# Mathletics

## **Quebec Progression of Learning**

Activities (Courses) and Skill Quests



**Grades 1-2** 

July, 2025



Gra	de 1		3
1	Arith	ımetic	3
	1.1	Understanding and writing numbers	3
	1.2	Meaning of operations involving numbers	7
	1.3	Operations involving numbers	8
2	G	Geometry	12
	2.1 (	Geometry	12
3	N	Лeasurement	15
	3.1	Measurement	15
4	S	tatistics	17
	4.1 9	Statistics	17
5	P	Probability	18
	5.1 F	Probability	18
Gra	de 2		20
1	Δ	Arithmetic	20
	1.1	Understanding and writing numbers	20
	1.2	Meaning of operations involving numbers	23
	1.3	Operations involving numbers	25
2	G	Geometry	28
	2.1	Geometry	28
3	N	Aeasurement	31
	3.1	Measurement	31
4	S	tatistics	33
	4.1	Statistics	33
5	P	No. 1, 1, 1, 1919	2/
		Probability	

### **Grade 1**

### 1 Arithmetic

### 1.1 Understanding and writing numbers

1.A.U.A1
Natural numbers less than 1000. 1. Counts or recites counting rhymes involving natural numbers a. counts
forward from a given number b. counts forward or backward c. skip counts (e.g. by twos)

Course Topics	Activities
Arithmetic-Counting	Counting by Twos
	Counting by Fives
	Counting by Tens
	Skip Counting
Arithmetic-Ordering and	Order Numbers to 10
Comparing	Order Numbers to 20
	Going Up
	Going Down
	Number Line Order
Topics	Skill Quests
Count forward & back	Counting forward & backward in ones within 100
within 100	
Skip count by 2, 5 & 10	Skip counting forward & backward by 2s up to 50
	Skip counting forward & backward by 5s up to 100
	Skip counting forward & backward by 10s to 100
	·

### 1.A.U.A2

Natural numbers less than 1000 2. Counts collections (using objects or drawings) a. matches the gesture to the corresponding number word; recognizes the cardinal aspect of a number and the conservation of number in various combinations b. counts from a given number c. counts a collection by grouping or regrouping

Course Topics	Activities
Arithmetic-Ordering and	How Many?
Comparing	How many dots?
	More or Less?
	How many Blocks?
	Making Teen Numbers
	Comparing Groups of Objects
Topics	Skill Quests
Create & count	Understanding conservation of numbers to 30
collections to 100	Creating & counting collections to 20
	Creating & counting collections up to 100
E: 1 1 C O C: 1	Finding numbers before & after to 100
Find numbers before & after to	Finding numbers before & after to 100

1.A.U.A3		
Natural numbers less than 1000. 3. Reads and writes any natural number.		
Course Topics	Activities	
Teacher directed		
Topics	Skill Quests	
Read, write & represent 2-digit	Connecting number names & numerals to 100	
numbers		

1.A.U.A4  Natural numbers less than 1000 4. Represents natural numbers in different ways or associates a number with a set of objects or drawings  a. emphasis on apparent, accessible groupings using objects, drawings or unstructured materials	
Course Topics	Activities
Arithmetic-Counting	Making Numbers Count
	Making Big Numbers Count
	Make Numbers Count
	Model Numbers
Arithmetic-Ordering and	Compare Numbers to 100
Comparing	
Operations-Addition and	1 More, 10 Less
Subtraction	1 More, 2 Less
Topics	Skill Quests
Represent 2-digit numbers different ways	Representing 2-digit numbers in different ways

1.A.U.A5  Natural numbers less than 1000. 5. Composes and decomposes a natural number in a variety of ways.	
Course Topics	Activities
Arithmetic-Counting	Model Numbers
Arithmetic-Ordering and	Making Teen Numbers
Comparing	
Operations-Addition and	Mental Addition
Subtraction	Complements to 50 and 100
	Complements to 10, 20, 50
	Decompose Numbers to Subtract
Topics	Skill Quests
Partition numbers to 100	Standard partitioning of 2-digit numbers
	Non-standard partitioning of 2-digit numbers

1.A.U.A6			
Natural numbers less than 1000	Natural numbers less than 1000. 6. Identifies equivalent expressions (e.g. 52 = 40 + 12, 25 + 27 = 40 + 12,		
52 = 104 ÷ 2)			
Course Topics	Activities		
Teacher directed			
Topics	Skill Quests		
Recognize equivalent	Recognizing equality in		
number sentences	numbers up to 50		

1.A.U.A7  Natural numbers less than 1000. 7. Compares natural numbers		
Course Topics	Activities	
Arithmetic-Ordering and	Compare Numbers to 100	
Comparing	Which is Bigger?	
	Which is Smaller?	
Topics	Skill Quests	
Compare numbers within 100	Comparing numbers up to 100	

1.A.U.A8	
Natural numbers less than	1000. 8. Arranges natural numbers in increasing or decreasing order
Course Topics	Activities
Arithmetic-Ordering and	Comparing Groups of Objects
Comparing	Ascending Order
	Descending Order
Topics	Skill Quests
Order numbers within 100	Ordering numbers & collections within 100

