

Kindergarten – Grade 5



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כבוובומוצב פומכב ימועב עוועבוזגמועוווש וטו ווועונו-עושו שוטוב וועווושבוז.	



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K–12 Standards for Mathematical Practices (MP)

As stated in the Tennessee State Math Standards "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	
AR	Additional Resource	
CR	Classroom Resource	
FP	Fact Practice	
PP	Parent Portal	



#### **Power Path Featured Content**

#### **Newest Features** Power Path is the next generation of activities for Istation, bringing a more modern approach to the user experience. These activities contain a greater degree of adaptability, many more questions, and a greater sense of agency for the student. MP 1, 2, 3, 4, 5, 6, 7, 8 Code **Digital Student Experience** Code **Teacher Resources** K.CC.A.1 Odd One Out - Counting U13-15 K.CC.C.6 Number Sense – Comparison Cards: Comparing Groups U9-11 U9-11 More or Less? Which is Best? or Numbers K.CC.C.7 Number Sense – Comparison Cards: Comparing Groups U9-11 U9-11 More or Less? Which is Best? or Numbers K.NBT.A.1 U7-8 Make It, Break It K.G.A.1 Shape Simon Says K.G.A.3 Shape Families K.G.A.5 Geometry – Sweet Shapes U4-6



### **Newest Features**

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Code	Digital Student Experience	Code	Teacher Resources	
1.NBT.A.1				
		U16-17	One Hundred Twenty is Plenty	
1.NBT.B.2	1.NBT.B.2			
		U12-13	Two-Digit Memory	
1.NBT.B.3	1.NBT.B.3			
U14-16	Number Sense – Comparison Cards: Comparing Two- Digit Numbers	U14-16	Dare to Compare Two-Digit Numbers	
1.G.A.1				
U20-23	Geometry – Sweet Shapes			
2.NBT.A.1				
		U30-31	Make It, Break It, Toss It	
2.NBT.A.2				
		U24-30	Skip Counting with Patterns	
2.NBT.A.4				
U33-35	Number Sense – Comparison Cards: Comparing Three- Digit Numbers	U33-35	Dare to Compare Three-Digit Numbers	
3.NBT.A.1				



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#### MP 1, 2, 3, 4, 5, 6, 7, 8 Code **Digital Student Experience** Code **Teacher Resources** Number Sense – Pyramid Pinball: Rounding to the U37-39 U37-39 Round and Round We Go (Whole Numbers) Nearest 10 or 100 3.G.A.1 Quads Quads Quads 4.NBT.A.2 Number Sense - Comparison Cards: Comparing Multi-Dare to Compare Multi-Digit Numbers U41-43 U41-43 **Digit Numbers** 4.NBT.A.3 U42-44 Number Sense - Pyramid Pinball: Rounding to Any Place U42-44 Round and Round We Go (Multi-Digit) Numbers 5.NBT.A.3 Number Sense - Comparison Cards: Comparing Decimal Dare to Compare Decimal Numbers U47-49 U47-49 Numbers 5.NBT.B.4 U48-50 Number Sense - Pyramid Pinball: Rounding Decimals U48-50 Round and Round We Go (Decimal) Numbers



## **Power Path Featured Content (Spanish)**

## **Newest Features**

Power Path is the next generation of activities for Istation, bringing a more modern approach to the user experience. These activities contain a greater degree of adaptability, many more questions, and a greater sense of agency for the student.

[VIF ], Z, C	MP 1, 2, 3, 4, 5, 6, 7, 8						
Code	Digital Student Experience	Code	Teacher Resources				
K.CC.C.6							
U9-11	Tarjetas de comparación - Comparando grupos o números	U9-11	¿Más o menos? ¿Cuál es mejor?				
K.CC.C.7							
		U9-11	¿Más o menos? ¿Cuál es mejor?				
1.NBT.B.3							
U14-16	Tarjetas de comparación - Comparando números de dos dígitos	U14-16	Atrévete a comparar (Números de dos dígitos)				
2.NBT.A.4			·				
U33-35	Tarjetas de comparación - Comparando números de tres dígitos	U33-35	Atrévete a comparar (Números de tres dígitos)				
3.NBT.A.1			·				
		U37-39	Dando y dando la vuelta (Números Enteros)				
4.NBT.A.2							
U41-43	Tarjetas de comparación - Comparando números de múltiples dígitos	U42-44	Atrévete a comparar (Numéros de dígitos múltiples)				
4.NBT.A.3	·						



### **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.

Code	Digital Student Experience	Code	Teacher Resources		
		U42-44	Dando y dando la vuelta (Números de dígitos múltiples)		
5.NBT.A.3					
U47-49	Tarjetas de comparación - Comparando números decimales	U47-49	Atrévete a comparar (Decimales)		
5.NBT.B.4					
		U48-50	Dando y dando la vuelta (Decimales)		

## Kindergarten

## **Counting and Cardinality**

Know number names and the count sequence.

## K.CC.A.1

Count to 100 by ones, fives and by tens. Count backwards from 10.

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



## K.CC.A.2

Count forward beginning from a given number other than one, within the known sequence (e.g., "Starting at the number 5, count up to 11.")

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 – Skip Counting by Tens		
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)				

Count forward beginning from a given number other than one, within the known sequence (e.g., "Starting at the number 5, count up to 11.")

MP	1, 2,	3, 4	, 5, 6	, 7, 8
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K.CC.A.2

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

## K.CC.A.3

Write numbers from 0 to 20. Represent a number of objects with a written numeral 0-20.

Code	Digital Student Experience		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)



## K.CC.A.3

Write numbers from 0 to 20. Represent a number of objects with a written numeral 0-20.

Code	Digital Student Experience	Code	Teacher Resources
U19	Number Sense – "Pattern of the Count" (1-20)	U11	Writing Numbers Everywhere (5-10)
U19	Number Sense – Place Value Columns (by ones and tens to 50)	U11	Writing Numbers (10-20)
U19	Number Sense – Number Puzzle (by ones and tens 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.

#### K.CC.B.4 Understand the relationship between numbers and quantities; connect counting to cardinality. a. When counting objects, say the number names in the standard order, using one-to-one correspondence. b. Understand that the last number name said tells the number of objects counted. The number of objects is the same regardless of their arrangement or the order in which they were counted. c. Understand that each successive number name refers to a quantity that is one greater. MP 1, 2, 3, 4, 5, 6, 7, 8 Code **Digital Student Experience** Code **Teacher Resources** Number Sense – "Counting Cattle" (1-10) U6 U6 Count with Me (1-20) U6 Number Sense – Counting in a Line (1-10) U7 Counting a Scattered Static Group (1-10) Number Sense - Counting a Static Scattered Group Counting Sticks (1-20) U6 U8 (1-10)U6 Number Sense – Remember the Counted Amount (1-10) U8 Counting Objects (1-20) Number Sense – "Counting Cattle" (1-10) U7 ISIP Set Stories Number Sense – Counting Fingers (1-10) Ten Frame Puzzles (1-20) U7 ISIP U7 Number Sense – Choose the Correct Amount (1-10) ISIP Subitizing to Problem Solve Number Sense – Counting a Static Scattered Group U7 ISIP Total Amount in a Scattered Group (1-10)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

## K.CC.B.4

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

- a. When counting objects, say the number names in the standard order, using one-to-one correspondence.
- b. Understand that the last number name said tells the number of objects counted. The number of objects is the same regardless of their arrangement or the order in which they were counted.
- c. Understand that each successive number name refers to a quantity that is one greater.

