

First Grade Academic Vocabulary

Data	One-half
Digit	Part
Direction	Place value
Equal to	Plus
Estimate	Ruler
Even	Skip count
Graph	Solve
Greater than/less than	Symbol
Half-hour	Total
Horizontal	Unit (standard, non-standard)
Length	Vertical
Measure/measurement	Week
Minute	Weight, scales
Month	Whole
Number sentence	Whole number
Numeral	Year
Odd	

<u>TN STANDARDS</u> <u>MOVED TO FIRST GRADE</u>		<u>COMMON CORE STANDARD</u> <u>THAT CORRELATES</u>	
✓ <u>0206.3.5</u>	Understand and use the commutative and associative properties of addition and multiplication	<u>OA.1.3</u>	Understand and apply properties of operations and the relationship between addition and subtraction. Apply properties of operations as strategies to add and subtract. Examples: If $8 + 3 = 11$ is known, then $3 + 8 = 11$ is also known. (Commutative property of addition.) To add $2 + 6 + 4$, the second two numbers can be added to make a ten, so $2 + 6 + 4 = 2 + 10 = 12$. (Associative property of addition.) (Students need not use formal terms for these properties.)
✓ <u>0006.1.4</u>	Tell time to the hour	<u>MD.1.3</u>	Tell and write time. Tell and write time in hours and half-hours using analog and digital clocks.
✓ <u>0006.4.1</u>	Identify, name, and describe a variety of shapes (i.e. circles, squares, triangles, rectangles, hexagons, trapezoids) shown in various positions.	<u>G.1.2</u>	G.1.2 Reason with shapes and their 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, and compose new shapes from the composite shape. (Students do not need to learn formal names such as "right rectangular prism.")
✓ <u>0006.4.2</u>	Identify, name, and describe three-dimensional shapes (such as sphere, cube, cone, cylinder).	<u>G.1.2</u>	Reason with shapes and their 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, and compose new shapes from the composite shape. (Students do not need to learn formal names such as "right rectangular prism.")

TN STANDARDS NOT INCLUDED IN TEXTBOOK:

Recognize the “word clues” and mathematical symbols for addition and subtraction.

Use age-appropriate books, stories, and videos to convey ideas of mathematics

Recognize the essential role of units in measurement, and understand the difference between standard and non-standard units.

FIRST NINE WEEKS – TOPICS 1, 2, 3, 4, 5

August 8th – October 6th

TOPIC	TN Standard	TN Standard	Common Core	
1	0106.2.2	Write numbers up to 10 in words.	n/a	
2	0106.2.5	Order and compare (less than, greater than, or equal to) whole numbers to 100.	OA.1.7	Work with addition and subtraction equations. Understand the meaning of the equal sign, and determine if equations involving addition and subtraction are true or false. For example, which of the following equations are true and which are false? $6 = 6$, $7 = 8 - 1$, $5 + 2 = 2 + 5$, $4 + 1 = 5 + 2$.
			NBT.1.3	Understand place value. Compare two two-digit numbers based on meanings of the tens and ones digits, recording the results of comparisons with the symbols $>$, $=$, and $<$.
2	0106.2.17	Use the number line to create visual representations of sequences (such as even numbers, tens, multiples of five).	NBT.1.3	Understand place value. Compare two two-digit numbers based on meanings of the tens and ones digits, recording the results of comparisons with the symbols $>$, $=$, and $<$.
			NBT.1.5	Use place value understanding and properties of operations to add and subtract. Given a two-digit number, mentally find 10 more or 10 less than the number, without having to count; explain the reasoning used.
			NBT.1.6	Use place value understanding and properties of operations to add and subtract. Subtract multiples of 10 in the range 10-90 from multiples of 10 in the range 10-90 (positive or zero differences), using concrete models or drawings and strategies based on place value, properties of operations, and/or the relationship between addition and subtraction; relate the strategy to a written method and explain the reasoning used.
3	0106.3.4	Demonstrate understanding of the basic equation $a + b = c$ by using objects to illustrate the numbers sentences (fact	OA.1.7	Work with addition and subtraction equations. Understand the meaning of the equal sign, and determine if equations involving addition and subtraction are true or false. For example, which of the following equations are true and which are false? $6 = 6$, $7 = 8 - 1$, $5 + 2 = 2 + 5$, $4 + 1 = 5 + 2$.

		families) associated with any particular sum.	OA.1.8	Work with addition and subtraction equations. Determine the unknown whole number in an addition or subtraction equation relating three whole numbers. For example, determine the unknown number that makes the equation true in each of the equations $8 + ? = 11$, $5 = _ - 3$, $6 + 6 = _$.
			NBT.1.4	Use place value understanding and properties of operations to add and subtract. Add within 100, including adding a two-digit number and a one-digit number, and adding a two-digit number and a multiple of 10, using concrete models or drawings and strategies based on place value, properties of operations, and/or the relationship between addition and subtraction; relate the strategy to a written method and explain the reasoning used. Understand that in adding two-digit numbers, one adds tens and tens, ones and ones; and sometimes it is necessary to compose a ten.
			NBT.1.6	Use place value understanding and properties of operations to add and subtract. Subtract multiples of 10 in the range 10-90 from multiples of 10 in the range 10-90 (positive or zero differences), using concrete models or drawings and strategies based on place value, properties of operations, and/or the relationship between addition and subtraction; relate the strategy to a written method and explain the reasoning used.
3,4	0106.3.3	Use objects to illustrate the commutative property with basic facts and show that subtraction is not commutative	OA.1.3	Understand and apply properties of operations and the relationship between addition and subtraction. Apply properties of operations as strategies to add and subtract. Examples: If $8 + 3 = 11$ is known, then $3 + 8 = 11$ is also known. (Commutative property of addition.) To add $2 + 6 + 4$, the second two numbers can be added to make a ten, so $2 + 6 + 4 = 2 + 10 = 12$. (Associative property of addition.) (Students need not use formal terms for these properties.)
			NBT.1.4	Use place value understanding and properties of operations to add and subtract. Add within 100, including adding a two-digit number and a one-digit number, and adding a two-digit number and a multiple of 10, using concrete models or drawings and strategies based on place value, properties of operations, and/or the relationship between addition and subtraction; relate the strategy to a written method and explain the reasoning used. Understand that in adding two-digit numbers, one adds tens and tens, ones and ones; and sometimes it is necessary to compose a ten.

