MP2 MP4 MP5 MP6
<b>Represent and interpret data.</b>				
3.MD.H.3	Draw a scaled picture graph and a scaled bar graph to represent a data set with several categories. Solve one- and two-step “how many more” and “how many less” problems using information presented in scaled graphs.	<b>Unit 39: Solve Two-Step Problems Using Information Presented in Scaled Bar Graphs</b>	<b>Unit 39: Solving Two-Step Problems Using Bar Graphs</b>	MP1 MP2 MP4 MP6
3.MD.H.4	Generate measurement data by measuring lengths using rulers marked with halves and fourths of an inch. Use the data to create a line plot, where the horizontal scale is marked off in appropriate units—whole numbers, halves, or quarters.		<b>ISIP Math: Measuring to the Nearest Quarter Inch</b>	MP1 MP2 MP4 MP5 MP6 MP7
<b>Geometric measurement: Understand concepts of area and relate area to multiplication and to addition.</b>				
3.MD.I.5	Understand area as an attribute of plane figures and understand concepts of area measurement, such as square units without gaps or overlaps.		<b>ISIP Math: Area Square</b> <b>ISIP Math: Finding the Area of Polygons</b> <b>ISIP Math: Finding the Area of Rectangles</b>	MP6
3.MD.I.6	Measure areas by counting unit squares (square cm, square m, square in, square ft, and improvised units).		<b>ISIP Math: Area Square</b> <b>ISIP Math: Finding the Area of Polygons</b> <b>ISIP Math: Finding the Area of Rectangles</b>	MP1 MP2 MP6
3.MD.I.7	Relate area to the operations of multiplication and addition. A. Find the area of a rectangle with whole-number side lengths (dimensions) by multiplying them. Show that the area is the same as when counting unit squares. B. Multiply side lengths to find areas of rectangles with whole-number side lengths in the context of solving real-world and mathematical problems, and represent whole-number products as rectangular areas in mathematical reasoning. C. Use area models to represent the distributive property in mathematical reasoning. Use tiling to show in a concrete case that the area of a rectangle with whole-number side lengths $a$ and $b + c$ is the sum of $a \times b$ and $a \times c$ .		<b>ISIP Math: Area Square</b> <b>ISIP Math: Finding the Area of Polygons</b> <b>ISIP Math: Finding the Area of Rectangles</b>	MP1 MP2 MP4 MP6 MP7 MP8

# Istation Math Curriculum Correlated to Wyoming Content and Performance Standards for Mathematics

## Grade 3



Standards	Objectives	Istation Application*	Istation Teacher Resources*	MP Standards
<b>Geometric measurement: Recognize perimeter as an attribute of plane figures and distinguish between linear and area measures.</b>				
3.MD.J.8	Solve real-world and mathematical problems involving perimeters of polygons, including finding the perimeter given the side lengths, finding an unknown side length, and exhibiting rectangles with the same perimeter and different areas or with the same area and different perimeters.	<b>Unit 38: Perimeter Word Problems</b>	<b>Unit 38: Perimeter Bundle</b> <b>ISIP Math: Perimeter of Polygons</b>	MP1 MP2 MP7
<b>Geometry (G)</b>				
<b>Reason with shapes and their attributes.</b>				
3.G.K.1	Use attributes of quadrilaterals to classify rhombuses, rectangles, and squares. Understand that the shared attributes can define a larger category (e.g., quadrilaterals). Recognize rhombuses, rectangles, and squares as examples of quadrilaterals, and draw examples of quadrilaterals that do not belong to any of these subcategories.		<b>ISIP Math: Are Squares the Perfect Shape?</b> <b>ISIP Math: Attributes of Polygons</b> <b>ISIP Math: Building Hexagons</b> <b>ISIP Math: Defining Quadrilaterals by Attributes</b> <b>ISIP Math: Multiplying with Polygons</b>	MP2 MP6 MP7
<i>*Includes content released through January 2019.</i>				
End of Grade 3				

