Istation

Istation Math Curriculum Correlated to the Utah Core Standards for Mathematics

Grade K – Grade 5

Contents

K – 12 Standards for Mathematical Practices (MP)

As stated in the Utah Core 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 applicable Mathematical Practice standard is listed below the correlation with the corresponding code, MP1–8.

Mathematical Practice 1: Make sense of problems and persevere in solving them.

Mathematical Practice 2: Reason abstractly and quantitatively.

Mathematical Practice 3: Construct viable arguments and critique the reasoning of others.

Mathematical Practice 4: Model with mathematics.

Mathematical Practice 5: Use appropriate tools strategically.

Mathematical Practice 6: Attend to precision.

Mathematical Practice 7: Look for and make use of structure.

Mathematical Practice 8: Look for and express regularity in repeated reasoning.

The following legend outlines the *Codes* found next to each *Digital Student Experience* and related *Teacher Resources*.

Code Legend	
U	Unit
ISIP	Istation’s Indicators of Progress
EM	Early Math
FP	Fact Practice
PFL	Personal Financial Literacy

Kindergarten

Counting and Cardinality

K.CC.1

Count to 100 by ones and tens.

MP 1, 2, 3, 4, 5, 6, 7, 8

Code	Digital Student Experience	Code	Teacher Resources
U14	Number Sense – “EZ With A Rock and Roll Beat” (1–100)	U14	One Hundred Is a Lot
U14	Number Sense – Identifying Numbers (1–100)	U14	Roll–Count–Cover
U14	Number Sense – Identify Missing Numbers (1–100)	U21	The Arrow Says (1–100)
U14	Number Sense – Number Sequence (1–100)	U23	Decade Numbers
U14	Number Sense – “Hens by Tens” (up to 100)		
U14	Number Sense – Count the Hen Amount (up to 100)		
U14	Number Sense – Count Hens to the Target (up to 100)		
U14	Number Sense – Choose the Hen Amount (up to 100)		

K.CC.2

Count forward beginning from a given number within the known sequence (instead of having to begin at 1).

MP 1, 2, 3, 4, 5, 6, 7, 8

Code	Digital Student Experience	Code	Teacher Resources
U6	Number Sense – “EZ With a Rock and Roll Beat” (1–20)	U6	Count with Me (1–20)

K.CC.2

Count forward beginning from a given number within the known sequence (instead of having to begin at 1).

MP 1, 2, 3, 4, 5, 6, 7, 8

Code	Digital Student Experience	Code	Teacher Resources
U6	Number Sense – Identifying Numbers (1–20)	U8	Counting Mystery (1–50)
U6	Number Sense – Identify Missing Numbers (1–20)	U15	Digit Deal (1–50)
U6	Number Sense – Number Sequence (1–20)	U17	Digit Deal (1–100)
U7	Number Sense – “EZ With a Rock and Roll Beat” (1–30)		
U7	Number Sense – Identifying Numbers (1–30)		
U7	Number Sense – Identify Missing Numbers (1–30)		
U7	Number Sense – Number Sequence (1–30)		
U8	Number Sense – “EZ With a Rock and Roll Beat” (1–50)		
U8	Number Sense – Identifying Numbers (1–50)		
U8	Number Sense – Identify Missing Numbers (1–50)		
U8	Number Sense – Number Sequence (1–50)		
U14	Number Sense – “EZ With A Rock and Roll Beat” (1–100)		
U14	Number Sense – Identifying Numbers (1–100)		
U14	Number Sense – Identify Missing Numbers (1–100)		
U14	Number Sense – Number Sequence (1–100)		

K.CC.3

Write numbers from 0-20. Represent a number of objects with a written numeral 0-20 (with 0 representing a count of no objects).

MP 1, 2, 3, 4, 5, 6, 7, 8

Code	Digital Student Experience	Code	Teacher Resources
U6	Number Sense – “EZ With a Rock and Roll Beat” (1–20)	U5	Writing Numbers Everywhere (1-5)
U6	Number Sense – Identifying Numbers (1–20)	U6	Count with Me (1–20)
U6	Number Sense – Identify Missing Numbers (1–20)	U8	Counting Sticks (1–20)
U6	Number Sense – Number Sequence (1–20)	U10	Park the Car and Write (1–20)
U18	Number Sense – Represent Objects with a Written Number (0–20)	U11	Writing Numbers Everywhere (5-10)
		U18	Writing Numbers (10-20)
		ISIP EM	Total Amount in a Scattered Group

K.CC.4

Understand the relationship between numbers and quantities; connect counting to cardinality

a. When counting objects, say the number names in the standard order, pairing each object with one and only one number name and each number name with one and only one object.
b. Understand that the last number name said tells the number of objects counted. The number of objects is the same regardless of their arrangement or the order in which they were counted.
c. Understand that each successive number name refers to a quantity that is one larger.

MP 1, 2, 3, 4, 5, 6, 7, 8

Code	Digital Student Experience	Code	Teacher Resources
U8	Number Sense – “Counting Cattle” (1–20)	U4	Count in a Line
U8	Number Sense – Counting in a Line (1–20)	U5	Count to Find How Many
U8	Number Sense – Counting in an Array (1–20)	U6	Domino Dot Memory
U10	Number Sense – “Counting Cattle” (1–20)	U7	Counting a Scattered Static Group
U10	Number Sense – Counting in an Array (1–20)	U8	Counting Sticks (1–20)
U10	Number Sense – Counting a Scattered Static Group (1–20)	ISIP EM	Numbers Up!
		ISIP EM	Fill Them Up!
		ISIP EM	Set Stories
		ISIP EM	Ten Frame Puzzles (1-20)
		ISIP EM	Before and After

K.CC.5

Count to answer “how many?” questions about as many as 20 things arranged in a line, a rectangular array, or a circle, or as many as 10 things in a scattered configuration; given a number from 1-20, count out that many objects.

MP 1, 2, 3, 4, 5, 6, 7, 8

Code	Digital Student Experience	Code	Teacher Resources
U8	Number Sense – “Counting Cattle” (1–20)	U7	Counting a Scattered Static Group
U8	Number Sense – Counting in a Line (1–20)	U8	Counting Sticks (1–20)
U8	Number Sense – Counting in an Array (1–20)	ISIP EM	Numbers Up!
U10	Number Sense – “Counting Cattle” (1–20)	ISIP EM	Fill Them Up!
U10	Number Sense – Counting in an Array (1–20)	ISIP EM	Set Stories
U10	Number Sense – Counting a Scattered Static Group (1–20)	ISIP EM	Ten Frame Puzzles (1-20)
		ISIP EM	Total Amount in a Scattered Group

K.CC.6

Use matching or counting strategies to identify whether the number of objects in one group is greater than, less than, or equal to the number of objects in another group. Include groups with up to ten object.

MP 1, 2, 3, 4, 5, 6, 7, 8

Code	Digital Student Experience	Code	Teacher Resources
		U6	Less/More/Equal Sets of Concrete Objects
		ISIP EM	Before and After

K.CC.7			
Compare two numbers between 1 and 10 presented as written numerals using “greater than,” “less than,” or “equal to.”			
MP 1, 2, 3, 4, 5, 6, 7, 8			
Code	**Digital Student Experience**	**Code**	**Teacher Resources**
		U6	Less/More/Equal Sets of Concrete Objects
		ISIP EM	Before and After

Operations and Algebraic Thinking

K.OA.1			
Make sums of 10 using any number from 1-9. For example, 2 + 8 =10. Use objects or drawings to represent and record the answer.			
MP 1, 2, 3, 4, 5, 6, 7, 8			
Code	**Digital Student Experience**	**Code**	**Teacher Resources**
U9	Computation and Algebraic Thinking – “Part–Part–Whole in New Orleans” (1–10)	U10	Dogs and Cats on Mats (up to 10)
U9	Computation and Algebraic Thinking – Part–Part–Whole Within 10	U12	Ten or Not Ten
U9	Computations and Algebraic Thinking – Addition Stories	U14	Start, Change, Result
U12	Computation and Algebraic Thinking – “Part–Part–Whole in New Orleans” (1–10)	U18	Decomposing House
U12	Computations and Algebraic Thinking – Making Ten using Tens Frames	U19	Relative Magnitude with Part-Part-Whole

K.OA.1

Make sums of 10 using any number from 1-9. For example, 2 + 8 =10. Use objects or drawings to represent and record the answer.

MP 1, 2, 3, 4, 5, 6, 7, 8

Code	Digital Student Experience	Code	Teacher Resources
U12	Computations and Algebraic Thinking – Identifying Addends using Tens Frames	U20	Adding with Addend Cards
U13	Computation and Algebraic Thinking – “Chicago Pizza Blues” (within 10)	U22	Beading the Difference
U13	Computation and Algebraic Thinking – Subtraction within 10	FP	Left Hand–Right Hand Grab Bag
U14	Computation and Algebraic Thinking – “Chicago Pizza Blues” (within 10)	FP	Two Color Grab Bag
U14	Computation and Algebraic Thinking – Subtraction Stories (within 10)	FP	Write, Tally, Draw
U18	Number Sense – Decompose Numbers Less Than or Equal to Ten	ISIP EM	Addition Stories/Subtraction Stories

K.OA.3

Decompose numbers less than or equal to 10 into pairs in more than one way (e.g., by using objects or drawings), and record each decomposition with a drawing or equation (e.g., 5 = 2 + 3 and 5 = 4 + 1).