			NBT.1.6	Use place value understanding and properties of operations to add and subtract. Subtract multiples of 10 in the range 10-90 from multiples of 10 in the range 10-90 (positive or zero differences), using concrete models or drawings and strategies based on place value, properties of operations, and/or the relationship between addition and subtraction; relate the strategy to a written method and explain the reasoning used.
4	0106.2.8	Relate “counting on” and “counting back” to addition and subtraction and understand them as inverse operations.	OA.1.3	Understand and apply properties of operations and the relationship between addition and subtraction. Apply properties of operations as strategies to add and subtract. Examples: If $8 + 3 = 11$ is known, then $3 + 8 = 11$ is also known. (Commutative property of addition.) To add $2 + 6 + 4$, the second two numbers can be added to make a ten, so $2 + 6 + 4 = 2 + 10 = 12$. (Associative property of addition.) (Students need not use formal terms for these properties.)
			OA.1.4	Understand and apply properties of operations and the relationship between addition and subtraction. Understand subtraction as an unknown-addend problem. For example, subtract $10 - 8$ by finding the number that makes 10 when added to 8.
			OA.1.5	Add and subtract within 20. Relate counting to addition and subtraction (e.g., by counting on 2 to add 2).
			OA.1.6	Add and subtract within 20. Add and subtract within 10. Use strategies such as counting on; making ten (e.g., $8 + 6 = 8 + 2 + 4 = 10 + 4 = 14$); decomposing a number leading to a ten (e.g., $13 - 4 = 13 - 3 - 1 = 10 - 1 = 9$); using the relationship between addition and subtraction (e.g., knowing that $8 + 4 = 12$, one knows $12 - 8 = 4$); and creating equivalent but easier or known sums (e.g., adding $6 + 7$ by creating the known equivalent $6 + 6 + 1 = 12 + 1 = 13$).
			NBT.1.4	Use place value understanding and properties of operations to add and subtract. Add within 100, including adding a two-digit number and a one-digit number, and adding a two-digit number and a multiple of 10, using concrete models or drawings and strategies based on place value, properties of operations, and/or the relationship between addition and subtraction; relate the strategy to a written method and explain the reasoning used. Understand that in adding two-digit numbers, one adds tens and tens, ones and ones; and sometimes it is necessary to compose a ten.

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4	0106.2.10	Use models (such as discrete objects, connecting cubes, and number lines) to represent “part-whole,” “adding to,” “taking away from,” and “comparing to” situations to develop understanding of the meaning of addition and subtraction.	OA.1.1	Represent and solve problems involving addition and subtraction. Use addition and subtraction within 20 to solve word problems involving situations of adding to, taking from, putting together, taking apart, and comparing, with unknowns in all positions, e.g., by using objects, drawings, and equations with a symbol for the unknown number to represent the problem.
			OA.1.2	Represent and solve problems involving addition and subtraction. Solve word problems that call for addition of three whole numbers whose sum is less than or equal to 20, e.g., by using objects, drawings, and equations with a symbol for the unknown number to represent the problem.
			OA.1.3	Understand and apply properties of operations and the relationship between addition and subtraction. Apply properties of operations as strategies to add and subtract. Examples: If $8 + 3 = 11$ is known, then $3 + 8 = 11$ is also known. (Commutative property of addition.) To add $2 + 6 + 4$, the second two numbers can be added to make a ten, so $2 + 6 + 4 = 2 + 10 = 12$. (Associative property of addition.) (Students need not use formal terms for these properties.)
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			OA.1.6	Add and subtract within 20. Add and subtract within 20, demonstrating fluency for addition and subtraction within 10. Use strategies such as counting on; making ten (e.g., $8 + 6 = 8 + 2 + 4 = 10 + 4 = 14$); decomposing a number leading to a ten (e.g., $13 - 4 = 13 - 3 - 1 = 10 - 1 = 9$); using the relationship between addition and subtraction (e.g., knowing that $8 + 4 = 12$, one knows $12 - 8 = 4$); and creating equivalent but easier or known sums (e.g., adding $6 + 7$ by creating the known equivalent $6 + 6 + 1 = 12 + 1 = 13$).

			OA.1.8	Work with addition and subtraction equations. Determine the unknown whole number in an addition or subtraction equation relating three whole numbers. For example, determine the unknown number that makes the equation true in each of the equations $8 + ? = 11$, $5 = _ - 3$, $6 + 6 = _$.
			NBT.1.4	Use place value understanding and properties of operations to add and subtract. Add within 100, including adding a two-digit number and a one-digit number, and adding a two-digit number and a multiple of 10, using concrete models or drawings and strategies based on place value, properties of operations, and/or the relationship between addition and subtraction; relate the strategy to a written method and explain the reasoning used. Understand that in adding two-digit numbers, one adds tens and tens, ones and ones; and sometimes it is necessary to compose a ten.
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4	0106.2.12	Use various models to develop strategies for solving arithmetic problems.	OA.1.1	Represent and solve problems involving addition and subtraction. Use addition and subtraction within 20 to solve word problems involving situations of adding to, taking from, putting together, taking apart, and comparing, with unknowns in all positions, e.g., by using objects, drawings, and equations with a symbol for the unknown number to represent the problem.
			OA.1.2	Represent and solve problems involving addition and subtraction. Solve word problems that call for addition of three whole numbers whose sum is less than or equal to 20, e.g., by using objects, drawings, and equations with a symbol for the unknown number to represent the problem.
			OA.1.3	Understand and apply properties of operations and the relationship between addition and subtraction. Apply properties of operations as

			strategies to add and subtract. Examples: If $8 + 3 = 11$ is known, then $3 + 8 = 11$ is also known. (Commutative property of addition.) To add $2 + 6 + 4$, the second two numbers can be added to make a ten, so $2 + 6 + 4 = 2 + 10 = 12$. (Associative property of addition.) (Students need not use formal terms for these properties.)
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				to a written method and explain the reasoning used.
4	0106.3.6	Use objects to demonstrate the inverse relationship between addition and subtraction.	OA.1.3	Understand and apply properties of operations and the relationship between addition and subtraction. Apply properties of operations as strategies to add and subtract. Examples: If $8 + 3 = 11$ is known, then $3 + 8 = 11$ is also known. (Commutative property of addition.) To add $2 + 6 + 4$, the second two numbers can be added to make a ten, so $2 + 6 + 4 = 2 + 10 = 12$. (Associative property of addition.) (Students need not use formal terms for these properties.)
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4	0106.3.7	Use the inverse relation between addition and subtraction to check arithmetic problems.	OA.1.3	Understand and apply properties of operations and the relationship between addition and subtraction. Apply properties of operations as strategies to add and subtract. Examples: If $8 + 3 = 11$ is known, then $3 + 8 = 11$ is also known. (Commutative property of addition.) To add $2 + 6 + 4$, the second two numbers can be added to make a ten, so $2 + 6 + 4 = 2 + 10 = 12$. (Associative property of addition.) (Students need not use formal terms for these properties.)
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4.5	0106.2.12	Use various models to develop strategies for solving arithmetic problems.	OA.1.1	Represent and solve problems involving addition and subtraction. Use addition and subtraction within 20 to solve word problems involving situations of adding to, taking from, putting together, taking apart, and comparing, with unknowns in all positions, e.g., by using objects, drawings, and equations with a symbol for the unknown number to represent the problem.
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			OA.1.3	Understand and apply properties of operations and the relationship between addition and subtraction. Apply properties of operations as strategies to add and subtract. Examples: If $8 + 3 = 11$ is known, then $3 + 8 = 11$ is also known. (Commutative property of addition.) To add $2 + 6 + 4$, the second two numbers can be added to make a ten, so $2 + 6 + 4 = 2 + 10 = 12$. (Associative property of addition.) (Students need not use formal terms for these properties.)
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			OA.1.7	Work with addition and subtraction equations. Understand the meaning of

