

Number and Operations

Domain	Grade	Lesson	Objective
Number and Operations	Early K	Count up to 3 Objects	<ul style="list-style-type: none"> • Develop familiarity with numerals 1, 2, and 3. • Tell how many objects are in a given set of up to 3 objects.
Number and Operations	Early K	Count up to 5 Objects	<ul style="list-style-type: none"> • Develop familiarity with numerals 1-5. • Tell how many objects are in a given set of up to 5 objects.
Number and Operations	Early K	Count up to 10 Objects in Rows or Arrays	<ul style="list-style-type: none"> • Count groups of up to 10 objects arranged in a row or an array and tell how many there are in all. • Develop familiarity with numerals 6-10.
Number and Operations	Early K	Practice: Count up to 10 Objects in Rows or Arrays	<ul style="list-style-type: none"> • Count groups of 6–10 objects arranged in a row or an array and tell how many there are in all. • Develop familiarity with numerals 6-10.
Number and Operations	Early K	Count up to 10 Objects in Different Arrangements	<ul style="list-style-type: none"> • Count groups of 6-10 objects arranged in circular or scattered configurations, and tell how many there are in all. • Develop familiarity with numerals up to 10.
Number and Operations	Early K	Practice: Count up to 10 Objects, Part 1	<ul style="list-style-type: none"> • Count groups of 6-10 objects arranged in circular or scattered configurations, and tell how many there are in all. • Develop familiarity with numerals 6-10.
Number and Operations	Early K	Practice: Count up to 10 Objects, Part 2	<ul style="list-style-type: none"> • Count groups of up to 10 objects and tell how many there are in all. • Develop familiarity with numerals up to 10.
Number and Operations	Mid K	Make Groups of up to 10 Objects	<ul style="list-style-type: none"> • Given a number from 2 to 10, count out that many objects.
Number and Operations	Mid K	Practice: Count and Make Groups to 10, Part 1	<ul style="list-style-type: none"> • Count groups of up to 10 objects. • Make groups of up to 10 objects.
Number and Operations	Mid K	Order Numbers to 10	<ul style="list-style-type: none"> • Count forward starting at a number other than 1 (within 10).
Number and Operations	Mid K	More	<ul style="list-style-type: none"> • Compare two groups of objects and identify which group has more.
Number and Operations	Mid K	Find One More	<ul style="list-style-type: none"> • Find the number that is 1 more than the number of objects in a group. • Understand that each successive number name refers to a quantity that is 1 larger.
Number and Operations	Mid K	Less	<ul style="list-style-type: none"> • Compare two groups of objects and identify which group has less.

Number and Operations	Mid K	Compare Numbers Within 10	<ul style="list-style-type: none"> Identify whether the number of objects in one group is more than, less than, or the same number of objects in another group. Given two numbers written as numerals, identify whether one is more, less, or the same as another.
Number and Operations	Late K	Practice: Count and Make Groups to 10, Part 2	<ul style="list-style-type: none"> Count groups of up to 10 objects. Make groups of up to 10 objects.
Number and Operations	Late K	Count up to 20 Objects	<ul style="list-style-type: none"> Count groups of up to 20 objects. Develop familiarity with numerals 11-20.
Number and Operations	Late K	Practice: Count up to 20 Objects	<ul style="list-style-type: none"> Count groups of up to 20 objects. Develop familiarity with numerals 11-20.
Number and Operations	Late K	Make Groups of up to 20 Objects	<ul style="list-style-type: none"> Given a number from 11 to 20, count out that many objects.
Number and Operations	Late K	Practice: Make Groups of up to 20 Objects	<ul style="list-style-type: none"> Make groups of 11-20 objects.
Number and Operations	Late K	Order Numbers to 20	<ul style="list-style-type: none"> Count forward starting at a number other than 1 (within 11-20).
Number and Operations	Late K	Explore Teen Numbers	<ul style="list-style-type: none"> Decompose numbers from 11 to 19. Compose numbers from 11 to 19.
Number and Operations	Mid 1	Practice: Order Numbers 1 to 20	<ul style="list-style-type: none"> Count forward starting at a number other than 1 (up to 20).
Number and Operations	Mid 1	Order Numbers to 120	<ul style="list-style-type: none"> Count forward in a given sequence, up to 120. Order a given group of numbers up to 120 (counting by one).
Number and Operations	Mid 1	Practice: Order Numbers to 120	<ul style="list-style-type: none"> Count forward in a given sequence, up to 120. Order a given group of numbers up to 120 (counting by one).
Number and Operations	Mid 1	Identify Teen Numbers	<ul style="list-style-type: none"> Understand that a ten is a unit made up of ten ones. Identify teen numbers that are represented visually as a ten and some ones.
Number and Operations	Mid 1	Practice: Identify Teen Numbers	<ul style="list-style-type: none"> Understand that a ten is a unit made up of ten ones. Identify teen numbers that are represented visually as a ten and some ones.
Number and Operations	Mid 1	Build Teen Numbers	<ul style="list-style-type: none"> Understand that a ten is a unit made up of ten ones. Build teen numbers by representing them as a ten and some ones.
Number and Operations	Mid 1	Practice: Build Teen Numbers	<ul style="list-style-type: none"> Understand that a ten is a unit made up of ten ones. Build teen numbers by representing them as a ten and some ones.

Number and Operations	Mid 1	Identify Two-Digit Numbers	<ul style="list-style-type: none"> Identify decade numbers that are represented visually as one, two, three, four, five, six, seven, eight, or nine tens. Identify two-digit numbers that are represented visually as tens and ones.
Number and Operations	Mid 1	Practice: Identify Two-Digit Numbers	<ul style="list-style-type: none"> Identify decade numbers that are represented as one, two, three, four, five, six, seven, eight, or nine tens. Identify two-digit numbers that are represented as tens and ones.
Number and Operations	Mid 1	Build Two-Digit Numbers	<ul style="list-style-type: none"> Understand that the first digit of a two-digit number represents the number of tens and the second digit represents the number of ones. Build two-digit numbers by representing them as groups of tens and ones.
Number and Operations	Mid 1	Practice: Build Two-Digit Numbers	<ul style="list-style-type: none"> Understand that the first digit of a two-digit number represents the number of tens and the second digit represents the number of ones. Build two-digit numbers by representing them as groups of tens and ones.
Number and Operations	Mid 1	Add Multiples of Ten to Multiples of Ten	<ul style="list-style-type: none"> Add multiples of 10 to multiples of 10 with totals to 100.
Number and Operations	Late 1	Practice: Add Multiples of Ten	<ul style="list-style-type: none"> Add multiples of 10 to multiples of 10 with totals to 100.
Number and Operations	Late 1	Subtract Multiples of Ten from Multiples of Ten	<ul style="list-style-type: none"> Subtract a multiple of 10 from a multiple of 10 in the range 10-90.
Number and Operations	Late 1	Practice: Subtract Multiples of Ten	<ul style="list-style-type: none"> Subtract a multiple of 10 from a multiple of 10 in the range 10-90.
Number and Operations	Late 1	Add Multiples of Ten to Any Two-Digit Number	<ul style="list-style-type: none"> Add a multiple of 10 to any two-digit number.
Number and Operations	Late 1	Practice: Add Multiples of 10 to Two-Digit Numbers	<ul style="list-style-type: none"> Add a multiple of 10 to any two-digit number (within 100).
Number and Operations	Late 1	Add Two-Digit and One-Digit Numbers	<ul style="list-style-type: none"> Add a two-digit number and a one-digit number, regrouping as needed (sums within 40).
Number and Operations	Late 1	Practice: Add Two-Digit and One-Digit Numbers	<ul style="list-style-type: none"> Add a two-digit and a one-digit number, regrouping as needed (sums within 40).
Number and Operations	Late 1	Add More Two-Digit and One-Digit Numbers	<ul style="list-style-type: none"> Add a two-digit number and a one-digit number, regrouping as needed (sums within 100).
Number and Operations	Late 1	Practice: Add More Two-Digit and One-Digit Numbers	<ul style="list-style-type: none"> Add a two-digit and a one-digit number, regrouping as needed (sums within 100).

Number and Operations	Late 1	Add Two-Digit Numbers	<ul style="list-style-type: none"> • Use models to add two-digit numbers, regrouping as needed (sums within 50).
Number and Operations	Late 1	Practice: Add Two-Digit Numbers	<ul style="list-style-type: none"> • Use models to add two-digit numbers, regrouping as needed (sums within 50).
Number and Operations	Late 1	Add More Two-Digit Numbers	<ul style="list-style-type: none"> • Use models to add two-digit numbers, regrouping as needed (sums within 100).
Number and Operations	Late 1	Practice: Add More Two-Digit Numbers	<ul style="list-style-type: none"> • Use models to add two-digit numbers, regrouping as needed (sums within 100).
Number and Operations	Mid 2	Add by Breaking Apart Two-Digit Numbers	<ul style="list-style-type: none"> • Add two-digit numbers by decomposing addends into tens and ones.
Number and Operations	Mid 2	Practice: Add by Breaking Apart Two-Digit Numbers	<ul style="list-style-type: none"> • Add two-digit numbers by decomposing addends into tens and ones.
Number and Operations	Mid 2	Add Within 100 on Number Lines, Part 1	<ul style="list-style-type: none"> • Add two-digit numbers by decomposing one addend into tens and ones and adding up on a number line.
Number and Operations	Mid 2	Practice: Add Within 100 on Number Lines, Part 1	<ul style="list-style-type: none"> • Add two-digit numbers by decomposing addends into tens and ones.
Number and Operations	Mid 2	Add Within 100 on Number Lines, Part 2	<ul style="list-style-type: none"> • Add two-digit numbers by decomposing one addend to go to the next ten and adding up on a number line.
Number and Operations	Mid 2	Practice: Add Within 100 on Number Lines, Part 2	<ul style="list-style-type: none"> • Add two-digit numbers by decomposing one addend to go to the next ten and adding up on a number line.
Number and Operations	Mid 2	Subtract Within 100 on Number Lines	<ul style="list-style-type: none"> • Subtract two-digit numbers by decomposing one number into tens and ones and subtracting back on a number line.
Number and Operations	Mid 2	Practice: Subtract Within 100 on Number Lines	<ul style="list-style-type: none"> • Subtract two-digit numbers by decomposing one number into tens and ones and subtracting back on a number line.
Number and Operations	Mid 2	Add to Subtract Within 100 on Number Lines, Part 1	<ul style="list-style-type: none"> • Subtract two-digit numbers by first adding ones on a number line to go to the next ten.
Number and Operations	Mid 2	Practice: Add to Subtract on Number Lines, Part 1	<ul style="list-style-type: none"> • Subtract two-digit numbers by first adding ones on a number line to go to the next ten.
Number and Operations	Mid 2	Add to Subtract Within 100 on Number Lines, Part 2	<ul style="list-style-type: none"> • Subtract two-digit numbers by first adding tens on a number line to get close to the total.
Number and Operations	Mid 2	Practice: Add to Subtract on Number Lines, Part 2	<ul style="list-style-type: none"> • Subtract two-digit numbers by first adding tens on a number line to get close to the total.

Number and Operations	Late 2	Practice: Tens and Ones	<ul style="list-style-type: none"> Identify decade numbers that are represented as one, two, three, four, five, six, seven, eight, or nine tens. Identify two-digit numbers that are represented as tens and ones.
Number and Operations	Late 2	Understand Hundreds, Tens, and Ones	<ul style="list-style-type: none"> Understand that one hundred is made up of 10 tens and that those 10 tens are made up of 100 ones. Understand that the digits of a three-digit number represent an amount of hundreds, tens, and ones.
Number and Operations	Late 2	Use Hundreds, Tens, and Ones	<ul style="list-style-type: none"> Understand that the digits of a three-digit number represent an amount of hundreds, tens, and ones. Read and write numbers to 1,000 using base-ten numerals, number names, and expanded form.
Number and Operations	Late 2	Practice: Use Hundreds, Tens, and Ones	<ul style="list-style-type: none"> Understand that one hundred is made up of 10 tens and that those 10 tens are made up of 100 ones. Understand that the digits of a three-digit number represent an amount of hundreds, tens, and ones.
Number and Operations	Late 2	Practice: Add Two-Digit Numbers	<ul style="list-style-type: none"> Use models to add two-digit numbers (sums within 50), regrouping as needed.
Number and Operations	Late 2	Add Three-Digit and Two-Digit Numbers	<ul style="list-style-type: none"> Use base ten models to add a three-digit number and a two-digit number, regrouping ones and/or tens when needed.
Number and Operations	Late 2	Practice: Add Three-Digit and Two-Digit Numbers	<ul style="list-style-type: none"> Use base-ten models to add a three-digit number and a two-digit number, regrouping ones and/or tens when needed.
Number and Operations	Late 2	Add Three-Digit Numbers	<ul style="list-style-type: none"> Use base ten models to add two three-digit numbers, regrouping ones and/or tens when needed.
Number and Operations	Late 2	Practice: Add Three-Digit Numbers	<ul style="list-style-type: none"> Use base-ten models to add two three-digit numbers, regrouping ones and/or tens when needed.
Number and Operations	Late 2	Practice: Subtract Multiples of Ten	<ul style="list-style-type: none"> Subtract a multiple of 10 from a multiple of 10 in the range 10-90.
Number and Operations	Late 2	Subtract Two-Digit from Three-Digit Numbers	<ul style="list-style-type: none"> Use base-ten models to subtract two-digit numbers from three-digit numbers, regrouping tens and/or hundreds when needed.
Number and Operations	Late 2	Practice: Subtract 2-Digit from 3-Digit Numbers	<ul style="list-style-type: none"> Use base-ten models to subtract two-digit numbers from three-digit numbers, regrouping tens and/or hundreds when needed.

Number and Operations	Late 2	Subtract Three-Digit Numbers	<ul style="list-style-type: none"> Use base-ten models to subtract two three-digit numbers, regrouping tens and/or hundreds when needed.
Number and Operations	Late 2	Practice: Subtract Three-Digit Numbers	<ul style="list-style-type: none"> Use base-ten models to subtract two three-digit numbers, regrouping tens and/or hundreds when needed.
Number and Operations	Late 2	Practice: Add Within 100 on Number Lines	<ul style="list-style-type: none"> Add two-digit numbers by decomposing addends into tens and ones.
Number and Operations	Late 2	Add Within 1,000 on Number Lines	<ul style="list-style-type: none"> Add within 1,000 by decomposing one addend to add hundreds, tens, and ones on a number line. Add within 1,000 by decomposing one addend to go to the next ten and then adding up on a number line. Add within 1,000 by decomposing one addend to go to the next hundred and then adding up on a number line.
Number and Operations	Late 2	Practice: Add Within 1,000 on Number Lines	<ul style="list-style-type: none"> Add within 1,000 by decomposing one addend to add hundreds, tens, and ones on a number line.
Number and Operations	Late 2	Practice: Subtract on Number Lines (Within 100)	<ul style="list-style-type: none"> Subtract two-digit numbers by decomposing one number into tens and ones and subtracting back on a number line.
Number and Operations	Late 2	Subtract Within 1,000 on Number Lines	<ul style="list-style-type: none"> Subtract within 1,000 by subtracting back hundreds, tens, and ones on a number line. Subtract within 1,000 by first adding up to the next hundred on a number line.
Number and Operations	Late 2	Practice: Subtract Within 1,000 on Number Lines	<ul style="list-style-type: none"> Subtract within 1,000 by subtracting back hundreds, tens, and ones on a number line.
Number and Operations	Extra 2	Add or Subtract 10 or 100	<ul style="list-style-type: none"> Mentally add 10 or 100 to a given number 100-900. Mentally subtract 10 or 100 from a given number 100-900.
Number and Operations	Extra 2	Add up to Four Two-Digit Numbers	<ul style="list-style-type: none"> Apply strategies based on place value and properties of operations to add up to four two-digit numbers.
Number and Operations	Mid 3	Multiply by Multiples of 10	<ul style="list-style-type: none"> Use place-value understanding and properties of multiplication to multiply a one-digit whole number by a multiple of 10.
Number and Operations	Late 3	Understand What a Fraction Is	<ul style="list-style-type: none"> Understand that a fraction is a number that names equal parts of a whole. Understand that unit fractions are the building blocks of all other fractions. Use models to represent and name fractions.

