Mathletics

Quebec Progression of Learning

Activities (Courses) and Skill Quests

Grades 3-6

July, 2025

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Grade 3

1 Arithmetic

1.1 Understanding and writing numbers

3.A.U.A1 Natural numbers less than 100 000. 1. Counts or recites counting rhymes involving natural numbers b. counts forward or backward c. skip counts (e.g. by twos)	
Course Topics	**Activities**
Teacher directed	
Topics	**Skill Quests**
Count using natural numbers	Counting by 1s to 1000
	Counting by 2s to 1000
	Counting by 3s to 1000
	Counting by 4s to 1000
	Counting by 5s to 1000
	Counting by 10s to 1000

3.A.U.A2 Natural numbers less than 100 000. 2. Counts collections (using objects or drawings) c. counts a collection by grouping or regrouping d. counts a pre-grouped collection	
Course Topics	**Activities**
Teacher directed	
Topics	**Skill Quests**
Counting collections	Counting collections of 10s & 100s

3.A.U.A3 Natural numbers less than 100 000. 3. Reads and writes any natural number	
Course Topics	**Activities**
Numbers 1	Place Value to Thousands
	Expanding Numbers
Topics	**Skill Quests**
Read & write numbers to 10 000	Reading & writing numbers to 10 000

3.A.U.A4 Natural numbers less than 100 000. 4. Represents natural numbers in different ways or associates a number with a set of objects or drawings b. emphasis on exchanging apparent, non-accessible groupings, using structured materials (e.g. base ten blocks, number tables) c. emphasis on place value in non-apparent, non-accessible groupings, using materials for which groupings are symbolic	
Course Topics	**Activities**
Numbers 1	Expanding Numbers
	Model Numbers
Topics	**Skill Quests**
Place value of numbers to 10 000	Place value of numbers to 10 000

3.A.U.A5 Natural numbers less than 100 000. 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 × 50 + 30 − 7, 123 = 2 × 60 + 3)	
Course Topics	**Activities**
Numbers 1	Place Value to Thousands
	Expanding Numbers
	Model Numbers
Operations with Numbers 1	Magic Mental Addition
	Magic Mental Subtraction
	Multiply Multiples of 10
	Complements to 50 and 100
Topics	**Skill Quests**
Compose & decompose numbers to 10 000	Composing & decomposing numbers to 10 000
	Non-standard partitioning of numbers to 10 000

3.A.U.A6 Natural numbers less than 100 000. 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 number sentences	Recognizing equivalent number sentences

3.A.U.A7 Compares natural numbers	
Course Topics	**Activities**
Teacher Numbers 1	Put in Order 1
	Which Is Greater?
	Which Is Less?
Topics	**Skill Quests**
Teacher directed	

3.A.U.A8 Natural numbers less than 100 000. 8. Arranges natural numbers in increasing or decreasing order	
Course Topics	**Activities**
Numbers 1	Put in Order 1
Topics	**Skill Quests**
Order numbers to 10 000	Ordering numbers to 10 000

3.A.U.A9 Natural numbers less than 100 000. 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	Put in Order 1
Topics	**Skill Quests**
Teacher directed	

3.A.U.A10 Natural numbers less than 100 000. 10. Locates natural numbers using different visual aids (e.g. hundreds chart, number strip, number line)	
Course Topics	**Activities**
Teacher directed	
Topics	**Skill Quests**
Teacher directed	

3.A.U.A11 Natural numbers less than 100 000. 11. Identifies properties of natural numbers a. odd or even numbers b. square, prime or composite numbers	
Course Topics	**Activities**
Teacher directed	
Topics	**Skill Quests**
Teacher directed	

3.A.U.A12 Natural numbers less than 100 000. 12. Classifies natural numbers in various ways, based on their properties (e.g. even numbers, composite numbers)	
Course Topics	**Activities**
Numbers 1	Odd and Even Numbers 1
Topics	**Skill Quests**
Investigate odd & even numbers	Investigating odd & even numbers

3.A.U.A13 Natural numbers less than 100 000. 13. Approximates a collection, using objects or drawings (e.g. estimate, round up/down to a given value)	
Course Topics	**Activities**
Numbers 1	Nearest 100?
	Nearest 1000?
Topics	**Skill Quests**
Round numbers to 10 000	Rounding numbers to 10 000

3.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**
Numbers 2	Halves and Quarters
Topics	**Skill Quests**
Represent fractions	Introducing thirds
	Introducing fifths
	Introducing tenths
	Introducing sixths
	Introducing eighths

3.A.U.B3 Fractions (using objects or drawings). 3. Matches a fraction to part of a whole (congruent or equivalent parts) or part of a group of objects, and vice versa	
Course Topics	**Activities**
Numbers 2	Halves and Quarters
	What Fraction is Shaded?
	Shading Equivalent Fractions
	Comparing Fractions 1
	Model Fractions
Topics	**Skill Quests**
Match fractions to part of a whole	Equivalence in fractions (halves & fourths)
	Equivalence in fractions (thirds & sixths)

3.A.U.B4 Fractions (using objects or drawings). 4. Identifies the different meanings of fractions (sharing, division, ratio)	
Course Topics	**Activities**
Teacher directed	
Topics	**Skill Quests**
Understand meaning of fractions	Fair share problems with fractions

3.A.U.B5 Fractions (using objects or drawings). 5. Distinguishes a numerator from a denominator	
Course Topics	**Activities**
Teacher directed	
Topics	**Skill Quests**
Understand fractions	Introducing the terms numerator & denominator

3.A.U.B6 Fractions (using objects or drawings). 6. Reads and writes a fraction	
Course Topics	**Activities**
Numbers 2	What Fraction is Shaded?
	Model Fractions
Topics	**Skill Quests**
Teacher directed	

3.A.U.B7 Fractions (using objects or drawings). 7. Compares a fraction to 0, ½ or 1	
Course Topics	**Activities**
Teacher directed	
Topics	**Skill Quests**
Compare fractions	Identifying & comparing fractions

3.A.U.B8 Fractions (using objects or drawings). 8. Verifies whether two fractions are equivalent	
Course Topics	**Activities**
Teacher directed	
Topics	**Skill Quests**
Equivalence in fractions	Equivalence in fractions

3.A.U.C1 Decimals up to hundredths. 1. Represents decimals in a variety of ways (using objects or drawings)	
Course Topics	**Activities**
Teacher directed	
Topics	**Skill Quests**
Represent decimals in different ways	Representing tenths using models

3.A.U.C2 Decimals up to hundredths. 2. Identifies equivalent representations (using objects or drawings)	
Course Topics	**Activities**
Teacher directed	
Topics	**Skill Quests**
Teacher directed	

3.A.U.C3 Decimals up to hundredths. 3. Reads and writes numbers written in decimal notation	
Course Topics	**Activities**
Numbers 2	Decimals from Words to Digits 1
Topics	**Skill Quests**
Read & write decimal numbers	Introducing decimal notation
	Reading & writing decimals

3.A.U.C4 Decimals up to hundredths. 4. Understands the role of the decimal point	
Course Topics	**Activities**
Numbers 2	Decimals from Words to Digits 1
Topics	**Skill Quests**
Teacher directed	

3.A.U.C5 Decimals up to hundredths. 5. Composes and decomposes a decimal written in decimal notation	
Course Topics	**Activities**
Teacher directed	
Topics	**Skill Quests**
Teacher directed	

3.A.U.C6 Decimals up to hundredths. 6. Recognizes equivalent expressions (e.g. 12 tenths is equivalent to 1 unit and 2 tenths; 0.5 is equivalent to 0.50)	
Course Topics	**Activities**
Teacher directed	
Topics	**Skill Quests**
Teacher directed	

3.A.U.C7 Decimals up to hundredths. 7. Locates decimals on a number line a. between two consecutive natural numbers	
Course Topics	**Activities**
Teacher directed	
Topics	**Skill Quests**
Teacher directed	

3.A.U.C8 Decimals up to hundredths. 8. Compares two decimals	
Course Topics	**Activities**
Operations with Numbers 1	Comparing Decimals
Numbers 2	Comparing Decimals 1
	Decimal Order 1
Topics	**Skill Quests**
Compare decimals	Comparing & ordering decimal tenths

3.A.U.C9 Decimals up to hundredths. 9. Approximates (e.g. estimates, rounds to a given value, truncates decimal places)	
Course Topics	**Activities**
Numbers 2	Nearest Whole Number
Topics	**Skill Quests**
Approximate decimals	Rounding decimal tenths

3.A.U.C10 Decimals up to hundredths. 10. Arranges decimals in increasing or decreasing order	
Course Topics	**Activities**
Teacher directed	
Topics	**Skill Quests**
Teacher directed	

3.A.U.C11 Decimals up to hundredths. 11. Matches a. a fraction to its decimal	
Course Topics	**Activities**
Teacher directed	
Topics	**Skill Quests**
Match fractions to decimals	Connecting decimal fractions to common fractions

1.2 Meaning of operations involving numbers

3.A.M.A1 Natural number less than 100 000. 1. Determines the operation(s) to perform in a given situation	
Course Topics	**Activities**
Teacher directed	
Topics	**Skill Quests**
Teacher directed	

3.A.M.A2 Natural number less than 100 000. 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 b. composition of transformations positive, negative	
Course Topics	**Activities**
Operations with Numbers 1	Problems: Add and Subtract
Operations with Numbers 2	Find the Missing Number 1
Topics	**Skill Quests**
Add & subtract word problems to 10 000	Solving addition & subtraction word problems

3.A.M.A3 Natural number less than 100 000. 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) b. rectangular arrays, repeated addition, Cartesian product, area, volume, repeated subtraction, sharing, number of times x goes into y, and comparisons (using objects, diagrams or equations)	
Course Topics	**Activities**
Operations with Numbers 2	Dividing Twos
	Dividing Fives
	Dividing Tens
	Share the Treasure
	Fill the Jars
	Multiplication Arrays
	Remainders by Arrays
Topics	**Skill Quests**
Use multiplication & repeated addition	Using repeated addition to multiply
	Connecting multiplication & repeated addition

3.A.M.A4 Natural number less than 100 000. 4. Establishes equality relations between numerical expressions	
Course Topics	**Activities**
Operations with Numbers 1	Magic Mental Addition
	Magic Mental Subtraction
	Find the Missing Number 1
Topics	**Skill Quests**
Equality in numerical expressions	Comparing numbers using inequality symbols

