Istation

Kindergarten – Grade 5

Istation Math Curriculum Correlated to the Alabama Course of Study for Mathematics

Code Legend

Code	Description
C	Cards
CR	Classroom Resource
FP	Fact Practice
GO	Graphic Organizer
ISIP	Istation's Indicators of Progress
L	Lesson
PP	Parent Portal
PWP	Power Path Activity
U	Unit
V	Video

Table of Contents

Kindergarten

Foundations of Counting

Know number names and the count sequence

K.FC.1	
Count forward orally from 0 to 100 by ones and by tens. Count backward orally from 10 to 0 by ones.	

Code	Digital Student Experience
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)
U14	Number Sense – "Hens by Tens" (1-100)
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)

Code	Teacher Resources
PWP	Odd One Out - Counting
U14	One Hundred Is a Lot
U14	Roll-Count-Cover – Skip Counting by Tens
U21	The Arrow Says (1-100)
U23	Decade Numbers

K.FC.2	
Count to 100 by ones beginning with any given number between 0 and 99.	

Code	Digital Student Experience
U4	Number Sense – "EZ with a Rock and Roll Beat" (1-10)
U4	Number Sense – Identifying Numbers (1-10)
U4	Number Sense – Identify Missing Numbers (1-10)
U4	Number Sense – Number Sequence (1-10)
U6	Number Sense – "EZ with a Rock and Roll Beat" (1-20)
U6	Number Sense – Identifying Numbers (1-20)
U6	Number Sense – Identify Missing Numbers (1-20)
U6	Number Sense – Number Sequence (1-20)

K.FC.2

Count to 100 by ones beginning with any given number between 0 and 99.

Code	Digital Student Experience
U7	Number Sense – "EZ with a Rock and Roll Beat" (1-30)
U7	Number Sense – Identifying Numbers (1-30)
U7	Number Sense – Identify Missing Numbers (1-30)
U7	Number Sense – Number Sequence (1-30)
U8	Number Sense – "EZ with a Rock and Roll Beat" (1-50)
U8	Number Sense – Identifying Numbers (1-50)
U8	Number Sense – Identify Missing Numbers (1-50)
U8	Number Sense – Number Sequence (1-50)
U14	Number Sense – "EZ with a Rock and Roll Beat" (1-100)
U14	Number Sense – Identifying Numbers (1-100)
U14	Number Sense – Identify Missing Numbers (1-100)
U14	Number Sense – Number Sequence (1-100)

Code	Teacher Resources
U6	Count with Me (1-20)
U8	Counting Sticks (1-20)
U8	Counting Objects (1-20)
U14	One Hundred Is a Lot
U14	Roll-Count-Cover – Skip Counting by Tens
U18	Counting Memory
U21	The Arrow Says (1-100)
U23	Decade Numbers
ISIP	Set Stories
ISIP	Ten Frame Puzzles (1-20)
ISIP	Total Amount in a Scattered Group

K.FC.3

Write numerals from 0 to 20.

    a. Represent 0 to 20 using concrete objects when given a written numeral from 0 to 20 (with 0 representing a count of no objects).

Code	Digital Student Experience
U11	Number Sense – "Writing Our Numbers"
U11	Number Sense – Writing Numbers Everywhere (1-10)
U18	Number Sense – Write to Represent Numbers (0-20)

Code	Teacher Resources
U6	Domino Dot Memory (1-10)
U7	Counting a Scattered Static Group (1-10)
U7	Calendar Counting (1-30)
U8	Counting Sticks (1-20)
U8	Counting Objects (1-20)
U10	Park the Car and Write (1-20)
U11	Writing Numbers Everywhere (5-10)
U11	Writing Numbers (10-20)
U18	Counting Memory
ISIP	Set Stories
ISIP	Total Amount in a Scattered Group
ISIP	Ten Frame Puzzles (1-20)
ISIP	Multiple Representations of Numbers (1-10)

Count to tell the number of objects.

K.FC.4

Connect counting to cardinality using a variety of concrete objects.

a. Say the number names in consecutive order when counting objects.

b. Indicate that the last number name said tells the number of objects counted in a set.

c. Indicate that the number of objects in a set is the same regardless of their arrangement or the order in which they were counted.

d. Explain that each successive number name refers to a quantity that is one larger.

Code	Digital Student Experience
U6	Number Sense – "Counting Cattle" (1-10)
U6	Number Sense – Counting in a Line (1-10)
U6	Number Sense – Counting a Static Scattered Group (1-10)
U6	Number Sense – Remember the Counted Amount (1-10)
U7	Number Sense – "Counting Cattle" (1-10)
U7	Number Sense – Counting Fingers (1-10)
U7	Number Sense – Choose the Correct Amount (1-10)
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)
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)

Code	Teacher Resources
U6	Count with Me (1-20)
U7	Counting a Scattered Static Group (1-10)
U8	Counting Sticks (1-20)
U8	Counting Objects (1-20)
ISIP	Set Stories
ISIP	Ten Frame Puzzles (1-20)
ISIP	Subitizing to Problem Solve
ISIP	Total Amount in a Scattered Group

K.FC.5

Count to answer "how many?" questions.

   a. Count using no more than 20 concrete objects arranged in a line, a rectangular array, or a circle.

   b. Count using no more than 10 concrete objects in a scattered configuration.

   c. Draw the number of objects that matches a given numeral from 0 to 20.

Code	Digital Student Experience
U6	Number Sense – "Counting Cattle" (1-10)
U6	Number Sense – Counting in a Line (1-10)
U6	Number Sense – Counting a Static Scattered Group (1-10)
U6	Number Sense – Remember the Counted Amount (1-10)
U7	Number Sense – "Counting Cattle" (1-10)
U7	Number Sense – Counting Fingers (1-10)
U7	Number Sense – Choose the Correct Amount (1-10)
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)
U10	Number Sense – Choose the Correct Amount (1-20)
U10	Number Sense – Remember the Counted Amount (1-20)

Code	Teacher Resources
U6	Domino Dot Memory (1-10)
U7	Counting a Scattered Static Group (1-10)
U8	Counting Sticks (1-20)
U8	Counting Objects (1-20)
U18	Counting Memory
ISIP	Set Stories
ISIP	Ten Frame Puzzles (1-20)
ISIP	Total Amount in a Scattered Group
ISIP	Subitizing to Problem Solve

Compare numbers.

K.FC.6	
Orally identify whether the number of objects in one group is greater/more than, less/fewer than, or equal/the same as the number of objects in another group, in groups containing up to 10 objects, by using matching, counting, or other strategies.	
Code	**Digital Student Experience**
PWP	Number Sense – Comparison Cards: Comparing Groups or Numbers
Code	**Teacher Resources**
U6	Less/More/Equal Sets of Concrete Objects
PWP	More or Less? Which is Best?
ISIP	Finding One More or One Less (1-20)
ISIP	Comparing Groups of Objects (1-20)

K.FC.7	
Compare two numbers between 0 and 10 presented as written numerals (without using inequality symbols).	
Code	**Digital Student Experience**
PWP	Number Sense – Comparison Cards: Comparing Groups or Numbers
Code	**Teacher Resources**
U6	Less/More/Equal Sets of Concrete Objects
PWP	More or Less? Which is Best?
ISIP	Finding One More or One Less (1-20)
ISIP	Comparing Groups of Objects (1-20)

Operations and Algebraic Thinking

Understand addition as putting together and adding to, and understand subtraction as taking apart and taking from.

K.OA.8	
Represent addition and subtraction up to 10 with concrete objects, fingers, pennies, mental images, drawings, claps or other sounds, acting out situations, verbal explanations, expressions, or equations.	
Code	**Digital Student Experience**
U9	Computations and Algebraic Thinking – "Part Part Whole in New Orleans" (1-10)
U9	Computations and Algebraic Thinking – Part Part Whole Addition within 10

K.OA.8

Represent addition and subtraction up to 10 with concrete objects, fingers, pennies, mental images, drawings, claps or other sounds, acting out situations, verbal explanations, expressions, or equations.

Code	Digital Student Experience
U10	Computations and Algebraic Thinking – "Part Part Whole in New Orleans" (1-10)
U10	Computations and Algebraic Thinking – Part Part Whole Addition Stories
U12	Computations and Algebraic Thinking – "Part Part Whole in New Orleans" (1-10)
U12	Computations and Algebraic Thinking – Making Ten Using Tens Frames
U12	Computations and Algebraic Thinking – Identifying Addends Using Tens Frames
U13	Computations and Algebraic Thinking – "Chicago Pizza Blues" (within 10)
U13	Computations and Algebraic Thinking – Subtraction Within Ten
U14	Computations and Algebraic Thinking – "Chicago Pizza Blues" (within 10)
U14	Computations and Algebraic Thinking – Whole Part Part Subtraction Stories (within 10)
U18	Number Sense – Decompose Numbers Less Than or Equal to Ten

Code	Teacher Resources
U12	Ten or Not Ten
U13	Whole in the Hand
U18	Decomposing House with Pictures
U18	Decomposing House
U19	Relative Magnitude with Part Part Whole
U20	Start, Change, Result
U20	Adding with Addend Cards
U22	Beading the Difference
ISIP	Subtraction within Ten
ISIP	Addition Stories
ISIP	Subtraction Stories
ISIP	Count Back to Subtract
ISIP	Ten Frame Addition

K.OA.9

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

Code	Digital Student Experience
U9	Computations and Algebraic Thinking – "Part Part Whole in New Orleans" (1-10)

