

Kindergarten – Grade 5





# Contents

Power Path Featured Content	13
Newest Features	13
Power Path Featured Content (Spanish)	16
Newest Features	16
Kindergarten	18
Counting and Cardinality	18
Know number names and the count sequence.	18
K.CC.A.1	18
K.CC.A.2	19
K.CC.A.3	19
Count to tell the number of objects	21
K.CC.B.4	21
K.CC.B.5	22
Compare numbers.	23
K.CC.C.6	23
K.CC.C.7	24
Operations and Algebraic Thinking	24
Understand addition as putting together and adding to, and understand subtraction as taking apart and taking from	24
K.OA.A.1	24
K.OA.A.2	26
K.OA.A.3	28
K.OA.A.4	29
Number and Operations in Base Ten	31
Work with numbers 11–19 to gain foundations for place value	31





K.NBT.A.1	31
Measurement and Data	31
Describe and compare measurable attributes.	31
K.MD.A.1	31
K.MD.A.2	32
Classify objects and count the number of objects in each category	33
K.MD.B.3	33
K.MD.C.4	33
Geometry	34
Identify and describe shapes (squares, circles, triangles, rectangles, hexagons, cubes, cones, cylinders, and spheres)	34
K.G.A.2	34
K.G.A.3	34
Analyze, compare, create, and compose shapes	35
K.G.B.4	35
Grade 1	36
Operations and Algebraic Thinking	36
Represent and solve problems involving addition and subtraction.	36
1.OA.A.1	36
1.OA.A.2	37
Understand and apply properties of operations and the relationship between addition and subtraction	38
1.OA.B.3	38
1.OA.B.4	39
Add and subtract within 20	40
1.OA.C.5	40
1.OA.C.6	41





Work with addition and subtraction equations.	43
1.OA.D.8	43
Number and Operations in Base Ten	43
Extend the counting sequence	43
1.NBT.A.1	43
Understand place value.	44
1.NBT.B.2	44
1.NBT.C.3	45
Use place value understanding and properties of operations to add and subtract	46
1.NBT.C.4	46
Measurement and Data	47
Work with time and money	47
1.MD.B.3	47
1.MD.B.4	48
1.MD.B.5	48
Represent and interpret data	49
1.MD.C.6	49
Geometry	50
Reason with shapes and their attributes.	50
1.G.A.1	50
1.G.A.3	50
Grade 2	51
Operations and Algebraic Thinking	51
Represent and solve problems involving addition and subtraction.	51
2.OA.A.1	51





Add and subtract within 20.	51
2.OA.B.2	51
Work with equal groups of objects to gain foundations for multiplication	53
2.OA.C.3	53
2.OA.C.4	53
Number and Operations in Base Ten	54
Understand place value	54
2.NBT.A.1	54
2.NBT.A.3	55
2.NBT.A.4	56
Use place value understanding and properties of operations to add and subtract	56
2.NBT.B.5	56
2.NBT.B.7	58
Measurement and Data	58
Measure and estimate lengths in standard units.	58
2.MD.A.1	58
2.MD.A.2	59
2.MD.A.4	60
Relate addition and subtraction to length.	60
2.MD.B.6	60
Work with time and money	61
2.MD.C.7	61
2.MD.C.8	61
Represent and interpret data	62
2.MD.D.10	62





Geometry	63
Reason with shapes and their attributes.	63
2.G.A.2	63
2.G.A.3	63
2.G.A.4	64
Grade 3	65
Operations and Algebraic Thinking	65
Represent and solve problems involving multiplication and division.	65
3.OA.A.1	65
3.OA.A.2	66
3.OA.A.3	67
3.OA.A.4	67
Understand properties of multiplication and the relationship between multiplication and division	68
3.OA.B.5	68
3.OA.B.6	69
Multiply and divide within 100	69
3.OA.C.7	69
Solve problems involving the four operations and identify and explain patterns in arithmetic	71
3.OA.D.8	71
3.OA.D.9	72
Number and Operations in Base Ten	73
Use place value understanding and properties of operations to perform multi-digit arithmetic	73
3.NBT.A.1	73
3.NBT.A.2	73
Number and Operations – Fractions	74





Develop understanding of fractions as numbers	74
3.NF.A.1	74
3.NF.A.2	74
3.NF.A.3	75
Measurement and Data	78
Solve problems involving money, measurement and estimation of intervals of time, liquid volumes, and masses of objects	78
3.MD.A.1	78
Represent and interpret data	78
3.MD.B.3	78
Geometric measurement: understand concepts of area and relate area to multiplication and to addition.	79
3.MD.C.5	79
3.MD.C.6	79
3.MD.C.7	80
Geometric measurement: recognize perimeter as an attribute of plane figures and distinguish between linear and area	
measures	
3.MD.D.8	
Geometry	
Reason with shapes and their attributes	
3.G.A.1	_
3.G.A.2	82
Grade 4	
Operations and Algebraic Thinking	
Use the four operations with whole-numbers to solve problems	83
4.OA.A.1	83
4.OA.A.2	83





