

## Correlation of Mathematics Readers Grade 3 to the Saskatchewan Mathematics Curriculum

### Number

#### OUTCOME

##### **N3.1.c.**

Create and explain the reasoning for a sequence of numbers that have different skip counting patterns in it (e.g., 3, 6, 9, 12, 16, 20, 24).

##### Correlated Lessons:

My Lemonade Stand Reader; The World of Trade Reader Objective 28: 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

The World of Trade; My Lemonade Stand Page 81 Objective 06: Students will recognize, create, extend, and continue numerical patterns.

#### OUTCOME

##### **N3.1.f.**

Solve situational questions involving the value of coins or bills and explain the strategies used (such as grouping or skip counting).

##### Correlated Lessons:

My Lemonade Stand Reader; The World of Trade Reader Objective 27: Solves real-world problems involving number operations-addition, subtraction, multiplication, division (e.g., computations involving recipes, computations with dollars and cents)

What Are Budgets? Reader; Our Vacation Budget Reader Objective 52: Adds, subtracts, multiplies and divides decimals, using dollars and cents

What Are Budgets? Reader; Our Vacation Budget Reader Objective 53: Solves real-world problems involving number operations-addition and subtraction (e.g., computations with dollars and cents)

#### OUTCOME

##### **N3.1.q.**

Provide examples of how different representations of quantities, including place value, can be used to determine sums and differences of whole numbers.

##### Correlated Lessons:

The World of Trade Reader; Tracking Time Reader; Timing Races Reader Objective 29: Uses or performs basic mental computations (e.g., addition, subtraction and multiplication of whole numbers/integers)

## OUTCOME

### OUTCOME

#### **N3.2.a.**

Describe personal mental mathematics strategies that could be used to determine a given basic fact.

Correlated Lessons:

The World of Trade Reader; Tracking Time Reader; Timing Races Reader Objective 29: Uses or performs basic mental computations (e.g., addition, subtraction and multiplication of whole numbers/integers)

### OUTCOME

#### **N3.2.h.**

Generalize (orally, in writing, concretely, or pictorially) personal strategies for estimating the sum or difference of two 2-digit quantities.

Correlated Lessons:

Collecting Data Reader; Reading the Newspaper Reader Objective 21: Uses specific strategies (e.g., front-end estimation, rounding) to estimate computations and to check the reasonableness of computational results

Collecting Data; Reading the Newspaper Page 33 Objective 01: Students will use specific strategies to estimate computations and to check the reasonableness of computational results.

### OUTCOME

#### **N3.2.j.**

Transfer knowledge of the basic addition facts up to 18 and the related subtraction facts to determine the sums and differences of quantities less than 1000.

Correlated Lessons:

The World of Trade Reader; Tracking Time Reader; Timing Races Reader Objective 29: Uses or performs basic mental computations (e.g., addition, subtraction and multiplication of whole numbers/integers)

### OUTCOME

#### **N3.2.i.**

Provide examples to show why knowing about place value is useful when adding and subtracting quantities.

Correlated Lessons:

The World of Trade Reader; Tracking Time Reader; Timing Races Reader Objective 29: Uses or performs basic mental computations (e.g., addition, subtraction and multiplication of whole numbers/integers)

### OUTCOME

#### **N3.3.**

Demonstrate understanding of multiplication to  $5 * 5$  and the corresponding division statements including: representing and explaining using repeated addition or subtraction, equal grouping, and arrays; creating and solving situational questions; modelling processes using concrete,

physical, and visual representations, and recording the process symbolically; relating multiplication and division.[C, CN, PS, R]

## OUTCOME

### **N3.3.a.**

Observe and describe situations relevant to self, family, or community that can be represented by multiplication and write and solve a multiplication statement for each situation.

#### Correlated Lessons:

At the Fire Station Reader Objective 43: Solves real-world problems involving number operations-multiplication and division (e.g., finds total measurements of length or volume, measuring a perimeter of an area)

My Lemonade Stand Reader; The World of Trade Reader Objective 27: Solves real-world problems involving number operations-addition, subtraction, multiplication, division (e.g., computations involving recipes, computations with dollars and cents)

Tracking Time Reader; Timing Races Reader Objective 38: Solves real-world problems involving number operations-addition, subtraction, multiplication, division (e.g., uses problems involving elapsed time)

## OUTCOME

### **N3.3.b.**

Observe and describe situations relevant to self, family, or community that can be represented by equal sharing or grouping and write and solve a division statement for each situation.

