Leaps AND Bounds

TOWARD Math Understanding

# Correlation to Ontario Curriculum and Grade 3 Resources

Leaps and Bounds 3/4 *is a math intervention resource.*

| **GRADE 3 Core Resources**<br>Correlation with Grade 3 core resources | | | **INTERVENTION Resources and Expectations**<br>Correlation between *Leaps and Bounds 3/4* and prerequisite expectations from Ontario Grades 1 and 2. | | |
|---|---|---|---|---|---|
| **Number: Whole Numbers** | | | | | |
| **Grade 3 Ontario expectations** | ***Nelson Mathematics 3*** | ***Math Path 3*** | **Leaps and Bounds 3/4 Topics** | **Grade 2 Ontario expectations** | **Grade 1 Ontario expectations** |
| B1.1 read, represent, compose, and decompose whole numbers up to and including 1000, using a variety of tools and strategies, and describe various ways they are used in everyday life | Chapter 2 Getting Started, 2.1, 2.2, 2.3, 2.6, Chapter 2 Math Game (Race for 2 Toonies), 2.9, Chapter 2 Task | 1.1 | **Representing Whole Numbers**<br>*Pathway 1:* Representing Numbers to 1000<br>*Pathway 2:* Representing Numbers to 100<br>*Pathway 3:* Representing Numbers to 20 | B1.1 read, represent, compose, and decompose whole numbers up to and including 200, using a variety of tools and strategies, and describe various ways they are used in everyday life | B1.1 read, represent, compose, and decompose whole numbers up to and including 200, using a variety of tools and strategies, and describe various ways they are used in everyday life<br><br>B1.2 compose and decompose whole numbers up to and including 50, using a variety of tools and strategies, in various contexts |
| B1.2 compare and order whole numbers up to and including 1000, in various contexts | Chapter 2 Getting Started, 2.5, Chapter 2 Math Game (Duelling Digits), Chapter 2 Task | 1.3, 1.4 | **Comparing and Ordering Numbers**<br>*Pathway 1:* Comparing and Ordering to 1000<br>*Pathway 2:* Comparing and Ordering to 100<br>*Pathway 3:* Comparing and Ordering to 20 | B1.2 compare and order whole numbers up to and including 200, in various contexts | B1.3 compare and order whole numbers up to and including 50, in various contexts |
| B1.3 round whole numbers to the nearest ten or hundred, in various contexts | 2.4 | 9.5 | | B1.3 estimate the number of objects in collections of up to 200 and verify their estimates by counting | B1.4 estimate the number of objects in collections of up to 50, and verify their estimates by counting |

| | | | | | |
|---|---|---|---|---|---|
| B1.4 count to 1000, including by 50s, 100s, and 200s, using a variety of tools and strategies | 1.3, 2.1, 2.3<br><br>expectation partially addressed | 1.1, 1.4 | **Skip Counting**<br>*Pathway 1:* Skip Counting to 1000<br>*Pathway 2:* Skip Counting to 100<br>*Pathway 3:* Skip Counting to 20 | B1.4 count to 200, including by 20s, 25s, and 50s, using a variety of tools and strategies | B1.5 count to 50 by 1s, 2s, 5s, and 10s, using a variety of tools and strategies |
| B1.5 use place value when describing and representing multi-digit numbers in a variety of ways, including with base ten materials | 2.1, 2.2, 2.3, 2.6, Chapter 2 Task | 1.2 | **Representing Numbers**<br>*Pathway 1:* Representing Numbers to 1000<br>*Pathway 2:* Representing Numbers to 100<br>*Pathway 3:* Representing Numbers to 20 | B1.5 describe what makes a number even or odd | |
| **Number: Fractions** | | | | | |
| **Grade 3 Ontario expectations** | ***Nelson Mathematics 3*** | ***Math Path 3*** | **Leaps and Bounds 3/4 Topics** | **Grade 2 Ontario expectations** | **Grade 1 Ontario expectations** |
| B1.6 use drawings to represent, solve, and compare the results of fair-share problems that involve sharing up to 20 items among 2, 3, 4, 5, 6, 8, and 10 sharers, including problems that result in whole numbers, mixed numbers, and fractional amounts | 12.3, Chapter 12 Math Game (Fraction Concentration)<br><br>expectation partially addressed | Chapter 13 | **Fractions**<br>*Pathway 3:* Halves | B1.6 use drawings to represent, solve, and compare the results of fair-share problems that involve sharing up to 10 items among 2, 3, 4, and 6 sharers, including problems that result in whole numbers, mixed numbers, and fractional amounts | B1.6 use drawings to represent and solve fair-share problems that involve 2 and 4 sharers, respectively, and have remainders of 1 or 2 |
| B1.7 represent and solve fair-share problems that focus on determining and using equivalent fractions, including problems that involve halves, fourths, and eighths; thirds and sixths; and fifths and tenths | | Chapter 13 | **Fractions**<br>*Pathway 3:* Halves | B1.7 recognize that one-third and two-sixths of the same whole are equal, in fair-sharing contexts | B1.7 recognize that one-half and two-fourths of the same whole are equal, in fair-sharing contexts<br><br>B1.8 use drawings to compare and order unit fractions representing the individual portions that result when a whole is shared by different numbers of sharers, up to a maximum of 10 |
| **Number: Properties and Relationships** | | | | | |

