



# Istation

Istation Math Curriculum Correlated to the North Carolina Standard Course of  
Study for Mathematics

**Grade K – Grade 5**



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# Istation Math Curriculum Correlated to the North Carolina Standard Course of Study for Mathematics



## K–12 Standards for Mathematical Practices (MP)

As stated in the Common Core State 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

**Power Path Featured Content**

<b>Newest Features</b>			
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
<b>NC.K.CC.1</b>			
		U13-15	Odd One Out - Counting
<b>NC.K.CC.2</b>			
		U13-15	Odd One Out – Skip Counting by Fives
<b>NC.K.CC.6</b>			
U9-11	Number Sense – Comparison Cards: Comparing Groups or Numbers	U9-11	More or Less? Which is Best?
<b>NC.K.CC.7</b>			
U9-11	Number Sense – Comparison Cards: Comparing Groups or Numbers	U9-11	More or Less? Which is Best?
<b>K.NBT.1</b>			
		U7-8	Make It, Break It
<b>NC.1.NBT.1</b>			
		U16-17	One Hundred Twenty is Plenty
<b>NC.1.NBT.2</b>			
		U12-13	Two-Digit Memory

# Istation Math Curriculum Correlated to the North Carolina Standard Course of Study for Mathematics

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
<b>NC.1.NBT.3</b>			
U14-16	Number Sense – Comparison Cards: Comparing Two-Digit Numbers	U14-16	Dare to Compare Two-Digit Numbers
<b>NC.2.NBT.1</b>			
		U30-31	Make It, Break It, Toss It
<b>NC.2.NBT.2</b>			
		U24-30	Skip Counting with Patterns
<b>NC.2.NBT.4</b>			
U33-35	Number Sense – Comparison Cards: Comparing Three-Digit Numbers	U33-35	Dare to Compare Three-Digit Numbers
<b>NC.4.NBT.2</b>			
U41-43	Number Sense – Comparison Cards: Comparing Multi-Digit Numbers	U41-43	Dare to Compare Multi-Digit Numbers
<b>NC.5.NBT.3</b>			
U47-49	Number Sense – Comparison Cards: Comparing Decimal Numbers	U47-49	Dare to Compare 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
<b>NC.K.CC.6</b>			
U9-11	Tarjetas de comparación - Comparando grupos o números	U9-11	¿Más o menos? ¿Cuál es mejor?
<b>NC.K.CC.7</b>			
		U9-11	¿Más o menos? ¿Cuál es mejor?
<b>NC.1.NBT.3</b>			
U14-16	Tarjetas de comparación - Comparando números de dos dígitos	U14-16	Atrévete a comparar (Números de dos dígitos)
<b>NC.2.NBT.4</b>			
U33-35	Tarjetas de comparación - Comparando números de tres dígitos	U33-35	Atrévete a comparar (Números de tres dígitos)
<b>NC.4.NBT.2</b>			
U41-43	Tarjetas de comparación - Comparando números de múltiples dígitos	U42-44	Atrévete a comparar (Números de dígitos múltiples)
<b>NC.5.NBT.3</b>			
U47-49	Tarjetas de comparación - Comparando números decimales	U47-49	Atrévete a comparar (Decimales)



## Kindergarten

### Counting and Cardinality

Know number names and the count sequence.

NC.K.CC.1			
Know number names and recognize patterns in the counting sequence by:			
<ul style="list-style-type: none"> <li>Counting to 100 by ones.</li> <li>Counting to 100 by tens.</li> </ul>			
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)		

## NC.K.CC.2

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

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

Code	Digital Student Experience	Code	Teacher Resources
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)		



### NC.K.CC.2

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

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

Code	Digital Student Experience	Code	Teacher Resources
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)		

### NC.K.CC.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)

### NC.K.CC.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 tell the number of objects.**

### NC.K.CC.4

Understand the relationship between numbers and quantities.

- 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 (one-to-one-correspondence).
- Recognize that the last number named tells the number of objects counting regardless of their arrangement (cardinality).
- State the number of objects in a group, of up to 5 objects without counting the objects (perceptual cardinality).

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)

## NC.K.CC.4

Understand the relationship between numbers and quantities.

- 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 (one-to-one-correspondence).
- Recognize that the last number named tells the number of objects counting regardless of their arrangement (cardinality).
- State the number of objects in a group, of up to 5 objects without counting the objects (perceptual cardinality).

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)		
U10	Number Sense – Choose the Correct Amount (1-20)		

### NC.K.CC.4

Understand the relationship between numbers and quantities.

- 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 (one-to-one-correspondence).
- Recognize that the last number named tells the number of objects counting regardless of their arrangement (cardinality).
- State the number of objects in a group, of up to 5 objects without counting the objects (perceptual cardinality).

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

Code	Digital Student Experience	Code	Teacher Resources
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)		

### NC.K.CC.5

Count to answer “how many?” in the following situations:

- Given a number from 1-20 count out that many objects.
- Given up to 20 objects, name the next successive number when an objects is added, recognizing the quantity is one more/greater.
- Given 20 objects arranged in a line, a rectangular array, and a circle, identify how many.
- Given 10 objects in scattered arrangement, identify how many.

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)

## NC.K.CC.5

Count to answer “how many?” in the following situations:

- Given a number from 1-20 count out that many objects.
- Given up to 20 objects, name the next successive number when an objects is added, recognizing the quantity is one more/greater.
- Given 20 objects arranged in a line, a rectangular array, and a circle, identify how many.
- Given 10 objects in scattered arrangement, identify how many.

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 Sticks (1-20)
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)		

## NC.K.CC.5

Count to answer “how many?” in the following situations:

- Given a number from 1-20 count out that many objects.
- Given up to 20 objects, name the next successive number when an objects is added, recognizing the quantity is one more/greater.
- Given 20 objects arranged in a line, a rectangular array, and a circle, identify how many.
- Given 10 objects in scattered arrangement, identify how many.

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)		

## Compare numbers.

## NC.K.CC.6

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

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)

## NC.K.CC.7

Compare two numbers, within 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)

## Operations and Algebraic Thinking

Understand addition and subtraction.

