

Mathology 1 Correlation (Number) – Ontario Mathology Kit (Prior 2022)

*Lessons indicated in green are new lessons that correspond to the Ontario Curriculum. They can be found in Mathology.ca and the updated Print Kits. For more information click here: Mathology.ca

*LINE MASTERS FOR THE LESSONS FROM THE KITS (PRIOR TO 2020) REFERRED TO BELOW CAN BE FOUND HERE: MATHOLOGY LINE MASTERS ONTARIO VERSION

Overall Expectation

A1. Social-Emotional Learning (SEL) Skills and the Mathematical Processes

Mathology provides teachers with a flexible framework to support the development of students' Social-Emotional Learning:

- o By using diverse resources that represent a variety of students in real-world contexts, students can see themselves and others while positively engaging in mathematics
- o By providing differentiated support that allows students to cope with challenges, start at a level that works for them, and build from there
- o By providing students with opportunities to learn by way of different approaches, through the use of digital (e.g., virtual tools) and print resources (e.g., laminated student cards and math mats), allowing students to reveal their mathematical thinking in a risk-free environment.
- o By providing students with a variety of learning opportunities (small group, pair, whole class), to work collaboratively on math problems, share their own thinking, and listen to the thinking of others
- o By including a variety of voices (built by and for Canadian learners) and opportunities to support local contexts (modifiable resources)

Curriculum Expectations 2020	Mathology Grade 1	Ideas to work with Mathology Activities to meet the new
	Activity Kit (Prior to 2022)	Ontario Curriculum Expectations

Overall Expectation		
B1. Number Sense: demonstrate an understanding Specific Expectation	g of numbers and make connections t	to the way numbers are used in everyday life
Whole Numbers		
B1.1 read and represent whole numbers up	Number Cluster 1: Counting	
to and including 50, and describe various	1: Counting to 20	3: Counting On and Counting Back
ways they are used in everyday life	2: Counting to 50	Consider including numbers on Line Master C to larger numbers
	3: Counting On and Counting	to 50.
	Back	
	4: Ordinal Numbers	
	5: Counting Consolidation	
	Number Cluster 6: Early Place	
	Value	
	24: Tens and Ones	
B1.2 compose and decompose whole	Number Cluster 5: Composing	
numbers up to and including 50, using a	and Decomposing	20: Money Amounts
variety of tools and strategies, in various	17: Decomposing 10	You may want to begin with money amounts to 10 cents and increase
contexts	18: Numbers to 10	total to 50 cents as students are ready.
	19: Numbers to 20	
	20: Money Amounts	23: Composing and Decomposing Consolidation
	23: Composing and	Include fair sharing drawings: e.g., Choose a number. Use a
	Decomposing Consolidation	drawing to share equally between 2 people. Use the same number to share among 4 people.
	Number Cluster 6: Early Place	
	Value	25: Building and Naming Numbers
	25: Building and Naming	Use cubes and numbers to 100. For combined grades use
	Numbers	numbers to 200.
B1.3 compare and order whole numbers up	Number Cluster 3: Comparing	
to and including 50, in various contexts	and Ordering	9: Comparing Sets Concretely
	9: Comparing Sets Concretely	Consider using bags of 20 to 50 counters. Add more counters to
	10: Comparing Sets Pictorially	bag when students are ready.
	11: Comparing Numbers to 50	
		25: Building and Naming Numbers

	12: Comparing and Ordering Consolidation Number Cluster 6: Early Place Value 24: Tens and Ones 25: Building and Naming Numbers 26: Different Representations 27: Early Place Value Consolidation Link to other strands: Patterning and Algebra Cluster 3: Equality and Inequality 10: Exploring Sets 11: Making Equal Sets	Consider using cubes and numbers to 100. For combined grades use numbers to 200. 26: Different Representations Consider using cards to 50. For combined grades consider having students make their own cards for larger numbers (50-200) 27: Early Place Value Consolidation For combined grades, have students work with larger numbers (up to 200).
B1.4 estimate the number of objects in collections of up to 50 and verify their estimates by counting	Number Cluster 2: Spatial Reasoning 6: Subitizing to 10 7: Estimating Quantities 8: Spatial Reasoning Consolidation	7: Estimating Quantities Consider extending the number of objects to 50. Use a referent of 5, 10, 20. Sort into piles of 10 and count (a ten frame can be used as support if needed). Are students able to explain why they think they have about 50 counters? Consider using the assessment chart and extend it to 50. 8: Spatial Reasoning Consolidation Consider creating a sheet with 35 and 50 dots.
B1.5 count to 50 by 1s, 2s, 5s, and 10s, using a variety of tools and strategies	Number Cluster 1: Counting 1: Counting to 20 2: Counting to 50 3: Counting On and Counting Back	3: Counting On and Counting Back Consider using larger numbers (to 50). Use the Line Master from this lesson and change numbers at the start and finish to reflect numbers to 50. When students seem ready, give them a