| Grade 3 Ontario expectations | *Nelson Mathematics 3* | *Math Path 3* | Leaps and Bounds 3/4 Topics | Grade 2 Ontario expectations | Grade 1 Ontario expectations |
|---|---|---|---|---|---|
| B2.1 use the properties of operations, and the relationships between multiplication and division, to solve problems and check calculations | Chapter 9 Getting Started, 9.1, 9.2, 9.3, Chapter 9 Math Game (Tap It Out), 9.4, 9.5, 9.6, Chapter 9 Task, Chapter 10 Getting Started, 10.2, Chapter 10 Math Game (Fill-a-Row Division), Chapter 10 Mental Math (Using Equal Groups), Chapter 10 Task<br><br>expectation partially addressed | 5.1, 5.2, 5.3, 6.4 | | B2.1 use the properties of addition and subtraction, and the relationships between addition and multiplication and between subtraction and division, to solve problems and check calculations | B2.1 use the properties of addition and subtraction, and the relationship between addition and subtraction, to solve problems and check calculations |
| **Number: Math Facts** | | | | | |
| **Grade 3 Ontario expectations** | ***Nelson Mathematics 3*** | ***Math Path 3*** | **Leaps and Bounds 3/4 Topics** | **Grade 2 Ontario expectations** | **Grade 1 Ontario expectations** |
| B2.2 recall and demonstrate multiplication facts of 2, 5, and 10, and related division facts | | 6.1, 6.2, 6.3, 6.4 | | B2.2 recall and demonstrate addition facts for numbers up to 20, and related subtraction facts | B2.2 recall and demonstrate addition facts for numbers up to 10, and related subtraction facts |
| **Number: Mental Math** | | | | | |
| **Grade 3 Ontario expectations** | ***Nelson Mathematics 3*** | ***Math Path 3*** | **Leaps and Bounds 3/4 Topics** | **Grade 2 Ontario expectations** | **Grade 1 Ontario expectations** |
| B2.3 use mental math strategies, including estimation, to add and subtract whole numbers that add up to no more than 1000, and explain the strategies used | Chapter 1 Mental Math (Addition Patterns), Chapter 2 Mental Math (Adding Tens), 4.1, 4.2, 4.3, Chapter 4 Math Game (Operation 25), | Chapter 9 | **Adding Whole Numbers**<br>*Pathway 1:* Adding Three-Digit Numbers<br>*Pathway 2:* Adding Two-Digit Numbers<br>*Pathway 3:* Adding One-Digit Numbers<br><br>**Subtracting Whole Numbers**<br>*Pathway 1:* Subtracting Three-Digit Numbers | B2.3 use mental math strategies, including estimation, to add and subtract whole numbers that add up to no more than 50, and explain the strategies used | B2.3 use mental math strategies, including estimation, to add and subtract whole numbers that add up to no more than 20, and explain the strategies used |