4.OA.A.3	84
Number and Operations in Base Ten	84
Generalize place value understanding for multi-digit whole-numbers less than or equal to 1,000,000	84
4.NBT.A.1	84
4.NBT.A.2	85
4.NBT.A.3	85
Use place value understanding and properties of operations to perform multi-digit arithmetic	86
4.NBT.B.4	86
4.NBT.B.5	86
Number and Operations – Fractions	87
Extend understanding of fraction equivalence and ordering.	87
4.NF.A.1	87
4.NF.A.2	88
Build fractions from unit fractions by applying and extending previous understanding of operations on whole numbers	89
4.NF.B.3	89
Understand decimal notation for fractions and compare decimal fractions.	90
4.NF.C.5	90
4.NF.C.6	90
4.NF.C.7	91
Measurement and Data	92
Solve problems involving measurement and conversion of measurements from a larger unit to a smaller unit	92
4.MD.A.1	92
4.MD.A2	92
4.MD.A.3	93
Represent and interpret data	93





4.MD.B.4	93
Geometric measurement: understand concepts of angle and measure angles.	94
4.MD.C.5	94
4.MD.C.6	94
4.MD.C.7	95
Geometry	95
Draw and identify lines and angles and classify shapes by properties of their lines and angles	95
4.G.A.1	95
Grade 5	96
Operations and Algebraic Thinking	96
Write and interpret numerical expressions.	96
5.OA.A.1	96
5.OA.A.2	96
Analyze patterns and relationships	97
5.OA.B.3	97
Number and Operations in Base Ten	98
Understand the place value system.	98
5.NBT.A.1	98
5.NBT.A.2	99
5.NBT.A.3	99
5.NBT.A.4	100
Perform operations with multi-digit whole numbers and with decimals to hundredths	101
5.NBT.B.6	101
5.NBT.B.7	102
Number and Operations – Fractions	103





Use equivalent fractions as a strategy to add and subtract fractions.	103
5.NF.A.1	103
5.NF.A.2	103
Apply and extend previous understandings of multiplication and division to multiply and divide fractions	104
5.NF.B.4	104
5.NF.B.6	105
Measurement and Data	105
Convert like measurement units within a given measurement system.	105
5.MD.A.1	105
Geometric measurement: understand concepts of volume and relate volume to multiplication and to addition	106
5.MD.C.3	106
5.MD.C.4	106
5.MD.C.5	107
Geometry	108
Graph points on the coordinate plane to solve real-world and mathematical problems	108
5.G.A.1	108
5.G.A.2	108
5.G.B.4	109
ppendix	110
Classroom Resource	110
General Graphic Organizers	110
Number Sense	111
Computations and Algebraic Thinking	113
Measurement	113
Data Analysis	114





Geometry	11	4
Parent Portal Lessons	11	4
Early Math PK-1	11	4
Istation Math 2-5	11	5



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

As stated in the Arkansas Academic Standards for Mathematics, "The Standards for Mathematical Practice describe varieties of expertise that mathematics educators at all levels should seek to develop in their students." Each applicable Mathematical Practice standard is listed below the correlation with the corresponding code, MP1–8.

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

Mathematical Practice 2: Reason abstractly and quantitatively.

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

Mathematical Practice 4: Model with mathematics.

Mathematical Practice 5: Use appropriate tools strategically.

Mathematical Practice 6: Attend to precision.

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

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

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

Code Legend		
U	Unit	
ISIP	Istation's Indicators of Progress	
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	MP 1, 2, 3, 4, 5, 6, 7, 8			
Code	Digital Student Experience	Code	Teacher Resources	
K.CC.A.1				
		U13-15	Odd One Out - Counting	
K.CC.C.6				
U9-11	Number Sense – Comparison Cards: Comparing Groups or Numbers	U9-11	More or Less? Which is Best?	
K.CC.C.7	K.CC.C.7			
U9-11	Number Sense – Comparison Cards: Comparing Groups or Numbers	U9-11	More or Less? Which is Best?	
K.NBT.A.1				
		U7-8	Make It, Break It	
K.G.A.1				
			Shape Simon Says	
K.G.A.3				
			Shape Families	
K.G.A.5				
U4-6	Geometry – Sweet Shapes			



# **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

MP 1, 2, 3	5, 4, 5, 6, 7, 8		
Code	Digital Student Experience	Code	Teacher Resources
1.NBT.A.1	· ·		
		U16-17	One Hundred Twenty is Plenty
1.NBT.B.2			
		U12-13	Two-Digit Memory
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



## **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
1111	٠,	∠,	ο,	ъ,	ο,	Ο,	٠,	U

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



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

	an i caracta comon (opamer)					
Newest	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	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	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)			



## **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.

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



# Kindergarten

18

# **Counting and Cardinality**

Know number names and the count sequence.