	4: Ordinal Numbers 5: Counting Consolidation Number Cluster 4: Skip- Counting 13: Skip-Counting Forward 14: Skip-Counting with Leftovers 15: Skip-Counting Backwards 16: Skip-Counting Consolidation Number Cluster 8: Financial Literacy 37: Counting Collections 40: Financial Literacy: Consolidation	number and have them count back 5 from that number. For combined grades consider using game boards to count on and back from different start numbers to 100. 15: Skip-Counting Backwards Consider extending to counting backward from 50. Use Line Masters 38 and 39 for choice of numbers. For assessment, track to numbers up to 50.
Specific Expectations Fractions		
B1.6 use drawings to represent and solve fair-	Number Cluster 5: Composing	
share problems that involve 2 and 4 sharers, respectively, and have remainders of 1 or 2	and Decomposing 21: Equal Groups 22: Equal Parts	21: Equal Groups Consider adapting the Line master to include an additional column for pictorial representation. 22: Equal Parts Consider equal sharing with wholes (ribbon, paper, string). Sharing with any number of friends (e.g., 2, 3, 4). Discuss the idea of sharing fairly. For combined grades consider using copies of the same item to explore the relation between number of equal parts and the size of the parts. Sharing Equally (2020)

B1.7 recognize that one half and two fourths of the same whole are equal, in fair-sharing contexts 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 Cluster 5: Composing and Decomposing 22: Equal Parts 23: Composing and Decomposing Consolidation Number Cluster 5: Composing and Decomposing 23: Composing and Decomposing Consolidation	22: Equal Parts Consider equal sharing with wholes (ribbon, paper, string) Sharing with any number of friends. E.g. 2,3,4 Discuss the idea of sharing fairly. For combined grades consider using copies of the same item to explore the relation between number of equa parts and the size of the parts. Comparing and Ordering Unit Fractions (New 2020)
		23: Composing and Decomposing Consolidation Use numbers to 50. Include fair sharing drawings: ex Choose a number. Use a drawing to share equally between 2 people. Use the same number to share among 4 people.
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 Cluster 5: Composing and Decomposing 23: Composing and Decomposing Consolidation	Comparing and Ordering Unit Fractions (New 2020) 23: Composing and Decomposing Consolidation Consider using numbers to 50. Include fair sharing drawings: e.g., choose a number. Use a drawing to share equally between 2 people. Use the same number to share among 4 people.
Overall Expectation		

B2. Operations: use knowledge of numbers and operations to solve mathematical problems encountered in everyday life

Specific Expectation

Properties and Relationships

B2.1 use the properties of addition and subtraction, and the relationship between addition and subtraction, to solve problems and check calculations	Number Cluster 7: Operational Fluency 28: More or Less 29: Adding to 20 30: Subtracting to 50 31: The Number Line 32: Doubles 33: Part-Part-Whole 34: Solving Story Problems	29: Adding to 20 Consider supporting properties of addition (commutative, zero property). Make a line master with numeral cards 21-50. Have students select two cards each. Choose a numeral card for the total or write the numeral with a whiteboard marker for addition and subtraction to 50. 30: Subtracting to 50 Consider supporting properties of subtraction (commutative does not work in subtraction, zero property); and relationship between addition and subtraction. 31: The Number Line Consider using numbers to 50. Include a number line to 50. 33: Part-Part-Whole Students may use more counters (up to 50) when they are ready. Create Line Master to record addition and subtraction sentences to represent their part-part-whole. 34: Solving Story Problems Use visuals with more items. Could include things like grapes, tomatoes, juice boxes in packs of 3, toilet paper rolls.
Specific Expectation Math Facts		
B2.2 recall and demonstrate addition facts for numbers up to 10, and related subtraction facts	Number Cluster 7: Operational Fluency 28: More or Less	Adding and Subtracting to 50 (New 2020)
Specific Expectation Mental Math		
B2.3 use mental math strategies, including estimation, to add and subtract whole	Number Cluster 7: Operational Fluency 28: More or Less	28: More or Less