	4.4.11.40		
	1.A.U.A9		
Natural numbers less than 1000	9. Describes number patterns, using his/her own words and appropriate		
mathematical vocabulary (e.g. e	mathematical vocabulary (e.g. even numbers, odd numbers, square numbers, triangular numbers, prime		
	numbers, composite numbers)		
Course Topics	Activities		
Arithmetic-Counting	Skip Counting		
Operations-Patterns	Describing Patterns		
Topics	Skill Quests		
Describe patterns as odd or	Recognizing odd & even		
even	number patterns		

1.A.U.A10  Natural numbers less than 1000. 10. Locates natural numbers using different visual aids (e.g. hundreds chart, number strip, number line)		
Course Topics	Activities	
Arithmetic-Counting	1st to 31st	
Arithmetic-Ordering and	Number Line Order	
Comparing	Number Lines	
Topics	Skill Quests	
Teacher directed	Teacher directed	

1.A.U.A11	
Natural numbers less than 1000. 11. Identifies properties of natural numbers a. odd or even numbers	
Course Topics	Activities
Teacher directed	
Topics	Skill Quests
Teacher directed	

1.A.U.A12	
Natural numbers less than 1000. 12. Classifies natural numbers in various ways, based on their properties	
(e.g. even numbers, composite numbers)	
Course Topics	Activities
Arithmetic-Counting	Odd and Even Numbers 1
Topics	Skill Quests
Investigate properties of	Investigating properties of odd & even numbers
numbers	

1.A.U.A13  Natural numbers less than 1000. 13. Approximates a collection, using objects or drawings (e.g. estimate,	
round up/down to a given value)	
Course Topics	Activities
Arithmetic-Counting	Nearest 10?
	Nearest 100?
Topics	Skill Quests
Round numbers	Rounding numbers up to 100

1.A.U.B1	
Fractions (using objects or drawings) 1. Identifies fractions related to everyday items (using objects or drawing)	
Course Topics	Activities
Teacher directed	
Topics	Skill Quests
Teacher directed	

### 1.A.U.B2

Fractions (using objects or drawings) 2. Represents a fraction in a variety of ways, based on a whole or a collection of objects

Course Topics	Activities
Arithmetic-Counting	Halves and Quarters
Topics	Skill Quests
Fractions - halves	Finding halves

### 1.2 Meaning of operations involving numbers

1.A.M.A1	
Natural numbers less than 1000. 1. Determines the operation(s) to perform in a given situation	
Course Topics	Activities
Teacher directed	
Topics	Skill Quests
Solve addition & subtraction	Creating addition & subtraction problems within 20
problems	

#### 1.A.M.A2

Natural numbers less than 1000. 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 addition and subtraction) a. transformation (adding, taking away), uniting, comparing

Course Topics	Activities
Teacher directed	
Topics	Skill Quests
Model addition to 10	Modelling & recording combinations to 10

### 1.A.M.A3

Natural numbers less than 1000. 3. Uses object, diagrams or equations to represent a situation and conversely, describes a situation represented by objects, diagrams or equations (use of different means of multiplication and division) a. rectangular arrays, repeated addition, Cartesian product, sharing, and number of times x goes into y (using objects and diagrams)

Course Topics	Activities
Arithmetic-Counting	Groups of Ten
Operations-Addition and	Share the Treasure
Subtraction	
Topics	Skill Quests
Topics  Multiply by equal grouping	Skill Quests Grouping & skip counting to multiply

1.A.M.A4	
Natural numbers less than 1000. 4. Establishes equality relations between numerical expressions	
Course Topics	Activities
Teacher directed	
Topics	Skill Quests
Find equality in expressions	Recognizing equality in addition & subtraction

1.A.M.A5	
Natural numbers less than 1000. 5. Determines numerical equivalences using relationships between. a.	
operations (addition and subtraction) and the commutative property of addition	
Course Topics	Activities
Teacher directed	
Topics	Skill Quests
Commutative properties of	Introducing the commutative property of addition
addition	

### 1.3 Operations involving numbers

1.A.O.A1	
Natural numbers (less than 1000). 1. Approximates the result of a. an addition or subtraction involving	
natural numbers	
Course Topics	Activities
Teacher directed	
Topics	Skill Quests
Teacher directed	

### 1.A.O.A2

Natural numbers (less than 1000). 2. Builds a repertoire of memorized addition and subtraction facts. a. Builds a memory of addition facts (0 + 0 to 10 + 10) and the corresponding subtraction facts, using objects, drawings, charts or tables

b. Develops various strategies that promote mastery of number facts and relates them to the properties of addition

c. Masters all addition facts (0 + 0 to 10 + 10) and the corresponding subtraction facts

Course Topics	Activities
Arithmetic-Ordering and	Balance Numbers to 20
Comparing	Balance Additions to 20
Operations-Addition and	Model Addition
Subtraction	Addition Facts to 18
	Model Subtraction
	Subtraction Facts to 18
	Add and Subtract Using Graphs
	Balance Numbers to 10
	Add and Subtract Problems
Topics	Skill Quests
Addition & subtraction facts to	Ways to make 10
10	Adding & subtracting within 10

