

Correlation of Mathematics Readers Level 2 to Quebec Education Program Progression of Learning

**Arithmetic: Understanding and writing numbers**

**Natural numbers less than 1000**

**Essential Knowledge**

Represents natural numbers in different ways or associates a number with a set of objects or drawings

Emphasis on apparent, accessible groupings using objects, drawings or unstructured materials (e.g. tokens, nesting cubes, groups of ten objects placed inside a bag and ten of these bags placed inside another container)  
  
Correlated Lessons:  
Our Garden in the City, Our School Garden: Reader: Objective 33: Students use whole number models (e.g., pattern blocks, tiles, or other manipulative materials) to represent problems  
  
Our Garden in the City, Our School Garden: Reader: Objective 36: Students understands that numerals are symbols used to represent quantities or attributes of real-world objects  
  
Reduce, Reuse, Recycle, Cleaning Our School: Reader: Objective 46: Students understands that numerals are symbols used to represent quantities or attributes of real-world objects  
  
The World of Transportation, Our Trip to the City, Our Family Reunion, Our Harvest Lunch, Getting Ready to Camp, What Is in the Attic?: Reader: Objective 26: Students understand that numerals are symbols used to represent quantities

**Essential Knowledge**

Emphasis on exchanging apparent, non-accessible groupings, using structured materials (e.g. base ten blocks, number tables)  
  
Correlated Lessons:  
Getting Ready to Camp, What Is in the Attic?: Reader: Objective 31: Students understand basic whole number relationships (e.g., 4 is less than 10, 30 is 3 tens)  
  
Our Garden in the City, Our School Garden: Reader: Objective 33: Students use whole number models (e.g., pattern blocks, tiles, or other manipulative materials) to represent problems  
  
Our Garden in the City, Our School Garden: Reader: Objective 36: Students understands that numerals are symbols used to represent quantities or attributes of real-world objects  
  
Reduce, Reuse, Recycle, Cleaning Our School: Reader: Objective 46: Students understands that numerals are symbols used to represent quantities or attributes of real-world objects  
  
The World of Transportation, Our Trip to the City, Our Family Reunion, Our Harvest Lunch, Getting Ready to Camp, What Is in the Attic?: Reader: Objective 26: Students understand that numerals are symbols used to represent quantities

**Essential Knowledge**

Compares natural numbers  
  
Correlated Lessons:  
Getting Ready to Camp, What Is in the Attic?: Reader: Objective 31: Students understand basic whole number relationships (e.g., 4 is less than 10, 30 is 3 tens)

**Essential Knowledge**

Arranges natural numbers in increasing or decreasing order  
  
Correlated Lessons:  
Getting Ready to Camp, What Is in the Attic?: Reader: Objective 31: Students understand basic whole number relationships (e.g., 4 is less than 10, 30 is 3 tens)

**Essential Knowledge**

Approximates a collection, using objects or drawings (e.g. estimate, round up/down to a given value)  
  
Correlated Lessons:  
World Markets, Farmers Market: Reader: Objective 42: Students understand basic estimation strategies (e.g., using reference sets, using front-end digits) and terms (e.g., "about," "near," "closer to," "between," "a little less than")

**Fractions (using objects or drawings)**

**Essential Knowledge**

Identifies fractions related to everyday items (using objects or drawings)  
  
Correlated Lessons:  
Getting Ready to Camp, What Is in the Attic?: Reader: Objective 30: Students understand the concept of a unit and its subdivision into equal parts (e.g., one object, such as a candy bar, and its division into equal parts)

**Essential Knowledge**

Represents a fraction in a variety of ways, based on a whole or a collection of objects  
  
Correlated Lessons:  
Getting Ready to Camp, What Is in the Attic?: Reader: Objective 30: Students understand the concept of a unit and its subdivision into equal parts (e.g., one object, such as a candy bar, and its division into equal parts)

**Arithmetic: Meaning of operations involving numbers**

**Natural numbers less than 1000**

**Essential Knowledge**

Rectangular arrays, repeated addition, Cartesian product, sharing, and number of times x goes into y(using objects and diagrams)  
  
Correlated Lessons:  
Getting Ready to Camp, What Is in the Attic?: Reader: Objective 30: Students understand the concept of a unit and its subdivision into equal parts (e.g., one object, such as a candy bar, and its division into equal parts)

