Common Core Correlation - Grade 3

Common Core Standards & Essential Skills Mathematics Software

This document outlines the correlations between the Common Core Standards for Grade 3 and the Mathematics programs from Essential Skills Software. The Common Core Standards 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 Mathematics programs cover 100% of the Common Core Standards for Grade 3.**

<table>
<tr><th colspan="2">Operations & Algebraic Thinking</th></tr>
<tr><th>Common Core
STANDARDS</th><th>Essential Skills Software
CORRELATING PROGRAMS</th></tr>
<tr><td>1. Interpret products of whole numbers, e.g., interpret 5 × 7 as the total number of objects in 5 groups of 7 objects each. For example, describe a context in which a total number of objects can be expressed as 5 × 7.</td><td rowspan="2">Mastering Numeration 2
Unit 9 - Multiplication & Division</td></tr>
<tr><td>2. Interpret whole-number quotients of whole numbers, e.g., interpret 56 ÷ 8 as the number of objects in each share when 56 objects are partitioned equally into 8 shares, or as a number of shares when 56 objects are partitioned into equal shares of 8 objects each. For example, describe a context in which a number of shares or a number of groups can be expressed as 56 ÷ 8.</td></tr>
<tr><td>3. Use multiplication and division within 100 to solve word problems in situations involving equal groups, arrays, and measurement quantities, e.g., by using drawings and equations with a symbol for the unknown number to represent the problem.</td><td>Problem Solving 2-3
Unit 4 - Numeration

Problem Solving 3-4
Unit 4 - Numeration</td></tr>
<tr><td>4. Determine the unknown whole number in a multiplication or division equation relating three whole numbers. For example, determine the unknown number that makes the equation true in each of the equations 8 × ? = 48, 5 = _ ÷ 3, 6 × 6 = ?</td><td>Problem Solving 2-3
Unit 5 - Patterning & Algebra

Problem Solving 3-4
Unit 5 - Patterning & Algebra</td></tr>
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5. Apply properties of operations as strategies to multiply and divide. Examples: If 6 × 4 = 24 is known, then 4 × 6 = 24 is also known. (Commutative property of multiplication.) 3 × 5 × 2 can be found by 3 × 5 = 15, then 15 × 2 = 30, or by 5 × 2 = 10, then 3 × 10 = 30. (Associative property of multiplication.) Knowing that 8 × 5 = 40 and 8 × 2 = 16, one can find 8 × 7 as 8 × (5 + 2) = (8 × 5) + (8 × 2) = 40 + 16 = 56. (Distributive property.)	**Mastering Numeration 2** **Unit 10 - Multiplication & Division Tricks**
6. Understand division as an unknown-factor problem. For example, find 32 ÷ 8 by finding the number that makes 32 when multiplied by 8.	**Mastering Numeration 2** **Unit 10 - Multiplication & Division Tricks**
7. Fluently multiply and divide within 100, using strategies such as the relationship between multiplication and division (e.g., knowing that 8 × 5 = 40, one knows 40 ÷ 5 = 8) or properties of operations. By the end of Grade 3, know from memory all products of two one-digit numbers.	**Mastering Numeration 2** **Unit 9 - Multiplication & Division** **Mastering Numeration 3** **Unit 5 - Multiplication** **Unit 6 - Division**
8. Solve two-step word problems using the four operations. Represent these problems using equations with a letter standing for the unknown quantity. Assess the reasonableness of answers using mental computation and estimation strategies including rounding.	**Problem Solving 2-3** **Unit 4 - Numeration** **Problem Solving 3-4** **Unit 4 - Numeration**
9. Identify arithmetic patterns (including patterns in the addition table or multiplication table), and explain them using properties of operations. For example, observe that 4 times a number is always even, and explain why 4 times a number can be decomposed into two equal addends.	**Patterning, Geometry & Data Management 2** **Unit Patterning 5 - Number Charts** **Patterning, Geometry & Data Management 3** **Unit Patterning 5 - Number Charts**
Number & Operations in Base Ten	
1. Use place value understanding to round whole numbers to the nearest 10 or 100.	**Mastering Numeration 3** **Unit 2 - Compare**
2. Fluently add and subtract within 1000 using strategies and algorithms based on place value, properties of operations, and/or the relationship between addition and subtraction.	**Mastering Numeration 3** **Unit 3 - Addition Facts** **Unit 4 - Subtraction Facts** **Problem Solving 2-3** **Unit 4 - Numeration** **Problem Solving 3-4** **Unit 4 - Numeration**

