



Istation

Istation Math Curriculum Correlated to the Hawaii Common Core
State Standards for Mathematics

Kindergarten – Grade 5



Contents

| | |
|---|----|
| Power Path Featured Content..... | 12 |
| Newest Features | 12 |
| Power Path Featured Content (Spanish)..... | 15 |
| Newest Features | 15 |
| Kindergarten | 17 |
| Counting and Cardinality | 17 |
| Know number names and the count sequence. | 17 |
| K.CC.1..... | 17 |
| K.CC.2..... | 18 |
| K.CC.3..... | 19 |
| Count to tell the number of objects..... | 20 |
| K.CC.4..... | 20 |
| K.CC.5..... | 22 |
| Compare numbers. | 24 |
| K.CC.6..... | 24 |
| K.CC.7..... | 24 |
| Operations and Algebraic Thinking..... | 25 |
| Understand addition as putting together and adding to, and understand subtraction as taking apart and taking from. | 25 |
| K.OA.1 | 25 |
| K.OA.2 | 27 |
| K.OA.3 | 28 |
| K.OA.4 | 30 |
| Number and Operations in Base Ten | 31 |
| Work with numbers 11–19 to gain foundations for place value..... | 31 |



| | |
|--|----|
| K.NBT.1..... | 31 |
| Measurement and Data | 32 |
| Describe and compare measurable attributes. | 32 |
| K.MD.1 | 32 |
| K.MD.2 | 32 |
| Classify objects and count the number of objects in each category..... | 33 |
| K.MD.3 | 33 |
| Geometry | 34 |
| Identify and describe shapes (squares, circles, triangles, rectangles, hexagons, cubes, cones, cylinders, and spheres). | 34 |
| K.G.2..... | 34 |
| K.G.3..... | 34 |
| Analyze, compare, create, and compose shapes. | 35 |
| K.G.4..... | 35 |
| Grade 1..... | 36 |
| Operations and Algebraic Thinking..... | 36 |
| Represent and solve problems involving addition and subtraction. | 36 |
| 1.OA.1 | 36 |
| 1.OA.2 | 37 |
| Understand and apply properties of operations and the relationship between addition and subtraction. | 38 |
| 1.OA.3..... | 38 |
| 1.OA.4..... | 39 |
| Add and subtract within 20. | 40 |
| 1.OA.5..... | 40 |
| 1.OA.6..... | 41 |
| Work with addition and subtraction equations. | 42 |



| | |
|---|----|
| 1.OA.8..... | 42 |
| Number and Operations in Base Ten | 43 |
| Extend the counting sequence..... | 43 |
| 1.NBT.1 | 43 |
| Understand place value. | 44 |
| 1.NBT.2..... | 44 |
| 1.NBT.3..... | 45 |
| Use place value understanding and properties of operations to add and subtract..... | 45 |
| 1.NBT.4..... | 45 |
| Measurement and Data | 47 |
| Tell and write time with respect to a clock and calendar..... | 47 |
| 1.MD.3..... | 47 |
| Represent and interpret data..... | 47 |
| 1.MD.4..... | 47 |
| Geometry | 48 |
| Reason with shapes and their attributes. | 48 |
| 1.G.1 | 48 |
| 1.G.3 | 49 |
| Grade 2..... | 50 |
| Operations and Algebraic Thinking..... | 50 |
| Represent and solve problems involving addition and subtraction. | 50 |
| 2.OA.1 | 50 |
| Add and subtract within 20..... | 50 |
| 2.OA.2..... | 50 |
| Work with equal groups of objects to gain foundations for multiplication. | 52 |



| | |
|--|----|
| 2.OA.3..... | 52 |
| 2.OA.4..... | 52 |
| Number and Operations in Base Ten | 53 |
| Understand place value. | 53 |
| 2.NBT.1 | 53 |
| 2.NBT.3..... | 54 |
| 2.NBT.4..... | 55 |
| Use place value understanding and properties of operations to add and subtract. | 55 |
| 2.NBT.5..... | 55 |
| 2.NBT.7 | 57 |
| Measurement and Data | 57 |
| Measure and estimate lengths in standard units. | 57 |
| 2.MD.1..... | 57 |
| 2.MD.2..... | 58 |
| 2.MD.4..... | 59 |
| Relate addition and subtraction to length. | 59 |
| 2.MD.6..... | 59 |
| Work with time and money. | 60 |
| 2.MD.7..... | 60 |
| 2.MD.8..... | 60 |
| Represent and interpret data..... | 61 |
| 2.MD.10..... | 61 |
| Geometry | 62 |
| Reason with shapes and their attributes. | 62 |
| 2.G.2 | 62 |



| | |
|--|----|
| 2.G.3 | 62 |
| Grade 3..... | 63 |
| Operations and Algebraic Thinking..... | 63 |
| Represent and solve problems involving multiplication and division. | 63 |
| 3.OA.1 | 63 |
| 3.OA.2..... | 64 |
| 3.OA.3..... | 65 |
| 3.OA.4..... | 65 |
| Understand properties of multiplication and the relationship between multiplication and division. | 66 |
| 3.OA.5..... | 66 |
| 3.OA.6..... | 67 |
| Multiply and divide within 100..... | 67 |
| 3.OA.7 | 67 |
| Solve problems involving the four operations, and identify and explain patterns in arithmetic. | 69 |
| 3.OA.8..... | 69 |
| 3.OA.9..... | 70 |
| Number and Operations in Base Ten | 71 |
| Use place value understanding and properties of operations to perform multi-digit arithmetic..... | 71 |
| 3.NBT.1 | 71 |
| 3.NBT.2..... | 71 |
| Number and Operations – Fractions..... | 72 |
| Develop understanding of fractions as numbers..... | 72 |
| 3.NF.1 | 72 |
| 3.NF.2 | 72 |
| 3.NF.3 | 74 |



| | |
|--|----|
| Measurement and Data | 76 |
| Solve problems involving money, measurement and estimation of intervals of time, liquid volumes, and masses of objects..... | 76 |
| 3.MD.1..... | 76 |
| Represent and interpret data..... | 76 |
| 3.MD.3..... | 76 |
| Geometric measurement: understand concepts of area and relate area to multiplication and to addition. | 77 |
| 3.MD.5..... | 77 |
| 3.MD.6..... | 77 |
| 3.MD.7..... | 78 |
| Geometric measurement: recognize perimeter as an attribute of plane figures and distinguish between linear and area measures. | 78 |
| 3.MD.8..... | 78 |
| Geometry | 79 |
| Reason with shapes and their attributes | 79 |
| 3.G.1 | 79 |
| 3.G.2 | 80 |
| Grade 4..... | 81 |
| Operations and Algebraic Thinking..... | 81 |
| Use the four operations with whole numbers to solve problems. | 81 |
| 4.OA.1 | 81 |
| 4.OA.2..... | 81 |
| 4.OA.3..... | 82 |
| Number and Operations in Base Ten | 82 |
| Generalize place value understanding for multi-digit whole numbers. | 82 |
| 4.NBT.1 | 82 |



