Mathematics Correlation - Grade 3

Alberta - Western and Northern Canadian Protocols & Essential Skills Math Software

This document outlines the correlations between the Grade 3 Alberta - Western and Northern Canadian Protocols and the Essential Skills math programs. The specific protocols 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 96% of the Grade 3 Western and Northern Canadian Protocols.

1. Number	
Alberta - Western and Northern Canadian Protocols	**Essential Skills Software CORRELATING PROGRAMS**
1. Say the number sequence 0 to 1000 forward and backward by: 5s, 10s or 100s, using any starting point, 3s, using starting points that are multiples of 3, 4s, using starting points that are multiples of 4, 25s, using starting points that are multiples of 25.	**Mastering Numeration 3**
2. Represent and describe numbers to 1000, concretely, pictorially and symbolically.	**Mastering Numeration 3** **Problem Solving 2-3**
3. Compare and order numbers to 1000.	**Mastering Numeration 3**
4. Estimate quantities less than 1000, using referents.	
5. Illustrate, concretely and pictorially, the meaning of place value for numerals to 1000.	**Mastering Numeration 3**
6. Describe and apply mental mathematics strategies for adding two 2-digit numerals, such as: adding from left to right, taking one addend to the nearest multiple of ten and then compensating, using doubles.	**Mastering Numeration 3**
7. Describe and apply mental mathematics strategies for subtracting two 2-digit numerals, such as: taking the subtrahend to the nearest multiple of ten and then compensating, thinking of addition, using doubles.	**Mastering Numeration 3** **Problem Solving 2-3**

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1. Number	
8. Apply estimation strategies to predict sums and differences of two 2-digit numerals in a problem-solving context.	
9. Demonstrate an understanding of addition and subtraction of numbers with answers to 1000 (limited to 1-, 2- and 3-digit numerals), concretely, pictorially and symbolically, by: using personal strategies for adding and subtracting with and without the support of manipulatives, creating and solving problems in context that involve addition and subtraction of numbers.	**Mastering Numeration 3** **Problem Solving 2-3** **Problem Solving 3-4**
10. Apply mental mathematics strategies and number properties, such as: using doubles, making 10, using the commutative property, using the property of zero, thinking addition for subtraction for basic addition facts and related subtraction facts to 18.	**Mastering Numeration 3**
11. Demonstrate an understanding of multiplication to 5 × 5 by: representing and explaining multiplication using equal grouping and arrays, creating and solving problems in context that involve multiplication, modelling multiplication using concrete and visual representations, and recording the process symbolically, relating multiplication to repeated addition, relating multiplication to division.	**Mastering Numeration 3** (to 7 x 7) **Problem Solving 2-3** (to 7 x 7)
12. Demonstrate an understanding of division (limited to division related to multiplication facts up to 5 × 5) by: representing and explaining division using equal sharing and equal grouping, creating and solving problems in context that involve equal sharing and equal grouping, modelling equal sharing and equal grouping using concrete and visual representations, and recording the process symbolically, relating division to repeated subtraction, relating division to multiplication.	**Mastering Numeration 3** (to 7 x 7) **Problem Solving 2-3** (to 7 x 7)
13. Demonstrate an understanding of fractions by: explaining that a fraction represents a part of a whole, describing situations in which fractions are used, comparing fractions of the same whole that have like denominators.	**Mastering Numeration 3** **Problem Solving 2-3**

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2. Patterns and Relations	
Alberta - Western and Northern Canadian Protocols	**Essential Skills Software CORRELATING PROGRAMS**
1. Demonstrate an understanding of increasing patterns by: describing, extending, comparing, creating numerical (numbers to 1000) and non-numerical patterns using manipulatives, diagrams, sounds and actions.	**Pattering, Geometry & Data Management 3** **Problem Solving 2-3**
2. Demonstrate an understanding of decreasing patterns by: describing, extending, comparing, creating numerical (numbers to 1000) and non-numerical patterns using manipulatives, diagrams, sounds and actions.	**Pattering, Geometry & Data Management 3** **Problem Solving 2-3**
3. Sort objects or numbers, using one or more than one attribute.	**Pattering, Geometry & Data Management 3** **Problem Solving 2-3**
4. Solve one-step addition and subtraction equations involving a symbol to represent an unknown number.	**Problem Solving 2-3**

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3. Shape and Space	
Alberta - Western and Northern Canadian Protocols	**Essential Skills Software CORRELATING PROGRAMS**
1. Relate the passage of time to common activities, using nonstandard and standard units (minutes, hours, days, weeks, months, years).	**Measurement 3** **Problem Solving 2-3** **Problem Solving 3-4**
2. Relate the number of seconds to a minute, the number of minutes to an hour and the number of days to a month in a problem-solving context.	**Measurement 3** **Problem Solving 2-3** **Problem Solving 3-4**
3. Demonstrate an understanding of measuring length (cm, m) by: selecting and justifying referents for the units cm and m, modelling and describing the relationship between the units cm and m, estimating length, using referents, measuring and recording length, width and height.	**Measurement 3** **Problem Solving 2-3**
4. Demonstrate an understanding of measuring mass (g, kg) by: selecting and justifying referents for the units g and kg, modelling and describing the relationship between the units g and kg, estimating mass, using referents, measuring and recording mass.	**Measurement 3**
5. Demonstrate an understanding of perimeter of regular and irregular shapes by: estimating perimeter, using referents for cm or m, measuring and recording perimeter (cm, m), constructing different shapes for a given perimeter (cm, m) to demonstrate that many shapes are possible for a perimeter.	**Measurement 3** **Problem Solving 2-3** **Problem Solving 3-4**
6. Describe 3-D objects according to the shape of the faces and the number of edges and vertices.	**Pattering, Geometry & Data Management 3** **Problem Solving 2-3** **Problem Solving 3-4**
7. Sort regular and irregular polygons, including: triangles, quadrilaterals, pentagons, hexagons, octagons according to the number of sides.	**Pattering, Geometry & Data Management 3** **Problem Solving 2-3** **Problem Solving 3-4**

4. Statistics and Probability	
Alberta - Western and Northern Canadian Protocols	**Essential Skills Software CORRELATING PROGRAMS**
1. Collect first-hand data and organize it using: tally marks, line plots, charts, lists to answer questions.	**Pattering, Geometry & Data Management 3** **Problem Solving 2-3**
2. Construct, label and interpret bar graphs to solve problems.	**Pattering, Geometry & Data Management 3**