## mathology

## Grade 1 Ontario Mathology.ca Sample Long-Range Pathway

In the example below, the suggested learning is balanced, starting with Patterning, but focused on Number most of the first months of math instruction.

|  | Strand | Big Idea | Mathology Activity Lessons | Grade 1 Mathology Little Books |
| :---: | :---: | :---: | :---: | :---: |
| Sept. | Patterning and Algebra | Regularity and repetition form patterns that can be generalized and predicted | Patterning and Algebra <br> Cluster 1 Investigating Repeating Patterns <br> 1.Repeating the Core <br> 2.Representing Patterns <br> 3.Predicting Elements <br> 4.Finding Patterns <br> 5.Consolidation <br> Cluster 2 Creating Patterns <br> 6. Extending Patterns <br> 7.Translating Patterns <br> 8.Errors and Missing Elements <br> 9.Consolidation | Midnight and Snowfall |
| Sept. | Number | Numbers tell us how many and how much | Number Cluster 1 Counting <br> 1.Counting to 20 <br> 2.Counting to 50 <br> 3.Counting On and Back <br> 4.Ordinal Numbers <br> 5.Consolidation | On Safari! <br> A Family Cookout <br> Paddling the River |


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| Oct. | Number | Numbers tell us how many and how much | Number Cluster 2 Spatial Reasoning <br> 6. Subitizing to 10 <br> 7.Estimating Quantities <br> 8.Consolidation | Paddling the River |
| Oct. | Number | Numbers are related in many ways | Number Cluster 3 Comparing and Ordering <br> 9. Comparing Sets Concretely <br> 10.Comparing Sets Pictorially <br> 11.Comparing Numbers to 50 <br> 12.Consolidation | Cats and Kittens! |
| Nov. | Number | Numbers tell us how many and how much | Number Cluster 4 Skip-Counting <br> 13.Skip-Counting Forward 14.Skip-Counting with Leftovers 15.Skip-Counting Backward 16.Consolidation | How Many is Too Many? |
| Nov. | Number | Numbers are related in many ways | Number Cluster 5 Composing and Decomposing <br> 17.Decomposing 10 <br> 18. Numbers to 10 <br> 19.Numbers to 20 <br> 20.Decomposing 50 <br> 21.Money Amounts <br> 22.Equal Groups <br> 23.Equal Parts <br> 24.Sharing Equally <br> 25.Comparing and Ordering Unit Fractions <br> 26.Consolidation | Paddling the River <br> That's 10! |

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| Dec. | Geometry | 2-D shapes and <br> 3-D solids can be analyzed and classified in different ways by their attributes <br> 2-D shapes and 3-D solids can be transformed in many ways and analyzed for change | Geometry Cluster 1 2-D Shapes <br> 1.Sorting Shapes <br> 2.Identifying Triangles <br> 3. Identifying Rectangles <br> 4.Visualizing Shapes <br> 5.Sorting Rules <br> 6.Consolidation | The Tailor Shop <br> What Was Here? |
| Dec. | Geometry | 2-D shapes and <br> 3-D solids can be analyzed and classified in different ways by their attributes <br> 2-D shapes and <br> 3-D solids can be transformed in many ways and analyzed for change | Geometry Cluster 2 3-D Solids <br> 7.Exploring 3-D Solids <br> 8. Faces of Solids <br> 9.Sorting 3-D Solids <br> 10.Identify the Sorting Rule <br> 11.Constructing Solids and Skeletons <br> 12.Consolidation | What Was Here? |
| Jan. | Measurement | Many things in our world have attributes that can be measured and compared | Measurement Cluster 1 Comparing Objects <br> 1.Identifying Attributes <br> 2.Comparing Length <br> 3.Matching Lengths <br> 4. Comparing Mass <br> 5.Comparing Capacity <br> 6.Making Comparisons <br> 7.Comparing Area <br> 8. Consolidation | The Amazing Seed |
| Jan. | Measurement | Assigning a unit to a continuous attribute allows us to measure and make comparisons | Measurement Cluster 2 Time <br> 9. Relating to Seasons 10.The Calendar <br> 11. Consolidation | Animal Measures |