| | |
|--|----|
| 4.NBT.2..... | 83 |
| 4.NBT.3..... | 83 |
| Use place value understanding and properties of operations to perform multi-digit arithmetic..... | 84 |
| 4.NBT.4..... | 84 |
| 4.NBT.5..... | 84 |
| Number and Operations – Fractions..... | 85 |
| Extend understanding of fraction equivalence and ordering. | 85 |
| 4.NF.1 | 85 |
| 4.NF.2 | 85 |
| Build fractions from unit fractions by applying and extending previous understanding of operations on whole numbers..... | 87 |
| 4.NF.3 | 87 |
| Understand decimal notation for fractions, and compare decimal fractions. | 88 |
| 4.NF.5 | 88 |
| 4.NF.6 | 88 |
| 4.NF.7 | 89 |
| Measurement and Data | 90 |
| Solve problems involving measurement and conversion of measurements from a larger unit to a smaller unit. | 90 |
| 4.MD.1..... | 90 |
| 4.MD.2..... | 90 |
| 4.MD.3..... | 91 |
| Represent and interpret data..... | 91 |
| 4.MD.4..... | 91 |
| Geometric measurement: understand concepts of angle and measure angles. | 92 |
| 4.MD.5..... | 92 |
| 4.MD.6..... | 92 |



| | |
|---|-----|
| 4.MD.7..... | 93 |
| Geometry | 93 |
| Draw and identify lines and angles, and classify shapes by properties of their lines and angles. | 93 |
| 4.G.1 | 93 |
| Grade 5..... | 94 |
| Operations and Algebraic Thinking..... | 94 |
| Write and interpret numerical expressions. | 94 |
| 5.OA.1 | 94 |
| 5.OA.2..... | 94 |
| Analyze patterns and relationships..... | 95 |
| 5.OA.3..... | 95 |
| Number and Operations in Base Ten | 96 |
| Understand the place value system. | 96 |
| 5.NBT.1 | 96 |
| 5.NBT.2..... | 96 |
| 5.NBT.3..... | 97 |
| 5.NBT.4..... | 98 |
| Perform operations with multi-digit whole numbers and with decimals to hundredths..... | 98 |
| 5.NBT.6..... | 98 |
| Number and Operations – Fractions..... | 99 |
| Use equivalent fractions as a strategy to add and subtract fractions. | 99 |
| 5.NF.1 | 99 |
| 5.NF.2 | 99 |
| Apply and extend previous understandings of multiplication and division to multiply and divide fractions..... | 100 |
| 5.NF.4 | 100 |



| | |
|--|-----|
| 5.NF.6 | 101 |
| Measurement and Data | 101 |
| Convert like measurement units within a given measurement system. | 101 |
| 5.MD.1..... | 101 |
| Geometric measurement: understand concepts of volume and relate volume to multiplication and to addition. | 102 |
| 5.MD.3..... | 102 |
| 5.MD.4..... | 102 |
| 5.MD.5..... | 103 |
| Geometry | 104 |
| Graph points on the coordinate plane to solve real-world and mathematical problems..... | 104 |
| 5.G.1 | 104 |
| 5.G.2 | 104 |
| Classify two-dimensional figures into categories based on their properties. | 105 |
| 5.G.4 | 105 |
| Appendix..... | 106 |
| Classroom Resource | 106 |
| General Graphic Organizers..... | 106 |
| Number Sense | 107 |
| Computations and Algebraic Thinking | 109 |
| Measurement | 109 |
| Data Analysis | 110 |
| Geometry | 110 |
| Parent Portal Lessons | 110 |
| Early Math PK-1 | 110 |
| Istation Math 2-5..... | 111 |



K–12 Standards for Mathematical Practices (MP)

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

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

Mathematical Practice 2: Reason abstractly and quantitatively.

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

Mathematical Practice 4: Model with mathematics.

Mathematical Practice 5: Use appropriate tools strategically.

Mathematical Practice 6: Attend to precision.

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

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

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

| Code Legend | |
|-------------|-----------------------------------|
| U | Unit |
| ISIP | Istation’s Indicators of Progress |
| AR | Additional Resource |
| CR | Classroom Resource |
| FP | Fact Practice |
| PP | Parent Portal |

Power Path Featured Content

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

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

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

Newest Features

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

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

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

Power Path Featured Content (Spanish)

| Newest Features | | | |
|--|---|--------|--|
| Power Path is the next generation of activities for Istation, bringing a more modern approach to the user experience. These activities contain a greater degree of adaptability, many more questions, and a greater sense of agency for the student. | | | |
| MP 1, 2, 3, 4, 5, 6, 7, 8 | | | |
| Code | Digital Student Experience | Code | Teacher Resources |
| K.CC.6 | | | |
| U9-11 | Tarjetas de comparación - Comparando grupos o números | U9-11 | ¿Más o menos? ¿Cuál es mejor? |
| K.CC.7 | | | |
| | | U9-11 | ¿Más o menos? ¿Cuál es mejor? |
| 1.NBT.3 | | | |
| U14-16 | Tarjetas de comparación - Comparando números de dos dígitos | U14-16 | Atrévete a comparar (Números de dos dígitos) |
| 2.NBT.4 | | | |
| U33-35 | Tarjetas de comparación - Comparando números de tres dígitos | U33-35 | Atrévete a comparar (Números de tres dígitos) |
| 3.NBT.1 | | | |
| | | U37-39 | Dando y Dando la vuelta (Números Enteros) |
| 4.NBT.2 | | | |
| U41-43 | Tarjetas de comparación - Comparando números de múltiples dígitos | U42-44 | Atrévete a comparar (Números 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.

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

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

Kindergarten

Counting and Cardinality

Know number names and the count sequence.

| K.CC.1 | | | |
|-----------------------------------|---|------|--|
| Count to 100 by ones and by tens. | | | |
| MP 1, 2, 3, 4, 5, 6, 7, 8 | | | |
| Code | Digital Student Experience | Code | Teacher Resources |
| U14 | Number Sense – “EZ with a Rock and Roll Beat” (1-100) | U14 | One Hundred Is a Lot |
| U14 | Number Sense – Identifying Numbers (1-100) | U14 | 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.2 | | | |
|--|--|-------------|--|
| Count forward beginning from a given number within the known sequence (instead of having to begin at 1). | | | |
| MP 1, 2, 3, 4, 5, 6, 7, 8 | | | |
| Code | Digital Student Experience | Code | Teacher Resources |
| U4 | Number Sense – “EZ with a Rock and Roll Beat” (1-10) | U6 | Count with Me (1-20) |
| U4 | Number Sense – Identifying Numbers (1-10) | U7 | Counting a Scattered Static Group (1-10) |
| U4 | Number Sense – Identify Missing Numbers (1-10) | U8 | Counting Sticks (1-20) |
| U4 | Number Sense – Number Sequence (1-10) | U8 | Counting Objects (1-20) |
| U6 | Number Sense – “EZ with a Rock and Roll Beat” (1-20) | U14 | One Hundred Is a Lot |
| U6 | Number Sense – Identifying Numbers (1-20) | U14 | Roll-Count-Cover – Skip Counting by Tens |
| U6 | Number Sense – Identify Missing Numbers (1-20) | U18 | Counting Memory |
| U6 | Number Sense – Number Sequence (1-20) | U21 | The Arrow Says (1-100) |
| U7 | Number Sense – “EZ with a Rock and Roll Beat” (1-30) | U23 | Decade Numbers |
| U7 | Number Sense – Identifying Numbers (1-30) | ISIP EM | Set Stories |
| U7 | Number Sense – Identify Missing Numbers (1-30) | ISIP EM | Ten Frame Puzzles (1-20) |
| U7 | Number Sense – Number Sequence (1-30) | ISIP EM | Total Amount in a Scattered Group |
| U8 | Number Sense – “EZ with a Rock and Roll Beat” (1-50) | ISIP EM | Understanding Ordinal Numbers |
| U8 | Number Sense – Identifying Numbers (1-50) | | |
| U8 | Number Sense – Identify Missing Numbers (1-50) | | |
| U8 | Number Sense – Number Sequence (1-50) | | |

K.CC.2

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

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

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

K.CC.3

Write numbers from 0 to 20. Represent a number of objects with a written numeral 0-20 (with 0 representing a count of no objects).