Number and Operations	Late 3	Model Fractions	<ul style="list-style-type: none"> • Divide shapes into equal parts. • Use models to represent and name fractions.
Number and Operations	Late 3	Practice: Build and Name Fractions	<ul style="list-style-type: none"> • Use models to represent and name fractions.
Number and Operations	Late 3	Fractions on a Number Line, Part 1	<ul style="list-style-type: none"> • Understand fractions as numbers on a number line. • Name fractions represented by points on a number line. • Represent fractions on a number line.
Number and Operations	Late 3	Fractions on a Number Line, Part 2	<ul style="list-style-type: none"> • Name fractions greater than 1 represented by points on a number line. • Represent fractions greater than 1 on a number line.
Number and Operations	Late 3	Practice: Fractions on a Number Line	<ul style="list-style-type: none"> • Name fractions represented by points on a number line. • Represent fractions on a number line.
Number and Operations	Late 3	Understand Equivalent Fractions	<ul style="list-style-type: none"> • Understand that two fractions are equivalent if they are the same size, cover the same area, or are on the same point on a number line. • Recognize and generate equivalent fractions using fraction models and number lines.
Number and Operations	Late 3	Practice: Equivalent Fractions	<ul style="list-style-type: none"> • Recognize and generate equivalent fractions using fraction models and number lines.
Number and Operations	Late 3	Understand Comparing Fractions	<ul style="list-style-type: none"> • Use models to compare two fractions. • Recognize that comparisons are valid only when the two fractions refer to the same whole.
Number and Operations	Late 3	Compare Fractions with the Same Denominator	<ul style="list-style-type: none"> • Compare two fractions with the same denominator by reasoning about their size. • Record fraction comparison statements using the symbols $>$, $<$, and $=$.
Number and Operations	Late 3	Compare Fractions with the Same Numerator	<ul style="list-style-type: none"> • Compare two fractions with the same numerator by reasoning about their size. • Record fraction comparison statements using the symbols $>$, $<$, and $=$.
Number and Operations	Late 3	Practice: Compare Fractions	<ul style="list-style-type: none"> • Compare two fractions with the same denominator or numerator by reasoning about their size. • Record fraction comparison statements using the symbols $>$, $<$, and $=$.
Number and Operations	Extra 3	Use Place Value to Round Numbers	<ul style="list-style-type: none"> • Round two- and three-digit numbers to the nearest 10. • Round three-digit numbers to the nearest 100.
Number and Operations	Extra 3	Practice: Use Place Value to Add Within 1,000	<ul style="list-style-type: none"> • Use base-ten models and place value concepts to add two three-digit numbers, regrouping ones and/or tens when needed.

Number and Operations	Extra 3	Practice: Use Place Value to Subtract Within 1,000	<ul style="list-style-type: none"> • Use base-ten models and place value concepts to subtract two three-digit numbers, regrouping ones and/or tens when needed.
Number and Operations	Extra 3	Add and Subtract Within 1,000	<ul style="list-style-type: none"> • Use a variety of strategies to fluently add within 1,000. • Use a variety of strategies to fluently subtract within 1,000. • Estimate to determine if an answer is reasonable.
Number and Operations	Extra 3	Practice: Add and Subtract Within 1,000. Part 1	<ul style="list-style-type: none"> • Use a variety of strategies to fluently add and subtract within 1,000.
Number and Operations	Extra 3	Practice: Add and Subtract Within 1,000. Part 2	<ul style="list-style-type: none"> • Use a variety of strategies to fluently add and subtract within 1,000.
Number and Operations	Early 4	Place Value, Part 1	<ul style="list-style-type: none"> • Use standard form, word form, and expanded form to read and write 4-digit numbers. • Identify the value of a digit based on its position in a number.
Number and Operations	Early 4	Place Value, Part 2	<ul style="list-style-type: none"> • Use standard form, word form, and expanded form to read and write up to 6-digit numbers. • Understand that a digit in one place represents 10 times what it represents in the place to its right. • Identify the value of a digit based on its position in a number.
Number and Operations	Early 4	Practice: Place Value	<ul style="list-style-type: none"> • Use standard form, word form, and expanded form to read and write up to 6-digit numbers. • Identify the value of a digit based on its position in a number.
Number and Operations	Early 4	Practice: Compare Whole Numbers	<ul style="list-style-type: none"> • Use place-value concepts to compare multi-digit numbers. • Record comparison statements using the symbols $>$, $<$, and $=$.
Number and Operations	Early 4	Round Whole Numbers	<ul style="list-style-type: none"> • Use place value understanding to round multi-digit whole numbers to any place.
Number and Operations	Early 4	Add Whole Numbers	<ul style="list-style-type: none"> • Use the standard algorithm to add multi-digit whole numbers.
Number and Operations	Early 4	Practice: Add Whole Numbers	<ul style="list-style-type: none"> • Use the standard algorithm to add multi-digit whole numbers.
Number and Operations	Early 4	Subtract Whole Numbers	<ul style="list-style-type: none"> • Use the standard algorithm to subtract multi-digit whole numbers.
Number and Operations	Early 4	Practice: Subtract Whole Numbers	<ul style="list-style-type: none"> • Use the standard algorithm to subtract multi-digit whole numbers.

Number and Operations	Mid 4	Multiply by One-Digit Numbers, Part 1	<ul style="list-style-type: none"> • Multiply a two-digit number by a one-digit number. • Use arrays, partial products, and area models to multiply.
Number and Operations	Mid 4	Multiply by One-Digit Numbers, Part 2	<ul style="list-style-type: none"> • Multiply whole numbers with three or four digits by one-digit whole numbers. • Use partial products and area models to multiply.
Number and Operations	Mid 4	Practice: Multiply by One-Digit Numbers	<ul style="list-style-type: none"> • Multiply whole numbers of up to four-digits by one-digit whole numbers. • Use partial products and area models to multiply.
Number and Operations	Mid 4	Multiply Two-Digit Numbers	<ul style="list-style-type: none"> • Multiply a two-digit number by a two-digit number. • Use partial products and area models to multiply.
Number and Operations	Mid 4	Practice: Multiply Two-Digit Numbers	<ul style="list-style-type: none"> • Multiply a two-digit number by a two-digit number. • Use partial products and area models to multiply.
Number and Operations	Mid 4	Divide Whole Numbers, Part 1 <i>Added July 2022</i>	<ul style="list-style-type: none"> • Use place-value understanding, the properties of operations, and/or the relationship between multiplication and division, to divide. • Divide up to three-digit dividends by one-digit divisors, with remainders. • Use place-value blocks to divide.
Number and Operations	Mid 4	Divide Whole Numbers, Part 2 <i>Added July 2022</i>	<ul style="list-style-type: none"> • Use place-value understanding, the properties of operations, and/or the relationship between multiplication and division, to divide. • Divide up to four-digit dividends by one-digit divisors, with remainders. • Use area models and partial quotients to divide.
Number and Operations	Late 4	Find Equivalent Fractions	<ul style="list-style-type: none"> • Recognize and generate equivalent fractions using fraction models. • Generate equivalent fractions by multiplying or dividing the numerator and denominator by the same whole number.
Number and Operations	Late 4	Practice: Find Equivalent Fractions	<ul style="list-style-type: none"> • Recognize and generate equivalent fractions using fraction models. • Generate equivalent fractions by multiplying or dividing the numerator and denominator by the same whole number.

Number and Operations	Late 4	Use Common Denominators to Compare Fractions	<ul style="list-style-type: none"> • Use common denominators to compare two fractions with different numerators and different denominators. • Record fraction comparison statements using the symbols $>$, $<$, and $=$.
Number and Operations	Late 4	Use a Benchmark to Compare Fractions	<ul style="list-style-type: none"> • Use a benchmark to compare two fractions with different numerators and different denominators. • Record fraction comparison statements using the symbols $>$, $<$, and $=$.
Number and Operations	Late 4	Practice: Use Strategies to Compare Fractions	<ul style="list-style-type: none"> • Use common denominators or a benchmark to compare two fractions with different numerators and different denominators. • Record fraction comparison statements using the symbols $>$, $<$, and $=$.
Number and Operations	Late 4	Add Fractions with Like Denominators	<ul style="list-style-type: none"> • Extend previous understandings of addition to add fractions. • Add fractions with like denominators using fraction models and equations.
Number and Operations	Late 4	Subtract Fractions with Like Denominators	<ul style="list-style-type: none"> • Extend previous understandings of subtraction to subtract fractions. • Subtract fractions with like denominators using fraction models and equations.
Number and Operations	Late 4	Practice: Add and Subtract Fractions	<ul style="list-style-type: none"> • Add and subtract fractions with like denominators using fraction models and equations.
Number and Operations	Late 4	Decompose Fractions	<ul style="list-style-type: none"> • Decompose fractions as a sum of fractions with the same denominator in more than one way. • Write a mixed number as a fraction, and write a fraction greater than 1 as a mixed number.
Number and Operations	Late 4	Add Mixed Numbers with Like Denominators	<ul style="list-style-type: none"> • Add fractions with like denominators, including mixed numbers, using fraction models and equations. • Decompose and compose fractions, including mixed numbers, to add.
Number and Operations	Late 4	Subtract Mixed Numbers with Like Denominators	<ul style="list-style-type: none"> • Subtract fractions with like denominators, including mixed numbers, using fraction models and equations. • Decompose and compose fractions, including mixed numbers, to subtract.
Number and Operations	Late 4	Practice: Add and Subtract Mixed Numbers	<ul style="list-style-type: none"> • Add and subtract fractions with like denominators, including mixed numbers, using fraction models and equations. • Decompose and compose fractions, including mixed numbers, to add or subtract.

Number and Operations	Late 4	Multiply a Unit Fraction by a Whole Number	<ul style="list-style-type: none"> • Extend previous understandings of multiplication to multiply a unit fraction by a whole number. • Multiply a unit fraction by a whole number using fraction models and equations.
Number and Operations	Late 4	Multiply a Fraction by a Whole Number	<ul style="list-style-type: none"> • Multiply a fraction by a whole number using fraction models and equations.
Number and Operations	Late 4	Practice: Multiply a Fraction by a Whole Number	<ul style="list-style-type: none"> • Multiply a fraction by a whole number using fraction models and equations.
Number and Operations	Late 4	Fractions as Tenths and Hundredths	<ul style="list-style-type: none"> • Write a fraction that has a denominator of 10 as an equivalent fraction with a denominator of 100. • Add two fractions with denominators of 10 and 100.
Number and Operations	Late 4	Understand and Model Decimals	<ul style="list-style-type: none"> • Use models to represent decimals. • Write fractions with denominators of 10 or 100 as decimals. • Write decimals as fractions with denominators of 10 or 100.
Number and Operations	Late 4	Compare Decimals	<ul style="list-style-type: none"> • Compare two decimals up to hundredths. • Record comparison statements using the symbols $>$, $<$, and $=$.
Number and Operations	Late 4	Decimals on a Number Line <i>Added July 2022</i>	<ul style="list-style-type: none"> • Represent decimals on a number line. • Name decimals represented by points on a number line.
Number and Operations	Extra 4	Practice: Place Value to Thousands	<ul style="list-style-type: none"> • Represent a four-digit number in multiple ways.
Number and Operations	Extra 4	Divide Whole Numbers, Part 1	<ul style="list-style-type: none"> • Divide up to four-digit dividends by one-digit divisors, with remainders. • Use equations, rectangular arrays, and area models to illustrate and explain calculations. • Interpret the remainder in a division word problem.
Number and Operations	Extra 4	Divide Whole Numbers, Part 2	<ul style="list-style-type: none"> • Divide up to four-digit dividends by one-digit divisors, with remainders. • Use area models to illustrate calculations.
Number and Operations	Extra 4	Add and Subtract Fractions	<ul style="list-style-type: none"> • Solve word problems involving addition and subtraction of fractions and mixed numbers referring to the same whole and having like denominators. • Use fraction models, number lines, and equations to represent the word problems.

Number and Operations	Early 5	Multiply Whole Numbers	<ul style="list-style-type: none"> • Use the standard algorithm to multiply multi-digit whole numbers.
Number and Operations	Early 5	Practice: Multiply Whole Numbers	<ul style="list-style-type: none"> • Use the standard algorithm to multiply multi-digit whole numbers.
Number and Operations	Early 5	Divide by Two-Digit Numbers, Part 1 <i>Added July 2022</i>	<ul style="list-style-type: none"> • Use place-value understanding, the properties of operations, and/or the relationship between multiplication and division, to divide. • Divide three-digit and four-digit dividends by two-digit divisors. • Use area models and partial quotients to divide.
Number and Operations	Early 5	Divide by Two-Digit Numbers, Part 2 <i>Added July 2022</i>	<ul style="list-style-type: none"> • Use place-value understanding, the properties of operations, and/or the relationship between multiplication and division, to divide. • Divide four-digit dividends by two-digit divisors. • Use partial quotients to divide.
Number and Operations	Early 5	Understand Powers of 10	<ul style="list-style-type: none"> • Use exponents to denote powers of 10. • Explore the relationship between the values of whole numbers when multiplying or dividing by powers of 10. • Use place-value concepts to mentally multiply whole numbers by powers of 10.
Number and Operations	Early 5	Decimal Place Value, Part 1 <i>Added July 2022</i>	<ul style="list-style-type: none"> • Use standard form, word form, and expanded form to read and write decimals to hundredths. • Understand that a digit in one place represents 10 times as much as it represents in the place to its right and $\frac{1}{10}$ of what it represents in the place to its left. • Identify the value of a digit based on its position in a number. • Represent decimals to hundredths on a number line.
Number and Operations	Early 5	Decimal Place Value, Part 2 <i>Added July 2022</i>	<ul style="list-style-type: none"> • Use standard form, word form, and expanded form to read and write decimals to thousandths. • Understand that a digit in one place represents 10 times as much as it represents in the place to its right and $\frac{1}{10}$ of what it represents in the place to its left. • Identify the value of a digit based on its position in a number. • Represent decimals to thousandths on a number line.

Number and Operations	Early 5	Multiply and Divide Decimals by Powers of 10	<ul style="list-style-type: none"> • Explore the relationship between the values of numbers when multiplying or dividing by powers of 10. • Use place-value concepts to mentally multiply and divide numbers by powers of 10.
Number and Operations	Early 5	Practice: Decimals and Powers of 10	<ul style="list-style-type: none"> • Use the patterns in the number of zeros of the product and the placement of the decimal point when multiplying or dividing by a power of 10. • Use exponents to denote powers of 10.
Number and Operations	Early 5	Compare Decimals up to Thousandths <i>Added July 2022</i>	<ul style="list-style-type: none"> • Compare two decimals up to thousandths. • Record comparison statements using the symbols $>$, $<$, and $=$.
Number and Operations	Early 5	Practice: Compare Decimals up to Thousandths	<ul style="list-style-type: none"> • Compare two decimals up to thousandths. • Record comparison statements using the symbols $>$, $<$, and $=$.
Number and Operations	Early 5	Round Decimals <i>Added July 2022</i>	Round decimals to the nearest hundredth, tenth, and whole number.
Number and Operations	Early 5	Practice: Round Decimals	<ul style="list-style-type: none"> • Round decimals to the nearest hundredth, tenth, and whole number.
Number and Operations	Early 5	Add Decimals <i>Added July 2022</i>	<ul style="list-style-type: none"> • Use models and strategies based on place value to add decimals. • Add decimals to hundredths.
Number and Operations	Mid 5	Subtract Decimals <i>Added July 2022</i>	<ul style="list-style-type: none"> • Use models and strategies based on place value to subtract decimals. • Subtract decimals to hundredths.
Number and Operations	Mid 5	Add Fractions with Unlike Denominators	<ul style="list-style-type: none"> • Add fractions with unlike denominators using fraction models and equations. • Use equivalent fractions to add fractions with unlike denominators.
Number and Operations	Mid 5	Subtract Fractions with Unlike Denominators	<ul style="list-style-type: none"> • Subtract fractions with unlike denominators using fraction models and equations. • Use equivalent fractions to subtract fractions with unlike denominators.
Number and Operations	Mid 5	Practice: Fraction Addition and Subtraction	<ul style="list-style-type: none"> • Add and subtract fractions with unlike denominators using fraction models and equations. • Use equivalent fractions to add or subtract fractions with unlike denominators.
Number and Operations	Mid 5	Add Mixed Numbers with Unlike Denominators	<ul style="list-style-type: none"> • Add fractions with unlike denominators, including mixed numbers, using fraction models and equations. • Use equivalent fractions to add fractions with unlike denominators, including mixed numbers.