### 1.A.O.A3

Natural numbers (less than 1000). 3. Develops processes for mental computation. a. Uses his/her own processes to determine the sum or difference of two natural numbers

Course Topics	Activities
Arithmetic-Ordering and	Balance Numbers to 20
Comparing	Balance Additions to 20
Operations-Addition and	Model Addition
Subtraction	Addition Facts to 18
	Model Subtraction
	Subtraction Facts to 18
	Add and Subtract Using Graphs
	Balance Numbers to 10
	Add and Subtract Problems
Topics	Skill Quests
Mental strategies addition &	Adding single numbers
subtraction	Adding & subtracting within 20
	Doubles & near doubles to 20
	Using a bar model to add & subtract to 20
	Adding & subtracting zero to 20
	Strategies to add 1-digit numbers

### 1.A.O.A4

Natural numbers (less than 1000). 4. Develops processes for written computation (addition and subtraction). a. Uses his/her own processes as well as objects and drawings to determine the sum or difference of two natural numbers less than 1000

difference of two natural numbers less than 1000	
Course Topics	Activities
Arithmetic-Ordering and	How many Blocks?
Comparing	
Operations-Addition and	All about Twenty
Subtraction	Mental Addition
	Missing Values
	Model Addition
	Addition Facts to 18
	Model Subtraction
	Subtraction Facts to 18
	Complements to 50 and 100
	Complements to 10, 20, 50
	1 More, 10 Less
	1 More, 2 Less
	Add and Subtract Problems
	Decompose Numbers to Subtract
Topics	Skill Quests
Teacher directed	

### 1.A.O.A5

Natural numbers (less than 1000). 5. Determines the missing term in an equation (relationships between operations)  $a + b = \Box$ ,  $a + \Box = c$ ,  $\Box + b = c$ ,  $a - b = \Box$ ,  $a - \Box = c$ ,  $\Box - b = c$ 

Course Topics	Activities
Operations-Addition and	All about Twenty
Subtraction	
	Missing Values
	Add and Subtract Using Graphs
	Complements to 50 and 100
	Complements to 10, 20, 50
	Balance Numbers to 10
Topics	Skill Quests
Find missing term in	Finding the missing term in addition & subtraction
add/subtract	

#### 1.A.O.A13

Natural numbers (less than 1000) 13. Using his/her own words and mathematical language that is at an appropriate level for the cycle, describes a. non-numerical patterns (e.g. series of colours, shapes, sounds, gestures) b. numerical patterns (e.g. number rhymes, tables and charts) c. series of numbers and family operations

Course Topics	Activities
Teacher directed	
Topics	Skill Quests
Repeating patterns	Recognizing repeating patterns
	Creating repeating patterns

#### 1.A.O.A14

Natural numbers (less than 1000). 14. Adds new terms to a series when the first three terms or more are given

Course Topics	Activities
Operations-Patterns	Increasing Patterns
	Increasing Patterns 1
	Pick the Next Number
	Count Forward Patterns
	Count Backward Patterns
Topics	Skill Quests
Extend & copy repeating	Extending repeating patterns
patterns	Copying a repeating pattern

1.A.O.A15	
Natural numbers (less than 1000). 15. Uses a calculator and a. becomes familiar with its basic functions (+,	
-, =, 0 to 9 number keys, all clear, clear)	
Course Topics	Activities
Teacher directed	
Topics	Skill Quests
Teacher directed	

### 2 Geometry

### 2.1 Geometry

1.G.A1	
Space. 1. Gets his/her bearings and locates objects in space (spatial awareness)	
Course Topics	Activities
Geometry	Left or Right?
Topics	Skill Quests
Position & direction	Describing position & direction

1.G.A2	
Space. 2. Locates objects in a plane	
Course Topics	Activities
Geometry	Following Directions
	Coordinate Meeting Place
Topics	Skill Quests
Locate objects	Locating objects

1.G.A3	
Space. 3. Locates objects on an axis (based on the types of numbers studied)	
Course Topics	Activities
Geometry	Coordinate Meeting Place
Topics	Skill Quests
Teacher directed	

1.G.A4	
Space. 4. Locates points in a Cartesian plane. a. in the first quadrant	
Course Topics	Activities
Geometry	Map Coordinates
	Coordinate Graphs: 1st Quadrant
Topics	Skill Quests
Teacher directed	

### 1.G.B1

Solids. 1. Compares objects or parts of objects in the environment with solids(e.g. spheres, cones, cubes, cylinders, prisms, pyramids)

Course Topics	Activities
Geometry	Match the Object
Topics	Skill Quests
Introduce 3D objects	Introducing spheres
	Introducing cones
	Introducing cubes
	Introducing cylinders
	Introducing prisms
	Introducing pyramids

1.G.B2	
Solids. 2.Compares and constructs solids(e.g. spheres, cones, cubes, cylinders, prisms, pyramids)	
Course Topics	Activities
Teacher directed	
Topics	Skill Quests
Teacher directed	

1.G.B3	
Solids. 3. Identifies the main solids	
Course Topics	Activities
Geometry	Collect the Objects
Topics	Skill Quests
Identify main solids	Naming main solids

