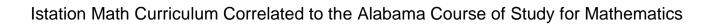


Kindergarten – Grade 5





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|--|-----|
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K–12 Standards for Mathematical Practices (MP)

As stated in the Alabama Course of Study 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

| i Owci i | atti i catarca doment | | | | | |
|----------|--|--------|------------------------------|--|--|--|
| Newes | t Features | | | | | |
| | th is the next generation of activities for Istation, bringing a mo egree of adaptability, many more questions, and a greater sens | | | | | |
| MP 1, 2, | 3, 4, 5, 6, 7, 8 | | | | | |
| Code | de Digital Student Experience Code Teacher Resources | | | | | |
| 1 | | | | | | |
| | | U13-15 | Odd One Out - Counting | | | |
| 6 | | | | | | |
| U9-11 | Number Sense – Comparison Cards: Comparing Groups or Numbers | U9-11 | More or Less? Which is Best? | | | |
| 7 | | | | | | |
| U9-11 | Number Sense – Comparison Cards: Comparing Groups or Numbers | U9-11 | More or Less? Which is Best? | | | |
| 14 | | | | | | |
| | | U7-8 | Make It, Break It | | | |
| 20 | | | | | | |
| | | | Shape Families | | | |
| 22 | | | | | | |
| U4-6 | Geometry – Sweet Shapes | | | | | |
| 10 | | | | | | |
| | | U16-17 | One Hundred Twenty is Plenty | | | |



Newest Features

| MP | 1. | 2. | 3. | 4. | 5. | 6. | 7. | 8 |
|----|----|----|----|----|----|----|-----|---|
| | ٠, | _, | Ο, | ٠, | Ο, | Ο, | . , | _ |

| Code | Digital Student Experience | Code | Teacher Resources |
|--------|--|--------|---------------------------------------|
| 11 | | | |
| | | U12-13 | Two-Digit Memory |
| 12 | | | |
| U14-16 | Number Sense – Comparison Cards: Comparing Two- Digit Numbers | | Dare to Compare Two-Digit Numbers |
| 21 | | | |
| U20-23 | Geometry – Sweet Shapes | | |
| 6 | | | |
| | | U30-31 | Make It, Break It, Toss It |
| 8 | | | |
| | | U24-30 | Skip Counting with Patterns |
| 9 | | | |
| U33-35 | Number Sense – Comparison Cards: Comparing Three- Digit Numbers | U33-35 | Dare to Compare Three-Digit Numbers |
| 10 | | | |
| U37-39 | Number Sense – Pyramid Pinball: Rounding to the Nearest 10 or 100 | U37-39 | Round and Round We Go (Whole Numbers) |
| 26 | | | |



Newest Features

| MP | 1. | 2. | 3. | 4. | 5. | 6. | 7. | 8 |
|----|----|----|----|----|----|----|----|---|
| | | | | | | | | |

| Code | Digital Student Experience | | Teacher Resources |
|--------|--|--------|---|
| | | | Quads Quads |
| 7 | | | |
| U41-43 | Number Sense – Comparison Cards: Comparing Multi- Digit Numbers | | Dare to Compare Multi-Digit Numbers |
| 9 | | | |
| U42-44 | Number Sense – Pyramid Pinball: Rounding to Any Place | U42-44 | Round and Round We Go (Multi-Digit) Numbers |
| 4 | | | |
| U47-49 | Number Sense – Comparison Cards: Comparing Decimal Numbers | U47-49 | Dare to Compare Decimal Numbers |
| 5 | | | |
| U48-50 | Number Sense – Pyramid Pinball: Rounding Decimals | U48-50 | Round and Round We Go (Decimal) Numbers |



Power Path Featured Content (Spanish)

Newest Features

| MP | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |
|---------|----|----|----|----|----|----|----|---------|
| 1 4 1 1 | ٠, | ۷, | Ο, | т, | Ο, | Ο, | ., | \circ |

| Code | Digital Student Experience | Code | Teacher Resources |
|--------|---|--------|--|
| 6 | | | |
| U9-11 | Tarjetas de comparación - Comparando grupos o números | U9-11 | ¿Más o menos? ¿Cuál es mejor? |
| 7 | | | |
| | | U9-11 | ¿Más o menos? ¿Cuál es mejor? |
| 12 | | | |
| U14-16 | Tarjetas de comparación - Comparando números de dos dígitos | U14-16 | Atrévete a comparar (Números de dos dígitos) |
| 9 | | | |
| U33-35 | Tarjetas de comparación - Comparando números de tres dígitos | U33-35 | Atrévete a comparar (Números de tres dígitos) |
| 10 | | | |
| | | U37-39 | Dando y dando la vuelta (Números Enteros) |
| 7 | | | |
| U41-43 | Tarjetas de comparación - Comparando números de múltiples dígitos | U42-44 | Atrévete a comparar (Numéros de dígitos múltiples) |
| 9 | | | |



Newest Features

| MP | 1. | 2. | 3. | 4. | 5. | 6. | 7. | 8 |
|----|----|----|----|----|----|----|----|---|
| | ٠, | _, | Ο, | ٠, | Ο, | Ο, | ., | _ |

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



Kindergarten

Foundations of Counting

Know number names and the count sequence.