			the equal sign, and determine if equations involving addition and subtraction are true or false. For example, which of the following equations are true and which are false? $6 = 6$, $7 = 8 - 1$, $5 + 2 = 2 + 5$, $4 + 1 = 5 + 2$.
		OA.1.8	Work with addition and subtraction equations. Determine the unknown whole number in an addition or subtraction equation relating three whole numbers. For example, determine the unknown number that makes the equation true in each of the equations $8 + ? = 11$, $5 = _ - 3$, $6 + 6 = _$.
		NBT.1.4	Use place value understanding and properties of operations to add and subtract. Add within 100, including adding a two-digit number and a one-digit number, and adding a two-digit number and a multiple of 10, using concrete models or drawings and strategies based on place value, properties of operations, and/or the relationship between addition and subtraction; relate the strategy to a written method and explain the reasoning used. Understand that in adding two-digit numbers, one adds tens and tens, ones and ones; and sometimes it is necessary to compose a ten.
		NBT.1.5	Use place value understanding and properties of operations to add and subtract. Given a two-digit number, mentally find 10 more or 10 less than the number, without having to count; explain the reasoning used.
		NBT.1.6	Use place value understanding and properties of operations to add and subtract. Subtract multiples of 10 in the range 10-90 from multiples of 10 in the range 10-90 (positive or zero differences), using concrete models or drawings and strategies based on place value, properties of operations, and/or the relationship between addition and subtraction; relate the strategy to a written method and explain the reasoning used.

Topic 1: 7 days

Topic 3: 8 days

Topic 5: 6 days

Topic 2: 5 days

Topic 4: 9 days

SECOND NINE WEEKS – TOPICS 6, 7, 8, 9, 10

October 17th – December 15th

Topic	TN Standard	TN Standard	Common Core	Common Core
6,7	0106.2.7	Develop fluency with addition and subtraction facts of sums through ten.	OA.1.6	Add and subtract within 20. Add and subtract within 20, demonstrating fluency for addition and subtraction within 10. Use strategies such as counting on; making ten (e.g., $8 + 6 = 8 + 2 + 4 = 10 + 4 = 14$); decomposing a number leading to a ten (e.g., $13 - 4 = 13 - 3 - 1 = 10 - 1 = 9$); using the relationship between addition and subtraction (e.g., knowing that $8 + 4 = 12$, one knows $12 - 8 = 4$); and creating equivalent but easier or known sums (e.g., adding $6 + 7$ by creating the known equivalent $6 + 6 + 1 = 12 + 1 = 13$).
6	0106.2.10	Use models (such as discrete objects, connecting cubes, and number lines) to represent “part-whole,” “adding to,” “taking away from,” and “comparing to” situations to develop understanding of the meaning of addition and subtraction.	OA.1.1	Represent and solve problems involving addition and subtraction. Use addition and subtraction within 20 to solve word problems involving situations of adding to, taking from, putting together, taking apart, and comparing, with unknowns in all positions, e.g., by using objects, drawings, and equations with a symbol for the unknown number to represent the problem.
			OA.1.2	Represent and solve problems involving addition and subtraction. Solve word problems that call for addition of three whole numbers whose sum is less than or equal to 20, e.g., by using objects, drawings, and equations with a symbol for the unknown number to represent the problem.
			OA.1.3	Understand and apply properties of operations and the relationship between addition and subtraction. Apply properties of operations as strategies to add and subtract. Examples: If $8 + 3 = 11$ is known, then $3 + 8 = 11$ is also known. (Commutative property of addition.) To add $2 + 6 + 4$, the second two numbers can be added to make a ten, so $2 + 6 + 4 = 2 + 10 = 12$. (Associative property of addition.) (Students need not use formal terms for these properties.)
			OA.1.4	Understand and apply properties of operations and the relationship between addition and subtraction. Understand subtraction as an unknown-addend problem. For example, subtract $10 - 8$ by finding the number that makes 10 when added to 8.
			OA.1.5	Add and subtract within 20. Relate counting to addition and subtraction (e.g., by counting on 2 to add 2).