MP 1,	2.	3.	4.	5.	6.	7.8	3
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Code	Digital Student Experience	Code	Teacher Resources
U8	Number Sense – Counting a Scattered Static Group (1-20)		
U10	Number Sense – "Counting Cattle" (1-20)		
U10	Number Sense – Choose the Correct Amount (1-20)		
U10	Number Sense – Remember the Counted Amount (1-20)		
U10	Number Sense – Counting an Array (1-20)		
U10	Number Sense – Counting a Scattered Static Group (1-20)		

## K.CC.B.5

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

Code	Digital Student Experience	Code	Teacher Resources
U6	Number Sense – "Counting Cattle" (1-10)	U6	Domino Dot Memory (1-10)

## K.CC.B.5

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

MP 1, 2, 3	MP 1, 2, 3, 4, 5, 6, 7, 8					
Code	Digital Student Experience	Code	Teacher Resources			
U6	Number Sense – Counting in a Line (1-10)	U7	Counting a Scattered Static Group (1-10)			
U6	Number Sense – Counting a Static Scattered Group (1-10)	U8	Counting Sticks (1-20)			
U6	Number Sense – Remember the Counted Amount (1-10)	U8	Counting Objects (1-20)			
U7	Number Sense – "Counting Cattle" (1-10)	U18	Counting Memory			
U7	Number Sense – Counting Fingers (1-10)	ISIP EM	Set Stories			
U7	Number Sense – Choose the Correct Amount (1-10)	ISIP EM	Ten Frame Puzzles (1-20)			
U7	Number Sense – Counting a Static Scattered Group (1-10)	ISIP EM	Total Amount in a Scattered Group			
U8	Number Sense – "Counting Cattle" (1-20)	ISIP EM	Multiple Representations of Numbers (1-10)			
U8	Number Sense – Counting in a Line (1-20)	ISIP EM	Subitizing to Problem Solve			
U8	Number Sense – Counting in an Array (1-20)					
U8	Number Sense – Counting a Scattered Static Group (1-20)					
U10	Number Sense – "Counting Cattle" (1-20)					
U10	Number Sense – Choose the Correct Amount (1-20)					



## K.CC.B.5

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

MP 1,	2, 3, 4, 5, 6, 7, 8		
Code	Digital Student Experience	Code	Teacher Resources
U10	Number Sense – Remember the Counted Amount (1-20)		

#### Compare numbers.

K.CC.C	K.CC.C.6					
Identify whether the number of objects in one group is greater than, less than, or equal to the number of objects in another group.						
MP 1, 2, 3	MP 1, 2, 3, 4, 5, 6, 7, 8					
Code	Digital Student Experience	Code	Teacher Resources			
		U6	Less/More/Equal Sets of Concrete Objects			
		ISIP EM	Finding One More or One Less (1-20)			
		ISIP EM	Comparing Groups of Objects (1-20)			
		ISIP EM	Multiple Representations of Numbers (1-10)			



## K.CC.C.7

Compare two numbers between 1 and when written as numerals, using the terms greater than, less than, or equal to.

MP 1, 2, 3	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 as putting together and adding to, and understand subtraction as taking apart and taking from.

K.OA.A	K.OA.A.1					
	Represent addition and subtraction with objects, fingers, mental images, drawings, sounds (e.g., claps), acting out situations, verbal explanations, expressions, or equations.					
MP 1, 2, 3	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)	U8	Parts and Wholes			
U9	Computations and Algebraic Thinking – Part Part Whole Addition within 10	U9	Roll to Find the Whole			

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## K.OA.A.1

Represent addition and subtraction with objects, fingers, mental images, drawings, sounds (e.g., claps), acting out situations, verbal explanations, expressions, or equations.

MP 1, 2, 3, 4, 5, 6, 7, 8				
Code	Digital Student Experience	Code	Teacher Resources	
U10	Computations and Algebraic Thinking – "Part Part Whole in New Orleans" (1-10)	U10	Dogs and Cats on Mats (up to 10)	
U10	Computations and Algebraic Thinking – Part Part Whole Addition Stories	U12	Ten or Not Ten	
U12	Computations and Algebraic Thinking – "Part Part Whole in New Orleans" (1-10)	U13	Whole in the Hand	
U12	Computations and Algebraic Thinking – Making Ten Using Tens Frames	U18	Decomposing House with Pictures	
U12	Computations and Algebraic Thinking – Identifying Addends Using Tens Frames	U18	Decomposing House	
U13	Computations and Algebraic Thinking – "Chicago Pizza Blues" (within 10)	U19	Relative Magnitude with Part Part Whole	
U13	Computations and Algebraic Thinking – Subtraction within Ten	U20	Start, Change, Result	
U14	Computations and Algebraic Thinking – "Chicago Pizza Blues" (within 10)	U20	Adding with Addend Cards	
U14	Computations and Algebraic Thinking – Whole Part Part Subtraction Stories (within 10)	U22	Beading the Difference	
U18	Number Sense – Decompose Numbers Less Than or Equal to Ten	ISIP	Subtraction within Ten	



Represent addition and subtraction with objects, fingers, mental images, drawings, sounds (e.g., claps), acting out situations, verbal explanations, expressions, or equations.

MP 1, 2, 3	MP 1, 2, 3, 4, 5, 6, 7, 8					
Code	Digital Student Experience	Code	Teacher Resources			
		ISIP	Addition Stories			
		ISIP	Subtraction Stories			
		ISIP	Count Back to Subtract			
		ISIP	Ten Frame Addition			

## K.OA.A.2

Add and subtract within to solve contextual problems using objects, or drawings to represent the problem.

MP 1, 2, 3, 4, 5, 6, 7, 8	MP 1,	2, 3,	4, 5,	6, 7,	8
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Code	Digital Student Experience	Code	Teacher Resources			
U9	Computations and Algebraic Thinking – "Part Part Whole in New Orleans" (1-10)	U8	Parts and Wholes			
U9	Computations and Algebraic Thinking – Part Part Whole Addition within 10	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	U18	Decomposing House with Pictures			

Add and subtract within to solve contextual problems using objects, or drawings to represent the problem.

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

Decompose numbers less than or equal to 10 into addend pairs in more than one way (e.g., 5 = 2 + 3 and 5 = 4 + 1) by using objects or drawings. Record each decomposition using a drawing or writing an 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)	U8	Parts and Wholes	
U9	Computations and Algebraic Thinking – Part Part Whole Addition Stories	U9	Roll to Find the Whole	
U10	Computations and Algebraic Thinking – "Part Part Whole in New Orleans" (1-10)	U10	Dogs and Cats on Mats (up to 10)	
U10	Computations and Algebraic Thinking – Part Part Whole Addition Stories	U12	Ten or Not Ten	
U12	Computations and Algebraic Thinking – "Part Part Whole in New Orleans" (1-10)	U13	Whole in the Hand	
U12	Computations and Algebraic Thinking – Making Ten Using Tens Frames	U18	Decomposing House with Pictures	
U12	Computations and Algebraic Thinking – Identifying Addends Using Tens Frames	U18	Decomposing House	
U13	Computations and Algebraic Thinking – "Part Part Whole in New Orleans" (1-10)	U19	Relative Magnitude with Part Part Whole	
U13	Computations and Algebraic Thinking – Subtraction within Ten	U20	Start, Change, Result	
U14	Computations and Algebraic Thinking – "Chicago Pizza Blues" (within 10)	U20	Adding with Addend Cards	

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

#### 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)	U22	Beading the Difference
U18	Number Sense – Decompose Numbers Less Than or Equal to Ten		

## K.OA.A.4

Find the number that makes 10, when added to any given number, from 1 to 9 using objects or drawings. Record the answer using a drawing or writing an equation.

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

Find the number that makes 10, when added to any given number, from 1 to 9 using objects or drawings. Record the answer using a drawing or writing an equation.

MP 1, 2, 3, 4, 5, 6, 7, 8				
Code	Digital Student Experience	Code	Teacher Resources	
U12	Computations and Algebraic Thinking – Making Ten Using Tens Frames	U18	Decomposing House	
U12	Computations and Algebraic Thinking – Identifying Addends Using Tens Frames	U19	Relative Magnitude with Part Part Whole	
U13	Computations and Algebraic Thinking – "Chicago Pizza Blues" (within 10)	U20	Start, Change, Result	
U13	Computations and Algebraic Thinking – Subtraction within Ten	U20	Adding with Addend Cards	
U14	Computations and Algebraic Thinking – "Chicago Pizza Blues" (within 10)	U22	Beading the Difference	
U14	Computations and Algebraic Thinking – Whole Part Part Subtraction Stories (within 10)			
U18	Number Sense – Decompose Numbers Less Than or Equal to Ten			

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#### Number and Operations in Base Ten

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

## K.NBT.A.1

Compose and decompose numbers from 11 to 19 into ten ones and some more ones by using objects or drawings. Record the composition or decomposition using a drawing or writing an equation.

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

Code	Digital Student Experience	Code	Teacher Resources
		U15	Digit Deal (1-50)
		U18	Decomposing House with Pictures
		U18	Decomposing House

#### **Measurement and Data**

#### Describe and compare measurable attributes.

K.MD.A.1					
Describe n	Describe measurable attributes of a single object, (e.g., length and weight).				
MP 1, 2, 3	MP 1, 2, 3, 4, 5, 6, 7, 8				
Code	Digital Student Experience	Code	Teacher Resources		
U10	Measurement and Data Analysis –	U10	Directly Comparing Length		
	Directly Comparing Length				



## K.MD.A.1

Describe measurable attributes of a single object, (e.g., length and weight).

