



Virginia Standards of Learning

Grades: K, 1, 2, 3, 4, 5

Mathematics

Grade: K - Adopted: 2023

NAME	STANDARD	TOUCHMATH UNITS AND MODULES
		Number and Number Sense
K.NS.1.		The student will utilize flexible counting strategies to determine and describe quantities up to 100.
a.	Use one-to-one correspondence to determine how many are in a given set containing 30 or fewer concrete objects (e.g., cubes, pennies, balls), and describe the last number named as the total number of objects counted.	Unit 1: Numbers & Operations Level 1 Module 1: Representing 0-3 Unit 1: Numbers & Operations Level 1 Module 2: Representing 4-5 Unit 1: Numbers & Operations Level 1 Module 3: Comparing Unit 2: Number & Operations Level 2 Module 1: Representing 6-7 Unit 2: Number & Operations Level 2 Module 2: Representing 8-9 Unit 2: Number & Operations Level 2 Module 5: Addition & Subtraction Unit 2: Number & Operations Level 2 Module 6: Composing & Decomposing Unit 3: Number & Operations Level 3 Module 1: Composing & Decomposing 10 Unit 3: Number & Operations Level 3 Module 2: Numbers 10-15 Unit 3: Number & Operations Level 3 Module 3: Numbers 16-20 Unit 3: Number & Operations Level 3 Module 4: Place Value Unit 3: Number & Operations Level 3 Module 5: Word Problems Unit 4: Measurement, Geometry, & Data Module 2: Sorting &

b.	Recognize and explain that the number of objects remains the same regardless of the arrangement or the order in which the objects are counted.	Unit 1: Numbers & Operations Level 1 Module 1: Representing 0-3 Unit 1: Numbers & Operations Level 1 Module 2: Representing 4-5 Unit 1: Numbers & Operations Level 1 Module 3: Comparing Unit 2: Number & Operations Level 2 Module 1: Representing 6-7 Unit 2: Number & Operations Level 2 Module 2: Representing 8-9 Unit 2: Number & Operations Level 2 Module 5: Addition & Subtraction Unit 2: Number & Operations Level 2 Module 6: Composing & Decomposing Unit 3: Number & Operations Level 3 Module 1: Composing & Decomposing 10 Unit 3: Number & Operations Level 3 Module 2: Numbers 10-15 Unit 3: Number & Operations Level 3 Module 3: Numbers 16-20 Unit 3: Number & Operations Level 3 Module 4: Place Value Unit 3: Number & Operations Level 3 Module 5: Word Problems Unit 4: Measurement, Geometry, & Data Module 2: Sorting &
c.	Represent forward counting by ones using a variety of tools, including five-frames, ten-frames, and number paths (a prelude to number lines).	Unit 1: Numbers & Operations Level 1 Module 3: Comparing Unit 1: Numbers & Operations Level 1 Module 6: Addition & Subtraction Unit 2: Number & Operations Level 2 Module 1: Representing 6-7 Unit 2: Number & Operations Level 2 Module 3: Addition Unit 2: Number & Operations Level 2 Module 4: Subtraction Unit 2: Number & Operations Level 2 Module 5: Addition & Subtraction Unit 3: Number & Operations Level 3 Module 1: Composing & Decomposing 10 Unit 3: Number & Operations Level 3 Module 2: Numbers 10-15
d.	Count forward orally by ones from 0 to 100.	Unit 1: Numbers & Operations Level 1 Module 1: Representing 0-3 Unit 1: Numbers & Operations Level 1 Module 2: Representing 4-5 Unit 1: Numbers & Operations Level 1 Module 3: Comparing Unit 1: Numbers & Operations Level 1 Module 6: Addition & Subtraction Unit 2: Number & Operations Level 2 Module 1: Representing 6-7 Unit 2: Number & Operations Level 2 Module 2: Representing 8-9 Unit 3: Number & Operations Level 3 Module 2: Numbers 10-15 Unit 3: Number & Operations Level 3 Module 3: Numbers 16-20 Unit 3: Number & Operations Level 3 Module 5: Word Problems Unit 3: Number & Operations Level 3 Module 6: Counting

e.	Count forward orally by ones, within 100, starting at any given number.	Unit 1: Numbers & Operations Level 1 Module 1: Representing 0-3 Unit 1: Numbers & Operations Level 1 Module 2: Representing 4-5 Unit 1: Numbers & Operations Level 1 Module 3: Comparing Unit 1: Numbers & Operations Level 1 Module 6: Addition & Subtraction Unit 2: Number & Operations Level 2 Module 1: Representing 6-7 Unit 2: Number & Operations Level 2 Module 2: Representing 8-9 Unit 3: Number & Operations Level 3 Module 2: Numbers 10-15 Unit 3: Number & Operations Level 3 Module 3: Numbers 16-20 Unit 3: Number & Operations Level 3 Module 5: Word Problems Unit 2: Number & Operations Level 2 Module 6: Counting
f.	Count backward orally by ones when given any number between 1 and 20.	Unit 1: Numbers & Operations Level 1 Module 1: Representing 0-3 Unit 1: Numbers & Operations Level 1 Module 2: Representing 4-5 Unit 1: Numbers & Operations Level 1 Module 3: Comparing Unit 1: Numbers & Operations Level 1 Module 6: Addition & Subtraction Unit 2: Number & Operations Level 2 Module 1: Representing 6-7 Unit 2: Number & Operations Level 2 Module 2: Representing 8-9 Unit 3: Number & Operations Level 3 Module 2: Numbers 10-15 Unit 3: Number & Operations Level 3 Module 3: Numbers 16-20 Unit 3: Number & Operations Level 3 Module 5: Word Problems
i.	Use objects, drawings, words, or numbers to compose and decompose numbers 11-19 into a ten and some ones.	Unit 1: Numbers & Operations Level 1 Module 4: Addition Unit 1: Numbers & Operations Level 1 Module 5: Subtraction Unit 1: Numbers & Operations Level 1 Module 6: Addition & Subtraction Unit 2: Number & Operations Level 2 Module 4: Subtraction Unit 2: Number & Operations Level 2 Module 5: Addition & Subtraction Unit 2: Number & Operations Level 2 Module 6: Composing & Decomposing Unit 3: Number & Operations Level 3 Module 1: Composing & Decomposing 10 Unit 3: Number & Operations Level 3 Module 2: Numbers 10-15 Unit 3: Number & Operations Level 3 Module 3: Numbers 16-20

j.	Group a collection of up to 100 objects (e.g., counters, pennies, cubes) into sets of ten and count by tens to determine the total (e.g., there	Unit 1: Numbers & Operations Level 1 Module 4: Addition Unit 1: Numbers & Operations Level 1 Module 6: Addition & Subtraction
Number and Number Sense		
K.NS.2. The student will identify, represent, and compare quantities up to 30.		
a.	Read, write, and identify the numerals 0 through 30.	Unit 1: Numbers & Operations Level 1 Module 1: Representing 0-3 Unit 1: Numbers & Operations Level 1 Module 2: Representing 4-5 Unit 1: Numbers & Operations Level 1 Module 6: Addition & Subtraction Unit 2: Number & Operations Level 2 Module 1: Representing 6-7 Unit 2: Number & Operations Level 2 Module 2: Representing 8-9 Unit 2: Number & Operations Level 2 Module 5: Addition & Subtraction Unit 3: Number & Operations Level 3 Module 1: Composing & Decomposing 10 Unit 3: Number & Operations Level 3 Module 2: Numbers 10-15 Unit 3: Number & Operations Level 3 Module 3: Numbers 16-20 Unit 3: Number & Operations Level 3 Module 4: Place Value
b.	Construct a set of objects that corresponds to a given numeral within 30, including an empty set.	Unit 1: Numbers & Operations Level 1 Module 1: Representing 0-3 Unit 1: Numbers & Operations Level 1 Module 2: Representing 4-5 Unit 1: Numbers & Operations Level 1 Module 3: Comparing Unit 2: Number & Operations Level 2 Module 1: Representing 6-7 Unit 2: Number & Operations Level 2 Module 2: Representing 8-9 Unit 2: Number & Operations Level 2 Module 5: Addition & Subtraction Unit 2: Number & Operations Level 2 Module 6: Composing & Decomposing Unit 3: Number & Operations Level 3 Module 1: Composing & Decomposing 10 Unit 3: Number & Operations Level 3 Module 2: Numbers 10-15 Unit 3: Number & Operations Level 3 Module 3: Numbers 16-20 Unit 3: Number & Operations Level 3 Module 4: Place Value Unit 3: Number & Operations Level 3 Module 5: Word Problems Unit 4: Measurement, Geometry, & Data Module 2: Sorting &

c.	Determine and write the numeral that corresponds to the total number of objects in a given set of 30 or fewer concrete objects or pictorial models.	Unit 3: Number & Operations Level 3 Module 2: Numbers 10-15 Unit 3: Number & Operations Level 3 Module 3: Numbers 16-20 Unit 3: Number & Operations Level 3 Module 4: Place Value Unit 3: Number & Operations Level 3 Module 6: Counting
d.	Given a set of up to 30 objects, construct another set which has more, fewer, or the same number of objects using concrete or pictorial models.	Unit 1: Numbers & Operations Level 1 Module 3: Comparing Unit 2: Number & Operations Level 2 Module 1: Representing 6-7 Unit 2: Number & Operations Level 2 Module 2: Representing 8-9 Unit 3: Number & Operations Level 3 Module 2: Numbers 10-15 Unit 3: Number & Operations Level 3 Module 3: Numbers 16-20 Unit 4: Measurement, Geometry, & Data Module 3: Data
e.	Given a numeral up to 30, construct a set which has more, fewer, or the same number of objects using concrete or pictorial models.	Unit 1: Numbers & Operations Level 1 Module 3: Comparing Unit 2: Number & Operations Level 2 Module 1: Representing 6-7 Unit 2: Number & Operations Level 2 Module 2: Representing 8-9 Unit 3: Number & Operations Level 3 Module 2: Numbers 10-15 Unit 3: Number & Operations Level 3 Module 3: Numbers 16-20 Unit 4: Measurement, Geometry, & Data Module 3: Data
f.	Compare two sets containing up to 30 concrete objects or pictorial models, using the terms more, fewer, or the same as (equal to).	Unit 1: Numbers & Operations Level 1 Module 3: Comparing Unit 1: Numbers & Operations Level 1 Module 6: Addition & Subtraction Unit 2: Number & Operations Level 2 Module 1: Representing 6-7 Unit 2: Number & Operations Level 2 Module 3: Addition Unit 2: Number & Operations Level 2 Module 4: Subtraction Unit 2: Number & Operations Level 2 Module 5: Addition & Subtraction Unit 3: Number & Operations Level 3 Module 1: Composing & Decomposing 10 Unit 3: Number & Operations Level 3 Module 2: Numbers 10-15

g.	Compare numbers up to 30, to the benchmarks of 5 and 10 using various models (e.g., five frames, ten frames, number paths [a prelude to number lines], beaded racks, hands) using the terms greater than, less than, or the same as (equal to).	Unit 1: Numbers & Operations Level 1 Module 3: Comparing Unit 1: Numbers & Operations Level 1 Module 6: Addition & Subtraction Unit 2: Number & Operations Level 2 Module 1: Representing 6-7 Unit 2: Number & Operations Level 2 Module 3: Addition Unit 2: Number & Operations Level 2 Module 4: Subtraction Unit 2: Number & Operations Level 2 Module 5: Addition & Subtraction Unit 3: Number & Operations Level 3 Module 1: Composing & Decomposing 10 Unit 3: Number & Operations Level 3 Module 2: Numbers 10-15 Unit 3: Number & Operations Level 3 Module 3: Numbers 16-20
Computation and Estimation		
K.CE.1.	The student will model and solve single-step contextual problems using addition and subtraction with whole numbers within 10.	
a.	Use objects, drawings, words, or numbers to compose and decompose numbers less than or equal to 5 in multiple ways.	Unit 1: Numbers & Operations Level 1 Module 4: Addition Unit 1: Numbers & Operations Level 1 Module 5: Subtraction Unit 1: Numbers & Operations Level 1 Module 6: Addition & Subtraction Unit 2: Number & Operations Level 2 Module 4: Subtraction Unit 2: Number & Operations Level 2 Module 5: Addition & Subtraction Unit 2: Number & Operations Level 2 Module 6: Composing & Decomposing Unit 3: Number & Operations Level 3 Module 1: Composing & Decomposing 10 Unit 3: Number & Operations Level 3 Module 2: Numbers 10-15 Unit 3: Number & Operations Level 3 Module 3: Numbers 16-20

b.	Recognize and describe with fluency part-part-whole relationships for numbers up to 5 in a variety of configurations.	Unit 1: Numbers & Operations Level 1 Module 4: Addition Unit 1: Numbers & Operations Level 1 Module 5: Subtraction Unit 1: Numbers & Operations Level 1 Module 6: Addition & Subtraction Unit 2: Number & Operations Level 2 Module 4: Subtraction Unit 2: Number & Operations Level 2 Module 5: Addition & Subtraction Unit 2: Number & Operations Level 2 Module 6: Composing & Decomposing Unit 3: Number & Operations Level 3 Module 1: Composing & Decomposing 10 Unit 3: Number & Operations Level 3 Module 2: Numbers 10-15 Unit 3: Number & Operations Level 3 Module 3: Numbers 16-20
c.	Model and identify the number that makes 5 when added to a given number less than or equal to 5.	Unit 1: Numbers & Operations Level 1 Module 4: Addition Unit 1: Numbers & Operations Level 1 Module 5: Subtraction Unit 1: Numbers & Operations Level 1 Module 6: Addition & Subtraction Unit 2: Number & Operations Level 2 Module 4: Subtraction Unit 2: Number & Operations Level 2 Module 5: Addition & Subtraction Unit 2: Number & Operations Level 2 Module 6: Composing & Decomposing Unit 3: Number & Operations Level 3 Module 1: Composing & Decomposing 10 Unit 3: Number & Operations Level 3 Module 2: Numbers 10-15 Unit 3: Number & Operations Level 3 Module 3: Numbers 16-20
d.	Use objects, drawings, words, or numbers to compose and decompose numbers less than or equal to 10 in multiple ways.	Unit 1: Numbers & Operations Level 1 Module 4: Addition Unit 1: Numbers & Operations Level 1 Module 5: Subtraction Unit 1: Numbers & Operations Level 1 Module 6: Addition & Subtraction Unit 2: Number & Operations Level 2 Module 4: Subtraction Unit 2: Number & Operations Level 2 Module 5: Addition & Subtraction Unit 2: Number & Operations Level 2 Module 6: Composing & Decomposing Unit 3: Number & Operations Level 3 Module 1: Composing & Decomposing 10 Unit 3: Number & Operations Level 3 Module 2: Numbers 10-15 Unit 3: Number & Operations Level 3 Module 3: Numbers 16-20