			OA.1.6	Add and subtract within 20. Add and subtract within 20, demonstrating fluency for addition and subtraction within 10. Use strategies such as counting on; making ten (e.g., $8 + 6 = 8 + 2 + 4 = 10 + 4 = 14$); decomposing a number leading to a ten (e.g., $13 - 4 = 13 - 3 - 1 = 10 - 1 = 9$); using the relationship between addition and subtraction (e.g., knowing that $8 + 4 = 12$, one knows $12 - 8 = 4$); and creating equivalent but easier or known sums (e.g., adding $6 + 7$ by creating the known equivalent $6 + 6 + 1 = 12 + 1 = 13$).
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			NBT.1.4	Use place value understanding and properties of operations to add and subtract. Add within 100, including adding a two-digit number and a one-digit number, and adding a two-digit number and a multiple of 10, using concrete models or drawings and strategies based on place value, properties of operations, and/or the relationship between addition and subtraction; relate the strategy to a written method and explain the reasoning used. Understand that in adding two-digit numbers, one adds tens and tens, ones and ones; and sometimes it is necessary to compose a ten.
			NBT.1.5	Use place value understanding and properties of operations to add and subtract. Given a two-digit number, mentally find 10 more or 10 less than the number, without having to count; explain the reasoning used.
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6,7	0106.3.5	Use various strategies to find unknowns in problems involving addition and subtraction.	OA.1.1	Represent and solve problems involving addition and subtraction. Use addition and subtraction within 20 to solve word problems involving situations of adding to, taking from, putting together, taking apart, and comparing, with unknowns in all positions, e.g., by using objects, drawings, and equations with a symbol for the unknown number to represent the problem.
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				problem. For example, subtract $10 - 8$ by finding the number that makes 10 when added to 8.
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7	0106.3.7	Use the inverse relation between addition and subtraction to check arithmetic problems.	OA.1.3	Understand and apply properties of operations and the relationship between addition and subtraction. Apply properties of operations as strategies to add and subtract. Examples: If $8 + 3 = 11$ is known, then $3 + 8 = 11$ is also known. (Commutative property of addition.) To add $2 + 6 + 4$, the second two numbers can be added to make a ten, so $2 + 6 + 4 = 2 + 10 = 12$. (Associative property of addition.) (Students need not use formal terms for these properties.)
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			OA.1.4	Understand and apply properties of operations and the relationship between addition and subtraction. Understand subtraction as an unknown-addend problem. For example, subtract $10 - 8$ by finding the number that makes 10 when added to 8.
			NBT.1.4	Use place value understanding and properties of operations to add and subtract. Add within 100, including adding a two-digit number and a one-digit number, and adding a two-digit number and a multiple of 10, using concrete models or drawings and strategies based on place value, properties of operations, and/or the relationship between addition and subtraction; relate the strategy to a written method and explain the reasoning used. Understand that in adding two-digit numbers, one adds tens and tens, ones and ones; and sometimes it is necessary to compose a ten.
			NBT.1.6	Use place value understanding and properties of operations to add and subtract. Subtract multiples of 10 in the range 10-90 from multiples of 10 in the range 10-90 (positive or zero differences), using concrete models or drawings and strategies based on place value, properties of operations, and/or the relationship between addition and subtraction; relate the strategy to a written method and explain the reasoning used.
8	0106.1.7	Apply spatial sense to recreate a figure from memory.	n/a	
8	0106.4.1	Recognize and describe similarities and differences between 2-dimensional figures (geometric attributes and properties).	G.1.1	Reason with shapes and their attributes. Distinguish between defining attributes (e.g., triangles are closed and three-sided) versus non-defining attributes (e.g., color, orientation, overall size); for a wide variety of shapes; build and draw shapes to possess defining attributes.
8	0106.4.2	Recognize 2- and 3-dimensional figures from different perspectives and orientations	G.1.1	Reason with shapes and their attributes. Distinguish between defining attributes (e.g., triangles are closed and three-sided) versus non-defining attributes (e.g., color, orientation, overall size); for a wide variety of shapes; build and draw shapes to possess defining attributes.
			G.1.2	
			G.1.3	
8	0106.4.3	Model part-whole relationships and properties of plane and solid figures by combining two or more shapes to make a larger	G.1.1	Reason with shapes and their attributes. Distinguish between defining attributes (e.g., triangles are closed and three-sided) versus non-defining attributes (e.g., color, orientation, overall size); for a wide variety of shapes; build and draw shapes to possess defining attributes.

		shape or by breaking apart an object into its smaller shapes.		
			G.1.2	Reason with shapes and their 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, and compose new shapes from the composite shape. (Students do not need to learn formal names such as “right rectangular prism.”)
			G.1.3	Reason with shapes and their attributes. Partition circles and rectangles into two and four equal shares, describe the shares using the words halves, fourths, and quarters, and use the phrases half of, fourth of, and quarter of. Describe the whole as two of, or four of the shares. Understand for these examples that decomposing into more equal shares creates smaller shares.
8	0106.4.4	Identify 2-dimensional shapes as faces of 3-dimensional figures.	G.1.1	Reason with shapes and their attributes. Distinguish between defining attributes (e.g., triangles are closed and three-sided) versus non-defining attributes (e.g., color, orientation, overall size); for a wide variety of shapes; build and draw shapes to possess defining attributes.
			G.1.2	Reason with shapes and their 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, and compose new shapes from the composite shape. (Students do not need to learn formal names such as “right rectangular prism.”)
			G.1.3	Reason with shapes and their attributes. Partition circles and rectangles into two and four equal shares, describe the shares using the words halves, fourths, and quarters, and use the phrases half of, fourth of, and quarter of. Describe the whole as two of, or four of the shares. Understand for these examples that decomposing into more equal shares creates smaller shares.
9, 10	0106.3.1	Find repeating patterns on the number line, addition table, and hundreds chart.	NBT.1.5	Use place value understanding and properties of operations to add and subtract. Given a two-digit number, mentally find 10 more or 10 less than the number, without having to count; explain the reasoning used.
			NBT.1.6	Use place value understanding and properties of operations to add and subtract. Subtract multiples of 10 in the range 10-90 from multiples of 10 in the range 10-90 (positive or zero differences), using concrete models or drawings and strategies based on place value, properties of operations, and/or the relationship between addition and subtraction; relate the strategy to a written method and explain the reasoning used.

9, 10	0106.3.2	Determine a reasonable next term in a given sequence and describe the rule.	NBT.1.6	Use place value understanding and properties of operations to add and subtract. Subtract multiples of 10 in the range 10-90 from multiples of 10 in the range 10-90 (positive or zero differences), using concrete models or drawings and strategies based on place value, properties of operations, and/or the relationship between addition and subtraction; relate the strategy to a written method and explain the reasoning used.
10	0106.3.8	Determine whether a number is odd or even by pairing objects.	n/a	
10	0106.2.1	Read and write numerals up to 100.	NBT.1.1	Extend the counting sequence. Count to 120, starting at any number less than 120. In this range, read and write numerals and represent a number of objects with a written numeral.
10	0106.2.3	Count forward and backward by ones beginning with any number less than 100.	OA.1.5	Add and subtract within 20. Relate counting to addition and subtraction(e.g., by counting on 2 to add 2).
			NBT.1.1	Extend the counting sequence. Count to 120, starting at any number less than 120. In this range, read and write numerals and represent a number of objects with a written numeral.
10	0106.2.4	Skip count by twos, fives, and tens.	NBT.1.6	Use place value understanding and properties of operations to add and subtract. Subtract multiples of 10 in the range 10-90 from multiples of 10 in the range 10-90 (positive or zero differences), using concrete models or drawings and strategies based on place value, properties of operations, and/or the relationship between addition and subtraction; relate the strategy to a written method and explain the reasoning used.