# Istation Math Curriculum Correlated to Wyoming Content and Performance Standards for Mathematics

## Grade 4



Standards	Objectives	Istation Application*	Istation Teacher Resources*	MP Standards
<b>K-12 Standards for Mathematical Practices (MP)</b>				
As stated in the Wyoming Content and Performance Standards for Mathematics, “The Standards for Mathematical Practice describe varieties of expertise that mathematics educators at all levels should seek to develop in their students.” Each Mathematical Practice standard is listed as applicable to the right of each Istation Math resource with the corresponding code, MP1-8.				
MP1	Make sense of problems and persevere in solving them.			
MP2	Reason abstractly and quantitatively.			
MP3	Construct viable arguments and critique the reasoning of others.			
MP4	Model with mathematics.			
MP5	Use appropriate tools strategically.			
MP6	Attend to precision.			
MP7	Look for and make use of structure.			
MP8	Look for and express regularity in repeated reasoning.			
<b>Operations and Algebraic Thinking (OA)</b>				
<b>Use the four operations with whole numbers to solve problems.</b>				
4.OA.A.2	Multiply or divide to solve word problems involving multiplicative comparison, e.g., by using drawings and equations with a symbol for the unknown number to represent the problem, distinguishing multiplicative comparison from additive comparison.	<b>Unit 42: Solve Multistep Word Problems</b>	<b>Unit 42: Solve Multistep Word Problems</b> <b>ISIP Math: Using Multiplication to Solve If-Then Word Problems</b>	MP1 MP2 MP4 MP7
4.OA.A.3	Solve multi-step word problems posed with whole numbers, including problems in which remainders must be interpreted. A. Represent these problems using equations with a letter standing for the unknown quantity. B. Assess the reasonableness of answers using mental computation and estimation strategies including rounding.	<b>Unit 42: Solve Multistep Word Problems</b>	<b>Unit 42: Solve Multistep Word Problems</b> <b>ISIP Math: Using Multiplication to Solve If-Then Word Problems</b>	MP1 MP2 MP3 MP4 MP6 MP7
<b>Develop understanding of factors and multiples.</b>				
4.OA.B.4	Demonstrate an understanding of factors and multiples. A. Find all factor pairs for a whole number in the range 1-100. B. Recognize that a whole number is a multiple of each of its factors. C. Determine whether a given whole number in the range 1-100 is a multiple of a given one-digit number. D. Determine whether a given whole number in the range 1-100 is prime or composite.		<b>Fact Practice Activities: Dice Blocks; Multominoes; Spider Queen’s Hidden Products; Spider Queen’s Spiders; Tall Towers; Wipe Out</b> <b>ISIP Math: Multiplication Practice Game</b>	MP1 MP2 MP7

# Istation Math Curriculum Correlated to Wyoming Content and Performance Standards for Mathematics

## Grade 4



Standards	Objectives	Istation Application*	Istation Teacher Resources*	MP Standards
<b>Generate and analyze patterns.</b>				
4.OA.C.5	Given a pattern, explain a rule that the pattern follows and extend the pattern. Generate a number or shape pattern that follows a given rule. Identify apparent features of the pattern that were not explicit in the rule itself.		<b>ISIP Math: Integrating Fact Practice Using Input/Output Function Tables</b>	MP1 MP2 MP3 MP4 MP6 MP7 MP8
<b>Number and Operations in Base Ten (NBT)</b>				
<b>Generalize place value understanding for multi-digit whole numbers.</b>				
4.NBT.D.1	Recognize that in a multi-digit whole number, a digit in one place represents ten times what it represents in the place to its right.	<b>Unit 40: Writing Standard Form from Expanded Form to Thousands</b> <b>Unit 40: Writing Expanded Form from Standard Form to Thousands</b> <b>Unit 40: Writing Word Form from Expanded and Standard Form to Thousands</b> <b>Unit 40: Writing Standard Form from Expanded Form through Millions</b> <b>Unit 40: Writing Expanded Form from Standard Form through Millions</b> <b>Unit 40: Writing Word Form from Expanded and Standard Form through Thousands and Millions</b>	<b>Unit 40: Writing Expanded Form from Standard through Thousands and Millions</b> <b>Unit 40: Writing Standard Form from Expanded through Thousands and Millions</b> <b>Unit 40: Writing Word Form from Expanded and Standard through Thousands and Millions</b>	MP1 MP2 MP7 MP8
4.NBT.D.2	Read and write multi-digit whole numbers using base-ten numerals, number names, and expanded form. Compare two multi-digit numbers based on meanings of the digits in each place, using $>$ , $=$ , and $<$ symbols.	<b>Unit 40: Writing Standard Form from Expanded Form to Thousands</b> <b>Unit 40: Writing Expanded Form from Standard Form to Thousands</b> <b>Unit 40: Writing Word Form from Expanded and Standard Form to Thousands</b> <b>Unit 40: Writing Standard Form from Expanded Form through Millions</b> <b>Unit 40: Writing Expanded Form from Standard Form through Millions</b> <b>Unit 40: Writing Word Form from Expanded and Standard Form through Thousands and Millions</b>	<b>Unit 40: Writing Expanded Form from Standard through Thousands and Millions</b> <b>Unit 40: Writing Standard Form from Expanded through Thousands and Millions</b> <b>Unit 40: Writing Word Form from Expanded and Standard through Thousands and Millions</b>	MP1 MP2 MP6
4.NBT.D.3	Use place value understanding to round multi-digit whole numbers to any place.	<b>Unit 40: Rounding within Whole Numbers to the Nearest Ten, Hundred, Thousand with Number Line</b> <b>Unit 40: Rounding within Whole Numbers to the Nearest Ten, Hundred, Thousand with Algorithm</b> <b>Unit 40: Rounding Zero</b>	<b>Unit 40: Rounding – Nearest Thousand</b> <b>Unit 40: Rounding – Nearest Ten, Hundred, Thousand</b> <b>Unit 40: Rounding within Three- and Four-Digit Numbers – Number Line</b> <b>Unit 40: Rounding within Three- and Four-Digit Numbers – Abstract</b> <b>Unit 40: Zero as the Rounding Digit</b>	MP6