e.	Model and identify the number that makes 10 when added to a given number less than or equal to 10.	Unit 1: Numbers & Operations Level 1 Module 4: Addition Unit 1: Numbers & Operations Level 1 Module 5: Subtraction Unit 1: Numbers & Operations Level 1 Module 6: Addition & Subtraction Unit 2: Number & Operations Level 2 Module 4: Subtraction Unit 2: Number & Operations Level 2 Module 5: Addition & Subtraction Unit 2: Number & Operations Level 2 Module 6: Composing & Decomposing Unit 3: Number & Operations Level 3 Module 1: Composing & Decomposing 10 Unit 3: Number & Operations Level 3 Module 2: Numbers 10-15 Unit 3: Number & Operations Level 3 Module 3: Numbers 16-20
f.	Model and solve single-step contextual problems (join, separate, and part-part-whole) using 10 or fewer concrete objects.	Unit 1: Numbers & Operations Level 1 Module 1: Representing 0-3 Unit 1: Numbers & Operations Level 1 Module 2: Representing 4-5 Unit 1: Numbers & Operations Level 1 Module 3: Comparing Unit 1: Numbers & Operations Level 1 Module 4: Addition Unit 1: Numbers & Operations Level 1 Module 5: Subtraction Unit 1: Numbers & Operations Level 1 Module 6: Addition & Subtraction Unit 2: Number & Operations Level 2 Module 1: Representing 6-7 Unit 2: Number & Operations Level 2 Module 2: Representing 8-9 Unit 2: Number & Operations Level 2 Module 3: Addition Unit 2: Number & Operations Level 2 Module 4: Subtraction Unit 2: Number & Operations Level 2 Module 5: Addition & Subtraction Unit 2: Number & Operations Level 2 Module 6: Composing & Decomposing Unit 3: Number & Operations Level 3 Module 1: Composing & Decomposing 10 Unit 3: Number & Operations Level 3 Module 2: Numbers 10-15 Unit 3: Number & Operations Level 3 Module 3: Numbers 16-20 Unit 3: Number & Operations Level 3 Module 5: Word Problems
Measurement and Geometry		
K.MG.1. The student will reason mathematically by making direct comparisons between two objects or events using the attributes of length,		
a.	Use direct comparisons to compare, describe,	

i.	lengths of two objects using the terms longer or shorter;	Unit 4: Measurement, Geometry, & Data Module 1: Describing Length
ii.	heights of two objects using the terms taller or shorter;	Unit 4: Measurement, Geometry, & Data Module 1: Describing Length
iii.	weights of two objects using the terms heavier or lighter;	Unit 4: Measurement, Geometry, & Data Module 1: Describing Length
Measurement and Geometry		
K.MG.2. The student will identify, describe, name, compare, and construct plane figures (circles, triangles, squares, and rectangles).		
e.	Compare and contrast two plane figures using characteristics to describe similarities and	Unit 4: Measurement, Geometry, & Data Module 3: Data Unit 4: Measurement, Geometry, & Data Module 4: 2-D Shapes
Probability and Statistics		
K.PS.1. The student will apply the data cycle (pose questions; collect or acquire data; organize and represent data; and analyze data and communicate results) with a focus on object		
a.	Sort and classify concrete objects into appropriate subsets (categories) based on one attribute (e.g., size, shape, color, thickness).	Unit 4: Measurement, Geometry, & Data Module 5: 3-D Shapes
b.	Describe and label attributes (e.g., size, color, shape) of a set of objects (e.g., coins, counters,	Unit 4: Measurement, Geometry, & Data Module 5: 3-D Shapes

c.	Pose questions, given a predetermined context, that require the collection of data (limited to 25 or fewer data points for no more than four	Unit 4: Measurement, Geometry, & Data Module 3: Data Unit 4: Measurement, Geometry, & Data Module 5: 3-D Shapes
d.	Determine the data needed to answer a posed question, and collect the data using various methods (e.g., counting objects, drawing pictures).	Unit 1: Numbers & Operations Level 1 Module 1: Representing 0-3 Unit 1: Numbers & Operations Level 1 Module 2: Representing 4-5 Unit 1: Numbers & Operations Level 1 Module 3: Comparing Unit 1: Numbers & Operations Level 1 Module 6: Addition & Subtraction Unit 2: Number & Operations Level 2 Module 1: Representing 6-7 Unit 2: Number & Operations Level 2 Module 2: Representing 8-9 Unit 2: Number & Operations Level 2 Module 3: Addition Unit 2: Number & Operations Level 2 Module 4: Subtraction Unit 2: Number & Operations Level 2 Module 5: Addition & Subtraction Unit 2: Number & Operations Level 2 Module 6: Composing & Decomposing Unit 3: Number & Operations Level 3 Module 1: Composing & Decomposing 10 Unit 3: Number & Operations Level 3 Module 2: Numbers 10-15 Unit 3: Number & Operations Level 3 Module 3: Numbers 16-20 Unit 3: Number & Operations Level 3 Module 5: Word Problems
Probability and Statistics		
K.PS.1.	The student will apply the data cycle (pose questions; collect or acquire data; organize and represent data; and analyze data and communicate results) with a focus on object	
g.	Analyze data represented in object graphs and picture graphs and communicate results:	
i.	ask and answer questions about the data represented in object graphs and picture graphs (e.g., how many in each category, which categories have the greatest, least, or the same	Unit 4: Measurement, Geometry, & Data Module 3: Data Unit 4: Measurement, Geometry, & Data Module 5: 3-D Shapes

Grade: 1 - Adopted: 2023

Number and Number Sense		
1.NS.1. The student will utilize flexible counting strategies to determine and describe quantities		
a.	Count forward orally by ones from 0 to 120 starting at any number between 0 and 120.	Unit 1: Numbers & Operations Level 1 Module 1: Counting Unit 2: Numbers & Operations Level 2 Module 4: Backward Counting Unit 3: Numbers & Operations Level 3 Module 1: Place Value
b.	Count backward orally by ones when given any number between 1 and 30.	Unit 1: Numbers & Operations Level 1 Module 1: Counting Unit 1: Numbers & Operations Level 1 Module 5: Subtraction within 9 Unit 2: Numbers & Operations Level 2 Module 4: Backward Counting
c.	Represent forward counting patterns when counting by groups of 5 and groups of 10 up to 120 using a variety of tools (e.g., objects, coins,	Unit 3: Numbers & Operations Level 3 Module 4: Addition Strategies
e.	Group a collection of up to 120 objects into tens and ones, and count to determine the total (e.g., 5 groups of ten and 6 ones is equal to 56 total	Unit 3: Numbers & Operations Level 3 Module 4: Addition Strategies
f.	Identify a penny, nickel, and dime by their attributes and describe the number of pennies	Unit 4: Measurement, Geometry & Data Module 1: Time & Money
g.	Count by ones, fives, or tens to determine the value of a collection of like coins (pennies, nickels, or dimes), whose total value is 100 cents	Unit 4: Measurement, Geometry & Data Module 1: Time & Money
Number and Number Sense		

1.NS.2. The student will represent, compare, and order quantities up to 120.		
a.	Read and write numerals 0-120 in sequence and out of sequence.	Unit 1: Numbers & Operations Level 1 Module 2: TouchPoints Unit 2: Numbers & Operations Level 2 Module 1: Place Value Unit 3: Numbers & Operations Level 3 Module 1: Place Value
c.	Create a concrete or pictorial representation of a number using tens and ones and write the corresponding numeral up to 120 (e.g., 47 can be represented as 47 ones or it can be grouped into	Unit 1: Numbers & Operations Level 1 Module 2: TouchPoints
d.	Describe the number of groups of tens and ones when given a two-digit number and justify	Unit 1: Numbers & Operations Level 1 Module 2: TouchPoints Unit 3: Numbers & Operations Level 3 Module 4: Addition Strategies
e.	Compare two numbers between 0 and 120 represented pictorially or with concrete objects using the terms greater than, less than, or equal to.	Unit 1: Numbers & Operations Level 1 Module 2: TouchPoints Unit 1: Numbers & Operations Level 1 Module 4: Addition within 9 Unit 1: Numbers & Operations Level 1 Module 5: Subtraction within 9 Unit 1: Numbers & Operations Level 1 Module 6: Within 9 Unit 2: Numbers & Operations Level 2 Module 1: Place Value Unit 2: Numbers & Operations Level 2 Module 2: Addition within 13 Unit 2: Numbers & Operations Level 2 Module 3: Addition within 20 Unit 2: Numbers & Operations Level 2 Module 4: Backward Counting Unit 2: Numbers & Operations Level 2 Module 5: Subtraction within 20 Unit 2: Numbers & Operations Level 2 Module 6: Within 20 Unit 3: Numbers & Operations Level 3 Module 1: Place Value Unit 3: Numbers & Operations Level 3 Module 2: Addition within 100 Unit 3: Numbers & Operations Level 3 Module 3: Mixed Addition Unit 3: Numbers & Operations Level 3 Module 4: Addition Strategies Unit 3: Numbers & Operations Level 3 Module 5: Subtraction within 100
Number and Number Sense		

1.NS.3. The student will use mathematical reasoning and justification to solve contextual problems that involve partitioning models into two and four		
c.	Describe and justify how shares are equal pieces or equal parts of the whole (limited to halves, fourths) when given a contextual	Unit 4: Measurement, Geometry & Data Module 4: 2-D Shapes Unit 4: Measurement, Geometry & Data Module 6: Fractional Parts of Shapes
Computation and Estimation		
1.CE.1. The student will recall with automaticity addition and subtraction facts within 10 and represent, solve, and justify solutions to single-step problems, including those in context, using		
b.	Demonstrate fluency with addition and subtraction within 10 by applying reasoning strategies (e.g., count on/count back, one more/one less, doubles, make ten).	Unit 1: Numbers & Operations Level 1 Module 3: Within 5 Unit 1: Numbers & Operations Level 1 Module 4: Addition within 9 Unit 1: Numbers & Operations Level 1 Module 5: Subtraction within 9 Unit 1: Numbers & Operations Level 1 Module 6: Within 9 Unit 2: Numbers & Operations Level 2 Module 2: Addition within 13 Unit 2: Numbers & Operations Level 2 Module 3: Addition within 20 Unit 2: Numbers & Operations Level 2 Module 5: Subtraction within 20 Unit 2: Numbers & Operations Level 2 Module 6: Within 20 Unit 3: Numbers & Operations Level 3 Module 2: Addition within 100 Unit 3: Numbers & Operations Level 3 Module 4: Addition Strategies
c.	Recall with automaticity addition and subtraction facts within 10.	Unit 1: Numbers & Operations Level 1 Module 3: Within 5 Unit 1: Numbers & Operations Level 1 Module 4: Addition within 9 Unit 1: Numbers & Operations Level 1 Module 5: Subtraction within 9 Unit 1: Numbers & Operations Level 1 Module 6: Within 9 Unit 2: Numbers & Operations Level 2 Module 2: Addition within 13 Unit 2: Numbers & Operations Level 2 Module 3: Addition within 20 Unit 2: Numbers & Operations Level 2 Module 5: Subtraction within 20 Unit 2: Numbers & Operations Level 2 Module 6: Within 20 Unit 3: Numbers & Operations Level 3 Module 2: Addition within 100 Unit 3: Numbers & Operations Level 3 Module 4: Addition Strategies

d.	Investigate, recognize, and describe part-part-whole relationships for numbers up to 20 in a variety of configurations (e.g., beaded racks, double ten frames).	Unit 1: Numbers & Operations Level 1 Module 2: TouchPoints Unit 1: Numbers & Operations Level 1 Module 4: Addition within 9 Unit 1: Numbers & Operations Level 1 Module 5: Subtraction within 9 Unit 1: Numbers & Operations Level 1 Module 6: Within 9 Unit 2: Numbers & Operations Level 2 Module 3: Addition within 20 Unit 2: Numbers & Operations Level 2 Module 5: Subtraction within 20 Unit 2: Numbers & Operations Level 2 Module 6: Within 20 Unit 3: Numbers & Operations Level 3 Module 2: Addition within 100 Unit 3: Numbers & Operations Level 3 Module 3: Mixed Addition Unit 3: Numbers & Operations Level 3 Module 4: Addition Strategies Unit 3: Numbers & Operations Level 3 Module 5: Subtraction within 100
f.	Represent, solve, and justify solutions to single-step addition and subtraction problems (join, separate, and part-part-whole) within 20, including those in context, using words, objects, drawings, or numbers.	Unit 1: Numbers & Operations Level 1 Module 3: Within 5 Unit 1: Numbers & Operations Level 1 Module 4: Addition within 9 Unit 1: Numbers & Operations Level 1 Module 5: Subtraction within 9 Unit 1: Numbers & Operations Level 1 Module 6: Within 9 Unit 2: Numbers & Operations Level 2 Module 3: Addition within 20 Unit 2: Numbers & Operations Level 2 Module 5: Subtraction within 20 Unit 2: Numbers & Operations Level 2 Module 6: Within 20 Unit 3: Numbers & Operations Level 3 Module 2: Addition within 100 Unit 3: Numbers & Operations Level 3 Module 3: Mixed Addition Unit 3: Numbers & Operations Level 3 Module 4: Addition Strategies Unit 3: Numbers & Operations Level 3 Module 5: Subtraction within 100
g.	Determine the unknown whole number that will result in a sum or difference of 10 or 20 (e.g., $14 - \underline{\hspace{1cm}} = 10$ or $15 + \underline{\hspace{1cm}} = 20$).	Unit 1: Numbers & Operations Level 1 Module 3: Within 5 Unit 2: Numbers & Operations Level 2 Module 2: Addition within 13 Unit 2: Numbers & Operations Level 2 Module 3: Addition within 20 Unit 2: Numbers & Operations Level 2 Module 6: Within 20 Unit 3: Numbers & Operations Level 3 Module 2: Addition within 100 Unit 3: Numbers & Operations Level 3 Module 3: Mixed Addition Unit 3: Numbers & Operations Level 3 Module 5: Subtraction within 100 Unit 3: Numbers & Operations Level 3 Module 6: Subtraction within 100
Measurement and Geometry		