| | | | | | |
|---|---|---|---|---|---|
| | 4.4, 4.5, Chapter 4 Mental Math (Finding 10s), Chapter 5 Mental Math (Adding and Subtracting Hundredths), Chapter 6 Getting Started, 6.1, Chapter 6 Curious Math (Checking Addition), Chapter 6 Mental Math (Adding and Subtracting Using Tens), 6.5, Chapter 6 Math Game (Spill the Beans), 6.10, Chapter 9 Curious Math (Odd Arrays), Chapter 9 Mental Math (Mental Subtraction) | | *Pathway 2:* Subtracting Numbers to 100<br>*Pathway 3:* Subtracting Numbers to 20<br><br>**Mental Math**<br>*Pathway 1:* Compensating<br>*Pathway 2:* Regrouping<br>*Pathway 3:* Relating to 5 or 10 | | |
| **Number: Addition and Subtraction** | | | | | |
| **Grade 3 Ontario expectations** | ***Nelson Mathematics 3*** | ***Math Path 3*** | **Leaps and Bounds 3/4 Topics** | **Grade 2 Ontario expectations** | **Grade 1 Ontario expectations** |
| B2.4 demonstrate an understanding of algorithms for adding and subtracting whole numbers by making connections to and describing the way other tools and strategies are used to add and subtract | Chapter 2 Mental Math (Adding Tens), 4.2, 4.6, 4.7, Chapter 4 Task, Chapter 6 Getting Started, 6.2, 6.3, 6.4, 6.6, Chapter 6 Math Game (Spill the Beans), 6.7, 6.10, Chapter 6 Math Game (Digit | 2.1, 2.2, 2.3, 2.4, 3.1, 3.2, 3.3, 3.4, 3.5, 4.1 | **Adding Whole Numbers**<br>*Pathway 1:* Adding Three-Digit Numbers<br>*Pathway 2:* Adding Two-Digit Numbers<br>*Pathway 3:* Adding One-Digit Numbers<br><br>**Subtracting Whole Numbers**<br>*Pathway 1:* Subtracting Three-Digit Numbers<br>*Pathway 2:* Subtracting Numbers to 100<br>*Pathway 3:* Subtracting Numbers to 20 | B2.4 use objects, diagrams, and equations to represent, describe, and solve situations involving addition and subtraction of whole numbers that add up to no more than 100 | B2.4 use objects, diagrams, and equations to represent, describe, and solve situations involving addition and subtraction of whole numbers that add up to no more than 50 |

| | | | | | |
|---|---|---|---|---|---|
| | Difference), Chapter 6 Task | | | | |
| B2.5 represent and solve problems involving the addition and subtraction of whole numbers that add up to no more than 1000, using various tools and algorithms | Chapter 1 Mental Math (Addition Patterns), Chapter 2 Mental Math (Adding Tens), Chapter 4 Getting Started, 4.1, 4.2, 4.3, 4.4, 4.5, 4.6, 4.7, Chapter 4 Mental Math (Finding 10s), Chapter 4 Task, Chapter 5 Mental Math (Adding and Subtracting Hundreds), Chapter 6 Getting Started, 6.1, 6.2, 6.3, Chapter 6 Curious Math (Checking Addition), 6.4, 6.5, 6.6, 6.7, 6.10, Chapter 6 Task, Chapter 9 Mental Math (Mental Subtraction) | 3.5, 4.2, 4.3, 4.4, 4.5 | **Adding Whole Numbers**<br>*Pathway 1:* Adding Three-Digit Numbers<br>*Pathway 2:* Adding Two-Digit Numbers<br>*Pathway 3:* Adding One-Digit Numbers<br><br>**Subtracting Whole Numbers**<br>*Pathway 1:* Subtracting Three-Digit Numbers<br>*Pathway 2:* Subtracting Numbers to 100<br>*Pathway 3:* Subtracting Numbers to 20<br><br>**Mental Math**<br>*Pathway 1:* Compensating<br>*Pathway 2:* Regrouping<br>*Pathway 3:* Relating to 5 or 10 | B2.4 use objects, diagrams, and equations to represent, describe, and solve situations involving addition and subtraction of whole numbers that add up to no more than 100 | B2.4 use objects, diagrams, and equations to represent, describe, and solve situations involving addition and subtraction of whole numbers that add up to no more than 50 |
| **Number: Multiplication and Division** | | | | | |
| **Grade 3 Ontario expectations** | ***Nelson Mathematics 3*** | ***Math Path 3*** | **Leaps and Bounds 3/4 Topics** | **Grade 2 Ontario expectations** | **Grade 1 Ontario expectations** |
| B2.6 represent multiplication of numbers up to 10 × 10 and division up to 100 ÷ 10, using a variety of tools and drawings, including arrays | Chapter 9 Getting Started, 9.1, 9.2, 9.3, Chapter 9 Math Game (Tap It Out), 9.4, 9.5, 9.6, Chapter 9 Task, Chapter 10 Getting Started, | 5.1, 5.2, 5.3 | | B2.5 represent multiplication as repeated equal groups, including groups of one-half and one-fourth, and solve related problems, using various tools and drawings | B2.5 represent and solve equal-group problems where the total number of items is no more than 10, including problems in which each group is a half, using tools and drawings |