# Istation Math Curriculum Correlated to Wyoming Content and Performance Standards for Mathematics

## Grade 4



Standards	Objectives	Istation Application*	Istation Teacher Resources*	MP Standards
<b>Use place value understanding and properties of operations to perform multi-digit arithmetic (limited to whole numbers less than or equal to 1,000,000).</b>				
4.NBT.E.4	Add and subtract multi-digit whole numbers using place value strategies including the standard algorithm.		<b>ISIP Math:</b> <i>Adding Multidigit Numbers and Checking for Reasonableness</i>	MP1
4.NBT.E.5	Use strategies based on place value and the properties of multiplication to: A. Multiply a whole number of up to four digits by a one-digit whole number. B. Multiply a pair of two-digit numbers. C. Use appropriate models to explain the calculation, such as by using equations, rectangular arrays, and/or area models.	<b>Unit 41:</b> <i>Multiply Two-Digit Numbers with Concrete Models</i>	<b>Unit 41:</b> <i>Two-Digit by Two-Digit Concrete Multiplication</i> <b>ISIP Math:</b> <i>Commutative Property of Multiplication to Represent Numbers</i> <b>ISIP Math:</b> <i>Multiplying Using the Distributive Property</i>	MP1 MP2 MP3 MP4 MP5
4.NBT.E.6	Use strategies based on place value, the properties of multiplication, and/or the relationship between multiplication and division to find quotients and remainders with up to four-digit dividends and one-digit divisors. Use appropriate models to explain the calculation, such as by using equations, rectangular arrays, and/or area models.	<b>Unit 42:</b> <i>Solve Multistep Word Problems</i>	<b>Unit 42:</b> <i>Solve Multistep Word Problems</i>	MP1 MP2 MP3 MP4 MP5 MP6 MP7
<b>Number and Operations – Fractions (NF)</b>				
<b>Extend understanding of fraction equivalence and ordering (limited to denominators 2, 3, 4, 5, 6, 8, 10, 12, and 100).</b>				
4.NF.F.1	Explain why a fraction $a/b$ is equivalent to a fraction $(n \times a)/(n \times b)$ by using visual fraction models, with attention to how the number and size of the parts differ even though the two fractions themselves are the same size. Use this principal to recognize and generate equivalent fractions.	<b>Unit 43:</b> <i>Use Models to Compare Equivalent Fractions</i> <b>Unit 43:</b> <i>Expressing Equivalent Fractions with Denominators of 10 and 100</i>	<b>Unit 37:</b> <i>Using Models to Identify Equivalent Fractions</i> <b>Unit 43:</b> <i>Expressing Equivalent Fractions with Denominators of 10 and 100</i> <b>ISIP Math:</b> <i>Comparing Fractions</i> <b>ISIP Math:</b> <i>Using Area Models to Compare Fractions</i>	MP1 MP2 MP3 MP4 MP7 MP8
4.NF.F.2	Compare two fractions with different numerators and different denominators by creating common denominators or numerators, or by comparing to a benchmark fraction such as $1/2$ . A. Recognize that comparisons are valid only when the two fractions refer to the same whole. B. Record the results of comparisons with symbols $>$ , $=$ , or $<$ . C. Justify the conclusions, e.g., by using a visual fraction model.	<b>Unit 43:</b> <i>Use Benchmark Fractions to Compare Fractions with Different Denominators</i> <b>Unit 43:</b> <i>Compare Fractions with Unlike Denominators by Creating Common Denominators</i>	<b>Unit 43:</b> <i>Compare Fractions by Creating Common Denominators</i> <b>Unit 43:</b> <i>Benchmark Fractions</i> <b>Unit 43:</b> <i>Fractions – Symbols</i> <b>ISIP Math:</b> <i>Comparing Fractions</i> <b>ISIP Math:</b> <i>Using Area Models to Compare Fractions</i>	MP1 MP2 MP3 MP4 MP6 MP7