Topic 6: 7 days

Topic 8: 12 days

Topic 10: 10 days

Topic 7: 6 days

Topic 9: 5 days

THIRD NINE WEEKS – TOPICS 11, 12, 13, 14, 15

January 3rd – March 9th

TOPIC	TN Standard	TN Standard	Common Core	Common Core
11	0106.2.6	Recognize the place value of numbers (ten, ones)	NBT.1.2	Understand place value. Understand that the two digits of a two-digit number represent amounts of tens and ones. Understand the following as special cases: -- a. 10 can be thought of as a bundle of ten ones — called a “ten.” -- b. The numbers from 11 to 19 are composed of a ten and one, two, three, four, five, six, seven, eight, or nine ones. -- c. The numbers 10, 20, 30, 40, 50, 60, 70, 80, 90 refer to one, two, three, four, five, six, seven, eight, or nine tens (and 0 ones).
			NBT.1.3	Understand place value. Compare two two-digit numbers based on meanings of the tens and ones digits, recording the results of comparisons with the symbols $>$, $=$, and $<$.
			NBT.1.4	Use place value understanding and properties of operations to add and subtract. Add within 100, including adding a two-digit number and a one-digit number, and adding a two-digit number and a multiple of 10, using concrete models or drawings and strategies based on place value, properties of operations, and/or the relationship between addition and subtraction; relate the strategy to a written method and explain the reasoning used. Understand that in adding two-digit numbers, one adds tens and tens, ones and ones; and sometimes it is necessary to compose a ten.
			NBT.1.5	Use place value understanding and properties of operations to add and subtract. Given a two-digit number, mentally find 10 more or 10 less than the number, without having to count; explain the reasoning used.
			NBT.1.6	Use place value understanding and properties of operations to add and subtract. Subtract multiples of 10 in the range 10-90 from multiples of 10 in the range 10-90 (positive or zero differences), using concrete models or drawings and strategies based on place value, properties of operations, and/or the relationship between addition and subtraction; relate the strategy to a written method and explain the reasoning used.

11	0106.2.14	Use composition and decomposition of numbers to identify and discuss patterns.	OA.1.6	Add and subtract within 20. Add and subtract within 20, demonstrating fluency for addition and subtraction within 10. Use strategies such as counting on; making ten (e.g., $8 + 6 = 8 + 2 + 4 = 10 + 4 = 14$); decomposing a number leading to a ten (e.g., $13 - 4 = 13 - 3 - 1 = 10 - 1 = 9$); using the relationship between addition and subtraction (e.g., knowing that $8 + 4 = 12$, one knows $12 - 8 = 4$); and creating equivalent but easier or known sums (e.g., adding $6 + 7$ by creating the known equivalent $6 + 6 + 1 = 12 + 1 = 13$).
			OA.1.7	Work with addition and subtraction equations. Understand the meaning of the equal sign, and determine if equations involving addition and subtraction are true or false. For example, which of the following equations are true and which are false? $6 = 6$, $7 = 8 - 1$, $5 + 2 = 2 + 5$, $4 + 1 = 5 + 2$.
			NBT.1.5	Use place value understanding and properties of operations to add and subtract. Given a two-digit number, mentally find 10 more or 10 less than the number, without having to count; explain the reasoning used.
			NBT.1.6	Use place value understanding and properties of operations to add and subtract. Subtract multiples of 10 in the range 10-90 from multiples of 10 in the range 10-90 (positive or zero differences), using concrete models or drawings and strategies based on place value, properties of operations, and/or the relationship between addition and subtraction; relate the strategy to a written method and explain the reasoning used.
11	0106.2.15	Represent whole numbers between 10 and 100 in groups of tens and ones.	OA.1.6	Add and subtract within 20. Add and subtract within 20, demonstrating fluency for addition and subtraction within 10. Use strategies such as counting on; making ten (e.g., $8 + 6 = 8 + 2 + 4 = 10 + 4 = 14$); decomposing a number leading to a ten (e.g., $13 - 4 = 13 - 3 - 1 = 10 - 1 = 9$); using the relationship between addition and subtraction (e.g., knowing that $8 + 4 = 12$, one knows $12 - 8 = 4$); and creating equivalent but easier or known sums (e.g., adding $6 + 7$ by creating the known equivalent $6 + 6 + 1 = 12 + 1 = 13$).
			NBT.1.2	Understand place value. Understand that the two digits of a two-digit number represent amounts of tens and ones. Understand the following as special cases: -- a. 10 can be thought of as a bundle of ten ones — called a “ten.” -- b. The numbers from 11 to 19 are composed of a ten and one, two, three, four, five, six, seven, eight, or nine ones. -- c. The numbers 10, 20, 30, 40, 50, 60, 70, 80, 90 refer to one, two, three, four, five, six, seven, eight, or nine tens (and 0 ones).
			NBT.1.3	Understand place value. Compare two two-digit numbers based on meanings of the tens and ones digits, recording the results of comparisons with the symbols $>$, $=$, and $<$.

			NBT.1.4	Use place value understanding and properties of operations to add and subtract. Add within 100, including adding a two-digit number and a one-digit number, and adding a two-digit number and a multiple of 10, using concrete models or drawings and strategies based on place value, properties of operations, and/or the relationship between addition and subtraction; relate the strategy to a written method and explain the reasoning used. Understand that in adding two-digit numbers, one adds tens and tens, ones and ones; and sometimes it is necessary to compose a ten.
			NBT.1.5	Use place value understanding and properties of operations to add and subtract. Given a two-digit number, mentally find 10 more or 10 less than the number, without having to count; explain the reasoning used.
			NBT.1.6	Use place value understanding and properties of operations to add and subtract. Subtract multiples of 10 in the range 10-90 from multiples of 10 in the range 10-90 (positive or zero differences), using concrete models or drawings and strategies based on place value, properties of operations, and/or the relationship between addition and subtraction; relate the strategy to a written method and explain the reasoning used.
12	0106.2.1	Read and write numerals up to 100.	NBT.1.1	Extend the counting sequence. Count to 120, starting at any number less than 120. In this range, read and write numerals and represent a number of objects with a written numeral.
12	0106.2.5	Order and compare (less than, greater than, or equal to) whole numbers to 100.	OA.1.7	Work with addition and subtraction equations. Understand the meaning of the equal sign, and determine if equations involving addition and subtraction are true or false. For example, which of the following equations are true and which are false? $6 = 6$, $7 = 8 - 1$, $5 + 2 = 2 + 5$, $4 + 1 = 5 + 2$.
			NBT.1.3	Understand place value. Compare two two-digit numbers based on meanings of the tens and ones digits, recording the results of comparisons with the symbols $>$, $=$, and $<$.
12	0106.2.16	Represent whole numbers up to 100 on a number line.	NBT.1.3	Understand place value. Compare two two-digit numbers based on meanings of the tens and ones digits, recording the results of comparisons with the symbols $>$, $=$, and $<$.
			NBT.1.6	Use place value understanding and properties of operations to add and subtract. Subtract multiples of 10 in the range 10-90 from multiples of 10 in the range 10-90 (positive or zero differences), using concrete models or drawings and strategies based on place value, properties of operations, and/or the relationship between addition and subtraction; relate the strategy to a written method and explain the reasoning used.
13	0106.1.4	Count the value of a set of coins up to fifty cents.	n/a	

