Correlation of Mathematics Readers Grade 4 to the Alberta Mathematics Program of Studies

Number: Develop number sense.

OUTCOME
4.1.3.
Demonstrate an understanding of addition of numbers with answers to 10 000 and their corresponding subtractions (limited to 3- and 4-digit numerals) by: using personal strategies for adding and subtracting; estimating sums and differences; solving problems involving addition and subtraction. [C, CN, ME, PS, R]

Correlated Lessons:
The Bread Book Reader; The Bake Sale Reader Objective 25: Adds, subtracts, multiplies, and divides whole numbers/integers

OUTCOME
4.1.6.
Demonstrate an understanding of multiplication (2- or 3-digit by 1-digit) to solve problems by: using personal strategies for multiplication with and without concrete materials; using arrays to represent multiplication; connecting concrete representations to symbolic representations; estimating products; applying the distributive property. [C, CN, ME, PS, R, V]

Correlated Lessons:
Olympic Technology Reader; Hosting the Olympic Summer Games Reader Objective 49: Uses a variety of strategies to understand problem situations (e.g., modeling problem with diagrams or physical objects, counting backward, identifying a pattern)

The Bread Book Reader Objective 29: Understands the properties of and the relationships among multiplication and division.

OUTCOME
4.1.7.
Demonstrate an understanding of division (1-digit divisor and up to 2-digit dividend) to solve problems by: using personal strategies for dividing with and without concrete materials; estimating quotients; relating division to multiplication. [C, CN, ME, PS, R, V]

Correlated Lessons:
Natural Disasters Reader; People Who Predict Reader Objective 31: Uses specific strategies (e.g., rounding) to estimate computations and to check the reasonableness of computational results

Natural Disasters; People Who Predict Page 60, 65 Objective 04: Students will estimate to compute answers/numbers or make predictions.

Olympic Technology Reader; Hosting the Olympic Summer Games Reader Objective 49: Uses a variety of strategies to understand problem situations (e.g., modeling problem with diagrams or physical objects, counting backward, identifying a pattern)

The Bread Book Reader Objective 29: Understands the properties of and the relationships among multiplication and division.

Patterns and Relations (Patterns): Use patterns to describe the world and to solve problems.

OUTCOME
4.2.1.
Identify and describe patterns found in tables and charts. [C, CN, PS, V] [ICT: C6-2.3]

Correlated Lessons:
Patterns Around Us Reader; Patterns in Nature Reader Objective 35: Recognizes a variety of number patterns (e.g., basic linear patterns such as [2,4,6,8&]; simple repeating, growing patterns) and the rules that explain them

Patterns Around Us; Patterns in Nature Page 84, 89 Objective 07: Students will recognize, analyze, and extend a wide variety of numerical and shape patterns and verbalize the rules that explain them.

Patterns In Nature Reader Objective 39: Under that a simple numerical or shape pattern can be represented in different ways (ie, geometrically or numerically; the pattern of numbers [7,14,21,28&] is equivalent to the mathematical relationship 7 X 9)

OUTCOME
4.2.2.
Translate among different representations of a pattern, such as a table, a chart or concrete materials. [C, CN, V]

Correlated Lessons:
The Bake Sale Reader Objective 30: Represents problem situations in a variety of forms (e.g., translates from a bar graph to a symbolic/algebraic expression)

OUTCOME
4.2.3.
Represent, describe and extend patterns and relationships, using charts and tables, to solve problems. [C, CN, PS, R, V] [ICT: C6-2.3]

Correlated Lessons:
Olympic Technology Reader; Hosting the Olympic Summer Games Reader Objective 49: Uses a variety of strategies to understand problem situations (e.g., modeling problem with diagrams or physical objects, counting backward, identifying a pattern)

Patterns In Nature Reader; Looking at Maps Reader; Journeys: Land, Air, Sea Reader Objective 40: Understands that mathematicians often represent real things with abstract ideas; then work with the abstractions to learn about the things they represent

Shape and Space (Measurement): Use direct and indirect measurement to solve problems.

OUTCOME

4.4.3.

Demonstrate an understanding of area of regular and irregular 2-D shapes by: recognizing that area is measured in square units; selecting and justifying referents for the units cm2 or m2; estimating area, using referents for cm2 or m2; determining and recording area (cm2 or m2); constructing different rectangles for a given area (cm2 or m2) in order to demonstrate that many different rectangles may have the same area. [C, CN, ME, PS, R, V]

Correlated Lessons:

Life in the Ocean Layers Reader Objective 56: Selects and uses appropriate units of measurement, according to type and size of unit

Life in the Ocean Layers; All About Sharks Page 180, 185 Objective 19: Students will select and use appropriate units of measurement, according to the type and size of the unit. (length, height, weight)

Statistics and Probability (Data Analysis): Collect, display and analyze data to solve problems.

OUTCOME

4.7.2.

Construct and interpret pictographs and bar graphs involving many-to-one correspondence to draw conclusions. [C, PS, R, V]

Correlated Lessons:

Eco-Predictions Reader; Animal Investigations Reader Objective 59: Organizes, analyzes, and displays data in simple bar graphs and frequency tables

Natural Disasters Reader; People Who Predict Reader; Patterns Around Us Reader; Eco-Predictions Reader; Animal Investigations Objective 33: Reads, analyzes, and interprets simple bar graphs and frequency tables