1.MG.1. The student will reason mathematically using nonstandard units to measure and compare		
a.	Use nonstandard units to measure the:	
i.	lengths of two objects (units laid end to end with no gaps or overlaps) and compare the measurements using the terms longer/shorter,	Unit 4: Measurement, Geometry & Data Module 2: Length
Measurement and Geometry		
1.MG.1. The student will reason mathematically using nonstandard units to measure and compare		
b.	Measure the length, weight, or volume of the same object or container with two different units and describe how and why the measurements	Unit 4: Measurement, Geometry & Data Module 2: Length
Measurement and Geometry		
1.MG.2. The student will describe, sort, draw, and name plane figures (circles, triangles, squares, and rectangles), and compose larger plane figures b		
a.	Describe triangles, squares, and rectangles using the terms sides, vertices, and angles. Describe a circle using terms such as round and	Unit 4: Measurement, Geometry & Data Module 4: 2-D Shapes
b.	Sort plane figures based on their characteristics (e.g., number of sides, vertices, angles, curved).	Unit 4: Measurement, Geometry & Data Module 4: 2-D Shapes
c.	Draw and name the plane figure (circle, square, rectangle, triangle) when given information about the number of sides, vertices, and angles.	Unit 4: Measurement, Geometry & Data Module 4: 2-D Shapes
d.	Identify, name, and describe representations of circles, squares, rectangles, and triangles, regardless of orientation, in different	Unit 4: Measurement, Geometry & Data Module 4: 2-D Shapes

e.	Recognize and name the angles found in rectangles and squares as right angles.	Unit 4: Measurement, Geometry & Data Module 4: 2-D Shapes
f.	Compose larger plane figures by combining two or three simple plane figures (triangles, squares,	Unit 4: Measurement, Geometry & Data Module 4: 2-D Shapes
Measurement and Geometry		
1.MG.3	The student will demonstrate an understanding of the concept of passage of time (to the nearest hour and half-hour) and the calendar.	
c.	Tell time to the hour and half-hour, using analog and digital clocks.	Unit 4: Measurement, Geometry & Data Module 1: Time & Money
d.	Describe the location of the hour hand relative to time to the hour and half-hour on an analog	Unit 4: Measurement, Geometry & Data Module 1: Time & Money
e.	Describe the location of the minute hand relative to time to the hour and half-hour on an analog	Unit 4: Measurement, Geometry & Data Module 1: Time & Money
f.	Match the time shown on a digital clock to an analog clock to the hour and half-hour.	
Probability and Statistics		
1.PS.1.	The student will apply the data cycle (pose questions; collect or acquire data; organize and represent data; and analyze data and communicate results) with a focus on object	
b.	Describe and label attributes of a set of objects that has been sorted.	Unit 4: Measurement, Geometry & Data Module 5: 3-D Shapes

d.	Determine the data needed to answer a posed question and collect the data using various methods (e.g., counting objects, drawing pictures, tallying).	Unit 1: Numbers & Operations Level 1 Module 1: Counting Unit 1: Numbers & Operations Level 1 Module 2: TouchPoints Unit 2: Numbers & Operations Level 2 Module 4: Backward Counting Unit 3: Numbers & Operations Level 3 Module 1: Place Value
e.	Organize and represent a data set by sorting the collected data using various methods (e.g.,	Unit 4: Measurement, Geometry & Data Module 3: Data
f.	Represent a data set (vertically or horizontally) using object graphs, picture graphs, and tables.	Unit 4: Measurement, Geometry & Data Module 3: Data
Probability and Statistics		
1.PS.1.	The student will apply the data cycle (pose questions; collect or acquire data; organize and represent data; and analyze data and communicate results) with a focus on object	
g.	Analyze data represented in object graphs, picture graphs, and tables and communicate	
ii.	draw conclusions about the data and make predictions based on the data.	Unit 4: Measurement, Geometry & Data Module 3: Data
Patterns, Functions, and Algebra		
1.PFA.1	The student will identify, describe, extend, create, and transfer repeating patterns and increasing patterns using various representations.	
a.	Identify and describe repeating and increasing patterns.	Unit 2: Numbers & Operations Level 2 Module 4: Backward Counting Unit 3: Numbers & Operations Level 3 Module 1: Place Value
b.	Analyze a repeating or increasing pattern and generalize the change to extend the pattern using objects, colors, movements, pictures, or	Unit 2: Numbers & Operations Level 2 Module 4: Backward Counting Unit 3: Numbers & Operations Level 3 Module 1: Place Value

c.	Create a repeating or increasing pattern using objects, pictures, movements, colors, or	Unit 2: Numbers & Operations Level 2 Module 4: Backward Counting Unit 3: Numbers & Operations Level 3 Module 1: Place Value
d.	Transfer a repeating or increasing pattern from one form to another.	Unit 2: Numbers & Operations Level 2 Module 4: Backward Counting Unit 3: Numbers & Operations Level 3 Module 1: Place Value

Grade: 2 - Adopted: 2023

Grade: 2 - Adopted: 2023		
Number and Number Sense		
2.NS.1. The student will utilize flexible counting strategies to determine and describe quantities		
a.	Represent forward counting patterns when counting by groups of 2 up to at least 50, starting at various multiples of 2 and using a variety of	Unit 1: Addition & Subtraction Level 1 Module 2: Addition Unit 3: Operations with Multi-Digit Numbers Module 5: Multiplication 1
b.	Represent forward counting patterns created when counting by groups of 5s, 10s, and 25s starting at various multiples up to at least 200 using a variety of tools (e.g., objects, number lines, hundreds charts).	Unit 1: Addition & Subtraction Level 1 Module 2: Addition Unit 2: Addition & Subtraction Level 2 Module 2: Counting & Reading Unit 2: Addition & Subtraction Level 2 Module 3: Reading & Writing Unit 3: Operations with Multi-Digit Numbers Module 1: Multiples of 10 & 100 Unit 3: Operations with Multi-Digit Numbers Module 6: Multiplication 2 Unit 4: Measurement, Geometry & Data Module 1: Time Unit 4: Measurement, Geometry & Data Module 2: Money
c.	Describe and use patterns in skip counting by multiples of 2 (to at least 50), and multiples of 5, 10, and 25 (to at least 200) to justify the next number in the counting sequence.	Unit 1: Addition & Subtraction Level 1 Module 2: Addition Unit 1: Addition & Subtraction Level 1 Module 4: Subtraction Unit 1: Addition & Subtraction Level 1 Module 1: Within 13 Unit 2: Addition & Subtraction Level 2 Module 2: Counting & Reading Unit 2: Addition & Subtraction Level 2 Module 3: Reading & Writing Unit 3: Operations with Multi-Digit Numbers Module 1: Multiples of 10 & 100 Unit 3: Operations with Multi-Digit Numbers Module 5: Multiplication 1 Unit 3: Operations with Multi-Digit Numbers Module 6: Multiplication 2 Unit 4: Measurement, Geometry & Data Module 1: Time

d.	Represent forward counting patterns when counting by groups of 100 up to at least 1,000 starting at 0 using a variety of tools (e.g., objects, number lines, calculators, one thousand charts).	Unit 1: Addition & Subtraction Level 1 Module 2: Addition Unit 1: Addition & Subtraction Level 1 Module 4: Subtraction Unit 1: Addition & Subtraction Level 1 Module 1: Within 13 Unit 2: Addition & Subtraction Level 2 Module 2: Counting & Reading Unit 2: Addition & Subtraction Level 2 Module 3: Reading & Writing Unit 3: Operations with Multi-Digit Numbers Module 1: Multiples of 10 & 100 Unit 3: Operations with Multi-Digit Numbers Module 6: Multiplication 2 Unit 4: Measurement, Geometry & Data Module 1: Time Unit 4: Measurement, Geometry & Data Module 2: Money
e.	Represent backward counting patterns when counting by groups of 10 from 200 or less using a variety of tools including objects, number lines, calculators, and hundreds charts.	Unit 1: Addition & Subtraction Level 1 Module 2: Addition Unit 1: Addition & Subtraction Level 1 Module 3: Backward Counting Unit 1: Addition & Subtraction Level 1 Module 4: Subtraction Unit 1: Addition & Subtraction Level 1 Module 1: Within 13 Unit 2: Addition & Subtraction Level 2 Module 2: Counting & Reading Unit 2: Addition & Subtraction Level 2 Module 3: Reading & Writing Unit 3: Operations with Multi-Digit Numbers Module 1: Multiples of 10 & 100 Unit 3: Operations with Multi-Digit Numbers Module 6: Multiplication 2 Unit 4: Measurement, Geometry & Data Module 1: Time Unit 4: Measurement, Geometry & Data Module 2: Money
f.	Describe and use patterns in skip counting backwards by 10s (from at least 200) to justify the next number in the counting sequence.	Unit 1: Addition & Subtraction Level 1 Module 3: Backward Counting Unit 2: Addition & Subtraction Level 2 Module 2: Counting & Reading Unit 2: Addition & Subtraction Level 2 Module 3: Reading & Writing Unit 3: Operations with Multi-Digit Numbers Module 1: Multiples of 10 & 100 Unit 4: Measurement, Geometry & Data Module 2: Money
h.	Represent even numbers (up to 50) with concrete objects, using two equal groups or two	Unit 3: Operations with Multi-Digit Numbers Module 5: Multiplication 1
i.	Represent odd numbers (up to 50) with concrete objects, using two equal groups with one leftover	Unit 3: Operations with Multi-Digit Numbers Module 5: Multiplication 1

j.	Determine whether a number (up to 50) is even or odd using concrete objects and justify reasoning (e.g., dividing collections of objects)	Unit 3: Operations with Multi-Digit Numbers Module 5: Multiplication 1
Number and Number Sense		
2.NS.2. The student will demonstrate an understanding of the ten-to-one relationships of the base 10 number system to represent, compare, and order		
a.	Write the three-digit whole number represented by a given model (e.g., concrete objects, pictures)	Unit 1: Addition & Subtraction Level 1 Module 2: Addition Unit 2: Addition & Subtraction Level 2 Module 1: Place Value
b.	Read, write, and represent three-digit numbers in standard form, expanded form, and word form, using concrete or pictorial representations.	Unit 1: Addition & Subtraction Level 1 Module 1: Forward Counting Unit 1: Addition & Subtraction Level 1 Module 3: Backward Counting Unit 2: Addition & Subtraction Level 2 Module 1: Place Value Unit 2: Addition & Subtraction Level 2 Module 2: Counting & Reading Unit 2: Addition & Subtraction Level 2 Module 3: Reading & Writing Unit 2: Addition & Subtraction Level 2 Module 6: Within 100
d.	Investigate and explain the ten-to-one relationships among ones, tens, and hundreds,	Unit 1: Addition & Subtraction Level 1 Module 3: Backward Counting
e.	Compose and decompose whole numbers up to 200 by making connections between a variety of models (e.g., base 10 blocks, place value cards, presented orally, in expanded or standard form) and counting strategies (e.g., 156 can be 1	Unit 1: Addition & Subtraction Level 1 Module 1: Forward Counting Unit 1: Addition & Subtraction Level 1 Module 2: Addition Unit 1: Addition & Subtraction Level 1 Module 3: Backward Counting Unit 2: Addition & Subtraction Level 2 Module 1: Place Value

f.	Plot and justify the position of a given number up to 100 on a number line with pre-marked benchmarks of 1s, 2s, 5s, 10s, or 25s.	Unit 1: Addition & Subtraction Level 1 Module 1: Forward Counting Unit 1: Addition & Subtraction Level 1 Module 2: Addition Unit 1: Addition & Subtraction Level 1 Module 3: Backward Counting Unit 1: Addition & Subtraction Level 1 Module 4: Subtraction Unit 2: Addition & Subtraction Level 2 Module 1: Place Value Unit 2: Addition & Subtraction Level 2 Module 2: Counting & Reading Unit 3: Operations with Multi-Digit Numbers Module 1: Multiples of 10 & 100 Unit 3: Operations with Multi-Digit Numbers Module 2: Addition within 1,000 Unit 3: Operations with Multi-Digit Numbers Module 3: Subtraction within 1,000 Unit 3: Operations with Multi-Digit Numbers Module 4: Mixed Operations
g.	Compare two whole numbers, each 999 or less, represented concretely, pictorially, or symbolically, using words (greater than, less than, or equal to) and symbols ($>$, $<$, or $=$). Justify	
h.	Order up to three whole numbers, each 999 or less, represented concretely, pictorially, or symbolically from least to greatest and greatest to least.	Unit 1: Addition & Subtraction Level 1 Module 1: Forward Counting Unit 1: Addition & Subtraction Level 1 Module 2: Addition Unit 1: Addition & Subtraction Level 1 Module 3: Backward Counting Unit 1: Addition & Subtraction Level 1 Module 4: Subtraction Unit 2: Addition & Subtraction Level 2 Module 1: Place Value Unit 2: Addition & Subtraction Level 2 Module 2: Counting & Reading Unit 3: Operations with Multi-Digit Numbers Module 1: Multiples of 10 & 100 Unit 3: Operations with Multi-Digit Numbers Module 2: Addition within 1,000 Unit 3: Operations with Multi-Digit Numbers Module 3: Subtraction within 1,000 Unit 3: Operations with Multi-Digit Numbers Module 4: Mixed Operations
Number and Number Sense		

2.NS.3. The student will use mathematical reasoning and justification to solve contextual problems that involve partitioning models into equal-sized		
a.	Model and describe fractions as representing equal-size parts of a whole.	Unit 4: Measurement, Geometry & Data Module 6: Geometry
b.	Describe the relationship between the number of fractional parts needed to make a whole and the size of the parts (i.e., as the whole is divided into	Unit 4: Measurement, Geometry & Data Module 6: Geometry
c.	Compose the whole for a given fractional part and its value (in context) for halves, fourths, eighths, thirds, and sixths (e.g., when given $\frac{1}{4}$, determine how many pieces would be needed to	Unit 4: Measurement, Geometry & Data Module 6: Geometry
d.	Using same-size fraction pieces, from a region/area model, count by unit fractions up to two wholes (e.g., zero one-fourths, one one-fourth, two one-fourths, three one-fourths, four one-fourths, five one-fourths; or zero-fourths, one-	Unit 4: Measurement, Geometry & Data Module 6: Geometry
Number and Number Sense		
2.NS.3. The student will use mathematical reasoning and justification to solve contextual problems that involve partitioning models into equal-sized		
e.	Given a context, represent, name, and write fractional parts of a whole for halves, fourths,	
i.	region/area models (e.g., pie pieces, pattern blocks, geoboards);	Unit 3: Operations with Multi-Digit Numbers Module 6: Multiplication 2

	Number and Number Sense	
2.NS.4.	The student will solve problems that involve counting and representing money amounts up to	
a.	Identify a quarter and its value and determine multiple ways to represent the value of a quarter using pennies, nickels, and/or dimes.	Unit 4: Measurement, Geometry & Data Module 2: Money
b.	Count by ones, fives, tens, and twenty-fives to determine the value of a collection of mixed coins and one-dollar bills whose total value is	Unit 4: Measurement, Geometry & Data Module 2: Money
c.	Construct a set of coins and/or bills to total a given amount of money whose value is \$2.00 or	Unit 4: Measurement, Geometry & Data Module 2: Money
d.	Represent the value of a collection of coins and one-dollar bills (limited to \$2.00 or less) using the cent (¢) and dollar (\$) symbols and decimal	Unit 4: Measurement, Geometry & Data Module 2: Money
	Computation and Estimation	
2.CE.1.	The student will recall with automaticity addition and subtraction facts within 20 and estimate, represent, solve, and justify solutions to single-step and multistep problems, including those in context, using addition and subtraction with	

b.	Apply strategies (e.g., the use of concrete and pictorial models, place value, properties of addition, the relationship between addition and subtraction) to determine the sum or difference of two whole numbers where addends or minuends do not exceed 100.	Unit 1: Addition & Subtraction Level 1 Module 4: Subtraction Unit 1: Addition & Subtraction Level 1 Module 3: Within 50 Unit 1: Addition & Subtraction Level 1 Module 4: Addition with Regrouping Unit 1: Addition & Subtraction Level 1 Module 5: Subtraction with Regrouping Unit 1: Addition & Subtraction Level 1 Module 6: Mixed Regrouping Unit 2: Addition & Subtraction Level 2 Module 4: Addition within 100 Unit 2: Addition & Subtraction Level 2 Module 5: Subtraction within 100 Unit 2: Addition & Subtraction Level 2 Module 6: Within 100 Unit 3: Operations with Multi-Digit Numbers Module 1: Multiples of 10 & 100 Unit 3: Operations with Multi-Digit Numbers Module 2: Addition within 1,000 Unit 3: Operations with Multi-Digit Numbers Module 3: Subtraction within 1,000
c.	Represent, solve, and justify solutions to single-step and multistep contextual problems (e.g., join, separate, part-part-whole, comparison) involving addition or subtraction of whole numbers where addends or minuends do not exceed 100.	Unit 1: Addition & Subtraction Level 1 Module 2: Addition Unit 1: Addition & Subtraction Level 1 Module 4: Subtraction Unit 1: Addition & Subtraction Level 1 Module 1: Within 13 Unit 1: Addition & Subtraction Level 1 Module 2: Within 20 Unit 1: Addition & Subtraction Level 1 Module 3: Within 50 Unit 1: Addition & Subtraction Level 1 Module 4: Addition with Regrouping Unit 1: Addition & Subtraction Level 1 Module 5: Subtraction with Regrouping Unit 1: Addition & Subtraction Level 1 Module 6: Mixed Regrouping Unit 2: Addition & Subtraction Level 2 Module 4: Addition within 100 Unit 2: Addition & Subtraction Level 2 Module 5: Subtraction within 100 Unit 2: Addition & Subtraction Level 2 Module 6: Within 100 Unit 3: Operations with Multi-Digit Numbers Module 1: Multiples of 10 & 100 Unit 3: Operations with Multi-Digit Numbers Module 2: Addition within 1,000 Unit 3: Operations with Multi-Digit Numbers Module 3: Subtraction within 1,000

