Common Core Correlation - Grade 5

Common Core Standards & Essential Skills Mathematics Software

This document outlines the correlations between the Common Core Standards for Grade 5 (Operations & Algebraic Thinking, Number and Operations in Base Ten, Number and Operations - Fractions) 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 94% of the Grade 5 Common Core Standards for these three strands of the curriculum.**

Operations & Algebraic Thinking	
Common Core STANDARDS	**Essential Skills Software CORRELATING PROGRAMS**
1. Use parentheses, brackets, or braces in numerical expressions, and evaluate expressions with these symbols.	**Number Concepts Grade 6**
2. Write simple expressions that record calculations with numbers, and interpret numerical expressions without evaluating them. For example, express the calculation “add 8 and 7, then multiply by 2” as 2 × (8 + 7). Recognize that 3 × (18932 + 921) is three times as large as 18932 + 921, without having to calculate the indicated sum or product.	**Number Concepts Grade 6**
3. Generate two numerical patterns using two given rules. Identify apparent relationships between corresponding terms. Form ordered pairs consisting of corresponding terms from the two patterns, and graph the ordered pairs on a coordinate plane. For example, given the rule “Add 3” and the starting number 0, and given the rule “Add 6” and the starting number 0, generate terms in the resulting sequences, and observe that the terms in one sequence are twice the corresponding terms in the other sequence. Explain informally why this is so.	**Math Operations Grade 5**

Common Core Correlation - Grade 5

Number & Operations in Base Ten	
1. Recognize that in a multi-digit number, a digit in one place represents 10 times as much as it represents in the place to its right and 1/10 of what it represents in the place to its left.	**Number Concepts Grade 4** **Number Concepts Grade 5** **Number Concepts Grade 6**
2. Explain patterns in the number of zeros of the product when multiplying a number by powers of 10, and explain patterns in the placement of the decimal point when a decimal is multiplied or divided by a power of 10. Use whole-number exponents to denote powers of 10.	**Number Concepts Grade 4** **Number Concepts Grade 5** **Number Concepts Grade 6**
3. Read, write, and compare decimals to thousandths.	**Number Concepts Grade 5**
4. Use place value understanding to round decimals to any place.	**Number Concepts Grade 5**
5. Fluently multiply multi-digit whole numbers using the standard algorithm.	**Math Operations Grade 5**
6. Find whole-number quotients of whole numbers with up to four-digit dividends and two-digit divisors, using strategies based on place value, the properties of operations, and/or the relationship between multiplication and division. Illustrate and explain the calculation by using equations, rectangular arrays, and/or area models.	**Math Operations Grade 5**
7. Add, subtract, multiply, and divide decimals to hundredths, using concrete models or drawings and strategies based on place value, properties of operations, and/or the relationship between addition and subtraction; relate the strategy to a written method and explain the reasoning used.	**Number Concepts Grade 4** **Number Concepts Grade 5**
Number & Operations - Fractions	
1. Add and subtract fractions with unlike denominators (including mixed numbers) by replacing given fractions with equivalent fractions in such a way as to produce an equivalent sum or difference of fractions with like denominators. For example, 2/3 + 5/4 = 8/12 + 15/12 = 23/12. (In general, a/b + c/d = (ad + bc)/bd.)	**Number Concepts Grade 5**

2. Solve word problems involving addition and subtraction of fractions referring to the same whole, including cases of unlike denominators, e.g., by using visual fraction models or equations to represent the problem. Use benchmark fractions and number sense of fractions to estimate mentally and assess the reasonableness of answers. For example, recognize an incorrect result 2/5 + 1/2 = 3/7, by observing that 3/7 < 1/2.	**Number Concepts Grade 5**
3. Interpret a fraction as division of the numerator by the denominator (a/b = a ÷ b). Solve word problems involving division of whole numbers leading to answers in the form of fractions or mixed numbers, e.g., by using visual fraction models or equations to represent the problem. For example, interpret 3/4 as the result of dividing 3 by 4, noting that 3/4 multiplied by 4 equals 3, and that when 3 wholes are shared equally among 4 people each person has a share of size 3/4. If 9 people want to share a 50-pound sack of rice equally by weight, how many pounds of rice should each person get? Between what two whole numbers does your answer lie?	**Number Concepts Grade 5** **Number Concepts Grade 6**
4. Apply and extend previous understandings of multiplication to multiply a fraction or whole number by a fraction.	**Number Concepts Grade 6**
5. Interpret multiplication as scaling (resizing), by:	
6. Solve real world problems involving multiplication of fractions and mixed numbers, e.g., by using visual fraction models or equations to represent the problem.	**Number Concepts Grade 6**
7. Apply and extend previous understandings of division to divide unit fractions by whole numbers and whole numbers by unit fractions.	**Number Concepts Grade 6**