K.CC.A	K.CC.A.1					
Count to 1	Count to 100 by ones, fives and tens					
MP 1, 2, 3	3, 4, 5, 6, 7, 8					
Code	Digital Student Experience	Code	Teacher Resources			
U14	Number Sense – "EZ with a Rock and Roll Beat" (1-100)	U14	One Hundred Is a Lot			
U14	Number Sense – Identifying Numbers (1-100)	U14	Roll-Count-Cover – Skip Counting by Tens			
U14	Number Sense – Identify Missing Numbers (1-100)	U21	Pattern of the Ones and Tens Places - The Arrow Says			
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 up to 100

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

Code	Digital Student Experience	Code	Teacher Resources
U14	Number Sense – "EZ with a Rock and Roll Beat" (1-100)	U14	One Hundred Is a Lot
U14	Number Sense – Identifying Numbers (1-100)	U14	Roll-Count-Cover – Skip Counting by Tens
U14	Number Sense – Identify Missing Numbers (1-100)	U21	Pattern of the Ones and Tens Places - The Arrow Says
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.3

Read, write and represent numerals 0-20

Code	Digital Student Experience	Code	Teacher Resources
U11	Number Sense – "Writing Our Numbers"	U6	Domino Dot Memory (1-10)
U11	Number Sense – Writing Numbers Everywhere (1-10)	U7	Counting a Scattered Static Group (1-10)
U15	Number Sense – "Pattern of the Count" (1-50)	U7	Calendar Counting (1-30)



# K.CC.A.3

Read, write and represent numerals 0-20

Code	Digital Student Experience	Code	Teacher Resources
U15	Number Sense – Place Value Rows (1-50)	U8	Counting Sticks (1-20)
U6	Number Sense – "EZ with a Rock and Roll Beat" (1-20)	U6	Count with Me (1-20)
U6	Number Sense – Identifying Numbers (1-20)	U8	Counting Objects (1-20)
U6	Number Sense – Identify Missing Numbers (1-20)	U10	Park the Car and Write (1-20)
U6	Number Sense – Number Sequence (1-20)	U11	Writing Numbers Everywhere (5-10)
U8	Number Sense – "Counting Cattle" (1-20)	U11	Writing Numbers (10-20)
U8	Number Sense – Counting in a Line (1-20)	U18	Counting Memory
U8	Number Sense – Counting in an Array (1-20)	ISIP	Set Stories
U8	Number Sense – Counting a Scattered Static Group (1-20)	ISIP	Total Amount in a Scattered Group
U10	Number Sense – "Counting Cattle" (1-20)	ISIP	Ten Frame Puzzles (1-20)
U10	Number Sense – Choose the Line with the Correct Amount (1-20)	ISIP	Multiple Representations of Numbers (1-10)
U10	Number Sense – Remember the Counted Amount (1-20)		
U10	Number Sense – Counting an Array		
U10	Number Sense – Choose the Correct Amount (1-20)		



## Count to tell the number of objects.

## K.CC.B.4

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

When counting objects:

- Say the numbers in order, pairing each object with only one number and each number with only one object (one to one correspondence)
- Understand that the last number name said tells the number of objects counted
- Understand that each successive number name refers to a quantity that is one larger

Code	Digital Student Experience	Code	Teacher Resources
U8	Number Sense – "Counting Cattle" (1-20)	U6	Count with Me (1-20)
U8	Number Sense – Counting in a Line (1-20)	U8	Counting Sticks (1-20)
U8	Number Sense – Counting in an Array (1-20)	U8	Counting Objects (1-20)
U8	Number Sense – Counting a Scattered Static Group (1-20)	U14	One Hundred Is a Lot
U10	Number Sense – "Counting Cattle" (1-20)	U18	Counting Memory
U10	Number Sense – Choose the Line with the Correct Amount (1-20)	ISIP	Total Amount in a Scattered Group
U10	Number Sense – Remember the Counted Amount (1-20)	ISIP	Multiple Representations of Numbers (1-10)
U10	Number Sense – Counting an Array		



# K.CC.B.5

## Count to answer "how many?":

- Count up to 20 objects in any arrangement
- Count up to 10 objects 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)
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	Set Stories
U7	Number Sense – Choose the Correct Amount (1-10)	ISIP	Ten Frame Puzzles (1-20)
U7	Number Sense – Counting a Static Scattered Group (1-10)	ISIP	Total Amount in a Scattered Group
U8	Number Sense – "Counting Cattle" (1-20)	ISIP	Multiple Representations of Numbers (1-10)
U8	Number Sense – Counting in a Line (1-20)	ISIP	Subitizing to Problem Solve
U8	Number Sense – Counting in an Array (1-20)		
U8	Number Sense – Counting a Scattered Static Group (1-20)		



## K.CC.B.5

Count to answer "how many?":

- Count up to 20 objects in any arrangement
- Count up to 10 objects 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 – "Counting Cattle" (1-20)		
U10	Number Sense – Choose the Correct Amount (1-20)		
U10	Number Sense – Remember the Counted Amount (1-20)		

## Compare numbers.

# K.CC.C.6

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

Code	Digital Student Experience	Code	Teacher Resources
		U6	Less/More/Equal Sets of Concrete Objects
		ISIP	Finding One More or One Less (1-20)
		ISIP	Comparing Groups of Objects (1-20)
		ISIP	Multiple Representations of Numbers (1-10)