| | | | | | |
|---|---|---|---|---|---|
| | 10.1, 10.2, 10.3, Chapter 10 Math Game (Fill-a-Row Division), 10.4, Chapter 10 Mental Math (Using Equal Groups), 10.5, Chapter 10 Task | | | B2.6 represent division of up to 12 items as the equal sharing of a quantity, and solve related problems, using various tools and drawings | |
| B2.7 represent and solve problems involving multiplication and division, including problems that involve groups of one-half, one-fourth, and one-third, using tools and drawings | 10.3<br><br>expectation slightly addressed | 11.1, 11.2, 11.3, Chapter 13 | | B2.5 represent multiplication as repeated equal groups, including groups of one-half and one-fourth, and solve related problems, using various tools and drawings<br><br>B2.6 represent division of up to 12 items as the equal sharing of a quantity, and solve related problems, using various tools and drawings | B2.5 represent and solve equal-group problems where the total number of items is no more than 10, including problems in which each group is a half, using tools and drawings |
| B2.8 represent the connection between the numerator of a fraction and the repeated addition of the unit fraction with the same denominator using various tools and drawings, and standard fractional notation | | Chapter 13 | | | |
| B2.9 use the ratios of 1 to 2, 1 to 5, and 1 to 10 to scale up numbers and to solve problems | | Chapter 13 | | | |
| **Algebra: Patterns** | | | | | |
| **Grade 3 Ontario expectations** | ***Nelson Mathematics 3*** | ***Math Path 3*** | **Leaps and Bounds 3/4 Topics** | **Grade 2 Ontario expectations** | **Grade 1 Ontario expectations** |
| C1.1 identify and describe repeating elements and operations in a variety of | Chapter 1 Getting Started, 1.1, 1.2, Chapter 1 Curious | 2.5, 3.6 | **Patterns**<br>*Pathway 2:* Repeating Patterns | C1.1 identify and describe a variety of patterns involving geometric designs, including | C1.1 identify and describe the regularities in a variety of patterns, including |

| | | | | | |
|---|---|---|---|---|---|
| patterns, including patterns found in real-life contexts | Math (Dance Patterns), 1.3, 1..4, 1.5, 1.6, Chapter 1 Task | | | patterns found in real-life contexts | patterns found in real-life contexts |
| C1.2 create and translate patterns that have repeating elements, movements, or operations using various representations, including shapes, numbers, and tables of values | 1.1, 1.2, Chapter 1 Curious Math (Dance Patterns), 1.3, 1.4, 1.6, Chapter 1 Task, Chapter 9 Curious Math (Odd Arrays) | 2.5 | **Patterns**<br>*Pathway 2:* Repeating Patterns | C1.2 create and translate patterns using various representations, including shapes and numbers | C1.2 create and translate patterns using movements, sounds, objects, shapes, letters, and numbers |
| C1.3 determine pattern rules and use them to extend patterns, make and justify predictions, and identify missing elements in patterns that have repeating elements, movements, or operations | Chapter 1 Getting Started, 1.1, 1.3, 1.4, 1.6, Chapter 1 Task, 9.6, 10.4 | 2.5, 3.6 | **Patterns**<br>*Pathway 2:* Repeating Patterns | C1.3 determine pattern rules and use them to extend patterns, make and justify predictions, and identify missing elements in patterns represented with shapes and numbers | C1.3 determine pattern rules and use them to extend patterns, make and justify predictions, and identify missing elements in patterns |
| C1.4 create and describe patterns to illustrate relationships among whole numbers up to 1000 | Chapter 1 Mental Math (Addition Patterns), 2.1, 2.3, 4.1, 9.4, 9.6<br><br>expectation partially addressed | 1.2, 3.4 | **Skip Counting**<br>*Pathway 1:* Skip Counting to 1000<br>*Pathway 2:* Skip Counting to 100<br>*Pathway 3:* Skip Counting to 20 | C1.4 create and describe patterns to illustrate relationships among whole numbers up to 100 | C1.4 create and describe patterns to illustrate relationships among whole numbers up to 50 |
| **Algebra: Variables** | | | | | |
| **Grade 3 Ontario expectations** | ***Nelson Mathematics 3*** | ***Math Path 3*** | **Leaps and Bounds 3/4 Topics** | **Grade 2 Ontario expectations** | **Grade 1 Ontario expectations** |
| C2.1 describe how variables are used, and use them in various contexts as appropriate | 4.1, Chapter 6 Getting Started, 10.6<br><br>expectation partially addressed | 4.1, 4.5 | **Equality**<br>*Pathway 1:* Equality Using Numbers to 100<br>*Pathway 2:* Equality Using Numbers to 20 | C2.1 identify when symbols are being used as variables, and describe how they are being used | C2.1 identify quantities that can change and quantities that always remain the same in real-life contexts |
| **Algebra: Equalities and Inequalities** | | | | | |
| **Grade 3 Ontario expectations** | ***Nelson Mathematics 3*** | ***Math Path 3*** | **Leaps and Bounds 3/4 Topics** | **Grade 2 Ontario expectations** | **Grade 1 Ontario expectations** |