K.OA.9

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

Code	Digital Student Experience
U9	Computations and Algebraic Thinking – Part Part Whole Addition within 10
U10	Computations and Algebraic Thinking – "Part Part Whole in New Orleans" (1-10)
U10	Computations and Algebraic Thinking – Part Part Whole Addition Stories
U12	Computations and Algebraic Thinking – "Part Part Whole in New Orleans" (1-10)
U12	Computations and Algebraic Thinking – Making Ten Using Tens Frames
U12	Computations and Algebraic Thinking – Identifying Addends Using Tens Frames
U13	Computations and Algebraic Thinking – "Chicago Pizza Blues" (within 10)
U13	Computations and Algebraic Thinking – Subtraction Within Ten
U14	Computations and Algebraic Thinking – "Chicago Pizza Blues" (within 10)
U14	Computations and Algebraic Thinking – Whole Part Part Subtraction Stories (within 10)
U18	Number Sense – Decompose Numbers Less Than or Equal to Ten

Code	Teacher Resources
U20	Start, Change, Result
U20	Adding with Addend Cards
ISIP	Subtraction within Ten
ISIP	Addition Stories
ISIP	Subtraction Stories
ISIP	Count Back to Subtract
ISIP	Ten Frame Addition

K.OA.10

Decompose numbers less than or equal to 10 into pairs of smaller numbers in more than one way, by using concrete objects or drawings, and record each decomposition by a drawing or equation.
Example: 5 = 2 + 3 and 5 = 4 + 1

Code	Digital Student Experience
U9	Computations and Algebraic Thinking – Part Part Whole Addition within 10
U10	Computations and Algebraic Thinking – "Part Part Whole in New Orleans" (1-10)
U10	Computations and Algebraic Thinking – Part Part Whole Addition Stories
U12	Computations and Algebraic Thinking – "Part Part Whole in New Orleans" (1-10)
U12	Computations and Algebraic Thinking – Making Ten Using Tens Frames
U12	Computations and Algebraic Thinking – Identifying Addends Using Tens Frames
U13	Computations and Algebraic Thinking – "Chicago Pizza Blues" (within 10)

K.OA.10

Decompose numbers less than or equal to 10 into pairs of smaller numbers in more than one way, by using concrete objects or drawings, and record each decomposition by a drawing or equation. Example: 5 = 2 + 3 and 5 = 4 + 1

Code	Digital Student Experience
U13	Computations and Algebraic Thinking – Subtraction Within Ten
U14	Computations and Algebraic Thinking – "Chicago Pizza Blues" (within 10)
U14	Computations and Algebraic Thinking – Whole Part Part Subtraction Stories (within 10)
U18	Number Sense – Decompose Numbers Less Than or Equal to Ten

Code	Teacher Resources
U8	Parts and Wholes
U9	Roll to Find the Whole
U10	Dogs and Cats on Mats (up to 10)
U12	Ten or Not Ten
U13	Whole in the Hand
U18	Decomposing House with Pictures
U18	Decomposing House
U19	Relative Magnitude with Part Part Whole
U20	Start, Change, Result
U20	Adding with Addend Cards
U22	Beading the Difference

K.OA.11

For any number from 0 to 10, find the number that makes 10 when added to the given number, by using concrete objects or drawings, and record the answer with a drawing or equation.

Code	Digital Student Experience
U9	Computations and Algebraic Thinking – Part Part Whole Addition within 10
U10	Computations and Algebraic Thinking – "Part Part Whole in New Orleans" (1-10)
U10	Computations and Algebraic Thinking – Part Part Whole Addition Stories
U12	Computations and Algebraic Thinking – "Part Part Whole in New Orleans" (1-10)
U12	Computations and Algebraic Thinking – Making Ten Using Tens Frames
U12	Computations and Algebraic Thinking – Identifying Addends Using Tens Frames
U13	Computations and Algebraic Thinking – "Chicago Pizza Blues" (within 10)
U13	Computations and Algebraic Thinking – Subtraction Within Ten
U14	Computations and Algebraic Thinking – "Chicago Pizza Blues" (within 10)

K.OA.11

For any number from 0 to 10, find the number that makes 10 when added to the given number, by using concrete objects or drawings, and record the answer with a drawing or equation.

Code	Digital Student Experience
U14	Computations and Algebraic Thinking – Whole Part Part Subtraction Stories (within 10)
U18	Number Sense – Decompose Numbers Less Than or Equal to Ten

Code	Teacher Resources
U9	Roll to Find the Whole
U10	Dogs and Cats on Mats (up to 10)
U12	Ten or Not Ten
U13	Whole in the Hand
U18	Decomposing House with Pictures
U18	Decomposing House
U19	Relative Magnitude with Part Part Whole
U20	Start, Change, Result
U22	Beading the Difference

K.OA.12

Fluently add and subtract within 5.

Code	Digital Student Experience
U7	Computations and Algebraic Thinking – "Part Part Whole in New Orleans" (1-5)
U7	Computations and Algebraic Thinking – Quantity Pairs (1-5)
U7	Computations and Algebraic Thinking – "Part Part Whole in New Orleans" (1-5)
U7	Computations and Algebraic Thinking – Number Pairs (1-5)

Code	Teacher Resources
U6	Dogs and Cats on Mats (up to 5)
U8	Math Matching Parts and Wholes

Understand simple patterns.

K.OA.13

Duplicate and extend simple patterns using concrete objects.

Code	Digital Student Experience
U1	Computations and Algebraic Thinking – Replicate Simple, Repeating Patterns

K.OA.13	
Duplicate and extend simple patterns using concrete objects.	
Code	**Teacher Resources**
ISIP	Identify the Pattern Rule, Duplicate and Extend Patterns
ISIP	Identify, Duplicate and Extend Sequential Patterns
ISIP	Identify, Duplicate and Extend Growing Patterns

Operations with Numbers

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

K.NBT.14	
Compose and decompose numbers from 11 to 19 by using concrete objects or drawings to demonstrate understanding that these numbers are composed of ten ones and one, two, three, four, five, six, seven, eight, or nine ones.	
Code	**Digital Student Experience**
PWP	Number Sense – Make It, Break It, Toss It
Code	**Teacher Resources**
PWP	Make It, Break It
U15	Digit Deal (1-50)
U18	Decomposing House with Pictures
U18	Decomposing House

Data Analysis

Collect and analyze data and interpret results.

K.D.15	
Classify objects into given categories of 10 or fewer; count the number of objects in each category and sort the categories by count. a. Categorize data on Venn diagrams, pictographs, and "yes-no" charts using real objects, symbolic representations, or pictorial representations.	
Code	**Digital Student Experience**
U2	Data Analysis – Sorting Objects by One Attribute
U4	Data Analysis – Soritng by One or Two Attributes
U9	Data Analysis – Classify and Count by Attribute
U12	Data Analysis – Classify, Count and Answer Questions on Category

K.D.15

Classify objects into given categories of 10 or fewer; count the number of objects in each category and sort the categories by count.

   a. Categorize data on Venn diagrams, pictographs, and "yes-no" charts using real objects, symbolic representations, or pictorial representations.

Code	Teacher Resources
U12	Classify and Compare
ISIP	Classify by Attribute
ISIP	Understanding Classifying by Object

Measurement

Describe and compare measurable attributes.

K.M.16

Identify and describe measurable attributes (length, weight, height) of a single object using vocabulary such as long/short, heavy/light, or tall/short.

Code	Digital Student Experience
U10	Measurement and Data Analysis – Directly Comparing Length
U10	Measurement and Data Analysis – Directly Comparing Weight
U15	Measurement and Data Analysis – Directly Comparing Height
U15	Measurement and Data Analysis – Directly Compare Capacity of Two Containers

Code	Teacher Resources
U10	Directly Comparing Length
U10	Directly Comparing Weight
U15	Directly Comparing Height
U15	Which Holds More? Which Holds Less?

K.M.17

Directly compare two objects with a measurable attribute in common to see which object has "more of" or "less of" the attribute and describe the difference.

Code	Digital Student Experience
U10	Measurement and Data Analysis – Directly Comparing Length
U10	Measurement and Data Analysis – Directly Comparing Weight
U15	Measurement and Data Analysis – Directly Comparing Height
U15	Measurement and Data Analysis – Directly Compare Capacity of Two Containers

K.M.17

Directly compare two objects with a measurable attribute in common to see which object has "more of" or "less of" the attribute and describe the difference.

Code	Teacher Resources
U10	Directly Comparing Length
U10	Directly Comparing Weight
U15	Directly Comparing Height
U15	Which Holds More? Which Holds Less?

Geometry

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

K.G.18

Describe objects in the environment using names of shapes, and describe the relative positions of these objects using terms such as above, below, beside, in front of, behind, and next to.

Code	Teacher Resources
L	Shape Simon Says

K.G.19

Correctly name shapes regardless of their orientations or overall sizes.

Code	Digital Student Experience
U1	Geometry – Identify Circles
U1	Geometry – Identify Squares
U3	Geometry – Identify Triangles
U9	Geometry – Identifying Shapes Regardless of Orientation

Code	Teacher Resources
L	Shape Families
U1	Identifying Two-Dimensional Shapes
U3	We're Going on a Shape Hunt
U9	Considering Sizes of Shapes

K.G.20

Identify shapes as two-dimensional (lying in a plane, "flat") or three-dimensional ("solid").

Code	Digital Student Experience
U14	Geometry – Identify Three-Dimensional Shapes

Code	Teacher Resources
L	Shape Families
U14	Shape Four-in-a-Row

Analyze, compare, create, and compose shapes.

K.G.21

Analyze and compare two- and three-dimensional shapes, in different sizes and orientations, using informal language to describe their similarities, differences, parts (number of sides and vertices or "corners"), and other attributes.

Code	Digital Student Experience
U9	Geometry – Identify Shapes Regardless of Orientation
U14	Geometry – Identify Three-Dimensional Shapes

Code	Teacher Resources
L	Shape Families
U9	Considering Sizes of Shapes
U9	Mighty Shape Match
U14	Shape Four-in-a-Row

Grade 1

Operations and Algebraic Thinking

Represent and solve problems involving addition and subtraction.

1.OA.1
Use addition and subtraction to solve word problems within 20 by using concrete objects, drawings, and equations with a symbol for the unknown number to represent the problem.

    a.   Add to with change unknown to solve word problems within 20.

    b.   Take from with change unknown to solve word problems within 20.

    c.   Put together/take apart with addend unknown to solve word problems within 20.

    d.   Compare quantities, with difference unknown, bigger unknown, and smaller unknown while solving word problems within 20.

