Istation

Istation Math Curriculum Correlated to the Colorado Academic Standards for Mathematics

Grade K – Grade 5

Contents

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K–12 Standards for Mathematical Practices (MP)

As stated in the Colorado Academic 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
CR	Classroom Resource
PP	Parent Portal

PWP

Power Path Featured Content

Newest Features			
Power Path is the next generation of activities for Istation, bringing a more modern approach to the user experience. These activities contain a greater degree of adaptability, many more questions, and a greater sense of agency for the student.			
MP 1, 2, 3, 4, 5, 6, 7, 8			
Code	**Digital Student Experience**	Code	**Teacher Resources**
K.CC.A.1			
		U13-15	Odd One Out - Counting
K.CC.A.2			
		U13-15	Odd One Out – Skip Counting by Fives
K.CC.C.6			
U9-11	Number Sense – Comparison Cards: Comparing Groups or Numbers	U9-11	More or Less? Which is Best?
K.CC.C.7			
U9-11	Number Sense – Comparison Cards: Comparing Groups or Numbers	U9-11	More or Less? Which is Best?
K.NBT.A.1			
		U7-8	Make It, Break It
1.NBT.A.1			
		U16-17	One Hundred Twenty is Plenty
1.NBT.B.2			
		U12-13	Two-Digit Memory

PWP

Newest Features			
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MP 1, 2, 3, 4, 5, 6, 7, 8			
Code	**Digital Student Experience**	Code	**Teacher Resources**
1.NBT.B.3			
U14-16	Number Sense – Comparison Cards: Comparing Two-Digit Numbers	U14-16	Dare to Compare Two-Digit Numbers
2.NBT.A.1			
		U30-31	Make It, Break It, Toss It
2.NBT.A.2			
		U24-30	Skip Counting with Patterns
2.NBT.A.4			
U33-35	Number Sense – Comparison Cards: Comparing Three-Digit Numbers	U33-35	Dare to Compare Three-Digit Numbers
3.NBT.A.1			
U37-39	Number Sense – Pyramid Pinball: Rounding to the Nearest 10 or 100	U37-39	Round and Round We Go (Whole Numbers)
4.NBT.A.2			
U41-43	Number Sense – Comparison Cards: Comparing Multi-Digit Numbers	U41-43	Dare to Compare Multi-Digit Numbers
4.NBT.A.3			
U42-44	Number Sense – Pyramid Pinball: Rounding to Any Place	U42-44	Round and Round We Go (Multi-Digit) Numbers

PWP

Newest Features			
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MP 1, 2, 3, 4, 5, 6, 7, 8			
Code	**Digital Student Experience**	Code	**Teacher Resources**
5.NBT.A.3			
U47-49	Number Sense – Comparison Cards: Comparing Decimal Numbers	U47-49	Dare to Compare Decimal Numbers
5.NBT.B.4			
U48-50	Number Sense – Pyramid Pinball: Rounding Decimals	U48-50	Round and Round We Go (Decimal) Numbers

Power Path Featured Content (Spanish)

Newest Features			
Power Path is the next generation of activities for Istation, bringing a more modern approach to the user experience. These activities contain a greater degree of adaptability, many more questions, and a greater sense of agency for the student.			
MP 1, 2, 3, 4, 5, 6, 7, 8			
Code	**Digital Student Experience**	Code	**Teacher Resources**
K.CC.C.6			
U9-11	Tarjetas de comparación - Comparando grupos o números	U9-11	¿Más o menos? ¿Cuál es mejor?
K.CC.C.7			
		U9-11	¿Más o menos? ¿Cuál es mejor?

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PWP

Newest Features			
Power Path is the next generation of activities for Istation, bringing a more modern approach to the user experience. These activities contain a greater degree of adaptability, many more questions, and a greater sense of agency for the student.			
MP 1, 2, 3, 4, 5, 6, 7, 8			
Code	**Digital Student Experience**	**Code**	**Teacher Resources**
1.NBT.B.3			
U14-16	Tarjetas de comparación - Comparando números de dos dígitos	U14-16	Atrévete a comparar (Números de dos dígitos)
2.NBT.A.4			
U33-35	Tarjetas de comparación - Comparando números de tres dígitos	U33-35	Atrévete a comparar (Números de tres dígitos)
3.NBT.A.1			
		U37-39	Dando y Dando la vuelta (Números Enteros)
4.NBT.A.2			
U41-43	Tarjetas de comparación - Comparando números de múltiples dígitos	U42-44	Atrévete a comparar (Numéros de dígitos múltiples)
4.NBT.A.3			
		U42-44	Dando y dando la vuelta (Números de dígitos múltiples)
5.NBT.A.3			
U47-49	Tarjetas de comparación - Comparando números decimales	U47-49	Atrévete a comparar (Decimales)
5.NBT.B.4			
		U48-50	Dando y dando la vuelta (Decimales)

Kindergarten

Counting and Cardinality

Use number names and the count sequence.

K.CC.A.1

Count to 100 by ones and by 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	Skip Counting by Tens
U14	Number Sense – Identify Missing Numbers (1-100)	U14	Roll–Count–Cover
U14	Number Sense – Number Sequence (1-100)	U21	The Arrow Says (1-100)
U14	Number Sense – "Hens by Tens" (1-100)	U23	Decade Numbers
U14	Number Sense – Count the Hen Amount (1-100)		
U14	Number Sense – Count to the Target Amount (1-100)		
U14	Number Sense – Choose the Correct Amount (1-100)		

K

K.CC.A.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
U4	Number Sense – "EZ with a Rock and Roll Beat" (1-10)	U6	Count with Me (1-20)
U4	Number Sense – Identifying Numbers (1-10)	U8	Counting Sticks (1-20)
U4	Number Sense – Identify Missing Numbers (1-10)	U8	Counting Objects (1-20)
U4	Number Sense – Number Sequence (1-10)	U14	One Hundred Is a Lot
U6	Number Sense – "EZ with a Rock and Roll Beat" (1-20)	U14	Roll–Count–Cover
U6	Number Sense – Identifying Numbers (1-20)	U18	Counting Memory
U6	Number Sense – Identify Missing Numbers (1-20)	U21	The Arrow Says (1-100)
U6	Number Sense – Number Sequence (1-20)	U23	Decade Numbers
U7	Number Sense – "EZ with a Rock and Roll Beat" (1-30)	ISIP EM	Set Stories
U7	Number Sense – Identifying Numbers (1-30)	ISIP EM	Ten Frame Puzzles (1-20)
U7	Number Sense – Identify Missing Numbers (1-30)	ISIP EM	Total Amount in a Scattered Group
U7	Number Sense – Number Sequence (1-30)	ISIP EM	Understanding Ordinal Numbers
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)		

K.CC.A.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
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.A.3

Write numbers from 0 to 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
U11	Number Sense – "Writing Our Numbers"	U6	Domino Dot Memory (1-10)
U11	Number Sense – Writing Numbers Everywhere (1-10)	U7	Counting a Scattered Static Group (1-10)
U15	Number Sense – "Pattern of the Count" (1-50)	U7	Calendar Counting (1-30)
U15	Number Sense – Place Value Rows (1-50)	U8	Counting Sticks (1-20)
U15	Number Sense – Number Puzzle (1-50)	U8	Counting Objects (1-20)
U18	Number Sense – Write to Represent Numbers (0-20)	U10	Park the Car and Write (1-20)
U19	Number Sense – "Pattern of the Count" (1-20)	U11	Writing Numbers Everywhere (5-10)
U19	Number Sense – Place Value Columns (by 1s and 10s to 50)	U11	Writing Numbers (10-20)

K

K.CC.A.3

Write numbers from 0 to 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
U19	Number Sense – Number Puzzle (by 1s and 10s to 50)	U18	Counting Memory
		ISIP EM	Set Stories
		ISIP EM	Total Amount in a Scattered Group
		ISIP EM	Ten Frame Puzzles (1-20)
		ISIP EM	Multiple Representations of Numbers (1-10)

Count to determine the number of objects.