| | | | | | |
|---|---|---|---|---|---|
| C2.2 determine whether given sets of addition, subtraction, multiplication, and division expressions are equivalent or not | 4.1, 9.3<br><br>expectation partially addressed | 5.1, 5.2 | **Equality**<br>*Pathway 1:* Equality Using Numbers to 100<br>*Pathway 2:* Equality Using Numbers to 20 | C2.2 determine what needs to be added to or subtracted from addition and subtraction expressions to make them equivalent | C2.2 determine whether given pairs of addition and subtraction expressions are equivalent or not |
| C2.3 identify and use equivalent relationships for whole numbers up to 1000, in various contexts | 2.2, 4.1, 9.3, 9.5<br><br>expectation partially addressed | 1.2 | **Representing Whole Numbers**<br>*Pathway 1:* Representing Numbers to 1000<br>*Pathway 2:* Representing Numbers to 100<br>*Pathway 3:* Representing Numbers to 20<br><br>**Mental Math**<br>*Pathway 2:* Regrouping<br><br>**Equality**<br>*Pathway 1:* Equality Using Numbers to 100<br>*Pathway 2:* Equality Using Numbers to 20 | C2.3 identify and use equivalent relationships for whole numbers up to 100, in various contexts | C2.3 identify and use equivalent relationships for whole numbers up to 50, in various contexts |
| **Algebra: Coding** | | | | | |
| **Grade 3 Ontario expectations** | ***Nelson Mathematics 3*** | ***Math Path 3*** | **Leaps and Bounds 3/4 Topics** | **Grade 2 Ontario expectations** | **Grade 1 Ontario expectations** |
| C3.1 solve problems and create computational representations of mathematical situations by writing and executing code, including code that involves sequential, concurrent, and repeating events | | 2.5, 3.6 | | C3.1 solve problems and create computational representations of mathematical situations by writing and executing code, including code that involves concurrent and sequential events | C3.1 solve problems and create computational representations of mathematical situations by writing and executing code, including code that involves sequential events |
| C3.2 read and alter existing code, including code that involves sequential, concurrent, and repeating events, and describe how changes to the code affect the outcomes | | 2.5, 3.6 | | C3.2 read and alter existing code, including code that involves sequential and concurrent events, and describe how changes to the code affect the outcomes | C3.2 read and alter existing code, including code that involves sequential events, and describe how changes to the code affect the outcomes |
| **Data: Data Collection and Organization** | | | | | |