MP 1, 2, 3, 4, 5, 6, 7, 8

Code	Digital Student Experience	Code	Teacher Resources
U9	Computation and Algebraic Thinking – “Part–Part–Whole in New Orleans” (1–10)	U18	Decomposing House

K.OA.3			
Decompose numbers less than or equal to 10 into pairs in more than one way (e.g., by using objects or drawings), and record each decomposition with a drawing or equation (e.g., 5 = 2 + 3 and 5 = 4 + 1).			
MP 1, 2, 3, 4, 5, 6, 7, 8			
Code	**Digital Student Experience**	**Code**	**Teacher Resources**
U9	Computation and Algebraic Thinking – Part–Part–Whole Within 10		
U13	Computation and Algebraic Thinking – “Chicago Pizza Blues” (within 10)		
U13	Computation and Algebraic Thinking – Whole–Part–Part (within 10)		
U18	Number Sense – Decompose Numbers Less than or Equal to Ten		

Number and Operations in Base Ten

K.NBT.1			
Compose and decompose numbers from 11 to 19 into ten ones and some further ones (e.g., by using objects or drawings), and record each composition or decomposition with a drawing or equation (such as 18 = 10 + 8); understand that these numbers are composed of ten ones and one, two, three, four, five, six, seven, eight, or nine ones.			
MP 1, 2, 3, 4, 5, 6, 7, 8			
Code	**Digital Student Experience**	**Code**	**Teacher Resources**
		U18	Decomposing House
		U15	Digit Deal (up to 50)
		U17	Digit Deal (up to 100)

Measurement and Data

K.MD.2

Directly compare two objects with a measurable attribute in common to see which object has “more of” or “less of” the attribute, and describe the difference. For example, directly compare the heights of two children and describe one child as taller/shorter.

MP 1, 2, 3, 4, 5, 6, 7, 8

Code	Digital Student Experience	Code	Teacher Resources
U10	Measurement – Comparing Objects by Length	U10	Directly Comparing Length
U10	Measurement – Comparing Objects by Weight	U10	Directly Comparing Weight
U15	Measurement – Comparing Objects by Height	U15	Directly Comparing Height
U15	Measurement – Comparing Objects by Capacity	U15	Which Holds More? Which Holds Less?

K.MD.3

Classify objects into given categories; count the numbers of objects in each category and sort the categories by count. (Limit category counts to be less than or equal to 10.) Limit the category counts to less than or equal to 10.

MP 1, 2, 3, 4, 5, 6, 7, 8

Code	Digital Student Experience	Code	Teacher Resources
U3	Data Analysis – Compare Data in Horizontal Picture Graphs	U1	Data Dash
U4	Data Analysis – Answer Data in Picture Graphs	U3	GRAPH-O
U19	Data Analysis – Represent and Interpret Data in Picture Graphs with Two or Three Columns	U19	Graphing Tic-Tac-Toe

Geometry and Measurement

K.G.2			
Correctly name shapes regardless of their orientations or overall size.			
MP 1, 2, 3, 4, 5, 6, 7, 8			
Code	**Digital Student Experience**	**Code**	**Teacher Resources**
U1	Geometry – Identify Circles	U1	Identifying Two-Dimensional Shapes
U3	Geometry – Identify Triangles	U9	Mighty Shape Match
U9	Geometry – Identifying Shapes Regardless of Orientation	U9	Considering Sizes of Shapes
U24	Geometry – Represent Two-Dimensional Shapes Based on Attributes		

K.G.3			
Identify shapes as two-dimensional (lying in a plane, “flat”) or three-dimensional (“solid”).			
MP 1, 2, 3, 4, 5, 6, 7, 8			
Code	**Digital Student Experience**	**Code**	**Teacher Resources**
U14	Geometry – Identify Three-Dimensional Shapes	U14	Shape Four-in-a-Row

K.G.4

Analyze and compare two- and three-dimensional shapes, in different sizes and orientations, using informal language to describe their similarities, differences, parts (e.g., number of sides and vertices/“corners”), and other attributes (e.g., having sides of equal length).

MP 1, 2, 3, 4, 5, 6, 7, 8

Code	Digital Student Experience	Code	Teacher Resources
U1	Geometry – Identify Circles	U1	Identifying Two–Dimensional Shapes
U3	Geometry – Identify Triangles	U3	Identifying Two–Dimensional Shapes
U9	Geometry – Identify Shapes Regardless of Orientation	U9	Mighty Shape Match
U14	Geometry – Identify Three–Dimensional Shapes	U9	Considering Sizes of Shapes
U24	Geometry – Represent Two–Dimensional Shapes Based on Attributes	U14	Shape Four–in–a–Row

Grade 1

Operations and Algebraic Thinking

1.OA.1

Use addition and subtraction within 20 to solve word problems involving situations of adding to, taking from, putting together, taking apart, and comparing, with unknowns in all positions, e.g., by using objects, drawings, and equations with a symbol for the unknown number to represent the problem.

MP 1, 2, 3, 4, 5, 6, 7, 8

Code	Digital Student Experience	Code	Teacher Resources
U20	Computation and Algebraic Thinking – “Part–Part–Whole in New Orleans” (1-20)	U24	Start, Change, Result (within 20)
U20	Computation and Algebraic Thinking – Addition Stories (1–20) Horizontal Equations		
U20	Computation and Algebraic Thinking – Addition Stories (1–20) Vertical Equations		
U24	Computation and Algebraic Thinking – “Chicago Pizza Blues”		
U24	Computation and Algebraic Thinking – Subtraction Stories (Within 20)		

1.OA.2

Solve word problems that call for addition of three whole numbers whose sum is less than or equal to 20, e.g., by using objects, drawings, and equations with a symbol for the unknown number to represent the problem.

MP 1, 2, 3, 4, 5, 6, 7, 8

Code	Digital Student Experience	Code	Teacher Resources
U16	Computations and Algebraic Thinking – Determine the Unknown Whole Numbers in Addition Sentences	U16	Beginning-Middle-End
U20	Computations and Algebraic Thinking – Properties of Addition – Associative Property	U24	Mystery in the Middle
		ISIP EM	Three Amazing Addends
		ISIP EM	Magical Addends

1.OA.3

Apply properties of operations as strategies to add and subtract. Examples: If 8 + 3 = 11 is known, then 3 + 8 = 11 is also known. (Commutative property of addition.) To add 2 + 6 + 4, the second two numbers can be added to make a ten, so 2 + 6 + 4 = 2 + 10 = 12. (Associative property of addition.)

MP 1, 2, 3, 4, 5, 6, 7, 8

Code	Digital Student Experience	Code	Teacher Resources
U20	Computation and Algebraic Thinking – Commutative Property of Addition	U20	Doubles
U20	Computation and Algebraic Thinking – Associative Property of Addition	U20	Grouping Groceries
U20	Computation and Algebraic Thinking – Identity Property of Addition	U20	Turn Around Addition

1.OA.3

Apply properties of operations as strategies to add and subtract. Examples: If 8 + 3 = 11 is known, then 3 + 8 = 11 is also known. (Commutative property of addition.) To add 2 + 6 + 4, the second two numbers can be added to make a ten, so 2 + 6 + 4 = 2 + 10 = 12. (Associative property of addition.)

MP 1, 2, 3, 4, 5, 6, 7, 8

Code	Digital Student Experience	Code	Teacher Resources
		U20	Identity Property – Go Fish!
		ISIP EM	Counting on Cards
		ISIP EM	Fact Family Dominoes

1.OA.4

Understand subtraction as an unknown-addend problem. For example, subtract 10 – 8 by finding the number that makes 10 when added to 8.

MP 1, 2, 3, 4, 5, 6, 7, 8

Code	Digital Student Experience	Code	Teacher Resources
U22	Computation and Algebraic Thinking – Whole–Part–Part – “Chicago Pizza Blues” (within 20)	U22	Beading the Difference
		U24	Start, Change, Result! (Within 20)
		ISIP EM	Fact Family Dominoes

1.OA.6

Add and subtract within 20.

a. Add and subtract within 20, demonstrating fluency for addition and subtraction within 10. Use strategies such as counting on; making ten (e.g., 8 + 6 = 8 + 2 + 4 = 10 + 4 = 14); decomposing a number leading to a ten (e.g., 13 – 4 = 13 – 3 – 1 = 10 – 1 = 9); using the relationship between addition and subtraction (e.g., knowing that 8 + 4 = 12, one knows 12 – 8 = 4); and creating equivalent but easier or known sums (e.g., adding 6 + 7 by creating the known equivalent 6 + 6 + 1 = 12 + 1 = 13).

b. By the end of Grade 1, demonstrate fluency for addition and subtraction within 10.

MP 1, 2, 3, 4, 5, 6, 7, 8

Code	Digital Student Experience	Code	Teacher Resources
U20	Computation and Algebraic Thinking – “The Math Whiz”	U24	Start, Change, Result! (Within 20)
U24	Computation and Algebraic Thinking – Fact Strategies	FP	Addition Fast Track
		FP	Subtraction Fact Track
		FP	Sticky Sums
		FP	Write, Tally, Draw
		FP	Shake It, Make It, Solve It (Addition)
		FP	Left Hand, Right Hand Grab Bag
		FP	Two–Color Grab Bag
		FP	Building Sums to 20

1.OA.8			
Determine the unknown whole number in an addition or subtraction equation relating three whole numbers. For example, determine the unknown number that makes the equation true in each of the equations 8 + ? = 11; 5 = _ – 3; 6 + 6 = _.			
MP 1, 2, 3, 4, 5, 6, 7, 8			
Code	**Digital Student Experience**	**Code**	**Teacher Resources**
U16	Computations and Algebraic Thinking – Determine the Unknown Whole Number in Addition Sentences	U16	Beginning-Middle-End
U24	Computations and Algebraic Thinking – Determine the Unknown Whole Number in a Subtraction Sentence	U24	Mystery in the Middle

Number and Operations in Base Ten

1.NBT.1			
Count to 120, starting at any number less than 120. In this range, read and write numerals and represent a number of objects with a written numeral.			
MP 1, 2, 3, 4, 5, 6, 7, 8			
Code	**Digital Student Experience**	**Code**	**Teacher Resources**
U14	Number Sense – Rote Counting to 100	U14	One Hundred is a Lot
		U14	One Hundred Twenty is Plenty!

1.NBT.2

Understand that the two digits of a two-digit number represent amounts of tens and ones. Understand the following as special cases:

a. 10 can be thought of as a bundle of ten ones – called a “ten.”
b. The numbers from 11 to 19 are composed of a ten and one, two, three, four, five, six, seven, eight, or nine ones.
c. The numbers, 10, 20, 30, 40, 50, 60, 70, 80, 90 refer to one, two, three, four, five, six, seven, eight, or nine tens (and 0 ones).

MP 1, 2, 3, 4, 5, 6, 7, 8

Code	Digital Student Experience	Code	Teacher Resources
U23	Number Sense – Decade Numbers: Free Play Number Puzzle	U14	Roll–Count–Cover
U23	Number Sense – Decade Numbers: Number Puzzle	U15	Digit Deal (up to 50)
		U17	Digit Deal (up to 100)
		U23	Decade Numbers
		ISIP EM	Base Ten Block Basics

1.NBT.3

Compare two two-digit numbers based on meanings of the tens and ones digits, recording the results of comparisons with the symbols >, =, and <.