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

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



2

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

| Code | Digital Student Experience | Code | Teacher Resources |
|------|--|---------|--|
| U4 | Number Sense – "EZ with a Rock and Roll Beat" (1-10) | U6 | Count with Me (1-20) |
| U4 | Number Sense – Identifying Numbers (1-10) | U8 | Counting Sticks (1-20) |
| U4 | Number Sense – Identify Missing Numbers (1-10) | U8 | Counting Objects (1-20) |
| U4 | Number Sense – Number Sequence (1-10) | U14 | One Hundred Is a Lot |
| U6 | Number Sense – "EZ with a Rock and Roll Beat" (1-20) | U14 | Roll-Count-Cover – Skip Counting by Tens |
| U6 | Number Sense – Identifying Numbers (1-20) | U18 | Counting Memory |
| U6 | Number Sense – Identify Missing Numbers (1-20) | U21 | The Arrow Says (1-100) |
| U6 | Number Sense – Number Sequence (1-20) | U23 | Decade Numbers |
| U7 | Number Sense – "EZ with a Rock and Roll Beat" (1-30) | ISIP EM | Set Stories |
| U7 | Number Sense – Identifying Numbers (1-30) | ISIP EM | Ten Frame Puzzles (1-20) |
| U7 | Number Sense – Identify Missing Numbers (1-30) | ISIP EM | Total Amount in a Scattered Group |
| U7 | Number Sense – Number Sequence (1-30) | ISIP EM | Understanding Ordinal Numbers |
| U8 | Number Sense – "EZ with a Rock and Roll Beat" (1-50) | | |
| U8 | Number Sense – Identifying Numbers (1-50) | | |
| U8 | Number Sense – Identify Missing Numbers (1-50) | | |
| U8 | Number Sense – Number Sequence (1-50) | | |



2

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

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) | | |

3

Write numerals from 0 to 20.

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

| Code | Digital Student Experience | | Teacher Resources |
|------|--|-----|--|
| U11 | Number Sense – "Writing Our Numbers" | U6 | Domino Dot Memory (1-10) |
| U11 | Number Sense – Writing Numbers Everywhere (1-10) | | 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) |



3

Write numerals from 0 to 20.

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

| Code | Digital Student Experience | 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.

4

Connect counting to cardinality using a variety of concrete objects.

- a. Say the number names in consecutive order when counting objects.
- b. Indicate that the last number name said tells the number of objects counted in a set.
- c. Indicate that the number of objects in a set is the same regardless of their arrangement or the order in which they were counted.
- d. Explain that each successive number name refers to a quantity that is one larger.

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



4

Connect counting to cardinality using a variety of concrete objects.

- a. Say the number names in consecutive order when counting objects.
- b. Indicate that the last number name said tells the number of objects counted in a set.
- c. Indicate that the number of objects in a set is the same regardless of their arrangement or the order in which they were counted.
- d. Explain that each successive number name refers to a quantity that is one larger.

| Code | Digital Student Experience | Code | Teacher Resources |
|------|---|------|-------------------|
| U8 | Number Sense – Counting a Scattered Static Group (1-20) | | |
| U10 | Number Sense – "Counting Cattle" (1-20) | | |
| U10 | Number Sense – Choose the Correct Amount (1-20) | | |
| U10 | Number Sense – Remember the Counted Amount (1-20) | | |
| U10 | Number Sense – Counting an Array (1-20) | | |
| U10 | Number Sense – Counting a Scattered Static Group (1-20) | | |



5

Count to answer "how many?" questions.