#### Correlated Lessons:

At the Fire Station Reader Objective 43: Solves real-world problems involving number operations-multiplication and division (e.g., finds total measurements of length or volume, measuring a perimeter of an area)

My Lemonade Stand Reader; The World of Trade Reader Objective 27: Solves real-world problems involving number operations-addition, subtraction, multiplication, division (e.g., computations involving recipes, computations with dollars and cents)

Tracking Time Reader; Timing Races Reader Objective 38: Solves real-world problems involving number operations-addition, subtraction, multiplication, division (e.g., uses problems involving elapsed time)

## OUTCOME

### **N3.3.d.**

Represent and solve an orally presented multiplication or division statement, concretely, physically, or pictorially, using equal groupings, an array, repeated addition, or repeated subtraction (e.g.,  $3 * 4$  shown using equal groupings of snowballs).

#### Correlated Lessons:

What Are Budgets? Reader; Our Vacation Budget Reader Objective 51: Understands the concept of a unit and its subdivision into equal parts (part-whole relationship) (e.g., understands that a dollar equals 100 pennies)

## OUTCOME

### **N3.3.e.**

Apply and explain personal strategies for determining products and quotients.

Correlated Lessons:

At the Fire Station Reader Objective 42: Multiplies and divides whole numbers

My Lemonade Stand Reader Objective 26: Multiplies whole numbers (integers)

The World of Trade Reader; Tracking Time Reader; Timing Races Reader Objective 29: Uses or performs basic mental computations (e.g., addition, subtraction and multiplication of whole numbers/integers)

## OUTCOME

### **N3.3.g.**

Represent and solve an orally presented situational question that involves division.

Correlated Lessons:

At the Fire Station Reader Objective 43: Solves real-world problems involving number operations-multiplication and division (e.g., finds total measurements of length or volume, measuring a perimeter of an area)

My Lemonade Stand Reader; The World of Trade Reader Objective 27: Solves real-world problems involving number operations-addition, subtraction, multiplication, division (e.g., computations involving recipes, computations with dollars and cents)

Tracking Time Reader; Timing Races Reader Objective 38: Solves real-world problems involving number operations-addition, subtraction, multiplication, division (e.g., uses problems involving elapsed time)

## OUTCOME

### **N3.4.d.**

Divide a whole, group, region, or length into equal parts (concretely, physically, or pictorially), demonstrate that the parts are equal in quantity, and name the quantity represented by each part.

Correlated Lessons:

What Are Budgets? Reader; Our Vacation Budget Reader Objective 51: Understands the concept of a unit and its subdivision into equal parts (part-whole relationship) (e.g., understands that a dollar equals 100 pennies)

## OUTCOME

### **N3.4.f.**

Analyze representations of a set of fractions of a whole, group, region, or length that all have the same numerator (e.g.,  $\frac{2}{3}$ ,  $\frac{2}{4}$ ,  $\frac{2}{5}$ ) and explain what about the fractional quantities is similar and what is different.

Correlated Lessons:

What Are Budgets? Reader; Our Vacation Budget Reader Objective 51: Understands the concept of a unit and its subdivision into equal parts (part-whole relationship) (e.g., understands that a dollar equals 100 pennies)

## OUTCOME

### **N3.4.g.**

Analyze representations of a set of fractions of a whole, group, region, or length that all have the same denominator (e.g.,  $0/5$ ,  $1/5$ ,  $2/5$ ,  $3/5$ ,  $4/5$ ,  $5/5$ ) and explain what about the fractional quantities is similar and what is different.

Correlated Lessons:

What Are Budgets? Reader; Our Vacation Budget Reader Objective 51: Understands the concept of a unit and its subdivision into equal parts (part-whole relationship) (e.g., understands that a dollar equals 100 pennies)

## OUTCOME

### **N3.4.k.**

Represent a fraction as part of a whole, group, region, or length and explain the representation.

Correlated Lessons:

What Are Budgets? Reader; Our Vacation Budget Reader Objective 51: Understands the concept of a unit and its subdivision into equal parts (part-whole relationship) (e.g., understands that a dollar equals 100 pennies)

## Patterns and Relations

## OUTCOME

### **P3.1.a.**

Identify and observe situations relevant to self, family, and community that contain an increasing or decreasing pattern, identify the starting value of the pattern, and describe the rule for the pattern and how the pattern would continue.