3.A.M.A5 Natural number less than 100 000. 5. Determines numerical equivalences using relationships between b. operations (the four operations), the commutative property of addition and multiplication and the associative property	
Course Topics	**Activities**
Teacher directed	
Topics	**Skill Quests**
Relationships between operations	Linking addition & subtraction
	The associative property of addition
	The commutative property of multiplication
	Linking the 4 operations

3.A.M.B1 Decimals up to hundredths. 1. Uses objects, diagrams or equations to represent a situation and conversely, describes a situation represented by objects, diagram or equations (use of different meanings of addition and subtraction) a. transformation (adding, taking away), uniting, comparing b. composition of transformations: positive, negative	
Course Topics	**Activities**
Teacher directed	
Topics	**Skill Quests**
Teacher directed	

3.A.M.B2 Uses objects, diagrams or equations to represent a situation and conversely, describes a situation represented by objects, diagrams or equations (use of different meanings of multiplication and division: rectangular arrays, Cartesian product, area, volume, sharing, number of times x goes into y, and comparisons)	
Course Topics	**Activities**
Teacher directed	
Topics	**Skill Quests**
Teacher directed	

3.A.M.B3 Decimals up to hundredths 3. Determines numerical equivalences using a. the relationship between operations (addition and subtraction), the commutative property of addition and the associative property	
Course Topics	**Activities**
Teacher directed	
Topics	**Skill Quests**
Teacher directed	

1.3 Operations involving numbers

3.A.O.A1 Natural numbers. 1. Approximates the result of a. an addition or subtraction involving natural numbers b. any of the four operations involving natural numbers	
Course Topics	**Activities**
Operations with Numbers 1	Increasing Patterns
	Decreasing Patterns
	Pick the Next Number
Operations with Numbers 2	Multiply Multiples of 10
	Fact Families: Multiply and Divide
Topics	**Skill Quests**
Estimate the result of calculations	Estimating addition of 3-digit numbers
	Estimating subtraction of 3-digit numbers

3.A.O.A2 Natural numbers. 2. Builds a repertoire of memorized addition and subtraction facts 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**
Teacher directed	
Topics	**Skill Quests**
Add & subtract within 20	Addition & subtraction facts within 20

3.A.O.A3 Natural numbers. 3. Develops processes for mental computation a. Uses his/her own processes to determine the sum or difference of two natural numbers b. Uses his/her own processes to determine the product or quotient of two natural numbers	
Course Topics	**Activities**
Operations with Numbers 2	Dividing Twos
	Dividing Fives
	Dividing Tens
	Share the Treasure
	Fill the Jars
	Division Facts
	Multiply Multiples of 10
	Multiply: 2-Digit by 1-Digit
	Fact Families: Multiply and Divide
Topics	**Skill Quests**
Add/subtract using 2-digit numbers	Addition: bridging to ten using models
	Addition: rounding & compensating
	Subtraction: bridging to ten using models
	Subtraction: rounding & compensating
	Add/subtract: bridging to ten using models
	Add/subtract: rounding & compensating
Add/subtract using 3-digit numbers	Adding using a number line
	Adding using place value
	Adding using a split strategy
	Adding using rounding & compensating
	Subtracting using a number line
	Subtracting using place value
	Subtracting using rounding & compensating
	Mixed addition strategies
	Mixed subtraction strategies
	Mixed addition & subtraction strategies

3.A.O.A4 Natural numbers. 4. Develops processes for written computation (addition and subtraction) b. Uses conventional processes to determine the sum of two natural numbers of up to four digits c. Uses conventional processes to determine the difference between two natural numbers of up to four digits whose result is greater than 0	
Course Topics	**Activities**
Operations with Numbers 1	Columns that Add
	Columns that Subtract
	Problems: Add and Subtract
	Related Facts 1
	Complements to 50 and 100
Topics	**Skill Quests**
Add/subtract using written strategies	Addition up two 2-digit numbers
	Subtraction up to 3-digit numbers

3.A.O.A5 Natural numbers. 5. Determines the missing term in an equation (relationships between operations)	
Course Topics	**Activities**
Teacher directed	
Topics	**Skill Quests**
Balance number sentences	Balancing number sentences

3.A.O.A6 Natural numbers. 6. Builds a repertoire of memorized multiplication and division facts a. Builds a memory of multiplication facts (0 x0 to 10 x 10) and the corresponding division facts, using objects, drawings, charts and tables b. Develops various strategies that promote mastery of number facts and relate them to the properties of multiplication c. Masters all multiplication facts (0 x 0 to 10 x 10) and the corresponding division facts	
Course Topics	**Activities**
Operations with Numbers 2	Dividing Twos
	Dividing Fives
	Dividing Tens
	Share the Treasure
	Fill the Jars
	Division Facts
	Multiply: 2-Digit by 1-Digit
	Fact Families: Multiply and Divide
Topics	**Skill Quests**
Multiplication facts to 10 x 10	Exploring multiplication by 2
	Exploring multiplication by 5
	Exploring multiplication by 10
Division facts within 10	Exploring division by 2
	Exploring division by 5
	Exploring division by 10
Mixed multiplication & division practice	Multiplying & dividing by 2s, 5s & 10s

3.A.O.A7 Natural numbers. 7. Develops processes for written computation (multiplication and division) a. Uses his/her own processes as well as materials and drawings to determine the product or quotient of a three-digit natural number and a none-digit natural number, expresses the remainder of a division as a fraction, dependng on the context	
Course Topics	**Activities**
Operations with Numbers 2	Multiply: 2-Digit by 1-Digit
Topics	**Skill Quests**
Teacher directed	

3.A.O.A8 Natural numbers. 8. Determines processes for written computation (multiplication and division)	
Course Topics	**Activities**
Teacher directed	
Topics	**Skill Quests**
Teacher directed	

3.A.O.A13 Natural numbers. 13. Using his/her own words and mathematical language that is at an appropriate level for the cycle, describes a. non-numerical patterns b. numerical patterns c. series of numbers and family operations	
Course Topics	**Activities**
Operations with Numbers 2	Multiply Multiples of 10
	Fact Families: Multiply and Divide
Topics	**Skill Quests**
Teacher directed	

3.A.O.A14 Natural numbers. 14. Adds new terms to a series when the first three terms or more are given	
Course Topics	**Activities**
Operations with Numbers 1	Increasing Patterns
	Decreasing Patterns
	Pick the Next Number
Topics	**Skill Quests**
Teacher directed	

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

3.A.O.B1 Fractions (using objects or diagrams) 1. Generates a set of equivalent fractions	
Course Topics	**Activities**
Numbers 2	Shading Equivalent Fractions
Topics	**Skill Quests**
Teacher directed	

3.A.O.C1 Decimals. 1. Approximates the result of a. an addition or subtraction	
Course Topics	**Activities**
Teacher directed	
Topics	**Skill Quests**
Teacher directed	

3.A.O.C2 Decimals. 2. Develops processes for mental computation a. adds and subtracts decimals	
Course Topics	**Activities**
Teacher directed	
Topics	**Skill Quests**
Add & subtract decimals	Adding decimals to tenths
	Subtracting decimals to tenths
	Adding & subtracting decimal word problems

3.A.O.C3 Decimals. 3. Develops processes for written computation a. adds and subtracts decimals whose result does not go beyond the second decimal place	
Course Topics	**Activities**
Operations with Numbers 1	Adding Decimals
	Subtracting Decimals
Topics	**Skill Quests**
Teacher directed	

2 Geometry

2.1 Geometry

3.G.A2 Space. 2. Locates objects in a plane	
Course Topics	**Activities**
Geometry	Left or Right?
	Following Directions
	Coordinate Meeting Place
Topics	**Skill Quests**
Teacher directed	

3.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	

3.G.A4 Space. 4. Locates points in a Cartesian plane a. in the first quadrant b. in all four quadrants	
Course Topics	**Activities**
Teacher directed	
Topics	**Skill Quests**
Teacher directed	

3.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**
Teacher directed	
Topics	**Skill Quests**
Compare objects with solids	Comparing solid objects

3.G.B3 Solids. 3. Identifies the main solids (e.g. spheres, cones, cubes, cylinders, prisms, pyramids)	
Course Topics	**Activities**
Teacher directed	
Topics	**Skill Quests**
Identify solids	Sorting solid objects

3.G.B4 Solids. 4. Identifies and represents the different faces of a prism or pyramid	
Course Topics	**Activities**
Teacher directed	
Topics	**Skill Quests**
Identify prisms & pyramids	Identifying properties of prisms & pyramids

3.G.B5 Solids. 5. Describes prisms and pyramids in terms of faces, vertices and edges	
Course Topics	**Activities**
Geometry	How many Faces?
	How many Edges?
	How many Corners?
	Faces, Edges and Vertices
Topics	**Skill Quests**
Teacher directed	

3.G.B6 Solids. 6. Classifies prisms and pyramids	
Course Topics	**Activities**
Teacher directed	
Topics	**Skill Quests**
Classify prisms & pyramids	Classifying & sorting prisms & pyramids

3.G.B7 Solids. 7. Constructs a net of a prism or pyramid	
Course Topics	**Activities**
Teacher directed	
Topics	**Skill Quests**
Teacher directed	

3.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**
Geometry	What Line am I?
	Nets
Topics	**Skill Quests**
Match nets of prisms & pyramids	Matching nets to prisms

3.G.C2 Plane figures. 2. Identifies plane figures (square, rectangle, triangle, rhombus and circle)	
Course Topics	**Activities**
Teacher directed	
Topics	**Skill Quests**
Identify & sort plane figures	Identifying regular plane figures
	Identifying regular & irregular plane figures
	Sorting plane figures

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

3.G.C4 Plane figures. 4. Describes convex and nonconvex polygons	
Course Topics	**Activities**
Teacher directed	
Topics	**Skill Quests**
Teacher directed	

3.G.C5 Plane figures. 5. Identifies and constructs parallel lines and perpendicular lines	
Course Topics	**Activities**
Teacher directed	
Topics	**Skill Quests**
Identify parallel & perpendicular lines	Identifying parallel lines