K.CC.B.4

Apply the relationship between numbers and quantities and 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
U6	Number Sense – "Counting Cattle" (1-10)	U6	Count with Me (1-20)
U6	Number Sense – Counting in a Line (1-10)	U8	Counting Sticks (1-20)

K

K.CC.B.4

Apply the relationship between numbers and quantities and 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
U6	Number Sense – Counting a Static Scattered Group (1-10)	U8	Counting Objects (1-20)
U6	Number Sense – Remember the Counted Amount (1-10)	ISIP EM	Set Stories
U7	Number Sense – "Counting Cattle" (1-10)	ISIP EM	Ten Frame Puzzles (1-20)
U7	Number Sense – Counting Fingers (1-10)	ISIP EM	Subitizing to Problem Solve
U7	Number Sense – Choose the Correct Amount (1-10)	ISIP EM	Total Amount in a Scattered Group
U7	Number Sense – Counting a Static Scattered Group (1-10)		
U8	Number Sense – "Counting Cattle" (1-20)		
U8	Number Sense – Counting in a Line (1-20)		
U8	Number Sense – Counting in an Array (1-20)		
U8	Number Sense – Counting a Scattered Static Group (1-20)		
U10	Number Sense – "Counting Cattle" (1-20)		

K

K.CC.B.4

Apply the relationship between numbers and quantities and 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
U10	Number Sense – Choose the Correct Amount (1-20)		
U10	Number Sense – Remember the Counted Amount (1-20)		
U10	Number Sense – Counting an Array (1-20)		
U10	Number Sense – Counting a Scattered Static Group (1-20)		

K.CC.B.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
U6	Number Sense – "Counting Cattle" (1-10)	U6	Domino Dot Memory (1-10)
U6	Number Sense – Counting in a Line (1-10)	U7	Counting a Scattered Static Group (1-10)
U6	Number Sense – Counting a Static Scattered Group (1-10)	U8	Counting Sticks (1-20)

K

K.CC.B.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
U6	Number Sense – Remember the Counted Amount (1-10)	U8	Counting Objects (1-20)
U7	Number Sense – "Counting Cattle" (1-10)	U18	Counting Memory
U7	Number Sense – Counting Fingers (1-10)	ISIP EM	Set Stories
U7	Number Sense – Choose the Correct Amount (1-10)	ISIP EM	Ten Frame Puzzles (1-20)
U7	Number Sense – Counting a Static Scattered Group (1-10)	ISIP EM	Total Amount in a Scattered Group
U8	Number Sense – "Counting Cattle" (1-20)	ISIP EM	Multiple Representations of Numbers (1-10)
U8	Number Sense – Counting in a Line (1-20)	ISIP EM	Subitizing to Problem Solve
U8	Number Sense – Counting in an Array (1-20)		
U8	Number Sense – Counting a Scattered Static Group (1-20)		
U10	Number Sense – "Counting Cattle" (1-20)		
U10	Number Sense – Choose the Correct Amount (1-20)		
U10	Number Sense – Remember the Counted Amount (1-20)		

Compare numbers.

K.CC.C.6

Identify whether the number of objects in one group is greater than, less than, or equal to the number of objects in another group, e.g., by using matching and counting strategies, (include groups with up to 10 objects.)

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	Finding One More or One Less (1-20)
		ISIP EM	Comparing Groups of Objects (1-20)
		ISIP EM	Multiple Representations of Numbers (1-10)

K.CC.C.7

Compare two numbers between 1 and 10 presented as written numerals.

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	Finding One More or One Less (1-20)
		ISIP EM	Comparing Groups of Objects (1-20)
		ISIP EM	Multiple Representations of Numbers (1-10)

K

Number and Operations in Base Ten

Work with numbers 11–19 to gain foundations for place value.

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
		U15	Digit Deal (up to 50)
		U18	Decomposing House with Pictures
		U18	Decomposing House

Operations and Algebraic Thinking

Model and describe addition as putting together and adding to, and subtraction as taking apart and taking from, using objects or drawings.

K.OA.A.1

Represent addition and subtraction with objects, fingers, mental images, drawings, (drawings need not show details, but should show the mathematics in the problem), sounds (e.g., claps), acting out situations, verbal explanations, expressions, or equations.

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

Code	Digital Student Experience	Code	Teacher Resources
U9	Computations and Algebraic Thinking – "Part Part Whole in New Orleans" (1-10)	U7	Figuring Out Fives

K

K.OA.A.1

Represent addition and subtraction with objects, fingers, mental images, drawings, (drawings need not show details, but should show the mathematics in the problem), sounds (e.g., claps), acting out situations, verbal explanations, expressions, or equations.

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

Code	Digital Student Experience	Code	Teacher Resources
U18	Number Sense – Decompose Numbers Less Than or Equal to Ten	U22	Beading the Difference
		ISIP EM	Subtraction within Ten
		ISIP EM	Addition/Subtraction Stories
		ISIP EM	Count Back to Subtract
		ISIP EM	Ten Frame Addition

K.OA.A.2

Solve addition and subtraction word problems, and add and subtract within 10, e.g., by using objects or drawings to represent the problem.

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

Code	Digital Student Experience	Code	Teacher Resources
U9	Computations and Algebraic Thinking – "Part Part Whole in New Orleans" (1-10)	U7	Figuring Out Fives
U9	Computations and Algebraic Thinking – Part Part Whole Addition within 10	U8	Parts and Wholes
U9	Computations and Algebraic Thinking – "Part Part Whole in New Orleans" (1-10)	U10	Dogs and Cats on Mats (up to 10)
U9	Computations and Algebraic Thinking – Part Part Whole Addition within 10	U12	Ten or Not Ten

K.OA.A.2

Solve addition and subtraction word problems, and add and subtract within 10, e.g., by using objects or drawings to represent the problem.

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

Code	Digital Student Experience	Code	Teacher Resources
U10	Computations and Algebraic Thinking – "Part Part Whole in New Orleans" (1-10)	U18	Decomposing House with Pictures
U10	Computations and Algebraic Thinking – Part Part Whole Addition Stories	U18	Decomposing House
U12	Computations and Algebraic Thinking – "Part Part Whole in New Orleans" (1-10)	U19	Relative Magnitude with Part Part Whole
U12	Computations and Algebraic Thinking – Making Ten Using Tens Frames	U20	Start, Change, Result
U12	Computations and Algebraic Thinking – Identifying Addends Using Tens Frames	U20	Adding with Addend Cards
U13	Computations and Algebraic Thinking – "Chicago Pizza Blues" (within 10)	ISIP EM	Subtraction within Ten
U13	Computations and Algebraic Thinking – Subtraction Within Ten	ISIP EM	Addition/Subtraction Stories
U14	Computations and Algebraic Thinking – "Chicago Pizza Blues" (within 10)	ISIP EM	Count Back to Subtract
U14	Computations and Algebraic Thinking – Whole Part Part Subtraction Stories (within 10)	ISIP EM	Ten Frame Addition
U18	Number Sense – Decompose Numbers Less Than or Equal to Ten		

K.OA.A.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	Computations and Algebraic Thinking – "Part Part Whole in New Orleans" (1-10)	U7	Figuring Out Fives
U9	Computations and Algebraic Thinking – Part Part Whole Addition Stories	U8	Parts and Wholes
U10	Computations and Algebraic Thinking – "Part Part Whole in New Orleans" (1-10)	U9	Roll to Find the Whole
U10	Computations and Algebraic Thinking – Part Part Whole Addition Stories	U10	Dogs and Cats on Mats (up to 10)
U12	Computations and Algebraic Thinking – "Part Part Whole in New Orleans" (1-10)	U12	Ten or Not Ten
U12	Computations and Algebraic Thinking – Making Ten Using Tens Frames	U13	Whole in the Hand
U12	Computations and Algebraic Thinking – Identifying Addends Using Tens Frames	U18	Decomposing House with Pictures
U13	Computations and Algebraic Thinking – "Part Part Whole in New Orleans" (1-10)	U18	Decomposing House
U13	Computations and Algebraic Thinking – Subtraction Within Ten	U19	Relative Magnitude with Part Part Whole
U14	Computations and Algebraic Thinking – "Chicago Pizza Blues" (within 10)	U20	Start, Change, Result

K

K.OA.A.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
U14	Computations and Algebraic Thinking – Whole Part Part Subtraction Stories (within 10)	U20	Adding with Addend Cards
U18	Number Sense – Decompose Numbers Less Than or Equal to Ten	U22	Beading the Difference

K.OA.A.4

For any number from 1 to 9, find the number that makes 10 when added to the given number, e.g., by using objects or drawings, and record the answer with a drawing or equation.

