

Correlation of Mathematics Readers Level 5 to

Québec Education Program Progression of Learning

**Arithmetic: Understanding and writing numbers**

F**ractions (using objects or drawings)**

SUBSTRAND

1.B.4.

Identifies the different meanings of fractions (sharing, division, ratio)

Correlated Lessons:
My Store in the Mall, Grandpa's Birthday Present Objective 25 Students will recognize and generate equivalent forms of commonly used fractions, decimals, and percents.

My Store in the Mall, Grandpa's Birthday Present Objective 26 Students will develop and use strategies to estimate computations involving fractions and decimals in situations relevant to students' experience

 SUBSTRAND

1.B.5.

Distinguishes a numerator from a denominator

Correlated Lessons:
My Store in the Mall, Grandpa's Birthday Present Objective 25 Students will recognize and generate equivalent forms of commonly used fractions, decimals, and percents.

My Store in the Mall, Grandpa's Birthday Present Objective 26 Students will develop and use strategies to estimate computations involving fractions and decimals in situations relevant to students' experience

 SUBSTRAND

1.B.6.

Reads and writes a fraction

Correlated Lessons:
My Store in the Mall, Grandpa's Birthday Present Objective 25 Students will recognize and generate equivalent forms of commonly used fractions, decimals, and percents.

My Store in the Mall, Grandpa's Birthday Present Objective 26 Students will develop and use strategies to estimate computations involving fractions and decimals in situations relevant to students' experience

SUBSTRAND

1.B.9.

Matches a decimal or percentage to a fraction

Correlated Lessons:
My Store in the Mall, Grandpa's Birthday Present Objective 25 Students will recognize and generate equivalent forms of commonly used fractions, decimals, and percents.

**Decimals up to thousandths**

SUBSTRAND

1.C.3.

Reads and writes numbers written in decimal notation

Correlated Lessons:
My Store in the Mall, Grandpa's Birthday Present Objective 25 Students will recognize and generate equivalent forms of commonly used fractions, decimals, and percents.

My Store in the Mall, Grandpa's Birthday Present Objective 26 Students will develop and use strategies to estimate computations involving fractions and decimals in situations relevant to students' experience

 SUBSTRAND

1.C.9.

Approximates (e.g. estimates, rounds to a given value, truncates decimal places)

Correlated Lessons:
My Store in the Mall, Grandpa's Birthday Present Objective 26 Students will develop and use strategies to estimate computations involving fractions and decimals in situations relevant to students' experience

COMPETENCY

1.C.11.a.

Matches: A fraction to its decimal

Correlated Lessons:
My Store in the Mall, Grandpa's Birthday Present Objective 25 Students will recognize and generate equivalent forms of commonly used fractions, decimals, and percents.

 COMPETENCY

1.C.11.b.

Matches: A fraction or percentage to its decimal

Correlated Lessons:
My Store in the Mall, Grandpa's Birthday Present Objective 25 Students will recognize and generate equivalent forms of commonly used fractions, decimals, and percents.

**Arithmetic: Meaning of operations involving numbers**

**Natural numbers less than 1,000,000**

COMPETENCY

2.A.2.c.

Uses objects, diagrams or equations to represent a situation and conversely, describes a situation represented by objects, diagrams or equations (use of different meanings of addition and subtraction): Composition of mixed transformations

Correlated Lessons:
Night Skies, It Started with Pizza Objective 30 Students will develop fluency in adding, subtracting, multiplying, and dividing whole numbers.

**Decimals up to thousandths**

 SUBSTRAND

2.B.2.

Uses objects, diagrams or equations to represent a situation and conversely, describes a situation represented by objects, diagrams or equations (use of different meanings of multiplication and division: rectangular arrays, Cartesian product, area, volume, sharing, number of times x goes into y, and comparisons)

Correlated Lessons:
My Store in the Mall, Grandpa's Birthday Present Objective 26 Students will develop and use strategies to estimate computations involving fractions and decimals in situations relevant to students' experience

My Store in the Mall, Grandpa's Birthday Present Objective 27 Students will solve problems that arise in mathematics and in other contexts.

**Fractions**

SUBSTRAND

2.C.1.