## K.CC.C.7

Compare two numbers between 1 and 10 presented as written numerals

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

Code	Digital Student Experience	Code	Teacher Resources
		U6	Less/More/Equal Sets of Concrete Objects
		ISIP	Finding One More or One Less (1-20)
		ISIP	Comparing Groups of Objects (1-20)
		ISIP	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.1

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

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
U10	Computations and Algebraic Thinking – "Part Part Whole in New Orleans" (1-10)	U10	Dogs and Cats on Mats (up to 10)



# 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 equation

Code	Digital Student Experience	Code	Teacher Resources
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
		ISIP	Addition Stories
		ISIP	Subtraction Stories



## 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 equation

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

Code	Digital Student Experience	Code	Teacher Resources
		ISIP	Count Back to Subtract
		ISIP	Ten Frame Addition

# K.OA.A.2

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

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
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



# K.OA.A.2

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

Code	Digital Student Experience	Code	Teacher Resources
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



## K.OA.A.3

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

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	Dogs and Cats on Mats (up to 10)
U10	Computations and Algebraic Thinking – "Part Part Whole in New Orleans" (1-10)	U10	Ten or Not Ten
U10	Computations and Algebraic Thinking – Part Part Whole Addition Stories	U12	Parts and Wholes
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



## **K.OA.A.3**

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

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

Code	Digital Student Experience	Code	Teacher Resources
U14	Computations and Algebraic Thinking – Whole Part Part Subtraction Stories (within 10)	U22	Beading the Difference
U18	Number Sense – Decompose Numbers Less Than or Equal to Ten		

# K.OA.A.4

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

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



# **K.OA.A.4**

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

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		



## **Number and Operations in Base Ten**

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

## K.NBT.A.1

Develop initial understanding of place value and the base-ten number system by showing equivalent forms of whole numbers from 11 to 19 as groups of tens and ones using objects and drawings

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

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

#### **Measurement and Data**

Describe and compare measurable attributes.

## K.MD.A.1

Describe measurable attributes of objects, including but not limited to length, weight, height, and temperature

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



## K.MD.A.1

Describe measurable attributes of objects, including but not limited to length, weight, height, and temperature

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

Describe the difference when comparing two objects (side-by-side) with a measurable attribute in common, to see which object has more of or less of the common attribute.

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?



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

## K.MD.B.3

Classify, sort, and count objects using both measurable and non-measurable attributes such as size, number, color, or shape

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

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

# K.MD.C.4

- Understand concepts of time including morning, afternoon, evening, today, yesterday, tomorrow, day week, month and year
- Understand that clocks, both analog and digital, and calendars are tools that measure time.

Code	Digital Student Experience	Code	Teacher Resources
U16	Measurement and Data Analysis – Tell Time to the Nearest Hour	U7	Calendar Counting
U16	Measurement and Data Analysis – Tell and Write Time from Analog and Digital Clock to the Nearest Half Hour	U16	What Does the Clock Say?
U19	Measurement and Data Analysis – Tell and Write Time from Analog/Digital Clocks to the Nearest Hour and Half Hour	U16	Roll the Clock
		U19	Set the Time and Go!



## 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 **Digital Student Experience** Code Code **Teacher Resources** U1 Geometry - Identify Circles Identifying Two-Dimensional Shapes U1 We're Going on a Shape Hunt Geometry - Identify Squares U1 U3 Geometry - Identify Triangles U9 Considering Sizes of Shapes U3 Geometry – Identifying Shapes Regardless of Orientation U9 U14 Odd One Out

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



## Analyze, compare, create, and compose shapes.

## K.G.B.4

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

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.OA.A.1

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

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)		

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

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

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

## 1.OA.A.2

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

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	Associative Property of Addition

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

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

Code	Digital Student Experience	Code	Teacher Resources
		ISIP	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 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	Counting on Cards

# 1.OA.B.3

Apply properties of operations as strategies to add and subtract

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

Code	Digital Student Experience	Code	Teacher Resources
U24	Computations and Algebraic Thinking – Determine the Unknown Whole Numbers in Subtraction Sentences	ISIP	Fact Family Dominoes
		ISIP	Associative Property of Addition
		ISIP	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)

# 1.OA.B.4

Understand subtraction as an unknown-addend problem

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

Code	Digital Student Experience	Code	Teacher Resources
		ISIP	Subtraction Stories
		ISIP	Fact Family Dominoes

#### Add and subtract within 20.

# 1.OA.C.5

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

Code	Digital Student Experience	Code	Teacher Resources
		U22	Beading the Difference
		U22	Mystery in the Middle
		U24	Start, Change, Result! (within 20)

# 1.OA.C.6

Add and subtract within 20, demonstrating computational fluency for addition and subtraction within ten.