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| Feb. | Number | Quantities and numbers can be added and subtracted to tell how many and how much | Number Cluster 7 Operational Fluency <br> 31.More or Less <br> 32. Complements of 10 <br> 33.Adding to 20 <br> 34.Subtracting to 50 | Hockey Time! <br> Buy 1 - Get 1 <br> Canada's Oldest Sport <br> Cats and Kittens! |
| Feb. | Patterning and Algebra | Patterns and relations can be represented with symbols, equations, and expressions | Patterning and Algebra Cluster 3 Equality and Inequality <br> 10.Exploring Sets <br> 11.Making Equal Sets <br> 12.Using Symbols <br> 13.Consolidation | Nutty and Wolfy |
| Mar. | Number | Quantities and numbers can be added and subtracted to tell how many and how much | Number Cluster 7 Operational Fluency <br> 35.The Number Line <br> 36.Doubles <br> 37.Part-Part-Whole <br> 38.Exploring Properties <br> 39.Solving Story Problems <br> 40. Adding and Subtracting to 50 <br> 41.Consolidation | Hockey Time! <br> Buy 1 - Get 1 <br> Canada’s Oldest Sport <br> Cats and Kittens! |
| Mar. | Number | Numbers tell us how many and how much | Number Cluster 8 Financial Literacy <br> 42.Values of Coins <br> 43.Values of Bills <br> 44.Counting Collections <br> 45.Fair Trades <br> 46. Wants and Needs <br> 47.Consolidation |  |

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| Apr. | Number | Quantities and numbers can be added and subtracted to tell how many and how much | Revisit Number Cluster 7 Operational Fluency <br> 31.More or Less <br> 32. Complements of 10 <br> 33.Adding to 20 <br> 34.Subtracting to 50 <br> 35.The Number Line <br> 36.Doubles <br> 37.Part-Part-Whole <br> 38.Exploring Properties <br> 39.Solving Story Problems <br> 40. Adding and Subtracting to 50 <br> 41.Consolidation | On Safari! <br> Hockey Time! <br> Buy 1 - Get 1 <br> Canada’s Oldest Sport <br> Cats and Kittens! |
| May | Number | Quantities and numbers can be grouped by or partitioned into equal-sized units | Number Cluster 6 Early Place Value <br> 27.Tens and Ones <br> 28. Building and Naming Numbers <br> 29.Different Representations <br> 30.Consolidation | At the Corn Farm |
| May | Geometry | 2-D shapes and <br> 3-D solids can be analyzed and classified in different ways by their attributes <br> 2-D shapes and <br> 3-D solids can be transformed in many ways and analyzed for change | Geometry Cluster 3 Symmetry <br> 13.Finding Lines of Symmetry <br> 14.Creating Symmetrical Designs <br> 15.Bulding Symmetrical Solids <br> 16.Consolidation | What Was Here? <br> The Tailor Shop |

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| :---: | :---: | :---: | :---: | :---: |
| June | Geometry | Objects can be located in space and viewed from multiple perspectives* | Geometry Cluster 4 Location and Movement <br> 17.Perspective Taking <br> 18.Mapping <br> 19.Exploring Coding <br> 20.Coding on a Grid <br> 21.Number Codes <br> 22.Consolidation | Memory Book |
| June | Data <br> Management and Probability | Formulating questions, collecting data, and consolidating data in visual and graphical displays helps us to understand, predict, and interpret situations that involve uncertainty, variability and randomness | Data Management and Probability Cluster 1 Data Management <br> 1.Sorting Data <br> 2.Interpreting Graphs <br> 3.Making Concrete Graphs <br> 4.Making Pictographs <br> 5. Consolidation <br> Cluster 2 Probability and Chance <br> 6. Likelihood of Events <br> 7.Making and Testing Predictions <br> 8.Consolidation | Graph It! |