Number and Operations	Mid 5	Subtract Mixed Numbers with Unlike Denominators	<ul style="list-style-type: none"> Subtract fractions with unlike denominators, including mixed numbers, using fraction models and equations. Use equivalent fractions to subtract fractions with unlike denominators, including mixed numbers.
Number and Operations	Mid 5	Practice: Mixed Number Addition and Subtraction	<ul style="list-style-type: none"> Add and subtract fractions with unlike denominators, including mixed numbers, using fraction models and equations. Use equivalent fractions to add or subtract fractions with unlike denominators, including mixed numbers.
Number and Operations	Mid 5	Multiply a Decimal by a Whole Number <i>Added July 2022</i>	<ul style="list-style-type: none"> Use place-value understanding and properties of operations to multiply. Multiply a decimal less than 1 to hundredths by a whole number. Use place-value blocks to multiply.
Number and Operations	Mid 5	Multiply a Decimal by a Decimal <i>Added July 2022</i>	<ul style="list-style-type: none"> Use place-value understanding and properties of operations to multiply. Multiply decimals less than 1 to tenths with products to hundredths. Use area models to multiply.
Number and Operations	Mid 5	Divide a Whole Number by a Decimal <i>Added July 2022</i>	<ul style="list-style-type: none"> Use place-value understanding and the relationship between multiplication and division to divide. Divide whole numbers by decimals to hundredths. Use decimal grids to divide.
Number and Operations	Mid 5	Divide a Decimal by a Decimal <i>Added Oct. 2022</i>	<ul style="list-style-type: none"> Use place-value understanding and the relationship between multiplication and division to divide. Divide a decimal by a decimal to hundredths. Use decimal grids and length models to divide.
Number and Operations	Mid 5	Divide a Decimal by a Whole Number <i>Added Oct. 2022</i>	<ul style="list-style-type: none"> Use place-value understanding and the relationship between multiplication and division to divide. Divide decimals by whole numbers. Use decimal grids and length models to divide.
Number and Operations	Mid 5	Practice: Divide Decimals	<ul style="list-style-type: none"> Divide a decimal by a decimal to hundredths. Divide decimals by whole numbers.
Number and Operations	Late 5	Understand Fractions as Division	<ul style="list-style-type: none"> Solve problems involving division of whole numbers in which the quotient is a fraction or mixed number by using fraction models and equations. Understand a fraction as division of the numerator by the denominator.

Number and Operations	Late 5	Multiply a Whole Number by a Unit Fraction	<ul style="list-style-type: none"> • Extend previous understandings of multiplication to multiply a whole number by a unit fraction. • Multiply a whole number by a unit fraction using fraction models and equations.
Number and Operations	Late 5	Multiply a Whole Number by a Fraction	<ul style="list-style-type: none"> • Extend previous understandings of multiplication to multiply a whole number by a fraction. • Multiply a whole number by a fraction using fraction models and equations.
Number and Operations	Late 5	Divide a Whole Number by a Unit Fraction	<ul style="list-style-type: none"> • Extend previous understandings of division to divide a whole number by a unit fraction. • Divide a whole number by a unit fraction using fraction models and equations.
Number and Operations	Late 5	Practice: Multiply and Divide by Fractions	<ul style="list-style-type: none"> • Multiply a whole number by a fraction using fraction models and equations. • Divide a whole number by a unit fraction using fraction models and equations.
Number and Operations	Late 5	Multiply a Unit Fraction by a Unit Fraction	<ul style="list-style-type: none"> • Extend previous understandings of multiplication to multiply a unit fraction by a unit fraction. • Multiply a unit fraction by a unit fraction using fraction models and equations.
Number and Operations	Late 5	Divide a Unit Fraction by a Whole Number	<ul style="list-style-type: none"> • Extend previous understandings of division to divide a unit fraction by a whole number. • Divide a unit fraction by a whole number using fraction models and equations.
Number and Operations	Late 5	Practice: Multiply and Divide Unit Fractions	<ul style="list-style-type: none"> • Multiply a unit fraction by a unit fraction using fraction models and equations. • Divide a unit fraction by a whole number using fraction models and equations.
Number and Operations	Late 5	Multiply a Fraction by a Fraction	<ul style="list-style-type: none"> • Multiply a fraction by a fraction using fraction models and equations.
Number and Operations	Late 5	Practice: Multiply a Fraction by a Fraction	<ul style="list-style-type: none"> • Multiply a fraction by a fraction using fraction models and equations.
Number and Operations	Extra 5	Divide Whole Numbers	<ul style="list-style-type: none"> • Divide multi-digit numbers (up to 4-digit by 2-digit) using the partial quotients method. • Use rounding to estimate quotient before dividing. • Check answers with multiplication.
Number and Operations	Extra 5	Round Decimals	<ul style="list-style-type: none"> • Use benchmark numbers to round decimals. • Explain why a number is rounded to a given place value.
Number and Operations	Extra 5	Practice: Add Decimals	<ul style="list-style-type: none"> • Add decimals to hundredths.

Number and Operations	Extra 5	Practice: Subtract Decimals	<ul style="list-style-type: none"> • Subtract decimals to hundredths.
Number and Operations	Extra 5	Add and Subtract Fractions in Word Problems	<ul style="list-style-type: none"> • Solve word problems involving addition and subtraction of fractions referring to the same whole and having unlike denominators. • Estimate the reasonableness of solutions to word problems involving addition and subtraction of fractions referring to the same whole.
Number and Operations	Extra 5	Understand Multiplication as Scaling	<ul style="list-style-type: none"> • Understand that multiplying a number times a fraction greater than 1 results in a product greater than the original number. • Understand that multiplying a number times a fraction less than 1 results in a product less than the original number.
Number and Operations	Extra 5	Divide Unit Fractions in Word Problems	<ul style="list-style-type: none"> • Represent and solve real-world problems involving division of unit fractions by whole numbers using visual fraction models and equations. • Represent and solve real-world problems involving division of a whole number by unit fractions using visual fraction models and equations.
Number and Operations	Extra 5	Multiply Fractions to Find Area	<ul style="list-style-type: none"> • Find the area of rectangles with fractional side lengths using tiles. • Find the area of rectangles with fractional side lengths by multiplying side lengths.
Number and Operations	Extra 5	Practice: Whole Numbers and Powers of Ten	<ul style="list-style-type: none"> • Use the patterns in the number of zeros of the product and the placement of the decimal point when multiplying or dividing by a power of ten. • Use exponents to denote powers of ten.
Number and Operations	Mid 6	Greatest Common Factor (GCF)	<ul style="list-style-type: none"> • Find the greatest common factor (GCF) of two whole numbers less than 100. • Rewrite sums using the greatest common factor of the addends and the distributive property.
Number and Operations	Mid 6	Least Common Multiple (LCM)	<ul style="list-style-type: none"> • Find the least common multiple (LCM) of two whole numbers less than or equal to 12.
Number and Operations	Mid 6	Practice: GCF and LCM	<ul style="list-style-type: none"> • Find the greatest common factor (GCF) of two whole numbers less than 100. • Rewrite sums using the greatest common factor of the addends and the distributive property. • Find the least common multiple (LCM) of two whole numbers less than or equal to 12.

Number and Operations	Mid 6	Understand the Standard Algorithm for Division <i>Added July 2022</i>	<ul style="list-style-type: none"> • Make sense of the standard algorithm for division using place-value models. • Use the standard algorithm to divide whole numbers.
Number and Operations	Mid 6	Divide Whole Numbers Using the Standard Algorithm <i>Added July 2022</i>	<ul style="list-style-type: none"> • Use the standard algorithm to divide whole numbers.
Number and Operations	Mid 6	Divide Decimals Using the Standard Algorithm <i>Added Oct. 2022</i>	<ul style="list-style-type: none"> • Use the standard algorithm to divide multi-digit decimals.
Number and Operations	Mid 6	Divide Fractions: Whole-Number Quotients <i>Added July 2022</i>	<ul style="list-style-type: none"> • Understand what it means to divide by a fraction when finding a whole number of groups. • Use visual models, multiplication equations, and division equations to represent problems involving fraction division.
Number and Operations	Mid 6	Divide Fractions: Fractional Quotients <i>Added July 2022</i>	<ul style="list-style-type: none"> • Use visual models and equations to solve fraction division problems with fractional quotients. • Divide fractions when the quotient is not a whole number.
Number and Operations	Mid 6	Divide Fractions: Use an Algorithm <i>Added July 2022</i>	<ul style="list-style-type: none"> • Understand why dividing by a fraction is equivalent to multiplying by the reciprocal. • Divide fractions by applying an algorithm.
Number and Operations	Late 6	Understand Integers	<ul style="list-style-type: none"> • Understand that positive and negative numbers are used together to describe quantities having opposite directions or values. • Understand an integer as a point on the number line. • Use a number line to order and compare integers.
Number and Operations	Late 6	Order Positive and Negative Numbers	<ul style="list-style-type: none"> • Compare and order rational numbers using their relative position on a number line.
Number and Operations	Late 6	Understand Absolute Value	<ul style="list-style-type: none"> • Understand the meaning of absolute value on a number line and in context. • Find absolute values. • Distinguish comparisons of absolute value from statements about order.
Number and Operations	Late 6	Practice: Positive and Negative Numbers	<ul style="list-style-type: none"> • Use positive and negative numbers to represent quantities in real-world contexts. • Solve problems using rational numbers and absolute value. • Compare and order rational numbers, including absolute values of rational numbers.

Number and Operations	Late 6	Understand the Four-Quadrant Coordinate Plane <i>Added July 2022</i>	<ul style="list-style-type: none"> • Understand that the axes of the coordinate plane can be extended in the negative direction to represent negative numbers. • Plot ordered pairs and identify the coordinates in all four quadrants in the coordinate plane. • Identify the quadrant a point is located in based on its coordinates.
Number and Operations	Late 6	Distance in the Coordinate Plane <i>Added Oct. 2022</i>	<ul style="list-style-type: none"> • Understand that when two ordered pairs differ only in the signs of their coordinates, the points are reflections of each other across one or both axes. • Solve real-world and mathematical problems by graphing points in all four quadrants of the coordinate plane. • Find distances between points in the coordinate plane with the same first coordinate or the same second coordinate by graphing the points and by using absolute value.
Number and Operations	Extra 6	Fluently Add and Subtract Decimals	<ul style="list-style-type: none"> • Fluently add and subtract multi-digit decimals using place value strategies including the standard algorithm. • Assess the reasonableness of answers using mental computation and estimation strategies including rounding.
Number and Operations	Extra 6	Multiplication of Decimals	<ul style="list-style-type: none"> • Estimate products of decimal numbers. • Multiply multi-digit decimal numbers up to the thousandths.
Number and Operations	Mid 7	Understand Addition with Integers	<ul style="list-style-type: none"> • Understand adding positive and negative numbers using a number line. • Understand that a number and its opposite have a sum of 0.
Number and Operations	Mid 7	Understand Subtraction with Integers	<ul style="list-style-type: none"> • Understand that subtracting a number is equivalent to adding the inverse of the number. Use that understanding to subtract integers.
Number and Operations	Mid 7	Practice: Add and Subtract Integers	<ul style="list-style-type: none"> • Understand that subtracting a number is equivalent to adding the inverse of the number. Use that understanding to subtract integers. • Understand adding positive and negative numbers using a number line. • Understand that a number and its opposite have a sum of 0.
Number and Operations	Mid 7	Strategies to Add and Subtract Integers	<ul style="list-style-type: none"> • Develop methods for adding and subtracting integers by reasoning about their absolute value. • Add and subtract integers without a number line.

Number and Operations	Mid 7	Practice: Strategies to Add and Subtract Integers	<ul style="list-style-type: none"> • Develop methods for adding and subtracting integers by reasoning about their absolute value. • Add and subtract integers without a number line.
Number and Operations	Mid 7	Understand Distance on the Number Line	<ul style="list-style-type: none"> • Use subtraction and absolute value to find the distance between two numbers on a number line.
Number and Operations	Mid 7	Add and Subtract Rationals	<ul style="list-style-type: none"> • Add and subtract with negative fractions and decimals.
Number and Operations	Mid 7	Practice: Add and Subtract Rationals	<ul style="list-style-type: none"> • Add and subtract with negative fractions and decimals.
Number and Operations	Mid 7	Strategies to Add and Subtract Rationals	<ul style="list-style-type: none"> • Use properties of operations to add and subtract rational numbers.
Number and Operations	Mid 7	Practice: Strategies to Add and Subtract Rationals	<ul style="list-style-type: none"> • Use properties of operations to add and subtract with negative fractions. • Estimate sums and differences involving negative fractions or decimals.
Number and Operations	Mid 7	Multiply Integers	<ul style="list-style-type: none"> • Apply and extend previous understandings of multiplication to multiply integers. • Establish and recognize rules for multiplying signed numbers.
Number and Operations	Mid 7	Divide Integers	<ul style="list-style-type: none"> • Apply and extend previous understandings of multiplication and division to divide integers. • Establish and recognize rules for dividing signed numbers.
Number and Operations	Mid 7	Practice: Multiply and Divide Integers	<ul style="list-style-type: none"> • Apply and extend previous understandings of multiplication and division to multiply and divide integers. • Solve real-world problems involving products and quotients of integers.
Number and Operations	Mid 7	Multiply and Divide Rationals	<ul style="list-style-type: none"> • Understand that all quotients of integers (with non-zero divisors) are rational numbers. • Find products and quotients of rational numbers using properties of operations and rules for multiplying signed numbers. • Interpret products and quotients of rational numbers by describing real-world contexts.
Number and Operations	Mid 7	Practice: Multiply and Divide Rationals	<ul style="list-style-type: none"> • Understand that all quotients of integers (with non-zero divisors) are rational numbers. • Find products and quotients of rational numbers using properties of operations and rules for multiplying signed numbers. • Interpret products and quotients of rational numbers by describing real-world contexts.

Number and Operations	Mid 7	Express Rational Numbers as Decimals <i>Added Oct. 2022</i>	<ul style="list-style-type: none"> • Use the standard algorithm for division to express a rational number as a terminating or repeating decimal. • Use repeating bar notation to represent a repeating decimal. • Understand that all rational numbers have a terminating or repeating decimal expansion.
Number and Operations	Mid 7	Solve Problems with Rational Numbers	<ul style="list-style-type: none"> • Solve real-world problems involving the four operations with rational numbers. • Use estimation to assess the reasonableness of answers.
Number and Operations	Mid 8	Properties of Positive Integer Exponents, Part 1 <i>Added July 2022</i>	<ul style="list-style-type: none"> • Understand these properties of positive integer exponents: power of a power: $(a^m)^n = a^{mn}$, product of powers: $a^m \times a^n = a^{(m+n)}$, quotient of powers: $a^m / a^n = a^{(m-n)}$ • Apply the properties of positive integer exponents to simplify expressions and to generate equivalent expressions.
Number and Operations	Mid 8	Properties of Positive Integer Exponents, Part 2 <i>Added July 2022</i>	<ul style="list-style-type: none"> • Understand these properties of positive integer exponents: power of a product: $(ab)^m = (a^m)(b^m)$, power of a quotient: $(a/b)^m = (a^m)/(b^m)$ • Apply the properties of positive integer exponents to simplify expressions and to generate equivalent expressions.
Number and Operations	Mid 8	Properties of Zero and Negative Exponents <i>Added Oct. 2022</i>	<ul style="list-style-type: none"> • Understand that $a^0 = 1$ and be able to explain why this is true. • Understand that $a^{-n} = 1/a^n$ for integer values of n and be able to explain why this is true. • Apply the properties of exponents to simplify and rewrite numerical expressions with zero and negative integer exponents.
Number and Operations	Late 8	Find Square Roots and Cube Roots to Solve Problems <i>Added Oct. 2022</i>	<ul style="list-style-type: none"> • Find square roots of perfect squares. • Find cube roots of perfect cubes. • Recognize that squaring a number and taking the square root of a number are inverse operations. • Recognize that cubing a number and taking the cube root of a number are inverse operations. • Solve problems that involve finding the square root or cube root of a number.
Number and Operations	Extra 8	Rational and Irrational Numbers	<ul style="list-style-type: none"> • Identify real numbers as rational or irrational. • Write rational numbers as fractions given their decimal expansions.
Number and Operations	Extra 8	Approximating Irrational Numbers	<ul style="list-style-type: none"> • Estimate square roots to the nearest hundredth.