Use strategies such as:

- Counting on
- Making ten (e.g., 8 + 6 = 8 + 2 + 4 = 10 + 4 = 14)
- Decomposing a number leading to a ten (e.g., 13 4 = 13 3 1 = 10 1 = 9)
- Using the relationship between addition and subtraction (e.g., knowing that 8 + 4 = 12, one knows 12 8 = 4)
- Creating equivalent but easier or known sums (e.g., adding 6 + 7 by creating the known equivalent 6 + 6 + 1 = 12 + 1 = 13)

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	Operations – Turn Around Addition
U20	Computations and Algebraic Thinking – Addition Stories (horizontal orientation)	U20	Operations – Grouping Groceries
U20	Computations and Algebraic Thinking – Addition Stories (vertical orientation)	U20	Operations – Identity Property Go Fish!
U20	Computations and Algebraic Thinking – "The Math Whiz"	U20	Doubles Facts
U20	Computations and Algebraic Thinking – Fact Strategies	FP	Building Sums to Ten

# 1.OA.C.6

Add and subtract within 20, demonstrating computational fluency for addition and subtraction within ten.

Use strategies such as:

- Counting on
- Making ten (e.g., 8 + 6 = 8 + 2 + 4 = 10 + 4 = 14)
- Decomposing a number leading to a ten (e.g., 13 4 = 13 3 1 = 10 1 = 9)
- Using the relationship between addition and subtraction (e.g., knowing that 8 + 4 = 12, one knows 12 8 = 4)
- Creating equivalent but easier or known sums (e.g., adding 6 + 7 by creating the known equivalent 6 + 6 + 1 = 12 + 1 = 13)

Code	Digital Student Experience	Code	Teacher Resources
U20	Computations and Algebraic Thinking – Commutative Property of Addition	FP	Place Value of Tens and One
U20	Computations and Algebraic Thinking – Associative Property of Addition	FP	Fact Family Dominoes
U20	Computations and Algebraic Thinking – Identity Property of Addition	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, starting at any number less than 120
- In this range, read and write numerals and represent a number of objects with a written numeral

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, starting at any number less than 120
- In this range, read and write numerals and represent a number of objects with a written numeral

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

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

#### Understand place value.

## 1.NBT.B.2

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

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

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
		U17	Digit Deal
		U23	Decade Numbers

### 1.NBT.B.2

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

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

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

Code	Digital Student Experience	Code	Teacher Resources
		ISIP	Base Ten Block Basics
		ISIP	Matching Numerals and Base Ten Blocks
		ISIP	Base Ten Block Comparison Game

## 1.NBT.C.3

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

Code	Digital Student Experience	Code	Teacher Resources
		ISIP	Base Ten Block Basics
		ISIP	Matching Numerals and Base Ten Blocks
		ISIP	Base Ten Block Comparison Game
		ISIP	Graphing Stories – Determining Most and Least

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

# 1.NBT.C.4

Add within 100 using concrete models or drawings, relate the strategy used to a written expression or equation, and be able to explain the reasoning

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 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	U24	Start, Change, Result! (within 20)
		ISIP	Computations and Algebraic Thinking – 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)

## 1.NBT.C.4

Add within 100 using concrete models or drawings, relate the strategy used to a written expression or equation, and be able to explain the reasoning

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

Code	Digital Student Experience	Code	Teacher Resources
		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 clock

Code	Digital Student Experience	Code	Teacher Resources
U16	Measurement and Data Analysis – Tell Time to the Nearest Hour	U16	What Does the Clock Say?
U16	Measurement and Data Analysis – Tell and Write Time from Analog and Digital Clock to the Nearest Half Hour	U16	Roll the Clock
U19	Measurement and Data Analysis – Tell and Write Time from Analog/Digital Clocks to the Nearest Hour and Half Hour	U19	Set the Time and Go!

# 1.MD.B.4

Identify and know the value of a penny, nickel, dime and quarter

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

Code	Digital Student Experience	Code	Teacher Resources
U14	Measurement and Data Analysis – Identify Coins by Value	U12	Coin Name Cover-Up
		U14	Coin Value Cover-Up
		AR	Cent Symbol Four-in-a-Row

# 1.MD.B.5

Count collections of like coins

Code	Digital Student Experience	Code	Teacher Resources
U14	Measurement and Data Analysis – Identify Coins by Value	U12	Coin Name Cover-Up
		U14	Coin Value Cover-Up
		AR	Cent Symbol Four-in-a-Row

### Istation Math Curriculum Correlated to the Arkansas Academic Standards for Mathematics



### Represent and interpret data.

# 1.MD.C.6

- Organize, represent, and interpret data with up to three categories, using tally tables, picture graphs and bar graphs
- Ask and answer questions about the total number represented, how many in each category and how may more or less are in one category than another

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

### Geometry

Reason with shapes and their attributes.

### 1.G.A.1

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

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

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

### 1.G.A.3

- Partition circles and rectangles into two and four equal shares, describe the shares using the words halves, fourths, and quarters, and use the phrases half of, fourth of, and quarter of
- Describe the whole as two of, or four of the shares
- Understand for these examples that 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

- Use addition and subtraction within ten to solve one- and two-step word problems involving situations of adding to, taking from, putting together, taking apart, and comparing, with unknowns in all positions
- Represent a strategy with a related equation including a symbol for the unknown number

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

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

#### Add and subtract within 20.

### 2.OA.B.2

- Fluently add and subtract within 20 using mental strategies
- By end of Grade 2, know from memory all sums of two one-digit numbers

 $\mathsf{MP}\ 1,\, 2,\, 3,\, 4,\, 5,\, 6,\, 7,\, 8$ 

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

# 2.OA.B.2

- Fluently add and subtract within 20 using mental strategies
- By end of Grade 2, know from memory all sums of two one-digit numbers