3. Multiply one-digit whole numbers by multiples of 10 in the range 10–90 (e.g., 9 × 80, 5 × 60) using strategies based on place value and properties of operations.	**Mastering Numeration 3** **Unit 5 - Multiplication**
Number & Operations - Fractions	
1. Understand a fraction 1/b as the quantity formed by 1 part when a whole is partitioned into b equal parts; understand a fraction a/b as the quantity formed by a parts of size 1/b.	**Numeration 3** **Unit 8 - Fractions** **Problem Solving 2-3** **Unit 4 - Numeration** **Problem Solving 3-4** **Unit 4 - Numeration**
2. Understand a fraction as a number on the number line; represent fractions on a number line diagram.	
3. Explain equivalence of fractions in special cases, and compare fractions by reasoning about their size.	
Measurement & Data	
1. Tell and write time to the nearest minute and measure time intervals in minutes. Solve word problems involving addition and subtraction of time intervals in minutes, e.g., by representing the problem on a number line diagram.	**Math Measurement 3** **Unit 2 - Telling Time** **(to 5 minutes)** **Problem Solving 2-3** **Unit 3 - Measurement** **(to 5 minutes)** **Problem Solving 3-4** **Unit 3 - Measurement** **(to 5 minutes)**
2. Measure and estimate liquid volumes and masses of objects using standard units of grams (g), kilograms (kg), and liters (l).1 Add, subtract, multiply, or divide to solve one-step word problems involving masses or volumes that are given in the same units, e.g., by using drawings (such as a beaker with a measurement scale) to represent the problem.	**Math Measurement 3** **Unit 6 - Capacity & Volume** **Unit 7 - Mass** **Problem Solving 2-3** **Unit 3 - Measurement** **Problem Solving 3-4** **Unit 3 - Measurement**

3. Draw a scaled picture graph and a scaled bar graph to represent a data set with several categories. Solve one- and two-step "how many more" and "how many less" problems using information presented in scaled bar graphs. For example, draw a bar graph in which each square in the bar graph might represent 5 pets.	**Patterning, Geometry & Data Management 3** **Unit Data Management 1.3 - Graphing** **Problem Solving 2-3** **Unit 1 - Data Management & Probability** **Problem Solving 3-4** **Unit 1 - Data Management & Probability**
4. Generate measurement data by measuring lengths using rulers marked with halves and fourths of an inch. Show the data by making a line plot, where the horizontal scale is marked off in appropriate units— whole numbers, halves, or quarters.	**Math Measurement 3** **Unit 4 - Length, Height & Distance** **Problem Solving 2-3** **Unit 3 - Measurement** **Problem Solving 3-4** **Unit 3 - Measurement**
5. Recognize area as an attribute of plane figures and understand concepts of area measurement.	**Math Measurement 3** **Unit 5 - Perimeter & Area** **Problem Solving 2-3** **Unit 3 - Measurement** **Problem Solving 3-4** **Unit 3 - Measurement**
6. Measure areas by counting unit squares (square cm, square m, square in, square ft, and improvised units).	
7. Relate area to the operations of multiplication and addition.	
8. Solve real world and mathematical problems involving perimeters of polygons, including finding the perimeter given the side lengths, finding an unknown side length, and exhibiting rectangles with the same perimeter and different areas or with the same area and different perimeters.	
Geometry	
1. Understand that shapes in different categories (e.g., rhombuses, rectangles, and others) may share attributes (e.g., having four sides), and that the shared attributes can define a larger category (e.g., quadrilaterals). Recognize rhombuses, rectangles, and squares as examples of quadrilaterals, and draw examples of quadrilaterals that do not belong to any of these subcategories.	**Patterning, Geometry & Data Management 3** **Unit Geometry 1 - 2D Shapes** **Problem Solving 2-3** **Unit 2 - Geometry** **Problem Solving 3-4** **Unit 2 - Geometry**

2. Partition shapes into parts with equal areas. Express the area of each part as a unit fraction of the whole. For example, partition a shape into 4 parts with equal area, and describe the area of each part as 1/4 of the area of the shape.	**Numeration 3** **Unit 8 - Fractions** **Problem Solving 2-3** **Unit 4 - Numeration** **Problem Solving 3-4** **Unit 4 - Numeration**