Correlated Lessons:

My Lemonade Stand Reader; The World of Trade Reader Objective 28: 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

## OUTCOME

### **P3.1.b.**

Verify (concretely, visually, orally, pictorially, or physically) whether or not a given sequence of numbers represents an increasing or decreasing pattern.

Correlated Lessons:

My Lemonade Stand Reader; The World of Trade Reader Objective 28: 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

The World of Trade; My Lemonade Stand Page 81 Objective 06: Students will recognize, create, extend, and continue numerical patterns.

## OUTCOME

### **P3.1.e.**

Visualize and create oral, concrete, physical, pictorial, or symbolic representations for a given increasing or decreasing pattern rule and explain how the representations are related.

Correlated Lessons:

My Lemonade Stand Reader; The World of Trade Reader Objective 28: 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

The World of Trade; My Lemonade Stand Page 81 Objective 06: Students will recognize, create, extend, and continue numerical patterns.

## OUTCOME

### **P3.1.f.**

Create a concrete, physical, pictorial, or symbolic pattern (increasing or decreasing) and describe the pattern rule.

Correlated Lessons:

My Lemonade Stand Reader; The World of Trade Reader Objective 28: 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

The World of Trade; My Lemonade Stand Page 81 Objective 06: Students will recognize, create, extend, and continue numerical patterns.

## OUTCOME

### **P3.1.g.**

Describe strategies used to solve situational questions involving increasing or decreasing patterns, including determining missing elements within the pattern.

Correlated Lessons:

My Lemonade Stand Reader; The World of Trade Reader Objective 28: 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

The World of Trade; My Lemonade Stand Page 81 Objective 06: Students will recognize, create, extend, and continue numerical patterns.

## OUTCOME

### **P3.1.h.**

Research (e.g., through Elders, traditional knowledge keepers, naturalists, and media) and present about the role and significance of increasing and decreasing patterns (e.g., making of a star blanket, beading, music, and patterns found in nature) in First Nations and Métis practices, lifestyles, and worldviews.

Correlated Lessons:

My Lemonade Stand Reader; The World of Trade Reader Objective 28: 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

The World of Trade; My Lemonade Stand Page 81 Objective 06: Students will recognize, create, extend, and continue numerical patterns.

## Shape and Space

### OUTCOME

#### **SS3.2.a.**

Observe and describe situations relevant to self, family, and community that involve measuring mass.

Correlated Lessons:

Natural Measures Reader; At the Fire Station Reader Objective 44: Understands and can apply the basic measures of volume, weight, length, and distance

### OUTCOME

#### **SS3.2.e.**

Select, with justification, an appropriate unit for measuring the mass of a given 3-D objects (e.g., kg would be used to measure a motorbike).

Correlated Lessons:

Natural Measures Reader Objective 46: Knows approximate size of basic standard units of measurement (e.g., knows which unit to use to measure a particular object)

### OUTCOME

#### **SS3.2.f.**

Determine, using a scale, and record the mass of an object relevant to one's self, family, or community.

Correlated Lessons:

Natural Measures Reader; At the Fire Station Reader Objective 44: Understands and can apply the basic measures of volume, weight, length, and distance

### OUTCOME

#### **SS3.2.h.**

Directly compare the mass of two 3-D objects and then verify the comparison by measuring the actual masses using a scale.

Correlated Lessons:

Natural Measures Reader; At the Fire Station Reader Objective 44: Understands and can apply the basic measures of volume, weight, length, and distance

## OUTCOME

### SS3.2.i.

Generalize statements about the mass of a specific amount of matter when reformed into different shapes or sizes (e.g, use clay to make an object, measure the mass of the object, reform the clay into another object and measure the mass of the two objects; an empty balloon versus a full balloon; or water versus ice).

Correlated Lessons:

Natural Measures Reader; At the Fire Station Reader Objective 44: Understands and can apply the basic measures of volume, weight, length, and distance

## OUTCOME

### SS3.2.j.

Observe and document conversations, mass media reports, and other forms of text that use the term "weight" rather than "mass".

Correlated Lessons:

Natural Measures Reader; At the Fire Station Reader Objective 44: Understands and can apply the basic measures of volume, weight, length, and distance

## OUTCOME

### SS3.3.b.

Measure and compare different lengths on 3-D objects to select personally relevant referents for 1 cm, 10 cm, and 1 m.