MP 1, 2, 3, 4, 5, 6, 7, 8

Code	Digital Student Experience	Code	Teacher Resources
		ISIP EM	Base Ten Block Battle
		ISIP EM	Graphing Stories – Determining Most and Least

1.NBT.4

Add within 100, including adding a two-digit number and a one-digit number, and adding a two-digit number and a multiple of 10, 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. Understand that in adding two-digit numbers, one adds tens and tens, ones and ones; and sometimes it is necessary to compose a ten.

MP 1, 2, 3, 4, 5, 6, 7, 8

Code	Digital Student Experience	Code	Teacher Resources
U20	Computation and Algebraic Thinking – “The Math Whiz”	U20	Identity Property Go Fish!
U20	Computation and Algebraic Thinking – Fact Strategies	FP	Addition Fast Track
U20	Computation and Algebraic Thinking – Properties of Addition – Commutative Property	FP	Subtraction Fact Track
U20	Computation and Algebraic Thinking – Properties of Addition – Identity Property	FP	Sticky Sums
		FP	Write, Tally, Draw
		FP	Shake It, Make It, Solve It (Addition)
		FP	Left Hand, Right Hand Grab Bag
		FP	Two–Color Grab Bag

Measurement and Data

1.MD.3			
Tell and write time in hours and half–hours using analog and digital clocks.			
MP 1, 2, 3, 4, 5, 6, 7, 8			
Code	**Digital Student Experience**	**Code**	**Teacher Resources**
U19	Measurement – Tell and Write Time from Analog/Digital Clocks to the Nearest Hour and Half Hour	U16	What Does the Clock Say?
		U19	Set the Time and Go!

1.MD.5			
Identify the values of pennies, nickels, dimes and quarters, and know their comparative values. (For example, a dime is of greater value than a nickel.) Use appropriate notation to designate a coin's value. (For example, 5¢)			
MP 1, 2, 3, 4, 5, 6, 7, 8			
Code	**Digital Student Experience**	**Code**	**Teacher Resources**
U16	Measurement – Identify the Value of a Collection of Mixed Coins (Pennies, Nickels, Dimes)	U14	Coin Value Cover-Up (Penny/Nickel/Dime/Quarter)
		U16	Money Match
		U16	Money War

Geometry and Measurement

1.G.4			
Partition circles and rectangles into two and four equal shares, describe the shares using the words halves, fourths, and quarters, and use the phrases half of, fourth of, and quarter of. Describe the whole as two of, or four of the shares. Understand for these examples that partitioning into more equal shares creates smaller shares.			
MP 1, 2, 3, 4, 5, 6, 7, 8			
Code	**Digital Student Experience**	**Code**	**Teacher Resources**
U18	Geometry – Identify Halves and Fourths	U18	Fraction Four–in–a–Row

Grade 2

Operations and Algebraic Thinking

2.OA.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, e.g., by using drawings and equations with a symbol for the unknown number to represent the problem.

MP 1, 2, 3, 4, 5, 6, 7, 8

Code	Digital Student Experience	Code	Teacher Resources
U32	Computation and Algebraic Thinking – Two-Step Word Problems with Unknowns at the End	U32	Build and Solve Two-Step Equations with Addition and Subtraction
U32	Computation and Algebraic Thinking – Two-Step Word Problems with Unknowns in the Middle	U32	Build Multistep Equations with Multiple Operations
		U32	Solve Multistep Equations with Multiple Operations

2.OA.2

Add and subtract within 20.

a. Add and subtract within 20, demonstrating fluency for addition and subtraction within 10. Use strategies such as counting on; making ten (e.g., 8 + 6 = 8 + 2 + 4 = 10 + 4 = 14); decomposing a number leading to a ten (e.g., 13 – 4 = 13 – 3 – 1 = 10 – 1 = 9); using the relationship between addition and subtraction (e.g., knowing that 8 + 4 = 12, one knows 12 – 8 = 4); and creating equivalent but easier or known sums (e.g., adding 6 + 7 by creating the known equivalent 6 + 6 + 1 = 12 + 1 = 13).
b. By the end of Grade 2, know from memory all sums of two one-digit numbers.

MP 1, 2, 3, 4, 5, 6, 7, 8

Code	Digital Student Experience	Code	Teacher Resources
		U31	Fact Families – Addition and Subtraction

2.OA.2

Add and subtract within 20.

a. Add and subtract within 20, demonstrating fluency for addition and subtraction within 10. Use strategies such as counting on; making ten (e.g., 8 + 6 = 8 + 2 + 4 = 10 + 4 = 14); decomposing a number leading to a ten (e.g., 13 – 4 = 13 – 3 – 1 = 10 – 1 = 9); using the relationship between addition and subtraction (e.g., knowing that 8 + 4 = 12, one knows 12 – 8 = 4); and creating equivalent but easier or known sums (e.g., adding 6 + 7 by creating the known equivalent 6 + 6 + 1 = 12 + 1 = 13).

b. By the end of Grade 2, know from memory all sums of two one-digit numbers.

MP 1, 2, 3, 4, 5, 6, 7, 8

Code	Digital Student Experience	Code	Teacher Resources
		ISIP	Addition and Subtraction Fact Families
		ISIP	Fact Family Triangles
		FP	Addition Fast Track
		FP	Shake it! Make it! Solve it! Addition

2.OA.3

Determine whether a group of objects (up to 20) has an odd or even number of members, e.g. by pairing objects or counting them by 2s; write an equation to express an even number as a sum of two equal addends.

MP 1, 2, 3, 4, 5, 6, 7, 8

Code	Digital Student Experience	Code	Teacher Resources
U30	Computation and Algebraic Thinking – Even and Odd Pairing	U30	Determining Even and Odd by Pairing

2.OA.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.			
MP 1, 2, 3, 4, 5, 6, 7, 8			
Code	**Digital Student Experience**	**Code**	**Teacher Resources**
U32	Computation and Algebraic Thinking – Addition Arrays	U32	Addition Arrays

Number and Operations in Base Ten

2.NBT.1			
Understand that the three digits of a three-digit number represent amounts of hundreds, tens, and ones (e.g., 706 equals 7 hundreds, 0 tens, and 6 ones). Understand the following as special cases: 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).			
MP 1, 2, 3, 4, 5, 6, 7, 8			
Code	**Digital Student Experience**	**Code**	**Teacher Resources**
U30	Number Sense – Writing Standard Form from Expanded Form	U30	Building Numbers Using Base 10 Blocks
U30	Number Sense – Writing Expanded Form from Standard Form	U30	Writing Expanded Form from Standard Form
U30	Number Sense – Writing Word Form from Expanded and Standard Form	U30	Writing Word Form from Expanded and Standard Form
		ISIP	Same Number, Different Ways
		ISIP	Place Value Pair–Up

2.NBT.1

Understand that the three digits of a three-digit number represent amounts of hundreds, tens, and ones (e.g., 706 equals 7 hundreds, 0 tens, and 6 ones). Understand the following as special cases:

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).

MP 1, 2, 3, 4, 5, 6, 7, 8

Code	Digital Student Experience	Code	Teacher Resources
		ISIP	Race to the Cube
		ISIP	Creating Numbers with Base 10 Blocks
		ISIP	Place Value Cups
		ISIP	Writing Standard Form from Expanded Form

2.NBT.3

Read and write numbers to 1,000 using base-ten numerals, number names, and expanded form.

MP 1, 2, 3, 4, 5, 6, 7, 8

Code	Digital Student Experience	Code	Teacher Resources
U30	Number Sense – Writing Standard Form from Expanded Form	U30	Building Numbers Using Base 10 Blocks
U30	Number Sense – Writing Expanded Form from Standard Form	U30	Writing Expanded Form from Standard Form
U30	Number Sense – Writing Word Form from Expanded and Standard Form	U30	Writing Word Form from Expanded and Standard Form

2.NBT.3

Read and write numbers to 1,000 using base-ten numerals, number names, and expanded form.

MP 1, 2, 3, 4, 5, 6, 7, 8

Code	Digital Student Experience	Code	Teacher Resources
		ISIP	Same Number, Different Ways
		ISIP	Place Value Pair–Up
		ISIP	Race to the Cube
		ISIP	Creating Numbers with Base 10 Blocks
		ISIP	Place Value Cups
		ISIP	Writing Standard Form from Expanded Form

2.NBT.4

Compare two three–digit numbers based on meanings of the hundreds, tens, and ones digits, using >, =, and < symbols to record the results of comparisons. (For example, after measuring a pencil and a crayon, a student uses the measurements to determine that the pencil is two inches longer than the crayon.

MP 1, 2, 3, 4, 5, 6, 7, 8

Code	Digital Student Experience	Code	Teacher Resources
U30	Number Sense – Comparing Two, Two–Digit Whole Numbers	U30	Comparison Symbols
U30	Number Sense – Comparing Two, Three–Digit Numbers	U30	Comparison – Three–Digit Numbers
U30	Number Sense – Comparing Two, Three–Digit Whole Numbers with Zeroes	ISIP	Steps for Comparing Three–Digit Numbers

2.NBT.5

Fluently add and subtract within 100 using strategies based on place value, properties of operations, and/or the relationship between addition and subtraction.

MP 1, 2, 3, 4, 5, 6, 7, 8

Code	Digital Student Experience	Code	Teacher Resources
U31	Computation and Algebraic Thinking – Adding with Regrouping Using Concrete Models	U31	Adding with Regrouping – Concrete
U31	Computation and Algebraic Thinking – Subtracting with Regrouping Using Concrete Models	U31	Adding Using Partitioning
U31	Computation and Algebraic Thinking – Adding with Regrouping – Partitioning	U31	Subtracting Using Partitioning
U31	Computation and Algebraic Thinking – Subtracting with Regrouping – Partitioning	U31	Adding on a Number Line
U31	Computation and Algebraic Thinking – Adding on a Number Line	U31	Subtracting on a Number Line
U31	Computation and Algebraic Thinking – Subtracting on a Number Line	U31	Fact Families – Addition and Subtraction
U31	Computation and Algebraic Thinking – Fact Families – Addition and Subtraction	ISIP	Addition and Subtraction Fact Families
		ISIP	Fact Family Triangles
		ISIP	Break Apart to Add
		ISIP	Race to the Cube
		ISIP	Using Arrow Paths to Add and Subtract
		ISIP	Math Mind Reader

2.NBT.5

Fluently add and subtract within 100 using strategies based on place value, properties of operations, and/or the relationship between addition and subtraction.