d.	Demonstrate fluency with addition and subtraction within 20 by applying reasoning strategies (e.g., doubles, near doubles, make-a-ten, compensations, inverse relationships).	Unit 1: Addition & Subtraction Level 1 Module 2: Addition Unit 1: Addition & Subtraction Level 1 Module 4: Subtraction Unit 1: Addition & Subtraction Level 1 Module 1: Within 13 Unit 1: Addition & Subtraction Level 1 Module 2: Within 20 Unit 1: Addition & Subtraction Level 1 Module 3: Within 50 Unit 1: Addition & Subtraction Level 1 Module 4: Addition with Regrouping Unit 1: Addition & Subtraction Level 1 Module 5: Subtraction with Regrouping Unit 1: Addition & Subtraction Level 1 Module 6: Mixed Regrouping Unit 2: Addition & Subtraction Level 2 Module 4: Addition within 100 Unit 2: Addition & Subtraction Level 2 Module 5: Subtraction within 100 Unit 2: Addition & Subtraction Level 2 Module 6: Within 100 Unit 3: Operations with Multi-Digit Numbers Module 2: Addition within 1,000 Unit 3: Operations with Multi-Digit Numbers Module 3: Subtraction within 1,000
e.	Recall with automaticity addition and subtraction facts within 20.	Unit 1: Addition & Subtraction Level 1 Module 2: Addition Unit 1: Addition & Subtraction Level 1 Module 4: Subtraction Unit 1: Addition & Subtraction Level 1 Module 1: Within 13 Unit 1: Addition & Subtraction Level 1 Module 2: Within 20 Unit 1: Addition & Subtraction Level 1 Module 3: Within 50 Unit 1: Addition & Subtraction Level 1 Module 4: Addition with Regrouping Unit 1: Addition & Subtraction Level 1 Module 5: Subtraction with Regrouping Unit 1: Addition & Subtraction Level 1 Module 6: Mixed Regrouping Unit 2: Addition & Subtraction Level 2 Module 4: Addition within 100 Unit 2: Addition & Subtraction Level 2 Module 5: Subtraction within 100 Unit 2: Addition & Subtraction Level 2 Module 6: Within 100 Unit 3: Operations with Multi-Digit Numbers Module 2: Addition within 1,000 Unit 3: Operations with Multi-Digit Numbers Module 3: Subtraction within 1,000

g.	Determine the missing number in an equation (number sentence) through modeling and justification with addition and subtraction within 20 (e.g., $3 + _ = 5$ or $_ + 2 = 5$; $5 - _ = 3$ or $5 - 2 = _$).	Unit 1: Addition & Subtraction Level 1 Module 2: Addition Unit 1: Addition & Subtraction Level 1 Module 4: Subtraction Unit 1: Addition & Subtraction Level 1 Module 1: Within 13 Unit 1: Addition & Subtraction Level 1 Module 2: Within 20 Unit 1: Addition & Subtraction Level 1 Module 3: Within 50 Unit 1: Addition & Subtraction Level 1 Module 4: Addition with Regrouping Unit 1: Addition & Subtraction Level 1 Module 5: Subtraction with Regrouping Unit 1: Addition & Subtraction Level 1 Module 6: Mixed Regrouping Unit 2: Addition & Subtraction Level 2 Module 4: Addition within 100 Unit 2: Addition & Subtraction Level 2 Module 5: Subtraction within 100 Unit 2: Addition & Subtraction Level 2 Module 6: Within 100 Unit 3: Operations with Multi-Digit Numbers Module 2: Addition within 1,000 Unit 3: Operations with Multi-Digit Numbers Module 3: Subtraction within 1,000
h.	Use inverse relationships to write all related facts connected to a given addition or subtraction fact model within 20 (e.g., given a model for $3 + 4 = 7$, write $4 + 3 = 7$, $7 - 4 = 3$, and $7 - 3 = 4$).	Unit 1: Addition & Subtraction Level 1 Module 4: Addition with Regrouping Unit 1: Addition & Subtraction Level 1 Module 6: Mixed Regrouping Unit 2: Addition & Subtraction Level 2 Module 4: Addition within 100 Unit 2: Addition & Subtraction Level 2 Module 6: Within 100 Unit 3: Operations with Multi-Digit Numbers Module 2: Addition within 1,000 Unit 3: Operations with Multi-Digit Numbers Module 4: Mixed

j.	Represent and justify the relationship between values and expressions as equal or not equal using appropriate models and/or symbols (e.g., $9 + 24 = 10 + 23$; $45 - 9 = 46 - 10$; $15 + 16 \neq 31 + 15$).	Unit 1: Addition & Subtraction Level 1 Module 2: Addition Unit 1: Addition & Subtraction Level 1 Module 4: Subtraction Unit 1: Addition & Subtraction Level 1 Module 1: Within 13 Unit 1: Addition & Subtraction Level 1 Module 2: Within 20 Unit 1: Addition & Subtraction Level 1 Module 3: Within 50 Unit 1: Addition & Subtraction Level 1 Module 4: Addition with Regrouping Unit 1: Addition & Subtraction Level 1 Module 5: Subtraction with Regrouping Unit 1: Addition & Subtraction Level 1 Module 6: Mixed Regrouping Unit 2: Addition & Subtraction Level 2 Module 4: Addition within 100 Unit 2: Addition & Subtraction Level 2 Module 5: Subtraction within 100 Unit 2: Addition & Subtraction Level 2 Module 6: Within 100 Unit 3: Operations with Multi-Digit Numbers Module 2: Addition within 1,000 Unit 3: Operations with Multi-Digit Numbers Module 3: Subtraction within 1,000
Measurement and Geometry		
2.MG.1. The student will reason mathematically using standard units (U.S. Customary) with appropriate tools to estimate, measure, and compare objects by length, weight, and liquid volume to		
a.	Explain the purpose of various measurement tools and how to use them appropriately by:	
i.	identifying a ruler as an instrument to measure length;	Unit 4: Measurement, Geometry & Data Module 3: Data Unit 4: Measurement, Geometry & Data Module 4: Measurement
Measurement and Geometry		
2.MG.2. The student will demonstrate an understanding of the concept of time to the nearest five minutes, using analog and digital clocks.		
a.	Identify the number of minutes in an hour (60 minutes) and the number of hours in a day (24	Unit 4: Measurement, Geometry & Data Module 1: Time

c.	Show, tell, and write time to the nearest five minutes, using analog and digital clocks.	Unit 4: Measurement, Geometry & Data Module 1: Time
d.	Match a written time (e.g., 1:35, 6:20, 9:05) to the time shown on an analog clock to the nearest	Unit 4: Measurement, Geometry & Data Module 1: Time
Measurement and Geometry		
2.MG.4. The student will describe, name, compare, and contrast plane and solid figures (circles/spheres/squares/cubes, and rectangles/rectangular		
c.	Given a concrete or pictorial model, name and describe the solid figure (sphere, cube, and rectangular prism) by its characteristics (e.g., number of edges, number of vertices, shapes of	Unit 4: Measurement, Geometry & Data Module 6: Geometry
Probability and Statistics		
2.PS.1. The student will apply the data cycle (pose questions; collect or acquire data; organize and represent data; and analyze data and communicate results) with a focus on		
a.	Pose questions, given a predetermined context, that require the collection of data (limited to 25 or fewer data points for no more than six	Unit 4: Measurement, Geometry & Data Module 3: Data
c.	Organize and represent a data set using a pictograph where each symbol represents up to 2 data points. Determine and use a key to assist	Unit 4: Measurement, Geometry & Data Module 3: Data
d.	Organize and represent a data set using a bar graph with a title and labeled axes (limited to 25 or fewer data points for up to six categories, and	Unit 4: Measurement, Geometry & Data Module 3: Data

Probability and Statistics		
2.PS.1.	The student will apply the data cycle (pose questions; collect or acquire data; organize and represent data; and analyze data and communicate results) with a focus on	
e.	Analyze data represented in pictographs and bar graphs and communicate results:	
i.	ask and answer questions about the data represented in pictographs and bar graphs (e.g., total number of data points represented, how many in each category, how many more or less are in one category than another). Pictograph keys will be limited to symbols representing 1, 2, 5, or 10 pieces of data and bar graphs will be	Unit 4: Measurement, Geometry & Data Module 3: Data
Patterns, Functions, and Algebra		
2.PFA.1	The student will describe, extend, create, and transfer repeating and increasing patterns (limited to addition of whole numbers) using	
a.	Identify and describe repeating and increasing patterns.	Unit 2: Addition & Subtraction Level 2 Module 3: Reading & Writing Unit 2: Addition & Subtraction Level 2 Module 6: Within 100 Unit 3: Operations with Multi-Digit Numbers Module 1: Multiples of 10 & 100
b.	Analyze a repeating or increasing pattern and generalize the change to extend the pattern using objects, pictures, and numbers.	Unit 2: Addition & Subtraction Level 2 Module 3: Reading & Writing Unit 2: Addition & Subtraction Level 2 Module 6: Within 100 Unit 3: Operations with Multi-Digit Numbers Module 1: Multiples of 10 & 100
c.	Create a repeating or increasing pattern using various representations (e.g., objects, pictures, numbers).	Unit 2: Addition & Subtraction Level 2 Module 3: Reading & Writing Unit 2: Addition & Subtraction Level 2 Module 6: Within 100 Unit 3: Operations with Multi-Digit Numbers Module 1: Multiples of 10 & 100
d.	Transfer a given repeating or increasing pattern from one form to another (e.g., objects, pictures, numbers) and explain the connection between the two patterns.	Unit 2: Addition & Subtraction Level 2 Module 3: Reading & Writing Unit 2: Addition & Subtraction Level 2 Module 6: Within 100 Unit 3: Operations with Multi-Digit Numbers Module 1: Multiples of 10 & 100

Grade: 3 - Adopted: 2023

	Number and Number Sense	
3.NS.1.	The student will use place value understanding to read, write, and determine the place and value of each digit in a whole number, up to six digits,	
a.	Read and write six-digit whole numbers in standard form, expanded form, and word form.	Unit 1: Addition & Subtraction Level 1 Module 6: Place Value Unit 2: Addition & Subtraction Level 2 Module 3: Place Value
b.	Apply patterns within the base 10 system to determine and communicate, orally and in written form, the place and value of each digit in a six-digit whole number (e.g., in 165,724, the 5	Unit 1: Addition & Subtraction Level 1 Module 6: Place Value Unit 2: Addition & Subtraction Level 2 Module 3: Place Value
c.	Compose, decompose, and represent numbers up to 9,999 in multiple ways, according to place value (e.g., 256 can be 1 hundred, 14 tens, 16 ones, but also 25 tens, 6 ones), with and without	Unit 1: Addition & Subtraction Level 1 Module 6: Place Value Unit 2: Addition & Subtraction Level 2 Module 3: Place Value Unit 6: Mixed Operations with Whole Numbers Module 2: Two–Four Digits by One Digit
	Number and Number Sense	
3.NS.3.	The student will use mathematical reasoning and justification to represent and compare fractions (proper and improper) and mixed numbers with denominators of 2, 3, 4, 5, 6, 8, and	
a.	Represent, name, and write a given fraction (proper or improper) or mixed number with denominators of 2, 3, 4, 5, 6, 8, and 10 using:	

i.	region/area models (e.g., pie pieces, pattern blocks, geoboards);	Unit 3: Skip Counting Module 1: Skip Counting by 2 Unit 3: Skip Counting Module 2: Skip Counting by 3 Unit 3: Skip Counting Module 3: Skip Counting by 4 Unit 3: Skip Counting Module 4: Skip Counting by 5 Unit 3: Skip Counting Module 5: Skip Counting by 6 Unit 3: Skip Counting Module 6: Skip Counting by 7 Unit 3: Skip Counting Module 7: Skip Counting by 8 Unit 3: Skip Counting Module 8: Skip Counting by 9 Unit 4: Multiplication & Division Level 1 Module 2: Multiplication Unit 5: Multiplication & Division Level 2 Module 2: Division by One Digit Unit 6: Mixed Operations with Whole Numbers Module 1: Relationships of Operations Unit 6: Mixed Operations with Whole Numbers Module 2: Two–Four Digits by One Digit
Number and Number Sense		
3.NS.3. The student will use mathematical reasoning and justification to represent and compare fractions (proper and improper) and mixed numbers with denominators of 2, 3, 4, 5, 6, 8, and		
c.	Use a model of a fraction greater than one to count the fractional parts to name and write it as an improper fraction and as a mixed number (e.g., $1/4, 2/4, 3/4, 4/4, 5/4 = 1\ 1/4$).	Unit 7: Fractions, Decimals & Percents Level 1 Module 1: Understanding Fractions Unit 7: Fractions, Decimals & Percents Level 1 Module 2: Application of Concepts Unit 9: Measurement, Geometry & Data Module 1: 2-D Shapes
d.	Compose and decompose fractions (proper and improper) with denominators of 2, 3, 4, 5, 6, 8, and 10 in multiple ways (e.g., $7/4 = 4/4 + 3/4$ or $4/6 = 3/6 + 1/6 = 2/6 + 2/6$) with models.	Unit 7: Fractions, Decimals & Percents Level 1 Module 1: Understanding Fractions Unit 7: Fractions, Decimals & Percents Level 1 Module 2: Application of Concepts
e.	Compare a fraction, less than or equal to one, to the benchmarks of 0, $1/2$, and 1 using area/region models, length models, and without models.	Unit 7: Fractions, Decimals & Percents Level 1 Module 1: Understanding Fractions Unit 7: Fractions, Decimals & Percents Level 1 Module 2: Application of Concepts