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

Code	Digital Student Experience	Code	Teacher Resources
U9	Computations and Algebraic Thinking – "Part Part Whole in New Orleans" (1-10)	U9	Roll to Find the Whole
U9	Computations and Algebraic Thinking – Part Part Whole Addition Stories	U10	Dogs and Cats on Mats (up to 10)
U10	Computations and Algebraic Thinking – "Part Part Whole in New Orleans" (1-10)	U12	Ten or Not Ten
U10	Computations and Algebraic Thinking – Part Part Whole Addition Stories	U13	Whole in the Hand
U12	Computations and Algebraic Thinking – "Part Part Whole in New Orleans" (1-10)	U18	Decomposing House with Pictures

K

K.OA.A.4

For any number from 1 to 9, find the number that makes 10 when added to the given number, e.g., by using objects or drawings, and record the answer with a drawing or equation.

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

Code	Digital Student Experience	Code	Teacher Resources
U12	Computations and Algebraic Thinking – Making Ten Using Tens Frames	U18	Decomposing House
U12	Computations and Algebraic Thinking – Identifying Addends Using Tens Frames	U19	Relative Magnitude with Part Part Whole
U13	Computations and Algebraic Thinking – "Chicago Pizza Blues" (within 10)	U20	Start, Change, Result
U13	Computations and Algebraic Thinking – Subtraction Within Ten	U20	Adding with Addend Cards
U14	Computations and Algebraic Thinking – "Chicago Pizza Blues" (within 10)	U22	Beading the Difference
U14	Computations and Algebraic Thinking – Whole Part Part Subtraction Stories (within 10)		
U18	Number Sense – Decompose Numbers Less Than or Equal to Ten		

Measurement and Data

Describe and compare measurable attributes.

K.MD.A.1

Describe measurable attributes of objects, such as length or weight. Describe several measurable attributes of a single object.

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

Code	Digital Student Experience	Code	Teacher Resources
U10	Measurement and Data Analysis – Directly Comparing Length	U10	Directly Comparing Length
U10	Measurement and Data Analysis – Directly Comparing Weight	U10	Directly Comparing Weight
U15	Measurement and Data Analysis – Directly Comparing Height	U15	Directly Comparing Height
U15	Measurement and Data Analysis – Directly Compare Capacity of Two Containers	U15	Which Holds More? Which Holds Less?

K.MD.A.2

Directly compare two objects with a measurable attribute in common to see which object has "more of" / "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 and Data Analysis – Comparing Objects by Length	U10	Directly Comparing Length
U10	Measurement and Data Analysis – Comparing Objects by Weight	U10	Directly Comparing Weight

K.MD.A.2

Directly compare two objects with a measurable attribute in common to see which object has "more of" / "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
U15	Measurement and Data Analysis – Comparing Objects by Height	U15	Directly Comparing Height
U15	Measurement and Data Analysis – Comparing Objects by Capacity	U15	Which Holds More? Which Holds Less?

Classify objects and count the number of objects in each category.

K.MD.B.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)

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

Code	Digital Student Experience	Code	Teacher Resources
		U12	Classify and Compare
		U19	Graphing Tic-Tac-Toe

K

Geometry and Measurement

Identify and describe shapes (squares, circles, triangles, rectangles, hexagons, cubes, cones, cylinders, and spheres).

K.G.A.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
U1	Geometry – Identify Squares	U3	We're Going on a Shape Hunt
U3	Geometry – Identify Triangles	U9	Considering Sizes of Shapes
U9	Geometry – Identifying Shapes Regardless of Orientation	U14	Odd One Out

K.G.A.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

Analyze, compare, create, and compose shapes.

K.G.B.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
U1	Geometry – Identify Squares	U3	We're Going on a Shape Hunt
U3	Geometry – Identify Triangles	U9	Considering Sizes of Shapes
U9	Geometry – Identify Shapes Regardless of Orientation	U9	Mighty Shape Match
U9	Geometry – Classify and Count by Attribute	U14	Shape Four-in-a-Row
U14	Geometry – Identify Three-Dimensional Shapes		

Grade 1

Number and Operations in Base Ten

Extend the counting sequence.

1.NBT.A.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
U17	Number Sense – "Pattern of the Count" Count by Ones to 100	U14	One Hundred Is a Lot
U17	Number Sense – Place Value Rows (1-100)	U17	Digit Deal (1-100)
U17	Number Sense – Number Puzzle (1-100)	U18	Mixed-Up, Fixed-Up
U21	Number Sense – "Pattern of the Count" Count by Ones and Tens to 100	U21	The Arrow Says (1-100)
U21	Number Sense – Place Value Columns (1-100)	U23	Decade Numbers
U21	Number Sense – Number Puzzle (1-100)		

Understand place value.

1.NBT.B.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
		ISIP EM	Matching Numerals and Base Ten Blocks
		ISIP EM	Base Ten Block Comparison Game

1.NBT.B.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 Basics
		ISIP EM	Matching Numerals and Base Ten Blocks
		ISIP EM	Base Ten Block Comparison Game
		ISIP EM	Base Ten Block Battle
		ISIP EM	Graphing Stories – Determining Most and Least

Use place value understanding and properties of operations to add and subtract.

1.NBT.C.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	Computations and Algebraic Thinking – "The Math Whiz"	U20	Doubles Facts
U20	Computations and Algebraic Thinking – Fact Strategies	U20	(Properties of) Operations – Turn Around Addition
U20	Computations and Algebraic Thinking – Commutative Property	U20	(Properties of) Operations – Grouping Groceries

1

1.NBT.C.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	Computations and Algebraic Thinking – Associative Property	U20	(Properties of) Operations – Identity Property Go Fish!
U20	Computations and Algebraic Thinking – Identity Property	U24	Start, Change, Result! (within 20)
		ISIP EM	Building Sums to Ten
		ISIP EM	Computations and Algebraic Thinking – Fact Family Dominoes
		FP	Addition Fast Track
		FP	Subtraction Fast Track
		FP	Sticky Sums
		FP	Write, Tally, Draw
		FP	Shake It, Make It, Solve It (Addition)
		FP	Wipe Out

1

Operations and Algebraic Thinking

Represent and solve problems involving addition and subtraction.

1.OA.A.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
U16	Computations and Algebraic Thinking – Determine Missing Addend	U16	Beginning-Middle-End
U19	Computations and Algebraic Thinking – "Part Part Whole in New Orleans" (1-20)	U18	Decomposing House
U19	Computations and Algebraic Thinking – Part Part Whole Using Ovals	U19	Decomposing House with Pictures
U19	Computations and Algebraic Thinking – Part Part Whole Using Ten Frames	U22	Beading the Difference
U20	Computations and Algebraic Thinking – "Part Part Whole in New Orleans" (1-20)	U24	Mystery in the Middle
U20	Computations and Algebraic Thinking – Addition Stories (1-20) Horizontal Equations	U24	Start, Change, Result (within 20)
U20	Computations and Algebraic Thinking – Addition Stories (1-20) Vertical Equations		
U22	Computations and Algebraic Thinking – Whole Part Part "Chicago Pizza Blues" (within 20)		

1.OA.A.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
U22	Computations and Algebraic Thinking – Whole Part Part (within 20)		
U24	Computations and Algebraic Thinking – Subtraction Stories (within 20)		
U24	Computations and Algebraic Thinking – Determine the Unknown Whole Numbers in Subtraction Sentences		

1.OA.A.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	U22	Beading the Difference
		U22	Mystery in the Middle
		ISIP EM	Associative Property of Addition
		ISIP EM	Commutative Property of Addition

1

Understand and apply properties of operations and the relationship between addition and subtraction.

1.OA.B.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**
U16	Computations and Algebraic Thinking – Determine the Unknown Whole Number in Addition Sentences	U16	Beginning-Middle-End
U20	Computations and Algebraic Thinking – "The Math Whiz"	U20	Doubles Facts
U20	Computations and Algebraic Thinking – Doubles Strategy	U20	(Properties of) Operations – Turn Around Addition
U20	Computations and Algebraic Thinking – Commutative Property of Addition	U20	(Properties of) Operations – Grouping Groceries
U20	Computations and Algebraic Thinking – Associative Property of Addition	U20	(Properties of) Operations – Identity Property Go Fish!
U20	Computations and Algebraic Thinking – Identity Property of Addition	ISIP EM	Counting on Cards
U24	Computations and Algebraic Thinking – Determine the Unknown Whole Numbers in Subtraction Sentences	ISIP EM	Fact Family Dominoes
		ISIP EM	Associative Property of Addition
		ISIP EM	Commutative Property of Addition

1

1.OA.B.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	Computations and Algebraic Thinking – Whole Part Part "Chicago Pizza Blues" (within 20)	U18	Decomposing House
U22	Computations and Algebraic Thinking – Whole Part Part (within 20)	U19	Decomposing House with Pictures
U24	Computations and Algebraic Thinking – Subtraction Stories (within 20)	U22	Beading the Difference
U24	Computations and Algebraic Thinking – Determine the Unknown Whole Numbers in Subtraction Sentences	U22	Mystery in the Middle
		U24	Start, Change, Result! (within 20)
		ISIP EM	Subtraction Stories
		ISIP EM	Fact Family Dominoes

Add and subtract within 20.