1.G.B4		
Solids. 4. Identifie	Solids. 4. Identifies and represents the different faces of a prism or pyramid	
Course Topics	Activities	
Geometry	Collect the Objects	
	Relate Shapes and Solids	
Topics	Skill Quests	
Introduce surfaces in solids	Introducing surfaces	

1.G.C1	
Plane figures. 1. Compares and constructs figures made with closed curved lines or closed straight lines	
Course Topics	Activities
Geometry	Collect the Shapes
Topics	Skill Quests
Compare plane shapes	Comparing plane shapes

1.G.C2	
Plane figures. 2. Identifies plane figures (square, rectangle, triangle, rhombus and circle	
Course Topics	Activities
Geometry	Collect the Shapes
Topics	Skill Quests
Identify plane figures	Sorting quadrilaterals

1.G.C3	
Plane figures 3. Describes plane figures (square, rectangle, triangle and rhombus)	
Course Topics	Activities
Teacher directed	
Topics	Skill Quests
Teacher directed	

1.G.D1	
Frieze patterns and tessellations. 1. Identifies congruent figures	
Course Topics	Activities
Teacher directed	
Topics	Skill Quests
Teacher directed	

1.G.D2	
Frieze patterns and tessellations. 2. Observes and produces patterns using geometric figures	
Course Topics	Activities
Teacher directed	
Topics	Skill Quests
Teacher directed	

### 3 Measurement

### 3.1 Measurement

1.M.A1  Lengths. 1. Compares length	
Course Topics	Activities
Measurement	Comparing Length
	Everyday Length
	Compare Length
Topics	Skill Quests
Teacher directed	

1.M.A2	
Lengths. 2. Constructs rulers	
Course Topics	Activities
Teacher directed	
Topics	Skill Quests
Teacher directed	

1.M.A3	
Lengths. 3. Estimates and measures the dimensions of an object using unconventional units	
Course Topics	Activities
Measurement	Measuring Length with Blocks
Topics	Skill Quests
Measure lengths informally	Measuring lengths – informal

1.M.A4	
Lengths. 4. Estimates and measures the dimensions of an object using conventional units. a. metre,	
decimetre and centimetre	
Course Topics	Activities
Measurement	How Long is That?
Topics	Skill Quests
Teacher directed	

1.M.G1	
Time. 1. Es	timates and measures time using conventional units
Course Topics	Activities
Measurement	Hour Times
	Half Hour Times
	Tell Time to the Half Hour
Topics	Skill Quests
Measures of time	Introducing days & months

1.M.G2  Time. 2. Establishes relationships between units of measure	
Course Topics	Activities
Measurement	Hour Times
	Half Hour Times
	Tell Time to the Half Hour
Topics	Skill Quests
Teacher directed	

1.M.H1	
Temperature. 1. Estimates and measures temperature using conventional units	
Course Topics	Activities
Teacher directed	
Topics	Skill Quests
Teacher directed	

### 4 Statistics

### 4.1 Statistics

1.S.1 Statistics. 1. Formulates questions for a survey (based on age-appropriate topics, students' language level, etc)	
Course Topics	Activities
Teacher directed	
Topics	Skill Quests
Choose questions for surveys	Choosing suitable questions for surveys

1.S.2		
Statistics. 2. Collects, de	Statistics. 2. Collects, describes and organizes data (classifies or categorizes) using tables	
Course Topics	Activities	
Statistics and Probability	Sort It	
Topics	Skill Quests	
Gather & record data	Gathering & recording data	
	Introducing tally charts	

1.S.3 Statistics. 3. Interprets data using a. a table, a bar graph and a pictograph	
Course Topics	Activities
Statistics and Probability	Who has the Goods?
	Pictographs
	Bar Graphs 1
	Interpreting Tables
	Bar Graphs 2
Topics	Skill Quests
Interpret data	Reading simple data displays

1.S.4	
Statistics. 4. Displays data using a. a table, a bar graph and a pictograph	
Course Topics	Activities
Teacher directed	
Topics	Skill Quests
Represent data	Representing data in a simple display

### 5 Probability

### 5.1 Probability

1.P.1	
Probability. 1. When applicable, recognizes variability in possible outcomes (uncertainty)	
Course Topics	Activities
Teacher directed	
Topics	Skill Quests
Recognize variability	Exploring possible outcomes

1.P.2	
Probability. 2. When applicable, recognizes equiprobability (e.g. quantity, symmetry of an object [cube])	
Course Topics	Activities
Teacher directed	
Topics	Skill Quests
Teacher directed	

1.P.3	
Probability. 3. When applicable, becomes aware of the independence of events in an experiment	
Course Topics	Activities
Teacher directed	
Topics	Skill Quests
Teacher directed	

1.P.4	
Probability. 4. Experiments with activities involving chance, using various objects (e.g. spinners, rectangular prisms, glasses, marbles, thumb tacks, 6-, 8- or 12-sided dice)	
Course Topics	Activities
Teacher directed	
Topics	Skill Quests
Teacher directed	

