



## North Carolina Essential Standards- Approved September, 2009

### Mathematics— Grade 1

Note on Numbering: **N**–Number and Operations, **A**–Algebra, **G**–Geometry, **M**–Measurement, **S**–Statistics and Probability and **D**–Discrete Mathematics

#### Number and Operations

	Essential Standard	Clarifying Objectives	
1.N.1	<b>Represent the whole numbers from 0 through 100 by counting, reading, writing and the use of physical models.</b>	1.N.1.1	Understand the sequential order of the counting numbers and their relative magnitudes.
		1.N.1.2	Use a range of numbers (1-10, 11-20, 21-30, etc.) to estimate the quantity of a given set.
		1.N.1.3	Understand that counting by 2s, 5s and 10s is counting groups of items by that amount.
		1.N.1.4	Recognize patterns in written numerals and use those patterns to determine the order of numbers including the number before and after, 1 more and 1 less and 2 more and 2 less.
		1.N.1.5	Understand that the order of the digits determines the given number and use this understanding to compare sets and numbers.
		1.N.1.6	Illustrate whole numbers to 30 in groups of tens and ones using objects, pictures and numbers.
1.N.2	<b>Use strategies to compose and decompose numbers 0-100.</b>	1.N.2.1	Use part-part-whole relationships (including 2 or more parts), benchmark numbers 5 and 10, doubles and near doubles to compose and decompose numbers.
		1.N.2.2	Understand the concept of ten–and–some–more with numbers 11-20.
		1.N.2.3	Understand 10 more and 10 less from any given number to 100.
1.N.3	<b>Use efficient strategies to solve a variety of story problems and generate a justification for the reasonableness of the answer.</b>	1.N.3.1	Use fluent recall of addition facts (sums to 10) and the related subtraction facts to solve problems.
		1.N.3.2	Use strategies to solve single and multi-step addition and subtraction story problems to 30.
		1.N.3.3	Use strategies to solve single-step addition and subtraction story problems to 100.
1.N.4	<b>Understand sharing fairly (equipartitioning) with collections of discrete items and single continuous wholes.</b>	1.N.4.1	Understand that a region or set must be divided into equal parts of the whole and when reassembled recreates the whole.
		1.N.4.2	Understand the concept of “left-over” (remainder).
		1.N.4.3	Understand that even numbers are sets that can be shared fairly between two people and odd sets cannot.

## Algebra

	Essential Standard	Clarifying Objectives	
1.A.1	<b>Use relationships between addition and subtraction to solve problems.</b>	1.A.1.1	Use models to demonstrate addition properties (commutative, associative and identity).
		1.A.1.2	Use models to demonstrate the inverse relationship between addition and subtraction.
1.A.2	<b>Apply the concept of equality.</b>	1.A.2.1	Use the equal sign to show the relationship between one side of the equation and the other.
		1.A.2.2	Interpret simple number sentences as models and models as number sentences in order to solve.
1.A.3	<b>Analyze repeating patterns.</b>	1.A.3.1	Analyze patterns to identify the unit, correct errors and extend the patterns.
		1.A.3.2	Translate patterns into symbolic representations using actions, words and models.

## Geometry

	Essential Standard	Clarifying Objectives	
1.G.1	<b>Classify two-dimensional figures (polygons) as parallelogram, rhombus, trapezoid and hexagon and three-dimensional figures (polyhedra) as prism and pyramid according to geometric attributes.</b>	1.G.1.1	Describe the attributes of the figures, such as: number of faces or edges, equal sizes of sides and numbers of angles.
		1.G.1.2	Use the attributes of figures to recognize different variations of figures.
1.G.2	<b>Compare geometric figures in terms of their perspectives and orientations.</b>	1.G.2.1	Summarize relationships of objects using proximity, position, perspective, orientation and navigation.
		1.G.2.2	Compare different perspectives and orientations by composing and decomposing geometric figures.

## Measurement

	Essential Standard	Clarifying Objectives	
<b>1.M.1</b>	<b>Use nonstandard units to estimate and measure length or weight* of objects.</b> <small>*More properly mass, but most commonly understood as weight at this grade band.</small>	1.M.1.1	Compare objects in terms of appropriate non-standard units of measurement.
		1.M.1.2	Use comparative vocabulary to describe the relationship among three to five objects with respect to length (longer, shorter), weight (heavier, lighter) or duration.
<b>1.M.2</b>	<b>Use the names of the days of the weeks and the months of the year to describe special activities and events.</b>	1.M.2.1	Remember in order the names of the days of the week and months of the year.
		1.M.2.2	Recognize the difference in the amount of time between a day, week and month.

## Statistics and Probability

	Essential Standard	Clarifying Objectives	
<b>1.S.1</b>	<b>Infer the rule for classifying objects on the basis of two attributes.</b>	1.S.1.1	Explain how a collection of objects with various attributes can be classified or sorted in different ways.
<b>1.S.2</b>	<b>Use appropriate methods to collect, display, analyze and interpret statistical data in response to specific questions.</b>	1.S.2.1	Represent data collected using picture graphs, line plots, lists and tallies to capture and represent categorical and numerical data.