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 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

- Understand that the three digits of a three-digit number represent amounts of hundreds, tens, and ones e.g., 726 equals 7 hundreds, 2 tens, and 6 ones
- Understand that 100 can be thought of as a group of ten tens called a "hundred"
- The numbers 100, 200, 300, 400, 500, 600, 700, 800, 900 refer to one, two, three, four, five, six, seven, eight or nine hundreds (and 0 tens and 0 ones)

Code	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 base-ten numerals, number names, and expanded form
- Model and describe numbers within 1,000 as groups of 10 in a variety of ways

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 hundreds, tens, and ones digits, using >, =, and < symbols to record the results of comparisons

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

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

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

### 2.NBT.B.5

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

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

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

### 2.NBT.B.7

Add and subtract within 1,000, using concrete models or drawings and strategies based on place value, properties of operations, and the relationship between addition and subtraction; relate the strategy to a written expression or equation

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

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

#### **Measurement and Data**

Measure and estimate lengths in standard units.

### 2.MD.A.1

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

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 twice with two different length units
- 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, expressing the length difference in terms of a standard length unit

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

Code	Digital Student Experience	Code	Teacher Resources
		ISIP	Ruler Relay

#### Relate addition and subtraction to length.

## 2.MD.B.6

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

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

### Work with time and money.

# 2.MD.C.7

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

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

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

# 2.MD.C.8

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

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

### Represent and interpret data.

# 2.MD.D.10

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

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

### Geometry

Reason with shapes and their attributes.

### 2.G.A.2

Partition a rectangle into rows and columns of same-size squares and count to find the total number of them.

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

Code	Digital Student Experience	Code	Teacher Resources
U32	Geometry – Addition Arrays	U32	Addition Arrays

### 2.G.A.3

Partition circles and rectangles into two, three, or four equal shares, describe the shares using the words *halves, thirds, half of, a third of,* etc., and describe the whole as two halves, three thirds, four fourths.

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		

# 2.G.A.4

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

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
		FP	Sticky Products

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

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

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

# 3.OA.A.2

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

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

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

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

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

# 3.OA.A.4

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

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

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

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

Code	Digital Student Experience	Code	Teacher Resources
		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

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

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

- Using computational fluency 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, automatically (fact fluency) recall 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

- Using computational fluency multiply and divide within 100, using strategies such as the relationship between multiplication and division (e.g., knowing that 8 x 5 = 40, one knows 40 ÷ 5 = 8) or properties of operations
- By the end of Grade 3, automatically (fact fluency) recall 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

- Using computational fluency 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, automatically (fact fluency) recall 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 word problems using the four operations, and be able to:

- 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

## 3.OA.D.8

Solve two-step word problems using the four operations, and be able to:

- · 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
		U35	Problem Solving without Numbers: Addition and Subtraction
		U35	Build and Solve Two-Step Equations with All Operations
		U36	Problem Solving without Numbers: Multiplication and Division

# 3.OA.D.9

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

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.A.1

Use place value understanding to round whole numbers to the nearest 10 or 100

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

Code	Digital Student Experience	Code	Teacher Resources
U35	Number Sense – Rounding to the Nearest Ten	U35	Rounding – Nearest Ten
U35	Number Sense – Rounding to the Nearest Hundred	U35	Rounding – Nearest Hundred
		U35	Rounding - Nearest Ten, Hundred, Thousand

## 3.NBT.A.2

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

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

#### **Number and Operations – Fractions**

Develop understanding of fractions as numbers.

## 3.NF.A.1

- Understand a fraction 1/b as the quantity formed by 1 part when a whole is partitioned into b equal parts
- Understand a fraction 1/b as the quantity formed by a parts of size 1/b

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

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

## 3.NF.A.2

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

- Represent a fraction 1/b on a number line diagram by defining the interval from 0 to 1 as the whole and partitioning it into b equal parts
- Recognize that each part has size 1/b and that the endpoint of the part based at 0 locates the number 1/b on the number line
- 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

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

#### 3.NF.A.2

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

- Represent a fraction 1/b on a number line diagram by defining the interval from 0 to 1 as the whole and partitioning it into b equal parts
- Recognize that each part has size 1/b and that the endpoint of the part based at 0 locates the number 1/b on the number line
- Represent a fraction a/b on a number line diagram by marking off a lengths 1/b from 0.
- Recognize that the resulting interval has size a/b and that its endpoint locates the number a/b on the number line

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

Code	Digital Student Experience	Code	Teacher Resources
		U37	Many Equivalent Fractions
		U37	Identifying Equivalent Fractions

#### 3.NF.A.3

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

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

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

#### 3.NF.A.3

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

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

Code	Digital Student Experience	Code	Teacher Resources
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
		ISIP	Recognizing Fractions in Different Forms

#### 3.NF.A.3

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

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

Code	Digital Student Experience	Code	Teacher Resources
		ISIP	Writing Fractions – 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 time using the terms quarter and half as related to the hour (e.g., quarter-past 3:00, half-past 4:00, and quarter till 3:00)
- Tell and write time to the nearest minute and measure time intervals in minutes
- Solve word problems involving addition and subtraction of time intervals in minutes,( e.g., by representing the problem on a number line diagram)

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

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

#### Represent and interpret data.

#### 3.MD.B.3

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

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

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

## 3.MD.C.5

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

- A 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
- 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.MD.C.7

Relate area to the operations of multiplication and addition.