- a. Count using no more than 20 concrete objects arranged in a line, a rectangular array, or a circle.
- b. Count using no more than 10 concrete objects in a scattered configuration.
- c. Draw the number of objects that matches a given numeral from 0 to 20.

| Code | Digital Student Experience | Code | Teacher Resources |
|------|---|---------|--|
| U6 | Number Sense – "Counting Cattle" (1-10) | U6 | Domino Dot Memory (1-10) |
| U6 | Number Sense – Counting in a Line (1-10) | U7 | Counting a Scattered Static Group (1-10) |
| U6 | Number Sense – Counting a Static Scattered Group (1-10) | U8 | Counting Sticks (1-20) |
| U6 | Number Sense – Remember the Counted Amount (1-10) | U8 | Counting Objects (1-20) |
| U7 | Number Sense – "Counting Cattle" (1-10) | U18 | Counting Memory |
| U7 | Number Sense – Counting Fingers (1-10) | ISIP 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) | | |



5

Count to answer "how many?" questions.

- a. Count using no more than 20 concrete objects arranged in a line, a rectangular array, or a circle.
- b. Count using no more than 10 concrete objects in a scattered configuration.
- c. Draw the number of objects that matches a given numeral from 0 to 20.

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

| Code | Digital Student Experience | Code | Teacher Resources |
|------|---|------|-------------------|
| U10 | Number Sense – "Counting Cattle" (1-20) | | |
| U10 | Number Sense – Choose the Correct Amount (1-20) | | |
| U10 | Number Sense – Remember the Counted Amount (1-20) | | |

Compare numbers.

6

Orally identify whether the number of objects in one group is greater/more than, less/fewer than, or equal/the same as the number of objects in another group, in groups containing up to 10 objects, by using matching, counting, or other strategies.

| Code | Digital Student Experience | 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) |



Compare two numbers between 0 and 10 presented as written numerals (without using inequality symbols).

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.

8

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

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



8

26

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

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



8

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

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

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

9

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

| Code | Digital Student Experience | Code | Teacher Resources |
|------|---|------|---|
| U9 | Computations and Algebraic Thinking – "Part Part Whole in New Orleans" (1-10) | U8 | Parts and Wholes |
| U9 | Computations and Algebraic Thinking – Part Part Whole Addition within 10 | U10 | Dogs and Cats on Mats (up to 10) |
| U9 | Computations and Algebraic Thinking – "Part Part Whole in New Orleans" (1-10) | U12 | Ten or Not Ten |
| U9 | Computations and Algebraic Thinking – Part Part Whole Addition within 10 | U18 | Decomposing House with Pictures |
| U10 | Computations and Algebraic Thinking – "Part Part Whole in New Orleans" (1-10) | U18 | Decomposing House |
| U10 | Computations and Algebraic Thinking – Part Part Whole Addition Stories | U19 | Relative Magnitude with Part Part Whole |



9

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

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



10

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

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



10

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

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

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

11

30

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

| Code | Digital Student Experience | 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 |



11

31

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

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



13

Duplicate and extend simple patterns using concrete objects.

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

| Code | Digital Student Experience | Code | Teacher Resources |
|------|----------------------------|------|--|
| | | ISIP | Identify the Pattern Rule, Duplicate and Extend Patterns |
| | | ISIP | Identify, Duplicate and Extend Sequential Patterns |
| | | ISIP | Identify, Duplicate and Extend Growing Patterns |

Operations with Numbers

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

K.NBT.1

Compose and decompose numbers from 11 to 19 by using concrete objects or drawings to demonstrate understanding that these numbers are composed of ten ones and one, two, three, four, five, six, seven, eight, or nine ones.

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



Measurement

Describe and compare measurable attributes.

16

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

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? |

17

Directly compare two objects with a measurable attribute in common to see which object has "more of" or "less of" the attribute and describe the difference. Example: Directly compare the heights of two children and describe one child as "taller" or "shorter."

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



17

Directly compare two objects with a measurable attribute in common to see which object has "more of" or "less of" the attribute and describe the difference. Example: Directly compare the heights of two children and describe one child as "taller" or "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 Weight | U10 | Directly Comparing Weight |
| U15 | Measurement and Data Analysis – Comparing Objects by Height | U15 | Directly Comparing Height |
| U15 | Measurement and Data Analysis – Comparing Objects by Capacity | U15 | Which Holds More? Which Holds Less? |

Geometry

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

19

Correctly name shapes regardless of their orientations or overall sizes.

| 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 |



20

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.

21

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

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

Grade 1

Operations and Algebraic Thinking

Represent and solve problems involving addition and subtraction.