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

1.OA.2

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

Code	Digital Student Experience
U16	Computations and Algebraic Thinking – Determine Missing Addend
U19	Computations and Algebraic Thinking – "Part Part Whole in New Orleans" (1-20)
U19	Computations and Algebraic Thinking – Part Part Whole Using Ovals
U19	Computations and Algebraic Thinking – Part Part Whole Using Ten Frames
U20	Computations and Algebraic Thinking – "Part Part Whole in New Orleans" (1-20)
U20	Computations and Algebraic Thinking – Addition Stories (1-20) Horizontal Equations
U20	Computations and Algebraic Thinking – Addition Stories (1-20) Vertical Equations
U24	Computations and Algebraic Thinking – Determine the Unknown Whole Numbers in Subtraction Sentences
U20	Computations and Algebraic Thinking – Properties of Addition – Associative Property

Code	Teacher Resources
U16	Beginning-Middle-End
U22	Beading the Difference
U24	Mystery in the Middle
U24	Start, Change, Result (within 20)
ISIP	Associative Property of Addition
ISIP	Commutative Property of Addition

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

1.OA.3

Apply properties of operations as strategies to add and subtract. Examples: If 8 + 3 = 11 is known, then 3 + 8 = 11 is also known (commutative property of addition). To add 2 + 6 + 4, the second and third numbers can be added to make a ten, so 2 + 6 + 4 = 2 + 10 = 12 (associative property of addition). When adding 0 to a number, the result is the same number (identity property of zero for addition).

Code	Digital Student Experience
U20	Computations and Algebraic Thinking – Properties of Addition – Associative Property

1.OA.3

Apply properties of operations as strategies to add and subtract. Examples: If 8 + 3 = 11 is known, then 3 + 8 = 11 is also known (commutative property of addition). To add 2 + 6 + 4, the second and third numbers can be added to make a ten, so 2 + 6 + 4 = 2 + 10 = 12 (associative property of addition). When adding 0 to a number, the result is the same number (identity property of zero for addition).

U20	Computations and Algebraic Thinking – Properties of Addition – Commutative Property
U20	Computations and Algebraic Thinking – Properties of Addition Identity Property of Addition
U20	Computations and Algebraic Thinking – "The Math Whiz"
U20	Computations and Algebraic Thinking – Doubles Strategy
Code	**Teacher Resources**
U16	Beginning-Middle-End
U20	Doubles Facts
U20	Turn Around Addition
U20	Grouping Groceries
U20	Identity Property Go Fish!
ISIP	Counting on Cards
ISIP	Fact Family Dominoes
ISIP	Associative Property of Addition
ISIP	Commutative Property of Addition

1.OA.4

Explain subtraction as an unknown-addend problem. Example: subtracting 10 - 8 by finding the number that makes 10 when added to 8

Code	**Digital Student Experience**
U24	Computations and Algebraic Thinking – Determine the Unknown Whole Numbers in Subtraction Sentences
Code	**Teacher Resources**
U22	Beading the Difference
U22	Mystery in the Middle
U24	Start, Change, Result! (within 20)
ISIP	Subtraction Stories
ISIP	Fact Family Dominoes

Add and subtract within 20.

1.OA.5

Relate counting to addition and subtraction. Example: counting on 2 to add 2

Code	Teacher Resources
U22	Beading the Difference
U22	Mystery in the Middle
U24	Start, Change, Result! (within 20)
U31	Addition on a Number Line
U31	Subtraction on a Number Line
ISIP	Number Line Addition

1.OA.6

Add and subtract within 20.

    a.   Demonstrate fluency with addition and subtraction facts with sums or differences to 10 by counting on.

    b.   Demonstrate fluency with addition and subtraction facts with sums or differences to 10 by making ten.

    c.   Demonstrate fluency with addition and subtraction facts with sums or differences to 10 by decomposing a number leading to a ten. Example: $13 - 4 = 13 - 3 - 1 = 10 - 1 = 9$

    d.   Demonstrate fluency with addition and subtraction facts with sums or differences to 10 by using the relationship between addition and subtraction. Example: Knowing that $8 + 4 = 12$, one knows $12 - 8 = 4$.

    e.   Demonstrate fluency with addition and subtraction facts with sums or differences to 10 by creating equivalent but easier or known sums. Example: adding $6 + 7$ by creating the known equivalent $6 + 6 + 1 = 12 + 1 = 13$

Code	Digital Student Experience
U10	Computations and Algebraic Thinking – "Part Part Whole in New Orleans" (1-20)
U10	Computations and Algebraic Thinking – Addition Stories
U12	Computations and Algebraic Thinking – Identifying Addends using Tens Frames
U16	Computations and Algebraic Thinking – Determine Missing Addend
U20	Computations and Algebraic Thinking – "Part Part Whole in New Orleans" (1-20)
U20	Computations and Algebraic Thinking – Addition Stories (horizontal orientation)
U20	Computations and Algebraic Thinking – Addition Stories (vertical orientation)
U20	Computations and Algebraic Thinking – "The Math Whiz"
U20	Computations and Algebraic Thinking – Fact Strategies
U20	Computations and Algebraic Thinking – Commutative Property
U20	Computations and Algebraic Thinking – Associative Property

1.OA.6	

Add and subtract within 20.
   a. Demonstrate fluency with addition and subtraction facts with sums or differences to 10 by counting on.
   b. Demonstrate fluency with addition and subtraction facts with sums or differences to 10 by making ten.
   c. Demonstrate fluency with addition and subtraction facts with sums or differences to 10 by decomposing a number leading to a ten. Example: 13 - 4 = 13 - 3 - 1 = 10 - 1 = 9
   d. Demonstrate fluency with addition and subtraction facts with sums or differences to 10 by using the relationship between addition and subtraction. Example: Knowing that 8 + 4 = 12, one knows 12 - 8 = 4.
   e. Demonstrate fluency with addition and subtraction facts with sums or differences to 10 by creating equivalent but easier or known sums. Example: adding 6 + 7 by creating the known equivalent 6 + 6 + 1 = 12 + 1 = 13	

U20	Computations and Algebraic Thinking – Identity Property
U24	Computations and Algebraic Thinking – Determine the Unknown Whole Numbers in Subtraction Sentences

Code	Teacher Resources
U10	[Dogs and Cats on Mats (up to Ten)](#)
U12	[Ten or Not Ten](#)
U13	[Whole in the Hand](#)
U20	[Turn Around Addition](#)
U20	[Grouping Groceries](#)
U20	[Identity Property Go Fish!](#)
U20	[Doubles Facts](#)
ISIP	[Place Value of Tens and One](#)
ISIP	[Fact Family Dominoes](#)

Work with addition and subtraction equations.

1.OA.8	
Solve for the unknown whole number in various positions in an addition or subtraction equation, relating three whole numbers that would make it true.	

Code	Digital Student Experience
U16	Computations and Algebraic Thinking – Determine the Unknown Whole Number in Addition Sentences

1.OA.8	
Solve for the unknown whole number in various positions in an addition or subtraction equation, relating three whole numbers that would make it true.	
Code	**Teacher Resources**
U16	Beginning-Middle-End
U24	Mystery in the Middle

Operations with Numbers: Base Ten

Extend the counting sequence.

1.NBT.10	

Extend the number sequence from 0 to 120.
 	
   a.   Count forward and backward by ones, starting at any number less than 120.
 	
   b.   Read numerals from 0 to 120.
 	
   c.   Write numerals from 0 to 120.
 	
   d. Represent a number of objects from 0 to 120 with a written numeral.	

Code	**Digital Student Experience**
U17	Number Sense – "Pattern of the Count" Count by Ones to 100
U17	Number Sense – Place Value Rows (1-100)
U17	Number Sense – Number Puzzle (1-100)
U21	Number Sense – "Pattern of the Count" Count by Ones and Tens to 100
U21	Number Sense – Place Value Columns (1-100)
U21	Number Sense – Number Puzzle (1-100)
Code	**Teacher Resources**
L	One Hundred Twenty is Plenty
U14	One Hundred Is a Lot
U17	Digit Deal (1-100)
U18	Mixed-Up, Fixed-Up
U21	The Arrow Says (1-100)
U23	Decade Numbers

Understand place value.

1.NBT.11

Explain that the two digits of a two-digit number represent amounts of tens and ones.

    a.   Identify a bundle of ten ones as a "ten."

    b.   Identify the numbers from 11 to 19 as composed of a ten and one, two, three, four, five, six, seven, eight, or nine ones.

    c.   Identify the numbers 10, 20, 30, 40, 50, 60, 70, 80, 90 as one, two, three, four, five, six, seven, eight, or nine tens (and 0 ones).

Code	Digital Student Experience
U23	Number Sense – Decade Numbers: Free Play Number Puzzle
U23	Number Sense – Decade Numbers: Number Puzzle

Code	Teacher Resources
PWP	Two-Digit Memory
U14	Roll-Count-Cover – Skip Counting by Tens
U15	Digit Deal (1-50)
U17	Digit Deal (1-100)
U23	Decade Numbers

1.NBT.12

Compare pairs of two-digit numbers based on the values of the tens and ones digits, recording the results of comparisons with the symbols >, =, and < and orally with the words "is greater than," "is equal to," and "is less than."

Code	Digital Student Experience
PWP	Number Sense – Comparison Cards: Comparing Two-Digit Numbers

Code	Teacher Resources
PWP	Dare to Compare Two-Digit Numbers
U30	Two-Digit Number Comparison: Language and Symbols
ISIP	Base Ten Block Comparison Game

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

1.NBT.13

Add within 100, using concrete models or drawings and strategies based on place value.

a. Add a two-digit number and a one-digit number.

b. Add a two-digit number and a multiple of 10.

c. Demonstrate that in adding two-digit numbers, tens are added to tens, ones are added to ones, and sometimes it is necessary to compose a ten.

d. Relate the strategy for adding a two-digit number and a one-digit number to a written method and explain the reasoning used.