MP 1, 2, 3, 4, 5, 6, 7, 8

Code	Digital Student Experience	Code	Teacher Resources
		ISIP	Partitioning

2.NBT.7

Add and subtract within 1000, 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. Understand that in adding or subtracting three-digit numbers, one adds or subtracts hundreds and hundreds, tens and tens, ones and ones; and sometimes it is necessary to compose or decompose tens or hundreds.

MP 1, 2, 3, 4, 5, 6, 7, 8

Code	Digital Student Experience	Code	Teacher Resources
U32	Computation and Algebraic Thinking – Two-Step Word Problems with Unknowns at the End	U32	Build and Solve Two-Step Equations with Addition and Subtraction
U32	Computation and Algebraic Thinking – Two-Step Word Problems with Unknowns in the Middle	U32	Build Multistep Equations with Multiple Operations
		U32	Solve Multistep Equations with Multiple Operations

2.NBT.9

Explain why addition and subtraction strategies work, using place value and the properties of operations.

MP 1, 2, 3, 4, 5, 6, 7, 8

Code	Digital Student Experience	Code	Teacher Resources
U31	Computation and Algebraic Thinking – Adding with Regrouping Using Concrete Models	U31	Adding with Regrouping – Concrete
U31	Computation and Algebraic Thinking – Subtracting with Regrouping Using Concrete Models	U31	Adding Using Partitioning
U31	Computation and Algebraic Thinking – Adding with Regrouping – Partitioning	U31	Subtracting Using Partitioning
U31	Computation and Algebraic Thinking – Subtracting with Regrouping – Partitioning	U31	Adding on a Number Line
U31	Computation and Algebraic Thinking – Adding on a Number Line	U31	Subtracting on a Number Line
U31	Computation and Algebraic Thinking – Subtracting on a Number Line	U31	Fact Families – Addition and Subtraction
U31	Computation and Algebraic Thinking – Fact Families – Addition and Subtraction	ISIP	Addition and Subtraction Fact Families
		ISIP	Fact Family Triangles
		ISIP	Break Apart to Add
		ISIP	Race to the Cube
		ISIP	Using Arrow Paths to Add and Subtract
		ISIP	Math Mind Reader

2.NBT.9			
Explain why addition and subtraction strategies work, using place value and the properties of operations.			
MP 1, 2, 3, 4, 5, 6, 7, 8			
Code	**Digital Student Experience**	**Code**	**Teacher Resources**
		ISIP	Partitioning

Measurement and Data

2.MD.1			
Measure the length of an object by selecting and using appropriate tools such as rulers, yardsticks, meter sticks, and measuring tapes.			
MP 1, 2, 3, 4, 5, 6, 7, 8			
Code	**Digital Student Experience**	**Code**	**Teacher Resources**
U33	Measurement – Choose Units and Measure Lengths	U33	Choosing Units of Linear Measurement
U33	Measurement – Measure to the Nearest Centimeter	U33	Measure to the Nearest Inch
		U33	Measure to the Nearest Centimeter
		ISIP	Appropriate Tools for Linear Measurement
		ISIP	How to Use Linear Measurement Tools
		ISIP	Measuring Objects
		ISIP	Ruler Relay

2.MD.2

Measure the length of an object twice, using length units of different lengths for the two measurements; describe how the two measurements relate to the size of the unit chosen.

MP 1, 2, 3, 4, 5, 6, 7, 8

Code	Digital Student Experience	Code	Teacher Resources
		ISIP	Unit Relationships

2.MD.4

Measure to determine how much longer one object is than another, expressing the length difference in terms of a standard length unit.

MP 1, 2, 3, 4, 5, 6, 7, 8

Code	Digital Student Experience	Code	Teacher Resources
		ISIP	Ruler Relay

2.MD.6

Represent whole numbers as lengths from 0 on a number line diagram with equally spaced points corresponding to the numbers 0, 1, 2, ..., and represent whole-number sums and differences within 100 on a number line diagram.

MP 1, 2, 3, 4, 5, 6, 7, 8

Code	Digital Student Experience	Code	Teacher Resources
U31	Computation and Algebraic Thinking – Adding on a Number Line	U31	Adding on a Number Line
U31	Computation and Algebraic Thinking – Subtracting on a Number Line	U31	Subtracting on a Number Line
		ISIP	Skip Counting

2.MD.7

Tell and write time from analog and digital clocks to the nearest five minutes, using a.m. and p.m.

MP 1, 2, 3, 4, 5, 6, 7, 8

Code	Digital Student Experience	Code	Teacher Resources
U34	Measurement – Tell Time to the Nearest Five Minutes	U34	Time to the Nearest Five Minutes
		U34	Time – AM and PM
		U34	Time to the Quarter Hour

2.MD.8

Find the value of combinations of dollar bills, quarters, dimes, nickels and pennies using $ and ¢ appropriately.

MP 1, 2, 3, 4, 5, 6, 7, 8

Code	Digital Student Experience	Code	Teacher Resources
		U32	Money Word Problems (Retail Riddles)

2.MD.10

Draw a picture graph or a bar graph to represent a data set with up to four categories.

MP 1, 2, 3, 4, 5, 6, 7, 8

Code	Digital Student Experience	Code	Teacher Resources
U33	Data Analysis – Solving Problems Using Information Presented in Picture Graphs	U33	Creating Picture Graphs
U33	Data Analysis – Solving Problems Using Information Presented in Bar Graphs	U33	Creating Bar Graphs

Geometry and Measurement

2.G.2			
Partition circles and rectangles into two, three, or four equal shares, describe the shares using the words halves, thirds, half of, a third of, etc.; describe the whole as two halves, three thirds, four fourths. Recognize that equal shares of identical wholes need not have the same shape.			
MP 1, 2, 3, 4, 5, 6, 7, 8			
Code	**Digital Student Experience**	**Code**	**Teacher Resources**
U32	Geometry – Partitioning to Identify Halves, Thirds, and Fourths	U32	Equal Shares of Identical Wholes
U32	Geometry – Equal Shares of Identical Wholes		

Grade 3

Operations and Algebraic Thinking

3.OA.1

Interpret products of whole numbers, e.g., interpret 5 × 7 as the total number of objects in 5 groups of 7 objects each. For example, describe a context in which a total number of objects can be expressed as 5 × 7.

MP 1, 2, 3, 4, 5, 6, 7, 8

Code	Digital Student Experience	Code	Teacher Resources
U35	Computation and Algebraic Thinking – Arithmetic Patterns in Multiplication	U35	Arithmetic Patterns in Multiplication
U36	Computation and Algebraic Thinking – Multiply One–Digit Numbers Using Concrete Models	U36	One–Digit by One–Digit Multiplication
U36	Computation and Algebraic Thinking – Multiply One–Digit Numbers Using 1×1 Arrays	U36	Multiplying Two One–Digit Numbers with Arrays
		U36	Problem Solving without Numbers
		ISIP	Relating Multiplication and Division
		ISIP	Practicing Fact Families
		ISIP	Strip Diagrams – Compare
		FP	Multominoes
		FP	Tall Towers
		FP	Dice Blocks
		FP	Multiplication Fast Track

3.OA.2

Interpret whole number quotients of whole numbers, e.g., interpret 56 ÷ 8 as the number of objects in each share when 56 objects are partitioned equally into 8 shares, or as a number of shares when 56 objects are partitioned into equal shares of 8 objects each.

MP 1, 2, 3, 4, 5, 6, 7, 8

Code	Digital Student Experience	Code	Teacher Resources
		U36	Problem Solving without Numbers
		ISIP	Relating Multiplication and Division
		ISIP	Practicing Fact Families
		ISIP	Strip Diagrams – Compare

3.OA.3

Use multiplication and division within 100 to solve word problems in situations involving equal groups, arrays, and measurement quantities, e.g., by using drawings and equations with a symbol for the unknown number to represent the problem.

MP 1, 2, 3, 4, 5, 6, 7, 8

Code	Digital Student Experience	Code	Teacher Resources
U36	Computation and Algebraic Thinking – Build and Solve Two–Step Word Problems with All Operations	U36	Build and Solve Two–Step Word Problems with All Operations
		ISIP	Problem Solving without Numbers
		ISIP	Multiplying with Three Factors
		ISIP	Strip Diagrams – Compare Problems
		ISIP	Doubling and Halving

3.OA.4

Determine the unknown whole number in a multiplication or division equation relating three whole numbers.

MP 1, 2, 3, 4, 5, 6, 7, 8

Code	Digital Student Experience	Code	Teacher Resources
U36	Computation and Algebraic Thinking – Build and Solve Two–Step Word Problems with All Operations	U36	Fact Families – Multiplication and Division
		U36	Build and Solve Two–Step Word Problems with All Operations
		ISIP	Relating Multiplication and Division
		ISIP	Practicing Fact Families
		ISIP	Strip Diagrams – Compare Problems
		ISIP	Using the Commutative Property of Multiplication

3.OA.5

Apply properties of operations as strategies to multiply and divide. For examples, if 6 × 4 = 24 is known, then 4 × 6 = 24 is also known. (Commutative property of multiplication.) 3 × 5 × 2 can be found by 3 × 5 = 15, then 15 × 2 = 30, or by 5 × 2 2 = 10, then 3 × 10 = 30. (Associative property of multiplication.) Knowing that 8 × 5 = 40 and 8 × 2 = 16, one can find 8 × 7 as 8 × (5 + 2) = (8 × 5) + (8 × 2) = 40 + 16 = 56 (Distributive property.)

MP 1, 2, 3, 4, 5, 6, 7, 8

Code	Digital Student Experience	Code	Teacher Resources
U36	Computation and Algebraic Thinking – Properties of Multiplication	ISIP	Using the Commutative Property of Multiplication
		ISIP	Multiplying with Three Factors

3.OA.6

Understand division as an unknown–factor problem.