			<ul style="list-style-type: none"> • Compare and order rational and irrational numbers using a number line.
Number and Operations	Extra 8	Scientific Notation	<ul style="list-style-type: none"> • Write numbers as the product of a single digit and an integer power of ten. • Write numbers expressed with scientific notation in standard notation. • Compare the size of quantities written in scientific notation.
Number and Operations	Extra 8	Operations with Numbers Expressed in Scientific Notation	<ul style="list-style-type: none"> • Interpret scientific notation that has been generated by technology. • Use technology to perform operations with numbers expressed in scientific notation, including problems where both decimal and scientific notation are used. • Use estimation to check the reasonableness of the answers produced by technology.

Algebra and Algebraic Thinking

Domain	Grade	Lesson	Objective
Algebra and Algebraic Thinking	Mid K	Understand Addition	<ul style="list-style-type: none"> Understand addition as adding to a set of objects.
Algebra and Algebraic Thinking	Mid K	Add Within 5	<ul style="list-style-type: none"> Add within 5 using pictures or fingers.
Algebra and Algebraic Thinking	Mid K	Understand Subtraction	<ul style="list-style-type: none"> Understand subtraction as taking away from a set of objects. Describe subtraction situations using mathematical language and numerical expressions.
Algebra and Algebraic Thinking	Mid K	Subtract Within 5	<ul style="list-style-type: none"> Subtract within 5 using pictures.
Algebra and Algebraic Thinking	Mid K	Practice: Add and Subtract Within 5	<ul style="list-style-type: none"> Add within 5 using pictures or fingers. Subtract within 5 using pictures.
Algebra and Algebraic Thinking	Mid K	Number Partners for 3	<ul style="list-style-type: none"> Decompose numbers less than or equal to 5 into pairs in more than one way using objects or drawings. Record decomposition as addition using drawings and equations.
Algebra and Algebraic Thinking	Mid K	Number Partners for 4 and 5	<ul style="list-style-type: none"> Decompose the numbers 4 and 5 into pairs in more than one way using objects or drawings. Record decomposition as addition using drawings and equations.
Algebra and Algebraic Thinking	Mid K	Add Within 10	<ul style="list-style-type: none"> Add within 10 using pictures or fingers.
Algebra and Algebraic Thinking	Mid K	Subtract Within 10	<ul style="list-style-type: none"> Subtract within 10 using pictures.
Algebra and Algebraic Thinking	Mid K	Practice: Add and Subtract Within 10, Part 1	<ul style="list-style-type: none"> Add within 10 using pictures or fingers. Subtract within 10 using pictures.
Algebra and Algebraic Thinking	Mid K	Number Partners for 6 and 7	<ul style="list-style-type: none"> Decompose the numbers 6 and 7 into pairs in more than one way using objects or drawings. Record decomposition as addition using drawings and equations.
Algebra and Algebraic Thinking	Mid K	Number Partners for 8 and 9	<ul style="list-style-type: none"> Decompose the numbers 8 and 9 into pairs in more than one way using objects or drawings. Record decomposition as addition using drawings and equations.

Algebra and Algebraic Thinking	Mid K	Number Partners for 10	<ul style="list-style-type: none"> Decompose the number 10 into pairs in more than one way using objects or drawings. Record decomposition as addition using drawings and equations.
Algebra and Algebraic Thinking	Late K	Practice: Add and Subtract Within 10, Part 2	<ul style="list-style-type: none"> Add within 10 using pictures or fingers. Subtract within 10 using pictures.
Algebra and Algebraic Thinking	Late K	Fluently Add and Subtract Within 5	<ul style="list-style-type: none"> Develop fluency with addition facts to 5. Develop fluency with subtraction facts to 5.
Algebra and Algebraic Thinking	Late K	Make 10	<ul style="list-style-type: none"> For any number from 1 to 9, find the number that can be added to make 10. Record each composition as addition, using drawings and equations.
Algebra and Algebraic Thinking	Late K	Practice: Make 10	<ul style="list-style-type: none"> For any number from 1 to 9, find the number that can be added to make 10. Record each composition as addition, using drawings and equations.
Algebra and Algebraic Thinking	Early 1	Practice: Add and Subtract Within 10	<ul style="list-style-type: none"> Add within 10 using pictures or fingers. Subtract within 10 using pictures.
Algebra and Algebraic Thinking	Early 1	"Add To" and "Put Together" Word Problems	<ul style="list-style-type: none"> Solve word problems involving "add to" and "put together" situations with the result or total unknown. Use objects, pictures, and equations to represent word problems.
Algebra and Algebraic Thinking	Early 1	Add in Any Order	<ul style="list-style-type: none"> Understand that two numbers may be added in either order and will result in the same sum.
Algebra and Algebraic Thinking	Early 1	Count On to Add	<ul style="list-style-type: none"> Relate addition by counting to addition. Count on to add within 15. Apply the Commutative Property to count on the smaller of two addends.
Algebra and Algebraic Thinking	Early 1	Practice: Count On to Add	<ul style="list-style-type: none"> Relate addition by counting to addition. Count on to add within 15. Apply the Commutative Property to count on the smaller of two addends.
Algebra and Algebraic Thinking	Early 1	"Add To Change Unknown" Word Problems	<ul style="list-style-type: none"> Solve word problems involving "add to" situations with the change unknown. Use objects, pictures, and equations to represent word problems.
Algebra and Algebraic Thinking	Early 1	Practice: "Add To" Word Problems	<ul style="list-style-type: none"> Solve word problems involving "add to" situations with the change or result unknown. Use objects, pictures, and equations to represent word problems.

Algebra and Algebraic Thinking	Early 1	Think Addition to Subtract	<ul style="list-style-type: none"> • Understand how addition and subtraction sentences relate to a total made up of two parts. • Subtract by thinking addition.
Algebra and Algebraic Thinking	Early 1	Count On to Subtract	<ul style="list-style-type: none"> • Apply the counting on strategy to subtract within 15.
Algebra and Algebraic Thinking	Early 1	"Take From" Word Problems	<ul style="list-style-type: none"> • Solve word problems involving "take from" situations with the result unknown. • Use objects, pictures, and equations to represent word problems.
Algebra and Algebraic Thinking	Early 1	"Take From Change Unknown" Word Problems	<ul style="list-style-type: none"> • Solve word problems involving "take from" situations with the change unknown. • Use objects, pictures, and equations to represent word problems.
Algebra and Algebraic Thinking	Early 1	Practice: "Change Unknown" Word Problems	<ul style="list-style-type: none"> • Solve word problems involving "take from" and "add to" situations with the change unknown. • Use objects, pictures, and equations to represent word problems.
Algebra and Algebraic Thinking	Early 1	Doubles	<ul style="list-style-type: none"> • Recognize doubles as adding two of the same number. • Find sums of doubles.
Algebra and Algebraic Thinking	Early 1	Doubles and Near Doubles	<ul style="list-style-type: none"> • Add two numbers by finding an equivalent sum that uses a double.
Algebra and Algebraic Thinking	Early 1	"Put Together/Take Apart Addend Unknown" Problems	<ul style="list-style-type: none"> • Solve word problems involving "put together/take apart" situations with one addend unknown. • Use objects, pictures, and equations to represent word problems.
Algebra and Algebraic Thinking	Early 1	Practice: "Put Together/Take Apart" Word Problems	<ul style="list-style-type: none"> • Solve word problems involving "put together/take apart" situations with one addend or the total unknown. • Use objects, pictures, and equations to represent word problems.
Algebra and Algebraic Thinking	Mid 1	"Compare Difference Unknown" Word Problems	<ul style="list-style-type: none"> • Solve word problems involving comparison situations with the difference unknown. • Use objects, pictures, and equations to represent word problems.
Algebra and Algebraic Thinking	Mid 1	Practice: "Compare Difference Unknown" Problems	<ul style="list-style-type: none"> • Solve word problems involving comparison situations with the difference unknown. • Use objects, pictures, and equations to represent word problems.

Algebra and Algebraic Thinking	Mid 1	"Compare Bigger Unknown" Word Problems	<ul style="list-style-type: none"> Solve word problems involving comparison situations in which the greater quantity is unknown and the term "more" is used. Use objects, pictures, and equations to represent word problems.
Algebra and Algebraic Thinking	Mid 1	Practice: Comparison Word Problems	<ul style="list-style-type: none"> Solve word problems involving comparison situations with the greater quantity unknown or the difference unknown. Use objects, pictures, and equations to represent word problems.
Algebra and Algebraic Thinking	Mid 1	"Compare Smaller Unknown" Word Problems	<ul style="list-style-type: none"> Solve word problems involving comparison situations in which the lesser quantity is unknown and the term "fewer" is used. Use objects, pictures, and equations to represent word problems.
Algebra and Algebraic Thinking	Mid 1	Practice: More Comparison Word Problems	<ul style="list-style-type: none"> Solve word problems involving comparison situations with the lesser quantity unknown or the greater quantity unknown. Use objects, pictures, and equations to represent word problems.
Algebra and Algebraic Thinking	Mid 1	Practice: Make 10	<ul style="list-style-type: none"> For any number from 1 to 9, find the number that can be added to make 10. Record each composition as addition, using drawings and equations.
Algebra and Algebraic Thinking	Mid 1	Make a Ten to Add	<ul style="list-style-type: none"> Understand the rationale for decomposing a number to make ten when adding. Add by making a ten.
Algebra and Algebraic Thinking	Mid 1	Practice: Make a Ten to Add	<ul style="list-style-type: none"> Understand the rationale for decomposing a number to make ten when adding. Add by making a ten.
Algebra and Algebraic Thinking	Mid 1	Add Three Numbers in Word Problems	<ul style="list-style-type: none"> Solve word problems involving the sum of three addends. Use objects, pictures, and equations to represent word problems.
Algebra and Algebraic Thinking	Mid 1	Make a Ten to Subtract	<ul style="list-style-type: none"> Understand the rationale for decomposing a number to make ten when subtracting. Subtract by decomposing a number leading to a ten.
Algebra and Algebraic Thinking	Mid 1	Practice: Make a Ten to Subtract	<ul style="list-style-type: none"> Understand the rationale for decomposing a number to make ten when subtracting. Subtract by decomposing a number leading to a ten.
Algebra and Algebraic Thinking	Mid 1	Practice: Number Partners for 10	<ul style="list-style-type: none"> Decompose the number 10 into pairs in more than one way by using objects or drawings. Record decomposition as addition using drawings and equations.

Algebra and Algebraic Thinking	Mid 1	Fluently Add and Subtract Within 10	<ul style="list-style-type: none"> • Develop fluency with addition facts to 10. • Develop fluency with subtraction facts to 10.
Algebra and Algebraic Thinking	Late 1	"Add To Start Unknown" Word Problems	<ul style="list-style-type: none"> • Solve word problems involving "add to" situations with the start unknown. • Use objects, pictures, and equations to represent word problems.
Algebra and Algebraic Thinking	Late 1	"Take From Start Unknown" Word Problems	<ul style="list-style-type: none"> • Solve word problems involving "take from" situations with the start unknown. • Use objects, pictures, and equations to represent word problems.
Algebra and Algebraic Thinking	Late 1	More "Compare Bigger Unknown" Word Problems	<ul style="list-style-type: none"> • Solve word problems involving comparison situations in which the greater quantity is unknown and the terms "more" and "fewer" are used. • Use objects, pictures, and equations to represent word problems.
Algebra and Algebraic Thinking	Late 1	More "Compare Smaller Unknown" Word Problems	<ul style="list-style-type: none"> • Solve word problems involving comparison situations in which the lesser quantity is unknown and the terms "fewer" and "more" are used. • Use objects, pictures, and equations to represent word problems.
Algebra and Algebraic Thinking	Early 2	Practice: Add Within 10	<ul style="list-style-type: none"> • Add within 10. • For any number from 1 to 9, find the number that can be added to make 10.
Algebra and Algebraic Thinking	Early 2	"Add To" Word Problems Within 10	<ul style="list-style-type: none"> • Solve word problems within 10 that involve "add to" situations with the result or change unknown. • Use objects, pictures, and equations to represent word problems.
Algebra and Algebraic Thinking	Early 2	Use Mental Math to Add (Make a Ten), Part 1	<ul style="list-style-type: none"> • Mentally use the make a ten strategy to add within 20.
Algebra and Algebraic Thinking	Early 2	Use Mental Math to Add (Make a Ten), Part 2	<ul style="list-style-type: none"> • Apply the commutative property to add in any order. • Mentally use the make a ten strategy to add within 20.
Algebra and Algebraic Thinking	Early 2	Practice: Use Mental Math to Add (Make a Ten)	<ul style="list-style-type: none"> • Apply the commutative property to add in any order. • Mentally use the make a ten strategy to add within 20.
Algebra and Algebraic Thinking	Early 2	"Add To Start Unknown" Word Problems Within 20	<ul style="list-style-type: none"> • Solve word problems within 20 that involve "add to" situations with the start unknown. • Use objects, pictures, and equations to represent word problems.

Algebra and Algebraic Thinking	Early 2	Use Mental Math to Add (Near Doubles)	<ul style="list-style-type: none"> Mentally use the near doubles strategy to add within 20.
Algebra and Algebraic Thinking	Early 2	Use Mental Math Strategies to Add	<ul style="list-style-type: none"> Use a variety of mental strategies to add within 20.
Algebra and Algebraic Thinking	Early 2	Practice: Use Mental Math Strategies to Add	<ul style="list-style-type: none"> Use a variety of mental strategies to add within 20. Mentally use the near doubles strategy to add within 20.
Algebra and Algebraic Thinking	Early 2	"Take From Start Unknown" Word Problems Within 20	<ul style="list-style-type: none"> Solve word problems within 20 that involve "take from" situations with the start unknown. Use objects, pictures, and equations to represent word problems.
Algebra and Algebraic Thinking	Early 2	Think Addition to Subtract	<ul style="list-style-type: none"> Mentally use the relationship between addition and subtraction to subtract within 20.
Algebra and Algebraic Thinking	Early 2	Think Addition to Subtract (Make a Ten)	<ul style="list-style-type: none"> Mentally apply the make a ten strategy to subtract by thinking of subtraction problems as unknown addend problems.
Algebra and Algebraic Thinking	Early 2	Practice: Think Addition to Subtract	<ul style="list-style-type: none"> Mentally apply the make a ten strategy to subtract by thinking of subtraction problems as unknown addend problems.
Algebra and Algebraic Thinking	Early 2	"Compare Bigger Unknown" Word Problems Within 20	<ul style="list-style-type: none"> Solve word problems within 20 that involve comparison situations in which the greater quantity is unknown and the terms "more" and "fewer" are used. Use pictures and equations to represent word problems.
Algebra and Algebraic Thinking	Early 2	"Compare Smaller Unknown" Word Problems Within 20	<ul style="list-style-type: none"> Solve word problems within 20 that involve comparison situations in which the lesser quantity is unknown and the terms "fewer" and "more" are used. Use pictures and equations to represent word problems.
Algebra and Algebraic Thinking	Extra 2	Solve Two-Step Problems	<ul style="list-style-type: none"> Use addition and subtraction to solve two-step problems. Use drawings and/or equations with a symbol for the unknown number to represent two-step problems.
Algebra and Algebraic Thinking	Extra 2	Add Using Arrays	<ul style="list-style-type: none"> Arrange objects in an array with up to 5 rows with 5 items in each row. Calculate the number of items in an array using repeated addition and skip-counting. Write an equation to express the total number of items in an array.