## NC.K.OA.1

Represent addition and subtraction, within 10:

- Use a variety of representations such as objects, fingers, mental images, drawings, sounds, acting out situations, verbal explanations or expressions.
- Demonstrate understanding of addition and subtraction by making connections among representations.

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

## NC.K.OA.1

Represent addition and subtraction, within 10:

- Use a variety of representations such as objects, fingers, mental images, drawings, sounds, acting out situations, verbal explanations or expressions.
- Demonstrate understanding of addition and subtraction by making connections among representations.

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)	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 – “Chicago Pizza Blues” (within 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
U14	Computations and Algebraic Thinking – Whole Part Part Subtraction Stories (within 10)	U20	Adding with Addend Cards



## NC.K.OA.1

Represent addition and subtraction, within 10:

- Use a variety of representations such as objects, fingers, mental images, drawings, sounds, acting out situations, verbal explanations or expressions.
- Demonstrate understanding of addition and subtraction by making connections among representations.

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

## NC.K.OA.2

Solve addition and subtraction word problems, within 10 using objects or drawings to represent the problem when solving:

- Add to/Take From-Result Unknown
- Put Together/Take Apart (Total Unknown and Two Addends Unknown)

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

## NC.K.OA.2

Solve addition and subtraction word problems, within 10 using objects or drawings to represent the problem when solving:

- Add to/Take From-Result Unknown
- Put Together/Take Apart (Total Unknown and Two Addends Unknown)

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)	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
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

### NC.K.OA.2

Solve addition and subtraction word problems, within 10 using objects or drawings to represent the problem when solving:

- Add to/Take From-Result Unknown
- Put Together/Take Apart (Total Unknown and Two Addends Unknown)

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)	ISIP EM	Ten Frame Addition
U18	Number Sense – Decompose Numbers Less Than or Equal to Ten		

### NC.K.OA.3

Decompose numbers less than or equal to 10 into pairs in more than one way by using objects or drawings, and record each decomposition 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)	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)

### NC.K.OA.3

Decompose numbers less than or equal to 10 into pairs in more than one way by using objects or drawings, and record each decomposition 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 – “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
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

## Istation Math Curriculum Correlated to the North Carolina Standard Course of Study for Mathematics

**NC.K.OA.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 expression.

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
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

### NC.K.OA.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 expression.

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)		
U18	Number Sense – Decompose Numbers Less Than or Equal to Ten		

## Number and Operations in Base Ten

**Build foundations for place value.**

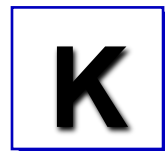
### K.NBT.1

Compose and decompose numbers from 11 to 19 into ten ones and some further ones by:

- Using objects or drawings.
- Recording each composition or decomposition with a drawing or expression.
- Understanding 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



## Measurement and Data

**Describe and compare measurable attributes.**

<b>NC.K.MD.1</b>			
Describe measurable attributes of objects; and describe several different measurable attributes of a single object.			
MP 1, 2, 3, 4, 5, 6, 7, 8			
<b>Code</b>	<b>Digital Student Experience</b>	<b>Code</b>	<b>Teacher Resources</b>
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?

<b>NC.K.MD.2</b>			
Directly compare two objects with a measurable attribute in common to see which object has “more of” or “less of” the attribute and describe the difference. For example, directly compare the heights of two children and describe one child as taller/shorter			
MP 1, 2, 3, 4, 5, 6, 7, 8			
<b>Code</b>	<b>Digital Student Experience</b>	<b>Code</b>	<b>Teacher Resources</b>
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

### NC.K.MD.2

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

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

Code	Digital Student Experience	Code	Teacher Resources
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.**

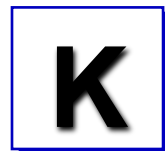
### NC.K.MD.3

Classify objects into given categories; count the numbers of objects in each category and sort the categories by count.

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





## Geometry

### Identify and describe shapes.

NC.K.G.2			
Correctly name squares, circles, triangles, rectangles, hexagons, cubes, cones ,cylinders and spheres 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

NC.K.G.3			
Identify circles, triangles, rectangles, hexagons, cubes, cones ,cylinders and spheres as two-dimensional or three-dimensional.			
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.**

<b>NC.K.G.4</b>			
Analyze and compare two- and three-dimensional shapes, in different sizes and orientations, using informal language to describe their similarities, differences, attributes, and other properties.			
MP 1, 2, 3, 4, 5, 6, 7, 8			
<b>Code</b>	<b>Digital Student Experience</b>	<b>Code</b>	<b>Teacher Resources</b>
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

### Operations and Algebraic Thinking

#### Represent and solve problems.

#### NC.1.OA.1

Represent and solve addition and subtraction word problems, within 20 with unknowns by using objects, drawings and equations with a symbol for the unknown number to represent the problems, when solving:

- Add to/Take from-Change Unknown
- Put together/Take-Apart-Addend Unknown
- Compare-Difference Unknown

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)

**NC.1.OA.1**

Represent and solve addition and subtraction word problems, within 20 with unknowns by using objects, drawings and equations with a symbol for the unknown number to represent the problems, when solving:

- Add to/Take from-Change Unknown
- Put together/Take-Apart-Addend Unknown
- Compare-Difference Unknown

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

Code	Digital Student Experience	Code	Teacher Resources
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		

## NC.1.OA.2

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

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

Code	Digital Student Experience	Code	Teacher Resources
U16	Computations and Algebraic Thinking – Determine the Unknown Whole Numbers in Addition Sentences	U16	Beginning–Middle–End
U20	Computations and Algebraic Thinking – Properties of Addition – Associative Property	U22	Beading the Difference
		U22	Mystery in the Middle
		ISIP EM	Associative Property of Addition
		ISIP EM	Commutative Property of Addition

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

## NC.1.OA.3

Apply the commutative and associative properties as strategies for solving addition problems.