Code	Digital Student Experience
U20	Computations and Algebraic Thinking – "The Math Whiz"
U20	Computations and Algebraic Thinking – Fact Strategies
U20	Computations and Algebraic Thinking – Commutative Property
U20	Computations and Algebraic Thinking – Associative Property
U20	Computations and Algebraic Thinking – Identity Property

Code	Teacher Resources
U20	Doubles Facts
U20	Turn Around Addition
U20	Grouping Groceries
U20	Identity Property Go Fish!
U24	Start, Change, Result! (within 20)
ISIP	Fact Family Dominoes
FP	Building Sums to Ten
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.NBT.14

Given a two-digit number, mentally find 10 more or 10 less than the number without having to count, and explain the reasoning used.

Code	Digital Student Experience
U19	Number Sense – "Pattern of the Count: Ones and Tens to Fifty"
U19	Number Sense – Place Value Columns
U19	Number Sense – Number Puzzle
U21	Number Sense – "Pattern of the Count: Ones and Tens to One Hundred"
U21	Number Sense – Place Value Columns
U21	Number Sense – Number Puzzle
U23	Number Sense – Decade Numbers: Free Play Number Puzzle
U23	Number Sense – Decade Numbers: Number Puzzle

Code	Teacher Resources
U15	Digit Deal (1-50)
U17	Digit Deal (1-100)
U23	Decade Numbers

Data Analysis

Collect and analyze data and interpret results.

1.D.16

Organize, represent, and interpret data with up to three categories.

    a.   Ask and answer questions about the total number of data points in organized data.

    b.   Summarize data on Venn diagrams, pictographs, and "yes-no" charts using real objects, symbolic representations, or pictorial representations.

    c.   Determine "how many" in each category using up to three categories of data.

    d.   Determine "how many more" or "how many less" are in one category than in another using data organized into two or three categories.

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

Measurement

Work with time and money

1.M.19	
Tell and write time to the hours and half hours using analog and digital clocks.	
Code	**Digital Student Experience**
U16	Measurement and Data Analysis – Tell Time to the Nearest Hour
U16	Measurement and Data Analysis – Tell and Write Time from Analog and Digital Clock to the Nearest Half Hour
U19	Measurement and Data Analysis – Tell and Write Time from Analog/Digital Clocks to the Nearest Hour and Half Hour
Code	**Teacher Resources**
U16	What Does the Clock Say?
U16	Roll the Clock
U19	Set the Time and Go!

1.M.20	
Identify pennies and dimes by name and value.	
Code	**Digital Student Experience**
U12	Measurement – Identify Coins by Name
U14	Measurement – Identify Coins by Value
Code	**Teacher Resources**
U12	Coin Name Cover-Up
U14	Coin Value Cover-Up

Geometry

Reason with shapes and their attributes.

1.G.21

Build and draw shapes which have defining attributes.

    a. Distinguish between defining attributes and non-defining attributes. Examples: Triangles are closed and three- sided, which are defining attributes; color, orientation, and overall size are non-defining attributes.

Code	Digital Student Experience
PWP	Geometry – Sweet Shapes
Code	**Teacher Resources**
U14	Odd One Out

1.G.23

Partition circles and rectangles into two and four equal shares and describe the shares using the words halves, fourths, and quarters, and use the phrases half of, fourth of, and quarter of.

    a. Describe "the whole" as two of or four of the shares of circles and rectangles partitioned into two or four equal shares.

    b. Explain that decomposing into more equal shares creates smaller shares of circles and rectangles.

Code	Digital Student Experience
U18	Geometry – Identify Halves and Fourths
Code	**Teacher Resources**
U18	Fraction Four-in-a-Row

Grade 2

Operations and Algebraic Thinking

Represent and solve problems involving addition and subtraction.

2.OA.1	
Use addition and subtraction within 100 to solve one- and two-step word problems by using drawings and equations with a symbol for the unknown number to represent the problem.	
Code	**Digital Student Experience**
U32	Computations and Algebraic Thinking – Two-Step Word Problems with Unknowns at the End
U32	Computations and Algebraic Thinking – Two-Step Word Problems with Unknowns in the Middle
Code	**Teacher Resources**
U32	Build Multistep Equations
U32	Build Multistep Equations with Multiple Operations
U32	Solve Multistep Equations with Multiple Operations
U32	Build and Solve Two-Step Equations with Addition and Subtraction
U35	Addition Problem Solving Strategies
U35	Subtraction Problem Solving Strategies
ISIP	Choosing the Operation

Add and subtract within 20.

2.OA.2	
Fluently add and subtract within 20 using mental strategies such as counting on, making ten, decomposing a number leading to ten, using the relationship between addition and subtraction, and creating equivalent but easier or known sums. a. State automatically all sums of two one-digit numbers.	
Code	**Teacher Resources**
U31	Fact Families – Addition and Subtraction
ISIP	Addition and Subtraction Fact Families
ISIP	Fact Family Dominos (Addition/Subtraction)
FP	Addition Fast Track
FP	Subtraction Fast Track

2.OA.2

Fluently add and subtract within 20 using mental strategies such as counting on, making ten, decomposing a number leading to ten, using the relationship between addition and subtraction, and creating equivalent but easier or known sums.

　　a.　State automatically all sums of two one-digit numbers.

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.3

Use concrete objects to determine whether a group of up to 20 objects is even or odd.

　　a.　Write an equation to express an even number as a sum of two equal addends.

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

2.OA.4

Using concrete and pictorial representations and repeated addition, determine the total number of objects in a rectangular array with up to 5 rows and up to 5 columns.

　　a.　Write an equation to express the total number of objects in a rectangular array with up to 5 rows and up to 5 columns as a sum of equal addends.

Code	Digital Student Experience
U32	Computations and Algebraic Thinking – Addition Arrays
Code	**Teacher Resources**
U32	Addition Arrays

Operations with Numbers: Base Ten

Understand place value.

2.NBT.6
Explain that the three digits of a three-digit number represent amounts of hundreds, tens, and ones.
a.   Explain the following three-digit numbers as special cases: 100 can be thought of as a bundle of ten tens, called a "hundred," and 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).

Code	Teacher Resources
ISIP	Equivalent Representations
ISIP	Build a Base Ten Cube
ISIP	Creating Numbers with Base Ten Blocks

2.NBT.7
Count within 1000 by ones, fives, tens, and hundreds

Code	Teacher Resources
PWP	Skip Counting with Patterns

2.NBT.8
Read and write numbers to 1000 using base-ten numerals, number names, and expanded form.

Code	Digital Student Experience
U30	Number Sense – Writing Standard Form from Expanded Form
U30	Number Sense – Writing Expanded Form from Standard Form
U30	Number Sense – Writing Word Form from Expanded and Standard Form
Code	**Teacher Resources**
U30	Building Numbers Using Base Ten Blocks
U30	Writing Expanded Form from Standard Form
U30	Writing Word Form from Expanded and Standard Form
ISIP	Writing Standard Form from Expanded Form
ISIP	Equivalent Representations
ISIP	Build a Base Ten Cube

2.NBT.9

Compare two three-digit numbers based on the value of the hundreds, tens, and ones digits, recording the results of comparisons with the symbols >, =, and < and orally with the words "is greater than," "is equal to," and "is less than."

Code	Digital Student Experience
U30	Number Sense – Comparing Two, Two–Digit Whole Numbers
U30	Number Sense – Comparing Two, Three–Digit Numbers
U30	Number Sense – Comparing Two, Three–Digit Whole Numbers with Zeroes
PWP	Number Sense – Comparison Cards: Comparing Three-Digit Numbers

Code	Teacher Resources
U30	Comparison – Three–Digit Numbers
PWP	Dare to Compare (Three-Digit Numbers)
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.10

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

Code	Digital Student Experience
U31	Computations and Algebraic Thinking – Adding with Regrouping Using Concrete Models
U31	Computations and Algebraic Thinking – Subtracting with Regrouping Using Concrete Models
U31	Computations and Algebraic Thinking – Adding with Regrouping – Partitioning
U31	Computations and Algebraic Thinking – Subtracting with Regrouping – Partitioning
U31	Computations and Algebraic Thinking – Adding on a Number Line
U31	Computations and Algebraic Thinking – Subtracting on a Number Line
U31	Computations and Algebraic Thinking – Fact Families – Addition and Subtraction

Code	Teacher Resources
U31	Adding with Regrouping – Concrete
U31	Addition Using Partitioning
U31	Subtraction Using Partitioning
U31	Adding on a Number Line

2.NBT.10

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

U31	Subtracting on a Number Line
U31	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.12

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.

    a. Explain 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.

Code	Digital Student Experience
U32	Computations and Algebraic Thinking – Two-Step Word Problems with Unknowns at the End
U32	Computations and Algebraic Thinking – Two-Step Word Problems with Unknowns in the Middle
Code	**Teacher Resources**
U32	Build Multistep Equations
U32	Build Multistep Equations with Multiple Operations
U32	Solve Multistep Equations with Multiple Operations
U32	Build and Solve Two-Step Equations with Addition and Subtraction
U35	Addition Problem Solving Strategies
U35	Subtraction Problem Solving Strategies
ISIP	Choosing the Operation

Data Analysis

Collect and analyze data and interpret results.

2.D.16	

Create a picture graph and bar graph to represent data with up to four categories.
     a. Using information presented in a bar graph, solve simple "put-together," "take-apart," and "compare" problems.
     b. Using Venn diagrams, pictographs, and "yes-no" charts, analyze data to predict an outcome.	