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

| Code | Digital Student Experience | Code | Teacher Resources |
|------|--|------|--|
| U11 | Number Sense – “Writing Our Numbers” | U6 | Domino Dot Memory (1-10) |
| U11 | Number Sense – Writing Numbers Everywhere (1-10) | U7 | Counting a Scattered Static Group (1-10) |
| U15 | Number Sense – “Pattern of the Count” (1-50) | U7 | Calendar Counting (1-30) |
| U15 | Number Sense – Place Value Rows (1-50) | U8 | Counting Sticks (1-20) |
| U15 | Number Sense – Number Puzzle (1-50) | U8 | Counting Objects (1-20) |
| U18 | Number Sense – Write to Represent Numbers (0-20) | U10 | Park the Car and Write (1-20) |
| U19 | Number Sense – “Pattern of the Count” (1-20) | U11 | Writing Numbers Everywhere (5-10) |

K.CC.3

Write numbers from 0 to 20. Represent a number of objects with a written numeral 0-20 (with 0 representing a count of no objects).

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

| Code | Digital Student Experience | Code | Teacher Resources |
|------|--|---------|--|
| U19 | Number Sense – Place Value Columns (by 1s and 10s to 50) | U11 | Writing Numbers (10-20) |
| U19 | Number Sense – Number Puzzle (by 1s and 10s to 50) | U18 | Counting Memory |
| | | ISIP EM | Set Stories |
| | | ISIP EM | Total Amount in a Scattered Group |
| | | ISIP EM | Ten Frame Puzzles (1-20) |
| | | ISIP EM | Multiple Representations of Numbers (1-10) |

Count to tell the number of objects.

K.CC.4

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

- When counting objects, say the number names in the standard order, pairing each object with one and only one number name and each number name with one and only one object.
- Understand that the last number name said tells the number of objects counted. The number of objects is the same regardless of their arrangement or the order in which they were counted.

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

| Code | Digital Student Experience | Code | Teacher Resources |
|------|---|------|----------------------|
| U6 | Number Sense – “Counting Cattle” (1-10) | U6 | Count with Me (1-20) |

K.CC.4

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

- a. When counting objects, say the number names in the standard order, pairing each object with one and only one number name and each number name with one and only one object.
- b. Understand that the last number name said tells the number of objects counted. The number of objects is the same regardless of their arrangement or the order in which they were counted.

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

| Code | Digital Student Experience | Code | Teacher Resources |
|------|---|---------|-----------------------------------|
| U6 | Number Sense – Counting in a Line (1-10) | U8 | Counting Sticks (1-20) |
| U6 | Number Sense – Counting a Static Scattered Group (1-10) | U8 | Counting Objects (1-20) |
| U6 | Number Sense – Remember the Counted Amount (1-10) | ISIP EM | Set Stories |
| U7 | Number Sense – “Counting Cattle” (1-10) | ISIP EM | Ten Frame Puzzles (1-20) |
| U7 | Number Sense – Counting Fingers (1-10) | ISIP EM | Subitizing to Problem Solve |
| U7 | Number Sense – Choose the Correct Amount (1-10) | ISIP EM | Total Amount in a Scattered Group |
| U7 | Number Sense – Counting a Static Scattered Group (1-10) | | |
| U8 | Number Sense – “Counting Cattle” (1-20) | | |
| U8 | Number Sense – Counting in a Line (1-20) | | |
| U8 | Number Sense – Counting in an Array (1-20) | | |
| U8 | Number Sense – Counting a Scattered Static Group (1-20) | | |
| U10 | Number Sense – “Counting Cattle” (1-20) | | |

K.CC.4

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

- a. When counting objects, say the number names in the standard order, pairing each object with one and only one number name and each number name with one and only one object.
- b. Understand that the last number name said tells the number of objects counted. The number of objects is the same regardless of their arrangement or the order in which they were counted.

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

| Code | Digital Student Experience | Code | Teacher Resources |
|------|---|------|-------------------|
| U10 | Number Sense – Choose the Correct Amount (1-20) | | |
| U10 | Number Sense – Remember the Counted Amount (1-20) | | |
| U10 | Number Sense – Counting an Array (1-20) | | |
| U10 | Number Sense – Counting a Scattered Static Group (1-20) | | |

K.CC.5

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

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

| Code | Digital Student Experience | Code | Teacher Resources |
|------|---|------|--|
| U6 | Number Sense – “Counting Cattle” (1-10) | U6 | Domino Dot Memory (1-10) |
| U6 | Number Sense – Counting in a Line (1-10) | U7 | Counting a Scattered Static Group (1-10) |
| U6 | Number Sense – Counting a Static Scattered Group (1-10) | U8 | Counting Sticks (1-20) |

K.CC.5

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

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

| Code | Digital Student Experience | Code | Teacher Resources |
|------|---|---------|--|
| U6 | Number Sense – Remember the Counted Amount (1-10) | U8 | Counting Objects (1-20) |
| U7 | Number Sense – “Counting Cattle” (1-10) | U18 | Counting Memory |
| U7 | Number Sense – Counting Fingers (1-10) | ISIP EM | Set Stories |
| U7 | Number Sense – Choose the Correct Amount (1-10) | ISIP EM | Ten Frame Puzzles (1-20) |
| U7 | Number Sense – Counting a Static Scattered Group (1-10) | ISIP EM | Total Amount in a Scattered Group |
| U8 | Number Sense – “Counting Cattle” (1-20) | ISIP EM | Multiple Representations of Numbers (1-10) |
| U8 | Number Sense – Counting in a Line (1-20) | ISIP EM | Subitizing to Problem Solve |
| U8 | Number Sense – Counting in an Array (1-20) | | |
| U8 | Number Sense – Counting a Scattered Static Group (1-20) | | |
| U10 | Number Sense – “Counting Cattle” (1-20) | | |
| U10 | Number Sense – Choose the Correct Amount (1-20) | | |
| U10 | Number Sense – Remember the Counted Amount (1-20) | | |

