

# Second Grade Standards Alignment

## 2024 i-Ready Classroom Mathematics

\***Bolded** NC standards beside lessons/topics are OCS identified Priority Standards (blue highlight below unit information)

\*Lower case Roman numerals after a standard reference that bullet point within a standard, the lower case letter represents a sub-bullet point. (i.e., NC.2.OA.1.i.a would be the first bullet point of: One-Step problems and Add to/Take from-Start Unknown.)

\*\*NC Second Grade Math Unpacking-Revised June 2022-Visit the website for the “Clarification” and “Checking for Understanding” sections.

<https://www.dpi.nc.gov/nc-2nd-grade-math-unpacking-rev-june-2022/open>

2nd Grade Standards Alignment: 2024 i-Ready Classroom Lessons

Unit 1: Numbers Within 20: Addition, Subtraction, and Data		
Duration: 29 days (6 weeks)		
Lesson	Topic	NC Standard
0	Try-Discuss-Connect Routine (only in Toolbox)	N/A
1	Mental Math Strategies for Addition	NC.2.OA.2
2	Mental Math Strategies for Subtraction	NC.2.OA.2
<b>3</b>	<b>Solve One-Step Word Problems</b>	<b>NC.2.OA.1.i.a, NC.2.OA.1.i.b, NC.2.OA.1.i.c</b>
<b>4</b>	<b>Draw and Use Bar Graphs and Picture Graphs</b>	<b>NC.2.MD.10.i, NC.2.MD.10.ii</b>
<b>5</b>	<b>Solve Two-Step Word Problems</b>	<b>NC.2.OA.1.ii.a, NC.2.OA.1.ii.b</b>

### Represent and solve problems.

**NC.2.OA.1** Represent and solve addition and subtraction word problems, within 100, with unknowns in all positions, by using representations and equations with a symbol for the unknown number to represent the problem, when solving:

- One-Step problems:
  - Add to/Take from-Start Unknown
  - Compare-Bigger Unknown
  - Compare-Smaller Unknown
- Two-Step problems involving single digits:
  - Add to/Take from- Change Unknown
  - Add to/Take From- Result Unknown

### Add and subtract within 20.

**NC.2.OA.2** Demonstrate fluency with addition and subtraction, within 20, using mental strategies.

### Represent and interpret data.

**NC.2.MD.10** Organize, represent, and interpret data with up to four categories.

- Draw a picture graph and a bar graph with a single-unit scale to represent a data set.
- Solve simple put-together, take-apart, and compare problems using information presented in a picture and a bar graph.

**Unit 2: Numbers Within 100: Addition, Subtraction, Time, and Money****Duration: 31 days (6 weeks)**

Lesson	Topic	NC Standard
6	Add Two-Digit Numbers	NC.2.NBT.5.i, NC.2.NBT.5.ii
7	Subtract Two-Digit Numbers	NC.2.NBT.5.i, NC.2.NBT.5.ii
8	Use Addition and Subtraction Strategies with Two-Digit Numbers	NC.2.NBT.5.i, NC.2.NBT.5.ii, NC.2.NBT.5.iii
9	<b>Solve Word Problems with Two-Digit Numbers</b>	<b>NC.2.OA.1.i.a, NC.2.OA.1.i.b, NC.2.OA.1.i.c, NC.2.OA.1.ii.a, NC.2.OA.1.ii.b</b>
10	<b>Solve Word Problems Involving Money</b>	<b>NC.2.OA.1.ii.a, NC.2.OA.1.ii.b, NC.2.MD.8.i, NC.2.MD.8.ii</b>
11	<b>Tell and Write Time</b>	<b>NC.2.MD.7</b>

**Represent and solve problems.**

**NC.2.OA.1** Represent and solve addition and subtraction word problems, within 100, with unknowns in all positions, by using representations and equations with a symbol for the unknown number to represent the problem, when solving:

- One-Step problems:
  - Add to/Take from-Start Unknown
  - Compare-Bigger Unknown
  - Compare-Smaller Unknown
- Two-Step problems involving single digits:
  - Add to/Take from- Change Unknown
  - Add to/Take From- Result Unknown

**Use place value understanding and properties of operations.**

**NC.2.NBT.5** Demonstrate fluency with addition and subtraction, within 100, by:

- Flexibly using strategies based on place value, properties of operations, and/or the relationship between addition and subtraction.
- Comparing addition and subtraction strategies and explaining why they work.
- Selecting an appropriate strategy in order to efficiently compute sums and differences.

**Build understanding of time and money.**

**NC.2.MD.7** Tell and write time from analog and digital clocks to the nearest five minutes, using a.m. and p.m.

**NC.2.MD.8** Solve word problems involving:

- Quarters, dimes, nickels, and pennies within 99¢, using ¢ symbols appropriately.
- Whole dollar amounts, using the \$ symbol appropriately.