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

## Istation Math Curriculum Correlated to the North Carolina Standard Course of Study for Mathematics

**NC.1.OA.3**

Apply the commutative and associative properties as strategies for solving addition problems.

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

Code	Digital Student Experience	Code	Teacher Resources
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

**NC.1.OA.4**

Solve an unknown-addend problems, within 20, by using addition strategies and/or changing it into a subtraction 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 “Chicago Pizza Blues” (within 20)	U18	Decomposing House
U22	Computations and Algebraic Thinking – Whole Part Part (within 20)	U19	Decomposing House with Pictures

**NC.1.OA.4**

Solve an unknown-addend problems, within 20, by using addition strategies and/or changing it into a subtraction problem.

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

Code	Digital Student Experience	Code	Teacher Resources
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.

## NC.1.OA.6

Add and subtract within 20, Use strategies such as:

- Counting on
- Making ten
- Decomposing a number leading to a ten U
- Using the relationship between addition and subtraction
- Using a number line
- Creating equivalent but simpler or known sums

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
U20	Computations and Algebraic Thinking – Fact Strategies	ISIP EM	Building Sums to Ten



## Istation Math Curriculum Correlated to the North Carolina Standard Course of Study for Mathematics

**NC.1.OA.6**

Add and subtract within 20, Use strategies such as:

- Counting on
- Making ten
- Decomposing a number leading to a ten U
- Using the relationship between addition and subtraction
- Using a number line
- Creating equivalent but simpler or known sums

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

Code	Digital Student Experience	Code	Teacher Resources
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

<b>NC.1.OA.9</b>			
Demonstrate fluency with addition and subtraction within ten.			
MP 1, 2, 3, 4, 5, 6, 7, 8			
<b>Code</b>	<b>Digital Student Experience</b>	<b>Code</b>	<b>Teacher Resources</b>
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
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

### NC.1.OA.9

Demonstrate fluency with addition and subtraction within ten.

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

Code	Digital Student Experience	Code	Teacher Resources
U10	Computations and Algebraic Thinking – Addition Stories	FP	Write, Tally, Draw
		FP	Shake It, Make It, Solve It (Addition)
		FP	Wipe Out

**Analyze addition and subtraction equations within 10.**

### NC.1.OA.8

Determine the unknown whole number in an addition or subtraction equation relating three whole numbers. For example, determine the unknown number that makes the equation true in each of the equations  $8 + ? = 11$ ;  $5 = \_ - 3$ ;  $6 + 6 = \_$ .

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

Code	Digital Student Experience	Code	Teacher Resources
U16	Computations and Algebraic Thinking – Determine the Unknown Whole Number in Addition Sentences	U16	Beginning–Middle–End
		U24	Mystery in the Middle

## Number and Operations in Base Ten

### Understand place value.

#### NC.1.NBT.2

Understand that the two digits of a two-digit number represents amounts of tens and ones.

- Unitize by making a ten from a collection of ten ones.
- Model the numbers from 11 to 19 as composed of a ten and one, two, three, four, five, six, seven, eight, or nine ones.
- Demonstrate that the numbers 10, 20, 30, 40, 50, 60, 70, 80, 90 refer to one, two, three, four, five six, seven, eight, or nine tens, with 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

**NC.1.NBT.3**

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

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

Code	Digital Student Experience	Code	Teacher Resources
		ISIP EM	Base Ten Block 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,

**NC.1.NBT.4**

Using concrete models or drawings, strategies based on place value, properties of operations and explaining the reasoning used, and within 100, in the following situations:

- A two-digit number and a one-digit number
- A two-digit number and a multiple of 10

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

# NC.1.NBT.4

Using concrete models or drawings, strategies based on place value, properties of operations and explaining the reasoning used, and within 100, in the following situations:

- A two-digit number and a one-digit number
- A two-digit number and a multiple of 10

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

Code	Digital Student Experience	Code	Teacher Resources
U20	Computations and Algebraic Thinking – Commutative Property	U20	(Properties of) Operations – Grouping Groceries
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

**Measurement and Data****Build Understanding of Time and Money**

<b>NC.1.MD.3</b>			
Tell and write time in hours and half-hours using analog and digital clocks.			
MP 1, 2, 3, 4, 5, 6, 7, 8			
<b>Code</b>	<b>Digital Student Experience</b>	<b>Code</b>	<b>Teacher Resources</b>
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.****NC.1.MD.4**

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

- Ask and answer questions about the total number of data points.
- Ask and answer questions about how many in each category
- Ask and answer questions about how many 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 objects and their attributes.****NC.1.G.3**

Partition circles and rectangles into two and four equal shares.

- Describe the shares as halves, fourths, as half of or fourth of the shares.
- Describe the whole as two of, or four of the shares.
- Explain 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

### Operations and Algebraic Thinking

#### Represent and solve problems.

#### NC.2.OA.1

Represent and solve addition and subtraction word problems, within 100, with unknowns in all positions, by using representations and equations with a symbol for the unknown number to represent the problems when solving:

- One-Step problems:
  - Add to/Take from-Start Unknown
  - Compare-Bigger Unknown
  - Compare-Similar Unknown
- Two-Step problems involving single digits:
  - Add to/Take from-Start Unknown
  - Compare-Bigger Unknown
  - Compare-Similar Unknown

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.**

<b>NC.2.OA.2</b>			
Demonstrate fluency with addition and subtraction, within 20, using mental strategies.			
MP 1, 2, 3, 4, 5, 6, 7, 8			
<b>Code</b>	<b>Digital Student Experience</b>	<b>Code</b>	<b>Teacher Resources</b>
		U31	Fact Families – Addition and Subtraction
		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
		ISIP	Addition and Subtraction Fact Families
		ISIP	Fact Family Triangles

# Istation Math Curriculum Correlated to the North Carolina Standard Course of Study for Mathematics

## Work with equal groups.

NC.2.OA.3			
Determine whether a group of objects, within 20, has an odd or even number of members by: <ul style="list-style-type: none"> <li>Pairing objects, then counting them by 2s</li> <li>Determining whether objects can be placed into two equal groups.</li> <li>Writing an equation to express an even number as a sum of two equal addends.</li> </ul>			
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

NC.2.OA.4			
Use addition to find the total number of objects arranged in rectangular arrays with up to 5 rows and up to 5 columns; write an equation to express the total as a sum of equal addends.			
MP 1, 2, 3, 4, 5, 6, 7, 8			
Code	Digital Student Experience	Code	Teacher Resources
U32	Computations and Algebraic Thinking – Addition Arrays	U32	Addition Arrays

## Number and Operations in Base Ten

### Understand place value.

#### NC.2.NBT.1

Understand that the three digits of a three-digit number represent amounts of hundreds, tens, and ones.