1

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

- a. Add to with change unknown to solve word problems within 20.
- b. Take from with change unknown to solve word problems within 20.
- c. Put together/take apart with addend unknown to solve word problems within 20.
- d. Compare quantities, with difference unknown, bigger unknown, and smaller unknown while solving word problems within 20.

| Code | Digital Student Experience | 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) |

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

1

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

- a. Add to with change unknown to solve word problems within 20.
- b. Take from with change unknown to solve word problems within 20.
- c. Put together/take apart with addend unknown to solve word problems within 20.
- d. Compare quantities, with difference unknown, bigger unknown, and smaller unknown while solving word problems within 20.

| Code | Digital Student Experience | Code | Teacher Resources |
|------|--|------|-------------------|
| U20 | Computations and Algebraic Thinking – Addition Stories (1-20) Vertical Equations | | |
| U22 | Computations and Algebraic Thinking – Whole Part Part "Chicago Pizza Blues" (within 20) | | |
| U22 | Computations and Algebraic Thinking – Whole Part Part (within 20) | | |
| U24 | Computations and Algebraic Thinking – Subtraction Stories (within 20) | | |
| U24 | Computations and Algebraic Thinking – Determine the Unknown Whole Numbers in Subtraction Sentences | | |

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

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

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

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

3

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

| Code | Digital Student Experience | 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 |

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

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

| Code | Digital Student Experience | Code | Teacher Resources |
|------|--|---------|----------------------------------|
| U20 | Computations and Algebraic Thinking – Doubles Strategy | U20 | Turn Around Addition |
| U20 | Computations and Algebraic Thinking – Commutative Property of Addition | U20 | Grouping Groceries |
| U20 | Computations and Algebraic Thinking – Associative Property of Addition | U20 | Identity Property Go Fish! |
| U20 | Computations and Algebraic Thinking – Identity Property of Addition | ISIP EM | Counting on Cards |
| U24 | Computations and Algebraic Thinking – Determine the Unknown Whole Numbers in Subtraction Sentences | ISIP EM | Fact Family Dominoes |
| | | ISIP EM | Associative Property of Addition |
| | | ISIP EM | Commutative Property of Addition |

4

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

| Code | Digital Student Experience | Code | Teacher Resources |
|------|---|------|-------------------|
| U22 | Computations and Algebraic Thinking – Whole Part Part "Chicago Pizza Blues" (within 20) | U18 | Decomposing House |

Explain subtraction as an unknown-addend problem. Example: subtracting 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 (within 20) | U19 | Decomposing House with Pictures |
| U24 | Computations and Algebraic Thinking – Subtraction Stories (within 20) | U22 | Beading the Difference |
| U24 | Computations and Algebraic Thinking – Determine the Unknown Whole Numbers in Subtraction Sentences | U22 | Mystery in the Middle |
| | | U24 | Start, Change, Result! (within 20) |
| | | ISIP EM | Subtraction Stories |
| | | ISIP EM | Fact Family Dominoes |

Add and subtract within 20.

5

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

| Code | Digital Student Experience | Code | Teacher Resources |
|------|----------------------------|------|------------------------|
| | | U22 | Beading the Difference |
| | | U22 | Mystery in the Middle |

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

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

| Code | Digital Student Experience | Code | Teacher Resources |
|------|----------------------------|------|------------------------------------|
| | | U24 | Start, Change, Result! (within 20) |

6

Add and subtract within 20.

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

| Code | Digital Student Experience | 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 |

Add and subtract within 20.

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

| Code | Digital Student Experience | Code | Teacher Resources |
|------|---|---------|-----------------------------|
| U20 | Computations and Algebraic Thinking – "Part Part Whole in New Orleans" (1-20) | U20 | Turn Around Addition |
| U20 | Computations and Algebraic Thinking – Addition Stories (horizontal orientation) | U20 | Grouping Groceries |
| U20 | Computations and Algebraic Thinking – Addition Stories (vertical orientation) | U20 | Identity Property Go Fish! |
| U20 | Computations and Algebraic Thinking – "The Math Whiz" | U20 | Doubles Facts |
| U20 | Computations and Algebraic Thinking – Fact Strategies | ISIP EM | Place Value of Tens and One |
| U20 | Computations and Algebraic Thinking – Commutative Property | ISIP EM | Fact Family Dominoes |
| U20 | Computations and Algebraic Thinking – Associative Property | ISIP EM | Building Sums to Twenty |
| U20 | Computations and Algebraic Thinking – Identity Property | FP | Addition Fast Track |

Add and subtract within 20.

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

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

Work with addition and subtraction equations.

8

Solve for the unknown whole number in various positions in an addition or subtraction equation, relating three whole numbers that would make it true. Example: determining the unknown number that makes the equation true in each of the equations 8 + ? = 11, 5 = ? - 3, and 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 |

Operations with Numbers: Base Ten

Extend the counting sequence.