1.P.5  Probability. 5. Predicts qualitatively an outcome or several events using a probability line, among other	
Course Topics	gs a. certain, possible or impossible outcome  Activities
Statistics and Probability	What are the Chances?
·	Will it Happen?
	Most Likely and Least Likely
Topics	Skill Quests
Teacher directed	

1.P.6	
Probability. 6. Distinguishes between prediction and outcome	
Course Topics	Activities
Teacher directed	
Topics	Skill Quests
Teacher directed	

1.P.7	
Probability. 7. Uses tables or diagrams to collect and display the outcomes of an experiment	
Course Topics	Activities
Teacher directed	
Topics	Skill Quests
Teacher directed	

1.P.8	
Probability. 8. Enumerates possible outcomes of a. a simple random experiment	
Course Topics	Activities
Teacher directed	
Topics	Skill Quests
Teacher directed	

### **Grade 2**

### 1 Arithmetic

### 1.1 Understanding and writing numbers

2.A.U.A1  Natural numbers less than 1000. 1. Counts or recites counting rhymes involving natural numbers a. counts forward from a given number b. counts forward or backward c. skip counts (e.g. by twos)	
Course Topics	Activities
Numbers 1	Going Up
	Number Line Order
	Going Down
	Counting by Twos
	Counting by Fives
	Counting by Tens
	Order Numbers to 20
	Skip Counting
Topics	Skill Quests
Count forward & backward within 1000	Counting forward & backward by 1s within 1000
	Skip counting forward & backward by 2s to 200
	Skip counting forward & backward by 5s to 200
	Skip counting forward & backward by 10s to 200

<b>2.A.U.A2</b> Natural numbers less than 1000. 2. Counts collections (using objects or drawings). b. counts from a given number. c. counts a collection by grouping or regrouping	
Course Topics	Activities
Teacher directed	
Topics	Skill Quests
Identify numbers before & after	Identifying numbers before & after within 1000
to 1000	
Count in hundreds, tens & ones	Counting in hundreds, tens & ones
Count collection by grouping	Counting large collections by grouping

2.A.U.A3	
Natural numbers less than 1000. 3. Reads and writes any natural number	
Course Topics	Activities
Teacher directed	
Topics	Skill Quests
Read, write & represent 3-digit	Reading, writing &
numbers	representing 3-digit numbers

### 2.A.U.A4

Natural numbers less than 1000 4. Represents natural numbers in different ways or associates a number with a set of objects or drawings. a. 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) b. emphasis on exchanging apparent, non-accessible groupings, using structured materials, (e.g. base ten blocks, number tables)

Course Topics	Activities
Numbers 1	Compare Numbers to 100
Numbers 2	Making Big Numbers Count
	Model Numbers
Topics	Skill Quests
Represent numbers in different	Using groups to represent
ways	3-digit numbers

2.A.U.A5	
Natural numbers less than 1000. 5. Composes and decomposes a natural number in a variety of ways (e.g. $123 = 100 + 23$ , $123 = 100 + 20 + 3$ , $123 = 50 + 50 + 20 + 3$ , $123 = 2 \times 50 + 30 - 7$ , $123 = 2 \times 60 + 3$ )	
Course Topics	Activities
Numbers 2	Model Numbers
Operations with Numbers 1	Complements to 50 and 100
	Complements to 10, 20, 50
Topics	Skill Quests
Partition numbers within 1000	Standard partitioning within 1000
	Non-standard partitioning within 1000

<b>2.A.U.A6</b> Natural numbers less than 1000. 6. Identifies equivalent expressions (e.g. $52 = 40 + 12$ , $25 + 27 = 40 + 12$ , $52 = 104 \div 2$ )		
Course Topics	Activities	
Teacher directed		
Topics	Skill Quests	
Equality & inequality	Recognizing equality	
	Representing equality & inequality	

2.A.U.A7	
Natural numbers less than 1000. 7. Compares natural numbers	
Course Topics	Activities
Numbers 1	Compare Numbers to 100
Numbers 2	Which is Bigger?
	Which is Smaller?
Topics	Skill Quests
Compare numbers within 1000	Comparing numbers within 1000

2.A.U.A8	
Natural numbers less than 1000. 8. Arranges natural numbers in increasing or decreasing order	
Course Topics	Activities
Teacher directed	
Topics	Skill Quests
Order numbers within 1000	Ordering numbers within 1000

### 2.A.U.A9

Natural numbers less than 1000. 9. Describes number patterns, using his/her own words and appropriate mathematical vocabulary (e.g. even numbers, odd numbers, square numbers, triangular numbers, prime numbers, composite numbers)

Course Topics	Activities
Numbers 1	Skip Counting
Topics	Skill Quests
Teacher directed	

### 2.A.U.A10

Natural numbers less than 1000. 10. Locates natural numbers using different visual aids (e.g. hundreds chart, number strip, number line)

Course Topics	Activities
Numbers 1	Number Line Order
Topics	Skill Quests
Teacher directed	

2.A.U.A11	
Natural numbers less than 1000. 11. Identifies properties of natural numbers. a. odd or even numbers	
Course Topics	Activities
Teacher directed	
Topics	Skill Quests
Teacher directed	