Compare numbers.**K.CC.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

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

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

K.CC.7

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

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

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

Operations and Algebraic Thinking

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

K.OA.1

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

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

| Code | Digital Student Experience | Code | Teacher Resources |
|------|---|------|----------------------------------|
| U9 | Computations and Algebraic Thinking – “Part Part Whole in New Orleans” (1-10) | U7 | Figuring Out Fives |
| U9 | Computations and Algebraic Thinking – Part Part Whole Addition within 10 | U8 | Parts and Wholes |
| U10 | Computations and Algebraic Thinking – “Part Part Whole in New Orleans” (1-10) | U9 | Roll to Find the Whole |
| U10 | Computations and Algebraic Thinking – Part Part Whole Addition Stories | U10 | Dogs and Cats on Mats (up to 10) |
| U12 | Computations and Algebraic Thinking – “Part Part Whole in New Orleans” (1-10) | U12 | Ten or Not Ten |
| U12 | Computations and Algebraic Thinking – Making Ten Using Tens Frames | U13 | Whole in the Hand |
| U12 | Computations and Algebraic Thinking – Identifying Addends Using Tens Frames | U18 | Decomposing House with Pictures |
| U13 | Computations and Algebraic Thinking – “Chicago Pizza Blues” (within 10) | U18 | Decomposing House |

K.OA.1

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

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

| Code | Digital Student Experience | Code | Teacher Resources |
|------|---|---------|---|
| U13 | Computations and Algebraic Thinking – Subtraction Within Ten | U19 | Relative Magnitude with Part Part Whole |
| U14 | Computations and Algebraic Thinking – “Chicago Pizza Blues” (within 10) | U20 | Start, Change, Result |
| U14 | Computations and Algebraic Thinking – Whole Part Part Subtraction Stories (within 10) | U20 | Adding with Addend Cards |
| U18 | Number Sense – Decompose Numbers Less Than or Equal to Ten | U22 | Beading the Difference |
| | | ISIP EM | Subtraction within Ten |
| | | ISIP EM | Addition Stories |
| | | ISIP EM | Subtraction Stories |
| | | ISIP EM | Count Back to Subtract |
| | | ISIP EM | Ten Frame Addition |

K.OA.2

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

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

| Code | Digital Student Experience | Code | Teacher Resources |
|-------------|--|-------------|---|
| U9 | Computations and Algebraic Thinking – “Part Part Whole in New Orleans” (1-10) | U7 | Figuring Out Fives |
| U9 | Computations and Algebraic Thinking – Part Part Whole Addition within 10 | U8 | Parts and Wholes |
| U10 | Computations and Algebraic Thinking – “Part Part Whole in New Orleans” (1-10) | U10 | Dogs and Cats on Mats (up to 10) |
| U10 | Computations and Algebraic Thinking – Part Part Whole Addition Stories | U12 | Ten or Not Ten |
| U12 | Computations and Algebraic Thinking – “Part Part Whole in New Orleans” (1-10) | U18 | Decomposing House with Pictures |
| U12 | Computations and Algebraic Thinking – Making Ten Using Tens Frames | U18 | Decomposing House |
| U12 | Computations and Algebraic Thinking – Identifying Addends Using Tens Frames | U19 | Relative Magnitude with Part Part Whole |
| U13 | Computations and Algebraic Thinking – “Chicago Pizza Blues” (within 10) | U20 | Start, Change, Result |
| U13 | Computations and Algebraic Thinking – Subtraction Within Ten | U20 | Adding with Addend Cards |
| U14 | Computations and Algebraic Thinking – “Chicago Pizza Blues” (within 10) | ISIP EM | Subtraction within Ten |

K.OA.2

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

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

| Code | Digital Student Experience | Code | Teacher Resources |
|------|---|---------|------------------------|
| U14 | Computations and Algebraic Thinking – Whole Part Part Subtraction Stories (within 10) | ISIP EM | Addition Stories |
| U18 | Number Sense – Decompose Numbers Less Than or Equal to Ten | ISIP EM | Subtraction Stories |
| | | ISIP EM | Count Back to Subtract |
| | | ISIP EM | Ten Frame Addition |

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

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

| Code | Digital Student Experience | Code | Teacher Resources |
|------|---|------|----------------------------------|
| U9 | Computations and Algebraic Thinking – “Part Part Whole in New Orleans” (1-10) | U7 | Figuring Out Fives |
| U9 | Computations and Algebraic Thinking – Part Part Whole Addition Stories | U8 | Parts and Wholes |
| U10 | Computations and Algebraic Thinking – “Part Part Whole in New Orleans” (1-10) | U9 | Roll to Find the Whole |
| U10 | Computations and Algebraic Thinking – Part Part Whole Addition Stories | U10 | Dogs and Cats on Mats (up to 10) |

K.OA.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 |
|------|---|------|---|
| U12 | Computations and Algebraic Thinking – “Part Part Whole in New Orleans” (1-10) | U12 | Ten or Not Ten |
| U12 | Computations and Algebraic Thinking – Making Ten Using Tens Frames | U13 | Whole in the Hand |
| U12 | Computations and Algebraic Thinking – Identifying Addends Using Tens Frames | U18 | Decomposing House with Pictures |
| U13 | Computations and Algebraic Thinking – “Part Part Whole in New Orleans” (1-10) | U18 | Decomposing House |
| U13 | Computations and Algebraic Thinking – Subtraction Within Ten | U19 | Relative Magnitude with Part Part Whole |
| U14 | Computations and Algebraic Thinking – “Chicago Pizza Blues” (within 10) | U20 | Start, Change, Result |
| U14 | Computations and Algebraic Thinking – Whole Part Part Subtraction Stories (within 10) | U20 | Adding with Addend Cards |
| U18 | Number Sense – Decompose Numbers Less Than or Equal to Ten | U22 | Beading the Difference |

K.OA.4

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

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

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

K.OA.4

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

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

| Code | Digital Student Experience | Code | Teacher Resources |
|------|---|------|-------------------|
| U14 | Computations and Algebraic Thinking – Whole Part Part Subtraction Stories (within 10) | | |
| 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.1

Compose and decompose numbers from 11 to 19 into ten ones and some further ones (e.g., by using objects or drawings), and record each composition or decomposition with a drawing or equation (such as $18 = 10 + 8$); understand that these numbers are composed of ten ones and one, two, three, four, five, six, seven, eight, or nine ones.

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

| Code | Digital Student Experience | Code | Teacher Resources |
|------|----------------------------|------|---------------------------------|
| | | U15 | Digit Deal |
| | | U18 | Decomposing House with Pictures |
| | | U18 | Decomposing House |



Measurement and Data

Describe and compare measurable attributes.

| K.MD.1 | | | |
|--|---|-------------|-------------------------------------|
| Describe measurable attributes of objects, such as lengths or weight. Describe several measurable attributes of a single object. | | | |
| MP 1, 2, 3, 4, 5, 6, 7, 8 | | | |
| Code | Digital Student Experience | Code | Teacher Resources |
| U10 | Measurement and Data Analysis – Directly Comparing Length | U10 | Directly Comparing Length |
| U10 | Measurement and Data Analysis – Directly Comparing Weight | U10 | Directly Comparing Weight |
| U15 | Measurement and Data Analysis – Directly Comparing Height | U15 | Directly Comparing Height |
| U15 | Measurement and Data Analysis – Directly Compare Capacity of Two Containers | U15 | Which Holds More? Which Holds Less? |

| K.MD.2 | | | |
|---|---|-------------|---------------------------|
| Directly compare two objects with a measurable attribute in common to see which object has “more of” or “less of” the attribute and describe the difference. For example, directly compare the heights of two children and describe one child as taller/shorter | | | |
| MP 1, 2, 3, 4, 5, 6, 7, 8 | | | |
| Code | Digital Student Experience | Code | Teacher Resources |
| U10 | Measurement and Data Analysis – Comparing Objects by Length | U10 | Directly Comparing Length |
| U10 | Measurement and Data Analysis – Comparing Objects by Weight | U10 | Directly Comparing Weight |

K.MD.2

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

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

| Code | Digital Student Experience | Code | Teacher Resources |
|------|---|------|-------------------------------------|
| U15 | Measurement and Data Analysis – Comparing Objects by Height | U15 | Directly Comparing Height |
| U15 | Measurement and Data Analysis – Comparing Objects by Capacity | U15 | Which Holds More? Which Holds Less? |

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

K.MD.3

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

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

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

Geometry

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

K.G.2

Correctly name shapes regardless of their orientations or overall size.