10

Extend the number sequence from 0 to 120.

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

| Code | Digital Student Experience | Code | Teacher Resources |
|------|--|------|----------------------|
| U17 | Number Sense – "Pattern of the Count" Count by Ones to 100 | U14 | One Hundred Is a Lot |
| U17 | Number Sense – Place Value Rows (1-100) | U17 | Digit Deal (1-100) |

Extend the number sequence from 0 to 120.

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

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

11

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

- a. Identify a bundle of ten ones as a "ten."
- b. Identify the numbers from 11 to 19 as composed of a ten and one, two, three, four, five, six, seven, eight, or nine ones.
- c. Identify the numbers 10, 20, 30, 40, 50, 60, 70, 80, 90 as one, two, three, four, five, six, seven, eight, or nine tens (and 0 ones).

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

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

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 | Graphing Stories – Determining Most and Least |

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

13

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

- a. Add a two-digit number and a one-digit number.
- b. Add a two-digit number and a multiple of 10.
- c. Demonstrate that in adding two-digit numbers, tens are added to tens, ones are added to ones, and sometimes it is necessary to compose a ten.
- d. Relate the strategy for adding a two-digit number and a one-digit number to a written method and explain the reasoning used.

| Code | Digital Student Experience | Code | Teacher Resources |
|------|---|------|----------------------|
| U20 | Computations and Algebraic Thinking – "The Math Whiz" | U20 | Doubles Facts |
| U20 | Computations and Algebraic Thinking – Fact Strategies | U20 | Turn Around Addition |

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

- a. Add a two-digit number and a one-digit number.
- b. Add a two-digit number and a multiple of 10.
- c. Demonstrate that in adding two-digit numbers, tens are added to tens, ones are added to ones, and sometimes it is necessary to compose a ten.
- d. Relate the strategy for adding a two-digit number and a one-digit number to a written method and explain the reasoning used.

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

Data Analysis

Collect and analyze data and interpret results.

16

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

- a. Ask and answer questions about the total number of data points in organized data.
- b. Summarize data on Venn diagrams, pictographs, and "yes-no" charts using real objects, symbolic representations, or pictorial representations.
- c. Determine "how many" in each category using up to three categories of data.
- d. Determine "how many more" or "how many less" are in one category than in another using data organized into two or three categories.

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

Measurement

Work with time and money

19

Tell and write time to the 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! |

20

Identify pennies and dimes by name and value.

| Code | Digital Student Experience | Code | Teacher Resources |
|------|----------------------------|------|---------------------|
| | | U12 | Coin Name Cover-Up |
| | | U14 | Coin Value Cover-Up |

Geometry

Reason with shapes and their attributes.

21

Build and draw shapes which have defining attributes.

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

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

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

23

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

- a. Describe "the whole" as two of or four of the shares of circles and rectangles partitioned into two or four equal shares.
- b. Explain that decomposing into more equal shares creates smaller shares of circles and rectangles.

| Code | Digital Student Experience | 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.

1

Use addition and subtraction within 100 to solve one- and two-step word problems by using drawings and equations with a symbol for the unknown number to represent the problem.

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

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

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

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

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

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

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

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

3

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

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

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 |

4

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

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

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

Operations with Numbers: Base Ten

Understand place value.

6

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

a. Explain the following three-digit numbers as special cases: 100 can be thought of as a bundle of ten tens, called a "hundred," and the numbers 100, 200, 300, 400, 500, 600, 700, 800, 900 refer to one, two, three, four, five, six, seven, eight, or nine hundreds (and 0 tens and 0 ones).

| Code | 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 |

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

| 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 |

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

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.

10

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

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

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 |

Add and subtract within 1000 using concrete models or drawings and strategies based on place value, properties of operations, and/or the relationship between addition and subtraction; relate the strategy to a written method.

a. Explain that in adding or subtracting three-digit numbers, one adds or subtracts hundreds and hundreds, tens and tens, ones and ones; and sometimes it is necessary to compose or decompose tens or hundreds.

| Code | Digital Student Experience | 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

Measure and estimate lengths in standard units.

17

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

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

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

18

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

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

Measure to determine how much longer one object is than another, expressing the length difference of the two objects using standard units of length.

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.

22

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

| Code | Digital Student Experience | 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.

23

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

a. Express an understanding of common terms such as, but not limited to, quarter past, half past, and quarter to.

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 |

Geometry

Reason with shapes and their attributes.

26

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

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

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

a. Explain that equal shares of identical wholes need not have the same shape.

| Code | Digital Student Experience | 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.

