

State: **NC**

Subject: **Math**

Grade Level: **2**

North Carolina Standard	Study Island Topic	Common Core Standard
Competency Goal 1		
The learner will read, write, model, and compute with whole numbers through 999.		
<p>1.01 - Develop number sense for whole numbers through 999.</p> <ol style="list-style-type: none">Connect model, number word, and number using a variety of representations.Read and write numbers.Compare and order.Rename.Estimate.Use a variety of models to build understanding of place value (ones, tens, hundreds).	<ul style="list-style-type: none">Compare & Order NumbersEstimate Sums & DifferencesPlace Value Models	<p>2.NBT.1. Understand that the three digits of a three-digit number represent amounts of hundreds, tens, and ones; e.g., 706 equals 7 hundreds, 0 tens, and 6 ones. Understand the following as special cases:</p> <ol style="list-style-type: none">100 can be thought of as a bundle of ten tens — called a “hundred.”The numbers 100, 200, 300, 400, 500, 600, 700, 800, 900 refer to one, two, three, four, five, six, seven, eight, or nine hundreds (and 0 tens and 0 ones). <p>2.NBT.3. Read and write numbers to 1000 using base-ten numerals, number names, and expanded form.</p> <p>2.NBT.4. Compare two three-digit numbers based on meanings of the hundreds, tens, and ones digits, using $>$, $=$, and $<$ symbols to record the results of comparisons.</p>
<p>1.02 - Use area or region models and set models of fractions to explore part-whole relationships in contexts.</p> <ol style="list-style-type: none">Represent fractions (halves, thirds, fourths) concretely and symbolically.Compare fractions (halves, thirds, fourths) using models.Make different representations of the	<ul style="list-style-type: none">Fractional Parts of Objects	<p>2.G.2. Partition a rectangle into rows and columns of same-size squares and count to find the total number of them.</p> <p>2.G.3. Partition circles and rectangles into two, three, or four equal shares, describe the shares using the words <i>halves</i>, <i>thirds</i>, <i>half of</i>, <i>a third of</i>, etc., and describe the whole as two halves, three thirds, four fourths. Recognize that equal shares of identical wholes need not have the same shape.</p>

<p>same fraction. d. Combine fractions to describe parts of a whole.</p>		
<p>1.03 - Create, model, and solve problems that involve addition, subtraction, equal grouping, and division into halves, thirds, and fourths (record in fraction form).</p>	<ul style="list-style-type: none"> • Model Addition, Subtraction, & Division 	<p>2.OA.1. Use addition and subtraction within 100 to solve one- and two-step word problems involving situations of adding to, taking from, putting together, taking apart, and comparing, with unknowns in all positions, e.g., by using drawings and equations with a symbol for the unknown number to represent the problem.</p> <p>2.NBT.7. Add and subtract within 1000, 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. Understand that in adding or subtracting three-digit numbers, one adds or subtracts hundreds and hundreds, tens and tens, ones and ones; and sometimes it is necessary to compose or decompose tens or hundreds.</p> <p>2.G.3. Partition circles and rectangles into two, three, or four equal shares, describe the shares using the words <i>halves</i>, <i>thirds</i>, <i>half of</i>, <i>a third of</i>, etc., and describe the whole as two halves, three thirds, four fourths. Recognize that equal shares of identical wholes need not have the same shape.</p>
<p>1.04 - Develop fluency with multi-digit addition and subtraction through 999 using multiple strategies.</p> <ol style="list-style-type: none"> a. Strategies for adding and subtracting numbers. b. Estimation of sums and differences in appropriate situations. c. Relationships between operations. 	<ul style="list-style-type: none"> • Addition & Subtraction • Estimate Sums & Differences • Fact Families • Real World Problems 	<p>2.NBT.5. Fluently add and subtract within 100 using strategies based on place value, properties of operations, and/or the relationship between addition and subtraction.</p> <p>2.NBT.6. Add up to four two-digit numbers using strategies based on place value and properties of operations.</p> <p>2.NBT.7. Add and subtract within 1000, using concrete models or</p>

		<p>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. Understand that in adding or subtracting three-digit numbers, one adds or subtracts hundreds and hundreds, tens and tens, ones and ones; and sometimes it is necessary to compose or decompose tens or hundreds.</p> <p>2.NBT.8. Mentally add 10 or 100 to a given number 100–900, and mentally subtract 10 or 100 from a given number 100–900.</p> <p>2.NBT.9. Explain why addition and subtraction strategies work, using place value and the properties of operations.</p>
<p>1.05 - Create and solve problems using strategies such as modeling, composing and decomposing quantities, using doubles, and making tens and hundreds.</p>	<p>Embedded</p>	<p>2.OA.2. Fluently add and subtract within 20 using mental strategies. By end of Grade 2, know from memory all sums of two one-digit numbers.</p> <p>2.NBT.7. Add and subtract within 1000, 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. Understand that in adding or subtracting three-digit numbers, one adds or subtracts hundreds and hundreds, tens and tens, ones and ones; and sometimes it is necessary to compose or decompose tens or hundreds.</p>
<p>1.06 - Define and recognize odd and even numbers.</p>	<ul style="list-style-type: none"> • Odd & Even 	<p>2.OA.3. Determine whether a group of objects (up to 20) has an odd or even number of members, e.g., by pairing objects or counting them by 2s; write an equation to express an even number as a sum of two equal addends.</p>

Competency Goal 2

The learner will recognize and use standard units of metric and customary measurement.