Algebra and Algebraic Thinking	Early 3	Understand Multiplication, Part 1 <i>Added July 2022</i>	<ul style="list-style-type: none"> • Understand that the symbol \times means “groups of” and that expressions such as 5×7 refer to 5 groups of 7. • Interpret a multiplication problem situation using pictures, objects, words, numbers, and equations. • Solve multiplication problems involving equal groups with an unknown total number of objects.
Algebra and Algebraic Thinking	Early 3	Multiplication Word Problems, Part 1	<ul style="list-style-type: none"> • Interpret multiplication problem situations using pictures, objects, and equations. • Solve multiplication word problems involving equal groups with an unknown total number of objects.
Algebra and Algebraic Thinking	Early 3	Practice: Multiplication & Addition Word Problems	<ul style="list-style-type: none"> • Interpret multiplication problem situations using pictures, objects, and equations. • Solve multiplication word problems involving equal groups with an unknown total number of objects. • Solve addition word problems.
Algebra and Algebraic Thinking	Early 3	Multiplication Word Problems, Part 2	<ul style="list-style-type: none"> • Interpret multiplication problem situations using pictures, objects, and equations. • Solve multiplication word problems involving arrays with an unknown total number of objects.
Algebra and Algebraic Thinking	Early 3	Practice: More Multiplication & Addition Problems	<ul style="list-style-type: none"> • Interpret multiplication problem situations using pictures, objects, and equations. • Solve multiplication word problems involving arrays with an unknown total number of objects. • Solve addition word problems.
Algebra and Algebraic Thinking	Early 3	Practice: Multiplication Word Problems	<ul style="list-style-type: none"> • Interpret multiplication problem situations using pictures, objects, and equations. • Solve multiplication word problems involving equal groups or arrays with an unknown total number of objects.
Algebra and Algebraic Thinking	Early 3	Use Order and Grouping to Multiply <i>Added Oct. 2022</i>	<ul style="list-style-type: none"> • Understand that factors can be multiplied in any order and the product will be the same. • Understand that three factors in a problem can be grouped in different ways and the product will be the same.
Algebra and Algebraic Thinking	Early 3	Practice: Use Order to Multiply	<ul style="list-style-type: none"> • Understand that numbers can be multiplied in any order and the product will be the same. • Apply the commutative property of multiplication as a strategy to multiply by 2, 3, and 4.
Algebra and Algebraic Thinking	Early 3	Practice: Use Order and Grouping to Multiply	<ul style="list-style-type: none"> • Apply properties of operations as strategies to multiply three factors together.
Algebra and Algebraic Thinking	Early 3	Practice: Multiplying by 0 and 1	<ul style="list-style-type: none"> • Multiply by a factor of 1 (Identity Property of Multiplication). • Multiply by a factor of 0 (Zero Property of Multiplication).

Algebra and Algebraic Thinking	Early 3	Practice: Multiply Within 100	<ul style="list-style-type: none"> Fluently multiply within 100.
Algebra and Algebraic Thinking	Early 3	Break Apart a Number to Multiply, Part 1 <i>Added July 2022</i>	<ul style="list-style-type: none"> Use arrays to break apart a factor as a strategy to multiply (distributive property of multiplication).
Algebra and Algebraic Thinking	Early 3	Break Apart a Number to Multiply, Part 2 <i>Added July 2022</i>	<ul style="list-style-type: none"> Break apart a factor as a strategy to multiply (distributive property of multiplication).
Algebra and Algebraic Thinking	Early 3	Practice: Multiples of 6	<ul style="list-style-type: none"> Break apart a factor as a strategy to find multiples of 6.
Algebra and Algebraic Thinking	Early 3	Practice: Multiples of 7	<ul style="list-style-type: none"> Break apart a factor as a strategy to find multiples of 7.
Algebra and Algebraic Thinking	Early 3	Practice: Multiples of 8	<ul style="list-style-type: none"> Break apart a factor as a strategy to find multiples of 8.
Algebra and Algebraic Thinking	Early 3	Practice: Multiples of 9	<ul style="list-style-type: none"> Break apart a factor as a strategy to find multiples of 9.
Algebra and Algebraic Thinking	Early 3	Word Problems Involving Length and Money	<ul style="list-style-type: none"> Interpret multiplication problem situations using pictures and equations. Solve multiplication word problems involving length and money.
Algebra and Algebraic Thinking	Early 3	Understand Division, Part 1	<ul style="list-style-type: none"> Understand division as sharing, knowing the number of equal shares and finding the number in each share or group. Use division expressions to represent contexts.
Algebra and Algebraic Thinking	Early 3	Division Word Problems, Part 1	<ul style="list-style-type: none"> Interpret division problem situations using pictures, objects, and equations. Solve division word problems involving equal groups with an unknown number of objects in each group.
Algebra and Algebraic Thinking	Early 3	Practice: Division & Subtraction Word Problems	<ul style="list-style-type: none"> Interpret division problem situations using pictures, objects, and equations. Solve division word problems involving equal groups with an unknown number of objects in each group. Solve subtraction word problems.
Algebra and Algebraic Thinking	Mid 3	Understand Division, Part 2 <i>Added Oct. 2022</i>	<ul style="list-style-type: none"> Understand division as separating a total into equal groups, knowing the number in each group and finding the number of groups.

			<ul style="list-style-type: none"> • Understand the relationship between multiplication and division.
Algebra and Algebraic Thinking	Mid 3	Division Word Problems, Part 2	<ul style="list-style-type: none"> • Interpret division problem situations using pictures, objects, and equations. • Solve division word problems involving equal groups or arrays with an unknown number of groups or rows.
Algebra and Algebraic Thinking	Mid 3	Practice: More Division & Subtraction Problems	<ul style="list-style-type: none"> • Interpret division problem situations using pictures, objects, and equations. • Solve division word problems involving equal groups or arrays with an unknown number of groups or rows. • Solve subtraction word problems.
Algebra and Algebraic Thinking	Mid 3	Practice: Understand Division	<ul style="list-style-type: none"> • Understand and use the relationship of multiplication and division to find quotients.
Algebra and Algebraic Thinking	Mid 3	Practice: Multiply and Divide Within 100	<ul style="list-style-type: none"> • Fluently multiply and divide within 100.
Algebra and Algebraic Thinking	Mid 3	Practice: Multiplication & Division Word Problems	<ul style="list-style-type: none"> • Interpret multiplication and division problem situations using pictures, objects, and equations. • Solve word problems involving equal groups with an unknown total, number of groups, or number in each group. • Solve word problems involving arrays with an unknown total, number of rows, or number in each row.
Algebra and Algebraic Thinking	Mid 3	Practice: More Multiplication & Division Problems	<ul style="list-style-type: none"> • Interpret multiplication and division problem situations using pictures, objects, and equations. • Solve word problems involving equal groups with an unknown total, number of groups, or number in each group. • Solve word problems involving arrays with an unknown total, number of rows, or number in each row.
Algebra and Algebraic Thinking	Late 3	Practice: Divide and Multiply (Within 100)	<ul style="list-style-type: none"> • Fluently multiply and divide within 100.
Algebra and Algebraic Thinking	Extra 3	Understand Multiplication, Part 1	<ul style="list-style-type: none"> • Understand that the symbol \times means "groups of," and problems such as 5×7 refer to 5 groups of 7. • Interpret a multiplication problem situation using pictures, objects, words, numbers, and equations.
Algebra and Algebraic Thinking	Extra 3	Practice: Multiples of 2	<ul style="list-style-type: none"> • Develop strategies for finding multiples of 2.

Algebra and Algebraic Thinking	Extra 3	Practice: Multiplying by 10	<ul style="list-style-type: none"> • Develop strategies for multiplying by a factor of 10.
Algebra and Algebraic Thinking	Extra 3	Practice: Multiplying by 5	<ul style="list-style-type: none"> • Develop strategies for multiplying by a factor of 5.
Algebra and Algebraic Thinking	Extra 3	Understand Multiplication, Part 2	<ul style="list-style-type: none"> • Understand that the symbol \times means "groups of," and expressions such as 5×7 refer to 5 groups of 7. • Represent a multiplication problem situation using arrays and equations. • Understand that numbers can be multiplied in any order and the product will be the same (commutative property of multiplication).
Algebra and Algebraic Thinking	Extra 3	Practice: Multiples of 3	<ul style="list-style-type: none"> • Develop strategies for finding multiples of 3.
Algebra and Algebraic Thinking	Extra 3	Practice: Multiples of 4	<ul style="list-style-type: none"> • Develop strategies for finding multiples of 4.
Algebra and Algebraic Thinking	Extra 3	Practice: Multiples of 5 and 10	<ul style="list-style-type: none"> • Understand that numbers can be multiplied in any order and the product will be the same. • Apply the commutative property of multiplication as a strategy to find multiples of 5 and 10.
Algebra and Algebraic Thinking	Extra 3	Break Apart a Number to Multiply	<ul style="list-style-type: none"> • Break apart a factor as a strategy to multiply (apply the distributive property of multiplication).
Algebra and Algebraic Thinking	Extra 3	Solve Two-Step Word Problems Using the Four Operations	<ul style="list-style-type: none"> • Determine operations needed to solve two-step word problems. • Model two-step problems with four operations using a variety of representations, including equations with a variable. • Solve two-step problems with four operations. • Assess the reasonableness of answers.
Algebra and Algebraic Thinking	Extra 3	Understand Patterns	<ul style="list-style-type: none"> • Use number properties to find and explain patterns. • Use knowledge of even and odd numbers to find and explain patterns.
Algebra and Algebraic Thinking	Early 4	Multiplication Word Problems	<ul style="list-style-type: none"> • Interpret multiplication problem situations using pictures and equations. • Solve multiplication word problems involving equal groups, length, and money.
Algebra and Algebraic Thinking	Early 4	Multiplicative Comparison Word Problems, Part 1	<ul style="list-style-type: none"> • Use pictures and equations to represent word problems involving a multiplicative comparison. • Solve word problems involving a multiplicative comparison with the larger quantity unknown.

Algebra and Algebraic Thinking	Early 4	Multiplicative Comparison Word Problems, Part 2	<ul style="list-style-type: none"> • Use pictures and equations to represent word problems involving a multiplicative comparison. • Solve word problems involving a multiplicative comparison with the smaller quantity unknown.
Algebra and Algebraic Thinking	Early 4	Practice: Multiplicative Comparison Problems	<ul style="list-style-type: none"> • Use pictures and equations to represent word problems involving a multiplicative comparison. • Solve word problems involving a multiplicative comparison with the larger quantity or smaller quantity unknown.
Algebra and Algebraic Thinking	Early 4	Multiplicative Comparison Word Problems, Part 3	<ul style="list-style-type: none"> • Use pictures and equations to represent word problems involving a multiplicative comparison. • Solve word problems involving a multiplicative comparison with the multiplier unknown.
Algebra and Algebraic Thinking	Early 4	Practice: More Multiplicative Comparison Problems	<ul style="list-style-type: none"> • Use pictures and equations to represent word problems involving a multiplicative comparison. • Solve word problems involving a multiplicative comparison with the multiplier unknown.
Algebra and Algebraic Thinking	Early 4	Practice: Understand Multiplication as Comparison	<ul style="list-style-type: none"> • Solve word problems that indicate a multiplicative comparison. • Write an equation to represent a multiplicative comparison indicated by a word problem.
Algebra and Algebraic Thinking	Early 4	Multiples	<ul style="list-style-type: none"> • Given a whole number within 10, determine all its multiples up to 100. • Determine whether a whole number within 100 is a multiple of a given number within 10.
Algebra and Algebraic Thinking	Early 4	Factors	<ul style="list-style-type: none"> • Find all the factor pairs for a given whole number within 100. • Determine whether a given whole number within 100 is prime or composite.
Algebra and Algebraic Thinking	Early 4	Practice: Multiples, Factors, and Prime Numbers	<ul style="list-style-type: none"> • Determine whether a whole number within 100 is a multiple of a given number within 10. • Determine whether a whole number within 10 is a factor of a given number within 100. • Determine whether a given whole number within 100 is prime or composite.
Algebra and Algebraic Thinking	Early 4	Division Word Problems with Remainders, Part 1	<ul style="list-style-type: none"> • Interpret division problem situations using pictures, objects, and equations. • Divide two-digit dividends by one-digit divisors, with remainders. • Interpret the remainder in a division word problem.
Algebra and Algebraic Thinking	Early 4	Division Word Problems with Remainders, Part 2	<ul style="list-style-type: none"> • Interpret division problem situations using pictures, objects, and equations. • Divide two-digit dividends by one-digit divisors, with remainders.

			<ul style="list-style-type: none"> • Interpret the remainder in a division word problem.
Algebra and Algebraic Thinking	Early 4	Practice: Division Word Problems with Remainders	<ul style="list-style-type: none"> • Interpret division problem situations using pictures, objects, and equations. • Divide two-digit dividends by one-digit divisors, with remainders. • Interpret the remainder in a division word problem.
Algebra and Algebraic Thinking	Extra 4	Number and Shape Patterns	<ul style="list-style-type: none"> • Use rules to generate or extend a number or shape pattern. • Analyze and describe features in number and shape patterns
Algebra and Algebraic Thinking	Extra 4	Solve Multi-Step Problems	<ul style="list-style-type: none"> • Solve multi-step word problems. • Use estimation strategies to make sure the answer makes sense
Algebra and Algebraic Thinking	Late 5	Evaluate, Write, and Interpret Expressions <i>Added August 2022</i>	<ul style="list-style-type: none"> • Evaluate numerical expressions containing grouping symbols. • Write numerical expressions using grouping symbols. • Interpret numerical expressions without evaluating them.
Algebra and Algebraic Thinking	Late 5	Practice: Interpret and Evaluate Expressions	<ul style="list-style-type: none"> • Evaluate numerical expressions containing grouping symbols. • Interpret numerical expressions without evaluating them.
Algebra and Algebraic Thinking	Early 6	Understand Algebraic Expressions	<ul style="list-style-type: none"> • Understand that variables represent unknown or varying quantities. • Use variables to write algebraic expressions that describe mathematical situations. • Identify, describe, and interpret parts of an algebraic expression.
Algebra and Algebraic Thinking	Early 6	Write and Evaluate Algebraic Expressions	<ul style="list-style-type: none"> • Use variables to write algebraic expressions that describe real-world situations. • Evaluate algebraic expressions at specific values of their variables, using the order of operations when appropriate.
Algebra and Algebraic Thinking	Early 6	Numerical Expressions with Exponents	<ul style="list-style-type: none"> • Write numerical expressions with whole-number exponents. • Evaluate numerical expressions with whole-number exponents.
Algebra and Algebraic Thinking	Early 6	Algebraic Expressions with Exponents	<ul style="list-style-type: none"> • Write algebraic expressions that record operations (including exponents) with numbers and with letters standing for numbers. • Evaluate algebraic expressions with exponents at specific values of their variables, using the order of operations when appropriate.

Algebra and Algebraic Thinking	Early 6	Practice: Numerical and Algebraic Expressions	<ul style="list-style-type: none"> • Write expressions with and without exponents that record operations with numbers and with letters standing for numbers. • Evaluate algebraic expressions with and without exponents at specific values of their variables, using the order of operations when appropriate.
Algebra and Algebraic Thinking	Mid 6	Equivalent Ratios	<ul style="list-style-type: none"> • Recognize and create equivalent ratios. • Use multiplication and division to describe equivalent ratios. • Understand and reason about equivalent ratios.
Algebra and Algebraic Thinking	Mid 6	Practice: Equivalent Ratios	<ul style="list-style-type: none"> • Use the concept of a ratio to explain ratio relationships. • Recognize and create equivalent ratios. • Describe and use equivalent ratios to solve real-world problems.
Algebra and Algebraic Thinking	Mid 6	Equivalent Ratio Tables	<ul style="list-style-type: none"> • Identify and apply multiplicative relationships between the quantities in a ratio and between equivalent ratios. • Make tables of equivalent ratios relating quantities with whole-number measurements and find missing values in the tables. • Use reasoning and equivalent ratio tables to solve real-world problems.
Algebra and Algebraic Thinking	Mid 6	Graph Equivalent Ratios	<ul style="list-style-type: none"> • Plot pairs of points in the coordinate plane that represent equivalent ratios. • Use tables and points plotted in the coordinate plane to reason about equivalent ratios.
Algebra and Algebraic Thinking	Mid 6	Understand Unit Rate	<ul style="list-style-type: none"> • Understand the concept of unit rate. • Find and compare unit rates.
Algebra and Algebraic Thinking	Mid 6	Solve Problems with Ratios and Unit Rates	<ul style="list-style-type: none"> • Use unit rates to solve real-world problems. • Solve problems by comparing unit rates.
Algebra and Algebraic Thinking	Mid 6	Solve Problems with Measurement Conversions	<ul style="list-style-type: none"> • Use unit rates to solve problems involving measurement conversions.
Algebra and Algebraic Thinking	Mid 6	Understand Percent Concepts	<ul style="list-style-type: none"> • Understand percent of a quantity as a rate per 100. • Express fractions and decimals as percents.
Algebra and Algebraic Thinking	Mid 6	Find Percent of a Number	<ul style="list-style-type: none"> • Given the whole and the part, find the percent. • Use percents to compare ratios. • Given the whole and the percent, find a part.
Algebra and Algebraic Thinking	Mid 6	Solve Problems with Percent	<ul style="list-style-type: none"> • Solve percent problems involving finding the whole. • Solve percent problems involving finding the percent of a number.