- 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
- 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
- Use tiling to show in a concrete case that the area of a rectangle with whole-number side lengths a and b + c is the sum of  $a \times b$  and  $a \times c$
- Use area models to represent the distributive property in mathematical reasoning
- Recognize area as additive. Find the area of figures composed of rectangles by decomposing them into non-overlapping rectangles and adding the areas of the non-overlapping parts, applying this technique to solve real—world problems

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 (e.g., rhombuses, rectangles, and others) may share attributes (e.g., having four sides), and that the shared attributes can define a larger category (e.g., quadrilaterals)
- Recognize rhombuses, rectangles, and squares as examples of quadrilaterals, and draw examples of quadrilaterals that do not belong to any of these subcategories

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

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.OA.A.1

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

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

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

# 4.OA.A.2

- Multiply or divide to solve word problems involving multiplicative comparison
- Use drawings and equations with a symbol for the unknown number to represent the problem, distinguishing multiplicative comparison from 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 multistep word problems posed with whole numbers and having whole-number answers using the four operations, including problems in which remainders must be interpreted. Represent these problems using equations with a letter standing for the unknown quantity
- · Assess the reasonableness of answers using mental computation and estimation strategies including rounding

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

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

## **Number and Operations in Base Ten**

Generalize place value understanding for multi-digit whole-numbers less than or equal to 1,000,000.

## 4.NBT.A.1

Recognize that in a multi-digit whole number, a digit in one place represents ten times what it represents in the place to its right

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

# 4.NBT.A.2

- Read and write multi-digit whole numbers using base-ten numerals, number names, and expanded form
- Compare two multi-digit numbers based on meanings of the digits in each place, using >, =, and < symbols to record the results of comparisons

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

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

# 4.NBT.A.3

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

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

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

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

Code	Digital Student Experience	Code	Teacher Resources
		U40	Zero as the Rounding Digit

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

## 4.NBT.B.4

Add and subtract multi-digit whole numbers using the standard algorithm

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

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

## 4.NBT.B.5

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

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

- By using visual fraction models explain why a fraction a/b is equivalent to fraction  $(n \times a)/(n \times b)$ , 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

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



## 4.NF.A.2

- Compare two fractions with different numerators and different denominators, (e.g., by creating common denominators or numerators, or by comparing to a benchmark fraction such as ½)
- Recognize that comparisons are valid only when the two fractions refer to the same whole. Record the results of comparisons with symbols (>, =, or <), and justify the conclusions, (e.g., by using a visual fraction model)

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- 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.

- Understand addition and subtraction of fractions as joining and separating parts referring to the same whole
- Decompose a fraction into a sum of fractions with the same denominator in more than one way, recording each decomposition by an equation. Justify decompositions, (e.g., by using a visual fraction model)
- Add and subtract mixed numbers with like denominators, (e.g., by using properties of operations and the relationship between addition and subtraction and by replacing each mixed number with an equivalent fraction)
- Solve word problems involving addition and subtraction of fractions referring to the same whole and having like denominators, (e.g., by using visual fraction models and equations to represent the problem)

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

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

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

## 4.NF.C.6

Use decimal notation for fractions with denominators of 10 or 100

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

# 4.NF.C.7

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

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

- Know relative sizes of measurement units within one system of units including km, m, cm; kg, g; l, ml; hr., min, sec; yd, ft, in; ga;, qt, pt, c
- Within a single system of measurement, express a larger measurement unit in terms of a smaller unit. Record measurement conversions in a two-column table.

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

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

## 4.MD.A2

- Use the four operations to solve word problems involving distances, intervals of time, liquid volumes, masses of objects, and money including the ability to make change, including problems involving simple fractions or decimals, and problems that requires expressing measurements given a larger unit in terms of a smaller unit
- Represent measurement quantities using diagrams such as number line diagrams that feature a measurement scale

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

Apply the area and perimeter formulas for rectangles in real world and mathematical problems

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

Code	Digital Student Experience	Code	Teacher Resources
		ISIP	Finding Area of Rectangles and Squares by Using Multiplication
		ISIP	Quantifying Areas of Rectangles and Squares
		ISIP	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)
- Solve problems involving addition and subtraction of fractions by using information presented in line plots

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:

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

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

Code	Digital Student Experience	Code	Teacher Resources
U45	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

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

## 4.MD.C.7

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

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

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

## Geometry

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

# 4.G.A.1

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

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 grouping symbols including parentheses, brackets, or braces in numerical expressions and evaluate expressions with this symbol

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

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

# 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
- Identify apparent relationships between corresponding terms by completing a function table or input/output table
- Using the terms created, form and graph 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

98

Recognize that in a multi-digit number, a digit in one place represents 10 times as much as it represents in the place to its right and 1/10 of what it represents in the place to its left

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

Understand why multiplying or dividing by a power of 10 shifts the value of the digits of a whole number or decima:

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

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

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

# 5.NBT.A.3

Read, write, and compare decimals to thousandths.