Correlated Lessons:

Natural Measures Reader Objective 47: Understands that measurement is not exact (e.g., knows that standards were developed to make measurements more exact than they were when measured with objects from nature or the human body)

## OUTCOME

### SS3.3.f.

Explain why sometimes different names are used for different length measurements (e.g., height, width, or depth).

Correlated Lessons:

Natural Measures Reader; At the Fire Station Reader Objective 44: Understands and can apply the basic measures of volume, weight, length, and distance

## OUTCOME

### SS3.4.a.

Observe and describe the faces, edges, and vertices of given 3-D objects, including cubes, spheres, cones, cylinders, pyramids, and prisms (e.g., drum, tipi, South American Pyramids, and other objects from the natural environment).

Correlated Lessons:

Shapes Around You Reader; A Tour of New York City Reader Objective 34: Knows basic geometric language/characteristics for describing, classifying, and naming three-dimensional shapes (e.g., sphere, cone, cube, cylinder)

Shapes Around You Reader; A Tour of New York City Reader Objective 35: Understands basic properties/characteristics of figures/shapes (e.g., three-dimensionality, lines of symmetry, number of sides or corners, dimensions)

Shaping Our World; Shapes in Art; Shapes Around You; A Tour of New York City Page 105, 129 Objective 17: Students will understand and describe properties/characteristics of two-dimensional and three-dimensional figures/shapes.

## OUTCOME

### SS3.4.b.

Critique the statement "the face of a 3-D object is always a 2-D shape".

Correlated Lessons:

Shapes Around You Reader; A Tour of New York City Reader Objective 34: Knows basic geometric language/characteristics for describing, classifying, and naming three-dimensional shapes (e.g., sphere, cone, cube, cylinder)

Shapes Around You Reader; A Tour of New York City Reader Objective 35: Understands basic properties/characteristics of figures/shapes (e.g., three-dimensionality, lines of symmetry, number of sides or corners, dimensions)

Shaping Our World; Shapes in Art; Shapes Around You; A Tour of New York City Page 105, 129 Objective 17: Students will understand and describe properties/characteristics of two-dimensional and three-dimensional figures/shapes.

## OUTCOME

### SS3.4.f.

Critique the statement "a vertex is where three faces meet".

Correlated Lessons:

Shapes Around You Reader; A Tour of New York City Reader Objective 34: Knows basic geometric language/characteristics for describing, classifying, and naming three-dimensional shapes (e.g., sphere, cone, cube, cylinder)

Shapes Around You Reader; A Tour of New York City Reader Objective 35: Understands basic properties/characteristics of figures/shapes (e.g., three-dimensionality, lines of symmetry, number of sides or corners, dimensions)

Shaping Our World; Shapes in Art; Shapes Around You; A Tour of New York City Page 105, 129 Objective 17: Students will understand and describe properties/characteristics of two-dimensional and three-dimensional figures/shapes.

## OUTCOME

### SS3.5.d.

Analyze irregular and regular polygons in different orientations in terms of the characteristics of the polygons (such as number or measurement of sides and angles).

Correlated Lessons:

Shaping Our World Reader; Shapes in Art Reader Objective 30: Knows basic geometric language/properties for describing, classifying, and naming shapes (e.g., triangle, rectangle, circle, pentagon, parallelogram)

Shaping Our World Reader; Shapes in Art Reader Objective 31: Understands basic properties/characteristics of figures or shapes (e.g., two-dimensionality, symmetry, types of angle)

## Statistics and Probability

### OUTCOME

#### SP3.1.a.

Observe and describe situations relevant to self, family, or community in which a particular type of data recording or organizing strategy might be used, including tally marks, charts, lists, and knots on a sash.

Correlated Lessons:

Collecting Data Reader; Reading the Newspaper Reader Objective 24: Understands that data comes in many different forms and that collecting, organizing, and displaying data can be done in several ways

What Are Budgets? Reader; Our Vacation Budget Reader Objective 54: Organizes and displays and analyzes data in a frequency table

Wildlife Scientists Reader; At Risk! Reader Objective 48: Organizes and displays and analyzes data in simple bar graphs

Wildlife Scientists Reader; At Risk! Reader Objective 50: Understands that data comes in many different forms and that collecting, organizing, and displaying data can be done in several ways (graphs, tables, charts, etc.)