MP 1, 2, 3, 4, 5, 6, 7, 8

Code	Digital Student Experience	Code	Teacher Resources
U36	Computation and Algebraic Thinking – Fact Families – Multiplication and Division	U36	Fact Families – Multiplication and Division
		ISIP	Relating Multiplication and Division
		ISIP	Practicing Fact Families

3.OA.7

a. Fluently multiply and divide within 100, using strategies such as the relationship between multiplication and division e.g., knowing that 8 × 5 = 40, one knows 40 ÷ 5 = 8.
b. By the end of Grade 3, know from memory all products of two one–digit numbers.

MP 1, 2, 3, 4, 5, 6, 7, 8

Code	Digital Student Experience	Code	Teacher Resources
U35	Computation and Algebraic Thinking – Arithmetic Patterns in Multiplication	U35	Arithmetic Patterns in Multiplication
U36	Computation and Algebraic Thinking – Multiply One–Digit Numbers Using Concrete Models	U36	One–Digit by One–Digit Multiplication
U36	Computation and Algebraic Thinking – Fact Families – Multiplication and Division	U36	Multiplying Two One–Digit Numbers with Arrays
U36	Computation and Algebraic Thinking – Two–Step Word Problems – All Operations	U36	Two–Step Word Problems – All Operations

3.OA.7

a. Fluently multiply and divide within 100, using strategies such as the relationship between multiplication and division e.g., knowing that 8 × 5 = 40, one knows 40 ÷ 5 = 8.
b. By the end of Grade 3, know from memory all products of two one–digit numbers.

MP 1, 2, 3, 4, 5, 6, 7, 8

Code	Digital Student Experience	Code	Teacher Resources
U36	Computation and Algebraic Thinking – Properties of Multiplication	U36	Fact Families – Multiplication and Division
		ISIP	Relating Multiplication and Division
		ISIP	Practicing Fact Families
		ISIP	Strip Diagrams – Compare Problems
		ISIP	Using the Commutative Property of Multiplication
		ISIP	Doubling and Halving
		FP	Multominoes
		FP	Tall Towers
		FP	Dice Blocks
		FP	Wipe Out

3.OA.8

Solve two–step word problems.

a. Solve two-step word problems using the four operations. Know how to perform operations in the conventional order when there are no parentheses to specify a particular order (Order of Operations).
b. Represent two-step problems using equations with a letter standing for the unknown quantity. Create accurate equations to match word problems.
c. Assess the reasonableness of answers using mental computation and estimation strategies including rounding.

MP 1, 2, 3, 4, 5, 6, 7, 8

Code	Digital Student Experience	Code	Teacher Resources
U36	Computation and Algebraic Thinking – Two–Step Word Problems – All Operations	U36	Problem Solving without Numbers – Addition and Subtraction
		U36	Problem Solving without Numbers – Multiplication and Division
		U36	Two–Step Word Problems – All Operations

3.OA.9

Identify arithmetic patterns (including patterns in the addition table or multiplication table), and explain them using properties of operations.

MP 1, 2, 3, 4, 5, 6, 7, 8

Code	Digital Student Experience	Code	Teacher Resources
U35	Computation and Algebraic Thinking – Arithmetic Patterns in Multiplication	U36	Arithmetic Patterns in Multiplication
		U36	Fact Families – Multiplication and Division
		ISIP	Doubling and Halving
		ISIP	Practicing Fact Families

3.OA.9			
Identify arithmetic patterns (including patterns in the addition table or multiplication table), and explain them using properties of operations.			
MP 1, 2, 3, 4, 5, 6, 7, 8			
Code	**Digital Student Experience**	**Code**	**Teacher Resources**
		ISIP	Relating Multiplication and Division
		ISIP	Using the Commutative Property of Multiplication

Number and Operations in Base Ten

3.NBT.1			
Use place value understanding to round whole numbers to the nearest 10 or 100.			
MP 1, 2, 3, 4, 5, 6, 7, 8			
Code	**Digital Student Experience**	**Code**	**Teacher Resources**
U35	Number Sense – Rounding to the Nearest Ten	U35	Rounding – Nearest Ten
U35	Number Sense – Rounding to the Nearest Hundred	U35	Rounding – Nearest Hundred
		U35	Rounding – Nearest Ten, Hundred, Thousand
		U35	Rounding within Three– and Four–Digit Numbers – Number Line

3.NBT.2

Fluently add and subtract within 1,000 using strategies and algorithms based on place value, properties of operations, and/or the relationship between addition and subtraction.

MP 1, 2, 3, 4, 5, 6, 7, 8

Code	Digital Student Experience	Code	Teacher Resources
U36	Computation and Algebraic Thinking – Two–Step Word Problems – All Operations	U36	Two–Step Word Problems – All Operations

3.NBT.3

Multiply one–digit whole numbers by multiples of 10 in the range 10 – 90, e.g., 9 × 80, 5 × 60 using strategies based on place value and properties of operations.

MP 1, 2, 3, 4, 5, 6, 7, 8

Code	Digital Student Experience	Code	Teacher Resources
U35	Computation and Algebraic Thinking – Arithmetic Patterns in Multiplication	U35	Arithmetic Patterns in Multiplication

Number and Operations – Fractions

3.NF.1

Understand that a unit has a numerator of one and a non-zero denominator.

a. Understand a fraction 1/b as the quantity formed by 1 part when a whole is partitioned into b equal parts
b. Understand a fraction a/b as the quantity formed by a parts and size 1/b. For example: ¼ + ¼ + ¼ = ¾

MP 1, 2, 3, 4, 5, 6, 7, 8

Code	Digital Student Experience	Code	Teacher Resources
		U37	Fractions Equivalent to One
		U37	Fractions Equivalent to Whole Numbers
		U37	Identifying Equivalent Fractions
		ISIP	Writing Fractions – Symbolic Notation

3.NF.2

Understand a fraction as a number on the number line; represent fractions on a number line diagram.

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 (which may be greater than 1) 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.

MP 1, 2, 3, 4, 5, 6, 7, 8

Code	Digital Student Experience	Code	Teacher Resources
U37	Number Sense – Equivalent Fractions	U37	Fractions Equivalent to One
U37	Number Sense – Fractions Equivalent to One	U37	Fractions Equivalent to Whole Numbers

3.NF.2

Understand a fraction as a number on the number line; represent fractions on a number line diagram.

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 (which may be greater than 1) 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.

MP 1, 2, 3, 4, 5, 6, 7, 8

Code	Digital Student Experience	Code	Teacher Resources
U37	Number Sense – Many Equivalent Fractions	U37	Mixed Numbers on a Number Line
		U37	Many Equivalent Fractions
		U37	Identifying Equivalent Fractions

3.NF.3

Explain equivalence of fractions in special cases, and compare fractions by reasoning about their size.

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, e.g., 1/2 = 2/4, 4/6 = 2/3. Explain why the fractions are equivalent, e.g., by using a visual fraction model.
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, e.g., by using a visual fraction model.

MP 1, 2, 3, 4, 5, 6, 7, 8

Code	Digital Student Experience	Code	Teacher Resources
U37	Number Sense – Equivalent Fractions	U37	Fractions Equivalent to One

3.NF.3

Explain equivalence of fractions in special cases, and compare fractions by reasoning about their size.

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, e.g., 1/2 = 2/4, 4/6 = 2/3. Explain why the fractions are equivalent, e.g., by using a visual fraction model.
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, e.g., by using a visual fraction model.

MP 1, 2, 3, 4, 5, 6, 7, 8

Code	Digital Student Experience	Code	Teacher Resources
U37	Number Sense – Fractions Equivalent to One	U37	Fractions Equivalent to Whole Numbers
U37	Number Sense – Many Equivalent Fractions	U37	Many Equivalent Fractions
U37	Number Sense – Comparing Fractions with Same Numerator	U37	Identifying Equivalent Fractions
U37	Number Sense – Comparing Fractions with Same Denominator	U37	Using Models to Identify Equivalent Fractions
		U37	Mixed Numbers
		U37	Fractions with Same Numerators
		U37	Fractions with Like Denominators
		U37	Whole Numbers and Fractions – Symbols
		ISIP	Identifying Equivalent Fractions Using Area Models
		ISIP	Comparing Fractions Using Models

3.NF.3

Explain equivalence of fractions in special cases, and compare fractions by reasoning about their size.

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, e.g., 1/2 = 2/4, 4/6 = 2/3. Explain why the fractions are equivalent, e.g., by using a visual fraction model.
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, e.g., by using a visual fraction model.

MP 1, 2, 3, 4, 5, 6, 7, 8

Code	Digital Student Experience	Code	Teacher Resources
		ISIP	Comparing Fractions

Measurement and Data

3.MD.2

Measure and estimate liquid volumes and masses of objects using standard units of grams, kilograms, and liters. Add, subtract, multiply, or divide whole numbers to solve one–step word problems involving masses or volumes that are given in the same units, e.g., by using drawings (such as a beaker with a measurement scale) to represent the problem.

MP 1, 2, 3, 4, 5, 6, 7, 8

Code	Digital Student Experience	Code	Teacher Resources
		ISIP	Take Me Out to the Ball Game

3.MD.3

Create a scaled picture graphs to represent a data set with several categories. Create a scaled bar graph to represent a data set with several categories. Solve two–step “how many more” and “how many less” problems using information presented in the scaled graphs.

MP 1, 2, 3, 4, 5, 6, 7, 8

Code	Digital Student Experience	Code	Teacher Resources
		U39	Solving Two–Step Problems Using Bar Graphs

3.MD.4

Generate measurement data by measuring lengths using rulers marked with halves and fourths of an inch. Show the data by creating a line plot where the horizontal scale is marked off in appropriate units – whole numbers, halves, or quarters.

MP 1, 2, 3, 4, 5, 6, 7, 8

Code	Digital Student Experience	Code	Teacher Resources
		U39	Solving Two–Step Problems Using Bar Graphs

3.MD.5

Recognize area as an attribute of plane figures, and understand concepts of area measurement.

a. A square with side length 1 unit called “a unit square,” is said to have “one square unit” of area and can be used to measure area.
b. A plane figure which can be covered without gaps or overlaps by *n* unit squares is said to have an area of *n* square units.