1

Illustrate the product of two whole numbers as equal groups by identifying the number of groups and the number in each group and represent as a written expression.

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

Illustrate the product of two whole numbers as equal groups by identifying the number of groups and the number in each group and represent as a written expression.

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

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

2

Illustrate and interpret the quotient of two whole numbers as the number of objects in each group or the number of groups when the whole is partitioned into equal shares.

| Code | Digital Student Experience | 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 |

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

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 |

4

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

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

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

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

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

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

5

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

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

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

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.

7

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

- a. Fluently determine all products obtained by multiplying two one-digit numbers.
- b. State automatically all products of two one-digit numbers by the end of third grade.

| Code | Digital Student Experience | 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 |

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

- a. Fluently determine all products obtained by multiplying two one-digit numbers.
- b. State automatically all products of two one-digit numbers by the end of third grade.

| Code | Digital Student Experience | 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 |

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

- a. Fluently determine all products obtained by multiplying two one-digit numbers.
- b. State automatically all products of two one-digit numbers by the end of third grade.

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

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

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

8

Determine and justify solutions for two-step word problems using the four operations and write an equation with a letter standing for the unknown quantity. Determine reasonableness of answers using number sense, context, mental computation, and estimation strategies including rounding.

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

Determine and justify solutions for two-step word problems using the four operations and write an equation with a letter standing for the unknown quantity. Determine reasonableness of answers using number sense, context, 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 |

9

Recognize and explain arithmetic patterns using properties of operations.

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

Operations with Numbers: Base Ten

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

10

Identify the nearest 10 or 100 when rounding whole numbers, using place value understanding.

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 |

11

Use various strategies to add and subtract fluently within 1000.

| 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 |

Operations with Numbers: Fractions

Develop understanding of fractions as numbers.

13

Demonstrate that a unit fraction represents one part of an area model or length model of a whole that has been equally partitioned; explain that a numerator greater than one indicates the number of unit pieces represented by the fraction.

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 |

14

Interpret a fraction as a number on the number line; locate or represent fractions on a number line diagram.

- a. Represent a unit fraction (1/bb) on a number line by defining the interval from 0 to 1 as the whole and partitioning it into b equal parts as specified by the denominator.
- b. Represent a fraction (aa/bb) on a number line by marking off a lengths of size (1/bb) from zero.

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

Interpret a fraction as a number on the number line; locate or represent fractions on a number line diagram.

- a. Represent a unit fraction (1/bb) on a number line by defining the interval from 0 to 1 as the whole and partitioning it into b equal parts as specified by the denominator.
- b. Represent a fraction (aa/bb) on a number line by marking off a lengths of size (1/bb) from zero.

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

| Code | Digital Student Experience | Code | Teacher Resources |
|------|----------------------------|------|----------------------------------|
| | | U37 | Identifying Equivalent Fractions |

15

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

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

| Code | Digital Student Experience | 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 |

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

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

| Code | Digital Student Experience | Code | Teacher Resources |
|------|--|------|---|
| U37 | Number Sense – Comparing Fractions with the Same Denominator | U37 | Identify Equivalent Fractions |
| U37 | Number Sense – Comparing Fractions with the Same Numerator | ISIP | Comparing Fractions Using Models |
| | | ISIP | Comparing Fractions |
| | | ISIP | Identify Equivalent Fractions Using Area Models |
| | | ISIP | Recognizing Fractions in Different Forms |
| | | ISIP | Writing Fractions – Symbolic Notation |

Data Analysis

Represent and interpret data.

16

For a given or collected set of data, create a scaled (one-to-many) picture graph and scaled bar graph to represent a data set with several categories.

- a. Determine a simple probability from a context that includes a picture.
- b. Solve one- and two-step "how many more" and "how many less" problems using information presented in scaled graphs.

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 |

Measurement

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

18

Tell and write time to the nearest minute; measure time intervals in minutes (within 90 minutes.)

a. Solve real-world problems involving addition and subtraction of time intervals in minutes by representing the problem on a number line diagram.

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

Tell and write time to the nearest minute; measure time intervals in minutes (within 90 minutes.)

a. Solve real-world problems involving addition and subtraction of time intervals in minutes by representing the problem on a number line diagram.

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

| Code | Digital Student Experience | Code | Teacher Resources |
|------|----------------------------|------|---------------------------|
| | | U39 | Elapsed Time Across Hours |

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

20

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

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

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

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

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

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

25

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

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

Geometry

Reason with shapes and their attributes.

26

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

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

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



Grade 4

Operations and Algebraic Thinking

Solve problems with whole numbers using the four operations.

