

Teacher: CORE Math Grade 1

Year: 2010-11

Course: Math Grade 1

Month: All Months

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Numbers and Operations in Base Ten							
Essential Questions	Content	Skills	Vocabulary	Assessments	Lessons	Resources	Standards
	Count: Forward 0-12	Count to 12, starting at 0. In this range, read and write numerals and represent a number of objects within a written numeral.					1.NBT.1-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.
	Place Value: Two Digit Numbers	Develop an initial understanding that a two digit number represents amounts of tens and ones. Develop an initial understanding that the numbers 10, 11, and 12 are composed of a ten and zero, one, two ones.					1.NBT.2-Understand that the two digits of a two-digit number represent amounts of tens and ones. 1.NBT.2b-The numbers from 11 to 19 are composed of a ten

O c t o b e r								and one, two, three, four, five, six, seven, eight, or nine ones.
	Numbers and Operations in Base Ten*							
	Essential Questions	Content	Skills	Vocabulary	Assessments	Lessons	Resources	Standards
		Understand Place Value	Compare one and two digit numbers based on the meanings of the tens and ones digits.					1.NBT.3- Compare two two-digit numbers based on meanings of the tens and ones digits, recording the results of comparisons with the symbols $>$, $=$, and $<$.
Operations and Algebraic Thinking*								
	Essential Questions	Content	Skills	Vocabulary	Assessments	Lessons	Resources	Standards
		Represent and solve problems involving addition and subtraction.	Use addition and subtraction within 20 to solve word problems.					1.OA.1- Use addition and subtraction within 20 to solve word problems involving situations of adding to, taking from,

							<p>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.</p>
	Understand and apply properties of operations and the relationship between addition and subtraction.	Apply properties of operations as strategies to add and subtract. (commutative property)					<p>1.OA.3- Apply properties of operations as strategies to add and subtract</p>
	Work with Addition and Subtraction Equations	Understand the meaning of the equal sign. Determine the unknown whole number in					<p>1.OA.7- Understand the meaning of the equal sign, and determine if equations involving</p>

		an addition or subtraction equation.					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, $5 + 2 = 2 + 5$, $4 + 1 = 5 + 2$. 1.OA.8- Determine the unknown whole number in an addition or subtraction equation relating three whole numbers.
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Number Operations and Algebraic Thinking*

Essential Questions	Content	Skills	Vocabulary Assessments	Lessons	Resources	Standards
	Understand Subtraction as an unknown addend	Understand and apply properties of operations and the relationship between addition				1.OA.4- Understand subtraction as an unknown-addend problem.

		and subtraction.					
	Add and Subtract within 20	Add and Subtract within 20 demonstrating fluency for addition and subtraction within 10.					<p>1.OA.6-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 $6 + 6 + 1 = 12 + 1 = 13$).</p>

e m b e r	Essential Questions	Content	Skills	Vocabulary	Assessments	Lessons	Resources	Standards
		Addition and Subtraction: Problem Solving	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.					1.OA.1- 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.
		Addition and Subtraction: Operations	Apply properties of operations as strategies to add and subtract					1.OA.3- Apply properties of operations as

		using commutative and associative properties. Understand subtraction as an unknown-addend problem.					strategies to add and subtract 1.OA.4- Understand subtraction as an unknown-addend problem.
	Add and subtract within 20.	Relate counting to addition and subtraction. Add and subtract within 20 demonstrating fluency for addition and subtraction within 10. Use strategies such as counting on, making 10 using a relationship between addition and subtraction and creating equivalent but easier or known sums.					1.OA.5- Relate counting to addition and subtraction (e.g., by counting on 2 to add 2). 1.OA.6-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 $6 + 6 + 1 = 12 + 1 = 13$).
	Addition and Subtraction: Equations	Understand the meaning of the equal sign and determine if equations involving addition and subtraction are true or false. Determine the unknown whole number in an addition and subtraction equation relating to 3 whole numbers.					1.OA.7- 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 , $5 + 2 = 2 + 5$, $4 + 1 = 5 + 2$.

								1.OA.8- Determine the unknown whole number in an addition or subtraction equation relating three whole numbers.
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Geometry*

Essential Questions	Content	Skills	Vocabulary	Assessments	Lessons	Resources	Standards
	Shapes: Attributes	Distinguish between defining attributes and non-defining attributes. Build and draw shapes to possess defining attributes. Compose two dimensional shapes or three dimensional shapes to create a composite shape and compose new shapes from the composite					1.G.1- Distinguish between defining attributes (e.g., triangles are closed and three-sided) versus non-defining attributes (e.g., color, orientation, overall size) ; build and draw shapes to possess defining attributes. 1.G.2- Compose two-dimensional shapes

		shape.					(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.
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Number and Operations in Base Ten*