1.OA.C.5

Relate counting to addition and subtraction (e.g., by counting on 2 to add 2).

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

Code	Digital Student Experience	Code	Teacher Resources
		U22	Beading the Difference
		U22	Mystery in the Middle

1

1.OA.C.5

Relate counting to addition and subtraction (e.g., by counting on 2 to add 2).

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

Code	Digital Student Experience	Code	Teacher Resources
		U24	Start, Change, Result! (within 20)

1.OA.C.6

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).

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

Code	Digital Student Experience	Code	Teacher Resources
U10	Computations and Algebraic Thinking – "Part Part Whole in New Orleans" (1-20)	U10	Dogs and Cats on Mats (up to Ten)
U10	Computations and Algebraic Thinking – Addition Stories	U12	Ten or Not Ten
U12	Computations and Algebraic Thinking – Identifying Addends using Tens Frames	U13	Whole in the Hand
U20	Computations and Algebraic Thinking – "Part Part Whole in New Orleans" (1-20)	U20	(Properties of) Operations – Turn Around Addition
U20	Computations and Algebraic Thinking – Addition Stories (horizontal orientation)	U20	(Properties of) Operations – Grouping Groceries
U20	Computations and Algebraic Thinking – Addition Stories (vertical orientation)	U20	(Properties of) Operations – Identity Property Go Fish!
U20	Computations and Algebraic Thinking – "The Math Whiz"	U20	Doubles Facts

1.OA.C.6

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).

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

Code	Digital Student Experience	Code	Teacher Resources
U20	Computations and Algebraic Thinking – Fact Strategies	ISIP EM	Building Sums to Ten
U20	Computations and Algebraic Thinking – Commutative Property	ISIP EM	Place Value of Tens and One
U20	Computations and Algebraic Thinking – Associative Property	ISIP EM	Fact Family Dominoes
U20	Computations and Algebraic Thinking – Identity Property	FP	Addition Fast Track
U10	Computations and Algebraic Thinking – "Part Part Whole in New Orleans" (1-20)	FP	Sticky Sums
U10	Computations and Algebraic Thinking – Addition Stories	FP	Write, Tally, Draw
		FP	Shake It, Make It, Solve It (Addition)
		FP	Wipe Out

1

Work with addition and subtraction equations.

1.OA.D.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	Mystery in the Middle

Measurement and Data

Tell and write time.

1.MD.B.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
U16	Measurement and Data Analysis – Tell Time to the Nearest Hour	U16	What Does the Clock Say?
U16	Measurement and Data Analysis – Tell and Write Time from Analog and Digital Clock to the Nearest Half Hour	U16	Roll the Clock
U19	Measurement and Data Analysis – Tell and Write Time from Analog/Digital Clocks to the Nearest Hour and Half Hour	U19	Set the Time and Go!

Represent and interpret data.

1.MD.C.4

Organize, represent, and interpret data with up to three categories; ask and answer questions about the total number of data points, how many in each category and how may more or less are in one category than another.

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

Code	Digital Student Experience	Code	Teacher Resources
		U19	Graphing Tic-Tac-Toe
		ISIP EM	Picture Graphs to the Rescue!
		ISIP EM	Analyze and Add Using Picture Graphs
		ISIP EM	Graphing Three Ways
		ISIP EM	Determining Most and Least with Graphs
		ISIP EM	Read and Analyze Bar Graphs

Geometry

Reason with shapes and their attributes.

1.G.A.1

Distinguish between defining attributes (e.g., triangles are closed and three-sided) versus non-defining attributes (e.g., color, orientation, overall size); build and draw shapes to possess defining attributes.

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

Code	Digital Student Experience	Code	Teacher Resources
		U14	Shape Four-in-a-Row

1.G.A.3

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 decomposing 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

Number and Operations in Base Ten

Understand place value.

2.NBT.A.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	Equivalent Representations
		ISIP	Build a Base Ten Cube
		ISIP	Creating Numbers with Base 10 Blocks
		ISIP	Expanded Form Place Value Cups
		ISIP	Writing Standard Form from Expanded Form

2

2.NBT.A.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 Ten 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	Equivalent Representations
		ISIP	Build a Base Ten Cube
		ISIP	Creating Numbers with Base 10 Blocks
		ISIP	Expanded Form Place Value Cups
		ISIP	Equivalent Representations
		ISIP	Writing Standard Form from Expanded Form

2.NBT.A.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.

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 – Two-Digit Numbers: Language and 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
		ISIP	Building and Comparing Three-Digit numbers

Use place value understanding and properties of operations to add and subtract.

2.NBT.B.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	Computations and Algebraic Thinking – Adding with Regrouping Using Concrete Models	U31	Adding with Regrouping – Concrete
U31	Computations and Algebraic Thinking – Subtracting with Regrouping Using Concrete Models	U31	Adding Using Partitioning
U31	Computations and Algebraic Thinking – Adding with Regrouping – Partitioning	U31	Subtracting Using Partitioning

2

2.NBT.B.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	Computations and Algebraic Thinking – Subtracting with Regrouping – Partitioning	U31	Adding on a Number Line
U31	Computations and Algebraic Thinking – Adding on a Number Line	U31	Subtracting on a Number Line
U31	Computations and Algebraic Thinking – Subtracting on a Number Line	U31	Fact Families – Addition and Subtraction
U31	Computations and Algebraic Thinking – Fact Families – Addition and Subtraction	ISIP	Partitioning for Addition
		ISIP	Using Arrow Paths to Add and Subtract
		FP	Fact Family Dominos (Addition/Subtraction)
		FP	Addition Fast Track
		FP	Subtraction Fast Track
		FP	Left Hand, Right Hand Grab Bag
		FP	Shake It! Make It! Solve It! Addition
		FP	Sticky Sums
		FP	Wipe Out
		FP	Write, Tally, Draw

2.NBT.B.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	Computations and Algebraic Thinking – Two-Step Word Problems with Unknowns at the End	U32	Build Multistep Equations
U32	Computations and Algebraic Thinking – Two-Step Word Problems with Unknowns in the Middle	U32	Build and Solve Two-Step Equations with Addition and Subtraction
		U32	Build Multistep Equations with Multiple Operations
		U32	Solve Multistep Equations
		ISIP	Choosing the Operation

2

Operations and Algebraic Thinking

Represent and solve problems involving addition and subtraction.

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, 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	Computations and Algebraic Thinking – Two-Step Word Problems with Unknowns at the End	U32	Build and Solve Two-Step Equations with Addition and Subtraction
U32	Computations 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

Add and subtract within 20.

2.OA.B.2

Fluently add and subtract within 20 using mental strategies. By 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
		ISIP	Addition and Subtraction Fact Families
		ISIP	Fact Family Triangles

2

2.OA.B.2

Fluently add and subtract within 20 using mental strategies. By 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
		FP	Fact Family Dominos (Addition/Subtraction)
		FP	Addition Fast Track
		FP	Subtraction Fast Track
		FP	Left Hand, Right Hand Grab Bag
		FP	Shake It! Make It! Solve It! Addition
		FP	Sticky Sums
		FP	Wipe Out
		FP	Write, Tally, Draw
		FP	Building Sums to Twenty

Work with equal groups of objects to gain foundations for multiplication.

2.OA.C.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	Computations and Algebraic Thinking – Even and Odd Pairing	U30	Determining Even and Odd by Pairing

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

Measurement and Data

Measure and estimate lengths in standard units.

2.MD.A.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

2.MD.A.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 – 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.A.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

2.MD.A.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

Relate addition and subtraction to length.

2.MD.B.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	Computations and Algebraic Thinking – Adding on a Number Line	U31	Adding on a Number Line
U31	Computations and Algebraic Thinking – Subtracting on a Number Line	U31	Subtracting on a Number Line

Work with time and money.

2.MD.C.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

2.MD.C.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	Time – AM and PM
		U34	Time to the Quarter Hour

2.MD.C.8

Solve word problems involving dollar bills, quarters, dimes, nickels and pennies using $ and ¢ appropriately. For example: If you have 2 dimes and 3 pennies, how many cents do you have?