# Istation Math Curriculum Correlated to Wyoming Content and Performance Standards for Mathematics

## Grade 4



Standards	Objectives	Istation Application*	Istation Teacher Resources*	MP Standards
<b>Build fractions from unit fractions by applying and extending previous understandings of operations on whole numbers (limited to denominators 2, 3, 4, 5, 6, 8, 10, 12, and 100).</b>				
4.NF.G.3	Understand a fraction $a/b$ with $a > 1$ as a sum of fractions $1/b$ .	<b>Unit 43: Add Fractions with Both Denominators of 10 and 100</b> <b>Unit 43: Add a Denominator of 10 to a Denominator of 100</b> <b>Unit 43: Add Fractions with Denominators of 10 and 100</b> <b>Unit 43: Decomposing Fractions</b>	<b>Unit 43: Add Denominators of 10 to Denominators of 100</b> <b>Unit 43: Adding Like Denominators of 10 and 100</b>	MP1 MP2 MP3 MP4 MP6 MP7
	A. Understand addition and subtraction of fractions as joining and separating parts referring to the same whole.			
	B. Decompose a fraction into a sum of fractions with the same denominator in more than one way, recording each decomposition by an equation. Justify decompositions, e.g., by using a visual fraction model.			
	C. Add and subtract mixed numbers with like denominators by replacing each mixed number with an equivalent fraction, and/or by using properties of addition and the relationship between addition and subtraction.			
	D. Solve word problems involving addition and subtraction of fractions referring to the same whole and having like denominators.			
<b>Understand decimal notation for fractions, and compare decimal fractions.</b>				
4.NF.H.5	Express a fraction with denominator 10 as an equivalent fraction with denominator 100, and use this technique to add two fractions with respective denominators 10 and 100.	<b>Unit 43: Add Fractions with Both Denominators of 10 and 100</b> <b>Unit 43: Express Equivalent Fractions – Tenths and Hundredths</b> <b>Unit 43: Add a Denominator of 10 to a Denominator of 100</b> <b>Unit 43: Add Fractions with Denominators of 10 and 100</b>	<b>Unit 43: Expressing Equivalent Fractions with Denominators of 10 and 100</b> <b>Unit 43: Add Denominators of 10 to Denominators of 100</b> <b>Unit 43: Adding Like Denominators of 10 and 100</b>	MP1 MP2 MP7
4.NF.H.6	Use decimal notation for fractions with denominators 10 or 100.	<b>Unit 43: Write Word Form of Decimals (0.1-0.9 and 0.01-0.09)</b> <b>Unit 43: Write Word Form of Decimals (0.10-0.90)</b> <b>Unit 43: Write Word Form of Decimals (0.01-1.99)</b>	<b>Unit 43: Decimals as Fractions (Tenths and Hundredths)</b> <b>Unit 43: Decimals – Standard and Word Form</b> <b>ISIP Math: Linking Fractions to Equivalent Decimal Numbers</b> <b>ISIP Math: Understanding Decimal Numbers with Fractional Language</b>	MP1 MP2 MP6 MP7
4.NF.H.7	Compare and order decimal numbers to hundredths and justify by using concrete and visual models. Record the results of comparisons with the words "is greater than," "is equal to," "is less than," and with the symbols $>$ , $=$ , and $<$ .		<b>ISIP Math: Comparing and Ordering Decimals</b>	MP1 MP2 MP3 MP4 MP6 MP7



# Istation Math Curriculum Correlated to Wyoming Content and Performance Standards for Mathematics

## Grade 4



Standards	Objectives	Istation Application*	Istation Teacher Resources*	MP Standards
<b>Measurement and Data (MD)</b>				
<b>Solve problems involving measurement and conversion of measurements from a larger unit to a smaller unit.</b>				
4.MD.I.1	Know relative sizes of measurement units within one system of units including, but not limited to, km, m, cm; kg, g; lb, oz.; l, ml; hr, min, sec; ft, in., gal., qt. pt., c., . Within a single system of measurement, express measurements in a larger unit in terms of a smaller unit. Record measurement equivalents in a two-column table.	<b>Unit 44: Converting Units of Measurement to Solve Word Problems</b>	<b>Unit 44: Measurement Conversion Word Problems</b>	MP1 MP2 MP6 MP7
4.MD.I.2	Use the four operations to solve word problems involving distances, intervals of time, liquid volumes, masses of objects, and money, including problems involving simple fractions or decimals, and problems that require expressing measurements given in a larger unit in terms of a smaller unit. Represent measurement quantities using diagrams such as number line diagrams that feature a measurement scale.	<b>Unit 44: Converting Units of Measurement to Solve Word Problems</b>	<b>Unit 44: Measurement Conversion Word Problems</b> <b>ISIP Math: Calculating Elapsed Time</b> <b>ISIP Math: Area of Rectangles and Part-Part-Whole Word Problems</b> <b>ISIP Math: Measuring Length to the Nearest Quarter Inch</b>	MP1 MP2 MP4 MP5 MP6 MP7
4.MD.I.3	Apply the area and perimeter formulas for rectangles in real-world and mathematical problems.		<b>ISIP Math: Area of Rectangles and Part-Part-Whole Word Problems</b> <b>ISIP Math: Finding Area of Rectangles and Squares by Using Multiplication</b> <b>ISIP Math: Making Connections between Multiplication and Area</b> <b>ISIP Math: Quantifying Areas of Rectangles and Squares</b>	MP1 MP2
<b>Represent and interpret data.</b>				
4.MD.J.4	Make a line plot to display a data set of measurements in fractions of a unit ( $\frac{1}{2}$ , $\frac{1}{4}$ , $\frac{1}{8}$ ). Solve problems involving addition and subtraction of fractions using information presented in line plots.	<b>Unit 45: Line Plots with Fractional Data</b>	<b>Unit 45: Line Plot Fraction Data</b>	MP1 MP2 MP4 MP5 MP6 MP7
<b>Geometric measurement: Understand concepts of angle and measure angles.</b>				
4.MD.K.5	Regarding angles: A. Recognize angles as geometric shapes that are formed wherever two rays share a common endpoint.	<b>Unit 45: Measure Angles with a Protractor</b>	<b>Unit 45: Measure Angles with a Protractor</b> <b>ISIP Math: Line and Angle Identification</b>	MP6
	B. Understand concepts of angle measurement. An angle is measured with reference to a circle with its center at the common endpoint of the rays.			
4.MD.K.6	Measure angles in whole-number degrees using a protractor. Sketch angles of specified measure.	<b>Unit 45: Measure Angles with a Protractor</b>	<b>Unit 45: Measure Angles with a Protractor</b> <b>ISIP Math: Line and Angle Identification</b>	MP6