MP 1, 2, 3, 4, 5, 6, 7, 8

Code	Digital Student Experience	Code	Teacher Resources
		ISIP	Area Square

3.MD.5

Recognize area as an attribute of plane figures, and understand concepts of area measurement.

a. A square with side length 1 unit called “a unit square,” is said to have “one square unit” of area and can be used to measure area.
b. A plane figure which can be covered without gaps or overlaps by *n* unit squares is said to have an area of *n* square units.

MP 1, 2, 3, 4, 5, 6, 7, 8

Code	Digital Student Experience	Code	Teacher Resources
		ISIP	Finding the Area of Polygons
		ISIP	Finding the Area of Rectangles

3.MD.6

Measure areas by counting unit squares (square cm, square m, square in, square ft., and improvised units).

MP 1, 2, 3, 4, 5, 6, 7, 8

Code	Digital Student Experience	Code	Teacher Resources
		ISIP	Area Square
		ISIP	Finding the Area of Polygons
		ISIP	Finding the Area of Rectangles

3.MD.7

Relate area to the operations of multiplication and addition.

a. Find the area of a rectangle with whole number side lengths by tiling it, and show that the area is the same as would be found by multiplying the side lengths.
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 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 $a \times c$. (represent the distributive property with visual models including an area model).
d. Recognize area as additive. Find the area of figures composed of rectangles by decomposing them into non-overlapping rectangles and adding the areas of the non-overlapping parts, applying this technique to solve real–world problems.

MP 1, 2, 3, 4, 5, 6, 7, 8

Code	Digital Student Experience	Code	Teacher Resources
		ISIP	Area Square
		ISIP	Finding the Area of Polygons
		ISIP	Finding the Area of Rectangles

3.MD.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.

MP 1, 2, 3, 4, 5, 6, 7, 8

Code	Digital Student Experience	Code	Teacher Resources
U38	Measurement – Perimeter Word Problems	U38	Perimeter Bundle
		ISIP	Perimeter of Polygons

Geometry

3.G.2			
Partition shapes into parts with equal areas. Express the area of each part as a unit fraction of the whole.			
MP 1, 2, 3, 4, 5, 6, 7, 8			
Code	**Digital Student Experience**	**Code**	**Teacher Resources**
		ISIP	Recognizing Fractions in Different Forms
		ISIP	Finding the Area of Rectangles

Grade 4

Operations and Algebraic Thinking

4.OA.1

Interpret a multiplication equation as a comparison, e.g., interpret 35 = 5 × 7 as a statement that 35 is 5 times as many as 7 and 7 times as many as 5. Represent verbal statements of multiplicative comparisons as multiplication equations.

MP 1, 2, 3, 4, 5, 6, 7, 8

Code	Digital Student Experience	Code	Teacher Resources
U42	Computation and Algebraic Thinking – Solve Multistep Word Problems	U42	Solve Multistep Word Problems

4.OA.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.

MP 1, 2, 3, 4, 5, 6, 7, 8

Code	Digital Student Experience	Code	Teacher Resources
U42	Computation and Algebraic Thinking – Solve Multistep Word Problems	U42	Solve Multistep Word Problems
		ISIP	Using Multiplication to Solve If-Then Word Problems

4.OA.3

Solve multistep word problems posed with whole numbers and having whole-number answers using the four operations, including problems in which remainders must be interpreted. Represent these problems using equations with a letter standing for the unknown quantity. Assess the reasonableness of answers using mental computation and estimation strategies including rounding.

MP 1, 2, 3, 4, 5, 6, 7, 8

Code	Digital Student Experience	Code	Teacher Resources
U42	Computation and Algebraic Thinking – Solve Multistep Word Problems	U42	Solve Multistep Word Problems
		ISIP	Using Multiplication to Solve If-Then Word Problems

4.OA.4

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.

MP 1, 2, 3, 4, 5, 6, 7, 8

Code	Digital Student Experience	Code	Teacher Resources
		ISIP	Integrating Fact Practice Using Input/Output Function Tables

Number and Operations in Base Ten

4.NBT.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, by applying concepts of place value, multiplication or division

MP 1, 2, 3, 4, 5, 6, 7, 8

Code	Digital Student Experience	Code	Teacher Resources
U40	Number Sense – Expanded Form to Thousands	U46	Decimals on a Place Value Mat
U40	Number Sense – Standard Form to Thousands		
U46	Number Sense – Decimal Comparison – Concrete		

4.NBT.2

Read and write multi-digit whole numbers using standard form, word form and expanded form. Compare two multi-digit numbers based on meanings of the digits in each place, using less than or equal to symbols to record the results of comparisons. Grade 4 expectations in this domain are limited to whole numbers less than or equal to 1,000,000

MP 1, 2, 3, 4, 5, 6, 7, 8

Code	Digital Student Experience	Code	Teacher Resources
U40	Number Sense – Expanded Form to Thousands	U40	Writing Expanded Form from Standard through Thousands and Millions
U40	Number Sense – Expanded Form to Millions	U43	Decimals – Standard and Word Form
U40	Number Sense – Writing Expanded Form from Standard Form through Millions		
U40	Number Sense – Standard Form to Thousands		

4.NBT.2

Read and write multi-digit whole numbers using standard form, word form and expanded form. Compare two multi-digit numbers based on meanings of the digits in each place, using less than or equal to symbols to record the results of comparisons. Grade 4 expectations in this domain are limited to whole numbers less than or equal to 1,000,000

MP 1, 2, 3, 4, 5, 6, 7, 8

Code	Digital Student Experience	Code	Teacher Resources
U43	Number Sense – Word Form of Decimals with Visual Models (0.01-1.99)		
U46	Number Sense – Decimal Comparison – Concrete		

4.NBT.3

Use place value understanding to round multi-digit whole numbers to any place through 1,000,000.

MP 1, 2, 3, 4, 5, 6, 7, 8

Code	Digital Student Experience	Code	Teacher Resources
U40	Number Sense – Rounding to the Nearest Thousand	U40	Rounding – Nearest Thousand
U40	Number Sense – Round to Any Place up to Thousands with Number Line	U40	Rounding – Nearest Ten, Hundred, Thousand
U40	Number Sense – Round to Any Place up to Thousands with Algorithm	U40	Rounding within Three- and Four-Digit Numbers – Number Line
U40	Number Sense – Rounding Zero	U40	Rounding within Three- and Four-Digit Numbers – Algorithm
		U40	Zero as the Rounding Digit

4.NBT.4

Fluently add and subtract multi-digit whole numbers using the standard algorithm.

MP 1, 2, 3, 4, 5, 6, 7, 8

Code	Digital Student Experience	Code	Teacher Resources
		ISIP	Adding Multi-digit Numbers and Checking for Reasonableness

4.NBT.5

Multiply a whole number of up to four digits by a one-digit whole number, and multiply two two-digit numbers, using strategies based on place value and the properties of operations. Illustrate and explain the calculation by using equations, rectangular arrays, and/or area models.

MP 1, 2, 3, 4, 5, 6, 7, 8

Code	Digital Student Experience	Code	Teacher Resources
U41	Multiply Two-Digit Numbers with Models	U41	Two-Digit by Two-Digit Concrete Multiplication

Number and Operations – Fractions

4.NF.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 principle to recognize and generate equivalent fractions.

MP 1, 2, 3, 4, 5, 6, 7, 8

Code	Digital Student Experience	Code	Teacher Resources
U43	Number Sense - Equivalent Fractions with Models	U43	Fraction Comparison with Benchmark Fractions

4.NF.1

Explain why a fraction *a*/*b* is equivalent to a fraction (*n* × *a*)/(*n* × *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 principle to recognize and generate equivalent fractions.

MP 1, 2, 3, 4, 5, 6, 7, 8

Code	Digital Student Experience	Code	Teacher Resources
U43	Number Sense - Comparing Fractions using Benchmark Fractions	U43	Compare Fractions Using Common Denominators Fractions
		U43	Expressing Equivalent Fractions with Denominators of 10 and 100
		U43	Add Fractions with Denominators of 10 and 100

4.NF.2

Compare two fractions with different numerators and different denominators, e.g., by creating common denominators or numerators, or by comparing to a benchmark fraction such as 1/2. Recognize that comparisons are valid only when the two fractions refer to the same whole. Record the results of comparisons with symbols >, =, or <, and justify the conclusions, e.g., by using a visual fraction model.

MP 1, 2, 3, 4, 5, 6, 7, 8

Code	Digital Student Experience	Code	Teacher Resources
U43	Number Sense - Equivalent Fractions with Models	U43	Benchmark Fractions
U43	Number Sense - Comparing Fractions using Benchmark Fractions	U43	Fractions - Symbols
U43	Number Sense - Comparing Fractions with Unlike Denominators	U43	Compare Fractions by Creating Common Denominators

4.NF.2

Compare two fractions with different numerators and different denominators, e.g., by creating common denominators or numerators, or by comparing to a benchmark fraction such as 1/2. Recognize that comparisons are valid only when the two fractions refer to the same whole. Record the results of comparisons with symbols >, =, or <, and justify the conclusions, e.g., by using a visual fraction model.

MP 1, 2, 3, 4, 5, 6, 7, 8

Code	Digital Student Experience	Code	Teacher Resources
		U43	Compare Fractions by Creating Common Denominators
		ISIP	Comparing Fractions
		ISIP	Using Area Models to Compare Fractions

4.NF.3

Understand a fraction *a*/*b* with *a* > 1 as a sum of fractions 1/*b*. In other words, any fraction is a sum of unit fractions.

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, e.g., by replacing each mixed number with an equivalent fraction, and/or by using properties of operations and the relationship between addition and subtraction. For example, 3 ¼ + 2 ¼ = 13/4 + 9/4 = 22/4; 3 ¼ + 2 ¼ = (3 + 2) + (¼ + ¼) = 5 + 2/4 = 5 2/4, which is equivalent to 22/4
d. Solve word problems involving addition and subtraction of fractions referring to the same whole and having like denominators, e.g., by using visual fraction models and equations to represent the problem.