Algebra and Algebraic Thinking	Mid 6	Equivalent Expressions & the Distributive Property	<ul style="list-style-type: none"> Understand that two expressions are equivalent if they have the same value, regardless of the number that is substituted for the variable. Identify and generate equivalent expressions by applying the distributive property.
Algebra and Algebraic Thinking	Mid 6	Equivalent Expressions & Properties of Addition	<ul style="list-style-type: none"> Understand that two expressions are equivalent if they have the same value, regardless of the number that is substituted for the variable. Identify and generate equivalent expressions by applying addition properties.
Algebra and Algebraic Thinking	Mid 6	Practice: Equivalent Expressions	<ul style="list-style-type: none"> Identify and generate equivalent expressions by applying the properties of operations. Understand that two expressions are equivalent if they have the same value, regardless of the number that is substituted for the variable.
Algebra and Algebraic Thinking	Mid 6	Solutions of Equations	<ul style="list-style-type: none"> Determine whether a number in a specified set is a solution of an equation. Use models to solve equations.
Algebra and Algebraic Thinking	Mid 6	Write and Solve Addition Equations	<ul style="list-style-type: none"> Solve equations of the form $x + p = q$ using properties of equality. Write equations of the form $x + p = q$ to model real-world and mathematical problems. Interpret the solution of an algebraic equation in context.
Algebra and Algebraic Thinking	Mid 6	Write and Solve Multiplication Equations	<ul style="list-style-type: none"> Solve equations of the form $px = q$ using properties of equality. Write equations of the form $px = q$ to model real-world and mathematical problems. Interpret the solution of an algebraic equation in context.
Algebra and Algebraic Thinking	Mid 6	Practice: Write and Solve Equations	<ul style="list-style-type: none"> Solve equations of the forms $x + p = q$ and $px = q$ using properties of equality. Write equations of the forms $x + p = q$ and $px = q$ to model real-world and mathematical problems. Interpret the solution of an algebraic equation in context.
Algebra and Algebraic Thinking	Mid 6	Analyze Two-Variable Relationships	<ul style="list-style-type: none"> Recognize that a change in the independent variable causes a change in the dependent variable. Analyze and describe the relationship between variables in tables, equations, and graphs.
Algebra and Algebraic Thinking	Mid 6	Practice: Analyze Two-Variable Relationships	<ul style="list-style-type: none"> Recognize that a change in the independent variable causes a change in the dependent variable. Analyze and describe the relationship between variables in tables, equations, and graphs.

Algebra and Algebraic Thinking	Late 6	Understand Inequalities	<ul style="list-style-type: none"> • Write, graph, and interpret solutions of inequalities of the form $x > c$ or $x < c$. • Understand that inequalities have infinitely many solutions. • Determine whether a number in a specified set is a solution of an inequality.
Algebra and Algebraic Thinking	Late 6	Write and Solve Inequalities	<ul style="list-style-type: none"> • Write, graph, and interpret solutions of inequalities of the form $x > c$ or $x < c$, and inequalities of the form $x \geq c$ and $x \leq c$. • Determine whether a number in a specified set is a solution of an inequality. • Understand that some real-world situations are represented by inequalities whose graphs consist of a discrete set of points.
Algebra and Algebraic Thinking	Early 7	Unit Rates for Ratios with Fractions, Part 1	<ul style="list-style-type: none"> • Find unit rates for ratios with one fraction.
Algebra and Algebraic Thinking	Early 7	Unit Rates for Ratios with Fractions, Part 2	<ul style="list-style-type: none"> • Find unit rates for ratios with two fractions.
Algebra and Algebraic Thinking	Early 7	Practice: Unit Rates for Ratios with Fractions	<ul style="list-style-type: none"> • Find unit rates for ratios with fractions.
Algebra and Algebraic Thinking	Early 7	Understand Proportional Relationships	<ul style="list-style-type: none"> • Identify a proportional relationship by testing for equivalent ratios in a table and/or observing whether the graph is a straight line through the origin. • Using a table and graph, identify the rate as the constant of proportionality.
Algebra and Algebraic Thinking	Early 7	Write Equations for Proportional Relationships	<ul style="list-style-type: none"> • Given a table of equivalent ratios or a graph, write the corresponding equation ($y = kx$) and identify the unit rate. • Describe the meaning of points on the graph of a proportional relationship.
Algebra and Algebraic Thinking	Early 7	Practice: Proportional Relationships	<ul style="list-style-type: none"> • Write an equation for a proportional relationship that is represented by a table, graph, or verbal description. • Analyze and solve problems about proportional relationships that are represented in different ways.
Algebra and Algebraic Thinking	Mid 7	Equivalent Linear Expressions	<ul style="list-style-type: none"> • Apply the distributive property to expand and factor linear expressions with rational coefficients. • Apply addition properties to generate equivalent expressions.
Algebra and Algebraic Thinking	Mid 7	Practice: Equivalent Linear Expressions	<ul style="list-style-type: none"> • Apply the distributive property to expand and factor linear expressions with rational coefficients.

			<ul style="list-style-type: none"> • Apply addition properties to generate equivalent expressions.
Algebra and Algebraic Thinking	Mid 7	Reasons for Equivalent Linear Expressions	<ul style="list-style-type: none"> • Use algebraic expressions to represent quantities in a problem. • Understand how changing the way an expression is written can illustrate different aspects of the problem.
Algebra and Algebraic Thinking	Mid 7	Understand Multi-Step Equations	<ul style="list-style-type: none"> • Use linear equations to represent multi-step problems. • Use number sense to solve linear equations with integer coefficients.
Algebra and Algebraic Thinking	Mid 7	Solve Multi-Step Equations, Part 1	<ul style="list-style-type: none"> • Solve one-variable equations of the form $px + q = r$, in which p, q, and r are non-zero rational numbers.
Algebra and Algebraic Thinking	Mid 7	Solve Multi-Step Equations, Part 2	<ul style="list-style-type: none"> • Solve one-variable equations of the form $p(x + q) = r$, in which p, q, and r are non-zero rational numbers.
Algebra and Algebraic Thinking	Mid 7	Write and Solve Multi-Step Equations	<ul style="list-style-type: none"> • Understand the difference between an arithmetic solution and an algebraic solution. • Write and solve one-variable equations of the form $px + q = r$ to model real-world problems. • Write and solve one-variable equations of the form $p(x + q) = r$ to model real-world problems.
Algebra and Algebraic Thinking	Mid 7	Practice: Write and Solve Multi-Step Equations	<ul style="list-style-type: none"> • Solve equations of the forms $px + q = r$ and $p(x + q) = r$. • Model and solve word problems leading to equations of the forms $px + q = r$ and $p(x + q) = r$.
Algebra and Algebraic Thinking	Mid 7	Understand Solutions of Inequalities	<ul style="list-style-type: none"> • Solve an inequality using substitution and a table. • Reason about an inequality that describes a real-world situation. • Understand the connection between solving an inequality and solving its related equation.
Algebra and Algebraic Thinking	Mid 7	Solve Inequalities	<ul style="list-style-type: none"> • Understand properties of inequalities. • Solve a one-step or two-step inequality algebraically.
Algebra and Algebraic Thinking	Mid 7	Solve Problems with Inequalities	<ul style="list-style-type: none"> • Solve word problems that can be modeled with inequalities.
Algebra and Algebraic Thinking	Mid 7	Solve Percent Problems, Part 1	<ul style="list-style-type: none"> • Solve percent problems involving adding to an original amount. • Solve percent problems involving subtracting from an original amount.
Algebra and Algebraic Thinking	Mid 7	Practice: Solve Percent Problems	<ul style="list-style-type: none"> • Solve percent problems involving adding to an original amount.

			<ul style="list-style-type: none"> • Solve percent problems involving subtracting from an original amount.
Algebra and Algebraic Thinking	Mid 7	Solve Percent Problems, Part 2	<ul style="list-style-type: none"> • Solve percent problems involving discounts, using proportional relationships. • Solve percent problems using diagrams and equations.
Algebra and Algebraic Thinking	Mid 7	Solve Percent Problems, Part 3	<ul style="list-style-type: none"> • Solve percent problems involving tax and tips, using proportional relationships. • Solve percent problems using diagrams and equations.
Algebra and Algebraic Thinking	Mid 7	Percent Change	<ul style="list-style-type: none"> • Solve percent problems involving percent increase and decrease. • Solve percent problems involving percent error.
Algebra and Algebraic Thinking	Early 8	Proportional Relationships and Slope <i>Added July 2022</i>	<ul style="list-style-type: none"> • Graph proportional relationships, interpreting the unit rate as the slope of the graph. • Find the slope of a line from two points. • Understand that the slope is the same between any two distinct points on a line.
Algebra and Algebraic Thinking	Early 8	Derive Linear Equations <i>Added July 2022</i>	<ul style="list-style-type: none"> • Derive the equation $y = mx$ for a line through the origin. • Derive the equation $y = mx + b$ for a line that intercepts the y-axis at b. • Write the equation of a line given its graph.
Algebra and Algebraic Thinking	Early 8	Graph Linear Equations <i>Added July 2022</i>	<ul style="list-style-type: none"> • Graph a linear equation given in slope-intercept form. • Understand that slope can be positive, negative, 0, or undefined.
Algebra and Algebraic Thinking	Early 8	Solve Linear Equations <i>Added July 2022</i>	<ul style="list-style-type: none"> • Solve linear equations with the variable on both sides, including equations that require applying the distributive property and collecting like terms.
Algebra and Algebraic Thinking	Early 8	Number of Solutions for Linear Equations <i>Added Oct. 2022</i>	<ul style="list-style-type: none"> • Determine whether a linear equation in one variable has one solution, infinitely many solutions, or no solution. • Write a linear equation in one variable that has one solution, infinitely many solutions, or no solution.
Algebra and Algebraic Thinking	Early 8	Understand Systems of Linear Equations <i>Added July 2022</i>	<ul style="list-style-type: none"> • Understand that solutions to a system of two linear equations in two variables correspond to points of intersection of their graphs, because points of intersection satisfy both equations simultaneously. • Use graphs and tables to identify the solutions to systems of two linear equations in two variables. • Determine whether a system of two linear equations has one solution, infinitely many solutions, or no solution by analyzing graphs.

Algebra and Algebraic Thinking	Early 8	Graph Systems of Linear Equations <i>Added July 2022</i>	<ul style="list-style-type: none"> Solve systems of equations by graphing.
Algebra and Algebraic Thinking	Early 8	Solve Systems of Linear Equations: Substitution <i>Added July 2022</i>	<ul style="list-style-type: none"> Estimate the solution of a system of linear equations by graphing. Use substitution to solve systems of linear equations with one solution, no solution, or infinitely many solutions.
Algebra and Algebraic Thinking	Early 8	Solve Systems of Linear Equations: Elimination <i>Added Oct. 2022</i>	<ul style="list-style-type: none"> Use elimination to solve systems of linear equations. Identify efficient ways to solve a system of linear equations.
Algebra and Algebraic Thinking	Mid 8	Understand Functions <i>Added July 2022</i>	<ul style="list-style-type: none"> Understand that a function is a rule that assigns to each input exactly one output. Identify whether a relationship is a function from a verbal description, table of values, graph, or equation. Classify a function as linear or nonlinear. Interpret the equation $y = mx + b$ as defining a linear function whose graph is a non-vertical straight line.
Algebra and Algebraic Thinking	Mid 8	Linear Functions: Rate of Change and Initial Value <i>Added July 2022</i>	<ul style="list-style-type: none"> Use linear functions to describe linear relationships. Identify and interpret the rate of change and initial value of a linear function from a graph or table.
Algebra and Algebraic Thinking	Mid 8	Linear Functions: Model from Two Points <i>Added July 2022</i>	<ul style="list-style-type: none"> Identify and interpret the rate of change and initial value of a linear function from two points on a graph or in a table. Write an equation for a linear function from two points.
Algebra and Algebraic Thinking	Mid 8	Linear Functions: Model from a Verbal Description <i>Added July 2022</i>	<ul style="list-style-type: none"> Identify and interpret the rate of change and initial value of a linear function from a verbal description. Write an equation for a linear function to model a relationship between two quantities described verbally.
Algebra and Algebraic Thinking	Mid 8	Compare Functions <i>Added Oct. 2022</i>	<ul style="list-style-type: none"> Compare rates of change in proportional relationships. Solve problems that require comparing linear functions represented in different ways.
Algebra and Algebraic Thinking	Extra 8	Using a Graph to Analyze a Functional Relationship	<ul style="list-style-type: none"> Sketch a graph of a function from a verbal description. Describe qualitatively the functional relationship between two quantities by analyzing a graph.

Measurement and Data

Domain	Grade	Lesson	Objective
Measurement and Data	Early K	Different	<ul style="list-style-type: none"> Given a set of objects, students identify an object that is different.
Measurement and Data	Early K	Same	<ul style="list-style-type: none"> Given a set of objects, students identify an object that is the same.
Measurement and Data	Early K	Longer or Shorter	<ul style="list-style-type: none"> Compare two objects to find which is longer or shorter. Compare two objects to find which is longer or shorter than a third reference object.
Measurement and Data	Early K	Taller or Shorter	<ul style="list-style-type: none"> Compare two objects to find which is taller or shorter. Compare two objects to find which is taller or shorter than a third reference object.
Measurement and Data	Early K	Lighter or Heavier	<ul style="list-style-type: none"> Compare two objects to find which is lighter or heavier. Compare two objects to find which is lighter or heavier than a third reference object.
Measurement and Data	Early K	Holds More or Less	<ul style="list-style-type: none"> Compare two objects to find which holds more or holds less. Compare two objects to find which holds more or holds less than a third reference object.
Measurement and Data	Late K	Sort Objects	<ul style="list-style-type: none"> Sort objects into given categories. Count the number of objects in each category. Compare the number of objects in each category.
Measurement and Data	Late K	Practice: Sort Objects	<ul style="list-style-type: none"> Sort objects into given categories. Count the number of objects in each category. Compare the number of objects in each category.
Measurement and Data	Late 1	Measure Lengths	<ul style="list-style-type: none"> Understand that the length measurement of an object is the number of same-size units that span it with no gaps or overlaps. Measure the length of an object by iterating length units from end to end and counting the number of units used.
Measurement and Data	Early 2	Measure Lengths in Inches	<ul style="list-style-type: none"> Connect measurement using inch tiles to measurement with a ruler. Measure the length of an object to the nearest inch using a ruler.
Measurement and Data	Early 2	Measure Lengths in Centimeters	<ul style="list-style-type: none"> Use a ruler to measure objects to the nearest centimeter.
Measurement and Data	Early 2	Practice: Measure Lengths	<ul style="list-style-type: none"> Measure the length of an object to the nearest inch or to the nearest centimeter using a ruler.
Measurement and Data	Early 2	Estimate Lengths in Inches	<ul style="list-style-type: none"> Use benchmarks to estimate lengths in inches. Understand when an estimate is appropriate.

Measurement and Data	Early 2	Estimate Lengths in Centimeters	<ul style="list-style-type: none"> • Use benchmarks to estimate lengths in centimeters. • Understand when an estimate is appropriate.
Measurement and Data	Early 2	Practice: Estimate Lengths	<ul style="list-style-type: none"> • Use benchmarks to estimate the length of an object in inches or centimeters.
Measurement and Data	Late 2	Understand Number Lines	<ul style="list-style-type: none"> • Create a number line. • Represent whole numbers on a number line as a distance from 0.
Measurement and Data	Late 2	Understand Addition Using Number Lines	<ul style="list-style-type: none"> • Represent sums within 100 on a number line.
Measurement and Data	Late 2	Practice: Addition Using Number Lines	<ul style="list-style-type: none"> • Represent sums within 100 on a number line.
Measurement and Data	Late 2	Understand Subtraction Using Number Lines, Part 1	<ul style="list-style-type: none"> • Represent differences within 100 on a number line by moving backward.
Measurement and Data	Late 2	Practice: Subtraction Using Number Lines, Part 1	<ul style="list-style-type: none"> • Represent differences within 100 on a number line by moving backward.
Measurement and Data	Late 2	Understand Subtraction Using Number Lines, Part 2	<ul style="list-style-type: none"> • Represent differences within 100 on a number line by moving forward.
Measurement and Data	Late 2	Practice: Subtraction Using Number Lines, Part 2	<ul style="list-style-type: none"> • Represent differences within 100 on a number line by moving forward.
Measurement and Data	Extra 2	Understand Measurement with Different Units	<ul style="list-style-type: none"> • Understand how the number of units used to measure is related to the size of the units used.
Measurement and Data	Extra 2	Compare Lengths	<ul style="list-style-type: none"> • Measure to determine how much longer or shorter one object is than another
Measurement and Data	Extra 2	Solve Problems Involving Length	<ul style="list-style-type: none"> • Use addition and subtraction to solve word problems involving lengths. • Use models, including a number line, to solve word problems involving lengths.
Measurement and Data	Extra 2	Make Line Plots	<ul style="list-style-type: none"> • Measure lengths and make a line plot to show the measurements.
Measurement and Data	Early 3	Tell and Write Time	<ul style="list-style-type: none"> • Tell and write time to the nearest minute. • Express time as the number of minutes before the hour.