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

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

## K.MD.A.2

Directly compare two objects with a measurable attribute in common to see which object has "more of" or "less of" the attribute and describe the difference (e.g., directly compare the lengths of 10 cubes to a pencil and describe one as longer or shorter).

Code	Digital Student Experience	Code	Teacher Resources
U10	Measurement and Data Analysis – Comparing Objects by Length	U10	Directly Comparing Length
U10	Measurement and Data Analysis – Comparing Objects by Weight	U10	Directly Comparing Weight
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?

#### Work with money.

K.MD.E	K.MD.B.3				
Identify the	Identify the penny, nickel, dime, and quarter and recognize the value of each.				
MP 1, 2, 3	MP 1, 2, 3, 4, 5, 6, 7, 8				
Code	Digital Student Experience	Code	Teacher Resources		
U12	Measurement and Data Analysis – Identify Pennies, Nickels, and Dimes by Name	U12	Coin Name Cover Up		
U14	Measurement and Data Analysis – Identify Coins by Value	U14	Coin Value Cover Up		

#### Geometry

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

K.G.A.2				
Correctly name shapes regardless of their orientations or overall size.				
MP 1, 2, 3, 4, 5, 6, 7, 8				
Code	Digital Student Experience	Code	Teacher Resources	
U1	Geometry – Identify Circles	U1	Identifying Two-Dimensional Shapes	
U1	Geometry – Identify Squares	U3	We're Going on a Shape Hunt	
U3	Geometry – Identify Triangles	U9	Considering Sizes of Shapes	
U9	Geometry – Identifying Shapes Regardless of Orientation	U14	Odd One Out	



K.G.A.3					
Identify sha	Identify shapes 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.

K.G.B.4					
Describe similarities and differences between two- and three- dimensional shapes, in different sizes and orientations.					
MP 1, 2, 3	MP 1, 2, 3, 4, 5, 6, 7, 8				
Code	Digital Student Experience	Code	Teacher Resources		
U1	Geometry – Identify Circles	U1	Identifying Two–Dimensional Shapes		
U1	Geometry – Identify Squares	U3	We're Going on a Shape Hunt		
U3	Geometry – Identify Triangles	U9	Considering Sizes of Shapes		
U9	Geometry – Identify Shapes Regardless of Orientation	U9	Mighty Shape Match		
U9	Geometry – Classify and Count by Attribute	U14	Shape Four-in-a-Row		
U14	Geometry – Identify Three-Dimensional Shapes				

## Grade 1

## **Operations and Algebraic Thinking**

Represent and solve problems involving addition and subtraction.

## 1.0A.A.1

Add and subtract within 20 to solve contextual problems with unknowns in all positions involving situations of add to, take from, put together/take apart, and compare. Use objects, drawings, and equations with a symbol for the unknown number to represent the problem.

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

## 1.0A.A.1

Add and subtract within 20 to solve contextual problems with unknowns in all positions involving situations of add to, take from, put together/take apart, and compare. Use objects, drawings, and equations with a symbol for the unknown number to represent the problem.

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

Code	Digital Student Experience	Code	Teacher Resources
U22	Computations and Algebraic Thinking – Whole Part Part (within 20)		
U24	Computations and Algebraic Thinking – Subtraction Stories (within 20)		
U24	Computations and Algebraic Thinking – Determine the Unknown Whole Numbers in Subtraction Sentences		

## 1.OA.A.2

Add three whole numbers whose sum is within 20 to solve contextual problems using objects.

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.

## 1.OA.B.3

Apply properties of operations (additive identity, commutative, and associative) as strategies to add and subtract.

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	Turn Around Addition		
U20	Computations and Algebraic Thinking – Commutative Property of Addition	U20	Grouping Groceries		
U20	Computations and Algebraic Thinking – Associative Property of Addition	U20	Identity Property Go Fish!		
U20	Computations and Algebraic Thinking – Identity Property of Addition	ISIP EM	Counting on Cards		
U24	Computations and Algebraic Thinking – Determine the Unknown Whole Numbers in Subtraction Sentences	ISIP EM	Fact Family Dominoes		
		ISIP EM	Associative Property of Addition		
		ISIP EM	Commutative Property of Addition		

## 1.OA.B.4

Understand subtraction as an unknown-addend problem.

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

#### Add and subtract within 20.

## 1.OA.C.5

Add and subtract within 20 using strategies such as counting on, counting back, making 10 using fact families and related known facts and composing/decomposing numbers with an emphasis on making ten (e.g., 13 - 4 = 13 - 3 - 1 = 10 - 1 = 9 or adding 6 + 7 by creating the known equivalent 6 + 4 + 3 = 10 + = 13)

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

## 1.OA.C.5

Add and subtract within 20 using strategies such as counting on, counting back, making 10 using fact families and related known facts and composing/decomposing numbers with an emphasis on making ten (e.g., 13 - 4 = 13 - 3 - 1 = 10 - 1 = 9 or adding 6 + 7 by creating the known equivalent 6 + 4 + 3 = 10 + = 13)

MP 1, 2, 3	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)				
U24	Computations and Algebraic Thinking – Determine the Unknown Whole Numbers in Subtraction Sentences				

## 1.OA.C.6

Fluently add and subtract within 20 using mental strategies. By end of Grade 1, know from memory all sums up to 10.

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	Turn Around Addition
U20	Computations and Algebraic Thinking – Addition Stories (horizontal orientation)	U20	Grouping Groceries

## 1.OA.C.6

Fluently add and subtract within 20 using mental strategies. By end of Grade 1, know from memory all sums up to 10.

Code	Digital Student Experience	Code	Teacher Resources
U20	Computations and Algebraic Thinking – Addition Stories (vertical orientation)	U20	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
U10	Computations and Algebraic Thinking – Addition Stories	FP	Write, Tally, Draw
		FP	Shake It, Make It, Solve It (Addition)
		FP	Wipe Out

#### Work with addition and subtraction equations.

## 1.OA.D.8

Determine the unknown whole number in an addition or subtraction equation relating three whole numbers.

#### 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

Extend the counting sequence.

## 1.NBT.A.1

Count to 120 by 1's, 2's and 10's starting at any number less than 120. Read and write numerals to 120 and represent a number of objects with a written numeral. Count backward from 20.

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

## 1.NBT.A.1

Count to 120 by 1's, 2's and 10's starting at any number less than 120. Read and write numerals to 120 and represent a number of objects with a written numeral. Count backward from 20.

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

Code	Digital Student Experience	Code	Teacher Resources
U21	Number Sense – Place Value Columns (1-100)	U23	Decade Numbers
U21	Number Sense – Number Puzzle (1-100)		

#### Understand place value.

## 1.NBT.B.2

Know that the digits of a two-digit number represent groups of tens and ones, e.g., 39 can be represented as 39 ones, 2 tens and 19 ones, or 3 tens and nine ones.

Code	Digital Student Experience	Code	Teacher Resources		
U23	Number Sense – Decade Numbers: Free Play Number Puzzle	U14	Roll-Count-Cover – Skip Counting by Tens		
U23	Number Sense – Decade Numbers: Number Puzzle	U15	Digit Deal (1-50)		
		U17	Digit Deal (1-100)		
		U23	Decade Numbers		
		ISIP EM	Base Ten Block Basics		
		ISIP EM	Matching Numerals and Base Ten Blocks		



## 1.NBT.B.2

Know that the digits of a two-digit number represent groups of tens and ones, e.g., 39 can be represented as 39 ones, 2 tens and 19 ones, or 3 tens and nine ones.

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

Code	Digital Student Experience	Code	Teacher Resources
		ISIP EM	Base Ten Block Comparison Game

## 1.NBT.B.3

Compare two two-digit numbers based on the meanings of the digits in each place and use the symbols >, =, and < to show the relationship.

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	Graphing Stories – Determining Most and Least



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

## 1.NBT.C.4

Add a two-digit number to a one-digit number and a two-digit number to a multiple of ten (within 100) using concrete models, drawings, strategies based on place value, properties of operations and/or the relationship between addition and subtraction.