| Grade 3 Ontario expectations | *Nelson Mathematics 3* | *Math Path 3* | Leaps and Bounds 3/4 Topics | Grade 2 Ontario expectations | Grade 1 Ontario expectations |
|---|---|---|---|---|---|
| D1.1 sort sets of data about people or things according to two and three attributes, using tables and logic diagrams, including Venn, Carroll, and tree diagrams, as appropriate | Chapter 3 Getting Started, 3.1, Chapter 3 Curious Math (It Takes All Sorts), Chapter 3 Task<br><br>expectation partially addressed | 16.4 | **Sorting and Organizing Data**<br>*Pathway 1:* Sorting: More Than One Attribute<br>*Pathway 2:* Sorting: One Attribute | D1.1 sort sets of data about people or things according to two attributes, using tables and logic diagrams, including Venn and Carroll diagrams | D1.1 sort sets of data about people or things according to one attribute, and describe rules used for sorting |
| D1.2 collect data through observations, experiments, and interviews to answer questions of interest that focus on qualitative and quantitative data, and organize the data using frequency tables | 3.1, 3.2, Chapter 3 Task, Chapter 13 Getting Started, 13.1, 13.3, Chapter 13 Math Game (Off to the Races), 13.4, Chapter 13 Curious Math (Spinning Red), Chapter 13 Task<br><br>expectation partially addressed | 16.4, 17.2 | | D1.2 collect data through observations, experiments, and interviews to answer questions of interest that focus on two pieces of information, and organize the data in two-way tally tables | D1.2 collect data through observations, experiments, and interviews to answer questions of interest that focus on a single piece of information; record the data using methods of their choice; and organize the data in tally tables |
| **Data: Data Visualization** | | | | | |
| **Grade 3 Ontario expectations** | ***Nelson Mathematics 3*** | ***Math Path 3*** | **Leaps and Bounds 3/4 Topics** | **Grade 2 Ontario expectations** | **Grade 1 Ontario expectations** |
| D1.3 display sets of data, using many-to-one correspondence, in pictographs and bar graphs with proper sources, titles, and labels, and appropriate scales | Chapter 3 Getting Started, 3.3, 3.4, Chapter 3 Task | 16.1, 16.3 | **Displaying Data**<br>*Pathway 1:* Data: Many-to-One Correspondence<br>*Pathway 2:* Data: One-to-One Correspondence<br>*Pathway 3:*Concrete and Picture Graphs | D1.3 display sets of data, using one-to-one correspondence, in concrete graphs, pictographs, line plots, and bar graphs with proper sources, titles, and labels | D1.3 display sets of data, using one-to-one correspondence, in concrete graphs and pictographs with proper sources, titles, and labels |
| **Data: Data Analysis** | | | | | |
| **Grade 3 Ontario expectations** | ***Nelson Mathematics 3*** | ***Math Path 3*** | **Leaps and Bounds 3/4 Topics** | **Grade 2 Ontario expectations** | **Grade 1 Ontario expectations** |

| | | | | | |
|---|---|---|---|---|---|
| D1.4 determine the mean and identify the mode(s), if any, for various data sets involving whole numbers, and explain what each of these measures indicates about the data | | 16.2, 16.5 | | D1.4 identify the mode(s), if any, for various data sets presented in concrete graphs, pictographs, line plots, bar graphs, and tables, and explain what this measure indicates about the data | D1.4 order categories of data from greatest to least frequency for various data sets displayed in tally tables, concrete graphs, and pictographs |
| D1.5 analyse different sets of data presented in various ways, including in frequency tables and in graphs with different scales, by asking and answering questions about the data and drawing conclusions, then make convincing arguments and informed decisions | Chapter 3 Getting Started, 3.2, 3.3, 3.4, 3.5, Chapter 3 Task, 9.2 | Chapter 16 | **Displaying Data**<br>*Pathway 1:* Data: Many-to-One Correspondence<br>*Pathway 2:* Data: One-to-One Correspondence<br>*Pathway 3:*Concrete and Picture Graphs | D1.5 analyse different sets of data presented in various ways, including in logic diagrams, line plots, and bar graphs, by asking and answering questions about the data and drawing conclusions, then make convincing arguments and informed decisions | D1.5 analyse different sets of data presented in various ways, including in tally tables, concrete graphs, and pictographs, by asking and answering questions about the data and drawing conclusions, then make convincing arguments and informed decisions |
| **Data: Probability** | | | | | |
| **Grade 3 Ontario expectations** | ***Nelson Mathematics 3*** | ***Math Path 3*** | **Leaps and Bounds 3/4 Topics** | **Grade 2 Ontario expectations** | **Grade 1 Ontario expectations** |
| D2.1 use mathematical language including the terms "impossible", "unlikely", "equally likely", "likely", and "certain", to describe the likelihood of events happening, and use that likelihood to make predictions and informed decisions | Chapter 13 Getting Started, 13.1, 13.2, Chapter 13 Task | 17.1 | | D2.1 use mathematical language including the terms "impossible", "possible", and "certain" to describe the likelihood of complementary events happening, and use that likelihood to make predictions and informed decisions | D2.1 use mathematical language including the terms "impossible", "possible", and "certain", to describe the likelihood of events happening, and use that likelihood to make predictions and informed decisions |
| D2.2 make and test predictions about the likelihood that the mean and the mode(s) of a data set will be the same for data collected from different populations | | 17.2 | | D2.2 make and test predictions about the likelihood that the mode(s) of a data set from one population will be the same for data collected from a different population | D2.2 make and test predictions about the likelihood that the categories in a data set from one population will have the same frequencies in data collected from a different population of the same size |
| **Spatial Sense: Geometric Reasoning** | | | | | |