Measurement and Data	Early 3	Practice: Tell and Write Time	<ul style="list-style-type: none"> • Tell and write time to the nearest minute. • Express time as the number of minutes before the hour.
Measurement and Data	Mid 3	Draw Scaled Picture Graphs	<ul style="list-style-type: none"> • Recognize that data displayed in picture graphs can be represented by a scale other than 1. • Draw a scaled picture graph.
Measurement and Data	Mid 3	Draw Scaled Bar Graphs	<ul style="list-style-type: none"> • Recognize that data displayed in bar graphs can be represented by a scale other than 1. • Draw a scaled bar graph.
Measurement and Data	Mid 3	Practice: Draw Scaled Graphs	<ul style="list-style-type: none"> • Draw a scaled picture graph. • Draw a scaled bar graph.
Measurement and Data	Mid 3	Solve Problems Using Scaled Picture Graphs	• Interpret data displayed in a scaled picture graph to solve one-step problems involving addition, subtraction, or multiplication.
Measurement and Data	Mid 3	Solve Problems Using Scaled Bar Graphs	• Interpret data displayed in a scaled bar graph to solve one- and two-step problems involving addition or subtraction.
Measurement and Data	Mid 3	Practice: Solve Problems Using Scaled Bar Graphs	• Interpret data displayed in a scaled bar graph to solve one- and two-step problems involving addition or subtraction.
Measurement and Data	Extra 3	Solve Problems About Time	<ul style="list-style-type: none"> • Measure time intervals in minutes using clock models and number lines. • Solve word problems involving addition of time intervals in minutes. • Solve word problems involving subtraction of time intervals in minutes.
Measurement and Data	Extra 3	Solve Problems About Liquid Volume	<ul style="list-style-type: none"> • Understand the relative sizes of a liter and a milliliter. • Use unit size to measure and estimate liquid volume. • Solve one-step word problems involving liquid volume.
Measurement and Data	Extra 3	Solve Problems about Mass	<ul style="list-style-type: none"> • Understand mass and measure mass using grams and kilograms. • Solve one-step word problems involving mass.
Measurement and Data	Extra 3	Measure Length and Plot Data on Line Plots	<ul style="list-style-type: none"> • Use a ruler to measure objects to the nearest $\frac{1}{2}$ inch. • Use a ruler to measure objects to the nearest $\frac{1}{4}$ inch. • Display measurement data in a line plot.
Measurement and Data	Extra 3	Understand Area	<ul style="list-style-type: none"> • Recognize area as an attribute of plane figures. • Understand how to measure area by covering a shape with unit squares and counting the squares. • Find the area of shapes using unit squares (non-standard units, square inch, square foot).

Measurement and Data	Extra 3	Add and Multiply to Find Area	<ul style="list-style-type: none"> • Understand that multiplying side lengths of a rectangle provides the same results as tiling it and counting the units. • Multiply side lengths to find areas of rectangles with whole-number side lengths in the context of solving real world and mathematical problems. • Decompose rectilinear shapes formed by rectangles to find the area. • Use the distributive property to find the area of combined rectangles.
Measurement and Data	Extra 3	Connect Area and Perimeter	<ul style="list-style-type: none"> • Understand the difference between perimeter and area. • Use side lengths to find the perimeter of a shape. • Find an unknown side length given the perimeter of a shape.
Measurement and Data	Early 4	Practice: Convert Metric Units of Length	<ul style="list-style-type: none"> • Understand the relative sizes of a kilometer, meter, and centimeter. • Convert meters to centimeters. • Convert kilometers to meters.
Measurement and Data	Early 4	Practice: Convert Customary Units of Length	<ul style="list-style-type: none"> • Understand the relative sizes of a yard, foot, and inch. • Convert feet to inches. • Convert yards to feet.
Measurement and Data	Early 4	Practice: Convert Metric Units of Mass	<ul style="list-style-type: none"> • Understand the relative sizes of a kilogram and gram. • Convert kilograms to grams.
Measurement and Data	Early 4	Practice: Convert Customary Units of Weight	<ul style="list-style-type: none"> • Understand the relative sizes of an ounce, pound, and ton. • Convert pounds to ounces. • Convert tons to pounds.
Measurement and Data	Early 4	Practice: Convert Metric Units of Liquid Volume	<ul style="list-style-type: none"> • Understand the relative sizes of a liter and milliliter. • Convert liters to milliliters.
Measurement and Data	Early 4	Practice: Convert Customary Units of Liquid Volume	<ul style="list-style-type: none"> • Understand the relative sizes of a cup, quart, and gallon. • Convert quarts to cups. • Convert gallons to quarts.
Measurement and Data	Early 4	Practice: Convert Units of Time	<ul style="list-style-type: none"> • Understand the relative sizes of an hour, minute, and second. • Convert hours to minutes. • Convert minutes to seconds.
Measurement and Data	Extra 4	Express Measurements in Larger Units	<ul style="list-style-type: none"> • Convert measurements from a larger unit to a smaller unit within the same system. • Create a conversion table showing equivalent measurements within the same system.

Measurement and Data	Extra 4	Solve Word Problems Involving Measurement	<ul style="list-style-type: none"> • Solve problems involving measurement and conversion of measurements from a larger unit to a smaller unit. • Use the four operations to solve word problems involving distances, liquid volumes, and weights and masses of objects, including problems involving simple fractions or decimals. • Represent measurement quantities using diagrams.
Measurement and Data	Extra 4	Add and Subtract Angle Measures	<ul style="list-style-type: none"> • Recognize that an angle is a geometric shape measured in degrees. • Identify angle measures and show that angles can be put together to form larger angles and broken up into two or more smaller angles. • Use addition and subtraction to find unknown angle measures
Measurement and Data	Late 5	Understand and Measure Volume <i>Added Oct. 2022</i>	<ul style="list-style-type: none"> • Understand the concept of volume as an attribute of solid figures. • Find the volume of a right rectangular prism with whole number side lengths by packing it with unit cubes. • Show that the volume of a rectangular prism can be found by multiplying the edge lengths, which is equivalent to multiplying the height by the area of the base.
Measurement and Data	Late 5	Practice: Measure Volume	<ul style="list-style-type: none"> • Find the volume of a rectangular prism in various cubic units by filling it with unit cubes and counting them or by counting the number of unit cubes in one layer and multiplying by the number of layers.
Measurement and Data	Late 5	Practice: Volume of Rectangular Prisms	<ul style="list-style-type: none"> • Find the volume of a rectangular prism by multiplying its height by the area of the base. • Find the volume of a rectangular prism by multiplying its edge lengths. • Determine the third dimension of a rectangular prism given its volume and two dimensions.
Measurement and Data	Late 5	Practice: Volume of Composite Figures	<ul style="list-style-type: none"> • Use addition to find volumes of solid figures composed of two non-overlapping rectangular prisms.
Measurement and Data	Extra 5	Solve Word Problems Involving Conversions	<ul style="list-style-type: none"> • Solve multi-step real world problems that require expressing measurements in larger or smaller units within a measurement system.

Measurement and Data	Extra 5	Fractions on a Line Plot	<ul style="list-style-type: none"> • Make a line plot to display a data set of measurements in fractions of a unit. • Add, subtract, multiply, and divide fractions to solve problems that contain fraction data sets presented in line plots.
Measurement and Data	Extra 5	Measure Volume Using Formulas	<ul style="list-style-type: none"> • Solve real world problems involving volumes of right rectangular prisms by multiplying the height by the area of the base or using the formula $V = l \times w \times h$. • Use addition to find volumes of solid figures composed of two non-overlapping right rectangular prisms.
Measurement and Data	Early 6	Understand Statistical Questions <i>Added Oct. 2022</i>	<ul style="list-style-type: none"> • Understand how a statistical question differs from other types of questions. • Understand that a data set collected to answer a statistical question has a distribution that can be described by its center, spread, and overall shape. • Summarize a data set by reporting the number of observations. • Understand how to represent data in a frequency table and dot plot.
Measurement and Data	Early 6	Dot Plots and Histograms <i>Added Oct. 2022</i>	<ul style="list-style-type: none"> • Display data in a dot plot and histogram. • Summarize a data set by describing the nature of the attribute under investigation, including how it was measured and its units of measurement. • Describe a set of data by its center, range, and overall shape when given a dot plot or histogram.
Measurement and Data	Mid 6	Medians and Quartiles <i>Added Oct. 2022</i>	<ul style="list-style-type: none"> • Understand median as a measure of center. • Calculate the median and quartiles of a data set. • Construct box plots and use the IQR to measure variability of a data set. • Interpret the median and IQR in a given context.
Measurement and Data	Mid 6	Mean and Mean Absolute Deviation <i>Added Oct. 2022</i>	<ul style="list-style-type: none"> • Calculate the mean of a data set. • Calculate the MAD of a data set. • Interpret the mean and MAD of data sets in different contexts. • Determine the effects of outliers on the mean and MAD of data sets.
Measurement and Data	Extra 6	Understanding Statistics	<ul style="list-style-type: none"> • Understand that data generated from statistical questions will vary. • Identify the difference between a statistical and non-statistical question. • Understand that data distribution can be viewed by its center, spread, and overall shape

Measurement and Data	Extra 6	Box Plots	<ul style="list-style-type: none"> • Display numerical data in a box plot. • Describe what kinds of inferences can be drawn from a box plot. • Find, use, and interpret median and the interquartile range.
Measurement and Data	Extra 6	Understand Mean and MAD	<ul style="list-style-type: none"> • Understand that data distribution can be described by its center, spread, and overall shape. • Recognize that the mean for a numerical data set summarizes all of its values with a single number. • Recognize that the MAD for a numerical data set describes how its values vary with a single number.
Measurement and Data	Extra 6	Dot Plots	<ul style="list-style-type: none"> • Display numerical data in dot plots. • Describe what kinds of inferences can be drawn from a dot plot. • Describe overall pattern of data in a dot plot.
Measurement and Data	Extra 6	Choice of Measures of Center and Variability	<ul style="list-style-type: none"> • Use the shape of a data distribution to determine which measure of center and variability to use. • Use the context in which data was collected to determine which measure of center and variability to use. • Describe the effects of an outlier on the mean value of a data set.
Measurement and Data	Extra 6	Histograms	<ul style="list-style-type: none"> • Display numerical data on a histogram. • Describe what kinds of inferences can be drawn from a histogram. • Describe the overall pattern of data in a histogram.
Measurement and Data	Extra 6	Choosing Data Displays	<ul style="list-style-type: none"> • Understand what types of data are best displayed in a dot plot, histogram, or box plot.
Measurement and Data	Early 7	Understand Random Sampling <i>Added Oct. 2022</i>	<ul style="list-style-type: none"> • Understand that a representative sample can be used to gain information about a population. • Understand that a random sample of a population is likely to be representative of the population and can be used to support valid inferences about the population. • Identify or describe methods that will result in a representative and/or random sample of a population.
Measurement and Data	Early 7	Reason about Random Samples <i>Added Oct. 2022</i>	<ul style="list-style-type: none"> • Use proportional reasoning to make inferences about a population from a single sample. • Understand that it is possible to draw inferences about a population from one random sample or from many random samples. • Make and compare inferences from different random samples of the same population.

Measurement and Data	Mid 7	Compare Populations <i>Added Oct. 2022</i>	<ul style="list-style-type: none"> • Compare two populations using measures of center and measures of variability for their random samples. • Informally assess the degree of visual overlap of two numerical data distributions with similar variabilities. • Calculate and use a multiple of a measure of variability to describe the difference between two populations.
Measurement and Data	Late 7	Understand Probability <i>Added Oct. 2022</i>	<ul style="list-style-type: none"> • Understand that the probability of a chance event can be represented with a number between 0 and 1. • Represent the likelihood of an event on a number line. • For a given situation, determine if the probability of an event is closer to 0 or 1. • Describe an event as impossible, unlikely, equally likely, very likely, or certain.
Measurement and Data	Late 7	Experimental Probability <i>Added Oct. 2022</i>	<ul style="list-style-type: none"> • Use the results of an experiment to calculate the experimental probability of an event. • Use the experimental probability of an outcome in an experiment to predict the outcome of a similar experiment.
Measurement and Data	Late 7	Probability Models <i>Added Oct. 2022</i>	<ul style="list-style-type: none"> • Develop a uniform probability model by assigning equal probability to all outcomes and use the model to determine probabilities of events. • Compare theoretical probabilities to experimental probabilities. Explain possible discrepancies. • Develop a non-uniform probability model and use the model to determine the probabilities of events.
Measurement and Data	Extra 7	Random Samples	<ul style="list-style-type: none"> • Recognize when a sample is representative of a population.
Measurement and Data	Extra 7	Making Statistical Inferences	<ul style="list-style-type: none"> • Use data from a sample(s) to make inferences about the population.
Measurement and Data	Extra 7	Using Mean and Mean Absolute Deviation to Compare Data	<ul style="list-style-type: none"> • Calculate the mean absolute deviation of a set of data. • Compare the variability of two populations with similar means and ranges using their mean absolute deviation. • Visually compare the means of two populations with similar variability by using their dot plots. • Calculate the difference in means of two populations and determine if it is likely that the difference is the result of chance.

Measurement and Data	Extra 7	Using Measures of Center and Variability to Compare Data	<ul style="list-style-type: none"> • Compare the medians of two populations with similar variability using the interquartile range (IQR). • Visually compare the medians of two populations with similar variability by using their boxplots. • Calculate the difference in medians of two populations and determine if it is likely that the difference is the result of chance.
Measurement and Data	Extra 7	Probability Concepts	<ul style="list-style-type: none"> • Explain why the probability of an event cannot be greater than 1. • Explain why events that are likely to occur have probabilities close to 1, unlikely to occur have probabilities near 0, etc. • Evaluate probabilities to determine how likely an event is to occur.
Measurement and Data	Extra 7	Experimental Probability	<ul style="list-style-type: none"> • Approximate the probability of a chance event occurring by observing its behavior in the long run. • Predict the approximate relative frequency of a chance event, given the probability of the event occurring.
Measurement and Data	Extra 7	Probability Models	<ul style="list-style-type: none"> • Create a probability model, given a table of data, a description of an event, or a diagram. • Compare probability models to data collected through observation.
Measurement and Data	Extra 7	Probability of Compound Events	<ul style="list-style-type: none"> • Find probabilities of compound events using organized lists, tables and tree diagrams.
Measurement and Data	Extra 7	Simulations of Compound Events	<ul style="list-style-type: none"> • Design and use a simulation to observe frequencies of compound events.
Measurement and Data	Mid 8	Analyze Scatter Plots and Fit a Linear Model <i>Added Oct. 2022</i>	<ul style="list-style-type: none"> • Construct scatter plots for sets of bivariate data. • Interpret scatter plots to determine the association between two quantities. • Interpret the meaning of an association between two quantities, in context. • Determine, informally by visual inspection, whether a line is a good fit for data that show a linear association. • Informally determine a line of fit for data that show a linear association.
Measurement and Data	Mid 8	Equations for Linear Models <i>Added Oct. 2022</i>	<ul style="list-style-type: none"> • Write an equation of a linear model for data with a linear association. • Interpret the slope and y-intercept of a linear model in the context of the data. • Use a linear model to solve problems in the context of the data.