- Read and write decimals to thousandths using base-ten numerals, number names, and expanded form(s)
- Compare two decimals to thousandths based on meanings of the digits in each place, using >, =, and < symbols to record the results of comparisons.

Code	Digital Student Experience	Code	Teacher Resources
U46	Number Sense – Compare Decimals Visually on the Number Line	U46	Decimal Grids and Place Value Mats

## 5.NBT.A.3

Read, write, and compare decimals to thousandths.

- Read and write decimals to thousandths using base-ten numerals, number names, and expanded form(s)
- Compare two decimals to thousandths based on meanings of the digits in each place, using >, =, and < symbols to record the results of comparisons.

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

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

# 5.NBT.A.4

Apply place value understanding to round decimals to any place

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 of whole numbers with up to four-digit dividends and two-digit divisors, using strategies based on
  - Place value
  - o The properties of operations
  - o Divisibility rules
  - o The relationship between multiplication and division
- Illustrate and explain the calculation by using equations, rectangular arrays, and/or area models

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

Perform basic operations on decimals to the hundredths place:

- Add and subtract decimals to hundredths, using concrete models or drawings and strategies based on place value, properties of operations, and/or the relationship between addition and subtraction
- 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 multiplication and division

Code	Digital Student Experience	Code	Teacher Resources
U46	Computations and Algebraic Thinking – Visual Representation for Multiplying Decimals	U46	Multiplying Decimals by Ten and One Hundred
U46	Computations and Algebraic Thinking – Multiply Decimals by Powers of Ten	U46	Dividing Decimals by Ten and One Hundred
U46	Computations and Algebraic Thinking – Divide Decimals by Powers of Ten	U46	Multiplying and Dividing Decimals by Powers of Ten
U46	Computations and Algebraic Thinking – Multiply and Divide Decimals by Powers of Ten	U47	Decimal Addition
		U47	Decimal Subtraction
		U47	Concrete Decimal Division
		U47	Representational Decimal Division
		U47	Decimal Division
		ISIP	Calculating Reasonable Estimates of Decimal Number Sums
		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

Efficiently, accurately, and with some degree of flexibility, add and subtract fractions with unlike denominators (including mixed numbers) using equivalent fractions and common denominators

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

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

## 5.NF.A.2

- Solve word problems involving addition and subtraction of fractions referring to the same whole, including 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 or whole number by a fraction.

- Interpret the product (a/b) × q as a parts of a partition of q into b equal parts; equivalently, as the result of a sequence of operations a × q ÷ b
- Find the area of a rectangle with fractional (less than and/or greater than 1) side lengths by tiling it with unit squares of the appropriate unit fraction side lengths, by multiplying the fractional side lengths, and then show that both procedures yield the same area

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

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 among different-sized standard measurement units within the metric system
- Convert among different-sized standard measurement units within the customary system
- Use these conversions in solving multi-step, real world problems

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

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

## 5.MD.C.3

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

- A 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
- A solid figure that can be packed without gaps or overlaps using n unit cubes is said to have a volume of *n* cubic units

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

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

# 5.MD.C.4

Measure volumes by counting unit cubes, using cubic cm, cubic in, cubic ft., and improvised 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.5

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

- 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 (B)
- Represent threefold whole-number products as volumes, e.g., to represent the associative property of multiplication
- Apply the formulas V = ℓ × w × h and V = B × h for rectangular prisms to find volumes of right rectangular prisms with whole-number edge lengths in the context of solving real-world and mathematical problems
- 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

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

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

Code	Digital Student Experience	Code	Teacher Resources
U51	Geometry – Graph Points in a Coordinate Plane	U51	Plotting Points on a Coordinate Grid
		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 and on the non-negative x- and y=axes of the coordinate plane
- 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 Plane	U51	Graphing and Analyzing Lines

# 5.G.A.2

- Represent real-world and mathematical problems by graphing points in the first quadrant and on the non-negative x- and y=axes of the coordinate plane
- Interpret coordinate values of points in the context of the situation

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

Code	Digital Student Experience	Code	Teacher Resources
		ISIP	Identifying and Plotting Ordered Pairs on the Coordinate Plane

# 5.G.B.4

Classify two-dimensional figures in a hierarchy based on properties

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 0-20 (Labeled and Blank)	
CR	Number Line 0-50 (Labeled and Blank)	
CR	Number Line 0-100 (Labeled and Blank)	





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	
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	





Numbe	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 (Labeled)		
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	





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

Data Analysis		nalysis
	Code	Teacher Resources
	CR	Analyzing Line Plots

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

#### **Parent Portal Lessons**

Early Math PK-1		
Code	Teacher Resources	
PP	Fact Practice: Addition Fast Track	
PP	Fact Practice: Addition Road Racing	
PP	Fact Practice: Building Sums with Dice	
PP	Fact Practice: Choose the Operation (Addition and Subtraction)	





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

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





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





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