f.	Compare two fractions (proper or improper) and/or mixed numbers with like numerators of 2, 3, 4, 5, 6, 8, and 10 (e.g., $\frac{2}{3} > \frac{2}{8}$) using words (greater than, less than, equal to) and/or symbols ($>$, $<$, $=$), using area/region models, length	Unit 7: Fractions, Decimals & Percents Level 1 Module 1: Understanding Fractions Unit 7: Fractions, Decimals & Percents Level 1 Module 2: Application of Concepts
g.	Compare two fractions (proper or improper) and/or mixed numbers with like denominators of 2, 3, 4, 5, 6, 8, and 10 (e.g., $\frac{3}{6} < \frac{4}{6}$) using words (greater than, less than, equal to) and/or symbols ($>$, $<$, $=$), using area/region models, length	Unit 7: Fractions, Decimals & Percents Level 1 Module 1: Understanding Fractions Unit 7: Fractions, Decimals & Percents Level 1 Module 2: Application of Concepts
h.	Represent equivalent fractions with denominators of 2, 3, 4, 5, 6, 8, or 10, using region/area models and length models.	Unit 7: Fractions, Decimals & Percents Level 1 Module 1: Understanding Fractions Unit 7: Fractions, Decimals & Percents Level 1 Module 2: Application of Concepts
Computation and Estimation		
3.CE.2. The student will recall with automaticity multiplication and division facts through 10×10; and represent, solve, and justify solutions to single-step contextual problems using		
b.	Use inverse relationships to write the related facts connected to a given model for multiplication and division of whole numbers through 10×10 .	Unit 4: Multiplication & Division Level 1 Module 2: Multiplication Unit 5: Multiplication & Division Level 2 Module 1: Multiplication by One Digit Unit 6: Mixed Operations with Whole Numbers Module 1: Relationships of Operations Unit 6: Mixed Operations with Whole Numbers Module 2: Two–Four Digits by One Digit

c.	Apply strategies (e.g., place value, the properties of multiplication and/or addition) when multiplying and dividing whole numbers.	Unit 4: Multiplication & Division Level 1 Module 2: Multiplication Unit 5: Multiplication & Division Level 2 Module 1: Multiplication by One Digit Unit 6: Mixed Operations with Whole Numbers Module 1: Relationships of Operations Unit 6: Mixed Operations with Whole Numbers Module 2: Two–Four Digits by One Digit
d.	Demonstrate fluency with multiplication facts through 10×10 by applying reasoning strategies (e.g., doubling, add-a-group, subtract-a-group, near squares, and inverse relationships).	Unit 4: Multiplication & Division Level 1 Module 2: Multiplication Unit 5: Multiplication & Division Level 2 Module 1: Multiplication by One Digit Unit 6: Mixed Operations with Whole Numbers Module 1: Relationships of Operations Unit 6: Mixed Operations with Whole Numbers Module 2: Two–Four Digits by One Digit
e.	Represent, solve, and justify solutions to single-step contextual problems that involve multiplication and division of whole numbers through 10×10 .	Unit 4: Multiplication & Division Level 1 Module 2: Multiplication Unit 5: Multiplication & Division Level 2 Module 1: Multiplication by One Digit Unit 6: Mixed Operations with Whole Numbers Module 1: Relationships of Operations Unit 6: Mixed Operations with Whole Numbers Module 2: Two–Four Digits by One Digit
f.	Recall with automaticity the multiplication facts through 10×10 and the corresponding division facts.	Unit 4: Multiplication & Division Level 1 Module 2: Multiplication Unit 5: Multiplication & Division Level 2 Module 1: Multiplication by One Digit Unit 6: Mixed Operations with Whole Numbers Module 1: Relationships of Operations Unit 6: Mixed Operations with Whole Numbers Module 2: Two–Four Digits by One Digit Unit 6: Mixed Operations with Whole Numbers Module 3: Two–Four Digits by Two Digits Unit 6: Mixed Operations with Whole Numbers Module 4: Three–Four Digits by Three Digits

g.	Create an equation to represent the mathematical relationship between equivalent expressions using multiplication and/or division facts through 10×10 (e.g., $4 \times 3 = 14 - 2$, $35 \div 5 = 1 \times 7$).	Unit 4: Multiplication & Division Level 1 Module 2: Multiplication Unit 5: Multiplication & Division Level 2 Module 1: Multiplication by One Digit Unit 6: Mixed Operations with Whole Numbers Module 1: Relationships of Operations Unit 6: Mixed Operations with Whole Numbers Module 2: Two–Four Digits by One Digit Unit 6: Mixed Operations with Whole Numbers Module 3: Two–Four Digits by Two Digits Unit 6: Mixed Operations with Whole Numbers Module 4: Three–Four Digits by Three Digits
Measurement and Geometry		
3.MG.2. The student will use multiple representations to estimate and solve problems, including those in context, involving area and perimeter (in both		
a.	Solve problems, including those in context,	
ii.	estimate and determine the area of a given surface by counting the number of square units, describe the measurement (using the number and unit) and justify the measurement.	Unit 3: Skip Counting Module 1: Skip Counting by 2 Unit 3: Skip Counting Module 2: Skip Counting by 3 Unit 3: Skip Counting Module 3: Skip Counting by 4 Unit 3: Skip Counting Module 4: Skip Counting by 5 Unit 3: Skip Counting Module 5: Skip Counting by 6 Unit 3: Skip Counting Module 6: Skip Counting by 7 Unit 3: Skip Counting Module 7: Skip Counting by 8 Unit 3: Skip Counting Module 8: Skip Counting by 9 Unit 4: Multiplication & Division Level 1 Module 2: Multiplication Unit 5: Multiplication & Division Level 2 Module 2: Division by One Digit Unit 6: Mixed Operations with Whole Numbers Module 1: Relationships of Operations Unit 6: Mixed Operations with Whole Numbers Module 2: Two–Four Digits by One Digit
Probability and Statistics		
3.PS.1. The student will apply the data cycle (formulate questions; collect or acquire data; organize and represent data; and analyze data and communicate results) with a focus on		

e.	Analyze data represented in pictographs and bar graphs, and communicate results orally and in	
iii.	make inferences about data represented in pictographs and bar graphs;	Unit 3: Skip Counting Module 1: Skip Counting by 2 Unit 3: Skip Counting Module 2: Skip Counting by 3 Unit 3: Skip Counting Module 3: Skip Counting by 4 Unit 3: Skip Counting Module 4: Skip Counting by 5 Unit 3: Skip Counting Module 5: Skip Counting by 6 Unit 3: Skip Counting Module 6: Skip Counting by 7 Unit 3: Skip Counting Module 7: Skip Counting by 8 Unit 3: Skip Counting Module 8: Skip Counting by 9
	Patterns, Functions, and Algebra	
3.PFA.1	The student will identify, describe, extend, and create increasing and decreasing patterns (limited to addition and subtraction of whole numbers), including those in context, using	
a.	Identify and describe increasing and decreasing patterns using various representations (e.g., objects, pictures, numbers, number lines).	Unit 2: Addition & Subtraction Level 2 Module 1: Counting to 1,000 Unit 3: Skip Counting Module 1: Skip Counting by 2 Unit 3: Skip Counting Module 2: Skip Counting by 3 Unit 3: Skip Counting Module 3: Skip Counting by 4 Unit 3: Skip Counting Module 4: Skip Counting by 5 Unit 3: Skip Counting Module 5: Skip Counting by 6 Unit 3: Skip Counting Module 6: Skip Counting by 7 Unit 3: Skip Counting Module 7: Skip Counting by 8 Unit 3: Skip Counting Module 8: Skip Counting by 9 Unit 4: Multiplication & Division Level 1 Module 1: Skip Counting Review
b.	Analyze an increasing or decreasing pattern and generalize the change to extend the pattern or identify missing terms using various representations.	Unit 2: Addition & Subtraction Level 2 Module 1: Counting to 1,000 Unit 3: Skip Counting Module 1: Skip Counting by 2 Unit 3: Skip Counting Module 2: Skip Counting by 3 Unit 3: Skip Counting Module 3: Skip Counting by 4 Unit 3: Skip Counting Module 4: Skip Counting by 5 Unit 3: Skip Counting Module 5: Skip Counting by 6 Unit 3: Skip Counting Module 6: Skip Counting by 7 Unit 3: Skip Counting Module 7: Skip Counting by 8 Unit 3: Skip Counting Module 8: Skip Counting by 9 Unit 4: Multiplication & Division Level 1 Module 1: Skip Counting Review

c.	Solve contextual problems that involve identifying, describing, and extending patterns.	Unit 2: Addition & Subtraction Level 2 Module 1: Counting to 1,000 Unit 3: Skip Counting Module 1: Skip Counting by 2 Unit 3: Skip Counting Module 2: Skip Counting by 3 Unit 3: Skip Counting Module 3: Skip Counting by 4 Unit 3: Skip Counting Module 4: Skip Counting by 5 Unit 3: Skip Counting Module 5: Skip Counting by 6 Unit 3: Skip Counting Module 6: Skip Counting by 7 Unit 3: Skip Counting Module 7: Skip Counting by 8 Unit 3: Skip Counting Module 8: Skip Counting by 9 Unit 4: Multiplication & Division Level 1 Module 1: Skip Counting Review
d.	Create increasing and decreasing patterns using objects, pictures, numbers, and number lines.	Unit 2: Addition & Subtraction Level 2 Module 1: Counting to 1,000 Unit 3: Skip Counting Module 1: Skip Counting by 2 Unit 3: Skip Counting Module 2: Skip Counting by 3 Unit 3: Skip Counting Module 3: Skip Counting by 4 Unit 3: Skip Counting Module 4: Skip Counting by 5 Unit 3: Skip Counting Module 5: Skip Counting by 6 Unit 3: Skip Counting Module 6: Skip Counting by 7 Unit 3: Skip Counting Module 7: Skip Counting by 8 Unit 3: Skip Counting Module 8: Skip Counting by 9 Unit 4: Multiplication & Division Level 1 Module 1: Skip Counting Review
e.	Investigate and explain the connection between two different representations of the same increasing or decreasing pattern.	Unit 2: Addition & Subtraction Level 2 Module 1: Counting to 1,000 Unit 3: Skip Counting Module 1: Skip Counting by 2 Unit 3: Skip Counting Module 2: Skip Counting by 3 Unit 3: Skip Counting Module 3: Skip Counting by 4 Unit 3: Skip Counting Module 4: Skip Counting by 5 Unit 3: Skip Counting Module 5: Skip Counting by 6 Unit 3: Skip Counting Module 6: Skip Counting by 7 Unit 3: Skip Counting Module 7: Skip Counting by 8 Unit 3: Skip Counting Module 8: Skip Counting by 9 Unit 4: Multiplication & Division Level 1 Module 1: Skip Counting Review

Grade: 4 - Adopted: 2023

	Number and Number Sense	Number and Number Sense
4.NS.1.	The student will use place value understanding to read, write, and identify the place and value of each digit in a nine-digit whole number.	The student will use place value understanding to read, write, and identify the place and value of each digit in a nine-digit whole number.

a.	Read nine-digit whole numbers, presented in standard form, and represent the same number in written form.	Unit 2: Addition & Subtraction Level 2 Module 3: Place Value Unit 6: Mixed Operations with Whole Numbers Module 5: Four Digits Unit 6: Mixed Operations with Whole Numbers Module 6: Mixed Practice with Operations
b.	Write nine-digit whole numbers in standard form when the numbers are presented orally or in written form.	Unit 2: Addition & Subtraction Level 2 Module 3: Place Value Unit 6: Mixed Operations with Whole Numbers Module 5: Four Digits Unit 6: Mixed Operations with Whole Numbers Module 6: Mixed Practice with Operations
c.	Apply patterns within the base 10 system to determine and communicate, orally and in written form, the place and value of each digit in a nine-digit whole number (e.g., in 568,165,724,	Unit 2: Addition & Subtraction Level 2 Module 3: Place Value Unit 6: Mixed Operations with Whole Numbers Module 5: Four Digits
Number and Number Sense		
4.NS.2. The student will demonstrate an understanding of the base 10 system to compare and order		

a.	Compare two whole numbers up to seven digits each, using words (greater than, less than, equal to, not equal to) and/or using symbols ($>$, $<$, $=$, \neq).	Unit 1: Addition & Subtraction Level 1 Module 5: Fact Families Unit 1: Addition & Subtraction Level 1 Module 6: Place Value Unit 1: Addition & Subtraction Level 1 Module 7: Strategies Unit 1: Addition & Subtraction Level 1 Module 8: Mixed Addition & Subtraction Unit 2: Addition & Subtraction Level 2 Module 1: Counting to 1,000 Unit 2: Addition & Subtraction Level 2 Module 3: Place Value Unit 2: Addition & Subtraction Level 2 Module 4: Within 100 Unit 2: Addition & Subtraction Level 2 Module 5: Strategies Unit 2: Addition & Subtraction Level 2 Module 6: Three-Digit Numbers Unit 6: Mixed Operations with Whole Numbers Module 3: Two–Four Digits by Two Digits Unit 6: Mixed Operations with Whole Numbers Module 4: Three–Four Digits by Three Digits Unit 6: Mixed Operations with Whole Numbers Module 5: Four Digits Unit 6: Mixed Operations with Whole Numbers Module 6: Mixed Practice with Operations
b.	Order up to four whole numbers up to seven digits each, from least to greatest or greatest to least.	Unit 2: Addition & Subtraction Level 2 Module 3: Place Value Unit 5: Multiplication & Division Level 2 Module 3: Multiplication Using the Algorithm Unit 6: Mixed Operations with Whole Numbers Module 5: Four Digits Unit 6: Mixed Operations with Whole Numbers Module 6: Mixed Practice with Operations
Number and Number Sense		
4.NS.3. The student will use mathematical reasoning and justification to represent, compare, and order fractions (proper, improper, and mixed numbers with denominators 12 or less), with and without		
a.	Compare and order no more than four fractions (proper or improper), and/or mixed numbers, with like denominators by comparing the number of parts (numerators) using fractions with denominators of 12 or less (e.g., $1/5 < 3/5$). Justify comparisons orally, in writing, or with a	Unit 7: Fractions, Decimals & Percents Level 1 Module 1: Understanding Fractions Unit 7: Fractions, Decimals & Percents Level 1 Module 2: Application of Concepts Unit 8: Fractions, Decimals & Percents Level 2 Module 7: Application

b.	Compare and order no more than four fractions (proper or improper), and/or mixed numbers, with like numerators and unlike denominators by comparing the size of the parts using fractions with denominators of 12 or less (e.g., $\frac{3}{8} < \frac{3}{5}$). Justify comparisons orally, in writing, or with a model.	Unit 7: Fractions, Decimals & Percents Level 1 Module 1: Understanding Fractions Unit 7: Fractions, Decimals & Percents Level 1 Module 2: Application of Concepts Unit 8: Fractions, Decimals & Percents Level 2 Module 7: Application
c.	Use benchmarks (e.g., 0, $\frac{1}{2}$, or 1) to compare and order no more than four fractions (proper or improper), and/or mixed numbers, with like and unlike denominators of 12 or less. Justify comparisons orally, in writing, or with a model.	Unit 7: Fractions, Decimals & Percents Level 1 Module 1: Understanding Fractions Unit 7: Fractions, Decimals & Percents Level 1 Module 2: Application of Concepts Unit 8: Fractions, Decimals & Percents Level 2 Module 7: Application
d.	Compare two fractions (proper or improper) and/or mixed numbers using fractions with denominators of 12 or less, using the symbols $>$, $<$, and $=$ (e.g., $\frac{2}{3} > \frac{1}{7}$). Justify comparisons orally, in writing, or with a model.	Unit 7: Fractions, Decimals & Percents Level 1 Module 1: Understanding Fractions Unit 7: Fractions, Decimals & Percents Level 1 Module 2: Application of Concepts Unit 8: Fractions, Decimals & Percents Level 2 Module 7: Application
e.	Represent equivalent fractions with denominators of 12 or less, with and without models.	Unit 7: Fractions, Decimals & Percents Level 1 Module 1: Understanding Fractions Unit 7: Fractions, Decimals & Percents Level 1 Module 2: Application of Concepts Unit 8: Fractions, Decimals & Percents Level 2 Module 1: Addition & Subtraction of Fractions Unit 8: Fractions, Decimals & Percents Level 2 Module 2: Multiplication & Division of Fractions Unit 9: Measurement, Geometry & Data Module 1: 2-D Shapes