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	Turn Around Addition
U20	Computations and Algebraic Thinking – Commutative Property	U20	Grouping Groceries
U20	Computations and Algebraic Thinking – Associative Property	U20	Identity Property Go Fish!
U20	Computations and Algebraic Thinking – Identity Property	U24	Start, Change, Result! (within 20)
		ISIP	Fact Family Dominoes
		FP	Building Sums to Ten
		FP	Addition Fast Track
		FP	Subtraction Fast Track
		FP	Sticky Sums
		FP	Write, Tally, Draw
		FP	Shake It, Make It, Solve It (Addition)
		FP	Wipe Out

## **Measurement and Data**

#### Work with time and money.

## 1.MD.B.3

Tell and write time in hours and half hours using analog and digital clocks.

Code	Digital Student Experience	Code	Teacher Resources
U14	Measurement and Data Analysis – Identify Coins by Value	U12	Coin Name Cover-Up
U16	Measurement and Data Analysis – Identify the Value of a Collection of Mixed Coins	U14	Coin Value Cover Up
U16	Measurement and Data Analysis – Compare Amounts of Mixed Coins	U16	Money War
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!
U24	Measurement and Data Analysis – Compare Amounts of Mixed Coins with Given Amounts of Money		

## 1.MD.B.4

Count the vale of a set of like coins less than one dollar using the ¢ symbol only.

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

Code	Digital Student Experience	Code	Teacher Resources
		AR	Cent Symbol Four-in-a-Row

#### Represent and interpret data.

1.MD.C	1.MD.C.5				
Organize, represent, and interpret data with up to three categories; ask and answer questions about the total number of data points, how many in each category and how may more or less are in one category than another.					
MP 1, 2, 3	8, 4, 5, 6, 7, 8				
Code	Digital Student Experience	Code	Teacher Resources		
		U19	Graphing Tic-Tac-Toe		
		ISIP EM	Picture Graphs to the Rescue!		
		ISIP EM	Analyze and Add Using Picture Graphs		
		ISIP EM	Graphing Three Ways		
		ISIP EM	Determining Most and Least with Graphs		
		ISIP EM	Read and Analyze Bar Graphs		

#### Geometry

#### Reason with shapes and their attributes.

## 1.G.A.1

Distinguish between attributes that define a shape (e.g., number of sides and vertices) versus attributes that do not define the shape (e.g., color, orientation, overall size); build and draw two-dimensional shapes to possess defining attributes.

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

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

## 1.G.A.3

Partition circles and rectangles into two and four equal shares, describe the shares using the words halves, fourths, and quarters. Describe the whole as two of, or four of the shares. Understand for these examples that partitioning into more equal shares creates smaller shares.

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 involving addition and subtraction.

## 2.OA.A.1

Add and subtract within 100 to solve one- and two-step contextual problems, with unknowns in all positions, involving situations of add to, take from, put together/take apart, and compare. Use 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
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 30.

2.OA.B	2.OA.B.2				
Fluently add and subtract within 30 using mental strategies. By end of Grade 2, know from memory all sums of two one-digit numbers and related subtraction facts.					
MP 1, 2, 3	8, 4, 5, 6, 7, 8				
Code	Code         Digital Student Experience         Code         Teacher Resources				
		U31	Fact Families – Addition and Subtraction		

## 2.0A.B.2

Fluently add and subtract within 30 using mental strategies. By end of Grade 2, know from memory all sums of two one-digit numbers and related subtraction facts.

Code	Digital Student Experience	Code	Teacher Resources
		ISIP	Addition and Subtraction Fact Families
		ISIP	Fact Family Dominos (Addition/Subtraction)
		FP	Addition Fast Track
		FP	Subtraction Fast Track
		FP	Left Hand, Right Hand Grab Bag
		FP	Shake It! Make It! Solve It! Addition
		FP	Sticky Sums
		FP	Wipe Out
		FP	Write, Tally, Draw
		FP	Building Sums to Twenty



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

## 2.OA.C.3

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

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

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

## 2.OA.C.4

Use repeated 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.

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.

## 2.NBT.A.1

Know that the three digits of a three-digit number represent amounts of hundreds, tens, and ones (e.g., 706 equals 7 hundreds, 0 tens, and 6 ones; as 706 ones; 70 tens and 5 ones).

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

## 2.NBT.A.3

Read and write numbers to 1,000 using standard form, word form, and expanded form.

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

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

## 2.NBT.A.4

Compare two three-digit numbers based on meanings of the digits in each place and use the symbols >, =, and < to show the relationship.

Code	Digital Student Experience	Code	Teacher Resources
U30	Number Sense – Comparing Two Two-Digit Whole Numbers	U30	Comparison – Two-Digit Numbers: Language and Symbols

## 2.NBT.A.4

Compare two three-digit numbers based on meanings of the digits in each place and use the symbols >, =, and < to show the relationship.

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

Code	Digital Student Experience	Code	Teacher Resources
U30	Number Sense – Comparing Two Three-Digit Numbers	U30	Comparison – Three–Digit Numbers
U30	Number Sense – Comparing Two Three-Digit Whole Numbers with Zeroes	ISIP	Steps for Comparing Three–Digit Numbers
		ISIP	Building and Comparing Three-Digit numbers

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

## 2.NBT.B.5

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

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	Addition Using Partitioning
U31	Computations and Algebraic Thinking – Adding with Regrouping – Partitioning	U31	Subtraction Using Partitioning
U31	Computations and Algebraic Thinking – Subtracting with Regrouping – Partitioning	U31	Adding on a Number Line

## 2.NBT.B.5

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

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

## 2.NBT.B.7

Add and subtract within 1,000 using concrete models, drawings, strategies based on place value, properties of operations, and/or the relationship between addition and subtraction to explain the reasoning used.

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

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

## **Measurement and Data**

#### Measure and estimate lengths in standard units.

2.MD.A.1					
Measure th	Measure the length of an object by selecting and using appropriate tools, such as rulers, yardsticks, meter sticks, and measuring tapes.				
MP 1, 2, 3	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		

## 2.MD.A.1

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

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

Code	Digital Student Experience	Code	Teacher Resources
		U33	Measure to the Nearest Centimeter
		ISIP	Appropriate Tools for Linear Measurement
		ISIP	How to Use Linear Measurement Tools
		ISIP	Measuring Objects
		ISIP	Ruler Relay

## 2.MD.A.2

Measure the length of an object using two different units of measure and describe how the two measurements relate to the size of the unit chosen.

Code	Digital Student Experience	Code	Teacher Resources
		ISIP	Unit Relationships

## 2.MD.A.4

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

# MP 1, 2, 3, 4, 5, 6, 7, 8 Code Digital Student Experience Code Teacher Resources

#### Relate addition and subtraction to length.

2.MD.B	2.MD.B.6			
Represent whole numbers as lengths from 0 on a number line and know that the points corresponding to the numbers on the number line are equally spaced. Use a number line to represent whole number sums and differences of lengths within 100.				
MP 1, 2, 3	MP 1, 2, 3, 4, 5, 6, 7, 8			
Cada				
Code	Digital Student Experience	Code	Teacher Resources	
U31	Computations and Algebraic Thinking – Adding on a Number Line	Code U31	Teacher Resources           Adding on a Number Line	

ISIP

Ruler Relay



#### Work with time and money.

## 2.MD.C.7

Tell and write time in quarter hours and to the nearest five minutes (in a.m. and p.m.) using analog and digital clocks.

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

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

## 2.MD.C.8

Solve contextual problems involving dollar bills, quarters, dimes, nickels and pennies using \$ and ¢ appropriately.

Code	Digital Student Experience	Code	Teacher Resources
		U32	Money Word Problems

# 2

#### **Represent and interpret data**

## 2.MD.D.10

Draw a pictograph and a bar graph (with intervals of one) to represent a data set with up to four categories. Solve addition and subtraction problems related to the data in a graph.

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

#### Geometry

#### Reason with shapes and their attributes.

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

## 2.G.A.3

Partition circles and rectangles into two, three, or four equal shares, describe the shares using the words *halves, thirds, fourths half of, a third of, and a fourth of*, and describe the whole as two halves, three thirds, four fourths. Recognize that equal shares of identical wholes need not have the same shape.

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

## Grade 3

## **Operations and Algebraic Thinking**

Represent and solve problems involving multiplication and division.

## 3.OA.A.1

Interpret the factors and products of whole numbers, in multiplication equations (e.g., 4 × 7 is 4 groups of 7 objects or 4 strings measuring 7 inches each).