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

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

K.G.3

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

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

| Code | Digital Student Experience | Code | Teacher Resources |
|------|--|------|---------------------|
| U14 | Geometry – Identify Three-Dimensional Shapes | U14 | Shape Four-in-a-Row |

Analyze, compare, create, and compose shapes.**K.G.4**

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

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

| Code | Digital Student Experience | Code | Teacher Resources |
|------|--|------|------------------------------------|
| U1 | Geometry – Identify Circles | U1 | Identifying Two-Dimensional Shapes |
| U1 | Geometry – Identify Squares | U3 | We’re Going on a Shape Hunt |
| U3 | Geometry – Identify Triangles | U9 | Considering Sizes of Shapes |
| U9 | Geometry – Identify Shapes Regardless of Orientation | U9 | Mighty Shape Match |
| U9 | Geometry – Classify and Count by Attribute | U14 | Shape Four-in-a-Row |
| U14 | Geometry – Identify Three-Dimensional Shapes | | |

Grade 1**Operations and Algebraic Thinking****Represent and solve problems involving addition and subtraction.****1.OA.1**

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

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

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

1.OA.1

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

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

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

1.OA.2

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

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

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

1.OA.2

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

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

| Code | Digital Student Experience | Code | Teacher Resources |
|------|----------------------------|---------|----------------------------------|
| | | ISIP EM | Commutative Property of Addition |

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

1.OA.3

Apply properties of operations as strategies to add and subtract. Examples: If $8 + 3 = 11$ is known, then $3 + 8 = 11$ is also known. (Commutative property of addition.) To add $2 + 6 + 4$, the second two numbers can be added to make a ten, so $2 + 6 + 4 = 2 + 10 = 12$. (Associative property of addition.)

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

| Code | Digital Student Experience | Code | Teacher Resources |
|------|--|---------|---|
| U16 | Computations and Algebraic Thinking – Determine the Unknown Whole Number in Addition Sentences | U16 | Beginning-Middle-End |
| U20 | Computations and Algebraic Thinking – “The Math Whiz” | U20 | Doubles Facts |
| U20 | Computations and Algebraic Thinking – Doubles Strategy | U20 | (Properties of) Operations – Turn Around Addition |
| U20 | Computations and Algebraic Thinking – Commutative Property of Addition | U20 | (Properties of) Operations – Grouping Groceries |
| U20 | Computations and Algebraic Thinking – Associative Property of Addition | U20 | (Properties of) Operations – Identity Property Go Fish! |
| U20 | Computations and Algebraic Thinking – Identity Property of Addition | ISIP EM | Counting on Cards |

1.OA.3

Apply properties of operations as strategies to add and subtract. Examples: If $8 + 3 = 11$ is known, then $3 + 8 = 11$ is also known. (Commutative property of addition.) To add $2 + 6 + 4$, the second two numbers can be added to make a ten, so $2 + 6 + 4 = 2 + 10 = 12$. (Associative property of addition.)

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

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

1.OA.4

Understand subtraction as an unknown-addend problem. For example, subtract $10 - 8$ by finding the number that makes 10 when added to 8.

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

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

1.OA.4

Understand subtraction as an unknown-addend problem. For example, subtract $10 - 8$ by finding the number that makes 10 when added to 8.

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

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

Add and subtract within 20.**1.OA.5**

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

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

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

1.OA.6

Add and subtract within 20, demonstrating 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 $12 - 8 = 4$); and creating equivalent but easier or known sums (e.g., adding $6 + 7$ by creating the known equivalent $6 + 6 + 1 = 12 + 1 = 13$).

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

| Code | Digital Student Experience | Code | Teacher Resources |
|------|---|------|---|
| U10 | Computations and Algebraic Thinking – “Part Part Whole in New Orleans” (1-20) | U10 | Dogs and Cats on Mats (up to Ten) |
| U10 | Computations and Algebraic Thinking – Addition Stories | U12 | Ten or Not Ten |
| U12 | Computations and Algebraic Thinking – Identifying Addends using Tens Frames | U13 | Whole in the Hand |
| U20 | Computations and Algebraic Thinking – “Part Part Whole in New Orleans” (1-20) | U20 | (Properties of) Operations – Turn Around Addition |
| U20 | Computations and Algebraic Thinking – Addition Stories (horizontal orientation) | U20 | (Properties of) Operations – Grouping Groceries |
| U20 | Computations and Algebraic Thinking – Addition Stories (vertical orientation) | U20 | (Properties of) Operations – Identity Property Go Fish! |
| U20 | Computations and Algebraic Thinking – “The Math Whiz” | U20 | Doubles Facts |
| U20 | Computations and Algebraic Thinking – Fact Strategies | FP | Building Sums to Ten |
| U20 | Computations and Algebraic Thinking – Commutative Property | FP | Fact Family Dominoes |
| U20 | Computations and Algebraic Thinking – Associative Property | FP | Addition Fast Track |
| U20 | Computations and Algebraic Thinking – Identity Property | FP | Sticky Sums |

1.OA.6

Add and subtract within 20, demonstrating 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 $12 - 8 = 4$); and creating equivalent but easier or known sums (e.g., adding $6 + 7$ by creating the known equivalent $6 + 6 + 1 = 12 + 1 = 13$).

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

| Code | Digital Student Experience | Code | Teacher Resources |
|------|---|------|--|
| U10 | Computations and Algebraic Thinking – “Part Part Whole in New Orleans” (1-20) | FP | Write, Tally, Draw |
| U10 | Computations and Algebraic Thinking – Addition Stories | FP | Shake It, Make It, Solve It (Addition) |
| | | FP | Wipe Out |

Work with addition and subtraction equations.

1.OA.8

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

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

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

Number and Operations in Base Ten**Extend the counting sequence.****1.NBT.1**

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

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

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

Understand place value.**1.NBT.2**

Understand that the two digits of a two-digit number represent amounts of tens and ones. Understand the following as special cases:

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

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

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

1.NBT.3

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

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

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

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

1.NBT.4

Add within 100, including adding a two-digit number and a one-digit number, and adding a two-digit number and a multiple of 10, using concrete models or drawings and strategies based on place value, properties of operations, and/or the relationship between addition and subtraction; relate the strategy to a written method and explain the reasoning used. Understand that in adding two-digit numbers, one adds tens and tens, ones and ones; and sometimes it is necessary to compose a ten.