Code	Digital Student Experience
U33	Data Analysis – Solving Problems with Picture Graphs
U33	Data Analysis – Solving Problems with Bar Graphs

Code	Teacher Resources
U33	Interpreting Picture Graphs
U33	Creating Picture Graphs
U33	Analyzing Picture Graphs
U33	Interpreting Bar Graphs
U33	Creating Bar Graphs
U33	Analyzing Bar Graphs

Measurement

Measure and estimate lengths in standard units.

2.M.17	
Measure the length of an object by selecting and using standard units of measurement shown on rulers, yardsticks, meter sticks, or measuring tapes.	

Code	Digital Student Experience
U33	Measurement – Choose Units and Measure Lengths
U33	Measurement – Measure to the Nearest Centimeter

Code	Teacher Resources
U33	Choosing Units of Linear Measurement
U33	Measure to the Nearest Inch
U33	Measure to the Nearest Centimeter
ISIP	Appropriate Tools for Linear Measurement

2.M.17
Measure the length of an object by selecting and using standard units of measurement shown on rulers, yardsticks, meter sticks, or measuring tapes.

ISIP	[How to Use Linear Measurement Tools](#)
ISIP	[Measuring Objects](#)

2.M.18
Measure objects with two different units, and describe how the two measurements relate to each other and the size of the unit chosen.

Code	Teacher Resources
ISIP	[Unit Relationships](#)

Relate addition and subtraction to length.

2.M.21
Use addition and subtraction within 100 to solve word problems involving same units of length, representing the problem with drawings (such as drawings of rulers) and/or equations with a symbol for the unknown number.

Code	Teacher Resources
ISIP	[Measurement Word Problems](#)

2.M.22
Create a number line diagram using whole numbers and use it to represent whole-number sums and differences within 100.

Code	Digital Student Experience
U31	Computations and Algebraic Thinking – Adding on a Number Line
U31	Computations and Algebraic Thinking – Subtracting on a Number Line

Code	Teacher Resources
U31	[Adding on a Number Line](#)
U31	[Subtracting on a Number Line](#)

Work with time and money.

2.M.23	
Tell and write time from analog and digital clocks to the nearest five minutes, using a.m. and p.m. a. Express an understanding of common terms such as, but not limited to, quarter past, half past, and quarter to.	

Code	Digital Student Experience
U34	Measurement – Tell Time to the Nearest Five Minutes

Code	Teacher Resources
U34	Time to the Nearest Five Minutes
U34	Time – AM and PM
U34	Time to the Quarter Hour

Geometry

Reason with shapes and their attributes.

2.G.26	
Partition a rectangle into rows and columns of same-size squares, and count to find the total number of squares.	

Code	Digital Student Experience
U32	Computations and Algebraic Thinking – Addition Arrays

Code	Teacher Resources
U32	Addition Arrays

2.G.27	
Partition circles and rectangles into two, three, or four equal shares. Describe the shares using such terms as halves, thirds, half of, or a third of, and describe the whole as two halves, three thirds, or four fourths. a. Explain that equal shares of identical wholes need not have the same shape.	

Code	Digital Student Experience
U32	Geometry – Partitioning to Identify Halves, Thirds, and Fourths
U32	Geometry – Equal Shares of Identical Wholes

Code	Teacher Resources
U32	Identifying Halves, Thirds, and Fourths

2.G.27
Partition circles and rectangles into two, three, or four equal shares. Describe the shares using such terms as halves, thirds, half of, or a third of, and describe the whole as two halves, three thirds, or four fourths.
a.   Explain that equal shares of identical wholes need not have the same shape.

U32	Equal Shares of Identical Wholes

Grade 3

Operations and Algebraic Thinking

Represent and solve problems involving multiplication and division.

3.OA.1	
Illustrate the product of two whole numbers as equal groups by identifying the number of groups and the number in each group and represent as a written expression.	
Code	**Digital Student Experience**
U36	Computations and Algebraic Thinking – Multiply One-Digit Numbers Using Concrete Models
U36	Computations and Algebraic Thinking – Multiply One-Digit Numbers Using Arrays
Code	**Teacher Resources**
U36	One-Digit by One-Digit Multiplication
U36	Multiplying Two One-Digit Numbers with Arrays
ISIP	Practicing Fact Families

3.OA.2	
Illustrate and interpret the quotient of two whole numbers as the number of objects in each group or the number of groups when the whole is partitioned into equal shares.	
Code	**Digital Student Experience**
U36	Computations and Algebraic Thinking – Multiplication and Division Fact Families
Code	**Teacher Resources**
U36	Fact Families: Multiplication and Division
ISIP	Doubling and Halving
ISIP	Relating Multiplication and Division

3.OA.3

Solve word situations using multiplication and division within 100 involving equal groups, arrays, and measurement quantities; represent the situation using models, drawings, and equations with a symbol for the unknown number.

Code	Digital Student Experience
U36	Computations and Algebraic Thinking – Build and Solve Two-Step Equations with All Operations

Code	Classroom Resources
V	Feeling Sheepish?
V	A Shear Delight
V	Wool you help me?

Code	Teacher Resources
U36	Build and Solve Two-Step Equations with All Operations

3.OA.4

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

Code	Digital Student Experience
U36	Computations and Algebraic Thinking – Multiplication and Division Fact Families

Code	Teacher Resources
U36	Fact Families: Multiplication and Division
ISIP	Relating Multiplication and Division
ISIP	Practicing Fact Families
ISIP	Using Strip Diagrams to Solve Compare Properties

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

3.OA.5

Develop and apply properties of operations as strategies to multiply and divide.

Code	Digital Student Experience
U36	Computations and Algebraic Thinking – Properties of Multiplication

Code	Teacher Resources
ISIP	Commutative Property of Multiplication
ISIP	Associative Property of Multiplication

3.OA.6

Use the relationship between multiplication and division to represent division as an equation with an unknown factor.

Code	Digital Student Experience
U36	Computations and Algebraic Thinking – Fact Families – Multiplication and Division
Code	Teacher Resources
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.7

Use strategies based on properties and patterns of multiplication to demonstrate fluency with multiplication and division within 100.

    a. Fluently determine all products obtained by multiplying two one-digit numbers.

    b. State automatically all products of two one-digit numbers by the end of third grade.

Code	Digital Student Experience
U36	Computations and Algebraic Thinking – Multiply One-Digit Numbers Using Concrete Models
U36	Computations and Algebraic Thinking – Multiply One-Digit Numbers Using Arrays
U36	Computations and Algebraic Thinking – Fact Families – Multiplication and Division
Code	Teacher Resources
U36	One-Digit by One-Digit Multiplication
U36	Multiplying Two One-Digit Numbers with Arrays
U36	Fact Families: Multiplication and Division
ISIP	Doubling and Halving
ISIP	Relating Multiplication and Division
ISIP	Practicing Fact Families
ISIP	Using Strip Diagrams to Solve Compare Problems
FP	Wipe Out

click here to return to:

Code Legend

3.OA.7

Use strategies based on properties and patterns of multiplication to demonstrate fluency with multiplication and division within 100.

    a. Fluently determine all products obtained by multiplying two one-digit numbers.

    b. State automatically all products of two one-digit numbers by the end of third grade.

FP	Multominoes
FP	Tall Towers
FP	Dice Blocks
FP	Sticky Products
FP	Multiplication Fast Track
FP	Division Fast Track
FP	Shake It! Make It! Solve It! (Multiplication)

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

3.OA.8

Code	Digital Student Experience
U36	Computations and Algebraic Thinking – Build and Solve Two-Step Equations with All Operations
Code	**Teacher Resources**
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
U36	Problem Solving without Numbers: Multiplication and Division

3.OA.9

Recognize and explain arithmetic patterns using properties of operations.

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

Operations with Numbers: Base Ten

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

3.NBT.10	
Identify the nearest 10 or 100 when rounding whole numbers, using place value understanding.	
Code	**Digital Student Experience**
U35	Number Sense – Rounding to the Nearest Ten
U35	Number Sense – Rounding to the Nearest Hundred
PWP	Number Sense – Pyramid Pinball: Rounding to the Nearest 10 or 100
Code	**Teacher Resources**
PWP	Round and Round We Go (Whole Numbers)
U35	Rounding – Nearest Ten
U35	Rounding – Nearest Hundred
U35	Rounding – Nearest Ten, Hundred, Thousand

Operations with Numbers: Fractions

Develop understanding of fractions as numbers.

3.NF.13	
Demonstrate that a unit fraction represents one part of an area model or length model of a whole that has been equally partitioned; explain that a numerator greater than one indicates the number of unit pieces represented by the fraction.	
Code	**Teacher Resources**
ISIP	Recognizing Fractions in Different Forms
ISIP	Writing Fractions Using Symbolic Notation

3.NF.14	

Interpret a fraction as a number on the number line; locate or represent fractions on a number line diagram.
   a. Represent a unit fraction (1/b) on a number line by defining the interval from 0 to 1 as the whole and partitioning it into b equal parts as specified by the denominator.
   b. Represent a fraction (a/b) on a number line by marking off a lengths of size (1/b) from zero.	

ISIP	Recognizing Fractions in Different Forms
ISIP	Writing Fractions Using Symbolic Notation

3.NF.15

Explain equivalence and compare fractions by reasoning about their size using visual fraction models and number lines.

a. Express whole numbers as fractions and recognize fractions that are equivalent to whole numbers.

b. Compare two fractions with the same numerator or with the same denominator by reasoning about their size (recognizing that fractions must refer to the same whole for the comparison to be valid). Record comparisons using < , >, or = and justify conclusions.

Code	Digital Student Experience
U37	Number Sense – Fractions Equivalent to One
U37	Number Sense – Fractions Equivalent to Whole Numbers
U37	Number Sense – Equivalent Fractions
U37	Number Sense – Many Equivalent Fractions
U37	Number Sense – Comparing Fractions with the Same Denominator
U37	Number Sense – Comparing Fractions with the Same Numerator

Code	Teacher Resources
U37	Fractions Equivalent to One
U37	Fractions Equivalent to Whole Numbers
U37	Identify Equivalent Fractions
U37	Many Equivalent Fractions
U37	Comparison – Fractions and Whole Numbers – Symbols
U37	Comparing Fractions with Like Numerators
ISIP	Comparing Fractions Using Models
ISIP	Comparing Fractions
ISIP	Identify Equivalent Fractions Using Area Models

Data Analysis

Represent and interpret data.