Uses objects, diagrams or equations to represent a situation and conversely, describes a situation represented by objects, diagrams or equations (use of different meanings of addition, subtraction and multiplication by a natural number)

Correlated Lessons:
My Store in the Mall, Grandpa's Birthday Present Objective 26 Students will develop and use strategies to estimate computations involving fractions and decimals in situations relevant to students' experience

My Store in the Mall, Grandpa's Birthday Present Objective 27 Students will solve problems that arise in mathematics and in other contexts.

**Arithmetic: Operations involving numbers**

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

COMPETENCY

3.A.1.a.

Approximates the result of: An addition or subtraction involving natural numbers

Correlated Lessons:
Night Skies, It Started with Pizza Objective 30 Students will develop fluency in adding, subtracting, multiplying, and dividing whole numbers.

COMPETENCY

3.A.1.b.

Approximates the result of: Any of the four operations involving natural numbers

Correlated Lessons:
My Store in the Mall, Grandpa's Birthday Present Objective 28 Students will use estimation to compute whole numbers.

COMPETENCY

3.A.3.a.

Develops processes for mental computation: Uses his/her own processes to determine the sum or difference of two natural numbers

Correlated Lessons:
Night Skies, It Started with Pizza Objective 30 Students will develop fluency in adding, subtracting, multiplying, and dividing whole numbers.

COMPETENCY

3.A.3.b.

Develops processes for mental computation: Uses his/her own processes to determine the product or quotient of two natural numbers

Correlated Lessons:
Night Skies, It Started with Pizza Objective 30 Students will develop fluency in adding, subtracting, multiplying, and dividing whole numbers.

 COMPETENCY

3.A.4.b.

Develops processes for written computation (addition and subtraction): Uses conventional processes to determine the sum of two natural numbers of up to four digits

Correlated Lessons:
Night Skies, It Started with Pizza Objective 30 Students will develop fluency in adding, subtracting, multiplying, and dividing whole numbers.

COMPETENCY

3.A.4.c.

Develops processes for written computation (addition and subtraction): Uses conventional processes to determine the difference between two natural numbers of up to four digits whose result is greater than 0

Correlated Lessons:
Night Skies, It Started with Pizza Objective 30 Students will develop fluency in adding, subtracting, multiplying, and dividing whole numbers.

COMPETENCY

3.A.7.b.

Develops processes for written computation (multiplication and division): Uses conventional processes to determine the product of a three-digit natural number and a two-digit natural number

Correlated Lessons:
Night Skies, It Started with Pizza Objective 30 Students will develop fluency in adding, subtracting, multiplying, and dividing whole numbers.

COMPETENCY

3.A.7.c.

Develops processes for written computation (multiplication and division): Uses conventional processes to determine the quotient of a four-digit natural number and a two-digit natural number, expresses the remainder of a division as a decimal that does not go beyond the second decimal place

Correlated Lessons:
Night Skies, It Started with Pizza Objective 30 Students will develop fluency in adding, subtracting, multiplying, and dividing whole numbers.

Using his/her own words and mathematical language that is at an appropriate level for the cycle, describes

 COMPETENCY

3.A.13.a.

Using his/her own words and mathematical language that is at an appropriate level for the cycle, describes: Non-numerical patterns (e.g. series of colours, shapes, sounds, gestures)

Correlated Lessons:
The Winning Angle, Basketball Angles Objective 33 Students will describe images of objects, patterns, and paths.

**Decimals**

COMPETENCY

3.C.1.b.

Approximates the result of: A multiplication or division

Correlated Lessons:
My Store in the Mall, Grandpa's Birthday Present Objective 26 Students will develop and use strategies to estimate computations involving fractions and decimals in situations relevant to students' experience

**Using Numbers**

SUBSTRAND

3.D.1.

Expresses a decimal as a fraction, and vice versa

Correlated Lessons:
My Store in the Mall, Grandpa's Birthday Present Objective 25 Students will recognize and generate equivalent forms of commonly used fractions, decimals, and percents.

 SUBSTRAND

3.D.2.

Expresses a decimal as a percentage, and vice versa

Correlated Lessons:
My Store in the Mall, Grandpa's Birthday Present Objective 25 Students will recognize and generate equivalent forms of commonly used fractions, decimals, and percents.

SUBSTRAND

3.D.3.

Expresses a fraction as a percentage, and vice versa

Correlated Lessons:
My Store in the Mall, Grandpa's Birthday Present Objective 25 Students will recognize and generate equivalent forms of commonly used fractions, decimals, and percents.

**Geometry**

 **Space**

COMPETENCY

4.A.4.b.