numbers that add up to no more than 20, and explain the strategies used	29: Adding to 20 30: Subtracting to 20 31: The Number Line 32: Doubles 33: Part-Part-Whole	Consider having students write corresponding number sentences. 29: Adding to 20 Support properties of addition (commutative, zero property) Make a line master with numerals cards 21-50. Have students select two salmon cards each. Choose a numeral card for the total or write the numeral with a whiteboard marker for addition and subtraction to 50. 30: Subtracting to 20 Support properties of subtraction (commutative does not work in subtraction, zero property); and relationship between addition and subtraction. 31: The Number Line Consider using numbers to 50. Include a number line to 50. 33: Part-Part-Whole Students may use more counters (up to 50) when they are ready. Create Line Master to record addition and subtraction
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 Cluster 7: Operational Fluency 29: Adding to 20 30: Subtracting to 20 31: The Number Line 32: Doubles 33: Part-Part-Whole 34: Solving Story Problems 35: Operational Fluency Consolidation	29: Adding to 20 Support properties of addition (commutative, zero property). Make a line master with numeral cards 21-50. Have students select two salmon cards each. Choose a numeral card for the total or write the numeral with a whiteboard marker for addition and subtraction to 50. 30: Subtracting to 20 Support properties of subtraction (commutative does not work in subtraction, zero property); and relationship between addition and subtraction.

		Subtracting to 50 (New 2020) 31: The Number Line Consider using numbers to 50. Include a number line to 50. 33: Part-Part-Whole Students may use more counters (up to 50) when they are ready. Create Line Master to record addition and subtraction
		sentences to represent their part-part-whole. 34: Solving Story Problems Use visuals with more items. Could include things like grapes, tomatoes, juice boxes in packs of 3, toilet paper rolls. Include numbers to 50 when students are ready. 35: Operational Fluency Consolidation Create pictures problems with greater numbers that sum to 50 when ready.
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	Number Cluster 5: Composing and Decomposing 21: Equal Groups 23: Composing and Decomposing Consolidation	21: Equal Groups Use 20 or 18 linking cubes. Have students make towers of 2, 3, 4, 5, 10. Include a conversation on leftovers. Adapt Line master to include additional column for pictorial representation. Sharing Equally (New 2020) 23: Composing and Decomposing Consolidation Consider using numbers to 50.

Curriculum Expectations 2020	Mathology Grade 1	Ideas to work with Mathology Activities to meet the new Ontario
		Curriculum Expectations

	Activity Kit (Prior to 2022)	
Overall Expectation C1. Patterns and Relationships: identify, descr real-life contexts	ibe, extend, create, and	make predictions about a variety of patterns, including those found in
Specific Expectation		
Patterns		
C1.1 identify and describe the regularities in a variety of patterns, including patterns found in real-life contexts	Patterning and Algebra Cluster 1: Investigating	3: Predicting Elements Consider having partners cover part of the pattern with a sticky note and
in real-life contexts	Repeating Patterns 1: Repeating the Core 2: Representing	the other students determines the missing part. Refer to assessment line master 6.
	Patterns	4: Finding Patterns
	3: Predicting	Consider removing any numbers over 50. Have students find as many
	Elements	number patterns as they can with numbers 1-50.
	4: Finding Patterns	
	5: Investigating	
	Repeating Patterns	
	Consolidation	
C1.2 create and translate patterns using	Patterning and	
movements, sounds, objects, shapes, letters,	Algebra Cluster 2:	
and numbers	Creating Patterns	
	6: Extending Patterns	
	7: Translating	
	Patterns	
	9: Creating Patterns	
	Consolidation	
C1.3 determine pattern rules and use them to	Patterning and	
extend patterns, make and justify predictions,	Algebra Cluster 1:	3: Predicting Elements
and identify missing elements in patterns	Investigating	Consider having partners cover part of the pattern with a sticky note and
,	Repeating Patterns	the other student determine the missing part.
	1: Repeating the Core	
	3: Predicting	4: Finding Patterns
	Elements	

