

Content Area: Mathematics	Course: Mathematics	Grade Level: 1
	R14 The Seven Cs of Learnin	ıg
		Collaboration
	Character	Communication
	Citizenship Creativ	Critical Thinking ity Curiosity
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Unit Titles	Longth	of Unit
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Unit 1-Mastering Addition and Subtraction Within Ten	5 weeks	
Unit 2-Early Place Value/Addition and Subtraction Within	7 weeks	
Twenty		
Unit 3-Geometry and Time	6 weeks	
Unit 4 Extending Place Value	5 weeks	
Unit 5-Measurement	5 weeks	
Unit 6-Addition and Subtraction Within 100	5 weeks	

Region 14 Curriculum: Mathematics Curriculum Grade 1 BOE Adopted: DRAFT



Strands	Course Level Expectations
Number and Operations in Base-Ten	 Extend the counting sequence. Understand place value. Use place value understanding and properties of operations to add and subtract. Develop, discuss and use efficient, accurate, and generalizable methods to add within 100 and subtract multiples of 10. Compare whole numbers at least to 100. Think of whole numbers in terms of tens and ones.
Operations and Algebraic Thinking	 Use a variety of models to represent and solve problems involving addition and subtraction. Understand and apply properties of operations and the relationship between addition and subtraction. Use properties of addition to add whole numbers and to create and use increasingly sophisticated strategies based on these properties (e.g., making tens) to solve addition and subtraction problems within 20. Work with addition and subtraction equations.

Strands	Course Level Expectations
Geometry	 Reason with shapes and their attributes, and determine how shapes are alike and different. Recognize shapes from different perspectives and orientations. Compose and decompose plane or solid figures (e.g., put two triangles together to make a quadrilateral). Build understanding of part-whole relationships.
Measurement and Data	 Measure lengths indirectly and by iterating length units (the mental activity of building up the length of an object with equal-sized units). Understand conservation of length including change in position, arrangement and comparing lengths and drawing conclusions. Tell and write time. Represent and interpret data.

Unit Title	Mastering Addition and Subtraction Within Ten	Length of Unit	5 weeks

Inquiry Questions (Engaging & Debatable)	 What is the relationship between counting, addition and subtraction? How can we use different strategies to solve equations for unknown quantities to ten? What is the role of the equal sign? How can we represent addition and subtraction problem situations? 	
Standards::	Operations and Algebraic Thinking	
	• 1.0A.A1, 1.0A.B3, 1.0A.B4, 1.0A.C5, 1.0A.C6, 1.0A.D7, 1.0A.D8	
Unit Strands &	Relationship between addition and subtraction	
Concepts	Meaning of the equal sign	
	Addition and subtraction strategies	
	 Situations and contexts involving addition and subtraction 	
Vocabulary	Addition, subtraction, adding to, taking from, putting together, taking apart, comparing, equations, symbol, make ten, addend, counting on, equivalent, sums, doubles, equal, true, false, manipulatives	
Standards based on (Common Core State Standards	

Standards based on Common Core State Standards For more information visit: <u>http://www.corestandards.org/Math/Content/1/introduction/</u>

Unit Title Mastering Addition and Su	btraction Within Ten	Length of Unit	5 weeks
Critical Content: My students will Know	Key Skills: My students will be able to (D0)		
 Numbers within 10 can be counted and compared Different combinations can make 10. Subtraction can be represented as an unknown addend addition problem Recognize and interpret different situations for addition and subtraction The equal sign means "is the same as" and does not always come before the sum or difference. 	 Linking equations to concrete representations of problem s Students count on to add and Model and solve addition and Find the number that makes 1-9 Add and subtract within 10 u number lines, and properties Fluently add and subtract with 	ituations count back to subtra l subtraction stories. ten when added to a sing drawings, object of operations	act. given number

Assessments:	Performance task focused on understanding of addition and subtraction situations, efficiency of strategies used to solve addition and subtraction problems, and decomposition ability.
Teacher Resources:	MyMath, Engage NY, 3 Act Task Bank, CCSS aligned anchor tasks, Illustrative Mathematics, Georgia Department of Education CCSS aligned tasks, North Carolina Department of Instruction, CCSS aligned tasks.

Unit Title	Early Place Value/Addition and Subtraction Within	Length of Unit	7 weeks
	Twenty		
Inquiry Questions	• What is the relationship between counting, addition	n and subtraction?	
(Engaging &	 How can we use different strategies to solve equati 	ons for unknown q	uantities to twenty?
Debatable)	 What is the role of the equal sign? 		
	• How can we represent addition and subtraction pre-		
	 How can we use base-ten methods to help with add 	lition, subtraction,	counting and
	comparing numbers?		
Unit Strands &	Operations and Algebraic Thinking		
Standards	• 1.0A.A1, 1.0A.A2, 1.0A.B3, 1.0A.B4, 1.0A.C5, 1.0A.C6, 1.0A.D7, 1.0A.D8, 1.NBT.B2, 1.NBT.B3		
Concepts	Relationship between addition and subtraction		
	Meaning of the equal sign		
	Addition and subtraction strategies		
	Situations and contexts involving addition and subtraction		
	Base ten understanding		
	Unitizing		
Vocabulary	Addition, subtraction, adding to, taking from, putting together, taking apart, compare, equations, symbol, make ten, addend, unknown addend, counting on, equivalent, sums, doubles, doubles plus/minus one, number line, equal, true, false, manipulatives, tens, ones, place value, compare, greater than, less than		