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

| Code | Digital Student Experience | Code | Teacher Resources |
|------|--|------|---|
| U20 | Computations and Algebraic Thinking – “The Math Whiz” | U20 | Doubles Facts |
| U20 | Computations and Algebraic Thinking – Fact Strategies | U20 | (Properties of) Operations – Turn Around Addition |
| U20 | Computations and Algebraic Thinking – Commutative Property | U20 | (Properties of) Operations – Grouping Groceries |

1.NBT.4

Add within 100, including adding a two-digit number and a one-digit number, and adding a two-digit number and a multiple of 10, using concrete models or drawings and strategies based on place value, properties of operations, and/or the relationship between addition and subtraction; relate the strategy to a written method and explain the reasoning used. Understand that in adding two-digit numbers, one adds tens and tens, ones and ones; and sometimes it is necessary to compose a ten.

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

| Code | Digital Student Experience | Code | Teacher Resources |
|------|--|------|---|
| U20 | Computations and Algebraic Thinking – Associative Property | U20 | (Properties of) Operations – Identity Property Go Fish! |
| U20 | Computations and Algebraic Thinking – Identity Property | U24 | Start, Change, Result! (within 20) |
| | | FP | Fact Family Dominoes |
| | | FP | Building Sums to Ten |
| | | FP | Addition Fast Track |
| | | FP | Subtraction Fast Track |
| | | FP | Sticky Sums |
| | | FP | Write, Tally, Draw |
| | | FP | Shake It, Make It, Solve It (Addition) |
| | | FP | Wipe Out |

Measurement and Data**Tell and write time with respect to a clock and calendar.****1.MD.3**

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

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

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

Represent and interpret data.**1.MD.4**

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

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

| Code | Digital Student Experience | Code | Teacher Resources |
|------|----------------------------|---------|--------------------------------------|
| | | U19 | Graphing Tic-Tac-Toe |
| | | ISIP EM | Picture Graphs to the Rescue! |
| | | ISIP EM | Analyze and Add Using Picture Graphs |

1.MD.4

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

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

| Code | Digital Student Experience | Code | Teacher Resources |
|------|----------------------------|---------|--|
| | | ISIP EM | Graphing Three Ways |
| | | ISIP EM | Determining Most and Least with Graphs |
| | | ISIP EM | Read and Analyze Bar Graphs |

Geometry

Reason with shapes and their attributes.

1.G.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.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.

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

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

Grade 2**Operations and Algebraic Thinking****Represent and solve problems involving addition and subtraction.****2.OA.1**

Use addition and subtraction within 100 to solve one- and two-step word problems involving situations of adding to, taking from, putting together, taking apart, and comparing, with unknowns in all positions, e.g., by using drawings and equations with a symbol for the unknown number to represent the problem.

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

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

Add and subtract within 20.**2.OA.2**

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

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

| Code | Digital Student Experience | Code | Teacher Resources |
|------|----------------------------|------|--|
| | | U31 | Fact Families – Addition and Subtraction |
| | | FP | Fact Family Dominos (Addition/Subtraction) |

2.OA.2

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

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

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

Work with equal groups of objects to gain foundations for multiplication.**2.OA.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.4

Use addition to find the total number of objects arranged in rectangular arrays with up to 5 rows and up to 5 columns; write an equation to express the total as a sum of equal addends.

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

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

Number and Operations in Base Ten**Understand place value.****2.NBT.1**

Understand that the three digits of a three-digit number represent amounts of hundreds, tens, and ones (e.g., 706 equals 7 hundreds, 0 tens, and 6 ones). Understand the following as special cases:

- a. 100 can be thought of as a bundle of ten tens – called a “hundred.”
- b. The numbers 100, 200, 300, 400, 500, 600, 700, 800, 900 refer to one, two, three, four, five, six, seven, eight or nine hundreds (and 0 tens and 0 ones).

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

| Code | Digital Student Experience | Code | Teacher Resources |
|------|--|------|---|
| U30 | Number Sense – Writing Standard Form from Expanded Form | U30 | Building Numbers Using Base 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.3

Read and write numbers to 1,000 using base-ten numerals, number names, and expanded form.

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

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

2.NBT.4

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

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

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

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

2.NBT.5

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

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

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

2.NBT.5

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

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

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

2.NBT.7

Add and subtract within 1000, using concrete models or drawings and strategies based on place value, properties of operations, and/or the relationship between addition and subtraction; relate the strategy to a written method. Understand that in adding or subtracting three-digit numbers, one adds or subtracts hundreds and hundreds, tens and tens, ones and ones; and sometimes it is necessary to compose or decompose tens or hundreds.

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

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

Measurement and Data

Measure and estimate lengths in standard units.

2.MD.1

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

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

| Code | Digital Student Experience | Code | Teacher Resources |
|------|--|------|--------------------------------------|
| U33 | Measurement – Choose Units and Measure Lengths | U33 | Choosing Units of Linear Measurement |

2.MD.1

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

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

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

2.MD.2

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

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

| Code | Digital Student Experience | Code | Teacher Resources |
|------|----------------------------|------|--------------------|
| | | ISIP | Unit Relationships |

2.MD.4

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

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

| Code | Digital Student Experience | Code | Teacher Resources |
|------|----------------------------|------|-------------------|
| | | ISIP | Ruler Relay |

Relate addition and subtraction to length.

2.MD.6

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

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

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

Work with time and money.**2.MD.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.8

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

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

| Code | Digital Student Experience | Code | Teacher Resources |
|------|----------------------------|------|---------------------|
| | | U32 | Money Word Problems |

Represent and interpret data**2.MD.10**

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

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

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

Geometry**Reason with shapes and their attributes.****2.G.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.3

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

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

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

Grade 3**Operations and Algebraic Thinking****Represent and solve problems involving multiplication and division.****3.OA.1**

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

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

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

3.OA.1

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

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

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

3.OA.2

Interpret whole-number quotients of whole numbers, e.g., interpret $56 \div 8$ as the number of objects in each share when 56 objects are partitioned equally into 8 shares, or as a number of shares when 56 objects are partitioned into equal shares of 8 objects each. For example, describe a context in which a number of shares or a number of groups can be expressed as $56 \div 8$.

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

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

3.OA.3

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

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

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

3.OA.4

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

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

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

3.OA.4

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

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

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

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

3.OA.5

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

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

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

3.OA.6

Understand division as an unknown–factor problem. For example, find $32 \div 8$ by finding the number that makes 32 when multiplied by 8.

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

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

Multiply and divide within 100.**3.OA.7**

Fluently multiply and divide within 100, using strategies such as the relationship between multiplication and division e.g., knowing that $8 \times 5 = 40$, one knows $40 \div 5 = 8$ or properties of operations. Limit to division without remainders. By the end of Grade 3, know from memory all products of two one-digit numbers.

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

| Code | Digital Student Experience | Code | Teacher Resources |
|------|--|------|---------------------------------------|
| 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.7

Fluently multiply and divide within 100, using strategies such as the relationship between multiplication and division e.g., knowing that $8 \times 5 = 40$, one knows $40 \div 5 = 8$ or properties of operations. Limit to division without remainders. By the end of Grade 3, know from memory all products of two one-digit numbers.

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

| Code | Digital Student Experience | Code | Teacher Resources |
|------|---|------|--|
| 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.7

Fluently multiply and divide within 100, using strategies such as the relationship between multiplication and division e.g., knowing that $8 \times 5 = 40$, one knows $40 \div 5 = 8$ or properties of operations. Limit to division without remainders. By the end of Grade 3, know from memory all products of two one-digit numbers.