3.D.16
For a given or collected set of data, create a scaled (one-to-many) picture graph and scaled bar graph to represent a data set with several categories.
a.   Determine a simple probability from a context that includes a picture.
b.   Solve one- and two-step "how many more" and "how many less" problems using information presented in scaled graphs.

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

3.D.17
Measure lengths using rulers marked with halves and fourths of an inch to generate data and create a line plot marked off in appropriate units to display the data.

Code	Teacher Resources
ISIP	Measuring to the Nearest Quarter Inch

Measurement

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

3.M.18
Tell and write time to the nearest minute; measure time intervals in minutes (within 90 minutes.)
a.   Solve real-world problems involving addition and subtraction of time intervals in minutes by representing the problem on a number line diagram.

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

3.M.19

Estimate and measure liquid volumes and masses of objects using liters (l), grams (g), and kilograms (kg).

    a.   Use the four operations to solve one-step word problems involving masses or volumes given in the same metric units.

Code	Teacher Resources
ISIP	Measuring Mass

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

3.M.20

Find the area of a rectangle with whole number side lengths by tiling without gaps or overlays and counting unit squares.

Code	Teacher Resources
ISIP	Areas of Squares
ISIP	Finding the Area of Squares

3.M.21

Count unit squares (square cm, square m, square in, square ft, and improvised or non-standard units) to determine area.

Code	Teacher Resources
ISIP	Areas of Squares
ISIP	Finding the Area of Squares

3.M.23

Decompose rectilinear figures into smaller rectangles to find the area, using concrete materials

Code	Teacher Resources
ISIP	Finding the Area of Polygons

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

3.M.25

Solve real-world problems involving perimeters of polygons, including finding the perimeter given the side lengths and finding an unknown side length of rectangles.

Code	Digital Student Experience
U38	Measurement – Perimeter Word Problems

Code	Teacher Resources
U38	Finding Perimeter
U38	Finding Missing Side Lengths in Word Problems
ISIP	Measuring Perimeter of Polygons

Geometry

Reason with shapes and their attributes.

3.G.26

Recognize and describe polygons (up to 8 sides), triangles, and quadrilaterals (rhombuses, rectangles, and squares) based on the number of sides and the presence or absence of square corners.

    a.   Draw examples of quadrilaterals that are and are not rhombuses, rectangles, and squares.

Code	Digital Student Experience
U38	Geometry – Attributes of Quadrilaterals

Code	Teacher Resources
U38	Understanding Quadrilaterals
ISIP	Defining Quadrilaterals by Attributes

Grade 4

Operations and Algebraic Thinking

Solve problems with whole numbers using the four operations.

4.OA.1

Interpret and write equations for multiplicative comparisons.

Code	Digital Student Experience
U42	Computations and Algebraic Thinking – Solve Multistep Word Problems
Code	**Teacher Resources**
U42	Building and Solving Multistep Equations with All Operations

4.OA.2

Solve word problems involving multiplicative comparison using drawings and write equations to represent the problem, using a symbol for the unknown number.

Code	Digital Student Experience
U42	Computations and Algebraic Thinking – Solve Multistep Word Problems
Code	**Teacher Resources**
U42	Building and Solving Multistep Equations with All Operations

4.OA.3

Determine and justify solutions for multi-step word problems, including problems where remainders must be interpreted.

  a. Write equations to show solutions for multi-step word problems with a letter standing for the unknown quantity.

  b. Determine reasonableness of answers for multi-step word problems, using mental computation and estimation strategies including rounding.

Code	Digital Student Experience
U42	Computations and Algebraic Thinking – Solve Multistep Word Problems
Code	**Teacher Resources**
U42	Building and Solving Multistep Equations with All Operations

click here to return to:

Operations with Numbers: Base Ten

Generalize place value understanding for multi-digit whole numbers.

4.NBT.6	
Using models and quantitative reasoning, explain that in a multi-digit whole number, a digit in any place represents ten times what it represents in the place to its right.	
Code	**Digital Student Experience**
U40	Number Sense – Expanded Form to Thousands
U40	Number Sense – Standard Form to Thousands

4.NBT.7	
Read and write multi-digit whole numbers using standard form, word form, and expanded form.	
Code	**Digital Student Experience**
U40	Number Sense – Write Numbers from Expanded Form to Standard Form
U40	Number Sense – Write Numbers from Standard Form to Expanded Form
U40	Number Sense – Write Numbers from Expanded and Standard Form from Word Form
Code	**Teacher Resources**
U40	Writing Expanded Form from Standard through Thousands and Millions
U40	Writing Standard Form from Expanded through Thousands and Millions
U40	Writing Word Form from Expanded and Standard through Thousands and Millions

4.NBT.8	
Use place value understanding to compare two multi-digit numbers using >, =, and < symbols.	
Code	**Digital Student Experience**
PWP	Number Sense – Comparison Cards: Multi-Digit Numbers
Code	**Teacher Resources**
PWP	Dare to Compare Multi-Digit Numbers

4.NBT.9

Round multi-digit whole numbers to any place using place value understanding

Code	Digital Student Experience
U40	Number Sense – Rounding to the Nearest Thousand
U40	Number Sense – Round to Any Place up to Thousands with Number Line
U40	Number Sense – Round to Any Place up to Thousands with Algorithm
U40	Number Sense – Rounding Zero
PWP	Number Sense – Pyramid Pinball: Rounding to Any Place

Code	Teacher Resources
U40	Rounding – Nearest Thousand
U40	Rounding – Nearest Ten, Hundred, Thousand
U40	Rounding within Three- and Four-Digit Numbers – Number Line
U40	Rounding within Three- and Four-Digit Numbers – Abstract
U40	Zero as the Rounding Digit
PWP	Round and Round We Go (Multi-Digit) Numbers

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

4.NBT.10

Use place value strategies to fluently add and subtract multi-digit whole numbers and connect strategies to the standard algorithm.

Code	Teacher Resources
ISIP	Adding Multi-Digit Numbers and Checking for Reasonableness

4.NBT.11

Find the product of two factors (up to four digits by a one-digit number and two two-digit numbers), using strategies based on place value and the properties of operations.

    a.   Illustrate and explain the product of two factors using equations, rectangular arrays, and area models.

Code	Digital Student Experience
U41	Computations and Algebraic Thinking – Multiply Two-Digit Numbers with Models

Code	Teacher Resources
U41	Two-Digit by Two-Digit Concrete Multiplication

Operations with Numbers: Fractions

Extend understanding of fraction equivalence and ordering.

4.NF.13

Using area and length fraction models, explain why one fraction is equivalent to another, taking into account that the number and size of the parts differ even though the two fractions themselves are the same size.

    a. Apply principles of fraction equivalence to recognize and generate equivalent fractions. Example: a/b is equivalent to n × a/n × b .

Code	Digital Student Experience
U43	Number Sense – Determine Equivalent Fractions with Models
U43	Number Sense – Comparing Fractions Using Benchmark Fractions
U43	Number Sense – Compare Fractions Using Symbols

Code	Teacher Resources
U43	Fraction Comparison Using Benchmark Fractions
U43	Compare Fractions- Symbols
U43	Compare Fractions by Creating Common Denominators
ISIP	Comparing Fractions
ISIP	Using Area Models to Compare Fractions

4.NF.14

Compare two fractions with different numerators and different denominators using concrete models, benchmarks (0, ½, 1), common denominators, and/or common numerators, recording the comparisons with symbols >, =, or

Code	Digital Student Experience
U43	Number Sense – Comparing Fractions Using Benchmark Fractions
U43	Number Sense – Comparing Fractions with Unlike Denominators

Code	Teacher Resources
U43	Fraction Comparison Using Benchmark Fractions
U43	Compare Fractions- Symbols
U43	Compare Fractions by Creating Common Denominators
ISIP	Comparing Fractions
ISIP	Using Area Models to Compare Fractions

Build fractions from unit fractions by applying and extending previous understanding of operations on whole numbers.

4.NF.15

Model and justify decompositions of fractions and explain addition and subtraction of fractions as joining or separating parts referring to the same whole.

    a.   Decompose a fraction as a sum of unit fractions and as a sum of fractions with the same denominator in more than one way using area models, length models, and equations.

    b.   Add and subtract fractions and mixed numbers with like denominators using fraction equivalence, properties of operations, and the relationship between addition and subtraction.

    c.   Solve word problems involving addition and subtraction of fractions and mixed numbers having like denominators, using drawings, visual fraction models, and equations to represent the problem.

Code	Digital Student Experience
U43	Number Sense – Decomposing Fractions
U43	Number Sense - Adding Fractions with Like Denominators of Ten and One Hundred
U43	Number Sense – Adding Fractions with Denominators of Ten and One Hundred

Code	Classroom Resources
V	Whale-come Aboard!
V	A Hectic Harbor
V	Sea Lion Safari
V	A Picture Perfect Trip

Code	Teacher Resources
U43	Add Like Denominators of Ten and One Hundred
U43	Adding Denominators of Ten to Denominators of One Hundred

Understand decimal notation for fractions, and compare decimal fractions.

4.NF.17

Express, model, and explain the equivalence between fractions with denominators of 10 and 100.

    a.   Use fraction equivalency to add two fractions with denominators of 10 and 100.

Code	Digital Student Experience
U43	Computations and Algebraic Thinking – Determine Equivalent Fractions Tenths and Hundredths
U43	Computations and Algebraic Thinking – Add Tenths to Hundredths

4.NF.17

Express, model, and explain the equivalence between fractions with denominators of 10 and 100.

    a.   Use fraction equivalency to add two fractions with denominators of 10 and 100.