Unit Title	Early Place Value/Addition and Subtraction Wi	thin Twenty Length of Unit 7 weeks
Critical Content	: My students will Know	Key Skills: My students will be able to (Do)
 Different (Subtraction addition p Recognized addition a The equal always co Numbers The numbro one, two, for (and 0 one) 	e and interpret different situations for and subtraction sign means "is the same as" and does not me before the sum or difference. 11-19 are a ten and some number of ones. bers 10, 20, 30, 40, 50, 60, 70, 80, 90 refer to three, four, five, six, seven, eight, or nine tens	 Link equations to concrete materials, drawings, and other representations of problem situations Model and solve addition and subtraction stories. Find the number that makes ten when added to a given number 1-9 Add and subtract within 20 using drawings, objects, 10 frames, number lines, properties of operations, and decomposition strategies Compare two two-digit numbers based on meanings of the tens and ones digits Determine the unknown number in an addition or subtraction equation
Assessments:	Performance task focused on understanding of a strategies used to solve addition and subtraction	addition and subtraction situations, efficiency of n problems, and decomposition and unitizing ability.
Teacher	MyMath, Engage NY, 3 Act Task Bank, CCSS aligned anchor tasks, Illustrative Mathematics,	

TeacherMyMath, Engage NY, 3 Act Task Bank, CCSS aligned anchor tasks, Illustrative Mathematics,
Georgia Department of Education CCSS aligned tasks, North Carolina Department of Instruction, CCSS
aligned tasks.

Unit Title	Geometry and Time	Length of Unit	6 weeks
Inquiry Questions (Engaging & Debatable)	 How can we distinguish, describe and classify shapes using defining attributes? How can we compose shapes to make new shapes? How can we partition shapes to make equal shares? How do we relate time to our daily activities? 		
Standards	Geometry and Measurement and Data • 1.G.A1, 1.G.A2, 1.G.A3, 1.MD.B3		
Unit Strands & Concepts	 Geometric versus non geometric attributes Clocks are used to read time of the day. Part-whole relationships 		
Vocabulary	Attributes, closed shapes, sides, corners, rectangles, squares, trapezoids, triangles, rhombus half- circles, quarter circles, cubes, right rectangular prisms, cones, cylinders, partition, halves, fourths, quarters, half of, fourth of, quarter of, two of the shares, four of the shares, equal shares, hours, half hours, digital clock, time		

Unit Title Geometry and Time	Length of Unit	6 weeks
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Critical Content:	Key Skills:
My students will Know	My students will be able to (Do)
 Part-whole relationships as well as the properties of the original and composite shapes. Plane shapes and solid figures are found all around us. Decomposing into more equal shares creates smaller shares Recognize the shape by its attributes not by its orientation Relate time to daily activities 	 Describe and classify shapes according to geometric attributes Differentiate between geometrically defining and non-defining attributes Compose two-dimensional shapes (rectangles, squares, trapezoids, triangles, half-circles, and quarter-circles) or three dimensional shapes (cubes, right rectangular prisms, right circular cones, and right circular cylinders) to create a composite shape. Partition circles and rectangles into two and four equal shares, describe the shares using the words halves, fourths, and quarters Tell and write time in hours and half-hours using analog and digital clocks.

Assessments	Performance task focused on classifying two and three dimensional shapes, composing two and three dimensional shapes, partitioning shapes, and telling time.
Teacher Resources:	MyMath, Engage NY, 3 Act Task Bank, CCSS aligned anchor tasks, Illustrative Mathematics, Georgia Department of Education CCSS aligned tasks, North Carolina Department of Instruction, CCSS aligned tasks.

Unit Title	Extending Place Value	Length of Unit	5 weeks
Inquiry Questions (Engaging & Debatable)	 What is place value? How can we use place value strategies to ext How can we use two-digit numbers to comp 	• •	to 120?
Standards	Numbers and Operations in Base Ten 1.NBT.A1, 1.NBT.B2, 1.NBT.C5, 1.NI 	3T.C6	
Unit Strands & Concepts	 Unitizing Base ten understanding Place value patterns 		
Vocabulary	Numbers to 120, tens, ones, bundle, ten more, ter	less, place value.	