F e b r u a r y	Essential Questions	Content	Skills	Vocabulary	Assessments	Lessons	Resources	Standards
		Count: Forward 1-120	Count to 120, starting at any number less than 120. In this range, read and write numerals and represent a number of					1.NBT.1- Count to 120, starting at any number less than 120. In this range, read and write numerals and represent a

		objects with a written numeral.					number of objects with a written numeral.
	Place Value	Develop an understanding that the numbers with zero in the ones place up to 120 refer to the corresponding number of tens by skip counting by 10s. Develop an understanding that the numbers 11-20 are composed of one or two tens, and one, two, three, four, five, six, seven, eight or nine ones. Bundle ten ones, orally identify this as a "ten."					1.NBT.2- Understand that the two digits of a two-digit number represent amounts of tens and ones. 1.NBT.2a- 10 can be thought of as a bundle of ten ones "called a ten." 1.NBT.2c- 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).

Operations and Algebraic Thinking*

Essential Questions	Content	Skills	Vocabulary	Assessments	Lessons	Resources	Standards
	Addition: Equations	Develop an understanding of the equal sign, and determine if					1.OA.7- Understand the meaning of the equal

		equations involving addition are true or false.					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? $6 = 6$, $7 = 8$ “ $1, 5 + 2 = 2 + 5$, $4 + 1 = 5 + 2$.”
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Math
Number and Operations in Base Ten*

Essential Questions	Content	Skills	Vocabulary	Assessments	Lessons	Resources	Standards
	Place Value: Numbers to 120	<p>Compose in writing a two digit number to represent amounts of tens and ones to 120.</p> <p>Compare two two-digit numbers based on meanings of the tens and ones digits, recording</p>					<p>1.NBT.2- Understand that the two digits of a two-digit number represent amounts of tens and ones.</p> <p>1.NBT.3- Compare two two-digit numbers based on meanings of the tens and</p>

		the results of comparisons with the symbols $>$, $=$, and $<$.					ones digits, recording the results of comparisons with the symbols $>$, $=$, and $<$.
	Place Value: Operations Addition and Subtraction	Add a two digit number with a one digit number using concrete models or drawings and strategies based on place value, properties of operations, and/or the relationship between addition and subtraction. Add a two digit number with a multiple of ten using concrete models or drawings and strategies based on place					1.NBT.4- 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

			<p>value, properties of operations, and/or the relationship between addition and subtraction. Find 10 more or 10 less than a two digit number without having to count. Explain the reasoning used. Subtract multiples of ten from a two digit number using concrete models or drawings and strategies based on place value, properties of operations, and/or the relationship between addition and subtraction in writing</p>				<p>that in adding two-digit numbers, one adds tens and tens, ones and ones; and sometimes it is necessary to compose a ten.</p> <p>1.NBT.5- Given a two-digit number, mentally find 10 more or 10 less than the number, without having to count; explain the reasoning used.</p> <p>1.NBT.6- 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</p>
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							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.
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Measurement and Data*

Essential Questions	Content	Skills	Vocabulary	Assessments	Lessons	Resources	Standards
	Data: Representing and Interpreting	Organize, represent and interpret data with up to three categories. Ask and answer questions about the data (data points, number per category, how many more or less).					1.MD.4- 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.
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Measurement and Data*

Essential Questions	Content	Skills	Vocabulary	Assessments	Lessons	Resources	Standards			
	Money: Values of Coins	Identify coins by their appearance and know the value of each (penny, nickel, dime, quarter).								

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Measurement and Data*

Essential Questions	Content	Skills	Vocabulary	Assessments	Lessons	Resources	Standards
	Measurement: Length	Compare lengths of 3 objects Estimate lengths of objects and measure objects using non-standard units Estimate and measure objects using feet and inches.					1.MD.1- Order three objects by length; compare the lengths of two objects indirectly by using a third object. 1.MD.2- Express the length of an object as a whole number of length units, by laying multiple copies of a shorter

		Estimate and measure objects using centimeters.					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.
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Measurement and Data*

Essential Questions	Content	Skills	Vocabulary	Assessments	Lessons	Resources	Standards
	Time: Hour and Minute	Understand the hour and minute hands on the analog clock. Tell and write time to the hour. Tell and write time to the half hour. Read a data table					1.MD.3- Tell and write time in hours and half-hours using analog and digital clocks.

		to solve problems about time.					
Geometry							
Essential Questions	Content	Skills	Vocabulary	Assessments	Lessons	Resources	Standards
	Shapes: Fractional Parts	Decide whether a shape is divided into equal or unequal parts. Identify and describe equal parts of whole objects Show and describe equal parts of a set.					1.G.3- 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.
Operations and Algebraic Thinking*							
Essential Questions	Content	Skills	Vocabulary	Assessments	Lessons	Resources	Standards

		<p>Addition and Subtraction: 3 Numbers</p> <p>Solve word problems that call for addition of three whole numbers whose sum is less than or equal to 20 by using objects, drawings, and equations with a symbol for the unknown number to represent the problem.</p>					<p>1.OA.1- 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.</p>
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