| Grade 3 Ontario expectations | *Nelson Mathematics 3* | *Math Path 3* | Leaps and Bounds 3/4 Topics | Grade 2 Ontario expectations | Grade 1 Ontario expectations |
|---|---|---|---|---|---|
| E1.1 sort, construct, and identify cubes, prisms, pyramids, cylinders, and cones by comparing their faces, edges, vertices, and angles | Chapter 11 Getting Started, 11.1, 11.2, 11.3, Chapter 11 Curious Math (Drawing 3-D Shapes), Chapter 11 Math Game (I Spy)<br><br>expectation partially addressed | 15.2 | **3-D Shapes**<br>*Pathway 1:* Describing 3-D Shapes<br>*Pathway 2:* Building 3-D Shapes | E1.1 sort and identify two-dimensional shapes by comparing number of sides, side lengths, angles, and number of lines of symmetry | E1.1 sort three-dimensional objects and two-dimensional shapes according to one attribute at a time, and identify the sorting rule being used |
| E1.2 compose and decompose various structures, and identify the two-dimensional shapes and three-dimensional objects that these structures contain | 11.1, 11.3, 11.4 | 15.2 | **3-D Shapes**<br>*Pathway 1:* Describing 3-D Shapes<br>*Pathway 2:* Building 3-D Shapes<br><br>**2-D Shapes**<br>*Pathway 1:* Describing 2-D Shapes | E1.2 compose and decompose two-dimensional shapes, and show that the area of a shape remains constant regardless of how its parts are rearranged | E1.2 construct three-dimensional objects, and identify two-dimensional shapes contained within structures and objects<br><br>E1.3 construct and describe two-dimensional shapes and three-dimensional objects that have matching halves |
| E1.3 identify congruent lengths, angles, and faces of three-dimensional objects by mentally and physically matching them, and determine if the objects are congruent | 11.3<br><br>expectation partially addressed | 15.3 | | E1.3 identify congruent lengths and angles in two-dimensional shapes by mentally and physically matching them, and determine if the shapes are congruent | |
| **Spatial Sense: Location and Movement** | | | | | |
| **Grade 3 Ontario expectations** | ***Nelson Mathematics 3*** | ***Math Path 3*** | **Leaps and Bounds 3/4 Topics** | **Grade 2 Ontario expectations** | **Grade 1 Ontario expectations** |
| E1.4 give and follow multistep instructions involving movement from one location to another, including distances and half- and quarter-turns | 8.5, Chapter 8 Math Game (Roll to the Star), Chapter 8 Task | 15.1 | **Movement and Location**<br>*Pathway 2:* Using Positional Language | E1.4 create and interpret simple maps of familiar places<br><br>E1.5 describe the relative positions of several objects | E1.4 describe the relative locations of objects or people, using positional language |

| | | | | | |
|---|---|---|---|---|---|
| | expectation partially addressed | | | and the movements needed to get from one object to another | E1.5 give and follow directions for moving from one location to another |
| **Spatial Sense: Length, Mass, and Capacity** | | | | **Spatial Sense: Length** | **Spatial Sense: Attributes** |
| **Grade 3 Ontario expectations** | ***Nelson Mathematics 3*** | ***Math Path 3*** | **Leaps and Bounds 3/4 Topics** | **Grade 2 Ontario expectations** | **Grade 1 Ontario expectations** |
| E2.1 use appropriate units of length to estimate, measure, and compare the perimeters of polygons and curved shapes, and construct polygons with a given perimeter | 5.5<br><br>expectation partially addressed | 7.3, 12.3 | **Length**<br>*Pathway 1:* Length: Standard Units<br>*Pathway 2:* Length: Non-Standard Units | E2.1 choose and use non-standard units appropriately to measure lengths, and describe the inverse relationship between the size of a unit and the number of units needed | E2.1 identify measurable attributes of two-dimensional shapes and three-dimensional objects, including length, area, mass, capacity, and angle<br><br>E2.2 compare several everyday objects and order them according to length, area, mass, and capacity |
| E2.2 explain the relationships between millimetres, centimetres, metres, and kilometres as metric units of length, and use benchmarks for these units to estimate lengths | 5.1, 5.2, 5.3, 5.4, Chapter 5 Curious Math (Comparing Body Lengths), Chapter 5 Mental Math (Adding and Subtracting Hundredths), Chapter 5 Task<br><br>expectation partially addressed | 7.1, 7.2, 7.4 | **Length**<br>*Pathway 1:* Length: Standard Units<br>*Pathway 2:* Length: Non-Standard Units | E2.2 explain the relationship between centimetres and metres as units of length, and use benchmarks for these units to estimate lengths<br><br>E2.3 measure and draw lengths in centimetres and metres, using a measuring tool, and recognize the impact of starting at points other than zero | |
| E2.3 use non-standard units appropriately to estimate, measure, and compare capacity, and explain the effect that overfilling or underfilling, and gaps between units, have on accuracy | Chapter 11 Mental Imagery (Estimating by Comparing)<br><br>expectation partially addressed | 9.1, 9.2, 9.3, 9.4 | **Capacity**<br>*Pathway 2:* Capacity: Non-Standard Units | | |
| E2.4 compare, estimate, and measure the mass of various objects, using a pan | | 8.1 | **Mass**<br>*Pathway 3:* Mass: Using Non-Standard Units | | |