Measurement and Data	Mid 8	Understand Two-Way Tables <i>Added Oct. 2022</i>	<ul style="list-style-type: none"> • Understand how to read, interpret, and build two-way tables that show frequencies. • Understand the distinction between measurement data and categorical data. • Understand how patterns of association can be seen by using a two-way table.
Measurement and Data	Mid 8	Construct and Interpret Two-Way Tables <i>Added Oct. 2022</i>	<ul style="list-style-type: none"> • Construct two-way tables of relative frequencies using row totals, column totals, or the overall total. • Interpret two-way tables of relative frequencies. • Analyze patterns of association in two-way tables of relative frequencies.
Measurement and Data	Extra 8	Scatter Plots	<ul style="list-style-type: none"> • Construct a scatter plot with quantitative data from two variables. • Identify clusters and outliers in a scatterplot. • Determine if there is a linear or non-linear association in a scatterplot. • Determine if a linear association is positive or negative in a scatterplot.
Measurement and Data	Extra 8	Linear Models	<ul style="list-style-type: none"> • Use a straight line to model a relationship between two quantitative variables. • Informally evaluate the fit of the line by judging the closeness of data points to the line.
Measurement and Data	Extra 8	Problem Solving with Linear Models	<ul style="list-style-type: none"> • Interpret the slope and intercepts of a given equation of a linear model to solve problems.
Measurement and Data	Extra 8	Associations Between Two Categorical Variables	<ul style="list-style-type: none"> • Construct and interpret a two-way table summarizing data for two categorical variables collected from the same subjects. • Use relative frequencies calculated for rows or columns to describe a possible association between the two variables.

Geometry

Domain	Grade	Lesson	Objective
Geometry	Early K	Left and Right	<ul style="list-style-type: none"> Describe the position of objects using words "left" and "right."
Geometry	Early K	Cube	<ul style="list-style-type: none"> Identify cubes.
Geometry	Early K	Sphere	<ul style="list-style-type: none"> Identify spheres.
Geometry	Early K	Circle	<ul style="list-style-type: none"> Identify circles.
Geometry	Early K	Square	<ul style="list-style-type: none"> Identify squares.
Geometry	Early K	Triangle	<ul style="list-style-type: none"> Identify triangles.
Geometry	Early K	Identify Two-Dimensional Shapes	<ul style="list-style-type: none"> Identify shapes as two-dimensional (flat) or three-dimensional (solid). Identify squares, circles, triangles, rectangles, and hexagons.
Geometry	Early K	Practice: Identify Two-Dimensional Shapes	<ul style="list-style-type: none"> Identify shapes as two-dimensional (flat) or three-dimensional (solid). Identify squares, circles, triangles, rectangles, hexagons.
Geometry	Mid 1	Understand Attributes of Shapes	<ul style="list-style-type: none"> Use defining attributes to describe, compare, sort, and identify shapes. Distinguish between defining and non-defining attributes of two-dimensional shapes.
Geometry	Mid 1	Practice: Attributes of Shapes	<ul style="list-style-type: none"> Use defining attributes to describe, compare, sort, and identify shapes. Distinguish between defining and non-defining attributes of two-dimensional shapes.
Geometry	Late 1	Divide Shapes into Two Equal Parts	<ul style="list-style-type: none"> Divide circles and rectangles into two equal parts and name the parts as halves. Describe one whole as two halves.
Geometry	Late 1	Divide Shapes into Four Equal Parts	<ul style="list-style-type: none"> Divide circles and rectangles into four equal parts and name the parts fourths, and quarters. Describe one whole as four fourths, or four quarters. Understand that the more equal parts a shape is divided into, the smaller each part is.
Geometry	Late 1	Practice: Identify Two or Four Equal Parts	<ul style="list-style-type: none"> Describe an equal share using language such as one half, one third, or one fourth. Describe one whole as two halves, three thirds, or four fourths. Understand that the more equal parts a shape is divided into, the smaller each part is.
Geometry	Late 2	Divide Shapes into Three Equal Parts	<ul style="list-style-type: none"> Divide circles and rectangles into three equal parts, and name the parts as thirds. Describe one whole as three thirds.

Geometry	Late 2	Divide Shapes into Two, Three, or Four Equal Parts	<ul style="list-style-type: none"> • Describe an equal share using language such as one half, one third, or one fourth. • Describe one whole as two halves, three thirds, or four fourths. • Understand that the more equal parts a shape is divided into, the smaller each part is. • Understand that equal shares of congruent wholes can have different shapes.
Geometry	Late 2	Practice: Identify Two, Three, or Four Equal Parts	<ul style="list-style-type: none"> • Describe an equal share using language such as one half, one third, or one fourth. • Describe one whole as two halves, three thirds, or four fourths. • Understand that the more equal parts a shape is divided into, the smaller each part is.
Geometry	Extra 2	Recognize and Draw Shapes	<ul style="list-style-type: none"> • Identify triangles, quadrilaterals, pentagons, and hexagons based on the number of sides and angles they have. • Draw a shape based on specific attributes.
Geometry	Extra 2	Practice: Recognize Shapes	<ul style="list-style-type: none"> • Identify triangles, quadrilaterals, pentagons, and hexagons based on the number of sides and angles they have.
Geometry	Early 3	Understand Categories of Shapes	<ul style="list-style-type: none"> • Identify two-dimensional shapes and their attributes. • Use attributes to classify shapes into categories.
Geometry	Late 3	Classify and Compare Quadrilaterals	<ul style="list-style-type: none"> • Recognize rhombuses, rectangles, and squares as being examples of quadrilaterals. • Compare and contrast attributes of quadrilaterals.
Geometry	Extra 3	Divide Shapes into Parts with Equal Areas	<ul style="list-style-type: none"> • Partition a shape into equal areas. • Express the area of an equal part as a unit fraction of the area of the whole shape. • Partition the same shape in different ways.
Geometry	Mid 4	Identify Points, Lines, and Rays	<ul style="list-style-type: none"> • Identify and name points, lines, line segments, and rays.
Geometry	Mid 4	Measure Angles <i>Modified July 2022</i>	<ul style="list-style-type: none"> • Use a protractor to measure an angle.
Geometry	Mid 4	Practice: Measure Angles	<ul style="list-style-type: none"> • Use a protractor to measure an angle. • Determine whether an angle is less than or greater than 90 degrees.
Geometry	Mid 4	Identify Angles	<ul style="list-style-type: none"> • Identify right, acute and obtuse angles in two-dimensional figures. • Identify perpendicular and parallel lines. • Identify perpendicular and parallel lines in two-dimensional figures.

Geometry	Late 4	Classify Quadrilaterals	<ul style="list-style-type: none"> Classify two-dimensional figures based on parallel or perpendicular sides and on acute, obtuse, or right angles.
Geometry	Late 4	Classify Triangles	<ul style="list-style-type: none"> Recognize that triangles can be classified based on the lengths of their sides (isosceles, equilateral, scalene). Name a triangle based on the kind of angles it has (acute, obtuse, right).
Geometry	Late 4	Line Symmetry	<ul style="list-style-type: none"> Recognize and draw lines of symmetry in two-dimensional figures.
Geometry	Early 5	Identify Two-Dimensional Figures	<ul style="list-style-type: none"> Classify two-dimensional figures based on parallel or perpendicular sides and/or right angles.
Geometry	Late 5	Practice: Analyze Patterns and Relationships	<ul style="list-style-type: none"> Generate a numerical pattern given a rule. Identify relationships between corresponding terms of two sequences.
Geometry	Extra 5	Classify Two-Dimensional Figures	<ul style="list-style-type: none"> Understand that attributes belonging to a category of two-dimensional figures also belong to all subcategories of that category. Classify two-dimensional figures in a hierarchy based on properties.
Geometry	Extra 5	Understand the Coordinate Plane	<ul style="list-style-type: none"> Understand the coordinate plane. Identify and plot points in a coordinate plane. Use and graph points to solve real world and mathematical problems.
Geometry	Extra 5	Analyze Patterns and Relationships	<ul style="list-style-type: none"> Generate a numeric sequence given a rule. Identify apparent relationships between corresponding terms of two sequences. Graph ordered pairs on a coordinate plane.
Geometry	Late 6	Area of Parallelograms <i>Added Oct. 2022</i>	<ul style="list-style-type: none"> Find the area of a parallelogram with whole number side lengths by composing/decomposing. Develop the formula $A = b \times h$ for the area of a parallelogram. Identify base/height pairs for a parallelogram. Use the formula $A = b \times h$ to find the area of a parallelogram with fractional or decimal side lengths.
Geometry	Late 6	Area of Triangles and Other Polygons <i>Added Oct. 2022</i>	<ul style="list-style-type: none"> Find the area of triangles by composing or decomposing into rectangles and parallelograms. Identify base/height pairs for a triangle. Develop the formula $A = \frac{1}{2}bh$ for the area of a triangle. Find the area of polygons by composing or decomposing into triangles, parallelograms, or rectangles.

Geometry	Late 6	Nets and Surface Area <i>Added Oct. 2022</i>	<ul style="list-style-type: none"> • Identify and draw nets for three-dimensional figures. • Use a net to find the surface area of a three-dimensional figure. • Recognize rectangular and triangular prisms and pyramids. • Identify the number of faces, edges, and vertices of a three-dimensional figure. • Understand surface area of a prism or pyramid as the sum of the areas of its faces.
Geometry	Extra 6	Polygons in the Coordinate Plane	<ul style="list-style-type: none"> • Draw polygons in the coordinate plane, given coordinates for the vertices. • Use coordinates to find the length of a side, joining two points with the same first coordinate or the same second coordinate. • Apply these techniques in the context of solving real-world and mathematical problems.
Geometry	Extra 6	Concepts of Area and Perimeter	<ul style="list-style-type: none"> • Find the area of rectangles, squares, and right triangles. • Analyze the differences between perimeter and area.
Geometry	Extra 6	Area of Parallelograms, Quadrilaterals, and Polygons	<ul style="list-style-type: none"> • Discover the formula for the area of parallelograms, triangles, and trapezoids • Find the area of parallelograms, triangles, and trapezoids • Find the area of special quadrilaterals and complex polygons by composing and decomposing into simpler polygons.
Geometry	Extra 6	Nets and Surface Area	<ul style="list-style-type: none"> • Identify or draw 2D nets made up of rectangles and triangles that represent 3D objects. • Use nets of three-dimensional figures to find the surface area of rectangular and triangular prisms and pyramids. • Apply knowledge of nets of three-dimensional figures to solve real-world and mathematical problems involving spatial representation and surface area.
Geometry	Extra 6	Volume with Fractional Length	<ul style="list-style-type: none"> • Find the volume of a right rectangular prism with fractional edge lengths by filling the prism with unit cubes of the appropriate unit fraction edge lengths. • Apply the formulas $V = lwh$ or $V = Bh$ to find volumes of right rectangular prisms with fractional edge lengths in the context of solving real-world and mathematical problems.
Geometry	Early 7	Understand Scale Drawings <i>Added August 2022</i>	<ul style="list-style-type: none"> • Understand that scale drawings are figures with the same angles and with side lengths in equivalent ratios. • Calculate and use a scale factor to find an unknown length.

Geometry	Early 7	Use Scale Factors <i>Added August 2022</i>	<ul style="list-style-type: none"> • Use a scale factor to find an unknown length either in a scale drawing or in the object it represents. • Use a scale factor to find area.
Geometry	Mid 7	Area and Circumference of a Circle <i>Added Oct. 2022</i>	<ul style="list-style-type: none"> • Understand that a circle's diameter and its circumference have a proportional relationship; the constant of proportionality is called pi (π). • Use proportional reasoning and the formula for circumference of a circle to solve problems involving radius, circumference, and diameter. • Use the formula for area of a circle to solve area problems.
Geometry	Late 7	Understand Angle Relationships <i>Added August 2022</i>	<ul style="list-style-type: none"> • Understand the relationships between special angles formed by intersecting lines. • Use properties of complementary, supplementary, vertical, and adjacent angles to find unknown angle measures.
Geometry	Late 7	Area and Surface Area <i>Added Oct. 2022</i>	<ul style="list-style-type: none"> • Use given areas and given lengths to solve problems involving unknown lengths of two-dimensional composite figures. • Use given surface areas and given lengths to solve problems involving unknown lengths of right prisms. • Apply knowledge of surface area of right prisms to solve real-world and mathematical problems involving surface areas of composite figures.
Geometry	Late 7	Volume of Composed Figures <i>Added Oct. 2022</i>	<ul style="list-style-type: none"> • Generalize that $V = bh$ for any prism and use this formula to solve problems. • Solve problems involving finding the volumes of right prisms. • Solve real-world and mathematical problems by finding measurements of right prisms. • Solve real-world and mathematical problems involving volumes of composite three-dimensional objects made up of right prisms.
Geometry	Extra 7	Construction of Triangles	<ul style="list-style-type: none"> • Construct triangles from three measures of angles or sides. • Recognize when the given measures form a unique triangle. • Recognize when the given measures cannot be used to form a triangle.
Geometry	Extra 7	Area and Circumference of a Circle	<ul style="list-style-type: none"> • Understand the relationship between circumference and area of a circle. • Use the formulas for area and circumference of a circle to solve problems.
Geometry	Extra 7	Area of Composed Figures	<ul style="list-style-type: none"> • Find the area of two-dimensional objects composed of triangles and quadrilaterals.

			<ul style="list-style-type: none"> • Apply formulas to solve real-world mathematical problems.
Geometry	Extra 7	Surface Area of Composed Figures	<ul style="list-style-type: none"> • Find the surface area of three-dimensional objects composed of cubes and right prisms. • Apply formulas to solve real-world mathematical problems.
Geometry	Extra 7	Volume of Composed Figures	<ul style="list-style-type: none"> • Find the volume of three-dimensional shapes composed of cubes and right prisms. • Apply formulas to solve real-world problems.
Geometry	Extra 7	Cross-sections of Prism and Pyramids	<ul style="list-style-type: none"> • Describe the intersection of a plane and a right rectangular prism. • Describe the intersection of a plane and a right rectangular pyramid. • Intersections may be parallel, perpendicular or neither to the base(s).
Geometry	Early 8	Understand Rigid Transformations	<ul style="list-style-type: none"> • Identify rigid transformations. • Understand that rigid transformations may change the position, location, and orientation of a figure, but not side lengths, angle measurements, or parallel sides. • Identify the corresponding sides and angles of a figure and its image.
Geometry	Early 8	Translations	<ul style="list-style-type: none"> • Understand and perform translations. • Perform a translation on a figure and identify the coordinates of the vertices of its image.
Geometry	Early 8	Reflections	<ul style="list-style-type: none"> • Understand and perform reflections. • Perform a reflection on a figure and identify the coordinates of the vertices of its image.
Geometry	Early 8	Rotations	<ul style="list-style-type: none"> • Understand and perform rotations. • Perform a rotation on a figure and identify the coordinates of the vertices of its image.
Geometry	Early 8	Dilations and Similarity	<ul style="list-style-type: none"> • Understand that a dilation is a transformation that makes a scale copy of a figure and that a dilation image is similar to the original figure. • Understand that similar figures have congruent corresponding angles and proportional corresponding side lengths. • Understand that the corresponding vertices of a dilated image and its original figure lie on the same ray through the center of dilation.
Geometry	Early 8	Dilations in the Coordinate Plane <i>Added Oct. 2022</i>	<ul style="list-style-type: none"> • Perform dilations in the coordinate plane with the center of dilation at the origin. • Understand that when the center of dilation is the origin, the coordinates of corresponding vertices are proportional.

Geometry	Early 8	Describe Angle Relationships	<ul style="list-style-type: none"> • Identify corresponding angles, alternate exterior angles, and alternate interior angles when given a pair of lines cut by a transversal. • Find unknown angle measures when given a pair of parallel lines cut by a transversal.
Geometry	Early 8	Describe Angle Relationships in Triangles <i>Added Oct. 2022</i>	<ul style="list-style-type: none"> • Understand that the interior angle measures of a triangle have a sum of 180°. • Understand that the measure of an exterior angle of a triangle is equal to the sum of the measures of the two nonadjacent interior angles.
Geometry	Extra 8	The Pythagorean Theorem	<ul style="list-style-type: none"> • Show and explain an informal proof of the Pythagorean Theorem. • Understand the converse of the Pythagorean Theorem. • Apply the Pythagorean Theorem to determine unknown side lengths in right triangles in two and three dimensions.
Geometry	Extra 8	Applications of the Pythagorean Theorem	<ul style="list-style-type: none"> • Use absolute value to find the distance between two points in the coordinate plane with the same x-coordinates or the same y-coordinates. • Use the Pythagorean Theorem to find the distance between two points that have different x-coordinates and different y-coordinates. • Apply the Pythagorean Theorem to determine unknown side lengths in right triangles in two and three dimensions.
Geometry	Extra 8	Volume of Cylinders, Cones, and Spheres	<ul style="list-style-type: none"> • Understand the formula for the volume of a cylinder by comparing it to the volume of a prism. • Understand the formula for the volume of a cone by comparing it to the volume of a cylinder. • Understand the formula for the volume of a sphere by comparing it to the volume of a cylinder. • Use the formulas for the volumes of cones, cylinders, and spheres to solve real-world and mathematical problems.