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

Code	Digital Student Experience	Code	Teacher Resources
		U32	Money Word Problems

Represent and interpret data

2.MD.D.10			
Draw a picture graph and a bar graph (with single-unit scale) to represent a data set with up to four categories. Solve simple put-together, take-apart, and compare problems using information presented in a graph.			
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	Interpreting Picture Graphs
		U33	Analyzing Picture Graphs
		U33	Creating Bar Graphs
		U33	Interpreting Bar Graphs
		U33	Analyzing Bar Graphs

Geometry

Reason with shapes and their attributes.

2.G.A.2			
Partition a rectangle into rows and columns of same-size squares and count to find the total number of them.			
MP 1, 2, 3, 4, 5, 6, 7, 8			
Code	**Digital Student Experience**	**Code**	**Teacher Resources**
U32	Geometry – Addition Arrays	U32	Addition Arrays

2

2.G.A.3

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., and 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

Number and Operations in Base Ten

Use place value understanding and properties of operations to perform multi-digit arithmetic.

3.NBT.A.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

3.NBT.A.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	Computations and Algebraic Thinking – Two-Step Word Problems – All Operations	U36	Build and Solve Two-Step Equations with All Operations

Number and Operations – Fractions

Develop understanding of fractions as numbers.

3.NF.A.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 and size 1/b.

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

Code	Digital Student Experience	Code	Teacher Resources
		ISIP	Recognizing Fractions in Different Forms
		ISIP	Writing Fractions – Symbolic Notation

3.NF.A.2

Describe 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 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
U37	Number Sense – Many Equivalent Fractions	U37	Mixed Fractions on a Number Line
		U37	Many Equivalent Fractions

3.NF.A.2

Describe 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 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	Identifying Equivalent Fractions

3.NF.A.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. Examples: Express 3 in the form 3 = 3/1; recognize that 6/1 = 6; locate 4/4 and 1 at the same point of a number line diagram.

    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
U37	Number Sense – Fractions Equivalent to One	U37	Many Equivalent Fractions
U37	Number Sense – Many Equivalent Fractions	U37	Fractions Equivalent to Whole Numbers

3

3.NF.A.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. Examples: Express 3 in the form 3 = 3/1; recognize that 6/1 = 6; locate 4/4 and 1 at the same point of a number line diagram.

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 Whole Numbers	U37	Comparison – Fractions and Whole Numbers – Symbols
U37	Number Sense – Mixed Numbers	U37	Comparing Fractions with Like Numerators
U37	Number Sense – Comparing Fractions with the Same Denominator	U37	Identify Equivalent Fractions
U37	Number Sense – Comparing Fractions with the Same Numerator	ISIP	Comparing Fractions Using Models
		ISIP	Comparing Fractions
		ISIP	Identify Equivalent Fractions Using Area Models
		ISIP	Recognizing Fractions in Different Forms
		ISIP	Writing Fractions – Symbolic Notation

3

Operations and Algebraic Thinking

Represent and solve problems involving multiplication and division.

3.OA.A.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	Computations and Algebraic Thinking – Arithmetic Patterns in Multiplication	U35	Arithmetic Patterns in Multiplication
U36	Computations and Algebraic Thinking – Multiply One-Digit Numbers Using Concrete Models	U36	One-Digit by One-Digit Multiplication
U36	Computations 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	Practicing Fact Families
		ISIP	Strip Diagrams – Compare
		FP	Multominoes
		FP	Tall Towers
		FP	Dice Blocks
		FP	Wipe Out
		FP	Sticky Products
		FP	Multiplication Fast Track

3.OA.A.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
		FP	Fact Family Triangles: Multiplication and Division
		FP	Shake It! Make It! Solve It! (Multiplication)

3.OA.A.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. For example, describe a context in which a number of shares or a number of groups can be expressed as 56 ÷8.

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

Code	Digital Student Experience	Code	Teacher Resources
U36	Computations and Algebraic Thinking – Multiplication and Division Fact Families	U36	Fact Families: Multiplication and Division
		ISIP	Doubling and Halving
		ISIP	Relating Multiplication and Division

3.OA.A.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	Computations and Algebraic Thinking – Build and Solve Two-Step Equations with All Operations	U36	Build and Solve Two-Step Equations with All Operations
		ISIP	Doubling and Halving
		ISIP	Problem Solving without Numbers
		ISIP	Practicing with Fact Families
		ISIP	Using Strip Diagrams to Solve Compare Problems

3.OA.A.4

Determine the unknown whole number in a multiplication or division equation relating three whole numbers. For example, determine the unknown number that makes the equation true in each of the equations $8 \times ? = 48$, $5 = \_ \div 3$, $6 \times 6 = ?$.

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

Code	Digital Student Experience	Code	Teacher Resources
U36	Computations and Algebraic Thinking – Build and Solve Two-Step Equations with All Operations	U36	Fact Families – Multiplication and Division
		U36	Build and Solve Two-Step Equations with All Operations
		ISIP	Relating Multiplication and Division
		ISIP	Practicing Fact Families

3.OA.A.4

Determine the unknown whole number in a multiplication or division equation relating three whole numbers. For example, determine the unknown number that makes the equation true in each of the equations $8 \times ? = 48$, $5 = \_ \div 3$, $6 \times 6 = ?$.

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

Code	Digital Student Experience	Code	Teacher Resources
		ISIP	Using Strip Diagrams to Solve Compare Properties
		ISIP	Using the Commutative Property of Multiplication

Apply properties of multiplication and the relationship between multiplication and division.

3.OA.B.5

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

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

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

3.OA.B.6

Interpret division as an unknown–factor problem. For example, find 32 ÷ 8 by finding the number that makes 32 when multiplied by 8.

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

Code	Digital Student Experience	Code	Teacher Resources
U36	Computations and Algebraic Thinking – Fact Families – Multiplication and Division	U36	Fact Families: Multiplication and Division
		ISIP	Doubling and Halving
		ISIP	Relating Multiplication and Division
		ISIP	Practicing with Fact Families
		ISIP	Using Strip Diagrams to Solve Compare Problems

Multiply and divide within 100.

3.OA.C.7

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) or properties of operations.

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

Code	Digital Student Experience	Code	Teacher Resources
U35	Computations and Algebraic Thinking – Arithmetic Patterns in Multiplication	U35	Arithmetic Patterns in Multiplication
U36	Computations and Algebraic Thinking – Multiply One-Digit Numbers Using Concrete Models	U36	One-Digit by One-Digit Multiplication
U36	Computations and Algebraic Thinking – Fact Families – Multiplication and Division	U36	Multiplying Two One-Digit Numbers with Arrays

3

3.OA.C.7

Fluently multiply and divide within 100, using strategies such as the relationship between multiplication and division (e.g., knowing that $8 \times 5 = 40$, one knows $40 \div 5 = 8$) or properties of operations.

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

Code	Digital Student Experience	Code	Teacher Resources
U36	Computations and Algebraic Thinking – Two-Step Word Problems – All Operations	U36	Build and Solve Two-Step Equations with All Operations
U36	Computations and Algebraic Thinking – Properties of Multiplication	U36	Fact Families – Multiplication and Division
		ISIP	Doubling and Halving
		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	Wipe Out
		FP	Multominoes
		FP	Tall Towers
		FP	Dice Blocks
		FP	Sticky Products
		FP	Multiplication Fast Track

3

3.OA.C.7

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) or properties of operations.

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

Code	Digital Student Experience	Code	Teacher Resources
		FP	Division Fast Track
		FP	Fact Family Triangles: Multiplication and Division
		FP	Shake It! Make It! Solve It! (Multiplication)

Solve problems involving the four operations, and identify and explain patterns in arithmetic.

3.OA.D.8

Solve two-step word problems using the four operations. 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
U36	Computations and Algebraic Thinking – Two-Step Word Problems – All Operations	U35	Addition Problem-Solving Strategies
		U35	Addition Problem-Solving Strategies
		U35	Subtraction Problem-Solving Strategies
		U35	Problem Solving without Numbers: Addition and Subtraction
		U36	Build and Solve Two-Step Equations with All Operations

3

3.OA.D.8

Solve two-step word problems using the four operations. 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
		U36	Problem Solving without Numbers: Multiplication and Division

3.OA.D.9

Identify arithmetic patterns (including patterns in the addition table or multiplication table) and explain them using properties of operations. For example, observe that 4 times a number is always even, and explain why 4 times a number can be decomposed into two equal addends.

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

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

3

Measurement and Data

Solve problems involving measurement and estimation of intervals of time, liquid volumes, and masses of objects.

3.MD.A.1

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, e.g., by representing the problem on a number line diagram.