Code	Teacher Resources
U43	Expressing Equivalent Fractions with Denominators of Ten and One Hundred
U43	Adding Like Denominators of Ten and One Hundred
U43	Add Denominators of Ten to Denominators of One Hundred

4.NF.18

Use models and decimal notation to represent fractions with denominators of 10 and 100.

Code	Digital Student Experience
U43	Computations and Algebraic Thinking – Determine Equivalent Fractions Tenths and Hundredths
U43	Number Sense – Determine Equivalent Fractions Using Models

Code	Classroom Resources
V	Tricky Terrain
V	Weather Watcher
V	Critter Observation

Code	Teacher Resources
U43	Decimals as Fractions (Tenths and Hundredths)
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.19

Use visual models and reasoning to compare two decimals to hundredths (referring to the same whole), recording comparisons using symbols >, =, or

Code	Digital Student Experience
U43	Number Sense – Understanding Decimals (0.1-0.9 and 0.01-0.09)
U43	Number Sense – Understanding Decimals 0.1-0.9
U43	Number Sense – Understanding Decimals with Visual Models 0.01-1.99
PWP	Number Sense – Comparison Cards: Comparing Decimal Numbers

Code	Teacher Resources
U43	Standard and Word Form of Decimals (0.01-0.09 and 0.1-0.9)

4.NF.19

Use visual models and reasoning to compare two decimals to hundredths (referring to the same whole), recording comparisons using symbols >, =, or

U43	Standard and Word form of Decimals (0.10-0.90)
U43	Standard and Word form of Decimals (0.01-1.99)
ISIP	Comparing and Ordering Decimals
PWP	Dare to Compare Decimal Numbers

Data Analysis

Represent and interpret data.

4.D.20

Interpret data in graphs (picture, bar, and line plots) to solve problems using numbers and operations.

    a. Create a line plot to display a data set of measurements in fractions of a unit (1/2 , 1/4 , 1/8).

    b. Solve problems involving addition and subtraction of fractions using information presented in line plots.

Code	Digital Student Experience
U45	Data Analysis – Line Plots with Fractional Data
U45	Data Analysis – Analyzing Line Plots

Code	Teacher Resources
U45	Line Plots with Fractional Data
U45	Finding Scales of Line Plots

Measurement

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

4.M.21

Select and use an appropriate unit of measurement for a given attribute (length, mass, liquid volume, time) within one system of units: metric - km, m, cm; kg, g, l, ml; customary - lb, oz; time - hr, min, sec.

    a. Within one system of units, express measurements of a larger unit in terms of a smaller unit. Record measurement equivalents in a two-column table.

Code	Digital Student Experience
U44	Measurement and Data Analysis – Word Problems with Various Measurements

4.M.21

Select and use an appropriate unit of measurement for a given attribute (length, mass, liquid volume, time) within one system of units: metric - km, m, cm; kg, g, l, ml; customary - lb, oz; time - hr, min, sec.

    a. Within one system of units, express measurements of a larger unit in terms of a smaller unit. Record measurement equivalents in a two-column table.

Code	Teacher Resources
U44	Converting Units of Measurement in Word Problems

4.M.22

Use the four operations to solve measurement word problems with distance, intervals of time, liquid volume, mass of objects, and money.

    a. Solve measurement problems involving simple fractions or decimals.

    b. Solve measurement problems that require expressing measurements given in a larger unit in terms of a smaller unit.

    c. Represent measurement quantities using diagrams such as number line diagrams that feature a measurement scale.

Code	Digital Student Experience
U44	Measurement and Data Analysis – Word Problems with Various Measurements

Code	Classroom Resources
V	Gone Fishin'
V	Ferry Tales
V	Snowdogs
V	Baked Alaska
V	Polar Prep
V	A Zoo-nique Experience
V	Keepsake Korner

Code	Teacher Resources
U44	Converting Units of Measurement in Word Problems
ISIP	Measuring Length to the Nearest Quarter Inch
ISIP	Calculating Elapsed Time

4.M.23

Apply area and perimeter formulas for rectangles in real-world and mathematical situations..

Code	Teacher Resources
ISIP	Finding Area of Rectangles and Squares by Using Multiplication

4.M.23

Apply area and perimeter formulas for rectangles in real-world and mathematical situations..

ISIP	Quantifying Areas of Rectangles and Squares
ISIP	Connecting Multiplication and Area
ISIP	Decomposing Figures to Find the Area of Polygons

Geometric measurement: understand concepts of angle and measure angles.

4.M.24

Identify an angle as a geometric shape formed wherever two rays share a common endpoint.

Code	Teacher Resources
ISIP	Line and Angle Identification

4.M.25

Use a protractor to measure angles in whole-number degrees and sketch angles of specified measure.

Code	Digital Student Experience
U45	Geometry – Measuring Angles with a Protractor

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

4.M.26

Decompose an angle into non-overlapping parts to demonstrate that the angle measure of the whole is the sum of the angle measures of the parts.

    a. Solve addition and subtraction problems on a diagram to find unknown angles in real-world or mathematical problems.

Code	Digital Student Experience
U45	Geometry – Determine Missing Angles

Code	Teacher Resources
U45	Find the Missing Angle Measurement
ISIP	Line and Angle Identification

Geometry

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

4.G.27	
Draw points, lines, line segments, rays, angles (right, acute, obtuse), and perpendicular and parallel lines, and identify these in two-dimensional figures.	
Code	**Teacher Resources**
U45	Measuring Angles with a Protractor
ISIP	Line and Angle Identification

4.G.28	
Identify two-dimensional figures based on the presence or absence of parallel or perpendicular lines or the presence or absence of angles of a specified size. a. Describe right triangles as a category, and identify right triangles.	
Code	**Classroom Resources**
V	Angles in the Andes
V	A Tapestry of Triangles
V	Incan Inspiration
V	Machu Picture This!

Grade 5

Operations and Algebraic Thinking

Write and interpret numerical expressions.

5.OA.1	
Write, explain, and evaluate simple numerical expressions involving the four operations to solve up to two-step problems. Include expressions involving parentheses, brackets, or braces, using commutative, associative, and distributive properties.	
Code	**Digital Student Experience**
U49	Computations and Algebraic Reasoning – Evaluate Numerical Expressions with Parentheses
U49	Computations and Algebraic Reasoning – Interpret Numerical Expressions with Parentheses
U49	Computations and Algebraic Reasoning – Write Numerical Expressions from Words
Code	**Teacher Resources**
U49	Evaluating Numerical Expressions with Parentheses
U49	Identifying Expressions in Scenarios
U49	Writing Expressions from Words – Addition and Subtraction
U49	Writing Expressions from Words – Subtraction

Analyze patterns and relationships.

5.OA.2	
Generate two numerical patterns using two given rules and complete an input/output table for the data. a. Use data from an input/output table to identify apparent relationships between corresponding terms. b. Form ordered pairs from values in an input/output table. c. Graph ordered pairs from an input/output table on a coordinate plane.	
Code	**Digital Student Experience**
U51	Computations and Algebraic Thinking – Comparing Points on a Coordinate Plane
Code	**Teacher Resources**
U51	Plotting Points on a Coordinate Grid

5.OA.2

Generate two numerical patterns using two given rules and complete an input/output table for the data.

a. Use data from an input/output table to identify apparent relationships between corresponding terms.

b. Form ordered pairs from values in an input/output table.

c. Graph ordered pairs from an input/output table on a coordinate plane.

U51	Graphing and Analyzing Lines

Operations with Numbers: Base Ten

Understand the place value system.

5.NBT.3

Using models and quantitative reasoning, explain that in a multi-digit number, including decimals, a digit in any place represents ten times what it represents in the place to its right and 1 10 of what it represents in the place to its left.

a. Explain patterns in the number of zeros of the product when multiplying a number by powers of 10, using whole-number exponents to denote powers of 10.

b. Explain patterns in the placement of the decimal point when a decimal is multiplied or divided by a power of 10, using whole-number exponents to denote powers of 10.

Code	Digital Student Experience
U46	Number Sense – Multiplying Decimals by Ten and One Hundred
U46	Number Sense – Dividing Decimals by Ten and One Hundred
U46	Number Sense – Exploring Powers of Ten
U46	Number Sense – Multiplying and Dividing Decimals by Powers of Ten
Code	**Teacher Resources**
U46	Multiplying Decimals by Ten and One Hundred
U46	Dividing Decimals by Ten and One Hundred
U46	Multiplying and Dividing Decimals by Powers of Ten
U46	Exploring Powers of Ten

5.NBT.4

Read, write, and compare decimals to thousandths.

   a. Read and write decimals to thousandths using base-ten numerals, number names, and expanded form. Example: 347.392 = 3 × 100 + 4 × 10 + 7 × 1 + 3 × (1/10) + 9 × (1/100) + 2 × (1/1000).

   b. Compare two decimals to thousandths based on the meaning of the digits in each place, using >, =, and < to record the results of comparisons.

Code	Digital Student Experience
U46	Number Sense – Compare Decimals Visually on the Number Line
U46	Number Sense – Compare Tenths and Hundredths on a Number Line
U46	Number Sense – Compare Tenths and Hundredths (with visual aids)
U46	Number Sense – Abstract Comparison of Decimals to Thousandths
PWP	Number Sense – Comparison Cards: Comparing Decimal Numbers

Code	Teacher Resources
U46	Decimal Grids and Place Value Mats
U46	Decimal Comparison on the Number Line
U46	Abstract Decimal Comparison
U46	Decimals with Whole Number Comparison
PWP	Dare to Compare Decimal Numbers

5.NBT.5

Use place value understanding to round decimals to thousandths.

Code	Digital Student Experience
U46	Number Sense – Round Decimals on the Number Line
U46	Number Sense – Round Decimals with the Rounding Algorithm
U46	Number Sense – Round Decimals with Whole Numbers
PWP	Number Sense – Pyramid Pinball: Rounding Decimals

Code	Teacher Resources
U46	Rounding Decimals on the Number Line
U46	Rounding Decimals with the Rounding Algorithm
PWP	Round and Round We Go (Decimal) Numbers

5.NBT.6

Fluently multiply multi-digit whole numbers using the standard algorithm.