MP 1, 2, 3, 4, 5, 6, 7, 8

Code	Digital Student Experience	Code	Teacher Resources
U43	Number Sense - Decomposing Fractions	U43	Adding Like Denominators of 10 and 100

4.NF.3

Understand a fraction *a*/*b* with *a* > 1 as a sum of fractions 1/*b*. In other words, any fraction is a sum of unit fractions.

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, e.g., by replacing each mixed number with an equivalent fraction, and/or by using properties of operations and the relationship between addition and subtraction. For example, 3 ¼ + 2 ¼ = 13/4 + 9/4 = 22/4; 3 ¼ + 2 ¼ = (3 + 2) + (¼ + ¼) = 5 + 2/4 = 5 2/4, which is equivalent to 22/4
d. Solve word problems involving addition and subtraction of fractions referring to the same whole and having like denominators, e.g., by using visual fraction models and equations to represent the problem.

MP 1, 2, 3, 4, 5, 6, 7, 8

Code	Digital Student Experience	Code	Teacher Resources
U43	Number Sense - Adding Fractions with Denominators of Ten and One Hundred		
U43	Number Sense – Add Fractions with Both Denominators of 10 and 100		
U43	Number Sense – Decomposing Fractions		

4.NF.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.

MP 1, 2, 3, 4, 5, 6, 7, 8

Code	Digital Student Experience	Code	Teacher Resources
U43	Number Sense - Equivalent Fractions with Models	U43	Fraction Comparison with Benchmark Fractions

4.NF.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.			
MP 1, 2, 3, 4, 5, 6, 7, 8			
Code	**Digital Student Experience**	**Code**	**Teacher Resources**
U43	Number Sense - Comparing Fractions using Benchmark Fractions	U43	Compare Fractions Using Common Denominators Fractions
		U43	Expressing Equivalent Fractions with Denominators of 10 and 100
		U43	Add Fractions with Denominators of 10 and 100

Measurement and Data

4.MD.1			
Know relative sizes of the metric measurement units within one system of units. Metric units include km, m, cm, and mm; kg, g; and l, ml. Express a larger measurement unit in terms of a smaller unit. Record measurement conversions in a two-column table			
MP 1, 2, 3, 4, 5, 6, 7, 8			
Code	**Digital Student Experience**	**Code**	**Teacher Resources**
		U44	Converting Units of Measurement in Word Problems

4.MD.3

Develop efficient strategies to determine the area and perimeter of rectangles in real-world situations and mathematical problems.

MP 1, 2, 3, 4, 5, 6, 7, 8

Code	Digital Student Experience	Code	Teacher Resources
		ISIP	Finding Area of Rectangles and Squares by Using Multiplication
		ISIP	Quantifying Areas of Rectangles and Squares
		ISIP	Making Connections Between Multiplication and Area

4.MD.4

Display and interpret data in graphs (picture graphs, bar graphs, and line plots) to solve problems using numbers and operations for this grade.

MP 1, 2, 3, 4, 5, 6, 7, 8

Code	Digital Student Experience	Code	Teacher Resources
U39	Data Analysis – Two Step Word Problems with Bar Graphs	U39	Data Analysis – Two Step Word Problems with Bar Graphs
U45	Data Analysis – Line Plots with Fractional Data	U45	Line Plots with Fractional Data
U45	Data Analysis – Analyzing Line Plots		

4.MD.5

Recognize angles as geometric shapes that are formed wherever two rays share a common endpoint, and understand concepts of angle measurement:

a. Understand an angle is measured with reference to a circle with its center at the common endpoint of the rays, by considering the fraction of the circular arc between the points where the two rays intersect the circle. An angle that turns through 1/360 of a circle is called a "one-degree angle," and can be used to measure angles.
b. Understand an angle that turns through *n* one-degree angles is said to have an angle measure of *n* degrees.

MP 1, 2, 3, 4, 5, 6, 7, 8

Code	Digital Student Experience	Code	Teacher Resources
		U45	Measuring Angles with a Protractor

4.MD.6

Measure angles in whole number degrees using a protractor. Sketch angles of specified measure.

MP 1, 2, 3, 4, 5, 6, 7, 8

Code	Digital Student Experience	Code	Teacher Resources
U45	Geometry – Measuring Angles with a Protractor	U45	Measuring Angles with a Protractor
		ISIP	Line and Angle Identification

4.MD.7

Recognize angle measure as additive.

a. Understand that when an angle is decomposed into non-overlapping parts, the angle measure of the whole is the sum of the angle measures of the parts.
b. Solve addition and subtraction problems to find unknown angles on a diagram in real-world and mathematical problems, e.g., by using an equation with a symbol for the unknown angle measure.

MP 1, 2, 3, 4, 5, 6, 7, 8

Code	Digital Student Experience	Code	Teacher Resources
U45	Geometry – Missing Angles	U45	Measuring Angles with a Protractor
		ISIP	Decomposing Figures to Find the Area of Polygons

Geometry

4.G.1

Draw points, lines, line segments, rays, angles (right, acute, obtuse), and perpendicular and parallel lines. Identify these in two-dimensional figures.

MP 1, 2, 3, 4, 5, 6, 7, 8

Code	Digital Student Experience	Code	Teacher Resources
		U45	Measuring Angles with a Protractor
		ISIP	Line and Angle Identification

Grade 5

Operations and Algebraic Thinking

5.OA.1			
Use parentheses in numerical expressions, and evaluate expressions with this symbol. Formal use of algebraic order of operations is not necessary			
MP 1, 2, 3, 4, 5, 6, 7, 8			
Code	**Digital Student Experience**	**Code**	**Teacher Resources**
U49	Computation and Algebraic Reasoning - Evaluate Numerical Expressions with Parentheses	U49	Evaluating Numerical Expressions with Parentheses
U49	Computation and Algebraic Reasoning - Interpret Numerical Expressions with Parentheses	U49	Identifying Expressions in Scenarios
U49	Computation and Algebraic Reasoning - Write Numerical Expressions from Words	U49	Writing Expressions from Words - Addition and Subtraction
		U49	Writing Expressions from Words - Subtraction

5.OA.2

Write and interpret simple numerical expressions

a. Write simple expressions that record calculations with numbers. For example, use 2 × (8 + 7) to express the calculation "add 8 and 7, then multiply by 2.
b. Interpret numerical expressions without evaluating them. For example, conceptual understanding of multiplication to interpret 3 × (18,939 + 921) as being three times as large as 18,932 + 921.

MP 1, 2, 3, 4, 5, 6, 7, 8

Code	Digital Student Experience	Code	Teacher Resources
U49	Computation and Algebraic Reasoning - Evaluate Numerical Expressions with Parentheses	U49	Evaluating Numerical Expressions with Parentheses
U49	Computation and Algebraic Reasoning – Interpret Numerical Expressions with Parentheses	U49	Identifying Expressions in Scenarios
U49	Computation and Algebraic Reasoning – Write Numerical Expressions from Words	U49	Writing Expressions from Words - Addition and Subtraction
		U49	Writing Expressions from Words - Subtraction

5.OA.3

Generate two numerical patterns using two given rules. Identify apparent relationships between corresponding terms. Form ordered pairs consisting of corresponding terms from the two patterns, and graph the ordered pairs on a coordinate plane.

MP 1, 2, 3, 4, 5, 6, 7, 8

Code	Digital Student Experience	Code	Teacher Resources
U51	Computation and Algebraic Thinking – Comparing Points on a Coordinate Plane	U51	Comparing Points on a Coordinate Plane
		ISIP	Identifying and Plotting Ordered Pairs on the Coordinate Plane

Number and Operations in Base Ten

5.NBT.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.

MP 1, 2, 3, 4, 5, 6, 7, 8

Code	Digital Student Experience	Code	Teacher Resources
U46	Number Sense – Multiplying Decimals by 10 and 100	U46	Multiplying Decimals by 10 and 100
U46	Number Sense – Dividing Decimals by 10 and 100	U46	Dividing Decimals by 10 and 100
U46	Number Sense – Exploring Powers of 10	U46	Multiplying and Dividing Decimals by Powers of 10
U46	Number Sense – Multiplying and Dividing Decimals by Powers of 10	U46	Exploring Powers of 10

5.NBT.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.

MP 1, 2, 3, 4, 5, 6, 7, 8

Code	Digital Student Experience	Code	Teacher Resources
U46	Number Sense – Multiplying Decimals by 10 and 100	U46	Multiplying Decimals by 10 and 100
U46	Number Sense – Dividing Decimals by 10 and 100	U46	Dividing Decimals by 10 and 100
U46	Number Sense – Exploring Powers of 10	U46	Multiplying and Dividing Decimals by Powers of 10
U46	Number Sense – Multiplying and Dividing Decimals by Powers of 10	U46	Exploring Powers of 10

5.NBT.3

Read, write, and compare decimals to thousandths.

a. Read and write decimals to thousandths using base-ten numerals, number names, and expanded form, e.g., 347.392 = 3 × 100 + 4 × 10 + 7 × 1 + 3 × (1/10) + 9 × (1/100) + 2 × (1/1000).
b. Compare two decimals to thousandths based on meanings of the digits in each place, using >, =, and < symbols to record the results of comparisons.

MP 1, 2, 3, 4, 5, 6, 7, 8

Code	Digital Student Experience	Code	Teacher Resources
U46	Number Sense - Abstract Comparison of Thousandths	U46	Abstract Decimal Comparison
		U46	Decimal Comparison on the Number Line
		U46	Decimals to Whole Numbers

5.NBT.4

Use place value understanding to round decimals to any place, millions through hundredths.

MP 1, 2, 3, 4, 5, 6, 7, 8

Code	Digital Student Experience	Code	Teacher Resources
U46	Number Sense – Round Decimals on the Number Line	U46	Rounding Decimals on the Number Line
U46	Number Sense – Round Decimals with the Rounding Algorithm	U46	Rounding Decimals with the Rounding Algorithm
U46	Number Sense – Round Decimals with Whole Numbers		

5.NBT.6

Find whole number quotients of whole numbers with up to four-digit dividends and two-digit divisors, using strategies based on place value, the properties of operations, and/or the relationship between multiplication and division. Illustrate and explain the calculation by using equations, rectangular arrays, and/or area models.