<b>2.A.U.A12</b> Natural numbers less than 1000. 12. Classifies natural numbers in various ways, based on their properties (e.g. even numbers, composite numbers)	
Course Topics	Activities
Numbers 2	Odd and Even Numbers 1
Topics	Skill Quests
Investigate odd & even numbers	Investigating odd & even numbers

2.A.U.A13	
Natural numbers less than 1000. 13. Approximates a collection, using objects or drawings (e.g. estimate,	
round up/down to a given value)	
Course Topics	Activities
Numbers 2	Nearest 100?
Topics	Skill Quests
Round up & down within 1000	Rounding up & down within 1000

2.A.U.B1	
Fractions (using objects or drawings). 1. Identifies fractions related to everyday items (using objects or drawing)	
37	
Course Topics	Activities
Teacher directed	
Topics	Skill Quests
Teacher directed	

<b>2.A.U.B2</b> Fractions (using objects or drawings). 2. Represents a fraction in a variety of ways, based on a whole or a collection of objects	
Course Topics	Activities
Numbers 2	Halves and Quarters
Topics	Skill Quests
Fractions	Recognizing & finding quarters
	Finding halves & quarters

### 1.2 Meaning of operations involving numbers

2.A.M.A1	
Natural numbers less than 1000. 1. Determines the operation(s) to perform in a given situation	
Course Topics	Activities
Teacher directed	
Topics	Skill Quests
Determine operation to use	Create & solve addition &
	subtraction problems

2.A.M.A2	
Natural numbers less than 1000. 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 addition and subtraction). a. transformation (adding, taking away), uniting, comparing	
Course Topics	Activities
Teacher directed	
Topics	Skill Quests
Teacher directed	

### 2.A.M.A3

Natural numbers less than 1000. 3. Uses object, diagrams or equations to represent a situation and conversely, describes a situation represented by objects, diagrams or equations (use of different means of multiplication and division). a. rectangular arrays, repeated addition, Cartesian product, sharing, and number of times x goes into y (using objects and diagrams)

Course Topics	Activities
Operations with Numbers 2	Groups of Two
	Groups of Ten
	Groups of Five
	Groups of Three
	Groups of Six
	Groups of Nine
	Groups of Four
	Groups of Eight
	Groups of Seven
	Share the Treasure
	Fill the Jars
Topics	Skill Quests
Multiply by equal grouping	Introducing arrays
	Using repeated addition
Divide by equal grouping	Dividing by sharing & grouping
	Dividing by repeated subtraction

2.A.M.A4	
Natural numbers less than 1000 . 4. Establishes equality relations between numerical expressions	
Course Topics	Activities
Teacher directed	
Topics	Skill Quests
Find equality in expressions	Solving add & subtract equality problems to 20

2.A.M.A5	
Natural numbers less than 1000. 5. Determines numerical equivalences using relationships between. a.	
operations (addition and subtraction) and the commutative property of addition	
Course Topics	Activities
Teacher directed	
Topics	Skill Quests
Commutative properties of	Using the commutative property for addition to 20
addition	

### 1.3 Operations involving numbers

#### 2.A.O.A1

Natural numbers (based on the benchmarks for each cycle). 1. Approximates the result of a. an addition or subtraction involving natural numbers

Course Topics	Activities
Teacher directed	
Topics	Skill Quests
Use estimation in addition &	Estimating sums & differences
subtraction	

#### 2.A.O.A2

Natural numbers (based on the benchmarks for each cycle) 2. Builds a repertoire of memorized addition and subtraction facts a. Builds a memory of addition facts (0 + 0 to 10 + 10) and the corresponding subtraction facts, using objects, drawings, charts or tables b. Develops various strategies that promote mastery of number facts and relates them to the properties of addition c. Masters all addition facts (0 + 0 to 10 + 10) and the corresponding subtraction

Course TopicsActivitiesOperations with Numbers 1Addition Facts to 18Subtraction Facts to 18Subtraction Facts to 18Balance Numbers to 10Balance Numbers to 20TopicsSkill QuestsMemorize addition & subtraction factsBonds to 10

#### 2.A.O.A3

Natural numbers (based on the benchmarks for each cycle). 3. Develops processes for mental computation. a. Uses his/her own processes to determine the sum or difference of two natural numbers

Course Topics	Activities
Operations with Numbers 1	Addition Facts to 18
	Subtraction Facts to 18
	Balance Numbers to 10
	Balance Numbers to 20
Topics	Skill Quests
Addition using mental	Adding 2-digit & 1-digit numbers using place value
strategies	Adding by bridging to 10 with 2- & 1-digit numbers
	Adding tens to a 2-digit number using models
	Adding two 2-digit numbers using place value
	Adding by compensating
Subtraction using mental strategies	Subtracting by bridging to 10
	Subtracting 2- & 1-digit numbers using place value
	Subtracting using mixed strategies
	Subtracting tens from a 2-digit number
	Subtracting two 2-digit numbers using place value
	Subtracting two 2-digit numbers on a number line
	Subtracting by compensating
Add & subtract using mental	Using the relationship of addition & subtraction
strategies	Adding & subtracting using mixed strategies