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

Code	Digital Student Experience	Code	Teacher Resources
U39	Measurement and Data Analysis – Elapsed Time on a Number Line	U39	Elapsed Time within One-Hour
		U39	Elapsed Time across Hours

Represent and interpret data.

3.MD.B.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 bar graphs. For example, draw a bar graph in which each square in the bar graph might represent 5 pets.

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

Code	Digital Student Experience	Code	Teacher Resources
U39	Measurement and Data Analysis – Two-Step Word Problems with Bar Graphs	U39	Solving Two–Step Problems Using Bar Graphs

Geometric measurement: understand concepts of area and relate area to multiplication and to addition.

3.MD.C.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
		ISIP	Finding the Area of Squares
		ISIP	Finding the Area of Rectangles

3.MD.C.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 Squares
		ISIP	Finding the Area of Rectangles

3.MD.C.7

Use concepts of area and 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 $a \times c$. Use area models to represent the distributive property in mathematical reasoning.

 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 Squares
		ISIP	Finding the Area of Rectangles

Geometric measurement: recognize perimeter as an attribute of plane figures and distinguish between linear and area measures.

3.MD.D.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 Lesson A: Finding Perimeter

3.MD.D.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	Finding Missing Side Lengths in Perimeter Problems
		FP	Multominoes
		ISIP	Measurement and Data Analysis – Measuring Perimeter of Polygons

Geometry

Reason with shapes and their attributes

3.G.A.1

Explain that shapes in different categories (e.g., rhombuses, rectangles, and others) may share attributes (e.g., having four sides), and 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.

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

Code	Digital Student Experience	Code	Teacher Resources
U38	Geometry – Attributes of Quadrilaterals	U38	Understanding Quadrilaterals
		ISIP	Defining Quadrilaterals by Attributes

3.G.2

Partition shapes into parts with equal areas. Express the area of each part as a unit fraction of the whole. For example, partition a shape into 4 parts with equal area, and describe the area of each part as 1/4 of the area of the shape.

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

Number and Operations in Base Ten

Generalize place value understanding for multi-digit whole numbers.

4.NBT.A.1

Explain that in a multi-digit whole number, a digit in one place represents ten times what it represents in the place to its right. For example, recognize that 700 ÷ 70 = 10 by applying concepts of place value and division.

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

Code	Digital Student Experience	Code	Teacher Resources
U40	Number Sense – Expanded Form to Thousands		
U40	Number Sense – Standard Form to Thousands		

4.NBT.A.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 to record the results of comparisons.

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	U40	Writing Standard Form from Expanded through Thousands and Millions
U40	Number Sense – Writing Expanded Form from Standard Form through Millions	U40	Writing Word Form from Expanded and Standard through Thousands and Millions

4.NBT.A.3

Use place value understanding to round multi-digit whole numbers to any place.

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

Use place value understanding and properties of operations to perform multi-digit arithmetic.

4.NBT.B.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.B.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	Computations and Algebraic Thinking – Multiply Two-Digit Numbers with Models	U41	Two-Digit by Two-Digit Concrete Multiplication

Number and Operations – Fractions

Extend understanding of fraction equivalence and ordering.

4.NF.A.1

Explain why a fraction a/b is equivalent to 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 – Determine Equivalent Fractions with Models	U43	Fraction Comparison Using Benchmark Fractions
U43	Number Sense – Comparing Fractions Using Benchmark Fractions	U43	Compare Fractions Using Symbols
U43	Number Sense – Compare Fractions Using Symbols	U43	Compare Fractions by Creating Common Denominators
		ISIP	Comparing Fractions
		ISIP	Using Area Models to Compare Fractions

4.NF.A.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 – Comparing Fractions Using Benchmark Fractions	U43	Fraction Comparison Using Benchmark Fractions
U43	Number Sense – Comparing Fractions with Unlike Denominators	U43	Compare Fractions Using Symbols
		U43	Compare Fractions by Creating Common Denominators
		ISIP	Comparing Fractions
		ISIP	Using Area Models to Compare Fractions

Build fractions from unit fractions.

4.NF.B.3

Understand a fraction a/b with $a > 1$ as a sum of fractions $1/b$.

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. Examples: 3/8 = 1/8 + 1/8 + 1/8 ; 3/8 = 1/8 + 2/8 ; 2 1/8 = 1 + 1 + 1/8 = 8/8 + 8/8 + 1/8.

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.

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	Add Like Denominators of Ten and One Hundred
U43	Number Sense - Adding Fractions with Like Denominators of Ten and One Hundred	U43	Adding Denominators of Ten to Denominators of One Hundred
U43	Number Sense – Adding Fractions with Denominators of Ten and One Hundred		

4

Use decimal notation for fractions, and compare decimal fractions.

4.NF.C.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. For example, express 3/10 as 30/100, and add 3/10 + 4/100 = 34/100.			
MP 1, 2, 3, 4, 5, 6, 7, 8			
Code	**Digital Student Experience**	**Code**	**Teacher Resources**
U43	Computations and Algebraic Thinking – Determine Equivalent Fractions Tenths and Hundredths	U43	Expressing Equivalent Fractions with Denominators of Ten and One Hundred
U43	Computations and Algebraic Thinking – Add Tenths to Hundredths	U43	Adding Like Denominators of Ten and One Hundred
		U43	Fractions – Add Denominators of Ten to Denominators of One Hundred

4.NF.C.6			
Use decimal notation for fractions with denominators of 10 or 100. For example, rewrite 0.62 as 62/100; describe a length as 0.62 meters; locate 0.62 on a number line diagram.			
MP 1, 2, 3, 4, 5, 6, 7, 8			
Code	**Digital Student Experience**	**Code**	**Teacher Resources**
U43	Number Sense – Determine Equivalent Fractions (Tenths and Hundredths)	U43	Decimals as Fractions (Tenths and Hundredths)
U43	Number Sense – Determine Equivalent Fractions Using Models	U43	Expressing Equivalent Fractions with Denominators of Ten and One Hundred
		ISIP	Understand Decimal Numbers with Fractional Language
		ISIP	Fraction to Decimal Equivalence

4.NF.C.7

Compare two decimals to hundredths by reasoning about their size. Recognize that comparisons are valid only when the two decimals refer to the same whole. Record the results of comparisons with symbols >, =, or <, justify the conclusions, e.g., by using a visual model.

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

Code	Digital Student Experience	Code	Teacher Resources
U43	Number Sense – Understanding Decimals (0.1-0.9 and 0.01-0.09)	U43	Standard and Word Form of Decimals (0.01-0.09 and 0.1-0.9)
U43	Number Sense – Understanding Decimals 0.1-0.9	U43	Standard and Word form of Decimals (0.10-0.90)
U43	Number Sense – Understanding Decimals with Visual Models 0.01-1.99	U43	Standard and Word form of Decimals (0.01-1.99)
		ISIP	Comparing and Ordering Decimals

Operations and Algebraic Thinking

Use the four operations with whole numbers to solve problems.

4.OA.A.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	Computations and Algebraic Thinking – Solve Multistep Word Problems	U42	Building and Solving Multistep Equations with All Operations

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.

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

Code	Digital Student Experience	Code	Teacher Resources
U42	Computations and Algebraic Thinking – Solve Multistep Word Problems	U42	Building and Solving Multistep Equations with All Operations
		ISIP	Using Multiplication to Solve If-Then Word Problems

4.OA.A.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	Computations and Algebraic Thinking – Solve Multistep Word Problems	U42	Building and Solving Multistep Equations with All Operations
		ISIP	Using Multiplication to Solve If-Then Word Problems

Generate and analyze patterns.

4.OA.C.5			
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. For example, given the rule "Add 3" and the starting number 1, generate terms in the resulting sequence and observe that the terms appear to alternate between odd and even numbers. Explain informally why the numbers will continue to alternate in this way.			
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

Measurement and Data

Solve problems involving measurement and conversion of measurements from a larger unit to a smaller unit.

4.MD.A.1			
Know relative sizes of measurement units within one system of units including km, m, cm; kg, g, mg; lb., oz.; l, ml; hr., min, sec. Within a single system of measurement, express a larger measurement unit in terms of a smaller unit. Record measurement conversions in a two-column table. For example, know that 1 ft is 12 times as long as 1 in. Express the length of a ft snake as 48 in. Generate a conversion table for feed and inches listing the number pairs (1, 12), (2, 24), (3, 36)…			
MP 1, 2, 3, 4, 5, 6, 7, 8			
Code	**Digital Student Experience**	**Code**	**Teacher Resources**
U44	Measurement and Data Analysis – Word Problems with Various Measurements	U44	Converting Units of Measurement in Word Problems

4.MD.A.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 a larger unit in terms of a smaller unit. Represent measurement quantities using diagrams such as number line diagrams that feature a measurement scale.