# Istation Math Curriculum Correlated to Wyoming Content and Performance Standards for Mathematics

## Grade 4



Standards	Objectives	Istation Application*	Istation Teacher Resources*	MP Standards
4.MD.K.7	Solve addition and subtraction problems to find unknown angles on a diagram in real world and mathematical problems.	<b>Unit 45: Missing Angles</b>	<b>Unit 45: Missing Angles</b> <b>ISIP Math: Decomposing Figures to Find the Area of Polygons</b>	MP1 MP2 MP4 MP5
<b>Geometry (G)</b>				
<b>Draw and identify lines and angles, and classify shapes by properties of their lines and angles.</b>				
4.G.L.1	Draw points, lines, line segments, rays, angles (right, acute, obtuse), and perpendicular and parallel lines. Identify these in two-dimensional figures.	<b>Unit 45: Measure Angles with a Protractor</b>	<b>Unit 45: Measure Angles with a Protractor</b> <b>ISIP Math: Line and Angle Identification</b>	MP2 MP5 MP6
*Includes content released through January 2019.				
End of Grade 4				

# Istation Math Curriculum Correlated to Wyoming Content and Performance Standards for Mathematics

## Grade 5



Standards	Objectives	Istation Application*	Istation Teacher Resources*	MP Standards
<b>K-12 Standards for Mathematical Practices (MP)</b>				
As stated in the Wyoming Content and Performance Standards for Mathematics, “The Standards for Mathematical Practice describe varieties of expertise that mathematics educators at all levels should seek to develop in their students.” Each Mathematical Practice standard is listed as applicable to the right of each Istation Math resource with the corresponding code, MP1-8.				
MP1	Make sense of problems and persevere in solving them.			
MP2	Reason abstractly and quantitatively.			
MP3	Construct viable arguments and critique the reasoning of others.			
MP4	Model with mathematics.			
MP5	Use appropriate tools strategically.			
MP6	Attend to precision.			
MP7	Look for and make use of structure.			
MP8	Look for and express regularity in repeated reasoning.			
<b>Operations and Algebraic Thinking (OA)</b>				
<b>Write, interpret, and/or evaluate numerical expressions.</b>				
5.OA.A.1	Use parentheses, brackets, or braces in numerical expressions, and evaluate expressions with these symbols.	<b>Unit 49: Writing Expressions from Words</b> <b>Unit 49: Interpreting Expressions</b> <b>Unit 49: Evaluate Numerical Expressions with Parentheses</b>	<b>Unit 49: Writing Expressions from Words – Subtraction</b> <b>Unit 49: Writing Expressions from Words – Addition and Subtraction</b> <b>Unit 49: Evaluating Numerical Expressions with Parentheses</b> <b>Unit 49: Identifying Expressions in Scenarios</b>	MP1 MP2 MP7
5.OA.A.2	Write simple expressions requiring parentheses that record calculations with numbers, and interpret numerical expressions without evaluating them.	<b>Unit 49: Writing Expressions from Words</b> <b>Unit 49: Interpreting Expressions</b>	<b>Unit 49: Writing Expressions from Words – Subtraction</b> <b>Unit 49: Writing Expressions from Words – Addition and Subtraction</b> <b>Unit 49: Evaluating Numerical Expressions with Parentheses</b> <b>Unit 49: Identifying Expressions in Scenarios</b>	MP1
<b>Analyze patterns and relationships.</b>				
5.OA.B.3	Generate two numerical patterns with each pattern having its own rule. Explain informally the relationship(s) between corresponding terms in the two patterns. A. Form ordered pairs consisting of corresponding terms from the two patterns. B. Graph the ordered pairs on a coordinate plane.	<b>Unit 51: Comparing Points on a Coordinate Plane</b>	<b>Unit 51: Comparing Points on a Coordinate Plane</b> <b>ISIP Math: Identifying and Plotting Ordered Pairs on the Coordinate Plane</b>	MP1 MP2 MP3 MP6 MP7 MP8
<b>Number and Operations in Base Ten (NBT)</b>				
<b>Understand the place value system.</b>				
5.NBT.C.1	Recognize that in a multi-digit number, a digit in one place represents 10 times as much as it represents in the place to its right and 1/10 of what it represents in the place to its left.	<b>Unit 46: Multiplying Decimals by 10 and 100</b> <b>Unit 46: Dividing Decimals by 10 and 100</b> <b>Unit 46: Exploring Powers of Ten</b> <b>Unit 46: Multiplying and Divide Decimals by Powers of Ten</b>	<b>Unit 46: Multiplying Decimals by 10 and 100</b> <b>Unit 46: Dividing Decimals by 10 and 100</b> <b>Unit 46: Multiplying and Dividing Decimals by Powers of Ten</b> <b>Unit 46: Exploring Powers of Ten</b> <b>Unit 46: Decimal Grids and Place Value Mats</b> <b>Unit 46: Decimals on Place Value Mats</b>	MP2 MP7