3.G.C6 Plane figures. 6. Describes quadrilaterals	
Course Topics	**Activities**
Teacher directed	
Topics	**Skill Quests**
Describe quadrilaterals	Describing quadrilaterals

3.G.C7 Plane figures. 7. Classifies quadrilaterals	
Course Topics	**Activities**
Teacher directed	
Topics	**Skill Quests**
Classify quadrilaterals	Sorting & naming quadrilaterals

3.G.D1 Frieze patterns and tessellations. 1. Identifies congruent figures	
Course Topics	**Activities**
Teacher directed	
Topics	**Skill Quests**
Identify congruent figures	Exploring congruency in plane shapes

3.G.D2 Frieze patterns and tessellations. 2. Observes and produces patterns using geometric figures	
Course Topics	**Activities**
Teacher directed	
Topics	**Skill Quests**
Patterns with geometric figures	Creating & describing repeating patterns
	Exploring visual patterns
	Exploring simple patterns with transformations
	Manipulating repeating patterns

3.G.D3 Frieze patterns and tessellations. 3. Observes and produces frieze patterns and tessellations a. using reflections	
Course Topics	**Activities**
Geometry	Flip, Slide, Turn
	Transformations
Topics	**Skill Quests**
Reflections & symmetry	Introducing reflections
	Recognizing symmetry of shapes

3 Measurement

3.1 Measurement

3.M.A4 Lengths. 4. Estimates and measures the dimensions of an object using conventional units b. metre, decimetre, centimetre and millimetre	
Course Topics	**Activities**
Measurement 1	How Long is That?
	Measuring Length
Topics	**Skill Quests**
Estimate & measure length	Estimating & measuring to the nearest cm
	Measuring in m & cm
	Measuring in half & quarter m/cm
	Ordering & comparing lengths: m & cm

3.M.A5 Lengths. 5. Establishes relationships between units of measure for length a. metre, decimetre, centimetre and millimetre	
Course Topics	**Activities**
Measurement 1	Centimetres and Metres
	Converting cm and mm
Topics	**Skill Quests**
Relationships between units of length	Converting between m & cm
	Selecting appropriate units of measure: m & cm

3.M.A6 Lengths. 6. Calculates the perimeter of plane figures	
Course Topics	**Activities**
Measurement 1	Perimeter of Shapes
Topics	**Skill Quests**
Teacher directed	

3.M.B1 Surface areas. 1. Estimates and measures surface area a. using unconventional units	
Course Topics	**Activities**
Measurement 1	Equal Areas
Topics	**Skill Quests**
Estimate & measure surface area	Using unconventional units to measure area
	Comparing & ordering areas
	Measuring & estimating areas using a square unit

3.M.C1 Volumes. 1. Estimates and measures volumes a. using unconventional units	
Course Topics	**Activities**
Measurement 2	Comparing Volume
	How many Blocks?
Topics	**Skill Quests**
Estimate & measure volume	Comparing & ordering volumes

3.M.D1 Angles. 1. Compares angles	
Course Topics	**Activities**
Measurement 1	Equal Angles
	Comparing Angles
	Right Angle Relation
Topics	**Skill Quests**
Compare angles	Comparing angles informally

3.M.E1 Capacities. 1. Estimates and measures capacity using unconventional units	
Course Topics	**Activities**
Measurement 2	How Full?
Topics	**Skill Quests**
Compare & order volumes	Comparing & ordering volumes through displacement
	Estimating, comparing & measuring: cm2 blocks

3.M.E2 Capacities. 2. Estimates and measures capacity using conventional units	
Course Topics	**Activities**
Measurement 2	Using a Litre
Topics	**Skill Quests**
Estimate & measure capacity	Measuring capacity: litres
	Measuring capacity: millilitres
	Estimating, comparing & measuring: litres
	Selecting appropriate unit of measure: L & mL

3.M.F1 Masses. 1. Estimates and measures mass using unconventional units	
Course Topics	**Activities**
Measurement 2	Everyday Mass
Topics	**Skill Quests**
Mass: unconventional units	Comparing & ordering mass: unconventional units

3.M.F2 Masses. 2. Estimates and measures mass using conventional units	
Course Topics	**Activities**
Measurement 2	How Heavy?
Topics	**Skill Quests**
Mass: conventional units	Measuring mass: kg

3.M.G1 Time. 1. Estimates and measures time using conventional units	
Course Topics	**Activities**
Measurement 2	Half Hour Times
	What is the Time?
	Using Timetables
Topics	**Skill Quests**
Estimate & measure time	Choosing appropriate units to measure time
	Telling time to five minutes (analogue)
	Telling time to five minutes (digital)

3.M.G2 Time. 2. Establishes relationships between units of measure	
Course Topics	**Activities**
Measurement 2	Half Hour Times
	What is the Time?
	Using Timetables
Topics	**Skill Quests**
Relationship between units of time	Recalling relationships between units of time
	Comparing & ordering time: seconds & minutes

3.M.H1 Temperature. 1. Estimates and measures temperature using conventional units	
Course Topics	**Activities**
Measurement 2	Temperature
Topics	**Skill Quests**
Estimate & measure temperature	Introducing thermometers

4 Statistics

4.1 Statistics

3.S.1 Formulates questions for a survey (based on age-appropriate topics, students' language level, etc)	
Course Topics	**Activities**
Teacher directed	
Topics	**Skill Quests**
Formulate questions in data	Posing questions for a survey

3.S.2 Collects, describes and organizes data (classifies or categorizes) using tables	
Course Topics	**Activities**
Teacher directed	
Topics	**Skill Quests**
Collect, describe & organize data	Collecting, describing & organizing data

3.S.3 Interprets data using b. a table, a bar graph, a pictograph and a broken-line graph	
Course Topics	**Activities**
Statistics and Probability	Sorting Data
	Tallies
	Picture Graphs
Topics	**Skill Quests**
Interpret data	Using a table
	Using a pictograph
	Using a bar graph
	Constructing a bar graph
	Introducing the statistical investigation process
	Conducting a simple statistical investigation

3.S.4 Displays data using b. a table, a bar graph, a pictograph and a broken-line graph	
Course Topics	**Activities**
Statistics and Probability	Making Graphs
	Tallies
Topics	**Skill Quests**
Teacher directed	

5 Probability

5.1 Probability

3.P.1 When applicable, recognizes variability in possible outcomes (uncertainty)	
Course Topics	**Activities**
Teacher directed	
Topics	**Skill Quests**
Use the language of probability	Using the language of probability

3.P.2 When applicable, recognizes equiprobability	
Course Topics	**Activities**
Teacher directed	
Topics	**Skill Quests**
Recognize equiprobability	Recognizing equiprobability
	Conducting chance experiments

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

3.P.4 Experiments with activities involving chance, using various objects	
Course Topics	**Activities**
Teacher directed	
Topics	**Skill Quests**
Teacher directed	

3.P.5 Predicts qualitatively an outcome or several events using a probability line, among other things a. certain, possible or impossible outcome b. more likely, just as likely, less likely event	
Course Topics	**Activities**
Statistics and Probability	What are the Chances?
Topics	**Skill Quests**
Teacher directed	

3.P.6 Distinguishes between prediction and outcome	
Course Topics	**Activities**
Teacher directed	
Topics	**Skill Quests**
Teacher directed	

3.P.7 Uses tables or diagrams to collect and display the outcomes of an experiment	
Course Topics	**Activities**
Statistics and Probability	How many Combinations?
Topics	**Skill Quests**
Display outcomes in data	Using a table to collect & display outcomes

3.P.8 Enumerates possible outcomes of b. a random experiment, using tables, a tree diagram	
Course Topics	**Activities**
Statistics and Probability	How many Combinations?
Topics	**Skill Quests**
Teacher directed	

3.P.9 Compares qualitatively the theoretical or experimental probability of events	
Course Topics	**Activities**
Teacher directed	
Topics	**Skill Quests**
Teacher directed	

3.P.13 Simulates random experiments with or without the use of technology	
Course Topics	**Activities**
Teacher directed	
Topics	**Skill Quests**
Teacher directed	

Grade 4

1 Arithmetic

1.1 Understanding and writing numbers

4.A.U.A1 Natural numbers less than 100 000. 1. Counts or recites counting rhymes involving natural numbers b. counts forward or backward c. skip counts (e.g. by twos)	
Course Topics	**Activities**
Teacher directed	
Topics	**Skill Quests**
Count natural numbers	Counting by 50s to 10 000
	Counting by 25s to 10 000
	Counting by 20s to 10 000
	Counting by 1000s to 10 000

4.A.U.A2 Natural numbers less than 100 000. 2. Counts collections (using objects or drawings) c. counts a collection by grouping or regrouping d. counts a pre-grouped collection	
Course Topics	**Activities**
Teacher directed	
Topics	**Skill Quests**
Teacher directed	

4.A.U.A3 Natural numbers less than 100 000. 3. Reads and writes any natural number	
Course Topics	**Activities**
Numbers 1	Place Value to Thousands
	Expanding Numbers
Topics	**Skill Quests**
Read & write numbers to 100 000	Reading & writing numbers to 100 000

4.A.U.A4 Natural numbers less than 100 000. 4. Represents natural numbers in different ways or associates a number with a set of objects or drawings b. emphasis on exchanging apparent, non-accessible groupings, using structured materials (e.g. base ten blocks, number tables) c. emphasis on place value in non-apparent, non-accessible groupings, using materials for which groupings are symbolic	
Course Topics	**Activities**
Numbers 1	Expanding Numbers
	Model Numbers
Topics	**Skill Quests**
Represent numbers to 100 000	Place value of numbers to 100 000

4.A.U.A5 Natural numbers less than 100 000. 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 × 50 + 30 − 7, 123 = 2 × 60 + 3)	
Course Topics	**Activities**
Numbers 1	Place Value to Thousands
	Expanding Numbers
	Model Numbers
Operations with Numbers 1	Magic Mental Addition
	Magic Mental Subtraction
	Complements to 50 and 100
Operations with Numbers 2	Multiply Multiples of 10
Topics	**Skill Quests**
Compose & decompose numbers to 100 000	Composing & decomposing numbers to 100 000

4.A.U.A6 Natural numbers less than 100 000. 6. Identifies equivalent expressions (e.g. 52 = 40 + 12, 25 + 27 = 40 + 12, 52 = 104 ÷ 2)	
Course Topics	**Activities**
Teacher directed	
Topics	**Skill Quests**
Identify equivalent expressions	Identifying equivalent expressions