MP 1, 2, 3, 4, 5, 6, 7, 8

Code	Digital Student Experience	Code	Teacher Resources
U47	Computation and Algebraic Thinking – Divide Four-Digit Numbers by Two-Digit Numbers	U47	Four-Digit by Two-Digit Division (Partial Quotients)
		ISIP	Estimating Quotients Using Compatible Numbers
		ISIP	Inverse Operations and Fact Families to Solve Simple Equations
		ISIP	Solving Multiplication and Division Word Problems with Diagrams
		ISIP	Using Models to Practice Extended Division Facts

5.NBT.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. In this standard, dividing decimals is limited to a whole number dividend with a decimal divisor or a decimal dividend with a whole number divisor. Compare the value of the quotient on the basis of the values of the dividend and divisor.

MP 1, 2, 3, 4, 5, 6, 7, 8

Code	Digital Student Experience	Code	Teacher Resources
U46	Number Sense – Visual Representation for Multiplying Decimals	U46	Decimal Grids and Place Value Mats

5.NBT.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. In this standard, dividing decimals is limited to a whole number dividend with a decimal divisor or a decimal dividend with a whole number divisor. Compare the value of the quotient on the basis of the values of the dividend and divisor.

MP 1, 2, 3, 4, 5, 6, 7, 8

Code	Digital Student Experience	Code	Teacher Resources
U46	Number Sense – Multiply Decimals by Powers of Ten	U46	Decimals on a Place Value Mat
U46	Number Sense – Divide Decimals by Powers of Ten	U46	Multiplying Decimals by10 and 100
U46	Number Sense – Multiply and Divide Decimals by Powers of Ten	U46	Dividing Decimals by 10 and 100
		U47	Decimal Addition
		U47	Decimal Subtraction
		U47	Concrete Decimal Division
		U47	Representational Decimal Division
		U47	Decimal Division

Number and Computation and Algebraic Thinking – Fractions

5.NF.1

Add and subtract fractions with unlike denominators (including mixed numbers and fractions greater than 1) by replacing given fractions with equivalent fractions in such a way as to produce an equivalent sum or difference of fractions with like denominators.

MP 1, 2, 3, 4, 5, 6, 7, 8

Code	Digital Student Experience	Code	Teacher Resources
U48	Computation and Algebraic Thinking – Add Fractions with Unlike Denominators	U48	Adding Fractions with Unlike Denominators
		ISIP	Adding and Subtracting Fractions with Unlike Denominators

5.NF.2

Solve word problems involving addition and subtraction of fractions referring to the same whole, including cases of unlike denominators, e.g., by using visual fraction models or equations to represent the problem. Use benchmark fractions and number sense of fractions to estimate mentally and assess the reasonableness of answers.

MP 1, 2, 3, 4, 5, 6, 7, 8

Code	Digital Student Experience	Code	Teacher Resources
U48	Computation and Algebraic Thinking – Add Fractions with Unlike Denominators	U48	Subtracting Fractions with Unlike Denominators
U48	Computation and Algebraic Thinking – Subtract Fractions with Unlike Denominators	ISIP	Adding and Subtracting Fractions with Unlike Denominators
U48	Computation and Algebraic Thinking – Add Fractions with Unlike Denominators		
U48	Computation and Algebraic Thinking – Subtract Fractions with Unlike Denominators		

5.NF.4

Apply and extend previous understandings of multiplication to multiply a fraction or whole number by a fraction.

a. Interpret the product (a/b) × q as a parts of a partition of q into b equal parts, equivalently, as the result of a sequence of operations a × q ÷ b.
b. Find the area of a rectangle with fractional side lengths by tiling it with unit squares of the appropriate unit fraction side lengths, and show that the area is the same as would be found by multiplying the side lengths. Multiply fractional side lengths to find areas of rectangles, and represent fraction products as rectangular areas.

MP 1, 2, 3, 4, 5, 6, 7, 8

Code	Digital Student Experience	Code	Teacher Resources
U48	Computation and Algebraic Thinking – Multiply by Fractions Less Than One	U48	Multiplying by Fractions Less Than One
		U48	Multiplying by Fractions Less Than One (Extra Practice)
		U48	Multiplying Fractions Less Than One with Improper Fractions
		U48	Multiplying Whole Numbers by Fractions Greater than One

5.NF.5

Interpret multiplication as scaling:

a. Compare the size of a product to the size of one factor on the basis of the size of the other factor, without performing the indicated multiplication. For example, the products of expressions such as 5 × 3 or ½ × 3 can be interpreted in terms of a quantity, three, and a scaling factor, five or ½. Tus in addition to knowing that 5 × 3 = `5, they can also say that 5 × 3 is five times as big as three, without evaluating the products. Likewise they see ½ × 3 as half the size of three.
b. Explain why multiplying a given number by a fraction greater than 1 results in a product greater than the given number (recognizing multiplication by whole numbers greater than 1 as a familiar case); explaining why multiplying a given number by a fraction less than 1 results in a product smaller than the given number; and relating the principle of fraction equivalence a/b = (n×a) /(n×b) to the effect of multiplying a/b by 1.

MP 1, 2, 3, 4, 5, 6, 7, 8

Code	Digital Student Experience	Code	Teacher Resources
U48	Computation and Algebraic Thinking – Multiply by Fractions Less Than One	U48	Multiplying by Fractions Less Than One
U48	Computation and Algebraic Thinking – Multiply by Fractions Less than One	U48	Multiplying by Fractions Less Than One
		U48	Multiplying by Fractions Less Than One (Extra Practice)
		U48	Multiplying Fractions Less Than One with Improper Fractions
		U48	Multiplying Whole Numbers by Fractions Greater than One

5.NF.6			
Solve real-world problems involving multiplication of fractions and mixed numbers, e.g., by using visual fraction models or equations to represent the problem.			
MP 1, 2, 3, 4, 5, 6, 7, 8			
Code	**Digital Student Experience**	**Code**	**Teacher Resources**
		U48	Multiplying by Fractions Less Than One
		U48	Multiplying by Fractions Less Than One (Extra Practice)
		U48	Multiplying Fractions Less Than One with Improper Fractions
		U48	Multiplying Whole Numbers by Fractions Greater than One

Measurement and Data

5.MD.1			
Know relative sizes of these U.S. customary measurement units: pounds, ounces, miles, yards, feet, inches, gallons, quarts, pints, cups, fluid ounces, hours, minutes, and seconds. Convert between pounds and ounces; miles and feet; yards, feet, and inches; gallons, quarts, pints, cups, and fluid ounces; hours, minutes, and seconds in solving multi-step, real-world problems.			
MP 1, 2, 3, 4, 5, 6, 7, 8			
Code	**Digital Student Experience**	**Code**	**Teacher Resources**
		ISIP	Converting Standard Units of Measurement
		ISIP	Performing Customary Measurement Conversions

5.MD.3

Recognize volume as an attribute of solid figures and understand concepts of volume measurement.

a. A cube with side length 1 unit, called a “unit cube,” is said to have “one cubic unit” of volume and can be used to measure volume.
b. A solid figure that can be packed without gaps or overlaps using n unit cubes is said to have a volume of n cubic units.

MP 1, 2, 3, 4, 5, 6, 7, 8

Code	Digital Student Experience	Code	Teacher Resources
U50	Measurement - Volume of Irregular Figures	U50	Volume of Irregular Figures
		ISIP	Volume as an Attribute of Three-Dimensional Space
		ISIP	Quantifying Volume: Counting Same-sized Units

5.MD.4

Measure volumes by counting unit cubes, using cubic cm, cubic in, cubic ft., and improvised units.

MP 1, 2, 3, 4, 5, 6, 7, 8

Code	Digital Student Experience	Code	Teacher Resources
U50	Measurement - Volume of Irregular Figures	U50	Volume of Irregular Figures
		ISIP	Volume as an Attribute of Three-Dimensional Space
		ISIP	Quantifying Volume: Counting Same-sized Units

5.MD.5

Relate volume to the operations of multiplication and addition and solve real-world and mathematical problems involving volume.

a. Find the volume of a right rectangular prism with whole number side lengths by packing it with unit cubes, and show that the volume is the same as would be found by multiplying the edge lengths, equivalently by multiplying the height by the area of the base. Represent threefold whole number products as volumes, e.g., to represent the Associative Property of Multiplication.
b. Apply the formulas $V = \ell \times w \times h$ and $V = B \times h$ for rectangular prisms to find volumes of right rectangular prisms with whole number edge lengths in the context of solving real-world and mathematical problems.
c. Recognize volume as additive. Find volumes of solid figures composed of two non-overlapping right rectangular prisms by adding the volumes of the non-overlapping parts, applying this technique to solve real-world problems.

MP 1, 2, 3, 4, 5, 6, 7, 8

Code	Digital Student Experience	Code	Teacher Resources
U50	Measurement - Volume of Irregular Figures	U50	Volume of Rectangular Prisms
		ISIP	Volume as an Attribute of Three-Dimensional Space
		ISIP	Calculating Volume in Multistep Word Problems
		ISIP	Integrating Fact Practice and Volume
		ISIP	Quantifying Volume: Counting Same-sized Units

Geometry

5.G.1

Use a pair of perpendicular number lines, called axes, to define a coordinate system, with the intersection of the lines (the origin) arranged to coincide with the 0 on each line and a given point in the plane located by using an ordered pair of numbers, called its coordinates. Understand that the first number indicates how far to travel from the origin in the direction of one axis, and the second number indicates how far to travel in the direction of the second axis, with the convention that the names of the two axes and the coordinates correspond, e.g., x-axis and x-coordinate, y-axis and y-coordinate.

MP 1, 2, 3, 4, 5, 6, 7, 8

Code	Digital Student Experience	Code	Teacher Resources
U51	Geometry – Graph Points in a Coordinate Plane	U51	Plotting Points on a Coordinate Grid
		U51	Graphing and Analyzing Lines
		ISIP	Identifying and Plotting Ordered Pairs on the Coordinate Plane

5.G.2

Represent real-world and mathematical problems by graphing points in the first quadrant of the coordinate plane, and interpret coordinate values of points in the context of the situation.

MP 1, 2, 3, 4, 5, 6, 7, 8

Code	Digital Student Experience	Code	Teacher Resources
U51	Geometry – Graph Points in a Coordinate Plane	U51	Plotting Points on a Coordinate Grid
U51	Geometry – Comparing Points on a Coordinate Plan	U51	Graphing and Analyzing Lines