**Istation Math Curriculum Correlated to Wyoming Content and Performance Standards for Mathematics**  
Grade 5



Standards	Objectives	Istation Application*	Istation Teacher Resources*	MP Standards
5.NBT.C.2	Explain patterns in the number of zeros of the product when multiplying a number by powers of 10, and explain patterns in the placement of the decimal point when a decimal is multiplied or divided by a power of 10. Use whole-number exponents to denote powers of 10.	<b>Unit 46: Multiplying Decimals by 10 and 100</b> <b>Unit 46: Dividing Decimals by 10 and 100</b> <b>Unit 46: Exploring Powers of Ten</b> <b>Unit 46: Multiplying and Dividing Decimals by Powers of Ten</b>	<b>Unit 46: Multiplying Decimals by 10 and 100</b> <b>Unit 46: Dividing Decimals by 10 and 100</b> <b>Unit 46: Multiplying and Dividing Decimals by Powers of Ten</b> <b>Unit 46: Exploring Powers of Ten</b>	MP2 MP3 MP6 MP7 MP8
5.NBT.C.3	Read, write, and compare decimals to thousandths.	<b>Unit 46: Concrete Decimal Comparison</b> <b>Unit 46: Decimal Comparison with Grids</b> <b>Unit 46: Comparison of Tenths and Hundredths on the Number Line</b> <b>Unit 46: Abstract Comparison of Tenths and Hundredths</b> <b>Unit 46: Abstract Comparison of Thousandths</b> <b>Unit 46: Abstract Comparison of Whole Numbers and Decimals</b>	<b>Unit 46: Abstract Decimal Comparison</b> <b>Unit 46: Decimal Comparison on the Number Line</b> <b>Unit 46: Decimals to Whole Numbers</b>	MP1 MP2 MP6 MP7
	A. Read and write decimals to thousandths using base-ten numerals, number names, and expanded form.  B. Compare two decimals to thousandths based on meanings of the digits in each place, using $>$ , $=$ , and $<$ symbols.			
5.NBT.C.4	Use place value understanding to round decimals to any place to a given place.	<b>Unit 46: Rounding Decimals with a Number Line</b> <b>Unit 46: Rounding Decimals with Dials</b> <b>Unit 46: Roll-Over Rounding</b>	<b>Unit 46: Rounding – Decimals – Number Line</b> <b>Unit 46: Rounding – Decimals – Algorithm</b>	MP1 MP6
<b>Perform operations with multi-digit whole numbers and with decimals to hundredths.</b>				
5.NBT.D.5	Multiply multi-digit whole numbers using place value strategies including the standard algorithm.		<b>ISIP Math: Factor Game for Multiplication Facts Practice</b> <b>ISIP Math: Solving Multiplication and Division Word Problems with Diagrams</b>	MP1
5.NBT.D.6	Find whole-number quotients with up to four-digit dividends and two-digit divisors, using strategies based on place value, the properties of multiplication, and/or the relationship between multiplication and division, including the standard algorithm. Use appropriate models to illustrate and explain the calculation, such as equations, rectangular arrays, and/or area models.	<b>Unit 44: Divide with Concrete Models</b> <b>Unit 44: Divide Using an Algorithm</b>	<b>Unit 44: Divide with Concrete Models</b> <b>Unit 44: Divide Using an Algorithm</b> <b>ISIP Math: Estimating Quotients Using Compatible Numbers</b> <b>ISIP Math: Models for Understanding Remainders</b> <b>ISIP Math: Using Models to Practice Extended Division Facts</b> <b>ISIP Math: Inverse Operations and Fact Families to Solve Simple Equations</b> <b>ISIP Math: Solving Multiplication and Division Word Problems with Diagrams</b>	MP1 MP2 MP3 MP4