- Utilize by making a hundred from a collection of ten tens.
- Demonstrate that the numbers 100, 200, 300, 400, 500, 600, 700, 800, 900 refer to one, two, three, four, five, six, seven, eight or nine hundreds with 0 tens and 0 ones.
- Compose and decompose numbers using various groupings of hundreds, tens, and 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

## Istation Math Curriculum Correlated to the North Carolina Standard Course of Study for Mathematics

<b>NC.2.NBT.3</b>			
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			
<b>Code</b>	<b>Digital Student Experience</b>	<b>Code</b>	<b>Teacher Resources</b>
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

## Istation Math Curriculum Correlated to the North Carolina Standard Course of Study for Mathematics

**NC.2.NBT.4**

Compare two three-digit numbers based on meanings of the hundreds, tens, and ones digits, using  $>$ ,  $=$ , and  $<$  symbols to record the results of comparisons.

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.**

**NC.2.NBT.5**

Demonstrate fluency with addition and subtraction, within 100 by:

- Flexibly using strategies based on place value, properties of operations, and/or the relationship between addition and subtraction.
- Comparing addition and subtraction strategies and explaining why they work.
- Selecting an appropriate strategy in order to efficiently compute sums and differences.

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

## Istation Math Curriculum Correlated to the North Carolina Standard Course of Study for Mathematics

**NC.2.NBT.5**

Demonstrate fluency with addition and subtraction, within 100 by:

- Flexibly using strategies based on place value, properties of operations, and/or the relationship between addition and subtraction.
- Comparing addition and subtraction strategies and explaining why they work.
- Selecting an appropriate strategy in order to efficiently compute sums and differences.

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

Code	Digital Student Experience	Code	Teacher Resources
U31	Computations and Algebraic Thinking – Adding with Regrouping – Partitioning	U31	Subtracting Using Partitioning
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



## Istation Math Curriculum Correlated to the North Carolina Standard Course of Study for Mathematics

**NC.2.NBT.5**

Demonstrate fluency with addition and subtraction, within 100 by:

- Flexibly using strategies based on place value, properties of operations, and/or the relationship between addition and subtraction.
- Comparing addition and subtraction strategies and explaining why they work.
- Selecting an appropriate strategy in order to efficiently compute sums and differences.

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

Code	Digital Student Experience	Code	Teacher Resources
		FP	Wipe Out
		FP	Write, Tally, Draw

**NC.2.NBT.7**

Add and subtract within 1000, relating the strategy to a written method, using:

- Concrete models or drawings
- Strategies based on place value
- Properties of operations
- Relationship between addition and subtraction

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

# Istation Math Curriculum Correlated to the North Carolina Standard Course of Study for Mathematics

## NC.2.NBT.7

Add and subtract within 1000, relating the strategy to a written method, using:

- Concrete models or drawings
- Strategies based on place value
- Properties of operations
- Relationship between addition and subtraction

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

Code	Digital Student Experience	Code	Teacher Resources
		ISIP	Choosing the Operation

## Measurement and Data

Measure and estimate lengths.

## NC.2.MD.1

Measure the length of an object in standard units by selecting and using appropriate tools such as rulers, yardsticks, meter sticks, and measuring tapes.

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

Code	Digital Student Experience	Code	Teacher Resources
U33	Measurement – Choose Units and Measure Lengths	U33	Choosing Units of Linear Measurement
U33	Measurement – Measure to the Nearest Centimeter	U33	Measure to the Nearest Inch
		U33	Measure to the Nearest Centimeter
		ISIP	Appropriate Tools for Linear Measurement
		ISIP	How to Use Linear Measurement Tools

**NC.2.MD.1**

Measure the length of an object in standard units 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
		ISIP	Measuring Objects
		ISIP	Ruler Relay

**NC.2.MD.2**

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

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

Code	Digital Student Experience	Code	Teacher Resources
		ISIP	Unit Relationships

**NC.2.MD.4**

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

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

Code	Digital Student Experience	Code	Teacher Resources
		ISIP	Ruler Relay

### Relate addition and subtraction to length.

NC.2.MD.6			
Represent whole numbers as lengths from 0 on a number line diagram with equally spaced points and represent whole-number sums and differences within 100 on a number line..			
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

### Build understanding of time and money.

NC.2.MD.7			
Tell and write time from analog and digital clocks to the nearest five minutes, using a.m. and p.m.			
MP 1, 2, 3, 4, 5, 6, 7, 8			
Code	Digital Student Experience	Code	Teacher Resources
U34	Measurement – Tell Time to the Nearest Five Minutes	U34	Time to the Nearest Five Minutes
		U34	Time – AM and PM
		U34	Time to the Quarter Hour

# Istation Math Curriculum Correlated to the North Carolina Standard Course of Study for Mathematics

## NC.2.MD.8

Solve word problems involving:

- Quarters, dimes, nickels, and pennies within 99¢, using ¢ symbol appropriately.
- Whole dollar amounts using the \$ appropriately.

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

Code	Digital Student Experience	Code	Teacher Resources
		U24	Enough Money?
		U32	Money Word Problems
		AR	Cent Symbol Four-in-a-Row

## Represent and interpret data

## NC.2.MD.10

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

- Draw a picture graph and a bar graph with a single-unit scale to represent a data set.
- Solve simple put-together, take-apart, and compare problems using information presented in a picture and a bar 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

### NC.2.MD.10

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

- Draw a picture graph and a bar graph with a single-unit scale to represent a data set.
- Solve simple put-together, take-apart, and compare problems using information presented in a picture and a bar graph.