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

Code	Digital Student Experience	Code	Teacher Resources
U44	Measurement and Data Analysis – Word Problems with Various Measurements	U44	Converting Units of Measurement in Word Problems
		ISIP	Measuring Length to the Next Quarter Inch
		ISIP	Calculating Elapsed Time

4.MD.A.3

Apply the area and perimeter formulas for rectangles in real world and mathematical problems. For example, find the width of a rectangular room given the area of the flooring and the length, by viewing the area formula as a multiplication equation with an unknown factor.

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
		ISIP	Decomposing Figures to Find the Area of Polygons

Represent and interpret data.

4.MD.B.4
Make a line plot to display a data set of measurements in fractions of a unit (1/2, (1/4, 1/8). Solve problems involving addition and subtraction of fractions by using information presented in line plots. For example, from a line plot find and interpret the difference in length between the longest and shortest specimens in an insect collection.
MP 1, 2, 3, 4, 5, 6, 7, 8

Code	Digital Student Experience	Code	Teacher Resources
U45	Data Analysis – Line Plots with Fractional Data	U45	Line Plots with Fractional Data
U45	Data Analysis – Analyzing Line Plots	U45	Finding Scales of Line Plots

Geometric measurement: Understand concepts of angle and measure angles.

4.MD.C.5
Recognize angles as geometric shapes that are formed wherever two rays share a common endpoint, and understand concepts of angle measurement:
a. 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. 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	Geometry – Measuring Angles with a Protractor	U45	Measuring Angles with a Protractor
		ISIP	Line and Angle Identification

4.MD.C.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.C.7

Recognize angle measure as additive. 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. 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 – Determine Missing Angles	U45	Find the Missing Angle Measurement
		ISIP	Line and Angle Identification

4

Geometry

Draw and identify lines and angles, and classify shapes by properties of their lines and angles.

4.G.A.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

Number and Operations in Base Ten

Understand the place value system.

5.NBT.A.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 Ten and One Hundred	U46	Multiplying Decimals by Ten and One Hundred
U46	Number Sense – Dividing Decimals by Ten and One Hundred	U46	Dividing Decimals by Ten and One Hundred
U46	Number Sense – Exploring Powers of Ten	U46	Multiplying and Dividing Decimals by Powers of Ten
U46	Number Sense – Multiplying and Dividing Decimals by Powers of Ten	U46	Exploring Powers of Ten

5.NBT.A.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 Ten and One Hundred	U46	Multiplying Decimals by Ten and One Hundred

5.NBT.A.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 – Dividing Decimals by Ten and One Hundred	U46	Dividing Decimals by Ten and One Hundred
U46	Number Sense – Exploring Powers of Ten	U46	Multiplying and Dividing Decimals by Powers of Ten
U46	Number Sense – Multiplying and Dividing Decimals by Powers of Ten	U46	Exploring Powers of Ten

5.NBT.A.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., $347.392 = 3 \times 100 + 4 \times 10 + 7 \times 1 + 3 \times (1/10) + 9 \times (1/100) + 2 \times (1/1000)$.

    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 – Compare Decimals Visually on the Number Line	U46	Decimal Grids and Place Value Mats
U46	Number Sense – Compare Tenths and Hundredths on a Number Line	U46	Decimal Comparison on the Number Line
U46	Number Sense – Compare Tenths and Hundredths (with visual aids)	U46	Abstract Decimal Comparison

5.NBT.A.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., $347.392 = 3 \times 100 + 4 \times 10 + 7 \times 1 + 3 \times (1/10) + 9 \times (1/100) + 2 \times (1/1000)$.

    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 Decimals to Thousandths	U46	Decimals with Whole Number Comparison

5.NBT.A.4

Use place value understanding to round decimals to any place.

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		

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5

Perform operations with multi-digit whole numbers and with decimals to hundredths.

5.NBT.B.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	Computations and Algebraic Thinking – Divide Three-Digit by Two-Digit Numbers with an Area Model	U47	Four-Digit by Two-Digit Division (Partial Quotients)
U47	Computations and Algebraic Thinking – Divide Four-Digit Numbers by Two-Digit Numbers	ISIP	Estimating Quotients Using Compatible Numbers
		ISIP	Using Models to Practice Extended Division Facts
		ISIP	Models for Understanding Remainders

5.NBT.B.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.

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

Code	Digital Student Experience	Code	Teacher Resources
U46	Computations and Algebraic Thinking – Visual Representation for Multiplying Decimals	U46	Multiplying Decimals by Ten and One Hundred
U46	Computations and Algebraic Thinking – Multiply Decimals by Powers of Ten	U46	Dividing Decimals by Ten and One Hundred
U46	Computations and Algebraic Thinking – Divide Decimals by Powers of Ten	U46	Multiplying and Dividing Decimals by Powers of Ten

5.NBT.B.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.

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

Code	Digital Student Experience	Code	Teacher Resources
U46	Computations and Algebraic Thinking – Multiply and Divide Decimals by Powers of Ten	U47	Decimal Addition
		U47	Decimal Subtraction
		U47	Concrete Decimal Division
		U47	Representational Decimal Division
		U47	Decimal Division
		ISIP	Calculating Reasonable Estimates of Decimal Number Sums
		ISIP	Adding and Subtracting Decimals Numbers in a Word Problem

Number and Computations and Algebraic Thinking – Fractions

Use equivalent fractions as a strategy to add and subtract fractions.

5.NF.A,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. For example, 2/3 + 5/4 = 8/12 + 15/12 = 23/12. (In general, a/b + c/d = (ad + bc)/bd.)

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

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

5.NF.A.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. For example, recognize an incorrect result 2/5 + 1/2 = 3/7, by observing that 3/7 < 1/2.

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

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

5

Apply and extend previous understandings of multiplication and division.

5.NF.B.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 part of a partition of q into b equal parts, equivalently, as the result of a sequence of operations a × q ÷ b. For example, use a visual fraction model to show (2/3) × 4 = 8/3, and create a story context for this equation. Do the same with (2/3) × (4/5) = 8/15. (In general, (a/b) × (c/d) = (ac)/(bd)).

   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	Computations and Algebraic Thinking – Multiply by Fractions Less Than One	U48	Multiplying by Fractions Less Than One
U48	Computations and Algebraic Thinking – Multiply by Fractions Greater Than One	U48	Multiplying by Fractions Less Than One (Extra Practice)
U50	Measurement and Data Analysis – Multiply Fractions to Find the Area of a Rectangle	U48	Multiplying Fractions Less Than One with Improper Fractions
		U48	Multiplying Whole Numbers by Fractions Less Than One
		U48	Multiplying Whole Numbers by Fractions Greater Than One
		U50	Determine the Area of a Rectangle with Fractional Side Lengths

5.NF.B.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	Computations and Algebraic Thinking – Multiply Fractions with Improper Fractions	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

Operations and Algebraic Thinking

Write and interpret numerical expressions.

5.OA.A.1

Use grouping symbols, (parentheses, brackets, or braces) in numerical expressions and evaluate expressions with these symbols.

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

Code	Digital Student Experience	Code	Teacher Resources
U49	Computations and Algebraic Reasoning – Evaluate Numerical Expressions with Parentheses	U49	Evaluating Numerical Expressions with Parentheses
U49	Computations and Algebraic Reasoning – Interpret Numerical Expressions with Parentheses	U49	Identifying Expressions in Scenarios

5.OA.A.1

Use grouping symbols, (parentheses, brackets, or braces) in numerical expressions and evaluate expressions with these symbols.

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

Code	Digital Student Experience	Code	Teacher Resources
U49	Computations and Algebraic Reasoning – Write Numerical Expressions from Words	U49	Writing Expressions from Words – Addition and Subtraction
		U49	Writing Expressions from Words – Subtraction

5.OA.A.2

Write simple expressions that record calculations with numbers and interpret numerical expressions without evaluating them. For example, express the calculation "add 8 and 7, then multiply by 2" as $2 \times (8 + 7)$. Recognize that $3 \times (18932 + 921)$ is three times as large as $18932 + 921$, without having to calculate the indicated sum or product.

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

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

Analyze patterns and relationships.