**Istation Math Curriculum Correlated to Wyoming Content and Performance Standards for Mathematics**  
Grade 5



Standards	Objectives	Istation Application*	Istation Teacher Resources*	MP Standards
5.NBT.D.7	Add, subtract, multiply, and divide decimals to hundredths using concrete models or drawings and strategies based on place value, properties of operations, and/or the relationship between addition and subtraction; Relate the strategy to a written method and explain the reasoning used.	<b>Unit 46: Multiplying Decimals by 10 and 100</b> <b>Unit 46: Dividing Decimals by 10 and 100</b> <b>Unit 46: Exploring Powers of Ten</b> <b>Unit 46: Multiplying and Divide Decimals by Powers of Ten</b>	<b>Unit 47: Decimal Addition</b> <b>Unit 47: Decimal Subtraction</b> <b>Unit 47: Concrete Decimal Division</b> <b>Unit 47: Representational Decimal Division</b> <b>Unit 46: Multiplying Decimals by 10 and 100</b> <b>Unit 46: Dividing Decimals by 10 and 100</b> <b>Unit 46: Multiplying and Dividing Decimals by Powers of Ten</b> <b>ISIP Math: Adding and Subtracting Decimal Numbers in a Word Problem</b> <b>ISIP Math: Calculating Reasonable Estimates of Decimal Number Sums</b>	MP1 MP2 MP3 MP4 MP5 MP6
<b>Number and Operations – Fractions (NF)</b>				
<b>Use equivalent fractions as a strategy to add and subtract fractions.</b>				
5.NF.E.1	Add and subtract fractions with unlike denominators (including mixed numbers) by replacing given fractions with equivalent fractions in such a way as to produce an equivalent sum or difference of fractions with like denominators.	<b>Unit 48: Adding Fractions with Unlike Denominators</b> <b>Unit 48: Subtracting Fractions with Unlike Denominators</b>	<b>Unit 48: Adding Fractions with Unlike Denominators</b> <b>Unit 48: Subtracting Fractions with Unlike Denominators</b> <b>ISIP Math: Adding and Subtracting Fractions with Unlike Denominators</b>	MP1 MP2 MP7
<b>Apply and extend previous understandings of multiplication and division to multiply and divide fractions.</b>				
5.NF.F.4	Extend the concept of multiplication to multiply a fraction or whole number by a fraction.	<b>Unit 48: Multiplying by Fractions Less Than One</b> <b>Unit 48: Multiplying by Fractions Less Than One with Improper Fractions</b> <b>Unit 48: Multiplying with Fractions Greater Than One</b> <b>Unit 50: Area of a Rectangle with Fractional Sides</b>	<b>Unit 48: Multiplying by Fractions Less Than One</b> <b>Unit 48: Multiplying by Fractions Less Than One with Improper Fractions</b> <b>Unit 48: Multiplying Whole Numbers by Fractions Greater Than One</b> <b>Unit 50: Area of a Rectangle with Fractional Sides</b>	MP1 MP2 MP6 MP7
	A. Recognize the relationship between multiplying fractions and finding the areas of rectangles with fractional side lengths.			
	B. Interpret multiplication of a fraction by a whole number and a whole number by a fraction and compute the product.			
5.NF.F.5	C. Interpret multiplication in which both factors are fractions less than one and compute the product.	<b>Unit 48: Multiplying by Fractions Less Than One</b> <b>Unit 48: Multiplying Fractions Less Than One with Improper Fractions</b> <b>Unit 48: Multiplying with Fractions Greater Than One</b>	<b>Unit 48: Multiplying by Fractions Less Than One</b> <b>Unit 48: Multiplying Fractions Less Than One with Improper Fractions</b> <b>Unit 48: Multiplying with Fractions Greater Than One</b>	MP1 MP2 MP3 MP7
	Justify the reasonableness of a product when multiplying with fractions.			
	A. Estimate the size of the product based on the size of the two factors.			
	B. Explain why multiplying a given number by a number greater than 1 (improper fractions, mixed numbers, whole numbers) results in a product larger than the given number.			
C. Explain why multiplying a given number by a fraction less than 1 results in a product smaller than the given number.	<b>Unit 48: Multiplying by Fractions Less Than One</b> <b>Unit 48: Multiplying Fractions Less Than One with Improper Fractions</b> <b>Unit 48: Multiplying with Fractions Greater Than One</b>	<b>Unit 48: Multiplying by Fractions Less Than One</b> <b>Unit 48: Multiplying Fractions Less Than One with Improper Fractions</b> <b>Unit 48: Multiplying with Fractions Greater Than One</b>	MP1 MP2 MP3 MP7	
D. Explain why multiplying the numerator and denominator by the same number has the same effect as multiplying the fraction by 1.				