f.	Compose and decompose fractions (proper and improper) and/or mixed numbers with denominators of 12 or less, in multiple ways, with and without models.	Unit 7: Fractions, Decimals & Percents Level 1 Module 1: Understanding Fractions Unit 7: Fractions, Decimals & Percents Level 1 Module 2: Application of Concepts Unit 8: Fractions, Decimals & Percents Level 2 Module 7: Application Unit 8: Fractions, Decimals & Percents Level 2 Module 8: Mixed
g.	Represent the division of two whole numbers as a fraction given a contextual situation and a model (e.g., $3/5$ means the same as 3 divided by 5 or $3/5$ represents the amount of muffin each of five children will receive when sharing three muffins equally).	Unit 7: Fractions, Decimals & Percents Level 1 Module 1: Understanding Fractions Unit 7: Fractions, Decimals & Percents Level 1 Module 2: Application of Concepts Unit 8: Fractions, Decimals & Percents Level 2 Module 1: Addition & Subtraction of Fractions Unit 8: Fractions, Decimals & Percents Level 2 Module 2: Multiplication & Division of Fractions Unit 9: Measurement, Geometry & Data Module 1: 2-D Shapes
Number and Number Sense		
4.NS.4. The student will use mathematical reasoning and justification to represent, compare, and order decimals through thousandths, with and without		
a.	Investigate and describe the ten-to-one place value relationship for decimals through thousandths, using concrete models (e.g., place	Unit 10: Algebra Module 1: Operations & Equations Unit 8: Fractions, Decimals & Percents Level 2 Module 7: Application
b.	Represent and identify decimals expressed through thousandths, using concrete, pictorial, and numerical representations.	Unit 10: Algebra Module 1: Operations & Equations Unit 8: Fractions, Decimals & Percents Level 2 Module 7: Application
c.	Read and write decimals expressed through thousandths, using concrete, pictorial, and	Unit 10: Algebra Module 1: Operations & Equations Unit 8: Fractions, Decimals & Percents Level 2 Module 7:

e.	Compare using symbols ($<$, $>$, $=$) and/or words (greater than, less than, equal to) and order (least to greatest and greatest to least), a set of no more than four decimals expressed through thousandths, using multiple strategies (e.g., benchmarks, place value, number lines). Justify	Unit 8: Fractions, Decimals & Percents Level 2 Module 7: Application Unit 8: Fractions, Decimals & Percents Level 2 Module 8: Mixed Review
Computation and Estimation		
4.CE.1. The student will estimate, represent, solve, and justify solutions to single-step and multistep problems, including those in context, using		
d.	Estimate, represent, solve, and justify solutions to single-step and multistep contextual problems involving addition and subtraction with whole numbers where addends and minuends do not exceed 1,000,000.	Unit 6: Mixed Operations with Whole Numbers Module 3: Two–Four Digits by Two Digits Unit 6: Mixed Operations with Whole Numbers Module 4: Three–Four Digits by Three Digits Unit 6: Mixed Operations with Whole Numbers Module 5: Four Digits Unit 6: Mixed Operations with Whole Numbers Module 6: Mixed Practice with Operations
Computation and Estimation		
4.CE.2. The student will estimate, represent, solve, and justify solutions to single-step and multistep problems, including those in context, using multiplication with whole numbers, and single-step problems, including those in context, using division with whole numbers; and recall with		
a.	Determine and justify whether an estimate or an exact answer is appropriate when solving contextual problems involving multiplication and division of whole numbers. Refine estimates by adjusting the final amount, using terms such as closer to, between, and a little more than.	Unit 6: Mixed Operations with Whole Numbers Module 3: Two–Four Digits by Two Digits Unit 6: Mixed Operations with Whole Numbers Module 4: Three–Four Digits by Three Digits Unit 6: Mixed Operations with Whole Numbers Module 5: Four Digits Unit 6: Mixed Operations with Whole Numbers Module 6: Mixed Practice with Operations

b.	Recall with automaticity the multiplication facts through 12×12 and the corresponding division facts.	Unit 5: Multiplication & Division Level 2 Module 1: Multiplication by One Digit Unit 5: Multiplication & Division Level 2 Module 3: Multiplication Using the Algorithm Unit 5: Multiplication & Division Level 2 Module 5: Multiplication by Two Digits Unit 5: Multiplication & Division Level 2 Module 7: Mixed Practice Unit 6: Mixed Operations with Whole Numbers Module 3: Two–Four Digits by Two Digits Unit 6: Mixed Operations with Whole Numbers Module 4: Three–Four Digits by Three Digits Unit 6: Mixed Operations with Whole Numbers Module 5: Four Digits Unit 6: Mixed Operations with Whole Numbers Module 6: Mixed Practice with Operations Unit 8: Fractions, Decimals & Percents Level 2 Module 2: Multiplication & Division of Fractions
c.	Create an equation using addition, subtraction, multiplication, and division to represent the relationship between equivalent mathematical expressions (e.g., $4 \times 3 = 2 \times 6$; $10 + 8 = 36 \div 2$; $12 \times 4 = 60 - 12$).	Unit 5: Multiplication & Division Level 2 Module 1: Multiplication by One Digit Unit 5: Multiplication & Division Level 2 Module 3: Multiplication Using the Algorithm Unit 5: Multiplication & Division Level 2 Module 4: Division Using the Algorithm Unit 5: Multiplication & Division Level 2 Module 5: Multiplication by Two Digits Unit 5: Multiplication & Division Level 2 Module 6: Division by Two Digits Unit 5: Multiplication & Division Level 2 Module 7: Mixed Practice Unit 6: Mixed Operations with Whole Numbers Module 3: Two–Four Digits by Two Digits Unit 6: Mixed Operations with Whole Numbers Module 4: Three–Four Digits by Three Digits Unit 6: Mixed Operations with Whole Numbers Module 5: Four Digits Unit 6: Mixed Operations with Whole Numbers Module 6: Mixed Practice with Operations

d.	Identify and use the appropriate symbol to distinguish between expressions that are equal and expressions that are not equal, using addition, subtraction, multiplication, and division (e.g., $4 \times 12 = 8 \times 6$ and $64 \div 8 \neq 8 \times 8$).	Unit 5: Multiplication & Division Level 2 Module 1: Multiplication by One Digit Unit 5: Multiplication & Division Level 2 Module 3: Multiplication Using the Algorithm Unit 5: Multiplication & Division Level 2 Module 4: Division Using the Algorithm Unit 5: Multiplication & Division Level 2 Module 5: Multiplication by Two Digits Unit 5: Multiplication & Division Level 2 Module 6: Division by Two Digits Unit 5: Multiplication & Division Level 2 Module 7: Mixed Practice Unit 6: Mixed Operations with Whole Numbers Module 3: Two–Four Digits by Two Digits Unit 6: Mixed Operations with Whole Numbers Module 4: Three–Four Digits by Three Digits Unit 6: Mixed Operations with Whole Numbers Module 5: Four Digits Unit 6: Mixed Operations with Whole Numbers Module 6: Mixed Practice with Operations
Computation and Estimation		
4.CE.2.	The student will estimate, represent, solve, and justify solutions to single-step and multistep problems, including those in context, using multiplication with whole numbers, and single-step problems, including those in context, using division with whole numbers; and recall with	
g.	Apply strategies (e.g., rounding, place value, properties of multiplication and/or addition) and algorithms, including the standard algorithm, to estimate and determine the product of two	
i.	a two-digit factor and a one-digit factor;	Unit 4: Multiplication & Division Level 1 Module 5: Multiples &
ii.	a three-digit factor and a one-digit factor; or	Unit 4: Multiplication & Division Level 1 Module 5: Multiples &
iii.	a two-digit factor and a two-digit factor.	Unit 4: Multiplication & Division Level 1 Module 5: Multiples &

	Computation and Estimation	
4.CE.2.	The student will estimate, represent, solve, and justify solutions to single-step and multistep problems, including those in context, using multiplication with whole numbers, and single-step problems, including those in context, using division with whole numbers; and recall with	
h.	Estimate, represent, solve, and justify solutions to single-step and multistep contextual problems that involve multiplication with whole numbers.	Unit 4: Multiplication & Division Level 1 Module 2: Multiplication Unit 4: Multiplication & Division Level 1 Module 4: Strategies Unit 4: Multiplication & Division Level 1 Module 5: Multiples & Factors Unit 4: Multiplication & Division Level 1 Module 6: Mixed Multiplication & Division Unit 5: Multiplication & Division Level 2 Module 1: Multiplication by One Digit Unit 5: Multiplication & Division Level 2 Module 3: Multiplication Using the Algorithm Unit 5: Multiplication & Division Level 2 Module 4: Division Using the Algorithm Unit 5: Multiplication & Division Level 2 Module 5: Multiplication by Two Digits Unit 5: Multiplication & Division Level 2 Module 7: Mixed Practice Unit 6: Mixed Operations with Whole Numbers Module 1: Relationships of Operations Unit 6: Mixed Operations with Whole Numbers Module 2: Two–Four Digits by One Digit Unit 6: Mixed Operations with Whole Numbers Module 3: Two–Four Digits by Two Digits Unit 6: Mixed Operations with Whole Numbers Module 4: Three–Four Digits by Three Digits Unit 6: Mixed Operations with Whole Numbers Module 5: Four Digits

i.	Apply strategies (e.g., rounding, compatible numbers, place value) and algorithms, including the standard algorithm, to estimate and determine the quotient of two whole numbers, given a one-digit divisor and a two- or three-digit dividend, with and without remainders.	Unit 4: Multiplication & Division Level 1 Module 3: Division Unit 4: Multiplication & Division Level 1 Module 4: Strategies Unit 5: Multiplication & Division Level 2 Module 2: Division by One Digit Unit 5: Multiplication & Division Level 2 Module 6: Division by Two Digits Unit 6: Mixed Operations with Whole Numbers Module 1: Relationships of Operations Unit 6: Mixed Operations with Whole Numbers Module 2: Two–Four
j.	Estimate, represent, solve, and justify solutions to single-step contextual problems involving division with whole numbers.	Unit 4: Multiplication & Division Level 1 Module 3: Division Unit 4: Multiplication & Division Level 1 Module 4: Strategies Unit 4: Multiplication & Division Level 1 Module 5: Multiples & Factors Unit 4: Multiplication & Division Level 1 Module 6: Mixed Multiplication & Division Unit 5: Multiplication & Division Level 2 Module 2: Division by One Digit Unit 5: Multiplication & Division Level 2 Module 4: Division Using the Algorithm Unit 5: Multiplication & Division Level 2 Module 6: Division by Two Digits Unit 5: Multiplication & Division Level 2 Module 7: Mixed Practice Unit 6: Mixed Operations with Whole Numbers Module 1: Relationships of Operations Unit 6: Mixed Operations with Whole Numbers Module 2: Two–Four Digits by One Digit Unit 6: Mixed Operations with Whole Numbers Module 3: Two–Four Digits by Two Digits Unit 6: Mixed Operations with Whole Numbers Module 4: Three–Four Digits by Three Digits Unit 6: Mixed Operations with Whole Numbers Module 5: Four Digits
k.		Interpret the quotient and remainder when solving a contextual TouchMath Unit 5: Multiplication & Division Level 2 Module 2: Division by One Unit 5: Multiplication & Division Level 2 Module 4: Division Using the Algorithm Unit 5: Multiplication & Division Level 2 Module 6: Division by Two

		Unit 5: Multiplication & Division Level 2 Module 7: Mixed Practice Unit 6: Mixed Operations with Whole Numbers Module 4: Three–Four Digits by Three Digits
	Computation and Estimation	
4.CE.3.	The student will estimate, represent, solve, and justify solutions to single-step problems, including those in context, using addition and subtraction of fractions (proper, improper, and mixed numbers with like denominators of 2, 3, 4, 5, 6, 8, 10, and 12), with and without models; and solve single-step contextual problems involving	
a.	Estimate and determine the sum or difference of two fractions (proper or improper) and/or mixed numbers, having like denominators limited to 2, 3, 4, 5, 6, 8, 10, and 12 (e.g., $\frac{3}{8} + \frac{3}{8}$, $2\frac{1}{5} + \frac{4}{5}$, $\frac{7}{4} - \frac{5}{4}$) and simplify the resulting fraction.	Unit 8: Fractions, Decimals & Percents Level 2 Module 1: Addition & Subtraction of Fractions Unit 8: Fractions, Decimals & Percents Level 2 Module 8: Mixed Review
b.	Estimate, represent, solve, and justify solutions to single-step contextual problems using addition and subtraction with fractions (proper or improper) and/or mixed numbers, having like denominators limited to 2, 3, 4, 5, 6, 8, 10, and 12, and simplify the resulting fraction. Addition and	Unit 8: Fractions, Decimals & Percents Level 2 Module 1: Addition & Subtraction of Fractions Unit 8: Fractions, Decimals & Percents Level 2 Module 8: Mixed Review
c.	Solve single-step contextual problems involving multiplication of a whole number, limited to 12 or less, and a unit fraction (e.g., $6 \times \frac{1}{3}$, $\frac{1}{5} \times 8$, $2 \times \frac{1}{10}$), with models.	Unit 8: Fractions, Decimals & Percents Level 2 Module 2: Multiplication & Division of Fractions Unit 8: Fractions, Decimals & Percents Level 2 Module 7: Application
	Computation and Estimation	
4.CE.4.	The student will estimate, represent, solve, and justify solutions to single-step and multistep problems, including those in context, using addition and subtraction of decimals through the	

a.	Apply strategies (e.g., rounding to the nearest whole number, using compatible numbers) and algorithms, including the standard algorithm, to estimate and determine the sum or difference of two decimals through the thousandths, with and	
i.	decimals do not exceed the thousandths; and	Unit 8: Fractions, Decimals & Percents Level 2 Module 7: Application
ii.	addends, subtrahends, and minuends are limited to four digits.	Unit 8: Fractions, Decimals & Percents Level 2 Module 7: Application
Computation and Estimation		
4.CE.4.	The student will estimate, represent, solve, and justify solutions to single-step and multistep problems, including those in context, using addition and subtraction of decimals through the	
b.	Estimate, represent, solve, and justify solutions to single-step and multistep contextual problems using addition and subtraction of	Unit 8: Fractions, Decimals & Percents Level 2 Module 7: Application Unit 8: Fractions, Decimals & Percents Level 2 Module 8: Mixed
Measurement and Geometry		
4.MG.4.	The student will identify, describe, and draw points, rays, line segments, angles, and lines, including intersecting, parallel, and perpendicular	
a.	Identify and describe points, lines, line segments, rays, and angles, including endpoints and	Unit 9: Measurement, Geometry & Data Module 1: 2-D Shapes Unit 9: Measurement, Geometry & Data Module 2: Lines & Angles
b.	Describe endpoints and vertices in relation to lines, line segments, rays, and angles.	Unit 9: Measurement, Geometry & Data Module 1: 2-D Shapes Unit 9: Measurement, Geometry & Data Module 2: Lines & Angles Unit 9: Measurement, Geometry & Data Module 1: 2-D Shapes Unit 9: Measurement, Geometry & Data Module 2: Lines & Angles