5.OA.B.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. For example, given the rule "Add 3" and the starting number 0, and given the rule "Add 6" and the starting number 0, generate terms in the resulting sequences, and observe that the terms in one sequence are twice the corresponding terms in the other sequence. Explain informally why this is so.
MP 1, 2, 3, 4, 5, 6, 7, 8

Code	Digital Student Experience	Code	Teacher Resources
U51	Computations and Algebraic Thinking – Comparing Points on a Coordinate Plane	U51	Comparing Points on a Coordinate Plane
		U51	Graphing and Analyzing Lines

Measurement and Data

Convert like measurement units within a given measurement system.

5.MD.A.1
Convert among different-sized standard measurement units within a given measurement system (e.g., convert 5 cm to 0.05 m), and use these conversions 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

Geometric measurement: understand concepts of volume and relate volume to multiplication and to addition.

5.MD.C.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 Rectangular Prisms
		U50	Volume of Irregular Figures
		ISIP	Volume as an Attribute of Three-Dimensional Space
		ISIP	Quantifying Volume: Counting Same-Sized Units
		ISIP	Integrating Fact Practice and Volume
		ISIP	Calculating Volume in Multistep Word Problems

5.MD.C.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 Rectangular Prisms
		U50	Volume of Irregular Figures
		ISIP	Volume as an Attribute of Three-Dimensional Space

5.MD.C.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
		ISIP	Quantifying Volume: Counting Same-Sized Units
		ISIP	Integrating Fact Practice and Volume
		ISIP	Calculating Volume in Multistep Word Problems

5.MD.C.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.   Use the additive nature of volume to 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 and Data Analysis – Volume of Irregular Figures	U50	Volume of Rectangular Prisms
		U50	Volume of Rectangular Figures
		ISIP	Volume as an Attribute of Three-Dimensional Space
		ISIP	Quantifying Volume: Counting Same-Sized Units

5.MD.C.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. Use the additive nature of volume to 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
		ISIP	Integrating Fact Practice and Volume
		ISIP	Calculating Volume in Multistep Word Problems

Geometry

Graph points on the coordinate plane to solve real-world and mathematical problems.

5.G.A.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

5

5.G.A.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
		ISIP	Identifying and Plotting Ordered Pairs on the Coordinate Plane

5.G.A.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	Computations and Algebraic Thinking – Comparing Points on a Coordinate Plan	U51	Graphing and Analyzing Lines
		ISIP	Identifying and Plotting Ordered Pairs on the Coordinate Plane

Classify two-dimensional figures into categories based on their properties.

5.G.4			
Classify two-dimensional figures in a hierarchy based on properties.			
MP 1, 2, 3, 4, 5, 6, 7, 8			
Code	**Digital Student Experience**	**Code**	**Teacher Resources**
		ISIP	Analyzing Properties of Two- and Three- Dimensional Figures

Appendix

Classroom Resource

General Graphic Organizers	
Code	**Teacher Resources**
CR	Dot Paper
CR	Frayer Model
CR	Frayer Model (multiple)
CR	Grid Paper
CR	Grid Paper (cm)
CR	Grid Paper (in)
CR	If-Then Diagram (Large)
CR	If-Then Diagrams
CR	Multiple Number Lines (10-100)
CR	Number Cards (1-10)
CR	Number Cards (1-20)
CR	Number Line 0-10 (Labeled and Blank)
CR	Number Line 0-100 (Labeled and Blank)
CR	Number Line 0-20 (Labeled and Blank)
CR	Number Line 0-50 (Labeled and Blank)
CR	Place Value Mat: 3-Column (Blank)

General Graphic Organizers

Code	Teacher Resources
CR	Place Value Mat: 4-Column (Blank)
CR	Ten Frame
CR	Three-Digit Number Cards
CR	Types of Word Problems Anchor Chart

Number Sense

Code	Teacher Resources
CR	100 Chart
CR	120 Chart
CR	Base Ten Block Cards (0-50)
CR	Base Ten Block Cards (Multiples of Ten)
CR	Counting Strips (1-10)
CR	Counting Strips (1-20)
CR	Decimal Cards
CR	Decimal Grid: Thousandths
CR	Decimal Grids: Tenths and Hundredths
CR	Decimal Models: One Whole Through Thousandths
CR	Decimal Place Value: Grid and Chart - Hundredths

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Number Sense

Code	Teacher Resources
CR	Decimal Place Value: Grid and Chart - Tenths
CR	Decimal Place Value: Grid and Chart – Thousandths
CR	Even and Odd Chart
CR	Fraction Bars
CR	Fraction Equivalency Cards
CR	Fraction Model Graphic Organizer
CR	Multiple Representations of Numbers (1-10)
CR	Place Value Anchor Chart: Tens and Ones
CR	Place Value Mat: Multiple Representations to Millions (Labeled)
CR	Place Value Mat: Multiple Representations to Thousands (Labels)
CR	Place Value Mat: Tens and Ones (Labeled)
CR	Place Value Word Cards
CR	Ten Frame Dot Cards (Large)
CR	Ten Frame Dot Cards (Small)

Computations and Algebraic Thinking

Code	Teacher Resources
CR	Algebra Tiles

Computations and Algebraic Thinking

Code	Teacher Resources
CR	Algebraic Strip Diagrams
CR	Coordinate Plane
CR	Missing Factor Cards
CR	Multiplication/Division Fact Family Template
CR	Operation Symbol Cards
CR	Part Part Whole Mat
CR	Problem Solving Cards – Addition and Subtraction
CR	Subitizing Cards (1-5)

Measurement

Code	Resources
CR	Customary Unit Conversion Cards – Linear Measurement
CR	Customary Unit Conversion Cards – Liquid Measurement
CR	Linear Measurement Bundle (Includes the following five resources)
CR	Linear Measurement Anchor Chart
CR	Linear Measurement Body Benchmarks Anchor Chart
CR	Linear Measurement Graphic Organizer
CR	Linear Measurement Steps Anchor Chart

Measurement

Code	Resources
CR	Linear Measurement Yards vs. Meters Anchor Chart

Data Analysis

Code	Teacher Resources
CR	Analyzing Line Plots

Geometry

Code	Teacher Resources
CR	Three-Dimensional Figure Nets
CR	Two-Dimensional Shapes

Parent Portal Lessons

Early Math PK-1

Code	Teacher Resources
PP	Fact Practice Addition Fast Track
PP	Fact Practice Addition Road Racing
PP	Fact Practice Building Sums with Dice
PP	Fact Practice Choose the Operation (Addition and Subtraction)
PP	Fact Practice Counting to Answer Math Questions
PP	Fact Practice Matching Numerals to Quantities

Early Math PK-1

Code	Teacher Resources
PP	Fact Practice Recognizing, Ordering and Counting
PP	Fact Practice Shake It! Make It! Solve It! (Addition)
PP	Fact Practice Skip Counting Raceway (Skip Counting by Fives and Tens)
PP	Fact Practice Skip Counting Raceway (Skip Counting by Twos)
PP	Fact Practice Sticky Sums
PP	Fact Practice Subtraction Fast Track
PP	Fact Practice Subtraction Road Racing
PP	Fact Practice Write, Tally, Dray (Addition)
PP	Practice Sorting by Attributes

Istation Math 2-5

Code	Teacher Resources
PP	Fact Practice Adding on a Number Line
PP	Fact Practice Addition and Subtraction Fact Families
PP	Fact Practice Choose the Operation (Addition and Subtraction)
PP	Fact Practice Choose the Operation (Multiplication and Division)
PP	Fact Practice Fact Family Dominoes (Addition/Subtraction)
PP	Fact Practice Identifying Halves, Thirds, Fourths

Istation Math 2-5

Code	Teacher Resources
PP	Fact Practice Multiplication and Division Fact Family Triangles
PP	Fact Practice Multiplication Fast Track
PP	Fact Practice Multiply Then Add
PP	Fact Practice Multominoes
PP	Fact Practice Shake It! Make It! Solve It! (Multiplication)
PP	Fact Practice Sticky Products
PP	Fact Practice Subtracting on a number Line
PP	Fact Practice Two-Digit Comparison: Who Has More?
PP	Fact Practice Two-Digit Comparison: Who Has Less?
PP	Fact Practice Three- and Four-Digit Comparison: Who Has More?
PP	Fact Practice Three-and Four-Digit Comparison: Who Has Less?
PP	Fact Practice Understanding Decimal Numbers
PP	Fact Practice Write, Expand, Sketch
PP	Fact Practice Writing Expressions from Scenarios
PP	Practice Linear Measurement Scavenger Hunt (Centimeter)
PP	Practice Linear Measurement Scavenger Hunt (Inches)
PP	Practice Plotting Points on a Coordinate Plane