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

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

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

3.OA.8

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

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

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

3.OA.8

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

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

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

3.OA.9

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

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

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

Number and Operations in Base Ten**Use place value understanding and properties of operations to perform multi-digit arithmetic.****3.NBT.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.2

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

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

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

Number and Operations – Fractions**Develop understanding of fractions as numbers.****3.NF.1**

Understand a fraction $\frac{1}{b}$ as the quantity formed by 1 part when a whole is partitioned into b equal parts; understand a fraction $\frac{a}{b}$ as the quantity formed by a parts and size $\frac{1}{b}$.

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.2

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

- Represent a fraction $\frac{1}{b}$ 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 $\frac{1}{b}$ and that the endpoint of the part based at 0 locates the number $\frac{1}{b}$ on the number line.
- Represent a fraction $\frac{a}{b}$ on a number line diagram by marking off a lengths $\frac{1}{b}$ from 0. Recognize that the resulting interval has size $\frac{a}{b}$ and that its endpoint locates the number $\frac{a}{b}$ on the number line.

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

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

3.NF.2

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

- a. Represent a fraction $\frac{1}{b}$ 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 $\frac{1}{b}$ and that the endpoint of the part based at 0 locates the number $\frac{1}{b}$ on the number line.
- b. Represent a fraction $\frac{a}{b}$ on a number line diagram by marking off a lengths $\frac{1}{b}$ from 0. Recognize that the resulting interval has size $\frac{a}{b}$ 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.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., $\frac{1}{2} = \frac{2}{4}$, $\frac{4}{6} = \frac{2}{3}$. 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. Examples: Express 3 in the form $3 = \frac{3}{1}$; recognize that $\frac{6}{1} = 6$; locate $\frac{4}{4}$ 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.

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

| Code | Digital Student Experience | Code | Teacher Resources |
|------|--|------|--|
| U37 | Number Sense – Equivalent Fractions | U37 | Fractions Equivalent to One |
| U37 | Number Sense – Fractions Equivalent to One | U37 | Many Equivalent Fractions |
| U37 | Number Sense – Many Equivalent Fractions | U37 | Fractions Equivalent to Whole Numbers |
| U37 | Number Sense – Fractions Equivalent to Whole Numbers | U37 | Comparison – Fractions and Whole Numbers – Symbols |
| U37 | Number Sense – Mixed Numbers | U37 | Comparing Fractions with Like Numerators |
| 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 |

3.NF.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., $\frac{1}{2} = \frac{2}{4}$, $\frac{4}{6} = \frac{2}{3}$. 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. Examples: Express 3 in the form $3 = \frac{3}{1}$; recognize that $\frac{6}{1} = 6$; locate $\frac{4}{4}$ 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.

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

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

Measurement and Data

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

3.MD.1

Tell and write time to the nearest minute and measure time intervals in minutes. Solve word problems involving addition and subtraction of time intervals in minutes, e.g., by representing the problem on a number line diagram.

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

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

Represent and interpret data.**3.MD.3**

Draw a scaled picture graph and a scaled bar graph to represent a data set with several categories. Solve one- and two-step "how many more" and "how many less" problems using information presented in scaled bar graphs. For example, draw a bar graph in which each square in the bar graph might represent 5 pets.

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

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

Geometric measurement: understand concepts of area and relate area to multiplication and to addition.**3.MD.5**

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

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

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

| Code | Digital Student Experience | Code | Teacher Resources |
|------|----------------------------|------|--------------------------------|
| | | ISIP | Area Square |
| | | ISIP | Area of Polygon |
| | | ISIP | Finding the Area of Rectangles |

3.MD.6

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

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

| Code | Digital Student Experience | Code | Teacher Resources |
|------|----------------------------|------|--------------------------------|
| | | ISIP | Area Square |
| | | ISIP | Area of Polygons |
| | | ISIP | Finding the Area of Rectangles |

3.MD.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.

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

| Code | Digital Student Experience | Code | Teacher Resources |
|------|----------------------------|------|--------------------------------|
| | | ISIP | Area Square |
| | | ISIP | Area of Polygons |
| | | ISIP | Finding the Area of Rectangles |

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

3.MD.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 |

3.MD.8

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

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

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

Geometry**Reason with shapes and their attributes****3.G.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.

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

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

3.G.2

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

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

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

Grade 4**Operations and Algebraic Thinking**

Use the four operations with whole numbers to solve problems.

4.OA.1

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

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

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

4.OA.2

Multiply or divide to solve word problems involving multiplicative comparison, e.g., by using drawings and equations with a symbol for the unknown number to represent the problem, distinguishing multiplicative comparison from additive comparison.

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

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

4.OA.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.

4.NBT.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. For example, recognize that $700 \div 70 = 10$ by applying concepts of place value and division.

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

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

4.NBT.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.3

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

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

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

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

4.NBT.4

Fluently add and subtract multi-digit whole numbers using the standard algorithm.

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

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

4.NBT.5

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

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

| Code | Digital Student Experience | Code | Teacher Resources |
|------|--|------|--|
| U41 | Computations and Algebraic Thinking – Multiply Two-Digit Numbers with Models | U41 | Two-Digit by Two-Digit Concrete Multiplication |

Number and Operations – Fractions**Extend understanding of fraction equivalence and ordering.****4.NF.1**

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

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

| Code | Digital Student Experience | Code | Teacher Resources |
|------|--|------|---|
| U43 | Number Sense – Determine Equivalent Fractions with Models | U43 | 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.2

Compare two fractions with different numerators and different denominators, e.g., by creating common denominators or numerators, or by comparing to a benchmark fraction such as $1/2$. Recognize that comparisons are valid only when the two fractions refer to the same whole. Record the results of comparisons with symbols $>$, $=$, or $<$, and justify the conclusions, e.g., by using a visual fraction model.

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

| Code | Digital Student Experience | Code | Teacher Resources |
|------|--|------|---------------------|
| U43 | Number Sense – Comparing Fractions Using Benchmark Fractions | U43 | Benchmark Fractions |

4.NF.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 $\frac{1}{2}$. Recognize that comparisons are valid only when the two fractions refer to the same whole. Record the results of comparisons with symbols $>$, $=$, or $<$, and justify the conclusions, e.g., by using a visual fraction model.

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

| Code | Digital Student Experience | Code | Teacher Resources |
|------|---|------|---|
| U43 | Number Sense – Comparing Fractions 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.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. Examples: $3/8 = 1/8 + 1/8 + 1/8$; $3/8 = 1/8 + 2/8$; $2 \frac{1}{8} = 1 + 1 + 1/8 = 8/8 + 8/8 + 1/8$.
- Add and subtract mixed numbers with like denominators, e.g., by replacing each mixed number with an equivalent fraction, and/or by using properties of operations and the relationship between addition and subtraction.
- Solve word problems involving addition and subtraction of fractions referring to the same whole and having like denominators, e.g., by using visual fraction models and equations to represent the problem.

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

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

Understand decimal notation for fractions, and compare decimal fractions.**4.NF.5**

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

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

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

4.NF.6

Use decimal notation for fractions with denominators of 10 or 100. For example, rewrite 0.62 as $\frac{62}{100}$; describe a length as 0.62 meters; locate 0.62 on a number line diagram.