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

Code	Digital Student Experience	Code	Teacher Resources
		U33	Creating Bar Graphs
		U33	Interpreting Bar Graphs
		U33	Analyzing Bar Graphs

## Geometry

Reason with shapes and their attributes.

### NC.2.G.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*, *quarter of*.
- Describe the whole as two halves, three thirds, four fourths.
- Explain 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		

# Istation Math Curriculum Correlated to the North Carolina Standard Course of Study for Mathematics

## Grade 3

### Operations and Algebraic Thinking

Represent and solve problems involving multiplication and division.

#### NC.3.OA.1

For products of whole numbers with two factors up to 10 and including 10:

- Interpret the factors as representative the number equal groups and the number of objects in each group.
- Illustrate and explain strategies including arrays, repeated addition, decomposing a factor, and applying the commutative and associative properties.

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 1x1 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

# Istation Math Curriculum Correlated to the North Carolina Standard Course of Study for Mathematics

## NC.3.OA.1

For products of whole numbers with two factors up to 10 and including 10:

- Interpret the factors as representative the number equal groups and the number of objects in each group.
- Illustrate and explain strategies including arrays, repeated addition, decomposing a factor, and applying the commutative and associative properties.

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

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

## NC.3.OA.2

For whole-number quotients of whole numbers with a one-digit divisor and a one-digit quotient:

- Interpret the divisor and quotient in a division equation as representing the number of equal groups and the number of objects in each group.
- Illustrate and explain strategies including arrays, repeated addition or subtraction, and decomposing a factor.

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



**NC.3.OA.2**

For whole-number quotients of whole numbers with a one-digit divisor and a one-digit quotient:

- Interpret the divisor and quotient in a division equation as representing the number of equal groups and the number of objects in each group.
- Illustrate and explain strategies including arrays, repeated addition or subtraction, and decomposing a factor.

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

Code	Digital Student Experience	Code	Teacher Resources
		ISIP	Relating Multiplication and Division

**NC.3.OA.3**

Represent, interpret, and solve one-step problems involving multiplication and division.

- Solve multiplication word problems with factors up to and including 10. Represent the problem using arrays, pictures, and/or equations with a symbol for the unknown number to represent the problem
- Solve division word problems with a divisor and quotient up to and including 10. Represent the problem using arrays, pictures, repeated subtraction and/or 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

# Istation Math Curriculum Correlated to the North Carolina Standard Course of Study for Mathematics

## Multiply and divide within 100.

NC.3.OA.7			
Demonstrate fluency with multiplication and division with factors, quotients and divisors up to and including 10.			
<ul style="list-style-type: none"> <li>Know from memory all products with factors up to and including 10.</li> <li>Illustrate and explain using the relationship between multiplication and division</li> <li>Determine the unknown whole number in a multiplication or division equation relating three whole numbers.</li> </ul>			
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
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

**NC.3.OA.7**

Demonstrate fluency with multiplication and division with factors, quotients and divisors up to and including 10.

- Know from memory all products with factors up to and including 10.
- Illustrate and explain using the relationship between multiplication and division
- Determine the unknown whole number in a multiplication or division equation relating three whole numbers.

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

		ISIP	Doubling and Halving
		FP	Wipe Out
		FP	Multominoes
		FP	Tall Towers
		FP	Dice Blocks
		FP	Sticky Products
		FP	Multiplication Fast Track
		FP	Division Fast Track
		FP	Fact Family Triangles: Multiplication and Division
		FP	Shake It! Make It! Solve It! (Multiplication)

**Solve problems two-step problems.**

<b>NC.3.OA.8</b>			
Solve two-step word problems using addition, subtraction, and multiplication, representing problems using equations with a symbol for the unknown number.			
MP 1, 2, 3, 4, 5, 6, 7, 8			
<b>Code</b>	<b>Digital Student Experience</b>	<b>Code</b>	<b>Teacher Resources</b>
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
		U36	Problem Solving without Numbers: Multiplication and Division

### Explore patterns of numbers.

NC.3.OA.9			
Interpret patterns of multiplication on a hundreds board and/or multiplication table.			
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

### Number and Operations in Base Ten

#### Use place value to add and subtract.

NC.3.NBT.2			
Add and subtract whole numbers up to and including 1,000.			
<ul style="list-style-type: none"> <li>Use estimation strategies to assess reasonableness of answers.</li> <li>Model and explain how the relationship between addition and subtraction can be applied to solve addition and subtraction problems. Use expanded form to decompose number and then find sums and differences.</li> </ul>			
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

# Istation Math Curriculum Correlated to the North Carolina Standard Course of Study for Mathematics

## Number and Operations – Fractions

### Understand fractions as numbers.

NC.3.NF.1			
Interpret unit fractions with denominators of 2, 3, 4, 6, and 8 as quantities formed when a whole is partitioned into equal parts;			
<ul style="list-style-type: none"> <li>Explain that a unit fraction is one of those parts.</li> <li>Represent and identify unit fractions using area and length models.</li> </ul>			
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

NC.3.NF.2			
Interpret fractions with denominators of 2, 3, 4, 6, and 8 using area and length models.			
<ul style="list-style-type: none"> <li>Using an area model, explain that the numerator of a fraction represents the number of equal parts of the unit fraction.</li> <li>Using a number line, explain that the numerator of a fraction represents the number of lengths of the unit fraction from 0.</li> </ul>			
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

## Istation Math Curriculum Correlated to the North Carolina Standard Course of Study for Mathematics

**NC.3.NF.2**

Interpret fractions with denominators of 2, 3, 4, 6, and 8 using area and length models.

- Using an area model, explain that the numerator of a fraction represents the number of equal parts of the unit fraction.
- Using a number line, explain that the numerator of a fraction represents the number of lengths of the unit fraction from 0.