Locates points in a Cartesian plane: In all four quadrants

Correlated Lessons:
CSI; The Jungle Park Case Pages 180, 185 Objective 19 Students will analyze and interpret graphs.

Graphs in Action; It's Our Business Pages 204, 209 Objective 22 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.

Ocean Maps, Shipwreck Detectives Objective 37 Students will use use coordinate systems to specify locations and to describe paths.

Ocean Maps, Shipwreck Detectives Objective 38 Students will find the distance between points along horizontal and vertical lines of a coordinate system.

Ocean Maps; Shipwreck Detectives Pages 108, 113 Objective 10 Students will understand how to read and create coordinate planes.

**Solids**

SUBSTRAND

4.B.3.

Identifies the main solids (e.g. spheres, cones, cubes, cylinders, prisms, pyramids)

Correlated Lessons:
The Winning Angle, Basketball Angles Objective 33 Students will describe images of objects, patterns, and paths.

 P**lane figures**

SUBSTRAND

4.C.2.

Identifies plane figures (square, rectangle, triangle, rhombus and circle)

Correlated Lessons:
The Winning Angle, Basketball Angles Objective 33 Students will describe images of objects, patterns, and paths.

 SUBSTRAND

4.C.3.

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

Correlated Lessons:
The Winning Angle, Basketball Angles Objective 33 Students will describe images of objects, patterns, and paths.

**Measurement**

**Lengths**

COMPETENCY

5.A.4.c.

Estimates and measures the dimensions of an object using conventional units: Metre, decimetre, centimetre, millimetre and kilometer

Correlated Lessons:
Towns and Cities, Amusement Parks Objective 41 Students understands the basic measures of length.

 SUBSTRAND

5.A.6.

Calculates the perimeter of plane figures

Correlated Lessons:
At the Aquarium, Hot Air Balloons Objective 45 Students will express mathematical relationships using equations and formulas.

At the Aquarium, Hot Air Balloons Objective 46 Students will use geometric models to solve problems in other areas of mathematics, such as number and measurement.

The Winning Angle, Basketball Angles Objective 34 Students will use geometric models to solve problems in other areas of mathematics, such as number and measurement.

The Winning Angle, Basketball Angles Objective 35 Students will recognize geometric ideas and relationships and apply them to other disciplines and to problems that arise in the classroom or in everyday life.

The Winning Angle, Basketball Angles Objective 36 Students will solve problems that arise in mathematics and in other contexts.

Towns and Cities, Amusement Parks Objective 43 Students will develop strategies for estimating the perimeters and areas of irregular shapes.

Towns and Cities; Amusement Parks Pages 132, 137 Objective 13 Students will measure the perimeter and area of objects.

**Surface areas**

Estimates and measures surface area

COMPETENCY

5.B.1.b.

Estimates and measures surface area: Using conventional units

Correlated Lessons:
At the Aquarium, Hot Air Balloons Objective 48 Students will develop strategies to determine the surface areas and volumes of various shapes.

**Volumes**

COMPETENCY

5.C.1.b.

Estimates and measures volume: Using conventional units

Correlated Lessons:
At the Aquarium; Hot Air Balloons Pages 156, 161 Objective 16 Students will learn how to measure the volume of various objects.

At the Aquarium, Hot Air Balloons Objective 48 Students will develop strategies to determine the surface areas and volumes of various shapes.

**Angles**

SUBSTRAND

5.D.1.

Compares angles

Correlated Lessons:
The Winning Angle; Basketball Angles Pages 84, 89 Objective 7 Students will understand and be able to determine the different types of angles.

 SUBSTRAND

5.D.2.

Estimates and determines the degree measurement of angles

Correlated Lessons:
The Winning Angle; Basketball Angles Pages 84, 89 Objective 7 Students will understand and be able to determine the different types of angles.

**Statistics**

 STANDARD

6.1.

Formulates questions for a survey (based on age-appropriate topics, students’ language level, etc.)

Correlated Lessons:
Graphs in Action, It's Our Business Objective 54 Students will collect data using observations, surveys, and experiments.

STANDARD

6.2.

Collects, describes and organizes data (classifies or categorizes) using tables

Correlated Lessons:
CSI, The Jungle Park Case Objective 51 Students will understand that data comes in many different forms and that collecting, organizing, and displaying data can be done in several ways.

Graphs in Action, It's Our Business Objective 54 Students will collect data using observations, surveys, and experiments.