e.	Use symbolic notation to name points, lines, line segments, rays, angles, and to describe parallel	Unit 9: Measurement, Geometry & Data Module 1: 2-D Shapes Unit 9: Measurement, Geometry & Data Module 2: Lines & Angles
Measurement and Geometry		
4.MG.5.	The student will classify and describe quadrilaterals (parallelograms, rectangles, squares, rhombi, and/or trapezoids) using	
a.	Develop definitions for parallelograms, rectangles, squares, rhombi, and trapezoids through the exploration of properties and	Unit 9: Measurement, Geometry & Data Module 1: 2-D Shapes
b.	Identify and describe points, line segments, angles, and vertices in quadrilaterals.	Unit 9: Measurement, Geometry & Data Module 1: 2-D Shapes
Measurement and Geometry		
4.MG.5.	The student will classify and describe quadrilaterals (parallelograms, rectangles, squares, rhombi, and/or trapezoids) using	
d.	Compare, contrast, and classify quadrilaterals (parallelograms, rectangles, squares, rhombi, and/or trapezoids) based on the following	
iv.	number of right angles.	Unit 9: Measurement, Geometry & Data Module 2: Lines & Angles
Probability and Statistics		
4.PS.1.	The student will apply the data cycle (formulate questions; collect or acquire data; organize and represent data; and analyze data and	

a.	Formulate questions that require the collection or acquisition of data.	Unit 3: Skip Counting Module 1: Skip Counting by 2 Unit 3: Skip Counting Module 2: Skip Counting by 3 Unit 3: Skip Counting Module 3: Skip Counting by 4 Unit 3: Skip Counting Module 4: Skip Counting by 5 Unit 3: Skip Counting Module 5: Skip Counting by 6 Unit 3: Skip Counting Module 6: Skip Counting by 7 Unit 3: Skip Counting Module 7: Skip Counting by 8 Unit 3: Skip Counting Module 8: Skip Counting by 9 Unit 8: Fractions, Decimals & Percents Level 2 Module 7: Application Unit 8: Fractions, Decimals & Percents Level 2 Module 8: Mixed
Probability and Statistics		
4.PS.1.	The student will apply the data cycle (formulate questions; collect or acquire data; organize and represent data; and analyze data and	
d.	Analyze data represented in line graphs and communicate results orally and in writing:	
iii.	make inferences about data represented in line graphs;	Unit 3: Skip Counting Module 1: Skip Counting by 2 Unit 3: Skip Counting Module 2: Skip Counting by 3 Unit 3: Skip Counting Module 3: Skip Counting by 4 Unit 3: Skip Counting Module 4: Skip Counting by 5 Unit 3: Skip Counting Module 5: Skip Counting by 6 Unit 3: Skip Counting Module 6: Skip Counting by 7 Unit 3: Skip Counting Module 7: Skip Counting by 8 Unit 3: Skip Counting Module 8: Skip Counting by 9
Grade: 5 - Adopted: 2023		
Number and Number Sense		
5.NS.1.	The student will use reasoning and justification to identify and represent equivalency between fractions (with denominators that are thirds, eighths, and factors of 100) and decimals; and compare and order sets of fractions (proper, improper, and/or mixed numbers having	

a.	Use concrete and pictorial models to represent fractions with denominators that are thirds, eighths, and factors of 100 in their equivalent decimal form.	Unit 7: Fractions, Decimals & Percents Level 1 Module 6: Decimals Unit 7: Fractions, Decimals & Percents Level 1 Module 8: Relationships of Fractions, Decimals & Percents Unit 8: Fractions, Decimals & Percents Level 2 Module 3: Addition & Subtraction of Decimals
b.	Use concrete and pictorial models to represent decimals in their equivalent fraction form (thirds, eighths, and factors of 100).	Unit 7: Fractions, Decimals & Percents Level 1 Module 6: Decimals Unit 7: Fractions, Decimals & Percents Level 1 Module 8: Relationships of Fractions, Decimals & Percents Unit 8: Fractions, Decimals & Percents Level 2 Module 3: Addition & Subtraction of Decimals
c.	Identify equivalent relationships between decimals and fractions with denominators that are thirds, eighths, and factors of 100 in their equivalent decimal form, with and without models.	Unit 7: Fractions, Decimals & Percents Level 1 Module 6: Decimals Unit 7: Fractions, Decimals & Percents Level 1 Module 8: Relationships of Fractions, Decimals & Percents Unit 8: Fractions, Decimals & Percents Level 2 Module 3: Addition & Subtraction of Decimals
d.	Compare (using symbols $<$, $>$, $=$) and order (least to greatest and greatest to least) a set of no more than four decimals and fractions (proper, improper) and/or mixed numbers using multiple strategies (e.g., benchmarks, place value, number lines). Justify solutions orally, in writing, or with a model.	Unit 7: Fractions, Decimals & Percents Level 1 Module 1: Understanding Fractions Unit 7: Fractions, Decimals & Percents Level 1 Module 2: Application of Concepts Unit 7: Fractions, Decimals & Percents Level 1 Module 3: Inequalities Unit 7: Fractions, Decimals & Percents Level 1 Module 5: Fractions Review Unit 7: Fractions, Decimals & Percents Level 1 Module 6: Decimals Unit 7: Fractions, Decimals & Percents Level 1 Module 8: Relationships of Fractions, Decimals & Percents Unit 8: Fractions, Decimals & Percents Level 2 Module 3: Addition & Subtraction of Decimals Unit 8: Fractions, Decimals & Percents Level 2 Module 4: Multiplication & Division of Decimals Unit 8: Fractions, Decimals & Percents Level 2 Module 6: Mixed Practice
Number and Number Sense		

5.NS.2.	The student will demonstrate an understanding of prime and composite numbers, and determine the prime factorization of a whole	
a.	Given a whole number up to 100, create a concrete or pictorial representation to demonstrate whether the number is prime or composite, and justify reasoning.	Unit 7: Fractions, Decimals & Percents Level 1 Module 6: Decimals Unit 7: Fractions, Decimals & Percents Level 1 Module 8: Relationships of Fractions, Decimals & Percents Unit 8: Fractions, Decimals & Percents Level 2 Module 3: Addition & Subtraction of Decimals
b.	Classify, compare, and contrast whole numbers up to 100 using the characteristics prime and composite.	Unit 4: Multiplication & Division Level 1 Module 2: Multiplication Unit 4: Multiplication & Division Level 1 Module 3: Division Unit 4: Multiplication & Division Level 1 Module 4: Strategies Unit 4: Multiplication & Division Level 1 Module 6: Mixed Multiplication & Division Unit 5: Multiplication & Division Level 2 Module 1: Multiplication by One Digit Unit 5: Multiplication & Division Level 2 Module 2: Division by One Digit Unit 5: Multiplication & Division Level 2 Module 3: Multiplication Using the Algorithm Unit 5: Multiplication & Division Level 2 Module 4: Division Using the Algorithm Unit 5: Multiplication & Division Level 2 Module 5: Multiplication by Two Digits Unit 5: Multiplication & Division Level 2 Module 6: Division by Two Digits Unit 5: Multiplication & Division Level 2 Module 7: Mixed Practice Unit 6: Mixed Operations with Whole Numbers Module 1: Relationships of Operations Unit 6: Mixed Operations with Whole Numbers Module 2: Two–Four Digits by One Digit Unit 6: Mixed Operations with Whole Numbers Module 3: Two–Four Digits by Two Digits
5.CE.1.	Computation and Estimation The student will estimate, represent, solve, and justify solutions to single-step and multistep contextual problems using addition, subtraction,	

a.	Estimate the sum, difference, product, and quotient of whole numbers in contextual problems.	Unit 5: Multiplication & Division Level 2 Module 1: Multiplication by One Digit Unit 5: Multiplication & Division Level 2 Module 3: Multiplication Using the Algorithm Unit 5: Multiplication & Division Level 2 Module 4: Division Using the Algorithm Unit 5: Multiplication & Division Level 2 Module 5: Multiplication by Two Digits Unit 5: Multiplication & Division Level 2 Module 6: Division by Two Digits Unit 5: Multiplication & Division Level 2 Module 7: Mixed Practice Unit 6: Mixed Operations with Whole Numbers Module 3: Two–Four Digits by Two Digits Unit 6: Mixed Operations with Whole Numbers Module 4: Three–Four Digits by Three Digits Unit 6: Mixed Operations with Whole Numbers Module 5: Four Digits Unit 6: Mixed Operations with Whole Numbers Module 6: Mixed Practice with Operations
	Computation and Estimation	
5.CE.1.	The student will estimate, represent, solve, and justify solutions to single-step and multistep contextual problems using addition, subtraction,	
b.	Represent, solve, and justify solutions to single-step and multistep contextual problems by applying strategies (e.g., estimation, properties of addition and multiplication) and algorithms, including the standard algorithm, involving addition, subtraction, multiplication, and division	

i.	sums, differences, and products do not exceed five digits;	Unit 4: Multiplication & Division Level 1 Module 2: Multiplication Unit 6: Mixed Operations with Whole Numbers Module 1: Relationships of Operations Unit 6: Mixed Operations with Whole Numbers Module 2: Two–Four Digits by One Digit Unit 6: Mixed Operations with Whole Numbers Module 3: Two–Four Digits by Two Digits Unit 6: Mixed Operations with Whole Numbers Module 4: Three–Four Digits by Three Digits Unit 6: Mixed Operations with Whole Numbers Module 5: Four Digits Unit 6: Mixed Operations with Whole Numbers Module 6: Mixed Practice with Operations
iii.	divisors do not exceed two digits; or	Unit 5: Multiplication & Division Level 2 Module 6: Division by Two Digits Unit 5: Multiplication & Division Level 2 Module 7: Mixed Practice Unit 6: Mixed Operations with Whole Numbers Module 3: Two–Four Digits by Two Digits Unit 6: Mixed Operations with Whole Numbers Module 4: Three–Four Digits by Three Digits Unit 6: Mixed Operations with Whole Numbers Module 5: Four Digits Unit 6: Mixed Operations with Whole Numbers Module 6: Mixed Practice with Operations
iv.	dividends do not exceed four digits.	Unit 5: Multiplication & Division Level 2 Module 6: Division by Two Digits Unit 5: Multiplication & Division Level 2 Module 7: Mixed Practice Unit 6: Mixed Operations with Whole Numbers Module 3: Two–Four Digits by Two Digits Unit 6: Mixed Operations with Whole Numbers Module 4: Three–Four Digits by Three Digits Unit 6: Mixed Operations with Whole Numbers Module 5: Four Digits Unit 6: Mixed Operations with Whole Numbers Module 6: Mixed Practice with Operations
Computation and Estimation		
5.CE.1. The student will estimate, represent, solve, and justify solutions to single-step and multistep contextual problems using addition, subtraction,		

c.	Interpret the quotient and remainder when solving a contextual problem.	Unit 5: Multiplication & Division Level 2 Module 1: Multiplication by One Digit Unit 5: Multiplication & Division Level 2 Module 3: Multiplication Using the Algorithm Unit 5: Multiplication & Division Level 2 Module 4: Division Using the Algorithm Unit 5: Multiplication & Division Level 2 Module 5: Multiplication by Two Digits Unit 5: Multiplication & Division Level 2 Module 6: Division by Two Digits Unit 5: Multiplication & Division Level 2 Module 7: Mixed Practice Unit 6: Mixed Operations with Whole Numbers Module 3: Two–Four Digits by Two Digits Unit 6: Mixed Operations with Whole Numbers Module 4: Three–Four Digits by Three Digits Unit 6: Mixed Operations with Whole Numbers Module 5: Four Digits Unit 6: Mixed Operations with Whole Numbers Module 6: Mixed Practice with Operations
Computation and Estimation		
5.CE.2. The student will estimate, represent, solve, and justify solutions to single-step and multistep problems, including those in context, using addition and subtraction of fractions with like and unlike denominators (with and without models), and solve single-step contextual		
a.	Determine the least common multiple of two numbers to find the least common denominator for two fractions.	Unit 7: Fractions, Decimals & Percents Level 1 Module 1: Understanding Fractions Unit 7: Fractions, Decimals & Percents Level 1 Module 2: Application of Concepts Unit 7: Fractions, Decimals & Percents Level 1 Module 3: Inequalities Unit 7: Fractions, Decimals & Percents Level 1 Module 5: Fractions Review Unit 7: Fractions, Decimals & Percents Level 1 Module 8: Relationships of Fractions, Decimals & Percents Unit 8: Fractions, Decimals & Percents Level 2 Module 1: Addition &

b.	Estimate and determine the sum or difference of two fractions (proper or improper) and/or mixed numbers, having like and unlike denominators limited to 2, 3, 4, 5, 6, 8, 10, and 12 (e.g., $5/8 + 1/4$,	Unit 8: Fractions, Decimals & Percents Level 2 Module 1: Addition & Subtraction of Fractions Unit 8: Fractions, Decimals & Percents Level 2 Module 6: Mixed Practice
c.	Estimate and solve single-step and multistep contextual problems involving addition and subtraction with fractions (proper or improper) and/or mixed numbers having like and unlike denominators, with and without models. Denominators should be limited to 2, 3, 4, 5, 6, 8,	Unit 7: Fractions, Decimals & Percents Level 1 Module 4: Mixed Numbers Unit 8: Fractions, Decimals & Percents Level 2 Module 1: Addition & Subtraction of Fractions Unit 8: Fractions, Decimals & Percents Level 2 Module 6: Mixed Practice
d.	Solve single-step contextual problems involving multiplication of a whole number, limited to 12 or less, and a proper fraction (e.g., $9 \times 2/3$, $8 \times 3/4$), with models. The denominator will be a factor of the whole number and answers should be expressed in simplest form.	Unit 7: Fractions, Decimals & Percents Level 1 Module 3: Inequalities Unit 7: Fractions, Decimals & Percents Level 1 Module 5: Fractions Review Unit 8: Fractions, Decimals & Percents Level 2 Module 1: Addition & Subtraction of Fractions Unit 8: Fractions, Decimals & Percents Level 2 Module 2: Multiplication & Division of Fractions Unit 8: Fractions, Decimals & Percents Level 2 Module 6: Mixed Practice
Computation and Estimation		
5.CE.3.	The student will estimate, represent, solve, and justify solutions to single-step and multistep problems, including those in context, using addition, subtraction, multiplication, and division	