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

Code	Digital Student Experience	Code	Teacher Resources
		U37	Identifying Equivalent Fractions
		ISIP	Identify Equivalent Fractions Using Area Models
		ISIP	Recognizing Fractions in Different Forms

**NC.3.NF.3**

Represent equivalent fractions with area and length models by:

- Composing and decomposing fractions into equivalent fractions using related fractions, halves, fourths and eighths; thirds and sixths.
- Explaining that a fraction with the same numerator and denominator equals one whole. Expressing whole numbers as fractions, and recognize fractions that are equivalent to whole numbers.

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
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

**NC.3.NF.3**

Represent equivalent fractions with area and length models by:

- Composing and decomposing fractions into equivalent fractions using related fractions, halves, fourths and eighths; thirds and sixths.
- Explaining that a fraction with the same numerator and denominator equals one whole. Expressing whole numbers as fractions, and recognize fractions that are equivalent to whole numbers.

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

Code	Digital Student Experience	Code	Teacher Resources
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



# Istation Math Curriculum Correlated to the North Carolina Standard Course of Study for Mathematics

## Measurement and Data

Solve problems involving measurement.

<b>NC.3.MD.1</b>			
Tell and write time to the nearest minute. Solve word problems involving addition and subtraction of time intervals within the same hour.			
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.

<b>NC.3.MD.3</b>			
Represent and interpret scaled picture and bar graphs:			
<ul style="list-style-type: none"> <li>Collect data by asking a question that yields data in up to four categories.</li> <li>Make a representation of data and interpret data in a frequency table, scaled picture graph , and/or scaled bar graph with axes provided.</li> <li>Solve one and two-step “how many more” and “how many less” problems using information from these graphs.</li> </ul>			
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

## Istation Math Curriculum Correlated to the North Carolina Standard Course of Study for Mathematics

**Understand the concept of area.**

<b>NC.3.MD.5</b>			
Find the area of a rectangles with whole-number side lengths by tiling without gaps or overlaps and counting unit squares.			
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

<b>NC.3.MD.7</b>			
Relate area to the operations of multiplication and addition.			
<ul style="list-style-type: none"> <li>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.</li> <li>Multiply side lengths to find areas of rectangles with whole number side lengths in the context of solving problems, and represent whole-number products as rectangular areas in mathematical reasoning.</li> <li>Use tiles and/or arrays to illustrate and explain that the area of a rectangle can be found by partitioning it into two smaller rectangles, and that the area of the large rectangle is the sum of the two smaller rectangles.</li> </ul>			
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

# Istation Math Curriculum Correlated to the North Carolina Standard Course of Study for Mathematics

## Understand the concept of perimeter.

NC.3.MD.8			
Solve problems involving perimeters of polygons, including finding the perimeter given the side lengths, and finding an unknown side length.			
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
		U38	Finding Missing Side Lengths in Perimeter Problems
		ISIP	Measurement and Data Analysis – Measuring Perimeter of Polygons

## Geometry

### Reason with shapes and their attributes

NC.3.G.1			
Reason with two-dimensional shapes and their attributes.			
<ul style="list-style-type: none"> <li>Investigate, describe, and reason about composing triangles and quadrilaterals and decomposing quadrilaterals.</li> <li>Recognize and draw examples and non-examples of types of quadrilaterals including rhombuses, rectangles, squares, parallelograms, and trapezoids.</li> </ul>			
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

**Grade 4****Operations and Algebraic Thinking****Represent and solve problems involving multiplication and division.****NC.4.OA.1**

Interpret a multiplication equation as a comparison. Multiply or divide to solve word problems involving multiplicative comparisons using models and equations with a symbol for the unknown number. Distinguish 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

**Use the four operations with whole numbers to solve problems.****NC.4.OA.3**

Solve two-step word problems involving the four operations with whole numbers.

- Use estimation strategies to assess reasonableness of answers.
- Interpret remainders in word problems.
- Represent problems using equations with a letter standing for the unknown quantity.

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.**

<b>NC.4.OA.5</b>			
Generate and analyze a number or shape pattern that follows a given rule.			
MP 1, 2, 3, 4, 5, 6, 7, 8			
Code	Digital Student Experience	Code	Teacher Resources
		ISIP	Integrating Fact Practice Using Input/Output Function Tables

**Number and Operations in Base Ten**

**Generalize place value understanding for multi-digit whole numbers.**

<b>NC.4.NBT.1</b>			
Explain that in a multi-digit whole number, a digit in one place represents 10 times as much as it represents in the place to its right, up to 100,000.			
MP 1, 2, 3, 4, 5, 6, 7, 8			
Code	Digital Student Experience	Code	Teacher Resources
U40	Number Sense – Expanded Form to Thousands		
U40	Number Sense – Standard Form to Thousands		

### NC.4.NBT.2

Read and write multi-digit whole numbers up to and including 100,00 using numerals, number names, and expanded form.

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

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

### NC.4.NBT.4

Add and subtract multi-digit whole numbers up to and including 100,000 using the standard algorithm with place value understanding.

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

**Number and Operations – Fractions****Extend understanding of fractions.****NC.4.NF.1**

Explain why a fraction is equivalent to another fraction by using area and length fraction models, with attention to how the number and size of the parts differ even though the two fractions themselves are the same size.

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

**NC.4.NF.2**

Compare two fractions with different numerators and different denominators, using the denominators 2, 3, 4, 5, 6, 8, 10, 12, and 100. Recognize that comparisons are valid only when the two fractions refer to the same whole. Record the results of comparisons with symbols  $>$ ,  $=$ , or  $<$ . Justify the conclusions by:

- Reasoning about their size and using area and length models.
- Using benchmark fractions 0,  $\frac{1}{2}$ , and whole.
- Comparing common numerator or common denominator.

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



# Istation Math Curriculum Correlated to the North Carolina Standard Course of Study for Mathematics

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

## NC.4.NF.3

Understand and justify decompositions of fractions with denominators 2, 3, 4, 5, 6, 8, 10, 12, and 100.