4.A.U.A7 Natural numbers less than 100 000. 7. Compares natural numbers	
Course Topics	**Activities**
Numbers 1	Put in Order 1
	Which Is Greater?
	Which Is Less?
Topics	**Skill Quests**
Compare numbers to 100 000	Comparing numbers to 100 000

4.A.U.A8 Natural numbers less than 100 000. 8. Arranges natural numbers in increasing or decreasing order	
Course Topics	**Activities**
Numbers 1	Put in Order 1
Topics	**Skill Quests**
Order numbers to 100 000	Ordering numbers to 100 000

4.A.U.A9 Natural numbers less than 100 000. 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**
Operations with Numbers 1	Increasing Patterns
	Decreasing Patterns
	Pick the Next Number
Topics	**Skill Quests**
Teacher directed	

4.A.U.A10 Natural numbers less than 100 000. 10. Locates natural numbers using different visual aids (e.g. hundreds chart, number strip, number line)	
Course Topics	**Activities**
Teacher directed	
Topics	**Skill Quests**
Teacher directed	

4.A.U.A11 Natural numbers less than 100 000. 11. Identifies properties of natural numbers a. odd or even numbers b. square, prime or composite numbers	
Course Topics	**Activities**
Teacher directed	
Topics	**Skill Quests**
Teacher directed	

4.A.U.A12 Natural numbers less than 100 000. 12. Classifies natural numbers in various ways, based on their properties (e.g. even numbers, composite numbers)	
Course Topics	**Activities**
Numbers 1	Prime or Composite?
	Odd and Even Numbers 1
Topics	**Skill Quests**
Understand odd & even numbers	Understanding odd & even numbers

4.A.U.A13 Natural numbers less than 100 000. 13. Approximates a collection, using objects or drawings (e.g. estimate, round up/down to a given value)	
Course Topics	**Activities**
Numbers 1	Nearest 100?
	Nearest 1000?
Topics	**Skill Quests**
Round numbers to 100 000	Rounding numbers to 100 000

4.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**
Teacher directed	
Topics	**Skill Quests**
Represent fractions	Finding halves, fourths & eighths
	Counting in tenths

4.A.U.B3 Fractions (using objects or drawings) 3. Matches a fraction to part of a whole (congruent or equivalent parts) or part of a group of objects, and vice versa	
Course Topics	**Activities**
Numbers 2	What Fraction is Shaded?
	Shading Equivalent Fractions
	Comparing Fractions 1
	Model Fractions
Topics	**Skill Quests**
Match fractions	Finding a unit fraction of a quantity

4.A.U.B4 Fractions (using objects or drawings) 4. Identifies the different meanings of fractions (sharing, division, ratio)	
Course Topics	**Activities**
Teacher directed	
Topics	**Skill Quests**
Teacher directed	

4.A.U.B5 Fractions (using objects or drawings) 5. Distinguishes a numerator from a denominator	
Course Topics	**Activities**
Teacher directed	
Topics	**Skill Quests**
Teacher directed	

4.A.U.B6 Fractions (using objects or drawings) 6. Reads and writes a fraction	
Course Topics	**Activities**
Numbers 2	What Fraction is Shaded?
	Model Fractions
Topics	**Skill Quests**
Teacher directed	

4.A.U.B7 Fractions (using objects or drawings) 7. Compares a fraction to 0, ½ or 1	
Course Topics	**Activities**
Teacher directed	
Topics	**Skill Quests**
Compare fractions	Comparing fractions using benchmarks

4.A.U.B8 Fractions (using objects or drawings) 8. Verifies whether two fractions are equivalent	
Course Topics	**Activities**
Teacher directed	
Topics	**Skill Quests**
Equivalence of fractions	Investigating equivalent fractions

4.A.U.B9 Fractions (using objects or drawings) 9. Matches a decimal or percentage to a fraction	
Course Topics	**Activities**
Teacher directed	
Topics	**Skill Quests**
Teacher directed	

4.A.U.B10 Fractions (using objects or drawings) 10. Orders fractions with the same denominator	
Course Topics	**Activities**
Teacher directed	
Topics	**Skill Quests**
Order fractions	Ordering tenths

4.A.U.C1 Decimals up to hundredths. 1. Represents decimals in a variety of ways (using objects or drawings)	
Course Topics	**Activities**
Teacher directed	
Topics	**Skill Quests**
Represent decimals	Representing decimals to hundredths

4.A.U.C2 Decimals up to hundredths. 2. Identifies equivalent representations (using objects or drawings)	
Course Topics	**Activities**
Teacher directed	
Topics	**Skill Quests**
Teacher directed	

4.A.U.C3 Decimals up to hundredths. 3. Reads and writes numbers written in decimal notation	
Course Topics	**Activities**
Numbers 2	Decimals from Words to Digits 1
Topics	**Skill Quests**
Read & write decimals	Reading & writing hundredths

4.A.U.C4 Decimals up to hundredths. 4. Understands the role of the decimal point	
Course Topics	**Activities**
Numbers 2	Decimals from Words to Digits 1
Topics	**Skill Quests**
Teacher directed	

4.A.U.C5 Decimals up to hundredths. 5. Composes and decomposes a decimal written in decimal notation	
Course Topics	**Activities**
Teacher directed	
Topics	**Skill Quests**
Compose & decompose decimals	Composing & decomposing decimals to hundredths

4.A.U.C6 Decimals up to hundredths. 6. Recognizes equivalent expressions (e.g. 12 tenths is equivalent to 1 unit and 2 tenths; 0.5 is equivalent to 0.50)	
Course Topics	**Activities**
Teacher directed	
Topics	**Skill Quests**
Teacher directed	

4.A.U.C7 Decimals up to hundredths. 7. Locates decimals on a number line a. between two consecutive natural numbers b. between two decimals	
Course Topics	**Activities**
Teacher directed	
Topics	**Skill Quests**
Teacher directed	

4.A.U.C8 Decimals up to hundredths. 8. Compares two decimals	
Course Topics	**Activities**
Numbers 2	Comparing Decimals 1
	Decimal Order 1
Topics	**Skill Quests**
Compare decimals	Comparing decimals

4.A.U.C9 Decimals up to hundredths. 9. Approximates (e.g. estimates, rounds to a given value, truncates decimal places)	
Course Topics	**Activities**
Numbers 2	Nearest Whole Number
Topics	**Skill Quests**
Approximate decimals	Rounding decimal hundredths

4.A.U.C10 Decimals up to hundredths. 10. Arranges decimals in increasing or decreasing order	
Course Topics	**Activities**
Teacher directed	
Topics	**Skill Quests**
Teacher directed	

4.A.U.C11 Decimals up to hundredths 11. Matches a. a fraction to its decimal	
Course Topics	**Activities**
Teacher directed	
Topics	**Skill Quests**
Match fractions to decimals	Connecting decimals & fraction

4.A.U.D1 Integers. 1. Represents integers in a variety of ways (using objects or drawings) (e.g. tokens in two different colours, number line, thermometer, football field, elevator, hot air balloon)	
Course Topics	**Activities**
Teacher directed	
Topics	**Skill Quests**
Represent integers in different ways	Representing numbers in different ways

1.2 Meaning of operations involving numbers

4.A.M.A1 Natural number less than 100 000. 1. Determines the operation(s) to perform in a given situation	
Course Topics	**Activities**
Teacher directed	
Topics	**Skill Quests**
Determine operations to use	One-step word problems

4.A.M.A2 Natural number less than 100 000. 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 b. composition of transformations positive, negative	
Course Topics	**Activities**
Operations with Numbers 1	Problems: Add and Subtract
	Find the Missing Number 1
Measurement 2	Mass Word Problems
Topics	**Skill Quests**
Solve add & subtract word problems	Solving addition & subtraction problems

4.A.M.A3 Natural number less than 100 000. 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) b. rectangular arrays, repeated addition, Cartesian product, area, volume, repeated subtraction, sharing, number of times x goes into y, and comparisons (using objects, diagrams or equations)	
Course Topics	**Activities**
Operations with Numbers 2	Multiplication Arrays
	Remainders by Arrays
Topics	**Skill Quests**
Solve multiply & divide word problems	Solving multiplication & division problems

4.A.M.A4 Natural number less than 100 000 . 4. Establishes equality relations between numerical expressions	
Course Topics	**Activities**
Operations with Numbers 1	Magic Mental Addition
	Magic Mental Subtraction
Operations with Numbers 2	Find the Missing Number 1
Topics	**Skill Quests**
Teacher directed	

4.A.M.A5 Natural number less than 100 000. 5. Determines numerical equivalences using relationships between b. operations (the four operations), the commutative property of addition and multiplication and the associative property	
Course Topics	**Activities**
Teacher directed	
Topics	**Skill Quests**
Equality in operations	Equality in addition & subtraction
	Equality in multiplication & division

4.A.M.B1 Decimals up to hundredths. 1. Uses objects, diagrams or equations to represent a situation and conversely, describes a situation represented by objects, diagram or equations (use of different meanings of addition and subtraction) a. transformation (adding, taking away), uniting, comparing b. composition of transformations: positive, negative	
Course Topics	**Activities**
Teacher directed	
Topics	**Skill Quests**
Teacher directed	

4.A.M.B2 Decimals up to hundredths. 2. Uses objects, diagrams or equations to represent a situation and conversely, describes a situation represented by objects, diagrams or equations (use of different meanings of multiplication and division: rectangular arrays, Cartesian product, area, volume, sharing, number of times x goes into y, and comparisons)	
Course Topics	**Activities**
Teacher directed	
Topics	**Skill Quests**
Teacher directed	

4.A.M.B3 Decimals up to hundredths. 3. Determines numerical equivalences using a. the relationship between operations (addition and subtraction), the commutative property of addition and the associative property	
Course Topics	**Activities**
Teacher directed	
Topics	**Skill Quests**
Teacher directed	

1.3 Operations involving numbers

4.A.O.A1 Natural numbers. 1. Approximates the result of a. an addition or subtraction involving natural numbers b. any of the four operations involving natural numbers	
Course Topics	**Activities**
Operations with Numbers 1	Increasing Patterns
	Decreasing Patterns
	Pick the Next Number
Operations with Numbers 2	Multiply Multiples of 10
	Fact Families: Multiply and Divide
	Factors
Topics	**Skill Quests**
Estimate results of calculations	Estimating additions & subtractions
	Estimating by rounding when multiplying