Code	Digital Student Experience
U41	Computations and Algebraic Thinking – Two-Digit by Two-Digit Multiplication

Code	Teacher Resources
U41	Two-Digit by Two-Digit Multiplication

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

5.NBT.7

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

Code	Digital Student Experience
U47	Computations and Algebraic Thinking – Divide Three-Digit by Two-Digit Numbers with an Area Model
U47	Computations and Algebraic Thinking – Divide Four-Digit Numbers by Two-Digit Numbers

Code	Classroom Resources
V	Hungry Hikers
V	Feeding Frenzy
V	A Wall of Wildlife

Code	Teacher Resources
U47	Four-Digit by Two-Digit Division (Partial Quotients)
ISIP	Estimating Quotients Using Compatible Numbers
ISIP	Using Models to Practice Extended Division Facts
ISIP	Models for Understanding Remainders

5.NBT.8

Add, subtract, multiply, and divide decimals to hundredths using strategies based on place value, properties of operations, and/or the relationships between addition/subtraction and multiplication/division; relate the strategy to a written method, and explain the reasoning used.

    a. Use concrete models and drawings to solve problems with decimals to hundredths.

    b. Solve problems in a real-world context with decimals to hundredths.

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

Code	Classroom Resources
V	Welcome to Yellowstone!
V	A Grand Get-Away
V	A Faithful Feature
V	Exit Through the Gift Shop

Code	Teacher Resources
U46	Multiplying Decimals by Ten and One Hundred
U46	Dividing Decimals by Ten and One Hundred
U46	Multiplying and Dividing 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 Decimal Numbers in a Word Problem

Operations with Numbers: Fractions

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

5.NF.9	
Model and solve real-word problems involving addition and subtraction of fractions referring to the same whole, including cases of unlike denominators, 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.	

Code	Digital Student Experience
U48	Computations and Algebraic Thinking – Add Fractions with Unlike Denominators
U48	Computations and Algebraic Thinking – Subtract Fractions with Unlike Denominators

Code	Teacher Resources
U48	Adding Fractions with Unlike Denominators
U48	Subtracting Fractions with Unlike Denominators
ISIP	Adding and Subtracting Fractions with Unlike Denominators

5.NF.10	
Add and subtract fractions and mixed numbers with unlike denominators, using fraction equivalence to calculate a sum or difference of fractions or mixed numbers with like denominators.	

Code	Digital Student Experience
U48	Computations and Algebraic Thinking – Add Fractions with Unlike Denominators
U48	Computations and Algebraic Thinking – Subtract Fractions with Unlike Denominators

Code	Teacher Resources
U48	Adding Fractions with Unlike Denominators
ISIP	Adding and Subtracting Fractions with Unlike Denominators

Apply and extend previous understandings of multiplication and division to multiply and divide fractions.

5.NF.12

Apply and extend previous understandings of multiplication to find the product of a fraction times a whole number or a fraction times a fraction.

    a. Use a visual fraction model (area model, set model, or linear model) to show $(aa/bb) \times q$ and create a story context for this equation to interpret the product as a parts of a partition of q into b equal parts.

    b. Use a visual fraction model (area model, set model, or linear model) to show $(a/b) \times (c/d)$ and create a story context for this equation to interpret the product.

    c. Multiply fractional side lengths to find areas of rectangles, and represent fraction products as rectangular areas.

    d. Find the area of a rectangle with fractional side lengths by tiling it with unit squares of the appropriate unit fraction side lengths to show that the area is the same as would be found by multiplying the side lengths.

Code	Digital Student Experience
U50	Measurement - Area of a Rectangle with Fractional Side Lengths

Code	Teacher Resources
U50	Area of a Rectangle with Fractional Side Lengths

5.NF.13

Interpret multiplication as scaling (resizing).

    a. Compare the size of a product to the size of one factor on the basis of the size of the other factor, without performing the indicated multiplication. Example: Use reasoning to determine which expression is greater? 225 or 3 4 × 225; 11 50 or 3 2 × 11 50

    b. Explain why multiplying a given number by a fraction greater than 1 results in a product greater than the given number and relate the principle of fraction equivalence.

    c. Explain why multiplying a given number by a fraction less than 1 results in a product smaller than the given number and relate the principle of fraction equivalence.

Code	Digital Student Experience
U48	Computations and Algebraic Thinking – Multiply by Fractions Less Than One
U48	Computations and Algebraic Thinking – Multiply by Fractions Greater Than One

Code	Teacher Resources
U48	Multiplying by Fractions Less Than One
U48	Multiplying by Fractions Less Than One (Extra Practice)
U48	Multiplying Whole Numbers by Fractions Less Than One
U48	Multiplying Whole Numbers by Fractions Greater Than One

click here to return to:

Code Legend

5.NF.14	
Model and solve real-world problems involving multiplication of fractions and mixed numbers using visual fraction models, drawings, or equations to represent the problem.	
Code	**Digital Student Experience**
U48	Computations and Algebraic Thinking – Multiply Fractions with Improper Fractions
Code	**Teacher Resources**
U48	Multiplying Fractions Less Than One with Improper Fractions

Measurement

Convert like measurement units within a given measurement system.

5.M.17	
Convert among different-sized standard measurement units within a given measurement system and use these conversions in solving multi-step, real-world problems.	
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.M.18	
Identify volume as an attribute of solid figures, and measure volumes by counting unit cubes, using cubic cm, cubic in, cubic ft, and improvised (non-standard) units. a. Pack a solid figure without gaps or overlaps using n unit cubes to demonstrate volume as n cubic units	
Code	**Digital Student Experience**
U50	Measurement – Volume of Irregular Figures
Code	**Teacher Resources**
U50	Volume of Rectangular Prisms
U50	Volume of Irregular Figures

5.M.19

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

- a. Use the associative property of multiplication to find the volume of a right rectangular prism and relate it to packing the prism with unit cubes. Show that the volume can be determined by multiplying the three edge lengths or by multiplying the height by the area of the base.

- b. Apply the formulas $V = l \times w \times h$ 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. Find volumes of solid figures composed of two non-overlapping right rectangular prisms by adding the volumes of the two parts, applying this technique to solve real-world problems.

Code	Digital Student Experience
U50	Measurement and Data Analysis – Volume of Irregular Figures

Code	Teacher Resources
U50	Volume of Rectangular Prisms
U50	Volume of Irregular Figures

Geometry

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

5.G.20

Graph points in the first quadrant of the coordinate plane, and interpret coordinate values of points to represent real-world and mathematical problems.

Code	Digital Student Experience
U51	Computations and Algebraic Thinking – Comparing Points on a Coordinate Plan

Code	Teacher Resources
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.23		
Explain that attributes belonging to a category of two-dimensional figures also belong to all subcategories of that category.		
Code	**Teacher Resources**	
ISIP	Analyzing Properties of Two- and Three-Dimensional Figures	

Appendix

Classroom Resources

Graphic Organizers	
Code	**Teacher Resources**
GO	Dot Paper
GO	Frayer Model
GO	Frayer Model (multiple)
GO	Grid Paper
GO	Grid Paper (cm)
GO	Grid Paper (in)
GO	If-Then Diagram (Large)
GO	If-Then Diagrams
GO	Multiple Number Lines (10-100)
GO	Number Line 0-10 (Labeled and Blank)
GO	Number Line 0-100 (Labeled and Blank)
GO	Number Line 0-20 (Labeled and Blank)
GO	Number Line 0-50 (Labeled and Blank)
GO	Place Value Mat: 3-Column (Blank)
GO	Place Value Mat: 4-Column (Blank)
GO	Ten Frame
AC	Types of Word Problems Anchor Chart

Cards	
Code	**Teacher Resources**
C	Base Ten Block Cards (0-50)
C	Base Ten Block Cards (Multiples of Ten)
C	Customary Unit Conversion Cards – Linear Measurement
C	Customary Unit Conversion Cards – Liquid Measurement
C	Decimal Cards
C	Fraction Equivalency Cards
C	Missing Factor Cards
C	Number Cards (1-10)
C	Number Cards (1-20)

Cards

Code	Teacher Resources
C	Operation Symbol Cards
C	Place Value Word Cards
C	Problem Solving Cards – Addition and Subtraction
C	Subitizing Cards (1-5)
C	Ten Frame Dot Cards (Large)
C	Ten Frame Dot Cards (Small)
C	Three-Digit Number Cards

Number Sense

Code	Teacher Resources
CR	100 Chart
CR	120 Chart
CR	Counting Strips (1-10)
CR	Counting Strips (1-20)
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
CR	Decimal Place Value: Grid and Chart – Tenths
CR	Decimal Place Value: Grid and Chart – Thousandths
CR	Even and Odd Chart
CR	Fraction Bars
GO	Fraction Model Graphic Organizer
CR	Multiple Representations of Numbers (1-10)
AC	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)

Computations and Algebraic Thinking

Code	Teacher Resources
CR	Algebra Tiles
CR	Algebraic Strip Diagrams

Computations and Algebraic Thinking

Code	Teacher Resources
CR	Coordinate Plane
CR	Multiplication/Division Fact Family Template
CR	Part Part Whole Mat

Measurement

Code	Teacher Resources
CR	Linear Measurement Bundle (Includes the following five resources)
AC	Linear Measurement Anchor Chart
AC	Linear Measurement Body Benchmarks Anchor Chart
GO	Linear Measurement Graphic Organizer
AC	Linear Measurement Steps Anchor Chart
AC	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

PreK - 1

Code	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

PreK - 1

Code	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

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Code	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
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)

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Code Legend

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Code	Resources
PP	Practice Linear Measurement Scavenger Hunt (Inches)
PP	Practice Plotting Points on a Coordinate Plane