	4: Finding Patterns	Consider removing any numbers over 50. Have students find as many number patterns as they can with numbers 1-50.
	Patterning and Algebra Cluster 2: Creating Patterns 6: Extending Patterns 8: Errors and Missing Elements	
C1.4 create and describe patterns to illustrate relationships among whole numbers up to 50	Patterning and Algebra Cluster 1: Investigating Repeating Patterns 4: Finding Patterns	4: Finding Patterns Consider removing any numbers over 50. Have students find as many number patterns as you can with numbers 1-50.
Overall Expectation C2. Equations and Inequalities: demonstrate a understanding in various contexts Specific Expectation Variables	n understanding of varia	bles, expressions, equalities, and inequalities, and apply this
C2.1 identify quantities that can change and quantities that always remain the same in real-life contexts	Link to other strands: Number Cluster 5: Composing and Decomposing 20: Money Amounts Number Cluster 8: Financial Literacy 36: Values of Coins	20: Money Amounts You may want to begin with money amounts to 10 cents and increase total to 50 cents as students are ready. 36: Values of Coins Consider introducing the idea that some quantities change and some always remain the same. A loonie is always worth (has a value of) one dollar, but if I have many dollars, the total value will change.
	Measurement Cluster 3: Time and Temperature	19: Relating to Seasons Consider introducing the idea of quantities that change and stay the same. For example: including holidays and their relationship to the seasons. There are always 4 seasons.

	19: Relating to Seasons 20: The Calendar 21: Time and Temperature Consolidation	To consolidate, relate the seasons to the months on the calendar. Discuss how there are always four seasons but the number of days until the seasons change will vary; or that the number of days in winter will stay the same each year but the number of snow days in winter will change from one year to the next. 20: The Calendar Consider discussing holidays that change from year to year and other holidays that are always on the same day. There are always 12 months each year, and 7 days each way. Discuss quantities that change from month to month. 21: Time and Temperature Consolidation Consider other things Zoey could do at the zoo that reflect the calendar. e.g., the days she helps at the zoo (every Thursday or every Saturday); The day the zoo is closed (incorporate holidays that it would be closed); include a variety of seasons.
Specific Expectation Equalities and Inequalities		
C2.2 determine whether given pairs of addition and subtraction expressions are equivalent or not	Patterning and Algebra Cluster 3: Equality and Inequality 10: Exploring Sets 11: Making Equal Sets 12: Using Symbols 13: Equality and Inequality Consolidation	12: Using Symbols Consider providing students with expressions and have them determine if they are equivalent or not (e.g., 5 + 7 6 + 3; 10 + 3 5 + 6; 16 - 3 7 + 6 etc.). Consider including addition and subtraction questions. 13: Equality and Inequality Consolidation Consider including addition and subtraction expressions and determine if they are equivalent or not. A number sentence is also called an expression.
C2.3 identify and use equivalent relationships for whole numbers up to 50, in various contexts	Patterning and Algebra Cluster 3: Equality and Inequality 11: Making Equal Sets	Decomposing Numbers to 50 (New 2020)