#### 2.A.O.A4

Natural numbers (based on the benchmarks for each cycle). 4. Develops processes for written computation (addition and subtraction). a. Uses his/her own processes as well as objects and drawings to determine the sum or difference of two natural numbers less than 1000

Course Topics	Activities
Operations with Numbers 1	All about Twenty
	Addition Facts to 18
	Subtraction Facts to 18
	Complements to 50 and 100
	Complements to 10, 20, 50
Topics	Skill Quests
Add & subtract using a number	Adding two 2-digit numbers using a number line
line	Subtracting 2-digit numbers using a number line

### 2.A.O.A5

Natural numbers (based on the benchmarks for each cycle). 5. Determines the missing term in an equation (relationships between operations)  $a + b = \Box$ ,  $a + \Box = c$ ,  $\Box + b = c$ ,  $a - b = \Box$ ,  $a - \Box = c$ ,  $\Box - b = c$ 

(relationships between operations) a + b = b, a + b = c, a + b = c, a - b = b, a - b = c	
Course Topics	Activities
Operations with Numbers 1	All about Twenty
	Complements to 50 and 100
	Complements to 10, 20, 50
	Balance Numbers to 10
	Balance Numbers to 20
Topics	Skill Quests
Find a missing term	Finding missing number in add/sub up to 18

### 2.A.O.A13

Natural numbers (based on the benchmarks for each cycle). 13. Using his/her own words and mathematical language that is at an appropriate level for the cycle, describes. a. non-numerical patterns (e.g. series of colours, shapes, sounds, gestures) b. numerical patterns (e.g. number rhymes, tables and charts) c. series of numbers and family operations

Course Topics	Activities	
Teacher directed	Teacher directed	
Topics	Skill Quests	
Non-numerical & numerical	Exploring visual patterns	
patterns		
	Exploring patterns with transformations	
	Identifying & describing number patterns to 100	

2.A.O.A14	
Natural numbers (based on the benchmarks for each cycle). 14. Adds new terms to a series when the first	
three terms or more are given	
Course Topics	Activities
Teacher directed	
Topics	Skill Quests
Extend number patterns	Extending number patterns to 100

2.A.O.A15	
Natural numbers (based on the benchmarks for each cycle). 15. Uses a calculator and. a. becomes familiar with its basic functions (+, -, =, 0 to 9 number keys, all clear, clear)	
Course Topics	Activities
Teacher directed	
Topics	Skill Quests
Teacher directed	

### 2 Geometry

### 2.1 Geometry

2.G.A1	
Space. 1. Gets his/her bearings and locates objects in space (spatial awareness)	
Course Topics	Activities
Geometry	Left or Right?
Topics	Skill Quests
Describe position	Describing position

2.G.A2	
Space. 2. Locates objects in a plane	
Course Topics	Activities
Geometry	Following Directions
	Coordinate Meeting Place
Topics	Skill Quests
Locate objects on images	Locating objects using images

2.G.A3	
Space. 3. Locates objects on an axis (based on the types of numbers studied)	
Course Topics	Activities
Geometry	Coordinate Meeting Place
Topics	Skill Quests
Teacher directed	

2.G.A4	
Space. 4. Locates points in a Cartesian plane. a. in the first quadrant	
Course Topics	Activities
Teacher directed	
Topics	Skill Quests
Teacher directed	

2.G.B1	
Solids. 1. Compares objects or parts of objects in the environment with solids(e.g. spheres, cones, cubes,	
cylinders, prisms, pyramids)	
Course Topics	Activities
Geometry	Match the Object
Topics	Skill Quests
Compare 3D objects in the	Comparing 3D objects in the environment
environment	

2.G.B2	
Solids. 2.Compares and constructs solids(e.g. spheres, cones, cubes, cylinders, prisms, pyramids)	
Course Topics	Activities
Teacher directed	
Topics	Skill Quests
Compare 3D shapes	Comparing 3D shapes

2.G.B3	
Solids. 3. Identifies the main solids	
Course Topics	Activities
Geometry	Collect the Objects
Topics	Skill Quests
Recognize main solids	Recognizing, sorting & naming main solids

2.G.B4	
Solids. 4. Identifies and represents the different faces of a prism or pyramid	
Course Topics	Activities
Geometry	Collect the Objects
	Relate Shapes and Solids
Topics	Skill Quests
Identify faces of prisms &	Identifying faces of prisms & pyramids
pyramids	

2.G.B8	
Solids. 8. Matches the net of a. a prism to the corresponding prism and vice versa. b. a pyramid to the	
corresponding pyramid and vice versa	
Course Topics	Activities
Teacher directed	
Topics	Skill Quests
Match nets to 3D objects	Matching nets to prisms

2.G.C1	
Plane figures. 1. Compares and constructs figures made with closed curved lines or closed straight lines	
Course Topics	Activities
Geometry	Collect the Shapes
Topics	Skill Quests
Compare plane shapes	Comparing 2D shapes

2.G.C2	
Plane figures. 2. Identifies plane figures (square, rectangle, triangle, rhombus and circle	
Course Topics	Activities
Geometry	Collect the Shapes
Topics	Skill Quests
Teacher directed	