Unit Title	Extending Place Value	Length of Unit	5 weeks
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Critical Content:	Key Skills:
My students will Know	My students will be able to (DO)
 Relate counting to cardinality Place value is used to help count, compare and order numbers. A group of ten ones can be referred to a unit called a "ten" Numbers 11-19 are a ten and some number of ones. The numbers 10, 20, 30, 40, 50, 60, 70, 80, 90 refer to one, two, three, four, five, six, seven, eight, or nine tens (and 0 ones). Two digits of a two-digit number represent amounts of tens and ones 	 Count, read, and write numbers to 120 Given a two-digit number, mentally find 10 more or 10 less than the number, without having to count; explain the reasoning used. Subtract multiples of 10 in the range 10-90 from multiples of 10 in the range 10-90 using concrete models, drawings, and strategies based on place value and the properties of operations Represent numbers as tens and ones Decompose one and two-digit numbers in different ways (i.e. 43= 4 tens and 3 ones, 43 ones, 3 tens and 13 ones, etc.)

Assessments:	Performance task focusing on unitizing, base ten patterns, and decomposition ability.	
Teacher Resources:	MyMath, Engage NY, 3 Act Task Bank, CCSS aligned anchor tasks, Illustrative Mathematics, Georgia Department of Education CCSS aligned tasks, Fosnot Organizing and Collecting Unit, North Carolina Department of Instruction, CCSS aligned tasks.	

Unit Title	Measurement	Length of Unit	5 weeks
Inquiry Questions (Engaging & Debatable)	 How can measurement using standard and nonstandard units of measure help us to find and compare length? How do we relate time to our daily activities? How can we organize, represent, and interpret data to ask and answer questions? 		
Standard	Measurement and Data • 1.MD.A1, 1.MD.A2, 1.MD.B3, 1.MD.C4		
Unit Strands & Concepts	 Transitivity principle Seriation Conservation of length 		
Vocabulary	Lengths, measure, compare, longer, shorter, gaps Time, hour, half hour, analog clock, digital clock, o how many less, data points		

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Unit Title	Measurement	Length of Unit	5 weeks
Critical Conten	t: My students will Know	Key Skills: My student	s will be able to (DO)
 comparis Length m units tha The size comparin An object of the san and one if A few big big space In order 	heasurement of an object is the number of same-size length t span it with no gaps or overlaps. of the unit of measure must be considered when ng lengths t retains its length regardless of its position, (two sticks me length are still the same length even if one is vertical is horizontal) g objects fit into small spaces and many small objects fit into	 using indirect object) Express the len whole number laying multiple object (the len Make compari of data points 	by length ength of two objects comparison (a third ngth of an object as a of length units, by e copies of a shorter gth unit) end to end sons about the number in given categories e hour and half an hour

Assessments:	Performance task focusing on measuring length through direct and indirect comparison, seriation, comparing and analyzing data sets, and telling time.
Teacher Resources:	MyMath, Engage NY, 3 Act Task Bank, CCSS aligned anchor tasks, Illustrative Mathematics, Georgia Department of Education CCSS aligned tasks, North Carolina Department of Instruction, CCSS aligned tasks.

Unit Title	Addition and Subtraction Within 100	Length of Unit	5 weeks
Inquiry Questions (Engaging & Debatable)	 How can we relate the properties of addition subtraction within 100? How can we use the equal sign to determine How can we use different strategies to solve terms of tens and ones? 	e if equations are true or fals	e?
Standards	Operations and Algebraic Thinking		

Standards	Operations and Algebraic Thinking • 1.0A.B3, 1.0A.B4, 1.0A.D7, 1.NBT.C4, 1.NBT.C5, 1.NBT.C6
Unit Strands & Concepts	 Unitizing Composing and decomposing Base ten and place value patterns Relations between addition and subtraction Meaning of the equal sign Addition and subtraction strategies Situations and contexts involving addition and subtraction
Vocabulary	Addition, subtraction, unknown addend, equal, true, false, one-digit number, two-digit number, ten, place value, make ten, ten more, ten less,

Unit Title	Addition and Subtraction Within 1	00	Length of Unit	5 weeks
Critical Content	: My students will Know	Key Skills:My students will b	e able to (D0)	
 subtracted In adding tens and t sometime ten. Subtraction addend a	mbers can be added and d with or without regrouping. two-digit numbers, one adds ens, ones and ones; and s it is necessary to compose a on can be represented as an unknown dition problem e and interpret different for addition and subtraction sign means "is the same as" and always come before the sum or e.	 operations Given a two-digit number, within the number, within the number, within the number. Subtract multiples of 10 in the range 10-9 	olace value and the pr mber, mentally find 1 thout having to count f 10 in the range 10-9 0 using concrete mod place value and the pr ncrete materials, draw roblem situations	roperties of 0 more or 10 less t; explain the 00 from multiples of lels, drawings, and roperties of wings, and other

Assessments:	Performance task focused on composing and decomposing, unitizing, base ten patterns, and understanding addition and subtraction situations.
Teacher Resources:	MyMath, Engage NY, 3 Act Task Bank, CCSS aligned anchor tasks, Illustrative Mathematics, Georgia Department of Education CCSS aligned tasks, North Carolina Department of Instruction, CCSS aligned tasks.