4.A.O.A2 Natural numbers. 2. Builds a repertoire of memorized addition and subtraction facts 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**
Teacher directed	
Topics	**Skill Quests**
Add & subtract within 20	Addition & subtraction facts within 20
	Adding using a number line
	Adding using place value
	Adding using a split strategy
	Adding using rounding & compensating
	Choosing mixed addition strategies
	Subtracting using a number line
	Subtracting using place value
	Subtracting using a split strategy
	Subtracting using rounding & compensating
	Choosing mixed subtraction strategies
Multiply/divide: mental strategies	Multiplying using an area model
	Multiplying using doubling
	Dividing using halving
	Choosing efficient multiplication strategies
	Choosing efficient division strategies

4.A.O.A3 Natural numbers. 3. Develops processes for mental computation a. Uses his/her own processes to determine the sum or difference of two natural numbers b. Uses his/her own processes to determine the product or quotient of two natural numbers	
Course Topics	**Activities**
Operations with Numbers 2	Fill the Jars
	Division Facts
	Multiply Multiples of 10
	Multiply: 2-Digit by 1-Digit
	Fact Families: Multiply and Divide
	Factors
Topics	**Skill Quests**
Teacher directed	

4.A.O.A4 Natural numbers. 4. Develops processes for written computation (addition and subtraction) b. Uses conventional processes to determine the sum of two natural numbers of up to four digits c. Uses conventional processes to determine the difference between two natural numbers of up to four digits whose result is greater than 0	
Course Topics	**Activities**
Operations with Numbers 1	Columns that Add
	Columns that Subtract
	Problems: Add and Subtract
	Related Facts 1

	Complements to 50 and 100
Topics	**Skill Quests**
Add/subtract: written strategies	Addition of 3-digit & 1-digit numbers
	Addition of 3-digit & 2-digit numbers
	Addition of two 3-digit numbers
	Addition of two 4-digit numbers
	Subtraction of up to 4-digit numbers
	Subtraction of two 4-digit numbers with exchange

4.A.O.A5	
Natural numbers. 5. Determines the missing term in an equation (relationships between operations)	
Course Topics	**Activities**
Teacher directed	
Topics	**Skill Quests**
Relationships between operations	Balance number sentences

4.A.O.A6	
Natural numbers. 6. Builds a repertoire of memorized multiplication and division facts a. Builds a memory of multiplication facts (0 x0 to 10 x 10) and the corresponding division facts, using objects, drawings, charts and tables b. Develops various strategies that promote mastery of number facts and relate them to the properties of multiplication c. Masters all multiplication facts (0 x 0 to 10 x 10) and the corresponding division facts	
Course Topics	**Activities**
Operations with Numbers 2	Fill the Jars
	Division Facts
	Multiply: 2-Digit by 1-Digit
	Fact Families: Multiply and Divide
	Factors
Topics	**Skill Quests**
Multiplication facts to 10 x 10	Exploring multiplication by 3
	Exploring multiplication by 4
	Exploring multiplication by 5
	Exploring multiplication by 6
	Exploring multiplication by 7
	Exploring multiplication by 8
	Exploring multiplication by 9
	Exploring multiplication by 10
Division facts within 10	Exploring division by 3
	Exploring division by 4
	Exploring division by 5
	Exploring division by 6
	Exploring division by 7
	Exploring division by 8
	Exploring division by 9
	Exploring division by 10
Mixed multiplication & division practice	Multiplying & dividing by 2s, 5s & 10s
	Multiplying & dividing by 2, 5, 3 & 4

4.A.O.A7 Natural numbers. 7. Develops processes for written computation (multiplication and division) a. Uses his/her own processes as well as materials and drawings to determine the product or quotient of a three-digit natural number and a none-digit natural number, expresses the remainder of a division as a fraction, depending on the context	
Course Topics	**Activities**
Operations with Numbers 2	Multiply: 2-Digit by 1-Digit
Topics	**Skill Quests**
Teacher directed	

4.A.O.A8 Natural numbers. 8. Determines processes for written computation (multiplication and division)	
Course Topics	**Activities**
Teacher directed	
Topics	**Skill Quests**
Teacher directed	

4.A.O.A9 Natural numbers. 9. Decomposes a number into prime factors	
Course Topics	**Activities**
Teacher directed	
Topics	**Skill Quests**
Teacher directed	

4.A.O.A13 Natural numbers. 13. Using his/her own words and mathematical language that is at an appropriate level for the cycle, describes a. non-numerical patterns b. numerical patterns c. series of numbers and family operations	
Course Topics	**Activities**
Operations with Numbers 2	Multiply Multiples of 10
	Fact Families: Multiply and Divide
	Factors
Topics	**Skill Quests**
Teacher directed	

4.A.O.A14 Natural numbers. 14. Adds new terms to a series when the first three terms or more are given	
Course Topics	**Activities**
Operations with Numbers 1	Increasing Patterns
	Decreasing Patterns
	Pick the Next Number
Topics	**Skill Quests**
Generate patterns	Generating addition & subtraction patterns
	Generating non-numerical patterns

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

4.A.O.B1 Fractions (using objects or diagrams) 1. Generates a set of equivalent fractions	
Course Topics	**Activities**
Numbers 2	Shading Equivalent Fractions
Topics	**Skill Quests**
Generate equivalent fractions	Generating equivalent fractions

4.A.O.C1 Decimals. 1. Approximates the result of a. an addition or subtraction	
Course Topics	**Activities**
Teacher directed	
Topics	**Skill Quests**
Teacher directed	

4.A.O.C2 Decimals. 2. Develops processes for mental computation a. adds and subtracts decimals	
Course Topics	**Activities**
Teacher directed	
Topics	**Skill Quests**
Add & subtract decimals	Adding decimals using models
	Adding decimals using mental strategies
	Subtracting decimals using models

4.A.O.C3 Decimals. 3. Develops processes for written computation a. adds and subtracts decimals whose result does not go beyond the second decimal place	
Course Topics	**Activities**
Operations with Numbers 1	Adding Decimals
	Subtracting Decimals
Topics	**Skill Quests**
Teacher directed	

2 Geometry

2.1 Geometry

4.G.A2 Space. 2. Locates objects in a plane	
Course Topics	**Activities**
Geometry	Left or Right?
	Following Directions
	Coordinate Meeting Place
Topics	**Skill Quests**
Introduce the Cartesian plane	Locating objects on a plane

4.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	

4.G.A4 Space. 4. Locates points in a Cartesian plane a. in the first quadrant b. in all four quadrants	
Course Topics	**Activities**
Teacher directed	
Topics	**Skill Quests**
Locate points in a Cartesian plane	Locating points in the first quadrant

4.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**
Teacher directed	
Topics	**Skill Quests**
Compare solids with objects	Identifying pyramids in the environment
	Identifying prisms in the environment

4.G.B5 Solids. 5. Describes prisms and pyramids in terms of faces, vertices and edges	
Course Topics	**Activities**
Geometry	How many Faces?
	How many Edges?
	How many Corners?
	Faces, Edges and Vertices
Topics	**Skill Quests**
Teacher directed	

4.G.B6 Solids. 6. Classifies prisms and pyramids	
Course Topics	**Activities**
Teacher directed	
Topics	**Skill Quests**
Teacher directed	

4.G.B7 Solids. 7. Constructs a net of a prism or pyramid	
Course Topics	**Activities**
Teacher directed	
Topics	**Skill Quests**
Teacher directed	

4.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**
Geometry	What Line am I?
	Nets
Topics	**Skill Quests**
Nets of prisms	Introducing nets of prisms

4.G.C4 Plane figures. 4. Describes convex and nonconvex polygons	
Course Topics	**Activities**
Teacher directed	
Topics	**Skill Quests**
Teacher directed	

4.G.C5 Plane figures. 5. Identifies and constructs parallel lines and perpendicular lines	
Course Topics	**Activities**
Teacher directed	
Topics	**Skill Quests**
Teacher directed	

4.G.C6 Plane figures. 6. Describes quadrilaterals	
Course Topics	**Activities**
Teacher directed	
Topics	**Skill Quests**
Teacher directed	

4.G.C7 Plane figures. 7. Classifies quadrilaterals	
Course Topics	**Activities**
Teacher directed	
Topics	**Skill Quests**
Teacher directed	

4.G.D2 Frieze patterns and tessellations. 2. Observes and produces patterns using geometric figures	
Course Topics	**Activities**
Teacher directed	
Topics	**Skill Quests**
Observe patterns	Finding a rule for a shape pattern

4.G.D3 Frieze patterns and tessellations. 3. Observes and produces frieze patterns and tessellations a. using reflections	
Course Topics	**Activities**
Geometry	Transformations
Topics	**Skill Quests**
Explore reflections	Exploring reflections

3 Measurement

3.1 Measurement

4.M.A4 Lengths. 4. Estimates and measures the dimensions of an object using conventional units b. metre, decimetre, centimetre and millimetre	
Course Topics	**Activities**
Measurement 1	How Long is That?
	Measuring Length
Topics	**Skill Quests**
Estimate & measure length	Reading lengths
	Introducing mm

4.M.A5 Lengths. 5. Establishes relationships between units of measure for length a. metre, decimetre, centimetre and millimetre	
Course Topics	**Activities**
Measurement 1	Centimetres and Metres
Topics	**Skill Quests**
Relationship between units of length	Comparing cm & mm
	Ordering lengths in mm & cm
	Selecting appropriate units of measure: m, cm, mm

4.M.A6 Lengths. 6. Calculates the perimeter of plane figures	
Course Topics	**Activities**
Measurement 1	Perimeter of Shapes
Topics	**Skill Quests**
Calculate perimeter	Calculating the perimeter of plane figures

4.M.B1 Surface areas. 1. Estimates and measures surface area a. using unconventional units	
Course Topics	**Activities**
Measurement 1	Equal Areas
Topics	**Skill Quests**
Teacher directed	

4.M.C1 Volumes. 1. Estimates and measures volumes a. using unconventional units	
Course Topics	**Activities**
Measurement 2	How many Blocks?
Topics	**Skill Quests**
Teacher directed	