**Arithmetic: Operations involving numbers**

**Natural numbers (based on the benchmarks for each cycle)**

**Essential Knowledge**

Approximates the result of: An addition or subtraction involving natural numbers  
  
Correlated Lessons:  
Our Family Reunion, Our Harvest Lunch Page 60, 65 Objective 4: Students subtract whole numbers  
  
Our Family Reunion, Our Harvest Lunch: Reader: Objective 29: Students solve real-world problems involving subtraction of whole numbers  
  
The World of Transportation, Our Trip to the City Page 36, 41 Objective 1: Students add whole numbers.  
  
The World of Transportation, Our Trip to the City: Reader: Objective 27: Students solve real-world problems involving addition of whole numbers

**Essential Knowledge**

Builds a memory of addition facts (0 + 0 to 10 + 10) and the corresponding subtraction facts, using objects, drawings, charts or tables  
  
Correlated Lessons:  
Our Family Reunion, Our Harvest Lunch Page 60, 65 Objective 4: Students subtract whole numbers

**Essential Knowledge**

Develops various strategies that promote mastery of number facts and relates them to the properties of addition  
  
Correlated Lessons:  
Our Family Reunion, Our Harvest Lunch Page 60, 65 Objective 4: Students subtract whole numbers

**Essential Knowledge**

Masters all addition facts (0 + 0 to 10 + 10) and the corresponding subtraction facts  
  
Correlated Lessons:  
Our Family Reunion, Our Harvest Lunch Page 60, 65 Objective 4: Students subtract whole numbers

**Develops processes for mental computation**

**Essential Knowledge**

Uses his/her own processes to determine the sum or difference of two natural numbers  
  
Correlated Lessons:  
Our Family Reunion, Our Harvest Lunch Page 60, 65 Objective 4: Students subtract whole numbers  
  
Our Family Reunion, Our Harvest Lunch: Reader: Objective 29: Students solve real-world problems involving subtraction of whole numbers  
  
The World of Transportation, Our Trip to the City Page 36, 41 Objective 1: Students add whole numbers.  
  
The World of Transportation, Our Trip to the City: Reader: Objective 27: Students solve real-world problems involving addition of whole numbers

**Essential Knowledge**

Uses his/her own processes as well as objects and drawings to determine the sum or difference of two natural numbers less than 1000  
  
Correlated Lessons:  
Our Family Reunion, Our Harvest Lunch Page 60, 65 Objective 4: Students subtract whole numbers  
  
The World of Transportation, Our Trip to the City Page 36, 41 Objective 1: Students add whole numbers.

**Essential Knowledge**

Non-numerical patterns (e.g. series of colours, shapes, sounds, gestures)  
  
Correlated Lessons:  
Our Garden in the City, Our School Garden Page 108, 113 Objective 10: Students extend simple patterns (e.g., of numbers, physical objects, geometric shapes).  
  
Our Garden in the City, Our School Garden, Traveling on a Train, Traveling on an Airplane, Building a Playground, The Fort: Reader: Objective 34: Students understand that patterns can be made by putting different shapes together  
  
Our Garden in the City, Our School Garden, Traveling on a Train, Traveling on an Airplane, Building a Playground, The Fort: Reader: Objective 35: Students recognize regularities in a variety of contexts

**Essential Knowledge**

Numerical patterns (e.g. number rhymes, tables and charts)  
  
Correlated Lessons:  
Our Garden in the City, Our School Garden Page 108, 113 Objective 10: Students extend simple patterns (e.g., of numbers, physical objects, geometric shapes).  
  
Our Garden in the City, Our School Garden, Traveling on a Train, Traveling on an Airplane, Building a Playground, The Fort: Reader: Objective 35: Students recognize regularities in a variety of contexts

**Essential Knowledge**

Adds new terms to a series when the first three terms or more are given  
  
Correlated Lessons:  
Our Garden in the City, Our School Garden Page 108, 113 Objective 10: Students extend simple patterns (e.g., of numbers, physical objects, geometric shapes).  
  