# Istation Math Curriculum Correlated to Wyoming Content and Performance Standards for Mathematics

## Grade 5



Standards	Objectives	Istation Application*	Istation Teacher Resources*	MP Standards
<b>Measurement and Data (MD)</b>				
<b>Convert like measurement units within a given measurement system.</b>				
5.MD.G.1	Solve multi-step real world problems by converting among different-sized standard measurement units within a given measurement system.		<b>ISIP Math:</b> <i>Converting Standard Units of Measurement</i> <b>ISIP Math:</b> <i>Performing Customary Measurement Conversions</i>	MP1 MP2 MP6 MP7
<b>Geometric measurement: Understand concepts of volume and relate volume to multiplication and to addition.</b>				
5.MD.I.3	Recognize volume as an attribute of three-dimensional figures and understand concepts of volume measurement such as "unit cube" and a volume of $n$ cubic units.	<b>Unit 50:</b> <i>Volume of Irregular Figures</i>	<b>Unit 50:</b> <i>Volume of Irregular Figures</i> <b>ISIP Math:</b> <i>Quantifying Volume: Counting Same-Sized Units</i> <b>ISIP Math:</b> <i>Volume as an Attribute of Three-Dimensional Space</i>	MP6 MP7
5.MD.I.4	Measure volumes by counting unit cubes, using cubic cm, cubic in, cubic ft, and improvised units.	<b>Unit 50:</b> <i>Volume of Irregular Figures</i>	<b>Unit 50:</b> <i>Volume of Irregular Figures</i> <b>ISIP Math:</b> <i>Quantifying Volume: Counting Same-Sized Units</i>	MP1 MP2 MP4 MP6 MP7
5.MD.I.5	Relate volume to the operations of multiplication and solve real world and mathematical problems involving volume.	<b>Unit 50:</b> <i>Volume of Irregular Figures</i>	<b>Unit 50:</b> <i>Volume of Irregular Figures</i> <b>ISIP Math:</b> <i>Quantifying Volume: Counting Same-Sized Units</i> <b>ISIP Math:</b> <i>Volume as an Attribute of Three-Dimensional Space</i> <b>ISIP Math:</b> <i>Calculating Volume in Multistep Word Problems</i> <b>ISIP Math:</b> <i>Integrating Fact Practice and Volume</i>	MP1 MP2 MP4 MP6 MP7 MP8
	A. Find the volume of a right rectangular prism with whole number dimensions by multiplying them. Show that this volume is the same as when counting unit cubes. B. Find volumes of right rectangular prisms with whole-number edge lengths in the context of solving real world and mathematical problems given the formulas $V = (l)(w)(h)$ and $V = (B)(h)$ for rectangular prisms.			
<b>Geometry (G)</b>				
<b>Graph points on the coordinate plane to solve real-world and mathematical problems.</b>				
5.G.J.1	Understand a coordinate system. A. The $x$ - and $y$ - axes are perpendicular number lines that intersect at 0 (the origin). B. Any point on the coordinate plane can be represented by its coordinates. C. The first number in an ordered pair is the $x$ -coordinate and represents the horizontal distance from the origin. D. The second number in an ordered pair is the $y$ -coordinate and represents the vertical distance from the origin.	<b>Unit 51:</b> <i>Plotting Points on a Coordinate Grid</i> <b>Unit 51:</b> <i>Lines on a Coordinate Plane</i>	<b>Unit 51:</b> <i>Plotting Points on a Coordinate Grid</i> <b>Unit 51:</b> <i>Lines on a Coordinate Plane</i> <b>ISIP Math:</b> <i>Identifying and Plotting Ordered Pairs on the Coordinate Plane</i>	MP1 MP2 MP6 MP7

**Istation Math Curriculum Correlated to Wyoming Content and Performance Standards for Mathematics**  
Grade 5



Standards	Objectives	Istation Application*	Istation Teacher Resources*	MP Standards
5.G.J.2	Plot and interpret points in the first quadrant of the coordinate plane to represent real-world and mathematical situations.	<b>Unit 51: Graph Points in a Coordinate Plane</b> <b>Unit 51: Lines on a Coordinate Plane</b>	<b>Unit 51: Graph Points in a Coordinate Plane</b> <b>Unit 51: Lines on a Coordinate Plane</b> <b>ISIP Math: Identifying and Plotting Ordered Pairs on the Coordinate Plane</b>	MP1 MP2 MP4 MP5 MP6 MP7
<b>Classify two-dimensional figures into categories based on their properties.</b>				
5.G.K.3	Understand that attributes belonging to a category of two-dimensional figures also belong to all subcategories of that category.		<b>ISIP Math: Analyzing Properties of Two- and Three-Dimensional Figures</b> <b>ISIP Math: What's My Rule? Corresponding Sides of Similar Triangles</b> <b>ISIP Math: Triangles: Finding a Missing Angle Measurement</b>	MP2 MP7
5.G.K.4	Classify polygons in a hierarchy based on properties.		<b>ISIP Math: Analyzing Properties of Two- and Three-Dimensional Figures</b>	MP2 MP3 MP7
<i>*Includes content released through January 2019.</i>				
End of Grade 5				