4.M.D1 Angles. 1. Compares angles	
Course Topics	**Activities**
Measurement 1	Equal Angles
	Comparing Angles
	Right Angle Relation
Topics	**Skill Quests**
Measurement: angles	Comparing angles

4.M.E1 Capacities. 1. Estimates and measures capacity using unconventional units	
Course Topics	**Activities**
Measurement 2	How Full?
Topics	**Skill Quests**
Teacher directed	

4.M.E2 Capacities. 2. Estimates and measures capacity using conventional units	
Course Topics	**Activities**
Measurement 2	Using a Litre
Topics	**Skill Quests**
Measurement: capacity	Reading & measuring capacity

4.M.F1 Masses. 1. Estimates and measures mass using unconventional units	
Course Topics	**Activities**
Teacher directed	
Topics	**Skill Quests**
Teacher directed	

4.M.F2 Masses. 2. Estimates and measures mass using conventional units	
Course Topics	**Activities**
Measurement 2	How Heavy?
	Mass Word Problems
Topics	**Skill Quests**
Measurement: mass	Estimating & measuring mass

4.M.G1 Time. 1. Estimates and measures time using conventional units	
Course Topics	**Activities**
Measurement 2	Half Hour Times
	What is the Time?
	Using Timetables
Topics	**Skill Quests**
Estimate & measure time	Telling time to the minute (analogue)
	Telling time to the minute (digital)

4.M.G2 Time. 2. Establishes relationships between units of measure	
Course Topics	**Activities**
Measurement 2	Half Hour Times
	What is the Time?
	Using Timetables
Topics	**Skill Quests**
Relationship between units of time	Converting units of time

4.M.H1 Temperature. 1. Estimates and measures temperature using conventional units	
Course Topics	**Activities**
Measurement 2	Temperature
Topics	**Skill Quests**
Measurement: temperature	Estimating & measuring temperature

4 Statistics

4.1 Statistics

4.S.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	

4.S.2 Collects, describes and organizes data (classifies or categorizes) using tables	
Course Topics	**Activities**
Teacher directed	
Topics	**Skill Quests**
Collect, describe & organize data	Collecting & organizing data

4.S.3 Interprets data using b. a table, a bar graph, a pictograph and a broken-line graph	
Course Topics	**Activities**
Statistics and Probability	Sorting Data
	Tallies
	Picture Graphs
Topics	**Skill Quests**
Interpret data	Using a bar graph
	Using a pictograph
	Using tables & bar graphs
	Using a line graph
	Comparing & reading graphs

4.S.4 Displays data using b. a table, a bar graph, a pictograph and a broken-line graph	
Course Topics	**Activities**
Statistics and Probability	Making Graphs
	Tallies
Topics	**Skill Quests**
Teacher directed	Teacher directed

5 Probability

5.1 Probability

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

4.P.2 When applicable, recognizes equiprobability	
Course Topics	**Activities**
Teacher directed	
Topics	**Skill Quests**
Recognize equiprobability in data	Recognizing equiprobability

4.P.3 When applicable, becomes aware of the independence of events in an experiment	
Course Topics	**Activities**
Teacher directed	
Topics	**Skill Quests**
Understand independence of events	Understanding the independence of events

4.P.4 Experiments with activities involving chance, using various objects	
Course Topics	**Activities**
Teacher directed	
Topics	**Skill Quests**
Chance experiments	Introducing chance experiments (unequal outcomes)

4.P.5 Predicts qualitatively an outcome or several events using a probability line, among other things a. certain, possible or impossible outcome b. more likely, just as likely, less likely event	
Course Topics	**Activities**
Statistics and Probability	What are the Chances?
Topics	**Skill Quests**
Predict the outcome of an event	Predicting the outcome of events

4.P.6 Distinguishes between prediction and outcome	
Course Topics	**Activities**
Teacher directed	
Topics	**Skill Quests**
Teacher directed	

4.P.7 Uses tables or diagrams to collect and display the outcomes of an experiment	
Course Topics	**Activities**
Statistics and Probability	How many Combinations?
Topics	**Skill Quests**
Teacher directed	

4.P.8 Enumerates possible outcomes of b. a random experiment, using tables, a tree diagram	
Course Topics	**Activities**
Statistics and Probability	How many Combinations?
Topics	**Skill Quests**
Teacher directed	

4.P.9 Compares qualitatively the theoretical or experimental probability of events	
Course Topics	**Activities**
Teacher directed	
Topics	**Skill Quests**
Compare probability of events	Describing the probability of events occurring

4.P.13 Simulates random experiments with or without the use of technology	
Course Topics	**Activities**
Teacher directed	
Topics	**Skill Quests**
Teacher directed	

Grade 5

1 Arithmetic

1.1 Understanding and writing numbers

5.A.U.A1 Natural numbers less than 1 000 000. 1. Counts or recites counting rhymes involving natural numbers b. counts forward or backward. c. skip counts (e.g. by twos)	
Course Topics	**Activities**
Teacher directed	
Topics	**Skill Quests**
Count numbers to 1 000 000	Counting to 1 000 000

5.A.U.A2 Natural numbers less than 1 000 000. 2. Counts collections (using objects or drawings) c. counts a collection by grouping or regrouping. d. counts a pre-grouped collection	
Course Topics	**Activities**
Teacher directed	
Topics	**Skill Quests**
Teacher directed	

5.A.U.A3 Natural numbers less than 1 000 000. 3. Reads and writes any natural number	
Course Topics	**Activities**
Numbers 1	Place Value to Millions
	Expanded Notation
Topics	**Skill Quests**
Read & write numbers to 1 000 000	Reading & writing numbers to 1 000 000

5.A.U.A4 Natural numbers less than 1 000 000. 4. Represents natural numbers in different ways or associates a number with a set of objects or drawings c. emphasis on place value in non-apparent, non-accessible groupings, using materials for which groupings are symbolic	
Course Topics	**Activities**
Numbers 1	Place Value to Millions
	Expanded Notation
Topics	**Skill Quests**
Represent numbers to 1 000 000	Place value of numbers to 1 000 000

5.A.U.A5 Natural numbers less than 1 000 000. 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 × 50 + 30 − 7, 123 = 2 × 60 + 3)	
Course Topics	**Activities**
Numbers 1	Place Value to Millions
	Expanded Notation
Operations with Numbers 2	Multiply Multiples of 10
	Remainders by Tables
Topics	**Skill Quests**
Compose & decompose numbers to 1 000 000	Composing & decomposing numbers to 1 000 000

5.A.U.A6 Natural numbers less than 1 000 000. 6. Identifies equivalent expressions (e.g. 52 = 40 + 12, 25 + 27 = 40 + 12, 52 = 104 ÷ 2)	
Course Topics	**Activities**
Teacher directed	
Topics	**Skill Quests**
Identify equivalent expressions	Working with equivalent expressions

5.A.U.A7 Natural numbers less than 1 000 000. 7. Compares natural numbers	
Course Topics	**Activities**
Teacher directed	
Topics	**Skill Quests**
Compare numbers to 1 000 000	Comparing numbers to 1 000 000

5.A.U.A8 Natural numbers less than 1 000 000. 8. Arranges natural numbers in increasing or decreasing order	
Course Topics	**Activities**
Teacher directed	
Topics	**Skill Quests**
Order numbers to 1 000 000	Ordering numbers to 1 000 000

5.A.U.A9 Natural numbers less than 1 000 000. 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	Multiples
	Pick the Next Number
	Describing Patterns
	Table of Values
Topics	**Skill Quests**
Teacher directed	

5.A.U.A10 Natural numbers less than 1 000 000. 10. Locates natural numbers using different visual aids (e.g. hundreds chart, number strip, number line)	
Course Topics	**Activities**
Teacher directed	
Topics	**Skill Quests**
Teacher directed	

5.A.U.A11 Natural numbers less than 1 000 000. 11. Identifies properties of natural numbers a. odd or even numbers. b. square, prime or composite numbers	
Course Topics	**Activities**
Teacher directed	
Topics	**Skill Quests**
Identify properties of numbers	Identifying & describing square numbers

5.A.U.A12 Natural numbers less than 1 000 000. 12. Classifies natural numbers in various ways, based on their properties (e.g. even numbers, composite numbers)	
Course Topics	**Activities**
Numbers 1	Prime or Composite?
Topics	**Skill Quests**
Classify numbers to 1 000 000	Understanding prime & composite numbers

5.A.U.A13 Natural numbers less than 1 000 000. 13. Approximates a collection, using objects or drawings (e.g. estimate, round up/down to a given value)	
Course Topics	**Activities**
Numbers 1	Rounding Numbers
Topics	**Skill Quests**
Approximate a collection to 1 000 000	Rounding numbers to 1 000 000

5.A.U.A14 Natural numbers less than 1 000 000. 14. Represents the power of a natural number	
Course Topics	**Activities**
Teacher directed	
Topics	**Skill Quests**
Represent powers of numbers	Introducing square numbers
	Introducing cube numbers

5.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**
Operations with Numbers 3	Fraction Word Problems
Topics	**Skill Quests**
Represent fractions	Representing a fraction in different ways

5.A.U.B4 Fractions (using objects or drawings). 4. Identifies the different meanings of fractions (sharing, division, ratio)	
Course Topics	**Activities**
Operations with Numbers 3	Fraction Word Problems
Topics	**Skill Quests**
Teacher directed	

5.A.U.B6 Fractions (using objects or drawings). 6. Reads and writes a fraction	
Course Topics	**Activities**
Teacher directed	
Topics	**Skill Quests**
Read & write fractions	Reading & writing fractions

5.A.U.B7 Fractions (using objects or drawings). 7. Compares a fraction to 0, ½ or 1	
Course Topics	**Activities**
Teacher directed	
Topics	**Skill Quests**
Compare fractions	Comparing fractions using benchmarks

5.A.U.B8 Fractions (using objects or drawings). 8. Verifies whether two fractions are equivalent	
Course Topics	**Activities**
Teacher directed	
Topics	**Skill Quests**
Equivalence of fractions	Recognizing equivalent fractions

5.A.U.B9 Fractions (using objects or drawings). 9. Matches a decimal or percentage to a fraction	
Course Topics	**Activities**
Teacher directed	
Topics	**Skill Quests**
Match fractions	Matching decimals & percentages to a fraction