14	0106.1.5	Use a thermometer to measure temperature.	n/a	
14	0106.1.6	Recognize scales as a way of measuring weight.	n/a	
14	0106.4.5	Estimate and measure length using non-standard units (counting by using groups of tens and ones) to represent addition.	MD.1.1	Measure lengths indirectly and by iterating length units. Order three objects by length; compare the lengths of two objects indirectly by using a third object.
			MD.1.2	Measure lengths indirectly and by iterating length units. Express the length of an object as a whole number of length units, by laying multiple copies of a shorter object (the length unit) end to end; understand that the length measurement of an object is the number of same-size length units that span it with no gaps or overlaps. Limit to contexts where the object being measured is spanned by a whole number of length units with no gaps or overlaps.
14	0106.4.7	Understand and use comparative words such as long, longer, longest; short, shorter, shortest; tall, taller, tallest; high, higher, highest.	MD.1.1	Measure lengths indirectly and by iterating length units. Order three objects by length; compare the lengths of two objects indirectly by using a third object.
			MD.1.2	Measure lengths indirectly and by iterating length units. Express the length of an object as a whole number of length units, by laying multiple copies of a shorter object (the length unit) end to end; understand that the length measurement of an object is the number of same-size length units that span it with no gaps or overlaps. Limit to contexts where the object being measured is spanned by a whole number of length units with no gaps or overlaps.
15	0106.1.1	Describe the relationship between days and months.	n/a	
15	0106.1.2	Read and write time to the hour, half-hour, and quarter-hour.	n/a	
15	0106.1.3	Compare units of time.	n/a	

Topic 11: 7 days

Topic 12: 9 days

Topic 13: 7 days

Topic 14: 14 days

Topic 15: 7 days

FOURTH NINE WEEKS – TOPICS 16, 17, 18, 19, 20

March 19th – May 21st

TOPIC	TN Standard	TN STANDARD	Common Core	Common Core
16	0106.2.9	Add three single-digit numbers.	OA.1.2	Represent and solve problems involving addition and subtraction. Solve word problems that call for addition of three whole numbers whose sum is less than or equal to 20, e.g., by using objects, drawings, and equations with a symbol for the unknown number to represent the problem.
			OA.1.3	Understand and apply properties of operations and the relationship between addition and subtraction. Apply properties of operations as strategies to add and subtract. Examples: If $8 + 3 = 11$ is known, then $3 + 8 = 11$ is also known. (Commutative property of addition.) To add $2 + 6 + 4$, the second two numbers can be added to make a ten, so $2 + 6 + 4 = 2 + 10 = 12$. (Associative property of addition.) (Students need not use formal terms for these properties.)
			OA.1.6	Add and subtract within 20. Add and subtract within 20, demonstrating fluency for addition and subtraction within 10. Use strategies such as counting on; making ten (e.g., $8 + 6 = 8 + 2 + 4 = 10 + 4 = 14$); decomposing a number leading to a ten (e.g., $13 - 4 = 13 - 3 - 1 = 10 - 1 = 9$); using the relationship between addition and subtraction (e.g., knowing that $8 + 4 = 12$, one knows $12 - 8 = 4$); and creating equivalent but easier or known sums (e.g., adding $6 + 7$ by creating the known equivalent $6 + 6 + 1 = 12 + 1 = 13$).
16	0106.2.12	Use various models to develop strategies for solving arithmetic problems.	OA.1.1	Represent and solve problems involving addition and subtraction. Use addition and subtraction within 20 to solve word problems involving situations of adding to, taking from, putting together, taking apart, and comparing, with unknowns in all positions, e.g., by using objects, drawings, and equations with a symbol for the unknown number to represent the problem.
			OA.1.2	Represent and solve problems involving addition and subtraction. Solve word problems that call for addition of three whole numbers whose sum is less than or equal to 20, e.g., by using objects, drawings, and equations with a symbol for the unknown number to represent the problem.
			OA.1.3	Understand and apply properties of operations and the relationship between addition and subtraction. Apply properties of operations as strategies to add

				and subtract. Examples: If $8 + 3 = 11$ is known, then $3 + 8 = 11$ is also known. (Commutative property of addition.) To add $2 + 6 + 4$, the second two numbers can be added to make a ten, so $2 + 6 + 4 = 2 + 10 = 12$. (Associative property of addition.) (Students need not use formal terms for these properties.)
			OA.1.4	Understand and apply properties of operations and the relationship between addition and subtraction. Understand subtraction as an unknown-addend problem. For example, subtract $10 - 8$ by finding the number that makes 10 when added to 8.
			OA.1.5	Add and subtract within 20. Relate counting to addition and subtraction (e.g., by counting on 2 to add 2).
			OA.1.7	Work with addition and subtraction equations. Understand the meaning of the equal sign, and determine if equations involving addition and subtraction are true or false. For example, which of the following equations are true and which are false? $6 = 6$, $7 = 8 - 1$, $5 + 2 = 2 + 5$, $4 + 1 = 5 + 2$.
			OA.1.8	Work with addition and subtraction equations. Determine the unknown whole number in an addition or subtraction equation relating three whole numbers. For example, determine the unknown number that makes the equation true in each of the equations $8 + ? = 11$, $5 = _ - 3$, $6 + 6 = _$.
			NBT.1.4	Use place value understanding and properties of operations to add and subtract. Add within 100, including adding a two-digit number and a one-digit number, and adding a two-digit number and a multiple of 10, using concrete models or drawings and strategies based on place value, properties of operations, and/or the relationship between addition and subtraction; relate the strategy to a written method and explain the reasoning used. Understand that in adding two-digit numbers, one adds tens and tens, ones and ones; and sometimes it is necessary to compose a ten.
			NBT.1.5	Use place value understanding and properties of operations to add and subtract. Given a two-digit number, mentally find 10 more or 10 less than the number, without having to count; explain the reasoning used.
			NBT.1.6	Use place value understanding and properties of operations to add and subtract. Subtract multiples of 10 in the range 10-90 from multiples of 10 in the range 10-90 (positive or zero differences), using concrete models or drawings and strategies based on place value, properties of operations, and/or the relationship between addition and subtraction; relate the strategy to a written method and explain the reasoning used.
16, 17	0106.2.13	Solve problems that require addition and subtraction of numbers	OA.1.1	Represent and solve problems involving addition and subtraction. Use addition and subtraction within 20 to solve word problems involving situations of adding to, taking from, putting together, taking apart, and comparing, with unknowns in all positions, e.g., by using objects, drawings, and equations with a symbol for