Code	Digital Student Experience	Code	Teacher Resources
U35	Computations and Algebraic Thinking – Arithmetic Patterns in Multiplication	U35	Arithmetic Patterns in Multiplication
U36	Computations and Algebraic Thinking – Multiply One-Digit Numbers Using Concrete Models	U36	One-Digit by One-Digit Multiplication
U36	Computations and Algebraic Thinking – Multiply One-Digit Numbers Using 1×1 Arrays	U36	Multiplying Two One-Digit Numbers with Arrays
		U36	Problem Solving without Numbers
		ISIP	Practicing Fact Families
		ISIP	Using Strip Diagrams to Solve Compare Problems
		FP	Multominoes
		FP	Tall Towers
		FP	Dice Blocks
		FP	Wipe Out



## 3.OA.A.1

Interpret the factors and products of whole numbers, in multiplication equations (e.g., 4 × 7 is 4 groups of 7 objects or 4 strings measuring 7 inches each).

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

Code	Digital Student Experience	Code	Teacher Resources
		FP	Sticky Products
		FP	Multiplication Fast Track
		FP	Shake It! Make It! Solve It! (Multiplication)

## 3.OA.A.2

Interpret the dividend, divisor, and quotient in whole number division equations, (e.g., 28 ÷ 7 can be interpreted as 28 objects divided into 7 equal groups or 28 objects divided so there are 7 objects in each group.)

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

## 3.OA.A.3

Multiply and divide within 100 to solve contextual problems, with unknowns in all positions, in situations involving equal groups, arrays, and measurement quantities using strategies based on place value, the properties of operations, and the relationship between multiplication and division (e.g., contexts including computations such as  $3 \times 2 = 24$ ,  $6 \times 16 = ?$ , divided 8 = 3, or 96 divided by 6 = ?)

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

Code	Digital Student Experience	Code	Teacher Resources
U36	Computations and Algebraic Thinking – Build and Solve Two-Step Equations with All Operations	U36	Build and Solve Two-Step Equations with All Operations
		ISIP	Doubling and Halving
		ISIP	Problem Solving without Numbers
		ISIP	Practicing with Fact Families
		ISIP	Using Strip Diagrams to Solve Compare Problems

## 3.OA.A.4

Determine the unknown whole number in a multiplication or division equation relating three whole numbers within 100. For example, determine the unknown number that makes the equation true in each of the equations  $8 \times ? = 48$ ,  $5 = \_ \div 3$ ,  $6 \times 6 = ?$ .

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

## Standa

## 3.OA.A.4

Determine the unknown whole number in a multiplication or division equation relating three whole numbers within 100. For example, determine the unknown number that makes the equation true in each of the equations  $8 \times ? = 48$ ,  $5 = \_ \div 3$ ,  $6 \times 6 = ?$ .

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

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

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

## 3.OA.B.5

Apply properties of operations as strategies to multiply and divide. (Students need not use formal terms for these properties.) Examples: if  $6 \times 4 = 24$  is known, then  $4 \times 6 = 24$  is also known. (Commutative property of multiplication.)  $3 \times 5 \times 2$  can be solved by  $(3 \times 5) \times 2$  or  $3 \times (5 \times 2)$ . (Associative property of multiplication.) One way to find  $8 \times 7$  is by using  $8 (5 = 2) = (8 \times 5) + (8 \times 2)$ . By knowing that  $8 \times 5 = 20$  and  $8 \times 2 = 16$ , then  $8 \times 7 = 40 + 16 = 56$  (Distributive property of multiplication over addition)

Code	Digital Student Experience	Code	Teacher Resources
U36	Computations and Algebraic Thinking – Properties of Multiplication	ISIP	Commutative Property of Multiplication
		ISIP	Associative Property of Multiplication

## 3.OA.B.6

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

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

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

#### Multiply and divide within 100.

## 3.OA.C.7

Fluently multiply and divide within 100, using strategies such as the relationship between multiplication and division (e.g., knowing that  $8 \times 5 = 40$ , one knows  $40 \div 5 = 8$ ) or properties of operations. By the end of Grade 3, know from memory all products of two one-digit numbers.

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

## 3.OA.C.7

Fluently multiply and divide within 100, using strategies such as the relationship between multiplication and division (e.g., knowing that  $8 \times 5 = 40$ , one knows  $40 \div 5 = 8$ ) or properties of operations. By the end of Grade 3, know from memory all products of two one-digit numbers.

Code	Digital Student Experience	Code	Teacher Resources
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	Using Strip Diagrams to Solve Compare Problems
		ISIP	Commutative Property of Multiplication
		ISIP	Doubling and Halving
		FP	Wipe Out
		FP	Multominoes
		FP	Tall Towers
		FP	Dice Blocks

## 3.OA.C.7

Fluently multiply and divide within 100, using strategies such as the relationship between multiplication and division (e.g., knowing that  $8 \times 5 = 40$ , one knows  $40 \div 5 = 8$ ) or properties of operations. By the end of Grade 3, know from memory all products of two one-digit numbers.

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

Code	Digital Student Experience	Code	Teacher Resources
		FP	Sticky Products
		FP	Multiplication Fast Track
		FP	Division Fast Track
		FP	Shake It! Make It! Solve It! (Multiplication)

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

## 3.OA.D.8

Solve two-step contextual problems using the four operations. Represent these problems using equations with a letter standing for the unknown quantity. Assess the reasonableness of answers using mental computation and estimation strategies including rounding.

Code	Digital Student Experience	Code	Teacher Resources
U36	Computations and Algebraic Thinking – Two-Step Word Problems – All Operations	U35	Addition Problem-Solving Strategies
		U35	Subtraction Problem-Solving Strategies
		U35	Problem Solving without Numbers: Addition and Subtraction
		U36	Build and Solve Two-Step Equations with All Operations

## 3.OA.D.8

Solve two-step contextual problems using the four operations. Represent these problems using equations with a letter standing for the unknown quantity. Assess the reasonableness of answers using mental computation and estimation strategies including rounding.

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

Code	Digital Student Experience	Code	Teacher Resources
		U36	Problem Solving without Numbers: Multiplication and Division

## 3.OA.D.9

Identify arithmetic patterns (including patterns in the addition and multiplication tables) and explain them using properties of operations. For example, analyze patterns in the addition or multiplication tables, explain why 4 times a number can be decomposed into two equal addends, and observe that 4 times a number is always even (because  $4 \times 6 = (2 \times 2) \times 6 = 2 \times (2 \times 6)$  which uses the associative property of multiplication.)

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

3.NBT./	3.NBT.A.1				
Round who	Round whole numbers to the nearest 10 or 100 using understanding of place value.				
MP 1, 2, 3	MP 1, 2, 3, 4, 5, 6, 7, 8				
Code	Digital Student Experience         Code         Teacher Resources				
U35	Number Sense – Rounding to the Nearest Ten	U35	Rounding – Nearest Ten		
U35	Number Sense – Rounding to the Nearest Hundred	U35	Rounding – Nearest Hundred		
		U35	Rounding – Nearest Ten, Hundred, Thousand		

## 3.NBT.A.2

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

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



## **Number and Operations – Fractions**

Develop understanding of fractions as numbers.

## 3.NF.A.1

Understand a fraction 1/b as the quantity formed by 1 part when a whole is partitioned into b equal parts (unit fraction); understand a fraction a/b as the quantity formed by a parts of size 1/b. For example, 3/4 represents a quantity formed by 3 parts of size 1/4.

## 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 Using Symbolic Notation

## 3.NF.A.2

Understand a fraction as a number on the number line. Represent fractions on a number line.

- a. Represent a fraction 1/b on a number line diagram by defining the interval from 0 to 1 as the whole and partitioning it into b equal parts. Recognize that each part has size 1/b and that the endpoint locates the number 1/b on the number line. For example, on a number line from 0 to 1, students can partition it into 4 equal parts and recognize that each part represents a length of 1/4 and the first part has an endpoint at 1/4 on the number line.
- b. Represent a fraction a/b on a number line diagram by marking off a lengths 1/b from 0. Recognize that the resulting interval has size a/b and that its endpoint locates the number a/b on the number line. For example, 5/3 is the distance from 0 when there are 5 iterations of 1/3.

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

Understand a fraction as a number on the number line. Represent fractions on a number line.

- a. Represent a fraction 1/b on a number line diagram by defining the interval from 0 to 1 as the whole and partitioning it into b equal parts. Recognize that each part has size 1/b and that the endpoint locates the number 1/b on the number line. For example, on a number line from 0 to 1, students can partition it into 4 equal parts and recognize that each part represents a length of 1/4 and the first part has an endpoint at 1/4 on the number line.
- Represent a fraction a/b on a number line diagram by marking off a lengths 1/b from 0. Recognize that the resulting interval has size a/b and that its endpoint locates the number a/b on the number line. For example, 5/3 is the distance from 0 when there are 5 iterations of 1/3.