5.A.U.B10 Fractions (using objects or drawings). 10. Orders fractions with the same denominator	
Course Topics	**Activities**
Numbers 2	Comparing Fractions 1
Topics	**Skill Quests**
Order fractions – same denominator	Ordering fractions with the same denominator

5.A.U.B11 Fractions (using objects or drawings). 11. Orders fractions where one denominator is a multiple of the other(s)	
Course Topics	**Activities**
Numbers 2	Comparing Fractions 1
	Comparing Fractions 2
Topics	**Skill Quests**
Order fractions - related denominator	Ordering fractions with related denominators

5.A.U.B12 Fractions (using objects or drawings). 12. Orders fractions with the same numerator	
Course Topics	**Activities**
Teacher directed	
Topics	**Skill Quests**
Order fractions – same numerator	Ordering fractions with the same numerator

5.A.U.B13 Fractions (using objects or drawings). 13. Locates fractions on a number line	
Course Topics	**Activities**
Teacher directed	
Topics	**Skill Quests**
Locate fractions on a number line	Locating fractions on a number line

5.A.U.C1 Decimals up to thousandths. 1. Represents decimals in a variety of ways (using objects or drawings)	
Course Topics	**Activities**
Teacher directed	
Topics	**Skill Quests**
Represent decimals to thousandths	Representing decimals to thousandths

5.A.U.C2 Decimals up to thousandths. 2. Identifies equivalent representations (using objects or drawings)	
Course Topics	**Activities**
Teacher directed	
Topics	**Skill Quests**
Teacher directed	

5.A.U.C3 Decimals up to thousandths. 3. Reads and writes numbers written in decimal notation	
Course Topics	**Activities**
Teacher directed	
Topics	**Skill Quests**
Read & write decimals to thousandths	Reading & writing numbers to thousandths

5.A.U.C5 Decimals up to thousandths. 5. Composes and decomposes a decimal written in decimal notation	
Course Topics	**Activities**
Teacher directed	
Topics	**Skill Quests**
Compose & decompose decimals	Composing & decomposing decimals to thousandths

5.A.U.C6 Decimals up to thousandths. 6. Recognizes equivalent expressions (e.g. 12 tenths is equivalent to 1 unit and 2 tenths; 0.5 is equivalent to 0.50)	
Course Topics	**Activities**
Teacher directed	
Topics	**Skill Quests**
Recognize equivalent expressions	Recognizing equivalent expressions to thousandths

5.A.U.C7 Decimals up to thousandths. 7. Locates decimals on a number line a. between two consecutive natural numbers. b. between two decimals	
Course Topics	**Activities**
Numbers 2	Decimals on a Number Line
Topics	**Skill Quests**
Teacher directed	

5.A.U.C8 Decimals up to thousandths. 8. Compares two decimals	
Course Topics	**Activities**
Numbers 2	Comparing Decimals
	Decimal Order
Topics	**Skill Quests**
Teacher directed	

5.A.U.C9 Decimals up to thousandths. 9. Approximates (e.g. estimates, rounds to a given value, truncates decimal places)	
Course Topics	**Activities**
Numbers 2	Rounding Decimals
Topics	**Skill Quests**
Approximate decimals	Rounding decimals to thousandths

5.A.U.C10 Decimals up to thousandths. 10. Arranges decimals in increasing or decreasing order	
Course Topics	**Activities**
Teacher directed	
Topics	**Skill Quests**
Order decimals	Ordering decimals to thousandths

5.A.U.C11 Decimals up to thousandths. 11. Matches. a. a fraction to its decimal. b. a fraction or percentage to its decimal	
Course Topics	**Activities**
Teacher directed	
Topics	**Skill Quests**
Teacher directed	

5.A.U.D1 Integers. 1. Represents integers in a variety of ways (using objects or drawings) (e.g. tokens in two different colours, number line, thermometer, football field, elevator, hot air balloon)	
Course Topics	**Activities**
Teacher directed	
Topics	**Skill Quests**
Represent integers	Representing integers

5.A.U.D2 Integers. 2. Reads and writes integers	
Course Topics	**Activities**
Teacher directed	
Topics	**Skill Quests**
Read & write integers	Reading & writing integers

5.A.U.D3 Integers. 3. Locates integers on a number line or Cartesian plane	
Course Topics	**Activities**
Teacher directed	
Topics	**Skill Quests**
Locate integers	Locating integers on number lines

5.A.U.D4 Integers. 4. Compares integers	
Course Topics	**Activities**
Teacher directed	
Topics	**Skill Quests**
Teacher directed	

5.A.U.D5 Integers. 5. Arranges integers in increasing or decreasing order	
Course Topics	**Activities**
Numbers 1	Ordering Integers
Topics	**Skill Quests**
Teacher directed	

1.2 Meaning of operations involving numbers

5.A.M.A1 Natural number less than 1 000 000. 1. Determines the operation(s) to perform in a given situation	
Course Topics	**Activities**
Teacher directed	
Topics	**Skill Quests**
Determine operations for word problems	Determining operations for word problems

5.A.M.A2 Natural number less than 1 000 000. 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. b. composition of transformations positive, negative. c. composition of mixed transformations	
Course Topics	**Activities**
Operations with Numbers 1	Problems: Add and Subtract
Topics	**Skill Quests**
Teacher directed	

5.A.M.A3 Natural number less than 1 000 000. 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). b. rectangular arrays, repeated addition, Cartesian product, area, volume, repeated subtraction, sharing, number of times x goes into y, and comparisons (using objects, diagrams or equations)	
Course Topics	**Activities**
Operations with Numbers 1	Problems: Times and Divide
Topics	**Skill Quests**
Teacher directed	

5.A.M.A4 Natural number less than 1 000 000. 4. Establishes equality relations between numerical expressions	
Course Topics	**Activities**
Teacher directed	
Topics	**Skill Quests**
Teacher directed	

5.A.M.A5 Natural number less than 1 000 000. 5. Determines numerical equivalences using relationships between c. operations (the four operations), the commutative property of addition and multiplication, the associative property and the distributive property of multiplication over addition or subtraction	
Course Topics	**Activities**
Operations with Numbers 1	Multiplication Properties
Topics	**Skill Quests**
Teacher directed	

5.A.M.A6 Natural number less than 1 000 000. 6. Translates a situation using a series of operations in accordance with the order of operations	
Course Topics	**Activities**
Teacher directed	
Topics	**Skill Quests**
Teacher directed	

5.A.M.B1 Decimals up to thousandths. 1. Uses objects, diagrams or equations to represent a situation and conversely, describes a situation represented by objects, diagram or equations (use of different meanings of addition and subtraction) a. transformation (adding, taking away), uniting, comparing. b. composition of transformations: positive, negative. c. composition of mixed transformations	
Course Topics	**Activities**
Teacher directed	
Topics	**Skill Quests**
Teacher directed	

5.A.M.B2 Decimals up to thousandths. 2. Uses objects, diagrams or equations to represent a situation and conversely, describes a situation represented by objects, diagrams or equations (use of different meanings of multiplication and division: rectangular arrays, Cartesian product, area, volume, sharing, number of times x goes into y, and comparisons)	
Course Topics	**Activities**
Teacher directed	
Topics	**Skill Quests**
Teacher directed	

5.A.M.B3 Decimals up to thousandths. 3. Determines numerical equivalences using b. relationships between operations (the four operations), the commutative property of addition and multiplication, the associative property and the distributative property of multiplication over addition or subtraction	
Course Topics	**Activities**
Teacher directed	
Topics	**Skill Quests**
Teacher directed	

5.A.M.B4 Decimals up to thousandths. 4. Translates a situation into a series of operations in accordance with the order of operations	
Course Topics	**Activities**
Teacher directed	
Topics	**Skill Quests**
Teacher directed	

5.A.M.C1 Fractions. 1. Uses objects, diagrams or equations to represent a situation and conversely, describes a situation represented by objects, diagram or equations (use of different meanings of addition, subtraction and multiplication by a natural number)	
Course Topics	**Activities**
Numbers 2	Unit Fractions
	Fraction of an Amount
Topics	**Skill Quests**
Teacher directed	

1.3 Operations involving numbers

5.A.O.A1 Natural numbers. 1. Approximates the result of a. an addition or subtraction involving natural numbers. b. any of the four operations involving natural numbers	
Course Topics	**Activities**
Teacher directed	
Topics	**Skill Quests**
Approximate results of all operations	Approximating results when adding & subtracting
	Approximating results when multiplying & dividing

5.A.O.A2 Natural numbers. 2. Builds a repertoire of memorized addition and subtraction facts 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**
Teacher directed	
Topics	**Skill Quests**
Apply addition & subtraction facts to 10	Applying basic addition & subtraction facts to 10

5.A.O.A3 Natural numbers. 3. Develops processes for mental computation a. Uses his/her own processes to determine the sum or difference of two natural numbers. b. Uses his/her own processes to determine the product or quotient of two natural numbers	
Course Topics	**Activities**
Operations with Numbers 1	Problems: Times and Divide
Operations with Numbers 2	Division Facts
	Dividing by 10, 100, 1000
	Multiplying by 10, 100, 1000
	Multiply Multiples of 10
	Remainders by Tables
	Mental Methods Division
	Mental Methods Multiplication
Topics	**Skill Quests**
Use mental strategies to add & subtract	Using mental strategies for addition & subtraction
Use mental strategies to multiply	Using known facts strategies for multiplication
	Using doubling strategies for multiplication
	Using split method for multiplying
	Using area method for multiplying
Use mental strategies to divide	Using place value strategies for division
	Using known facts strategies for division
	Using doubling & halving to divide

5.A.O.A4 Natural numbers. 4. Develops processes for written computation (addition and subtraction) b. Uses conventional processes to determine the sum of two natural numbers of up to four digits. c. Uses conventional processes to determine the difference between two natural numbers of up to four digits whose result is greater than 0	
Course Topics	**Activities**
Teacher directed	
Topics	**Skill Quests**
Use written methods to add & subtract	Using written methods for addition
	Using written methods for subtraction

5.A.O.A5 Natural numbers. 5. Determines the missing term in an equation (relationships between operations)	
Course Topics	**Activities**
Teacher directed	
Topics	**Skill Quests**
Teacher directed	