		through 100.		the unknown number to represent the problem.
			OA.1.2	Represent and solve problems involving addition and subtraction. Solve word problems that call for addition of three whole numbers whose sum is less than or equal to 20, e.g., by using objects, drawings, and equations with a symbol for the unknown number to represent the problem.
			OA.1.3	Understand and apply properties of operations and the relationship between addition and subtraction. Apply properties of operations as strategies to add and subtract. Examples: If $8 + 3 = 11$ is known, then $3 + 8 = 11$ is also known. (Commutative property of addition.) To add $2 + 6 + 4$, the second two numbers can be added to make a ten, so $2 + 6 + 4 = 2 + 10 = 12$. (Associative property of addition.) (Students need not use formal terms for these properties.)
			OA.1.5	Add and subtract within 20. Relate counting to addition and subtraction (e.g., by counting on 2 to add 2).
			OA.1.7	Work with addition and subtraction equations. Understand the meaning of the equal sign, and determine if equations involving addition and subtraction are true or false. For example, which of the following equations are true and which are false? $6 = 6$, $7 = 8 - 1$, $5 + 2 = 2 + 5$, $4 + 1 = 5 + 2$.
			OA.1.8	Work with addition and subtraction equations. Determine the unknown whole number in an addition or subtraction equation relating three whole numbers. For example, determine the unknown number that makes the equation true in each of the equations $8 + ? = 11$, $5 = _ - 3$, $6 + 6 = _$.
			NBT.1.4	Use place value understanding and properties of operations to add and subtract. Add within 100, including adding a two-digit number and a one-digit number, and adding a two-digit number and a multiple of 10, using concrete models or drawings and strategies based on place value, properties of operations, and/or the relationship between addition and subtraction; relate the strategy to a written method and explain the reasoning used. Understand that in adding two-digit numbers, one adds tens and tens, ones and ones; and sometimes it is necessary to compose a ten.
			NBT.1.5	Use place value understanding and properties of operations to add and subtract. Given a two-digit number, mentally find 10 more or 10 less than the number, without having to count; explain the reasoning used.
			NBT.1.6	Use place value understanding and properties of operations to add and subtract. Subtract multiples of 10 in the range 10-90 from multiples of 10 in the range 10-90 (positive or zero differences), using concrete models or drawings and strategies based on place value, properties of operations, and/or the relationship between addition and subtraction; relate the strategy to a written method and explain the reasoning used.

17	0106.3.5	Use various strategies to find unknowns in problems involving addition and subtraction.	OA.1.1	Represent and solve problems involving addition and subtraction. Use addition and subtraction within 20 to solve word problems involving situations of adding to, taking from, putting together, taking apart, and comparing, with unknowns in all positions, e.g., by using objects, drawings, and equations with a symbol for the unknown number to represent the problem.
			OA.1.2	Represent and solve problems involving addition and subtraction. Solve word problems that call for addition of three whole numbers whose sum is less than or equal to 20, e.g., by using objects, drawings, and equations with a symbol for the unknown number to represent the problem.
			OA.1.4	Understand and apply properties of operations and the relationship between addition and subtraction. Understand subtraction as an unknown-addend problem. For example, subtract $10 - 8$ by finding the number that makes 10 when added to 8.
			OA.1.8	Work with addition and subtraction equations. Determine the unknown whole number in an addition or subtraction equation relating three whole numbers. For example, determine the unknown number that makes the equation true in each of the equations $8 + ? = 11$, $5 = _ - 3$, $6 + 6 = _$.
17	0106.3.7	Use the inverse relation between addition and subtraction to check arithmetic problems.	OA.1.3	Understand and apply properties of operations and the relationship between addition and subtraction. Apply properties of operations as strategies to add and subtract. Examples: If $8 + 3 = 11$ is known, then $3 + 8 = 11$ is also known. (Commutative property of addition.) To add $2 + 6 + 4$, the second two numbers can be added to make a ten, so $2 + 6 + 4 = 2 + 10 = 12$. (Associative property of addition.) (Students need not use formal terms for these properties.)
			OA.1.4	Understand and apply properties of operations and the relationship between addition and subtraction. Understand subtraction as an unknown-addend problem. For example, subtract $10 - 8$ by finding the number that makes 10 when added to 8.
			NBT.1.4	Use place value understanding and properties of operations to add and subtract. Add within 100, including adding a two-digit number and a one-digit number, and adding a two-digit number and a multiple of 10, using concrete models or drawings and strategies based on place value, properties of operations, and/or the relationship between addition and subtraction; relate the strategy to a written method and explain the reasoning used. Understand that in adding two-digit numbers, one adds tens and tens, ones and ones; and sometimes it is necessary to compose a ten.
			NBT.1.6	Use place value understanding and properties of operations to add and subtract. Subtract multiples of 10 in the range 10-90 from multiples of 10 in the range 10-90 (positive or zero differences), using concrete models or drawings and strategies based on place value, properties of operations, and/or the

				relationship between addition and subtraction; relate the strategy to a written method and explain the reasoning used.
18	0106.5.1	Represent measurements and discrete data using concrete objects, picture graphs, and bar graphs.	MD.1.1	Measure lengths indirectly and by iterating length units. Order three objects by length; compare the lengths of two objects indirectly by using a third object.
			MD.1.2	Measure lengths indirectly and by iterating length units. Express the length of an object as a whole number of length units, by laying multiple copies of a shorter object (the length unit) end to end; understand that the length measurement of an object is the number of same-size length units that span it with no gaps or overlaps. Limit to contexts where the object being measured is spanned by a whole number of length units with no gaps or overlaps.
			MD.1.4	Represent and interpret data. Organize, represent, and interpret data with up to three categories; ask and answer questions about the total number of data points, how many in each category, and how many more or less are in one category than in another.
18	0106.5.2	Represent data in both horizontal and vertical form.	n/a	
18	0106.5.3	Display data using appropriate titles and labels.	MD.1.4	Represent and interpret data. Organize, represent, and interpret data with up to three categories; ask and answer questions about the total number of data points, how many in each category, and how many more or less are in one category than in another.
18	0106.5.4	Count and compare data.	MD.1.2	Measure lengths indirectly and by iterating length units. Express the length of an object as a whole number of length units, by laying multiple copies of a shorter object (the length unit) end to end; understand that the length measurement of an object is the number of same-size length units that span it with no gaps or overlaps. Limit to contexts where the object being measured is spanned by a whole number of length units with no gaps or overlaps.
			MD.1.4	Represent and interpret data. Organize, represent, and interpret data with up to three categories; ask and answer questions about the total number of data points, how many in each category, and how many more or less are in one category than in another.
19	0106.1.10	Match the spoken, written, concrete, and pictorial representations of whole numbers, one-half, and one-fourth.	G.1.2	Reason with shapes and their 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, and compose new shapes from the composite shape. (Students do not need to learn formal names such as “right rectangular prism.”)
19	0106.2.11	Recognize the “part-whole” relationship in	G.1.2	Reason with shapes and their 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,