a.	Apply estimation strategies (e.g., rounding to the nearest whole number, tenth or hundredth; compatible numbers, place value) to determine a reasonable solution for single-step and multistep contextual problems involving addition, subtraction, and multiplication of decimals, and single-step contextual problems involving division of decimals.	Unit 5: Multiplication & Division Level 2 Module 1: Multiplication by One Digit Unit 5: Multiplication & Division Level 2 Module 3: Multiplication Using the Algorithm Unit 5: Multiplication & Division Level 2 Module 4: Division Using the Algorithm Unit 5: Multiplication & Division Level 2 Module 5: Multiplication by Two Digits Unit 5: Multiplication & Division Level 2 Module 6: Division by Two Digits Unit 5: Multiplication & Division Level 2 Module 7: Mixed Practice Unit 6: Mixed Operations with Whole Numbers Module 3: Two–Four Digits by Two Digits Unit 6: Mixed Operations with Whole Numbers Module 4: Three–Four Digits by Three Digits Unit 6: Mixed Operations with Whole Numbers Module 5: Four Digits Unit 6: Mixed Operations with Whole Numbers Module 6: Mixed Practice with Operations
	Computation and Estimation	
5.CE.3.	The student will estimate, represent, solve, and justify solutions to single-step and multistep problems, including those in context, using addition, subtraction, multiplication, and division	
b.	Estimate and determine the product of two numbers using strategies and algorithms, including the standard algorithm, when given:	

i.	a two-digit factor and a one-digit factor (e.g., 2.3×4 ; 0.08×0.9 ; $.16 \times 5$);	Unit 5: Multiplication & Division Level 2 Module 1: Multiplication by One Digit Unit 5: Multiplication & Division Level 2 Module 3: Multiplication Using the Algorithm Unit 5: Multiplication & Division Level 2 Module 7: Mixed Practice Unit 6: Mixed Operations with Whole Numbers Module 2: Two–Four Digits by One Digit Unit 8: Fractions, Decimals & Percents Level 2 Module 4: Multiplication & Division of Decimals Unit 8: Fractions, Decimals & Percents Level 2 Module 6: Mixed Practice Unit 8: Fractions, Decimals & Percents Level 2 Module 7: Application
ii.	a three-digit factor and a one-digit factor (e.g., 0.156×4 , 3.28×7 , 8.09×0.2); and	Unit 8: Fractions, Decimals & Percents Level 2 Module 4: Multiplication & Division of Decimals Unit 8: Fractions, Decimals & Percents Level 2 Module 6: Mixed Practice Unit 8: Fractions, Decimals & Percents Level 2 Module 7: Application
iii.	a two-digit factor and a two-digit factor (e.g., 0.85×3.7 , 14×1.6 , 9.2×3.5).	Unit 8: Fractions, Decimals & Percents Level 2 Module 4: Multiplication & Division of Decimals Unit 8: Fractions, Decimals & Percents Level 2 Module 6: Mixed Practice Unit 8: Fractions, Decimals & Percents Level 2 Module 7: Application
Computation and Estimation		
5.CE.3. The student will estimate, represent, solve, and justify solutions to single-step and multistep problems, including those in context, using addition, subtraction, multiplication, and division		
c.	Estimate and determine the quotient of two numbers using strategies and algorithms, including the standard algorithm, in which:	
i.	quotients do not exceed four digits with or without a decimal point;	Unit 8: Fractions, Decimals & Percents Level 2 Module 4: Multiplication & Division of Decimals Unit 8: Fractions, Decimals & Percents Level 2 Module 6: Mixed Practice Unit 8: Fractions, Decimals & Percents Level 2 Module 7: Application

ii.	quotients may include whole numbers, tenths, hundredths, or thousandths;	Unit 8: Fractions, Decimals & Percents Level 2 Module 4: Multiplication & Division of Decimals Unit 8: Fractions, Decimals & Percents Level 2 Module 6: Mixed Practice
iii.	divisors are limited to a single digit whole number or a decimal expressed as tenths; and	Unit 8: Fractions, Decimals & Percents Level 2 Module 4: Multiplication & Division of Decimals Unit 8: Fractions, Decimals & Percents Level 2 Module 6: Mixed Practice Unit 8: Fractions, Decimals & Percents Level 2 Module 7: Computation and Estimation
iv.	no more than one additional zero will need to be annexed.	Unit 8: Fractions, Decimals & Percents Level 2 Module 4: Multiplication & Division of Decimals Unit 8: Fractions, Decimals & Percents Level 2 Module 6: Mixed Practice Unit 8: Fractions, Decimals & Percents Level 2 Module 7: Computation and Estimation
Computation and Estimation		
5.CE.3. The student will estimate, represent, solve, and justify solutions to single-step and multistep problems, including those in context, using addition, subtraction, multiplication, and division		
d.	Solve single-step and multistep contextual problems involving addition, subtraction, and multiplication of decimals by applying strategies (e.g., estimation, modeling) and algorithms,	Unit 8: Fractions, Decimals & Percents Level 2 Module 4: Multiplication & Division of Decimals Unit 8: Fractions, Decimals & Percents Level 2 Module 6: Mixed Practice
e.	Solve single-step contextual problems involving division with decimals by applying strategies (e.g., estimation, modeling) and algorithms,	Unit 8: Fractions, Decimals & Percents Level 2 Module 4: Multiplication & Division of Decimals
Computation and Estimation		
5.CE.4. The student will simplify numerical expressions with whole numbers using the order of		

a.	Use order of operations to simplify numerical expressions with whole numbers, limited to addition, subtraction, multiplication, and division	
i.	expressions may contain no more than one set	Unit 10: Algebra Module 1: Operations & Equations
ii.	simplification will be limited to five whole numbers and four operations in any combination of addition, subtraction, multiplication, or division;	Unit 5: Multiplication & Division Level 2 Module 2: Division by One Unit 5: Multiplication & Division Level 2 Module 4: Division Using the Algorithm Unit 5: Multiplication & Division Level 2 Module 7: Mixed Practice Unit 6: Mixed Operations with Whole Numbers Module 2: Two–Four Digits by One Digit
iii.	whole numbers will be limited to two digits or	Unit 5: Multiplication & Division Level 2 Module 1: Multiplication by One Digit Unit 5: Multiplication & Division Level 2 Module 2: Division by One Unit 5: Multiplication & Division Level 2 Module 3: Multiplication Using the Algorithm Unit 5: Multiplication & Division Level 2 Module 4: Division Using the Algorithm Unit 5: Multiplication & Division Level 2 Module 7: Mixed Practice Unit 6: Mixed Operations with Whole Numbers Module 2: Two–Four Digits by One Digit
iv.	expressions should not include braces, brackets,	Unit 10: Algebra Module 1: Operations & Equations
Computation and Estimation		

5.CE.4. The student will simplify numerical expressions with whole numbers using the order of		
b.	Given a whole number numerical expression involving more than one operation, describe which operation is completed first, which is	<p>Unit 5: Multiplication & Division Level 2 Module 1: Multiplication by One Digit</p> <p>Unit 5: Multiplication & Division Level 2 Module 3: Multiplication Using the Algorithm</p> <p>Unit 5: Multiplication & Division Level 2 Module 4: Division Using the Algorithm</p> <p>Unit 5: Multiplication & Division Level 2 Module 5: Multiplication by Two Digits</p> <p>Unit 5: Multiplication & Division Level 2 Module 6: Division by Two</p> <p>Unit 5: Multiplication & Division Level 2 Module 7: Mixed Practice</p> <p>Unit 6: Mixed Operations with Whole Numbers Module 3: Two–Four Digits by Two Digits</p> <p>Unit 6: Mixed Operations with Whole Numbers Module 4: Three–Four Digits by Three Digits</p> <p>Unit 6: Mixed Operations with Whole Numbers Module 5: Four Digits</p> <p>Unit 6: Mixed Operations with Whole Numbers Module 6: Mixed Practice with Operations</p>
Measurement and Geometry		
5.MG.1. The student will reason mathematically to solve problems, including those in context, that involve length, mass, and liquid volume using metric		
a.	Determine the most appropriate unit of measure to use in a contextual problem that involves	
i.	length (millimeters, centimeters, meters, and	
		Unit 9: Measurement, Geometry & Data Module 6: Units of Measure
ii.	mass (grams and kilograms); and	

		Unit 9: Measurement, Geometry & Data Module 6: Units of Measure
iii.	liquid volume (milliliters and liters).	
		Unit 9: Measurement, Geometry & Data Module 6: Units of Measure
	Measurement and Geometry	Measurement and Geometry
5.MG.1.	The student will reason mathematically to solve problems, including those in context, that involve length, mass, and liquid volume using metric	The student will reason mathematically to solve problems, including those in context, that involve length, mass, and liquid volume using metric units.
b.	Estimate and measure to solve contextual problems that involve metric units:	Estimate and measure to solve contextual problems that involve metric units:
i.	length (millimeters, centimeters, and meters);	
		Unit 9: Measurement, Geometry & Data Module 6: Units of Measure
ii.	mass (grams and kilograms); and	
		Unit 9: Measurement, Geometry & Data Module 6: Units of Measure
iii.	liquid volume (milliliters and liters).	
		Unit 9: Measurement, Geometry & Data Module 6: Units of Measure
	Measurement and Geometry	
5.MG.1.	The student will reason mathematically to solve problems, including those in context, that involve length, mass, and liquid volume using metric	
c.	Given the equivalent metric measure of one unit, in a contextual problem, determine the equivalent measurement within the metric	
i.	length (millimeters, centimeters, meters, and	
		Unit 9: Measurement, Geometry & Data Module 6: Units of Measure
ii.	mass (grams and kilograms); and	

		Unit 9: Measurement, Geometry & Data Module 6: Units of Measure
iii.	liquid volume (milliliters and liters).	
		Unit 9: Measurement, Geometry & Data Module 6: Units of Measure
	Measurement and Geometry	
	5.MG.2. The student will use multiple representations to solve problems, including those in context,	
a.	Investigate and develop a formula for determining the area of a right triangle.	
		Unit 9: Measurement, Geometry & Data Module 4: Perimeter, Area & Volume
c.	Describe volume as a measure of capacity and give examples of volume as a measurement in	
		Unit 9: Measurement, Geometry & Data Module 6: Units of Measure
d.	Investigate and develop a formula for determining the volume of rectangular prisms	
		Unit 9: Measurement, Geometry & Data Module 4: Perimeter, Area & Volume Unit 10: Algebra Module 4: Expressions Unit 10: Algebra Module 7: Geometry Unit 9: Measurement, Geometry & Data Module 4: Perimeter, Area & Volume
e.	Solve problems, including those in context, to estimate and determine the volume of a rectangular prism using concrete objects, diagrams, and formulas when the length, width, and height are given in whole number units.	
		Unit 9: Measurement, Geometry & Data Module 4: Perimeter, Area & Volume

		Unit 10: Algebra Module 4: Expressions Unit 10: Algebra Module 7: Geometry
f.	Identify whether the application of the concept of perimeter, area, or volume is appropriate for a	Unit 9: Measurement, Geometry & Data Module 4: Perimeter, Area & Volume
g.	Solve contextual problems that involve perimeter, area, and volume in standard units of	Unit 9: Measurement, Geometry & Data Module 4: Perimeter, Area & Volume
Measurement and Geometry		
5.MG.3. The student will classify and measure angles and triangles, and solve problems, including		
a.	Classify angles as right, acute, obtuse, or straight and justify reasoning.	Unit 9: Measurement, Geometry & Data Module 2: Lines & Angles Unit 9: Measurement, Geometry & Data Module 3: Classification of 2-D Unit 10: Algebra Module 7: Geometry
b.	Classify triangles as right, acute, or obtuse and equilateral, scalene, or isosceles and justify	Unit 9: Measurement, Geometry & Data Module 1: 2-D Shapes Unit 9: Measurement, Geometry & Data Module 3: Classification of 2-D Figures
c.	Identify congruent sides and right angles using geometric markings to denote properties of	Unit 9: Measurement, Geometry & Data Module 1: 2-D Shapes

		Unit 9: Measurement, Geometry & Data Module 3: Classification of 2D Figures
e.	Identify the appropriate tools (e.g., protractor, straightedge, angle ruler, available technology) to	Unit 9: Measurement, Geometry & Data Module 2: Lines & Angles Unit 10: Algebra Module 7: Geometry
f.	Measure right, acute, obtuse, and straight angles, using appropriate tools, and identify measures in	Unit 9: Measurement, Geometry & Data Module 2: Lines & Angles Unit 10: Algebra Module 7: Geometry
Probability and Statistics		
5.PS.1.	The student will apply the data cycle (formulate questions; collect or acquire data; organize and represent data; and analyze data and communicate results) with a focus on line plots.	
e.	Analyze data represented in line plots (dot plots) and stem-and-leaf plots and communicate	
ii.	make inferences about data represented in line plots (dot plots) and stem-and-leaf plots (e.g., based on a line plot (dot plot) of the number of books students in a bus line have in their	Unit 9: Measurement, Geometry & Data Module 8: Data Analysis
iii.	identify parts of the data that have special characteristics and explain the meaning of the greatest, the least, or the same (e.g., the stem-and-leaf plot shows that the same number of	Unit 9: Measurement, Geometry & Data Module 7: Data Unit 9: Measurement, Geometry & Data Module 8: Data Analysis

v.	solve single-step and multistep addition and subtraction problems using data from line plots (dot plots) and stem-and-leaf plots.	Unit 9: Measurement, Geometry & Data Module 7: Data Unit 9: Measurement, Geometry & Data Module 8: Data Analysis
Probability and Statistics		
5.PS.2. The student will solve contextual problems using measures of center and the range.		
e.	Describe and determine the range of a set of data values representing data from a given	Unit 9: Measurement, Geometry & Data Module 8: Data Analysis
Patterns, Functions, and Algebra		
5.PFA.1 The student will identify, describe, extend, and create increasing and decreasing patterns with whole numbers, fractions, and decimals, including those in context, using various		
b.	Analyze an increasing or decreasing single-operation numerical pattern found in lists, input/output tables, and function machines, and generalize the change to identify the rule, extend the pattern, or identify missing terms. (Patterns will be limited to addition, subtraction, multiplication, and division of whole numbers; addition and subtraction of fractions with like denominators of 12 or less; and addition and subtraction of decimals expressed in tenths or hundredths).	Unit 4: Multiplication & Division Level 1 Module 1: Skip Counting Review Unit 4: Multiplication & Division Level 1 Module 3: Division Unit 4: Multiplication & Division Level 1 Module 4: Strategies Unit 4: Multiplication & Division Level 1 Module 5: Multiples & Factors Unit 5: Multiplication & Division Level 2 Module 7: Mixed Practice Unit 6: Mixed Operations with Whole Numbers Module 1: Relationships of Operations Unit 6: Mixed Operations with Whole Numbers Module 2: Two–Four Digits by One Digit Unit 6: Mixed Operations with Whole Numbers Module 3: Two–Four Digits by Two Digits Unit 9: Measurement, Geometry & Data Module 5: Time, Money, & Unit 10: Algebra Module 1: Operations & Equations Unit 10: Algebra Module 6: Patterns & Structure

c.	Solve contextual problems that involve identifying, describing, and extending increasing and decreasing patterns using single-operation input and output rules (limited to addition, subtraction, multiplication, and division of whole numbers; addition and subtraction of fractions with like denominators of 12 or less; and addition and subtraction of integers.)	Unit 10: Algebra Module 5: Variables
Patterns, Functions, and Algebra		
5.PFA.2 The student will investigate and use variables in contextual problems.		
c.	Use an expression with a variable to represent a given verbal expression involving one operation (e.g., “5 more than a number” can be represented	Unit 10: Algebra Module 5: Variables
d.	Create and write a word problem to match a given equation with a single variable and one	Unit 10: Algebra Module 5: Variables