<p>2.01 - Estimate and measure using appropriate units.</p> <p>a. Length (meters, centimeters, feet, inches, yards).</p> <p>b. Temperature (Fahrenheit).</p>	<ul style="list-style-type: none"> • Measuring Objects 	<p>2.MD.1. Measure the length of an object by selecting and using appropriate tools such as rulers, yardsticks, meter sticks, and measuring tapes.</p> <p>2.MD.2. Measure the length of an object twice, using length units of different lengths for the two measurements; describe how the two measurements relate to the size of the unit chosen.</p> <p>2.MD.3. Estimate lengths using units of inches, feet, centimeters, and meters.</p> <p>2.MD.4. Measure to determine how much longer one object is than another, expressing the length difference in terms of a standard length unit.</p> <p>Temperature is not covered by Common Core.</p>
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<p>2.02 - Tell time at the five-minute intervals.</p>	<ul style="list-style-type: none"> • Time 	<p>2.MD.7. Tell and write time from analog and digital clocks to the nearest five minutes, using a.m. and p.m.</p>
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Competency Goal 3

The learner will perform simple transformations.

<p>3.01 - Combine simple figures to create a given shape.</p>	<ul style="list-style-type: none"> • Combining Shapes 	<p>Covered by First Grade Common Core</p>
<p>3.02 - Describe the change in attributes as two- and three-dimensional figures are cut and rearranged.</p>	<ul style="list-style-type: none"> • Combining Shapes 	<p>Covered by First Grade Common Core</p>
<p>3.03 - Identify and make:</p> <p>a. Symmetric figures.</p> <p>b. Congruent figures.</p>	<ul style="list-style-type: none"> • Symmetry & Congruence 	<p>Symmetry is covered by Fourth Grade Common Core.</p> <p>Congruence is covered by Eighth Grade Common Core.</p>

Competency Goal 4

The learner will understand and use data and simple probability concepts.

<p>4.01 - Collect, organize, describe and display data using Venn diagrams (three sets) and pictographs where symbols represent multiple</p>	<ul style="list-style-type: none"> • Interpret Graphs 	<p>2.MD.10. Draw a picture graph and a bar graph (with single-unit scale) to represent a data set with up to four categories. Solve simple put-together, take-apart,</p>
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units (2's, 5's, 10's).		and compare problems using information presented in a bar graph. Venn diagrams are not covered by Common Core.
4.02 - Conduct simple probability experiments; describe the results and make predictions.	• Probability	Covered by Seventh Grade Common Core
Competency Goal 5		
The learner will recognize and represent patterns and simple mathematical relationships.		
5.01 - Identify, describe, translate, and extend repeating and growing patterns.	• Number Patterns	2.NBT.2. Count within 1000; skip-count by 5s, 10s, and 100s.
5.02 - Write addition and subtraction number sentences to represent a problem; use symbols to represent unknown quantities.	• Number Sentences	2.OA.1. Use addition and subtraction within 100 to solve one- and two-step word problems involving situations of adding to, taking from, putting together, taking apart, and comparing, with unknowns in all positions, e.g., by using drawings and equations with a symbol for the unknown number to represent the problem.

Second Grade Common Core Standards Not Covered in North Carolina Second Grade

2.OA.4. Use addition to find the total number of objects arranged in rectangular arrays with up to 5 rows and up to 5 columns; write an equation to express the total as a sum of equal addends.
2.MD.5. Use addition and subtraction within 100 to solve word problems involving lengths that are given in the same units, e.g., by using drawings (such as drawings of rulers) and equations with a symbol for the unknown number to represent the problem.
2.MD.6. Represent whole numbers as lengths from 0 on a number line diagram with equally spaced points corresponding to the numbers 0, 1, 2, ..., and represent whole-number sums and differences within 100 on a number line diagram.
2.MD.8. Solve word problems involving dollar bills, quarters, dimes, nickels, and pennies, using \$ and ¢ symbols appropriately. <i>Example: If you have 2 dimes and 3 pennies, how many cents do you have?</i>
2.MD.9. Generate measurement data by measuring lengths of several objects to the nearest whole unit, or by making repeated measurements of the same object. Show the measurements by making a line plot, where the horizontal scale is marked off in whole-number units.

2.G.1. Recognize and draw shapes having specified attributes, such as a given number of angles or a given number of equal faces. Identify triangles, quadrilaterals, pentagons, hexagons, and cubes.