		representations of basic fractions such as $\frac{1}{2}$ and $\frac{1}{4}$.		and right circular cylinders) to create a composite shape, and compose new shapes from the composite shape. (Students do not need to learn formal names such as "right rectangular prism.")
			G.1.3	Reason with shapes and their attributes. Partition circles and rectangles into two and four equal shares, describe the shares using the words halves, fourths, and quarters, and use the phrases half of, fourth of, and quarter of. Describe the whole as two of, or four of the shares. Understand for these examples that decomposing into more equal shares creates smaller shares.
20	0106.2.12	Use various models to develop strategies for solving arithmetic problems.	OA.1.1	Represent and solve problems involving addition and subtraction. Use addition and subtraction within 20 to solve word problems involving situations of adding to, taking from, putting together, taking apart, and comparing, with unknowns in all positions, e.g., by using objects, drawings, and equations with a symbol for the unknown number to represent the problem.
			OA.1.2	Represent and solve problems involving addition and subtraction. Solve word problems that call for addition of three whole numbers whose sum is less than or equal to 20, e.g., by using objects, drawings, and equations with a symbol for the unknown number to represent the problem.
			OA.1.3	Understand and apply properties of operations and the relationship between addition and subtraction. Apply properties of operations as strategies to add and subtract. Examples: If $8 + 3 = 11$ is known, then $3 + 8 = 11$ is also known. (Commutative property of addition.) To add $2 + 6 + 4$, the second two numbers can be added to make a ten, so $2 + 6 + 4 = 2 + 10 = 12$. (Associative property of addition.) (Students need not use formal terms for these properties.)
			OA.1.4	Understand and apply properties of operations and the relationship between addition and subtraction. Understand subtraction as an unknown-addend problem. For example, subtract $10 - 8$ by finding the number that makes 10 when added to 8.
			OA.1.5	Add and subtract within 20. Relate counting to addition and subtraction (e.g., by counting on 2 to add 2).
			OA.1.7	Work with addition and subtraction equations. Understand the meaning of the equal sign, and determine if equations involving addition and subtraction are true or false. For example, which of the following equations are true and which are false? $6 = 6$, $7 = 8 - 1$, $5 + 2 = 2 + 5$, $4 + 1 = 5 + 2$.
			OA.1.8	Work with addition and subtraction equations. Determine the unknown whole number in an addition or subtraction equation relating three whole numbers. For example, determine the unknown number that makes the equation true in each of the equations $8 + ? = 11$, $5 = _ - 3$, $6 + 6 = _$.
			NBT.1.4	Use place value understanding and properties of operations to add and subtract. Add within 100, including adding a two-digit number and a one-digit

				number, and adding a two-digit number and a multiple of 10, using concrete models or drawings and strategies based on place value, properties of operations, and/or the relationship between addition and subtraction; relate the strategy to a written method and explain the reasoning used. Understand that in adding two-digit numbers, one adds tens and tens, ones and ones; and sometimes it is necessary to compose a ten.
			NBT.1.5	Use place value understanding and properties of operations to add and subtract. Given a two-digit number, mentally find 10 more or 10 less than the number, without having to count; explain the reasoning used.
			NBT.1.6	Use place value understanding and properties of operations to add and subtract. Subtract multiples of 10 in the range 10-90 from multiples of 10 in the range 10-90 (positive or zero differences), using concrete models or drawings and strategies based on place value, properties of operations, and/or the relationship between addition and subtraction; relate the strategy to a written method and explain the reasoning used.
20	0106.2.13	Solve problems that require addition and subtraction of numbers through 100.	OA.1.1	Represent and solve problems involving addition and subtraction. Use addition and subtraction within 20 to solve word problems involving situations of adding to, taking from, putting together, taking apart, and comparing, with unknowns in all positions, e.g., by using objects, drawings, and equations with a symbol for the unknown number to represent the problem.
			OA1.2	Represent and solve problems involving addition and subtraction. Solve word problems that call for addition of three whole numbers whose sum is less than or equal to 20, e.g., by using objects, drawings, and equations with a symbol for the unknown number to represent the problem.
			OA.1.3	Understand and apply properties of operations and the relationship between addition and subtraction. Apply properties of operations as strategies to add and subtract. Examples: If $8 + 3 = 11$ is known, then $3 + 8 = 11$ is also known. (Commutative property of addition.) To add $2 + 6 + 4$, the second two numbers can be added to make a ten, so $2 + 6 + 4 = 2 + 10 = 12$. (Associative property of addition.) (Students need not use formal terms for these properties.)
			OA.1.5	Add and subtract within 20. Relate counting to addition and subtraction (e.g., by counting on 2 to add 2).
			OA.1.7	Work with addition and subtraction equations. Understand the meaning of the equal sign, and determine if equations involving addition and subtraction are true or false. For example, which of the following equations are true and which are false? $6 = 6$, $7 = 8 - 1$, $5 + 2 = 2 + 5$, $4 + 1 = 5 + 2$.
			OA.1.8	Work with addition and subtraction equations. Determine the unknown whole number in an addition or subtraction equation relating three whole numbers. For example, determine the unknown number that makes the equation true in each of the equations $8 + ? = 11$, $5 = _ - 3$, $6 + 6 = _$.

			NBT.1.4	Use place value understanding and properties of operations to add and subtract. Add within 100, including adding a two-digit number and a one-digit number, and adding a two-digit number and a multiple of 10, using concrete models or drawings and strategies based on place value, properties of operations, and/or the relationship between addition and subtraction; relate the strategy to a written method and explain the reasoning used. Understand that in adding two-digit numbers, one adds tens and tens, ones and ones; and sometimes it is necessary to compose a ten.
			NBT.1.5	Use place value understanding and properties of operations to add and subtract. Given a two-digit number, mentally find 10 more or 10 less than the number, without having to count; explain the reasoning used.
			NBT.1.6	Use place value understanding and properties of operations to add and subtract. Subtract multiples of 10 in the range 10-90 from multiples of 10 in the range 10-90 (positive or zero differences), using concrete models or drawings and strategies based on place value, properties of operations, and/or the relationship between addition and subtraction; relate the strategy to a written method and explain the reasoning used.

Topic 16: 9 days

Topic 18: 11 days

Topic 20: 9 days

Topic 17: 6 days

Topic 19: 6 days