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

Explain equivalence of fractions and compare fractions by reasoning about their size.

- a. Understand two fractions as equivalent (equal) if they are the same relative size, or the same point on a number line.
- b. Recognize and generate simple equivalent fractions (e.g., 1/2 = 2/4, 4/6 = 2/3) and explain why the fractions are equivalent using a visual fraction model.
- c. Express whole numbers as fractions and recognize fractions that are equivalent to whole numbers. For example, express 3 in the form of 3 = 3/1; recognize that 6/1 = 6; locate 4/4 and 1 at the same point on a number line diagram.
- d. Compare two fractions with the same numerator or the same denominator by reasoning about their size. Recognize that comparisons are valid only when the two fractions refer to the same whole. Use the symbols >, =, or <, to show the relationship and justify the conclusions.

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
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

Explain equivalence of fractions and compare fractions by reasoning about their size.

- a. Understand two fractions as equivalent (equal) if they are the same relative size, or the same point on a number line.
- b. Recognize and generate simple equivalent fractions (e.g., 1/2 = 2/4, 4/6 = 2/3) and explain why the fractions are equivalent using a visual fraction model.
- c. Express whole numbers as fractions and recognize fractions that are equivalent to whole numbers. For example, express 3 in the form of 3 = 3/1; recognize that 6/1 = 6; locate 4/4 and 1 at the same point on a number line diagram.
- d. Compare two fractions with the same numerator or the same denominator by reasoning about their size. Recognize that comparisons are valid only when the two fractions refer to the same whole. Use the symbols >, =, or <, to show the relationship and justify the conclusions.

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



## **Measurement and Data**

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

# 3.MD.A.1

Tell and write time to the nearest minute and measure time intervals in minutes. Solve contextual problems involving addition and subtraction of time intervals in minutes. For examples, students may use a number line to determine the difference between the start time and the end time of lunch.

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

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

## Represent and interpret data.

3.MD.A	3.MD.A.3					
Create scaled pictograph and a scaled bar graph to represent a data set with several categories. Solve one- and two-step "how many more" and "how many less" problems using information presented in scaled graphs.						
MP 1, 2, 3	MP 1, 2, 3, 4, 5, 6, 7, 8					
Code	Digital Student Experience	Code	Teacher Resources			
U39	Measurement and Data Analysis – Two-Step Word Problems with Bar Graphs	U39	Solving Two–Step Problems Using Bar Graphs			



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

## 3.MD.C.5

Recognize that plane figures have an area and understand concepts of area measurement.

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

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

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

# 3.MD.C.6

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

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

# 3

# 3.MD.C.7

Relate area to the operations of multiplication and addition.

- a. Find the area of a rectangle with whole-number side lengths by tiling it and show that the area is the same as would be found by multiplying the side lengths.
- b. Multiply side lengths to find areas of rectangles with whole-number side lengths in the context of solving real-world and mathematical problems and represent whole-number products as rectangular areas in mathematical reasoning.
- c. Use tiling to show in a concrete case that the area of a rectangle with whole-number side lengths *a* and *b* + *c* is the sum of *a* × *b* and *a* × *c*. Use area models to represent the distributive property in mathematical reasoning. For example, in a rectangle with dimensions 4 by 6, students can decompose the rectangle into 4 × 3 and 4 × 3 to find the total area of 4 × 6.
- d. Recognize area as additive. Find areas of rectilinear figures by decomposing them into non-overlapping parts, applying this technique to solve real world problems.

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



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

## 3.MD.D.8

Solve real-world and mathematical problems involving perimeters of polygons, including finding the perimeter given the side lengths, finding an unknown side length, and exhibiting rectangles with the same perimeter and different areas or with the same area and different perimeters.

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

Code	Digital Student Experience	Code	Teacher Resources
U38	Measurement – Perimeter Word Problems	U38	Finding Perimeter
		U38	Finding Missing Side Lengths in Word Problems
		ISIP	Measuring Perimeter of Polygons

## Geometry

## Reason with shapes and their attributes

# 3.G.A.1

Understand that shapes in different categories may share attributes, and that the shared attributes can define a larger category. Recognize rhombuses, rectangles, and squares as examples of quadrilaterals, and draw examples of quadrilaterals that do not belong to any of these subcategories.

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

# 3.G.A.2

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

Code	Digital Student Experience	Code	Teacher Resources
		ISIP	Recognizing Fractions in Different Forms
		ISIP	Finding the Area of Rectangles

## Grade 4

## **Operations and Algebraic Thinking**

Use the four operations with whole numbers to solve problems.

4.0A.A	4.OA.A.1				
Interpret a multiplication equation as a comparison, e.g., interpret $35 = 5 \times 7$ as a statement that 35 is 5 times as many as 7 and 7 times as many as 5. Represent verbal statements of multiplicative comparisons as multiplication equations.					
MP 1, 2, 3	8, 4, 5, 6, 7, 8				
Code	Code         Digital Student Experience         Code         Teacher Resources				
U42	Computations and Algebraic Thinking – Solve Multistep Word Problems	U42	Building and Solving Multistep Equations with All Operations		

# 4.OA.A.2

Multiply or divide within to solve contextual problems involving multiplicative comparison and distinguish multiplicative comparison from additive comparison. For example, school A has 300 students and school B has 600 students; school B has two times as many students is multiplicative comparison; school B has 300 more students is additive comparison.

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

# 4.OA.A.3

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

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

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

## Number and Operations in Base Ten

Generalize place value understanding for multi-digit whole numbers.

# 4.NBT.A.1

Recognize that in a multi-digit number (less than or equal to 1,000,000) a digit in one place represents 10 times as much as it represents in the place to its right. For example, recognize that 7 in 700 is 10 times bigger than the 7 in 70 because  $700 \div 7 = 10$  and  $70 \times 10 = 700$ 

Code	Digital Student Experience	Code	Teacher Resources
U40	Number Sense – Convert Numbers from Expanded form to Standard form		
U40	Number Sense – Convert Numbers from Standard Form to Expanded Form to Millions		
U40	Number Sense – Writing Expanded Form from Standard Form through Millions		

# 4

# 4.NBT.A.2

Read and write multi-digit whole numbers (less than or equal to 1,000,000) using standard form, word form, and expanded form (e.g., the expanded form of 4,256 is written as  $4 \times 1,000 + 2 \times 100 + 5 \times 10 + 6 \times 1$ ). Compare two multi-digit numbers based on meanings of the digits in each place and use the symbols >, =, and < to show the relationship.

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

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

# 4.NBT.A.3

Round multi-digit whole numbers to any place (up to and including hundred-thousands place) using understanding of place value.

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

# 4.NBT.A.3

Round multi-digit whole numbers to any place (up to and including hundred-thousands place) using understanding of place value.

MP 1, 2, 3, 4, 5, 6, 7, 8				
Code	Code         Digital Student Experience         Code         Teacher Resources			
		U40	Zero as the Rounding Digit	

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

4.NBT.B.4				
Fluently ad	Fluently add and subtract within 1,000,000 using appropriate strategies and algorithms.			
MP 1, 2, 3	8, 4, 5, 6, 7, 8			
Code	Code         Digital Student Experience         Code         Teacher Resources			
		ISIP	Adding Multi-Digit Numbers and Checking for Reasonableness	

# 4.NBT.B.5

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

MP 1, 2, 3, 4, 5, 6, 7, 8	
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Code	Digital Student Experience	Code	Teacher Resources
U41	Computations and Algebraic Thinking – Multiply Two-Digit Numbers with Models	U41	Two-Digit by Two-Digit Concrete Multiplication



## **Number and Operations – Fractions**

## Extend understanding of fraction equivalence and ordering.

# 4.NF.A.1

Explain why a fraction a/b is equivalent to fraction  $(n \times a)/(n \times b)$  by using visual fraction models, with attention to how the number and size of the parts differ even though the two fractions themselves are the same size. Use this principle to recognize and generate equivalent fractions. Use this principle to recognize and generate equivalent fractions. For example,  $3/4 = 3 \times 2/4 \times 2 = 6/8$ .