2.G.C3	
Plane figures . 3. Describes plane figures (square, rectangle, triangle and rhombus)	
Course Topics	Activities
Teacher directed	
Topics	Skill Quests
Teacher directed	

2.G.D1	
Frieze patterns and tessellations. 1. Identifies congruent figures	
Course Topics	Activities
Teacher directed	
Topics	Skill Quests
Teacher directed	

2.G.D2	
Frieze patterns and tessellations. 2. Observes and produces patterns using geometric figures	
Course Topics	Activities
Teacher directed	
Topics	Skill Quests
Teacher directed	

### 3 Measurement

### 3.1 Measurement

<b>2.M.A1</b> Lengths. 1. Compares length	
Course Topics	Activities
Measurement	Everyday Length
	Comparing Length
Topics	Skill Quests
Compare non-standard	Comparing non-standard
lengths	lengths

2.M.A2	
Lengths. 2. Constructs rulers	
Course Topics	Activities
Teacher directed	
Topics	Skill Quests
Teacher directed	

2.M.A3	
Lengths. 3. Estimates and measures the dimensions of an object using unconventional units	
Course Topics	Activities
Teacher directed	
Topics	Skill Quests
Teacher directed	

2.M.A4	
Lengths. 4. Estimates and measures the dimensions of an object using conventional units. a. metre,	
decimetre and centimetre	
Course Topics	Activities
Teacher directed	
Topics	Skill Quests
Measure length	Measuring lengths - cm

<b>2.M.G1</b> Time. 1. Estimates and measures time using conventional units	
Course Topics	Activities
Measurement	Set Time to the Hour
	Set Time to the Half Hour
Topics	Skill Quests
Measure time using	Using calendars
conventional units	Introducing minutes
	Choosing appropriate units of time
	Reading digital time (hour & half-hour)

2.M.G2	
Time. 2. Establishes relationships between units of measure	
Course Topics	Activities
Measurement	Set Time to the Hour
	Set Time to the Half Hour
Topics	Skill Quests
Teacher directed	

2.M.H1	
Temperature. 1. Estimates and measures temperature using conventional units	
Course Topics	Activities
Teacher directed	
Topics	Skill Quests
Teacher directed	

### 4 Statistics

### 4.1 Statistics

2.S.1 Statistics. 1. Formulates questions for a survey (based on age-appropriate topics, students' language level, etc)	
Course Topics	Activities
Teacher directed	
Topics	Skill Quests
Teacher directed	

2.S.2	
Statistics. 2. Collects, de	scribes and organizes data (classifies or categorizes) using tables
Course Topics	Activities
Statistics and Probability	Sort It
Topics	Skill Quests
Collect & organize data	Collecting & organizing data

2.S.3	
Statistics. 3. Interprets data using a. a table, a bar graph and a pictograph	
Course Topics	Activities
Statistics and Probability	Sorting Data
	Who has the Goods?
	More or Less?
	Tallies
Topics	Skill Quests
Interpret graphs & tables	Data in pictographs
	Data in tally charts
	Data in tables
	Data in bar graphs

2.S.4	
Statistics. 4. Displays data using. a. a table, a bar graph and a pictograph	
Course Topics	Activities
Statistics and Probability	Tallies
	Making Graphs
Topics	Skill Quests
Represent data	Representing & reading data

### 5 Probability

### 5.1 Probability

2.P.1	
Probability. 1. When applicable, recognizes variability in possible outcomes (uncertainty)	
Course Topics	Activities
Teacher directed	
Topics	Skill Quests
Understand language of	Understanding the language of probability
probability	

2.P.2	
Probability. 2. When applicable, recognizes equiprobability (e.g. quantity, symmetry of an object [cube])	
Course Topics	Activities
Teacher directed	
Topics	Skill Quests
Teacher directed	

2.P.3	
Probability. 3. When applicable, becomes aware of the independence of events in an experiment	
Course Topics	Activities
Teacher directed	
Topics	Skill Quests
Teacher directed	

2.P.4		
Probability. 4. Experiments with activities involving chance, using various objects (e.g. spinners, rectangular		
prisms, gla	prisms, glasses, marbles, thumb tacks, 6-, 8- or 12-sided dice)	
Course Topics	Activities	
Teacher directed		
Topics	Skill Quests	
Teacher directed		

2.P.5	
Probability. 5. Predicts qualitatively an outcome or several events using a probability line, among other	
things a. certain, possible or impossible outcome	
Course Topics	Activities
Statistics and Probability	What are the Chances?
Topics	Skill Quests
Teacher directed	

2.P.6	
Probability. 6. Distinguishes between prediction and outcome	
Course Topics	Activities
Teacher directed	
Topics	Skill Quests
Describe predictions &	Describing predictions & outcomes
outcomes	

2.P.7		
Probability. 7. Uses tables or diagrams to collect and display the outcomes of an experiment		
Course Topics	Activities	
Teacher directed		
Topics	Skill Quests	
Teacher directed		

2.P.8		
Probability. 8. Enumerates possible outcomes of a. a simple random experiment		
Course Topics	Activities	
Teacher directed		
Topics	Skill Quests	
Teacher directed		



For more information about Mathletics, contact our friendly team.

www.mathletics.com/contact