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

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

4.NF.6

Use decimal notation for fractions with denominators of 10 or 100. For example, rewrite 0.62 as 62/100; describe a length as 0.62 meters; locate 0.62 on a number line diagram.

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

| Code | Digital Student Experience | Code | Teacher Resources |
|------|----------------------------|------|---------------------------------|
| | | ISIP | Fraction to Decimal Equivalence |

4.NF.7

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

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

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

Measurement and Data**Solve problems involving measurement and conversion of measurements from a larger unit to a smaller unit.****4.MD.1**

Know relative sizes of measurement units within one system of units including km, m, cm, and mm; kg, g, mg; lb., oz.; l, ml; hr., min, sec. Within a single system of measurement, express a larger measurement unit in terms of a smaller unit. Record measurement conversions in a two-column table. For example, know that 1 ft is 12 times as long as 1 in. Express the length of a ft snake as 48 in. Generate a conversion table for feet and inches listing the number pairs (1, 12), (2, 24), (3, 36)...

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

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

4.MD.2

Use the four operations to solve word problems involving distances, intervals of time, liquid volumes, masses of objects, and money, including problems involving simple fractions or decimals, and problems that 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.

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

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

4.MD.3

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

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

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

Represent and interpret data.**4.MD.4**

Make a line plot to display a data set of measurements in fractions of a unit ($\frac{1}{2}$, $\frac{1}{4}$, $\frac{1}{8}$). Solve problems involving addition and subtraction of fractions by using information presented in line plots. For example, from a line plot find and interpret the difference in length between the longest and shortest specimens in an insect collection.

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

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

Geometric measurement: understand concepts of angle and measure angles.**4.MD.5**

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

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

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

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

4.MD.6

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

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

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

4.MD.7

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

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

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

Geometry

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

4.G.1

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

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

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

Grade 5**Operations and Algebraic Thinking****Write and interpret numerical expressions.****5.OA.1**

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

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

| Code | Digital Student Experience | Code | Teacher Resources |
|------|---|------|---|
| U49 | Computations and Algebraic Reasoning – Evaluate Numerical Expressions with Parentheses | U49 | Evaluating Numerical Expressions with Parentheses |
| U49 | Computations and Algebraic Reasoning – Interpret Numerical Expressions with Parentheses | U49 | Identifying Expressions in Scenarios |
| 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.2Write simple expressions that record calculations with numbers and interpret numerical expressions without evaluating them. For example, express the calculation "add 8 and 7, then multiply by 2" as $2 \times (8 + 7)$. Recognize that $3 \times (18932 + 921)$ is three times as large as $18932 + 921$, without having to calculate the indicated sum or product.

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

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

5.OA.2

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

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

| Code | Digital Student Experience | Code | Teacher Resources |
|------|---|------|---|
| U49 | Computations and Algebraic Reasoning – 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.3**

Generate two numerical patterns using two given rules. Identify apparent relationships between corresponding terms. Form ordered pairs consisting of corresponding terms from the two patterns and graph the ordered pairs on a coordinate plane. For example, given the rule "Add 3" and the starting number 0, and given the rule "Add 6" and the starting number 0, generate terms in the resulting sequences, and observe that the terms in one sequence are twice the corresponding terms in the other sequence. Explain informally why this is so.

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

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

Number and Operations in Base Ten**Understand the place value system.****5.NBT.1**

Recognize that in a multi-digit number, a digit in one place represents 10 times as much as it represents in the place to its right and $\frac{1}{10}$ of what it represents in the place to its left.

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

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

5.NBT.2

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

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

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

5.NBT.2

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

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

| Code | Digital Student Experience | Code | Teacher Resources |
|------|---|------|--|
| U46 | Number Sense – 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.3

Read, write, and compare decimals to thousandths.

- Read and write decimals to thousandths using base-ten numerals, number names, and expanded form, e.g., $347.392 = 3 \times 100 + 4 \times 10 + 7 \times 1 + 3 \times (1/10) + 9 \times (1/100) + 2 \times (1/1000)$.
- Compare two decimals to thousandths based on meanings of the digits in each place, using $>$, $=$, and $<$ symbols to record the results of comparisons.

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

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

5.NBT.4

Use place value understanding to round decimals to any place.

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

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

Perform operations with multi-digit whole numbers and with decimals to hundredths.**5.NBT.6**

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

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

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

Number and Operations – Fractions**Use equivalent fractions as a strategy to add and subtract fractions.****5.NF.1**

Add and subtract fractions with unlike denominators (including mixed numbers and fractions greater than 1) by replacing given fractions with equivalent fractions in such a way as to produce an equivalent sum or difference of fractions with like denominators. For example, $\frac{2}{3} + \frac{5}{4} = \frac{8}{12} + \frac{15}{12} = \frac{23}{12}$. (In general, $\frac{a}{b} + \frac{c}{d} = \frac{ad + bc}{bd}$.)

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

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

5.NF.2

Solve word problems involving addition and subtraction of fractions referring to the same whole, including cases of unlike denominators, e.g., by using visual fraction models or equations to represent the problem. Use benchmark fractions and number sense of fractions to estimate mentally and assess the reasonableness of answers. For example, recognize an incorrect result $\frac{2}{5} + \frac{1}{2} = \frac{3}{7}$, by observing that $\frac{3}{7} < \frac{1}{2}$.

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

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

Apply and extend previous understandings of multiplication and division to multiply and divide fractions.**5.NF.4**

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

- Interpret the product $(a/b) \times q$ as a part of a partition of q into b equal parts, equivalently, as the result of a sequence of operations $a \times q \div b$. For example, use a visual fraction model to show $(2/3) \times 4 = 8/3$, and create a story context for this equation. Do the same with $(2/3) \times (4/5) = 8/15$. (In general, $(a/b) \times (c/d) = (ac)/(bd)$).
- Find the area of a rectangle with fractional side lengths by tiling it with unit squares of the appropriate unit fraction side lengths and show that the area is the same as would be found by multiplying the side lengths. Multiply fractional side lengths to find areas of rectangles and represent fraction products as rectangular areas.

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

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

5.NF.6

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

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

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

Measurement and Data

Convert like measurement units within a given measurement system.

5.MD.1

Convert among different-sized standard measurement units within a given measurement system (e.g., convert 5 cm to 0.05 m), and use these conversions in solving multi-step, real world problems.

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

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

Geometric measurement: understand concepts of volume and relate volume to multiplication and to addition.**5.MD.3**

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

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

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

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

5.MD.4

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

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

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

5.MD.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. Represent threefold whole number products as volumes, e.g., to represent the Associative Property of Multiplication.
- Apply the formulas $V = \ell \times w \times h$ and $V = B \times h$ for rectangular prisms to find volumes of right rectangular prisms with whole number edge lengths in the context of solving real-world and mathematical problems.
- 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.

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

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

Geometry**Graph points on the coordinate plane to solve real-world and mathematical problems.****5.G.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.2

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

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

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

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

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



Appendix

Classroom Resource

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



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



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

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



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

| Data Analysis | |
|---------------|----------------------|
| Code | Teacher Resources |
| CR | Analyzing Line Plots |

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

Parent Portal Lessons

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



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

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



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



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