Overall Expectation		
C3. Coding: solve problems and create comput	ational representations of	of mathematical situations using coding concepts and skills
Specification Expectation		
Coding Skills		
C3.1 solve problems and create		Exploring Coding (New 2020)
computational representations of		Coding on a Grid (New 2020)
mathematical situations by writing and		
executing code, including code that involves		Number Codes (New 2020)
sequential events		Consolidation (New 2020)
C3.2 read and alter existing code, including		Number Codes (New 2020)
code that involves sequential events, and		Consolidation (New 2020)
describe how changes to the code affect the		
outcomes		
Overall Expectation		
C4. Mathematical Modelling		
apply the process of mathematical modelling to rep		dictions, and provide insight into real-life situations
This overall expectation has no specific expectations. Mathematical modelling is an	Patterning and Algebra	12: Using Symbols
iterative and interconnected process that is	Cluster 2: Creating	Consider providing students with expressions and have them determine
applied to various contexts, allowing students	Patterns	if they are equivalent or not (e.g., $5 + 7 $ _ $6 + 3$; $10 + 3$ _ $5 + 6$; $16 - 3$
to bring in learning from other strands.	7: Translating	7 + 6 etc. Consider including addition and subtraction questions.
Students' demonstration of the process of	Patterns	
mathematical modelling, as they apply	9: Creating Patterns	20: Money Amounts
concepts and skills learned in other strands, is	Consolidation	You may want to begin with money amounts to 10 cents and increase
assessed and evaluated		total to 50 cents as students are ready.
	Patterning and	
	Algebra Cluster 3:	26: Different Representations
	Equality and	Consider using cards to 50.
	Inequality	
	12: Using Symbols	27: Early Place Value Consolidation
	Link to other strands:	For combined grades, give students larger numbers (to 200).

Number Cluster 3: Comparing and Ordering

10: Comparing Sets Pictorially

Number Cluster 4: Skip-Counting

14: Skip-Counting with leftovers

Number Cluster 5: Composing and Decomposing

19: Composing and Decomposing numbers to 20
20: Money Amounts

Number Cluster 6: Early Place Value

26: Different Representations 27: Early Place Value Consolidation

Number Cluster 7: Operational Fluency

34: Math in Pictures 35: Operational Fluency Consolidation

Number Cluster 8: Financial Literacy

2: Making Concrete Graphs

Consider representing students favorite season with a tally chart. Students create a tally chart of their linking cubes prior to representing them on the graph. Combined grade extensions: students use two-way tally tables. On the Assessment Chart: add the information in the last box (compares and orders data).

4: Data management Consolidation

Consider including tally charts and have students compare and order the data greatest to least. Have students make a concrete graph or a pictograph on chart paper to show the sort.

18: Symmetry Consolidation

Consider collecting two-dimensional shapes and three-dimensional objects that have matching halves and determining whether shapes and objects are symmetrical. Make a chart of pictures that show 2-D shapes and 3-D objects that have matching halves (symmetrical).

37: Counting Collections 40: Financial Literacy Consolidation Data Management and Probability Cluster 1: Data Management 2: Making Concrete Graphs 4: Data management Consolidation Geometry Cluster 3: Geometric Relationships 15: Geometric Relationships Consolidation Geometry Cluster 4: Symmetry 18: Symmetry Consolidation

Mathology 1 Correlation (Data Management and Probability) – Ontario

Curriculum Expectations 2020	Mathology Grade 1	Ideas to work with Mathology Activities to meet the new Ontario
	Activity Kit (Prior to 2022)	Curriculum Expectations

Overall Expectation

D1. Data Literacy: manage, analyse, and use data to make convincing arguments and informed decisions, in various contexts drawn from real life

Specific Expectation

Data Collection and Organization		
Data Collection and Organization D1.1 sort sets of data about people or things according to one attribute, and describe the rules used for sorting	Data Management and Probability Cluster 1: Data Management 1: Interpreting Graphs	1: Interpreting Graphs Consider ordering the categories of data from greatest to least frequency for various data sets displayed in tally chart, concrete graphs, and pictographs. Introduce how the frequency of a category represents the count or how many.
	Link to other strands: Geometry Cluster 1: 2-D Shapes 1: Sorting Shapes 5: Sorting Rules 6: 2-D Shapes Consolidation	
D1.2 collect data through observations, experiments, or 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 Management and Probability Cluster 1: Data Management 2: Making Concrete Graphs 3: Making Pictographs 4: Data Management Consolidation	2: Making Concrete Graphs Consider representing students' favourite season with a tally chart. Students create a tally chart of their linking cubes prior to representing them on the graph. Combined grade extensions: students use two-way tally tables. On the Assessment Chart: add the information in the last box (compares and orders data).
Specific Expectation Data Visualization		
D1.3 display sets of data, using one-to-one correspondence, in concrete graphs and	Data Management and Probability	2: Making Concrete Graphs