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- 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	

Compare two fractions with different numerators and different denominators by creating common denominators or common numerators, or by comparting to a benchmark fraction such as 1/2. Recognize that comparisons are valid only when the two factions refer to the same whole. Use the symbols >, =, and < to show the relationship and justify the conclusions.

Code	Digital Student Experience	Code	Teacher Resources		
U43	Number Sense – Comparing Fractions Using Benchmark Fractions	U43	Fraction Comparison Using Benchmark Fractions		
U43	Number Sense – Comparing Fractions with Unlike Denominators	U43	Compare Fractions Using Symbols		
		U43	Compare Fractions by Creating Common Denominators		
		ISIP	Comparing Fractions		
		ISIP	Using Area Models to Compare Fractions		



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

# 4.NF.B.3

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

- a. Understand addition and subtraction of fractions as joining and separating parts referring to the same whole.
- b. Decompose a fraction into a sum of fractions with the same denominator in more than one way (e.g., 3/8 = 1/8 + 1/8 ; 3/8 = 1/8 + 2/8 ; 2 1/8 = 1 + 1 + 1/8 = 8/8 + 8/8 + 1/8.), recording each decomposition by an equation. Justify decompositions by using a visual fraction model.
- c. Add and subtract mixed numbers with like denominators by replacing each mixed number with an equivalent fraction and/or by using properties of operations and the relationship between addition and subtraction.
- d. Solve contextual problems involving addition and subtraction of fractions referring to the same whole and having like denominators.

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		



Understand decimal notation for fractions and compare decimal fractions.

# 4.NF.C.5

Express a fraction with denominator 10 as an equivalent fraction with denominator 100 and use this technique to add two fractions with respective denominators 10 and 100. For example, express 3/10 as 30/100, and add 3/10 + 4/100 = 34/100.

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

Code	Digital Student Experience	Code	Teacher Resources
U43	Computations and Algebraic Thinking – Determine Equivalent Fractions Tenths and Hundredths	U43	Expressing Equivalent Fractions with Denominators of Ten and One Hundred
U43	Computations and Algebraic Thinking – Add Tenths to Hundredths	U43	Adding Like Denominators of Ten and One Hundred
		U43	Add Denominators of Ten to Denominators of One Hundred

## 4.NF.C.6

Read and write decimal notation for fractions with denominators of 10 or 100. Locate these decimals on a number line.

Code	Digital Student Experience	Code	Teacher Resources
U43	Number Sense – Determine Equivalent Fractions (Tenths and Hundredths)	U43	Decimals as Fractions (Tenths and Hundredths)
U43	Number Sense – Determine Equivalent Fractions Using Models	U43	Expressing Equivalent Fractions with Denominators of Ten and One Hundred
		ISIP	Understand Decimal Numbers with Fractional Language
		ISIP	Fraction to Decimal Equivalence



# 4.NF.C.7

Compare two decimals to hundredths by reasoning about their size. Recognize that comparisons are valid only when the two decimals refer to the same whole. Use the symbols >, =, or <, to show the relationship and justify the conclusions.

## 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 and conversion of measurements from a larger unit to a smaller unit.

# 4.MD.A.1

Measure and estimate to determine relative sizes of measurement units within a single system of measurement involving length, liquid volume, and mass/weight of objects using customary and metric units.

Code	Digital Student Experience	Code	Teacher Resources
U44	Measurement and Data Analysis – Word Problems with Various Measurements	U44	Converting Units of Measurement in Word Problems

# 4.MD.A.2

Solve one- or two-step real world problems involving measurement with all four operations within a single system of measurement including problems involving simple fractions.

#### 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 Nearest Quarter Inch
		ISIP	Calculating Elapsed Time

# 4.MD.A.3

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

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	Connecting Multiplication and Area
		ISIP	Decomposing Figures to Find the Area of Polygons



## Represent and interpret data.

## 4.MD.B.4

Make a line plot to display a data set of measurements in fractions of a unit (1/2, 1/4, 1/8). Use operations on fractions by using information presented in line plots. For example, from a line plot find and interpret the difference in length between the longest and shortest specimens in an insect collection.

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

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

## Geometric measurement: understand concepts of angle and measure angles.

## 4.MD.C.5

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

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

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

# 4.MD.C.6

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

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

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

# 4.MD.C.7

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

Code	Digital Student Experience	Code	Teacher Resources
U45	Geometry – Determine Missing Angles	U45	Find the Missing Angle Measurement
		ISIP	Line and Angle Identification



## Geometry

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

# 4.G.A.1

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

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

## Grade 5

# **Operations and Algebraic Thinking**

Write and interpret numerical expressions.

# 5.OA.A.1

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

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

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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			

# 5.OA.A.2

Write simple expressions that record calculations with numbers and interpret numerical expressions without evaluating them.

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

# 5.OA.A.2

Write simple expressions that record calculations with numbers and interpret numerical expressions without evaluating them.

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

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

## Analyze patterns and relationships.

## 5.OA.B.3

Generate two numerical patterns using two given rules. For example, given the rule "Add 3" and the starting number 0, and given the rule "Add 6" and the starting number 0, generate terms in the resulting sequences.

- a. Identify relationships between corresponding terms in two numerical patterns. For example, observe that the terms in one sequence are twice the corresponding terms in the other sequence.
- b. Form ordered pairs consisting of corresponding terms from two numerical patterns and graph the ordered pairs on a coordinate plane.

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



## Number and Operations in Base Ten

## Understand the place value system.

# 5.NBT.A.1

Recognize that in a multi-digit whole number (less than or equal to 1,000,000), a digit in one place represents 10 times as much as it represents in the place to its right. For example, recognize that 7 in 700 is 10 times bigger than the 7 in 70 because  $700 \div 70 = 10$  and  $70 \times 10 = 700$ .

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

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

## 5.NBT.A.2

Explain patterns in the number of zeros of the product when multiplying a number by powers of 10 and explain patterns in the placement of the decimal point when a decimal is multiplied or divided by a power of 10. Use whole-number exponents to denote powers of 10.

Code	Digital Student Experience	Code	Teacher Resources
U46	Number Sense – Multiplying Decimals by Ten and One Hundred	U46	Multiplying Decimals by Ten and One Hundred

# 5.NBT.A.2

Explain patterns in the number of zeros of the product when multiplying a number by powers of 10 and explain patterns in the placement of the decimal point when a decimal is multiplied or divided by a power of 10. Use whole-number exponents to denote powers of 10.

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

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

# 5.NBT.A.3

Read and write decimals to thousandths using standard form, word form and expanded form (e.g., the expanded form of 347.392 is written as  $3 \times 100 + 4 \times 10 + 7 \times 1 + 3 \times (1/10) + 9 \times (1/100) + 2 \times (1/100)$ . Compare two decimals to thousandths based on meanings of the digits in each place, and use the symbols >, =, and < to show the relationship.

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

# 5.NBT.A.3

Read and write decimals to thousandths using standard form, word form and expanded form (e.g., the expanded form of 347.392 is written as  $3 \times 100 + 4 \times 10 + 7 \times 1 + 3 \times (1/10) + 9 \times (1/100) + 2 \times (1/1000)$ . Compare two decimals to thousandths based on meanings of the digits in each place, and use the symbols >, =, and < to show the relationship.

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

Code	Digital Student Experience	Code	Teacher Resources
U46	Number Sense – Abstract Comparison of Decimals to Thousandths	U46	Decimals with Whole Number Comparison

## 5.NBT.A.4

Round decimals to the nearest hundredth, tenth, or whole number using understanding of place value.

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



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

# 5.NBT.B.6

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

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

Code	Digital Student Experience	Code	Teacher Resources
U47	Computations and Algebraic Thinking – Divide Three-Digit by Two-Digit Numbers with an Area Model	U47	Four-Digit by Two-Digit Division (Partial Quotients)
U47	Computations and Algebraic Thinking – Divide Four-Digit Numbers by Two-Digit Numbers	ISIP	Estimating Quotients Using Compatible Numbers
		ISIP	Using Models to Practice Extended Division Facts
		ISIP	Models for Understanding Remainders

# 5.NBT.B.7

Add, subtract, multiply, and divide decimals to hundredths, using concrete models or drawings and strategies based on place value, properties of operations, and/or the relationship between operations; assess the reasonableness of answers using estimation strategies. (Limit division problems so that either the dividend or the divisor is a whole number.)

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

# 5.NBT.B.7

Add, subtract, multiply, and divide decimals to hundredths, using concrete models or drawings and strategies based on place value, properties of operations, and/or the relationship between operations; assess the reasonableness of answers using estimation strategies. (Limit division problems so that either the dividend or the divisor is a whole number.)