| | | | | | |
|---|---|---|---|---|---|
| balance and non-standard units | | | | | |
| E2.5 use various units of different sizes to measure the same attribute of a given item, and demonstrate that even though using different-sized units produces a different count, the size of the attribute remains the same | 5.2, Chapter 8 Getting Started, 8.1, 8.2<br><br>expectation partially addressed | 8.1, Chapter 12 | **Length**<br>*Pathway 1:* Length: Standard Units<br>*Pathway 2:* Length: Non-Standard Units | | |
| **Spatial Sense: Time** | | | | | |
| **Grade 3 Ontario expectations** | ***Nelson Mathematics 3*** | ***Math Path 3*** | **Leaps and Bounds 3/4 Topics** | **Grade 2 Ontario expectations** | **Grade 1 Ontario expectations** |
| E2.6 use analog and digital clocks and timers to tell time in hours, minutes, and seconds | 5.6, 5.7, Chapter 5 Math Game (Red Time, Blue Time), Chapter 5 Task | 14.1, 14.5, 14.6 | **Time**<br>*Pathway 1:* Reading a Clock<br>*Pathway 2:* Time: Using Standard Units<br>*Pathway 3:* Time: Using Non-Standard Units | E2.4 use units of time, including seconds, minutes, hours, and non-standard units, to describe the duration of various events | E2.3 read the date on a calendar, and use a calendar to identify days, weeks, months, holidays, and seasons |
| **Spatial Sense: Area** | | | | | |
| **Grade 3 Ontario expectations** | ***Nelson Mathematics 3*** | ***Math Path 3*** | **Leaps and Bounds 3/4 Topics** | **Grade 2 Ontario expectations** | **Grade 1 Ontario expectations** |
| E2.7 compare the areas of two-dimensional shapes by matching, covering, or decomposing and recomposing the shapes, and demonstrate that different shapes can have the same area | Chapter 8 Getting Started, 8.1, 8.2, 8.3, 8.4<br><br>expectation partially addressed | 12.1 | **Area**<br>*Pathway 1:* Area: Using Strategies<br>*Pathway 2:* Area: Using Whole Units | | |
| E2.8 use appropriate non-standard units to measure area, and explain the effect that gaps and overlaps have on accuracy | Chapter 8 Getting Started, 8.1, 8.2, 8.3, 8.4, Chapter 8 Mental Imagery (Areas of Unusual Shapes), Chapter 8 Task | Chapter 12 | **Area**<br>*Pathway 1:* Area: Using Strategies<br>*Pathway 2:* Area: Using Whole Units | | |
| E2.9 use square centimetres (cm2) and square metres (m2) to estimate, measure, and compare the areas of | | 12.2, 12.3 | | | |

| | | | | | |
|---|---|---|---|---|---|
| various two-dimensional shapes, including those with curved sides | | | | | |
| **Financial Literacy: Money Concepts** | | | | | |
| **Grade 3 Ontario expectations** | ***Nelson Mathematics 3*** | ***Math Path 3*** | **Leaps and Bounds 3/4 Topics** | **Grade 2 Ontario expectations** | **Grade 1 Ontario expectations** |
| F1.1 estimate and calculate the change required for various simple cash transactions involving whole-dollar amounts and amounts of less than one dollar | | Chapter 10 | | F1.1 identify different ways of representing the same amount of money up to Canadian 200¢ using various combinations of coins, and up to $200 using various combinations of $1 and $2 coins and $5, $10, $20, $50, and $100 bills | F1.1 identify the various Canadian coins up to 50¢ and coins and bills up to $50, and compare their values |