Consider representing students' favourite season with a tally chart.

pictographs with proper sources, titles, and labels Specific Expectation	Cluster 1: Data Management 2: Making Concrete Graphs 3: Making Pictographs 4: Data Management Consolidation	Students create a tally chart of their linking cubes prior to representing them on the graph. Combined grade extensions: students use two-way tally tables. On the Assessment Chart: add the information in the last box (compares and orders data). 3: Making Pictographs Consider discussing making convincing arguments and informed decisions (e.g., Do we need more stop signs? Why or Why not?). Include that pictographs include sources, titles and labels. 4: Data Management Consolidation Consider including tally charts and have students compare and order the data greatest to least. Have students make a concrete graph or a pictograph on chart paper to show the sort.
Data Analysis		
D1.4 order categories of data from greatest to least frequency for various data sets displayed in tally tables, concrete graphs, and pictographs	Data Management and Probability Cluster 1: Data Management 1: Interpreting Graph	1: Interpreting Graph Consider ordering the categories of data from greatest to least frequency for various data sets displayed in tally tables, concrete graphs, and pictographs. Introduce how the frequency of a category represents the count or how many.
D1.5 analyze 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 Management and Probability Cluster 1: Data Management 1: Interpreting Graphs 2: Making Concrete Graphs 3: Making Pictographs	2: Making Concrete Graphs Consider representing students' favourite season with a tally chart. Students create a tally chart of their linking cubes prior to representing them on the graph. Combined grade extensions: students use two-way tally tables. On the Assessment Chart: add the information in the last box (compares and orders data). 3: Making Pictographs Consider discussing making convincing arguments and informed decisions (e.g., Do we need more stop signs? Why or Why not?). Include

	4: Data Management Consolidation	that pictographs include sources, titles and labels. 4: Data Management Consolidation Consider including tally charts and have students compare and order the date greatest to least. Have students make a concrete graph or a pictograph on chart paper to show the sort.
Overall Expectation		
D2. Probability: describe the likelihood that evo	ents will happen and use	that information to make predictions
Specific Expectation		
Probability		
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	Data Management and Probability Cluster 2: Probability and Chance 5: Likelihood of Events 6: Probability and Chance Consolidation	6: Probability and Chance Consolidation Consider predicting and recording the likelihood of the same events happening in the community (e.g., the weather tomorrow). Have students make informed decisions about these predictions.
D2.2 make and test predictions about the likelihood that the categories in a data set will have the same frequencies in data collected from a different population of the same size		Making and Testing Predictions (New 2020)

Mathology 1 Correlation (Geometry and Measurement) – Ontario

Curriculum Expectations 2020	Mathology Grade 1 Activity Kit (Prior to 2022)	Ideas to work with Mathology Activities to meet the new Ontario Curriculum Expectations
Overall Expectation		
E1. Geometric and Spatial Reasoning: de	escribe and represent shape, lo	ocation, and movement by applying geometric properties and spatial
relationships in order to navigate the wo	rld around them	
Specific Expectation		
Geometric Reasoning		

E1.1 sort three-dimensional objects and two-dimensional shapes according to one attribute at a time, and identify the sorting rule being used	Geometry Cluster 1: 2-D Shapes 1: Sorting Shapes 2: Identifying Triangles 3: Identifying Rectangles 4: Visualizing Shapes 5: Sorting Rules 6: 2D Shapes Consolidation	10: 3-D Solids Consolidation Consider include descriptions of attributes of length and angle.
	Geometry Cluster 2: 3-D Solids 7: Exploring 3-D Solids 8: Sorting 3-D Solids 9: Identifying the Sorting Rule 10: 3-D Solids Consolidation	
E1.2 construct three-dimensional objects, and identify two-dimensional shapes contained within structures and objects	Geometry Cluster 3: Geometric Relationships 11: Faces of Solids 15: Geometric Relationships Consolidation	Constructing Solids and Skeletons (New 2020)
E1.3 construct and describe two-dimensional shapes and three-dimensional objects that have matching halves.	Geometry Cluster 4: Symmetry 16: Finding Lines of Symmetry 18: Symmetry Consolidation	18: Symmetry Consolidation Consider collecting two-dimensional shapes and three-dimensional objects that have matching halves, and determine whether shapes and objects are symmetrical. Make a chart of pictures that show 2-D shapes and 3-D objects that have matching halves (symmetrical).

