North Carolina Mathematics

Grade 1

Adopted 2018

Standards for Mathematical Practice

1. **Make sense of problems and persevere in solving them.** MP.1
2. **Reason abstractly and quantitatively.** MP.2
3. **Construct viable arguments and critique the reasoning of others.** MP.3
4. **Model with mathematics.** MP.4
5. **Use appropriate tools strategically.** MP.5
6. **Attend to precision.** MP.6
7. **Look for and make use of structure.** MP.7
8. **Look for and express regularity in repeated reasoning.** MP.8

Operations and Algebraic Thinking

Represent and solve problems.

1. Represent and solve addition and subtraction word problems, within 20, with unknowns, by using objects, drawings, and equations with a symbol for the unknown number to represent the problem, when solving:
Add to/Take from-Change Unknown
Put together/Take Apart-Addend Unknown
Compare-Difference Unknown NC.1.OA.1
2. Represent and 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. NC.1.OA.2

Understand and apply the properties of operations.

3. Apply the commutative and associative properties as strategies for solving addition problems. NC.1.OA.3
4. Solve an unknown-addend problem, within 20, by using addition strategies and/or changing it to a subtraction problem. NC.1.OA.4

Add and subtract within 20.

9. Demonstrate fluency with addition and subtraction within 10. NC.1.OA.9

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6. Add and subtract, within 20, using strategies such as:
Counting on
Making ten
Decomposing a number leading to a ten
Using the relationship between addition and subtraction
Using a number line
Creating equivalent but simpler or known sums NC.1.OA.6

Analyze addition and subtraction equations within 20.

7. Apply understanding of the equal sign to determine if equations involving addition and subtraction are true. NC.1.OA.7
8. Determine the unknown whole number in an addition or subtraction equation involving three whole numbers. NC.1.OA.8

Number and Operations in Base Ten

Extend and recognize patterns in the counting sequence.

1. Count to 150, starting at any number less than 150. NC.1.NBT.1
7. Read and write numerals, and represent a number of objects with a written numeral, to 100. NC.1.NBT.7

Understand place value.

2. Understand that the two digits of a two-digit number represent amounts of tens and ones.
Unitize by making a ten from a collection of ten ones.
Model the numbers from 11 to 19 as composed of a ten and one, two, three, four, five, six, seven, eight, or nine ones.
Demonstrate that the numbers 10, 20, 30, 40, 50, 60, 70, 80, 90 refer to one, two, three, four, five, six, seven, eight, or nine tens, with 0 ones. NC.1.NBT.2
3. Compare two two-digit numbers based on the value of the tens and ones digits, recording the results of comparisons with the symbols >, =, and <. NC.1.NBT.3

Use place value understanding and properties of operations.

4. Using concrete models or drawings, strategies based on place value, properties of operations, and explaining the reasoning used, add, within 100, in the following situations:
A two-digit number and a one-digit number
A two-digit number and a multiple of 10 NC.1.NBT.4
5. Given a two-digit number, mentally find 10 more or 10 less than the number, without having to count; explain the reasoning used. NC.1.NBT.5
6. Subtract multiples of 10 in the range 10-90 from multiples of 10 in the range 10-90, explaining the reasoning, using:
Concrete models and drawings
Number lines
Strategies based on place value
Properties of operations
The relationship between addition and subtraction NC.1.NBT.6

Measurement and Data

Measure lengths.

1. Order three objects by length; compare the lengths of two objects indirectly by using a third object. NC.1.MD.1

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2. Measure lengths with non-standard units.
Express the length of an object as a whole number of non-standard length units.
Measure by laying multiple copies of a shorter object (the length unit) end to end (iterating) with no gaps or overlaps. NC.1.MD.2

Build understanding of time and money.

3. Tell and write time in hours and half-hours using analog and digital clocks. NC.1.MD.3
5. Identify quarters, dimes, and nickels and relate their values to pennies. NC.1.MD.5

Represent and interpret data.

4. Organize, represent, and interpret data with up to three categories.
Ask and answer questions about the total number of data points.
Ask and answer questions about how many in each category.
Ask and answer questions about how many more or less are in one category than in another. NC.1.MD.4

Geometry

Reason with shapes and their attributes.

1. Distinguish between defining and non-defining attributes and create shapes with defining attributes by:
Building and drawing triangles, rectangles, squares, trapezoids, hexagons, circles.
Building cubes, rectangular prisms, cones, spheres, and cylinders. NC.1.G.1
2. Create composite shapes by:
Making a two-dimensional composite shape using rectangles, squares, trapezoids, triangles, and half-circles naming the components of the new shape.
Making a three-dimensional composite shape using cubes, rectangular prisms, cones, and cylinders, naming the components of the new shape. NC.1.G.2
3. Partition circles and rectangles into two and four equal shares.
Describe the shares as halves and fourths, as half of and fourth of.
Describe the whole as two of, or four of the shares.
Explain that decomposing into more equal shares creates smaller shares. NC.1.G.3