Our Garden in the City, Our School Garden, Traveling on a Train, Traveling on an Airplane, Building a Playground, The Fort: Reader: Objective 35: Students recognize regularities in a variety of contexts

**Geometry**

**Solids**

**Essential Knowledge**

Compares objects or parts of objects in the environment with solids (e.g. spheres, cones, cubes, cylinders, prisms, pyramids)  
  
Correlated Lessons:  
Building a Playground, The Fort Page 156, 161 Objective 16: Students understand that geometric shapes are useful for representing and describing real-world situations.  
  
Traveling on a Train, Traveling on an Airplane: Reader: Objective 37: Students understand that geometric shapes are useful for representing and describing real world situations

**Plane figures**

**Essential Knowledge**

Identifies plane figures (square, rectangle, triangle, rhombus and circle)  
  
Correlated Lessons:  
Building a Playground, The Fort: Reader: Objective 39: Students will understand basic properties of and similarities and differences among simple geometric shapes.  
  
Traveling on a Train, Traveling on an Airplane Page 132, 137 Objective 13: Students will understand basic properties of and similarities and differences among simple geometric shapes.

**Describes plane figures (square, rectangle, triangle and rhombus)**

**Essential Knowledge**

Correlated Lessons:  
Building a Playground, The Fort: Reader: Objective 39: Students will understand basic properties of and similarities and differences among simple geometric shapes.  
  
Our Garden in the City, Our School Garden, Traveling on a Train, Traveling on an Airplane, Building a Playground, The Fort: Reader: Objective 34: Students understand that patterns can be made by putting different shapes together  
  
Traveling on a Train, Traveling on an Airplane Page 132, 137 Objective 13: Students will understand basic properties of and similarities and differences among simple geometric shapes.

**Frieze patterns and tessellations**

**Essential Knowledge**

Observes and produces patterns using geometric figures  
  
Correlated Lessons:  
Our Garden in the City, Our School Garden Page 108, 113 Objective 10: Students extend simple patterns (e.g., of numbers, physical objects, geometric shapes).  
  
Our Garden in the City, Our School Garden, Traveling on a Train, Traveling on an Airplane, Building a Playground, The Fort: Reader: Objective 34: Students understand that patterns can be made by putting different shapes together  
  
Our Garden in the City, Our School Garden, Traveling on a Train, Traveling on an Airplane, Building a Playground, The Fort: Reader: Objective 35: Students recognize regularities in a variety of contexts

**Measurement**

**Lengths**

**Essential Knowledge**

Estimates and measures the dimensions of an object using unconventional units  
  
Correlated Lessons:  
World Markets, Farmers Market: Reader: Objective 40: Students know processes for measuring length, weight, and temperature, using basic standard and non-standard units

**Metre, decimetre and centimeter**

**Essential Knowledge**

Correlated Lessons:  
World Markets, Farmers Market Page 180, 185 Objective 19: Students know processes for measuring length, weight, and temperature using standard measurement.  
  
World Markets, Farmers Market: Reader: Objective 40: Students know processes for measuring length, weight, and temperature, using basic standard and non-standard units

**Statistics**

**Essential Knowledge**

Formulates questions for a survey (based on age-appropriate topics, students’ language level, etc.)  
  
Correlated Lessons:  
Traveling on a Train, Traveling on an Airplane, Building a Playground, The Fort: Reader: Objective 38: Students will understand that data represents specific pieces of information about real-world objects or activities.

**Essential Knowledge**

Collects, describes and organizes data (classifies or categorizes) using tables  
  
Correlated Lessons:  
Our Garden in the City, Our School Garden Page 108, 113 Objective 12: Students use a variety of sources to gather information.  
  
Reduce, Reuse, Recycle, Cleaning Our School Page 204, 209 Objective 22: Students will collect and represent information about objects or events in simple graphs.

**Interprets data using**

**Essential Knowledge**

A table, a bar graph and a pictograph  
  
Correlated Lessons:  
Reduce, Reuse, Recycle, Cleaning Our School: Reader: Objective 47: Students will understand how to read and write the various types of graphs, as well as determine which types of graphs are appropriate to use for different situations.

**Displays data using**

**Essential Knowledge**

A table, a bar graph and a pictograph  
  
Correlated Lessons:  
Reduce, Reuse, Recycle, Cleaning Our School: Reader: Objective 47: Students will understand how to read and write the various types of graphs, as well as determine which types of graphs are appropriate to use for different situations.