Interpret and write equations for multiplicative comparisons.

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 |

2

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

| Code | Digital Student Experience | 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 |

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

- a. Write equations to show solutions for multi-step word problems with a letter standing for the unknown quantity.
- b. Determine reasonableness of answers for multi-step word problems, using mental computation and estimation strategies including rounding.

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 |

Operations with Numbers: Base Ten

Generalize place value understanding for multi-digit whole numbers.

6

Using models and quantitative reasoning, explain that in a multi-digit whole number, a digit in any place represents ten times what it represents in the place to its right.

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

Read and write multi-digit whole numbers using standard form, word form, and expanded form.

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

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

9

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

| 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 with whole numbers.

10

Use place value strategies to fluently add and subtract multi-digit whole numbers and connect strategies to 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 |

11

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

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

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



Operations with Numbers: Fractions

Extend understanding of fraction equivalence and ordering.

13

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

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

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

| Code | Digital Student Experience | Code | Teacher Resources |
|------|--|------|---|
| U43 | Number Sense – Determine Equivalent Fractions with Models | U43 | Fraction Comparison Using Benchmark Fractions |
| U43 | Number Sense – Comparing Fractions Using Benchmark Fractions | U43 | Compare Fractions- 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 |

14

Compare two fractions with different numerators and different denominators using concrete models, benchmarks $(0, \frac{1}{2}, 1)$, common denominators, and/or common numerators, recording the comparisons with symbols >, =, or

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

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14

Compare two fractions with different numerators and different denominators using concrete models, benchmarks $(0, \frac{1}{2}, 1)$, common denominators, and/or common numerators, recording the comparisons with symbols >, =, or

| 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 |

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

15

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

- a. Decompose a fraction as a sum of unit fractions and as a sum of fractions with the same denominator in more than one way using area models, length models, and equations.
- b. Add and subtract fractions and mixed numbers with like denominators using fraction equivalence, properties of operations, and the relationship between addition and subtraction.
- c. Solve word problems involving addition and subtraction of fractions and mixed numbers having like denominators, using drawings, visual fraction models, and equations to represent the problem.

| Code | Digital Student Experience | 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.

17

Express, model, and explain the equivalence between fractions with denominators of 10 and 100. a. Use fraction equivalency to add two fractions with denominators of 10 and 100.

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

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

18

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

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

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

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 |

Data Analysis

Represent and interpret data.

20

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

- a. Create a line plot to display a data set of measurements in fractions of a unit (1/2, 1/4, 1/8).
- b. Solve problems involving addition and subtraction of fractions using information presented in line plots.

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 |

Measurement

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

21

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

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

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

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22

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

- a. Solve measurement problems involving simple fractions or decimals.
- b. Solve measurement problems that require expressing measurements given in a larger unit in terms of a smaller unit.
- c. Represent measurement quantities using diagrams such as number line diagrams that feature a measurement scale.

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 |

23

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

| 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 |



Geometric measurement: understand concepts of angle and measure angles.

24

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

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

| Code | Digital Student Experience | Code | Teacher Resources |
|------|----------------------------|------|-------------------------------|
| | | ISIP | Line and Angle Identification |

25

Use a protractor to measure angles in whole-number degrees and 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 |

26

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

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

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

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26

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

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

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

| Code | Digital Student Experience | Code | Teacher Resources |
|------|----------------------------|------|-------------------------------|
| | | ISIP | Line and Angle Identification |

Geometry

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

27

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

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

Grade 5

Operations and Algebraic Thinking

Write and interpret numerical expressions.

1

Write, explain, and evaluate simple numerical expressions involving the four operations to solve up to two-step problems. Include expressions involving parentheses, brackets, or braces, using commutative, associative, and distributive properties.

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

Analyze patterns and relationships.

2

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

- a. Use data from an input/output table to identify apparent relationships between corresponding terms.
- b. Form ordered pairs from values in an input/output table.
- c. Graph ordered pairs from an input/output table on a coordinate plane.

| Code | Digital Student Experience | 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 |

Operations with Numbers: Base Ten

Understand the place value system.

3

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

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

| Code | Digital Student Experience | 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 |

Read, write, and compare decimals to thousandths.

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

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

Use place value understanding to round decimals to thousandths.

| 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 |

Use place value understanding to round decimals to thousandths.

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

| Code | Digital Student Experience | Code | Teacher Resources |
|------|--|------|-------------------|
| U46 | Number Sense – Round Decimals with Whole Numbers | | |

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

7

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

| Code | Digital Student Experience | 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 |

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

- a. Use concrete models and drawings to solve problems with decimals to hundredths.
- b. Solve problems in a real-world context with decimals to hundredths.