**Unit 3: Numbers Within 1,000: Place Value, Addition, and Subtraction**  
**Duration: 34 days (7 weeks)**

Lesson	Topic	NC Standard
12	<b>Understand Three-Digit Numbers</b>	<b>NC.2.NBT.1. i, NC.2.NBT.1.ii, NC.2.NBT.1.iii</b>
13	<b>Read and Write Three-Digit Numbers</b>	<b>NC.2.NBT.3</b>
14	Compare Three-Digit Numbers	NC.2.NBT.4
15	Mental Addition and Subtraction	NC.2.NBT.2, NC.2.NBT.8
16	<b>Add Three-Digit Numbers</b>	<b>NC.2.NBT.7. i, NC.2.NBT.7. ii, NC.2.NBT.7.iii, NC.2.NBT.7.iv</b>
17	<b>Subtract Three-Digit Numbers</b>	<b>NC.2.NBT.7. i, NC.2.NBT.7. ii, NC.2.NBT.7.iii, NC.2.NBT.7.iv</b>
18	<b>Use Addition and Subtraction Strategies with Three-Digit Numbers</b>	<b>NC.2.NBT.7. i, NC.2.NBT.7. ii, NC.2.NBT.7.iii, NC.2.NBT.7.iv</b>
19	Add Several Two-Digit Numbers	NC.2.NBT.6

**Understand place value.**

**NC.2.NBT.1** Understand that the three digits of a three-digit number represent amounts of hundreds, tens, and ones.

- Unitize by making a hundred from a collection of ten tens.
- Demonstrate that the numbers 100, 200, 300, 400, 500, 600, 700, 800, 900 refer to one, two, three, four, five, six, seven, eight, or nine hundreds, with 0 tens and 0 ones.
- Compose and decompose numbers using various groupings of hundreds, tens, and ones.

**NC.2.NBT.2** Count within 1,000; skip-count by 5s, 10s, and 100s.

**NC.2.NBT.3** Read and write numbers, within 1,000, using base-ten numerals, number names, and expanded form.

**NC.2.NBT.4** Compare two three-digit numbers based on the value of the hundreds, tens, and ones digits, using  $>$ ,  $=$ , and  $<$  symbols to record the results of comparisons.

**Use place value understanding and properties of operations.**

**NC.2.NBT.6** Add up to three two-digit numbers using strategies based on place value and properties of operations.

**NC.2.NBT.7** Add and subtract, within 1,000, relating the strategy to a written method, using:

- Concrete models or drawings
- Strategies based on place value
- Properties of operations
- Relationship between addition and subtraction

**NC.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.

**Unit 4: Length: Measurement, Addition and Subtraction, and Line Plot**  
**Duration: 33 days (6.5 weeks)**

Lesson	Topic	NC Standard
<b>20</b>	<b>Measure in Inches and Centimeters</b>	<b>NC.2.MD.1</b>
<b>21</b>	<b>Measure in Feet and Meters</b>	<b>NC.2.MD.1</b>
22	Understand Measurement with Different Units	NC.2.MD.2
23	Estimate and Measure Lengths	NC.2.MD.3
<b>24</b>	<b>Compare Lengths</b>	<b>NC.2.MD.4</b>
25	Add and Subtract Lengths	NC.2.MD.5
<b>26</b>	<b>Add and Subtract on the Number Line</b>	<b>NC.2.MD.6</b>
27	Read and Make Line Plots	(no NC Standard)

**Measure and estimate lengths.**

**NC.2.MD.1** Measure the length of an object in standard units by selecting and using appropriate tools such as rulers, yardsticks, meter sticks, and measuring tapes.

**NC.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.

**NC.2.MD.3** Estimate lengths in using standard units of inches, feet, yards, centimeters, and meters.

**NC.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.

**Relate addition and subtraction to length.**

**NC.2.MD.5** Use addition and subtraction, within 100, to solve word problems involving lengths that are given in the same units, using equations with a symbol for the unknown number to represent the problem.

**NC.2.MD.6** Represent whole numbers as lengths from 0 on a number line diagram with equally spaced points and represent whole-number sums and differences, within 100, on a number line.

**Unit 5: Shapes and Arrays: Partitioning and Tiling Shapes, Arrays, Evens and Odds**  
**Duration: 19 days (4 weeks)**

Lesson	Topic	NC Standard
28	Recognize and Draw Shapes	NC.2.G.1
<b>29</b>	<b>Understand Partitioning Shapes into Halves, Thirds, and Fourths</b>	<b>NC.2.G.3.i, NC.2.G.3.ii, NC.2.G.3.iii</b>
<b>30</b>	<b>Partition Rectangles</b>	<b>NC.2.G.3.i, NC.2.G.3.ii, NC.2.G.3.iii</b>
<b>31</b>	<b>Add Using Arrays</b>	<b>NC.2.OA.4</b>
32	Even and Odd Numbers	NC.2.OA.3. i, NC.2.OA.3.ii, NC.2.OA.3.iii

**Work with equal groups.**

**NC.2.OA.3** Determine whether a group of objects, within 20, has an odd or even number of members by:

- Pairing objects, then counting them by 2s.
- Determining whether objects can be placed into two equal groups.
- Writing an equation to express an even number as a sum of two equal addends.

**NC.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.

**Reason with shapes and their attributes.**

**NC.2.G.1** Recognize and draw triangles, quadrilaterals, pentagons, and hexagons, having specified attributes; recognize and describe attributes of rectangular prisms and cubes.

**NC.2.G.3** Partition circles and rectangles into two, three, or four equal shares.

- Describe the shares using the words halves, thirds, half of, a third of, fourths, fourth of, quarter of.
- Describe the whole as two halves, three thirds, four fourths.
- Explain that equal shares of identical wholes need not have the same shape.