- Understand addition and subtraction of fractions as joining and separating parts referring to the same whole.
- Decompose a fraction into a sum of unit fractions and a sum of fractions with the same denominator in more than one way using area models, length models, and equations
- Add and subtract fractions, including mixed numbers with like denominators, by replacing mixed number with an equivalent fraction, and/or by properties of operations and the relationship between addition and subtraction
- Solve word problems involving addition and subtraction of fractions, including mixed numbers by writing equations from a visual representation of 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		

# Istation Math Curriculum Correlated to the North Carolina Standard Course of Study for Mathematics

**Understand decimal notation for fractions, and compare decimal fractions.**

<b>NC.4.NF.5</b>			
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 $\frac{3}{10}$ as $\frac{30}{100}$ , and add $\frac{3}{10} + \frac{4}{100} = \frac{34}{100}$ .			
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

<b>NC.4.NF.6</b>			
Use decimal notation to represent fractions			
<ul style="list-style-type: none"> <li>Express, model and explain the equivalence between fractions with denominators of 10 and 100</li> <li>Use equivalent fractions to add two fractions with denominators of 10 and 100</li> <li>Represent tenths and hundredths with models, making connections between fractions and decimals.</li> </ul>			
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

## Istation Math Curriculum Correlated to the North Carolina Standard Course of Study for Mathematics

**NC.4.NF.6**

Use decimal notation to represent fractions

- Express, model and explain the equivalence between fractions with denominators of 10 and 100
- Use equivalent fractions to add two fractions with denominators of 10 and 100
- Represent tenths and hundredths with models, making connections between fractions and decimals.

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

Code	Digital Student Experience	Code	Teacher Resources
		ISIP	Understand Decimal Numbers with Fractional Language
		ISIP	Fraction to Decimal Equivalence

**NC.4.NF.7**

Compare two decimals to hundredths by reasoning about their size. using area and length models, and recording the results of comparisons with the symbols  $>$ ,  $=$ , or  $<$ . Recognize that comparisons are valid only when the two decimals refer to the same whole.

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

**Measurement and Data****Solve problems involving measurement.****NC.4.MD.1**

Know relative sizes of measurement units. Solve problems involving metric measurement

- Measure to solve problems involving metric units: centimeter, meter, gram, kilogram Liter, milliliter.
- Add, subtract, multiply, and divide to solve one-step word problems involving whole-number measurements of length, mass, and capacity that are given in metric units.

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

**NC.4.MD.2**

Use multiplicative reasoning to convert metric measurements from a larger unit to a smaller unit using place value understanding, two-column tables, and length models.

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

### NC.4.MD.3

Solve problems with area and perimeter.

- Find areas of rectilinear figures with known side lengths.
- Solve problems involving a fixed area and varying perimeters and a fixed perimeter and varying areas.
- Apply the area and perimeter formulas for rectangles in real world and mathematical problems.

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

Code	Digital Student Experience	Code	Teacher Resources
		ISIP	Finding Area of Rectangles and Squares by Using Multiplication
		ISIP	Quantifying Areas of Rectangles and Squares
		ISIP	Making Connections between Multiplication and Area
		ISIP	Decomposing Figures to Find the Area of Polygons

# Represent and interpret data.

## NC.4.MD.4

Represent and interpret data using whole numbers.

- Collect data by asking questions that yields numerical data.
- Make a representation of data and interpret data in a frequency table, scaled picture graph, and/or line plot.
- Determine whether a survey question will yield categorical or numerical data.

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

# Understand concepts of angle and measure angles.

## NC.4.MD.6

Develop an understanding of angles and angle measurement.

- Understand angles as geometric shapes that are form wherever to rays share a common endpoint and are measured in degrees.
- Measure and sketch angles in whole-number degrees using a protractor.
- Solve addition and subtraction problems to find unknown angles on a diagram in real-world and mathematical problems.

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

## Geometry

Classify shapes based on lines and angles in two-dimensional figures.

NC.4.G.1			
Draw and identify points, lines, line segments, rays, angles, and perpendicular and parallel lines.			
MP 1, 2, 3, 4, 5, 6, 7, 8			
Code	Digital Student Experience	Code	Teacher Resources
		U45	Measuring Angles with a Protractor
		ISIP	Line and Angle Identification

**Grade 5****Operations and Algebraic Thinking****Understand the place value system.****NC.5.OA.1**

Write, explain, and evaluate numerical expressions involving the four operations to solve up to two-step problems. Include expressions involving

- Parentheses, using the order of operations.
- Commutative, associative, and distributive properties.

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.**

<b>NC.5.OA.3</b>			
Generate two numerical patterns using two given rules.			
<ul style="list-style-type: none"> <li>Identify apparent relationships between corresponding terms.</li> <li>Form ordered pairs consisting of corresponding terms from the two patterns</li> <li>Graph the ordered pairs on a coordinate plane.</li> </ul>			
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

**Number and Operations in Base Ten****Understand the place value system.**

<b>NC.5.NBT.1</b>			
Explain the patterns in the place value system from one million to the thousandths place.			
<ul style="list-style-type: none"> <li>Explain 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 lefts</li> <li>Explain patterns in products and quotients when number are multiplied by 1,000, 100, 10, 0.1, and 0.01 and/or divided by 10 and 100.</li> </ul>			
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

**NC.5.NBT.1**

Explain the patterns in the place value system from one million to the thousandths place.

- Explain 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  $\frac{1}{10}$  of what it represents in the place to its lefts
- Explain patterns in products and quotients when number are multiplied by 1,000, 100, 10, 0.1, and 0.01 and/or divided by 10 and 100.

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

**NC.5.NBT.3**

Read, write, and compare decimals to thousandths.

- Write decimals using base-ten numerals, number names, and expanded form
- Compare two decimals to thousandths based on the value 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

**NC.5.NBT.3**

Read, write, and compare decimals to thousandths.