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

Operations with Numbers: Fractions

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

9

Model and solve real-word problems involving addition and subtraction of fractions referring to the same whole, including cases of unlike denominators, using visual fraction models or equations to represent the problem. Use benchmark fractions and number sense of fractions to estimate mentally, and assess the reasonableness of answers.

Example: Recognize an incorrect result 2/5 + 1/2 = 3/7 by observing that 3/7 < 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 |

10

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

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

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

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

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

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

12

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

- a. Use a visual fraction model (area model, set model, or linear model) to show $(aa/bb) \times q$ and create a story context for this equation to interpret the product as a parts of a partition of q into b equal parts.
- b. Use a visual fraction model (area model, set model, or linear model) to show $(aa/bb) \times (cc/dd)$ and create a story context for this equation to interpret the product.
- c. Multiply fractional side lengths to find areas of rectangles, and represent fraction products as rectangular areas.
- d. Find the area of a rectangle with fractional side lengths by tiling it with unit squares of the appropriate unit fraction side lengths to show that the area is the same as would be found by multiplying the side lengths.

| Code | Digital Student Experience | 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) |

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

- a. Use a visual fraction model (area model, set model, or linear model) to show $(aa/bb) \times q$ and create a story context for this equation to interpret the product as a parts of a partition of q into b equal parts.
- b. Use a visual fraction model (area model, set model, or linear model) to show $(aa/bb) \times (cc/dd)$ and create a story context for this equation to interpret the product.
- c. Multiply fractional side lengths to find areas of rectangles, and represent fraction products as rectangular areas.
- d. Find the area of a rectangle with fractional side lengths by tiling it with unit squares of the appropriate unit fraction side lengths to show that the area is the same as would be found by multiplying the side lengths.

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

Model and solve real-world problems involving multiplication of fractions and mixed numbers using visual fraction models, drawings, 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

Convert like measurement units within a given measurement system.

17

Convert among different-sized standard measurement units within a given measurement system and use these conversions in solving multistep, real-world problems.

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

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

18

Identify volume as an attribute of solid figures, and measure volumes by counting unit cubes, using cubic cm, cubic in, cubic ft, and improvised (non-standard) units.

a. Pack a solid figure without gaps or overlaps using n unit cubes to demonstrate volume as n cubic units

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 |

19

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

- a. Use the associative property of multiplication to find the volume of a right rectangular prism and relate it to packing the prism with unit cubes. Show that the volume can be determined by multiplying the three edge lengths or by multiplying the height by the area of the base.
- b. Apply the formulas $V = I \times w \times h$ and $V = B \times h$ for rectangular prisms to find volumes of right rectangular prisms with whole-number edge lengths in the context of solving real-world and mathematical problems.
- c. Find volumes of solid figures composed of two non-overlapping right rectangular prisms by adding the volumes of the two parts, applying this technique to solve real-world problems.

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

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

- a. Use the associative property of multiplication to find the volume of a right rectangular prism and relate it to packing the prism with unit cubes. Show that the volume can be determined by multiplying the three edge lengths or by multiplying the height by the area of the base.
- b. Apply the formulas $V = I \times w \times h$ and $V = B \times h$ for rectangular prisms to find volumes of right rectangular prisms with whole-number edge lengths in the context of solving real-world and mathematical problems.
- c. Find volumes of solid figures composed of two non-overlapping right rectangular prisms by adding the volumes of the two parts, applying this technique to solve real-world problems.

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

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

Geometry

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

20

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

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

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

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

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

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

23

Explain that attributes belonging to a category of two-dimensional figures also belong to all subcategories of that category.

Example: All rectangles have four right angles, and squares have four right angles, so squares are rectangles.

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

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Appendix

Classroom Resource

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





| Genera | General Graphic Organizers | |
|--------|-------------------------------------|--|
| Code | Teacher Resources | |
| CR | Place Value Mat: 3-Column (Blank) | |
| CR | Place Value Mat: 4-Column (Blank) | |
| CR | Ten Frame | |
| CR | Three-Digit Number Cards | |
| CR | Types of Word Problems Anchor Chart | |

| Number Sense | |
|--------------|---|
| Code | Teacher Resources |
| 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) |

| Measu | 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) | Ī |
| CR | Linear Measurement Anchor Chart | |
| CR | Linear Measurement Body Benchmarks Anchor Chart | |
| CR | Linear Measurement Graphic Organizer | |

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| 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 M | 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 | 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 |