MP	1,	2,	3,	4,	5,	6,	7, 8	
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Code	Digital Student Experience	Code	Teacher Resources			
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			
		ISIP	Adding and Subtracting Decimal Numbers in a Word Problem			



## **Number and Operations – Fractions**

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

# 5.NF.A.1

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

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

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

# 5.NF.A.2

Solve contextual problems involving addition and subtraction of fractions referring to the same whole, including cases of unlike denominators. Use benchmark fractions and number sense of fractions to estimate mentally and assess the reasonableness of answers

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



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

# 5.NF.B.4

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

- a. Interpret the product  $a b \times q$  as  $a \times (q \div b)$  (partition the quantity q into b equal parts and then multiply by a). Interpret the product  $a b \times q$  as  $(a \times q) \div b$  (multiply a times the quantity q and then partition the product into b equal parts). For example, use a visual fraction model or write a story context to show that  $2 \ 3 \times 6$  can be interpreted as  $2 \times (6 \div 3)$  or  $(2 \times 6) \div 3$ . Do the same with  $2 \ 3 \times 4 \ 5 = 8 \ 15$ . (In general  $ab \times cd = ac \ bd$ ).
- b. Find the area of a rectangle with fractional side lengths by tiling it with unit squares of the appropriate unit fraction side lengths and show that the area is the same as would be found by multiplying the side lengths. Multiply fractional side lengths to find areas of rectangles and represent fraction products as rectangular areas.

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



## 5.NF.B.6

Solve real world problems involving multiplication of fractions and mixed numbers, e.g., by using visual fraction models or equations to represent the problem.

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

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

## Measurement and Data

Convert like measurement units within a given measurement system.

## 5.MD.A.1

Convert customary and metric measurement units within a single system by expressing measurement of a larger unit in terms of a smaller unit. Use these conversions to solve multistep real world problems involving distances, intervals of time, liquid volumes, masses of objects, and money (including problems involving simple fractions or decimals). For example, 3.6 liters and 4.1 liters can e combined as 7.7 liters or 7700 milliliters.

Code	Digital Student Experience	Code	Teacher Resources
		ISIP	Converting Standard Units of Measurement

# 5.MD.A.1

Convert customary and metric measurement units within a single system by expressing measurement of a larger unit in terms of a smaller unit. Use these conversions to solve multistep real world problems involving distances, intervals of time, liquid volumes, masses of objects, and money (including problems involving simple fractions or decimals). For example, 3.6 liters and 4.1 liters can e combined as 7.7 liters or 7700 milliliters.

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

Code	Digital Student Experience	Code	Teacher Resources
		ISIP	Performing Customary Measurement Conversions

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

## 5.MD.C.3

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

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

Code	Digital Student Experience	Code	Teacher Resources
U50	Measurement – Volume of Irregular Figures	U50	Volume of Rectangular Prisms
		U50	Volume of Irregular Figures
		ISIP	Integrating Fact Practice and Volume

# 5.MD.C.4

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

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

Code	Digital Student Experience	Code	Teacher Resources
U50	Measurement – Volume of Irregular Figures	U50	Volume of Rectangular Prisms
		U50	Volume of Irregular Figures
		ISIP	Integrating Fact Practice and Volume

# 5.MD.C.5

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

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

Code	Digital Student Experience	Code	Teacher Resources
U50	Measurement and Data Analysis – Volume of Irregular Figures	U50	Volume of Rectangular Prisms
		U50	Volume of Irregular Figures
		ISIP	Integrating Fact Practice and Volume

## Geometry

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

# 5.G.A.1

Graph ordered pairs and label points using the first quadrant of the coordinate plane. Understand in the ordered pair that the first number indicates the horizontal distance traveled along the x-axis from the origin, and the second number indicates the vertical distance traveled along the y-axis, with the convention that the names of the two axes and the coordinates correspond (e.g., x-axis and x-coordinate, y-axis and y-coordinate).

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

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

## 5.G.A.2

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

Code	Digital Student Experience	Code	Teacher Resources
U51	Computations and Algebraic Thinking – Comparing Points on a Coordinate Plan	U51	Graphing and Analyzing Lines
		ISIP	Identifying and Plotting Ordered Pairs on the Coordinate Plane



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

# 5.G.A.3

Classify two-dimensional figures in a hierarchy based on properties. Understand that attributes belonging to a category of two-dimensional figures also belong to all subcategories of that category. For example, all rectangles have four right angles and squares and rectangles, so all squares have four right angles.

Code	Digital Student Experience	Code	Teacher Resources
		ISIP	Analyzing Properties of Two- and Three-Dimensional Figures



# Appendix

## **Classroom Resource**

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



Genera	General Graphic Organizers	
Code	Teacher Resources	
CR	Place Value Mat: 3-Column (Blank)	
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
0.0	

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



Number Sense		
Code	Teacher Resources	
CR	Decimal Place Value: Grid and Chart – Hundredths	
CR	Decimal Place Value: Grid and Chart – Tenths	
CR	Decimal Place Value: Grid and Chart – Thousandths	
CR	Even and Odd Chart	
CR	Fraction Bars	
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
CR	Algebraic Strip Diagrams
CR	Coordinate Plane
CR	Missing Factor Cards
CR	Multiplication/Division Fact Family Template
CR	Operation Symbol Cards
CR	Part Part Whole Mat
CR	Problem Solving Cards – Addition and Subtraction
CR	Subitizing Cards (1-5)

# Measurement

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

# Istation Math Curriculum Correlated to the Tennessee State Math Standards



Measurement	
Code	Resources
CR	Linear Measurement Steps Anchor Chart
CR	Linear Measurement Yards vs. Meters Anchor Chart

Data Analysis	
Code	Teacher Resources
CR	Analyzing Line Plots

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

## **Parent Portal Lessons**

Early Math PK-1	
Code	Teacher Resources
PP	Fact Practice: Addition Fast Track
PP	Fact Practice: Addition Road Racing
PP	Fact Practice: Building Sums with Dice



Early Math PK-1	
Code	Teacher Resources
PP	Fact Practice: Choose the Operation (Addition and Subtraction)
PP	Fact Practice: Counting to Answer Math Questions
PP	Fact Practice: Matching Numerals to Quantities
PP	Fact Practice: Recognizing, Ordering and Counting
PP	Fact Practice: Shake It! Make It! Solve It! (Addition)
PP	Fact Practice: Skip Counting Raceway (Skip Counting by Fives and Tens)
PP	Fact Practice: Skip Counting Raceway (Skip Counting by Twos)
PP	Fact Practice: Sticky Sums
PP	Fact Practice: Subtraction Fast Track
PP	Fact Practice: Subtraction Road Racing
PP	Fact Practice: Write, Tally, Dray (Addition)
PP	Practice Sorting by Attributes

Istation Math 2-5	
Code	Teacher Resources
PP	Fact Practice: Adding on a Number Line
PP	Fact Practice: Addition and Subtraction Fact Families
PP	Fact Practice: Choose the Operation (Addition and Subtraction)



Istation Math 2-5	
Code	Teacher Resources
PP	Fact Practice: Choose the Operation (Multiplication and Division)
PP	Fact Practice: Fact Family Dominoes (Addition/Subtraction)
PP	Fact Practice: Identifying Halves, Thirds, Fourths
PP	Fact Practice: Multiplication and Division Fact Family Triangles
PP	Fact Practice: Multiplication Fast Track
PP	Fact Practice: Multiply Then Add
PP	Fact Practice: Multominoes
PP	Fact Practice: Shake It! Make It! Solve It! (Multiplication)
PP	Fact Practice: Sticky Products
PP	Fact Practice: Subtracting on a number Line
PP	Fact Practice: Two-Digit Comparison: Who Has More?
PP	Fact Practice: Two-Digit Comparison: Who Has Less?
PP	Fact Practice: Three- and Four-Digit Comparison: Who Has More?
PP	Fact Practice: Three-and Four-Digit Comparison: Who Has Less?
PP	Fact Practice: Understanding Decimal Numbers
PP	Fact Practice: Write, Expand, Sketch
PP	Fact Practice: Writing Expressions from Scenarios



Istation Math 2-5	
Code	Teacher Resources
PP	Practice Linear Measurement Scavenger Hunt (Centimeter)
PP	Practice Linear Measurement Scavenger Hunt (Inches)
PP	Practice Plotting Points on a Coordinate Plane