### OUTCOME

#### SP3.1.d.

Analyze a set of bar graphs to determine the common attributes of bar graphs.

Correlated Lessons:

Collecting Data Reader; Reading the Newspaper Reader Objective 23: Reads and interprets simple bar graphs and frequency tables (analyze data)

Wildlife Scientists Reader; At Risk! Reader Objective 48: Organizes and displays and analyzes data in simple bar graphs

Wildlife Scientists Reader; At Risk! Reader Objective 49: Reads, analyzes and interprets simple bar graphs, pictographs, line graphs, and frequency tables

Wildlife Scientists; At Risk! Page 201 Objective 14: Students will organize, create, display, and read data in simple bar graphs, pictographs, circle graphs (pie charts) and charts.

## OUTCOME

### SP3.1.e.

Answer questions related to the data presented in a bar graph or line plots.

Correlated Lessons:

Collecting Data Reader; Reading the Newspaper Reader Objective 23: Reads and interprets simple bar graphs and frequency tables (analyze data)

Wildlife Scientists Reader; At Risk! Reader Objective 48: Organizes and displays and analyzes data in simple bar graphs

Wildlife Scientists Reader; At Risk! Reader Objective 49: Reads, analyzes and interprets simple bar graphs, pictographs, line graphs, and frequency tables

Wildlife Scientists; At Risk! Page 201 Objective 14: Students will organize, create, display, and read data in simple bar graphs, pictographs, circle graphs (pie charts) and charts.

## OUTCOME

### SP3.1.f.

Collect and represent data using bar graphs or line plots.

Correlated Lessons:

Wildlife Scientists Reader; At Risk! Reader Objective 48: Organizes and displays and analyzes data in simple bar graphs

Wildlife Scientists Reader; At Risk! Reader Objective 49: Reads, analyzes and interprets simple bar graphs, pictographs, line graphs, and frequency tables

Wildlife Scientists; At Risk! Page 201 Objective 14: Students will organize, create, display, and read data in simple bar graphs, pictographs, circle graphs (pie charts) and charts.

## OUTCOME

### SP3.1.g.

Pose and solve situational questions related to self, family, or community by collecting and organizing data, representing the data using a bar graph or line plot, and interpreting the data display.

Correlated Lessons:

Collecting Data Reader; Reading the Newspaper Reader Objective 23: Reads and interprets simple bar graphs and frequency tables (analyze data)

Wildlife Scientists Reader; At Risk! Reader Objective 48: Organizes and displays and analyzes data in simple bar graphs

Wildlife Scientists Reader; At Risk! Reader Objective 49: Reads, analyzes and interprets simple bar graphs, pictographs, line graphs, and frequency tables

Wildlife Scientists; At Risk! Page 201 Objective 14: Students will organize, create, display, and read data in simple bar graphs, pictographs, circle graphs (pie charts) and charts.

## OUTCOME

### SP3.1.h.

Analyze interpretations of bar graphs or line plots and explain whether or not the interpretation is valid based on the data display.

Correlated Lessons:

Collecting Data Reader; Reading the Newspaper Reader Objective 23: Reads and interprets simple bar graphs and frequency tables (analyze data)

Wildlife Scientists Reader; At Risk! Reader Objective 48: Organizes and displays and analyzes data in simple bar graphs

Wildlife Scientists Reader; At Risk! Reader Objective 49: Reads, analyzes and interprets simple bar graphs, pictographs, line graphs, and frequency tables

Wildlife Scientists; At Risk! Page 201 Objective 14: Students will organize, create, display, and read data in simple bar graphs, pictographs, circle graphs (pie charts) and charts.

## OUTCOME

### SP3.1.i.

Examine how various cultures past and present, including First Nations and Métis, collect, represent, and use first-hand data.

Correlated Lessons:

Collecting Data Reader; Reading the Newspaper Reader Objective 24: Understands that data comes in many different forms and that collecting, organizing, and displaying data can be done in several ways

What Are Budgets? Reader; Our Vacation Budget Reader Objective 54: Organizes and displays and analyzes data in a frequency table

Wildlife Scientists Reader; At Risk! Reader Objective 48: Organizes and displays and analyzes data in simple bar graphs

Wildlife Scientists Reader; At Risk! Reader Objective 50: Understands that data comes in many different forms and that collecting, organizing, and displaying data can be done in several ways (graphs, tables, charts, etc.)