North Carolina Math Competencies & Essential Skills Math Software

This document outlines the correlations between the Grade 3 North Carolina Math Competencies and the Essential Skills math programs. The specific curriculum outcomes are noted on the left and are matched with the relevant Essential Skills program on the right. Where correlations are not exact, the difference is noted in brackets. **Essential Skills programs correlate with 88% of the Grade 3 North Carolina Math Competencies.**

North Carolina Math Competencies	Essential Skills Software CORRELATING PROGRAMS
Number & Operations	
1.01 Develop number sense for whole numbers through 9,999. a) Connect model, number word, and number using a variety of representations.	**Mastering Numeration 3** (to 1000)
b) Build understanding of place value (ones through thousands).	
c) Compare and order.	
1.02 Develop fluency with multi-digit addition and subtraction through 9,999 using: a) Strategies for adding and subtracting numbers.	**Mastering Numeration 3** **Problem Solving 2-3** **Problem Solving 3-4** (to 1000)
b) Estimation of sums and differences in appropriate situations.	
c) Relationships between operations.	**Mastering Numeration 1** **Mastering Numeration 3**
1.03 Develop fluency with multiplication from 1x1 to 12x12 and division up to two-digit by one-digit numbers using: a) Strategies for multiplying and dividing numbers.	**Mastering Numeration 3** **Problem Solving 2-3** (to 7x7)
b) Estimation of products and quotients in appropriate situations.	
c) Relationships between operations.	**Mastering Numeration 1** **Mastering Numeration 3**

North Carolina Math Competencies	Essential Skills Software CORRELATING PROGRAMS
1.04 Use basic properties (identity, commutative, associative, order of operations) for addition, subtraction, multiplication, and division.	**Mastering Numeration 3** **Problem Solving 2-3** **Problem Solving 3-4**
1.05 Use area or region models and set models of fractions to explore part-whole relationships. a) Represent fractions concretely and symbolically (halves, fourths, thirds, sixths, eighths).	**Mastering Numeration 3**
b) Compare and order fractions (halves, fourths, thirds, sixths, eighths) using models and benchmark numbers (zero, one-half, one); describe comparisons.	**Mastering Numeration 3**
c) Model and describe common equivalents, especially relationships among halves, fourths, and eighths, and thirds and sixths.	**Mastering Numeration 3**
d) Understand that the fractional relationships that occur between zero and one also occur between every two consecutive whole numbers.	
e) Understand and use mixed numbers and their equivalent fraction forms.	
1.06 Develop flexibility in solving problems by selecting strategies and using mental computation, estimation, calculators or computers, and paper and pencil.	**Problem Solving 2-3** **Problem Solving 3-4**
Measurement	
2.01 Solve problems using measurement concepts and procedures involving: a) Elapsed time.	**Measurement 3** **Problem Solving 2-3** **Problem Solving 3-4**
b) Equivalent measures within the same measurement system.	**Measurement 3**
2.02 Estimate and measure using appropriate units. a) Capacity (cups, pints, quarts, gallons,liters).	**Measurement 3** **Problem Solving 2-3**
b) Length (miles, kilometers).	**Measurement 3** **Problem Solving 2-3**
c) Mass (ounces, pounds, grams, kilograms).	**Measurement 3**

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d) Temperature (Fahrenheit, Celsius).	**Measurement 3** **Problem Solving 2-3** **Problem Solving 3-4**
Geometry	
3.01 Use appropriate vocabulary to compare, describe, and classify two- and three-dimensional figures.	**Patterning, Geometry & Data Management** **Problem Solving 2-3** **Problem Solving 3-4**
3.02 Use a rectangular coordinate system to solve problems. a) Graph and identify points with whole number and/or letter coordinates.	**Patterning, Geometry & Data Management 3** **Problem Solving 3-4**
b) Describe the path between given points on the plane.	**Patterning, Geometry & Data Management 3** **Problem Solving 3-4**
Data Analysis & Probability	
4.01 Collect, organize, analyze, and display data (including circle graphs and tables) to solve problems.	**Patterning, Geometry & Data Management** **Problem Solving 2-3** **Problem Solving 3-4**
4.02 Determine the number of permutations and combinations of up to three items.	**Patterning, Geometry & Data Management 3**
4.03 Solve probability problems using permutations and combinations.	**Patterning, Geometry & Data Management 3** **Problem Solving 2-3** **Problem Solving 3-4**
Algebra	
5.01 Describe and extend numeric and geometric patterns.	**Patterning, Geometry & Data Management 3** **Problem Solving 2-3** **Problem Solving 3-4**
5.02 Extend and find missing terms of repeating and growing patterns.	**Patterning, Geometry & Data Management 3** **Problem Solving 2-3** **Problem Solving 3-4**
5.03 Use symbols to represent unknown quantities in number sentences.	**Problem Solving 2-3** **Problem Solving 3-4**

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5.04 Find the value of the unknown in a number sentence.	**Problem Solving 2-3** **Problem Solving 3-4**