		Building Symmetrical Solids (New 2020)
Specific Expectation Location and Movement		
E1.4 describe the relative locations of objects or people, using positional language	Geometry Cluster 5: Location and Movement 19: Perspective Taking 20: Mapping 21: Location and Movement Consolidation	21: Location and Movement Consolidation Consider adapting to include read and alter code.
E1.5 give and follow directions for moving from one location to another	Geometry Cluster 5: Location and Movement 20: Mapping 21: Location and Movement Consolidation	21: Location and Movement Consolidation Consider adapting to include read and alter code.
Overall Expectation E2. Measurement: compare, estimate, and det	termine measurements i	n various contexts
Specific Expectation Attributes		TVG.1045 CONTEXTS
E2.1 identify measurable attributes of two-dimensional shapes and three-dimensional objects, including length, area, mass, capacity, and angle	Measurement Cluster 1: Comparing Objects 1: Comparing Length 2: Comparing Mass 3: Comparing Capacity 4: Making Comparisons 5: Comparing Area	1: Comparing Length Consider adding comparisons of length, width, height. Throughout the lesson, review length being measured in different directions (up and down height; etc.) 6: Comparing Objects Consolidation

E2.2 compare several everyday objects and order them according to length, area, mass, and capacity	6: Comparing Objects Consolidation Geometry Cluster 2: 3-D Solids 7: Exploring 3-D Solids 10: 3-D Solids Consolidation Measurement Cluster 1: Comparing Objects 1: Comparing Length 2: Comparing Mass 3: Comparing Capacity 4: Making Comparisons 5: Comparing Area 6: Comparing Objects Consolidation	Consider including collections of 2-D and 3-D items. Include angles and length for 2-D shapes and 3-D solids. Use angles as the amount of turn between one line and another. 10: 3-D Solids Consolidation Consider omitting references to capacity. 1: Comparing Length Consider adding comparisons of length, width, height. Throughout the lesson review length being measured in different directions (up and down height; etc.) 6: Comparing Objects Consolidation Consider including collections of 2-D and 3-D items. Include angles and length for 2-D shapes and 3-D solids. Use angles as the amount of turn between one line and another.
Specific Expectation Time		
E2.3 read the date on a calendar, and use a calendar to identify days, weeks, months, holidays, and seasons	Measurement Cluster 3: Time and Temperature 19: Relating to Seasons 20: The Calendar Link to other strands: Number Cluster 1: Counting 4: Ordinal Numbers	19: Relating to Seasons Consider introducing the idea of quantities that change and stay the same. For example: including holidays and their relationship to the seasons. There are always 4 seasons. To consolidate, relate the seasons to the months on the calendar. Discuss how there are always four seasons but the number of days until the seasons change will vary; or that the number of days in winter will stay the same each year but the number of snow days in winter will change from one year to the next.

		20: The Calendar Consider discussing holidays that change from year to year and other holidays that are always on the same day. There are always 12 months each year, and 7 days each way. Discuss quantities that change from month to month.
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Curriculum Expectations 2020	Mathology Grade 1 Activity Kit (Prior to	Ideas to work with Mathology Activities to meet the new Ontario Curriculum Expectations
	2022)	Curriculum Expectations
Overall Expectation		
F1. Money and Finances: demonstrate an under	erstanding of the value o	of Canadian currency
Specific Expectations		
Money Concepts		
F1.1 identify the various Canadian coins up to	Number Cluster 5:	20: Money Amounts
50¢ and coins and bills up to \$50, and	Composing and	Consider beginning with money amounts to 10.
compare their values	Decomposing	
	20: Money Amounts	36: Values of Coins
		Consider introducing the idea that some quantities change and some
	Number Cluster 8:	always remain the same. A loonie is always worth (has a value of) one
	Financial Literacy	dollar, but if I have many dollars, the total value will change.
	36: Values of Coins	
	37: Counting	Values of Bills (New 2020)
	Collections	
	40: Financial Literacy	
	Consolidation	