- Write decimals using base-ten numerals, number names, and expanded form
- Compare two decimals to thousandths based on the value 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 Tenths and Hundredths (with visual aids)	U46	Abstract Decimal Comparison
U46	Number Sense – Abstract Comparison of Decimals to Thousandths	U46	Decimals with Whole Number Comparison

**Perform operations with multi-digit whole numbers.**

**NC.5.NBT.6**

Find quotients with remainders when dividing whole numbers with up to four-digit dividends and two-digit divisors using rectangular arrays, area models, repeated subtraction, partial quotients and/or the relationship between multiplication and division. Use models to make connects and develop the algorithm

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

# Perform operations with decimals.

## NC.5.NBT.7

Compute and solve real-world problems with multi-digit whole number and decimal numbers.

- Add and subtract decimals to thousandths using models, drawings or strategies based on place value.
- Multiply decimals with a product to the thousandths using models, drawings or strategies based on place value
- Divide a whole number by a decimal and divide a decimal by a whole number, using repeated subtraction or area models. Decimals should be limited to hundredths.
- Use estimation strategies to assess reasonableness of answers.

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
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

**NC.5.NBT.7**

Compute and solve real-world problems with multi-digit whole number and decimal numbers.

- Add and subtract decimals to thousandths using models, drawings or strategies based on place value.
- Multiply decimals with a product to the thousandths using models, drawings or strategies based on place value
- Divide a whole number by a decimal and divide a decimal by a whole number, using repeated subtraction or area models. Decimals should be limited to hundredths.
- Use estimation strategies to assess reasonableness of answers.

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

Code	Digital Student Experience	Code	Teacher Resources
		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.

**NC.5.NF.1**

Add and subtract fractions, including mixed numbers, with unlike denominators using related fractions: halves fourths and eighth; thirds, sixths, and twelfths; fifths, tenths, and hundredths.

- Use benchmark fractions and number sense of fractions to estimate mentally and assess the reasonableness of answers.
- Solve one- and two-step word problems in context using area and length models to develop the algorithm. Represent the word problem in an equation.

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

## Istation Math Curriculum Correlated to the North Carolina Standard Course of Study for Mathematics

**NC.5.NF.1**

Add and subtract fractions, including mixed numbers, with unlike denominators using related fractions: halves fourths and eighth; thirds, sixths, and twelfths; fifths, tenths, and hundredths.

- Use benchmark fractions and number sense of fractions to estimate mentally and assess the reasonableness of answers.
- Solve one- and two-step word problems in context using area and length models to develop the algorithm. Represent the word problem in an equation.

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

Code	Digital Student Experience	Code	Teacher Resources
U48	Computations and Algebraic Thinking – Subtract 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.**

**NC.5.NF.4**

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

- Use area and lengths models to multiply two fractions with the denominators 2, 3, 4.
- Explain why multiplying a given number by a fraction greater than 1 results in a product greater than the given number and when multiplying a given number by a fraction less than 1 results in a products smaller than the given number.
- Solve one-step word problems involving multiplication of fractions using models to develop the algorithm.

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)

**NC.5.NF.4**

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

- Use area and lengths models to multiply two fractions with the denominators 2, 3, 4.
- Explain why multiplying a given number by a fraction greater than 1 results in a product greater than the given number and when multiplying a given number by a fraction less than 1 results in a product smaller than the given number.
- Solve one-step word problems involving multiplication of fractions using models to develop the algorithm.

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

Code	Digital Student Experience	Code	Teacher Resources
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

**Measurement and Data****Convert like measurement units within a given measurement system.****NC.5.MD.1**

Given a conversion chart, use multiplicative reasoning to solve one-step conversion problems within a given measurement system.

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

**Understand concepts of volume.****NC.5.MD.4**

Recognize volume as an attribute of solid figures measure volume by counting, unit cubes, using cubic centimeter, cubic inches, cubic feet, 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
		ISIP	Quantifying Volume: Counting Same-Sized Units
		ISIP	Integrating Fact Practice and Volume
		ISIP	Calculating Volume in Multistep Word Problems



**NC.5.MD.5**

Relate volume to the operations of multiplication and addition.

- Find the volume of a 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.
- Build understanding of the volume formula for rectangular prisms with whole-number edge lengths in the context of solving problems.
- Find volume of solid figures with one-digit dimensions composed of two non-overlapping rectangular prisms.

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
		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.

NC.5.G.1			
Graph points in the first quadrant of a coordinate plane, and identify and interpret the x and y coordinates to solve problems.			
MP 1, 2, 3, 4, 5, 6, 7, 8			
Code	Digital Student Experience	Code	Teacher Resources
U51	Geometry – Graph Points in a Coordinate Plane	U51	Plotting Points on a Coordinate Grid
U51	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 quadrilaterals.

NC.5.G.3			
Classify quadrilaterals into categories based on their properties.			
<ul style="list-style-type: none"> <li>Explain that attributes belonging to a category of quadrilaterals also belong to all subcategories of that category</li> <li>Classify quadrilaterals in a hierarchy based on properties.</li> </ul>			
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	Fray Model
CR	Fray 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



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



<b>Computations and Algebraic Thinking</b>	
<b>Code</b>	<b>Teacher Resources</b>
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)

<b>Measurement</b>	
<b>Code</b>	<b>Resources</b>
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



<b>Measurement</b>	
<b>Code</b>	<b>Resources</b>
CR	Linear Measurement Yards vs. Meters Anchor Chart

<b>Data Analysis</b>	
<b>Code</b>	<b>Teacher Resources</b>
CR	Analyzing Line Plots

<b>Geometry</b>	
<b>Code</b>	<b>Teacher Resources</b>
CR	Three-Dimensional Figure Nets
CR	Two-Dimensional Shapes

### Parent Portal Lessons

<b>Early Math PK-1</b>	
<b>Code</b>	<b>Teacher Resources</b>
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



<b>Early Math PK-1</b>	
<b>Code</b>	<b>Teacher Resources</b>
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, Draw (Addition)
PP	Practice Sorting by Attributes

<b>Istation Math 2-5</b>	
<b>Code</b>	<b>Teacher Resources</b>
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





<b>Istation Math 2-5</b>	
<b>Code</b>	<b>Teacher Resources</b>
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