5.A.O.A6 Natural numbers. 6. Builds a repertoire of memorized multiplication and division facts b. Develops various strategies that promote mastery of number facts and relate them to the properties of multiplication. c. Masters all multiplication facts (0 x 0 to 10 x 10) and the corresponding division facts	
Course Topics	**Activities**
Operations with Numbers 2	Division Facts
	Mental Methods Division
	Mental Methods Multiplication
Topics	**Skill Quests**
Multiplication & division facts to 10 x 10	Recalling multiplication by 2
	Recalling multiplication by 3
	Recalling multiplication by 4
	Recalling multiplication by 5
	Recalling multiplication by 6
	Recalling multiplication by 7
	Recalling multiplication by 8
	Recalling multiplication by 9
	Recalling multiplication by 10
	Recalling division by 2
	Recalling division by 3
	Recalling division by 4
	Recalling division by 5
	Recalling division by 6
	Recalling division by 7
	Recalling division by 8
	Recalling division by 9
	Recalling division by 10
	Using properties of multiplication up to 10 x 10

5.A.O.A7 Natural numbers. 7. Develops processes for written computation (multiplication and division) b. Uses conventional processes to determine the product of a three-digit natural number and a two-digit natural number c. Uses conventional processes to determine the quotient of a four-digit natural number and a two-digit natural number, expresses the remainder of a division as a decimal that does not go beyond the second decimal place	
Course Topics	**Activities**
Operations with Numbers 2	Long Multiplication
	Long Division
Topics	**Skill Quests**
Use written methods to multiply & divide	Using written methods for multiplication
	Using written methods for division

5.A.O.A8 Natural numbers. 8. Determines the missing term in an equation (relationships between operations): a × b = □, a × □ = c, □ × b = c, a ÷ b = □, a ÷ □ = c, □ ÷ b = c	
Course Topics	**Activities**
Operations with Numbers 1	Problems: Times and Divide
Operations with Numbers 2	Dividing by 10, 100, 1000
	Remainders by Tables
Topics	**Skill Quests**
Determine missing terms in equations	Determining missing terms in 1-step equations

5.A.O.A9 Natural numbers. 9. Decomposes a number into prime factors	
Course Topics	**Activities**
Teacher directed	
Topics	**Skill Quests**
Decompose a number into prime factors	Decomposing a number into prime factors

5.A.O.A10 Natural numbers. 10. Calculates the power of a number	
Course Topics	**Activities**
Numbers 1	Square Roots
Topics	**Skill Quests**
Calculate power of a number	Calculating the power of a number

5.A.O.A11 Natural numbers. 11. Determines the divisibility of a number by 2, 3, 4, 5, 6, 8, 9, 10	
Course Topics	**Activities**
Operations with Numbers 1	Divisibility Tests
Topics	**Skill Quests**
Determine divisibility of a number	Determining the divisibility of the number 2
	Determining the divisibility of the number 3
	Determining the divisibility of the number 4
	Determining the divisibility of the number 5
	Determining the divisibility of the number 6
	Determining the divisibility of the number 8
	Determining the divisibility of the number 9

5.A.O.A12 Natural numbers. 12. Performs a series of operations in accordance with the order of operations	
Course Topics	**Activities**
Operations with Numbers 1	Order of Operations 1
Topics	**Skill Quests**
Order of operations with whole numbers	Order of operations, addition & subtraction
	Order of operations, multiplication & division

5.A.O.A13 Natural numbers. 13. Using his/her own words and mathematical language that is at an appropriate level for the cycle	
Course Topics	**Activities**
Numbers 1	Multiples
	Factors
Operations with Numbers 1	Problems: Times and Divide
Operations with Numbers 2	Multiply Multiples of 10
	Remainders by Tables
Topics	**Skill Quests**
Teacher directed	

5.A.O.A14 Natural numbers. 14. Adds new terms to a series when the first three terms or more are given	
Course Topics	**Activities**
Numbers 1	Pick the Next Number
	Table of Values
Topics	**Skill Quests**
Add new terms to a series	Adding new terms to a series

5.A.O.A15 Natural numbers. 15. Uses a calculator and. a. becomes familiar with its basic functions (+, -, =, 0 to 9 number keys, all clear, clear) b. becomes familiar with its x and ÷ functions. c. becomes familiar with memory keys and change to sign keys (+/-)	
Course Topics	**Activities**
Teacher directed	
Topics	**Skill Quests**
Teacher directed	

5.A.O.B1 Fractions (using objects or diagrams). 1. Generates a set of equivalent fractions	
Course Topics	**Activities**
Numbers 2	Equivalent Fractions
Topics	**Skill Quests**
Generate equivalent fractions	Generating equivalent fractions

5.A.O.B2 Fractions (using objects or diagrams). 2. Reduces a fraction to its simplest form (lowest terms)	
Course Topics	**Activities**
Numbers 2	Simplifying Fractions
Operations with Numbers 3	Percentage to Fraction
Topics	**Skill Quests**
Reduce fractions to simplest form	Reducing a fraction to its simplest form

5.A.O.B3 Fractions (using objects or diagrams). 3. Adds and subtracts fractions when the denominator of one fraction is a multiple of the other fraction(s)	
Course Topics	**Activities**
Operations with Numbers 3	Add: Common Denominator
	Subtract: Common Denominator
Topics	**Skill Quests**
Add/sub fractions - related denominators	Adding fractions with related denominators
	Subtracting fractions with related denominators
	Add & subtract fractions with related denominators

5.A.O.B4 Fractions (using objects or diagrams). 4. Multiplies a natural number by a fraction	
Course Topics	**Activities**
Operations with Numbers 3	Fraction by Whole Number
	Calculating Percentages
	Fraction Word Problems
Topics	**Skill Quests**
Multiply a natural number by a fraction	Multiplying a natural number by a fraction

5.A.O.C1 Decimals. 1. Approximates the result of a. an addition or subtraction. b. a multiplication or division	
Course Topics	**Activities**
Operations with Numbers 1	Estimation: Multiply and Divide
	Estimate Decimal Differences 1
	Estimate Decimal Sums 1
	Estimate Decimal Differences 2
	Estimate Decimal Sums 2
Topics	**Skill Quests**
Estimate - add/subtract decimals	Estimating addition & subtraction of decimals

5.A.O.C2 Decimals. 2. Develops processes for mental computation a. adds and subtracts decimals. b. perfoms operations involving decimals (multiplication, division by a natural number). c. multiplies and divides by 10, 100, 1000)	
Course Topics	**Activities**
Operations with Numbers 3	Multiply Decimals: 10, 100, 1000
	Divide Decimals: 10, 100, 1000
	Divide decimals by powers of 10 100 1000
	Calculating Percentages
Topics	**Skill Quests**
Strategies to add & subtract decimals	Adding decimals using mental strategies
	Subtracting decimals using mental strategies
Strategies to multiply & divide decimals	Multiplying decimals using mental strategies
	Dividing decimals using mental strategies
Multiply decimals by 10, 100 & 1000	Multiplying decimals by 10, 100 & 1000
Divide decimals by 10, 100 & 1000	Dividing decimals by 10, 100 & 1000

5.A.O.C3 Decimals. 3. Develops processes for written computation a. adds and subtracts decimals whose result does not go beyond the second decimal place. b. multiplies decimals whose product does not go beyond the second decimal place. c. divides a decimal by a natural number less than 11	
Course Topics	**Activities**
Operations with Numbers 3	Adding Decimals
	Subtracting Decimals
Topics	**Skill Quests**
Multiply decimals to hundredths - formal	Multiplying decimals to hundredths - formal
Divide decimals to hundredths - formal	Dividing decimals to hundredths - formal

5.A.O.D1 Using Numbers. 1. Expresses a decimal as a fraction, and vice versa	
Course Topics	**Activities**
Operations with Numbers 3	Fractions to Decimals
	Decimals to Fractions 1
Topics	**Skill Quests**
Express decimals as fractions	Expressing a decimal as a fraction

5.A.O.D2 Using Numbers. 2. Expresses a decimal as a percentage, and vice versa	
Course Topics	**Activities**
Operations with Numbers 3	Calculating Percentages
	Decimal to Percentage
Topics	**Skill Quests**
Express decimals as percentages	Expressing a decimal as a percentage

5.A.O.D3 Using Numbers. 3. Expresses a fraction as a percentage, and vice versa	
Course Topics	**Activities**
Operations with Numbers 3	Calculating Percentages
	Percentage to Fraction
Topics	**Skill Quests**
Express fractions as percentages	Expressing fractions as percentages

5.A.O.D4 Using Numbers. 4. Chooses an appropriate number form for a given context	
Course Topics	**Activities**
Teacher directed	
Topics	**Skill Quests**
Teacher directed	

2 Geometry

2.1 Geometry

5.G.A3 Space. 3. Locates objects on an axis (based on the types of numbers studied)	
Course Topics	**Activities**
Geometry	Transformations: Coordinate Plane
Topics	**Skill Quests**
Locate objects on an axis	Locating objects on an axis

5.G.A4 Space. 4. Locates points in a Cartesian plane b. in all four quadrants	
Course Topics	**Activities**
Geometry	Ordered Pairs
	Graphing from a Table of Values
	Transformations: Coordinate Plane
Topics	**Skill Quests**
Locate points in a Cartesian plane	Locating points in a Cartesian plane - 4 quadrants

5.G.B5 Solids. 5. Describes prisms and pyramids in terms of faces, vertices and edges	
Course Topics	**Activities**
Teacher directed	
Topics	**Skill Quests**
Investigate prisms & pyramids	Investigating properties of prisms & pyramids

5.G.B6 Solids. 6. Classifies prisms and pyramids	
Course Topics	**Activities**
Teacher directed	
Topics	**Skill Quests**
Compare & describe prisms & pyramids	Comparing, describing & naming prisms & pyramids

5.G.B7 Solids. 7. Constructs a net of a prism or pyramid	
Course Topics	**Activities**
Teacher directed	
Topics	**Skill Quests**
Connect prisms & pyramids with nets	Connecting prisms & pyramids with nets

5.G.B8 Solids. 8. Matches the net of c. a convex polyhedron to the corresponding convex polyhedron	
Course Topics	**Activities**
Teacher directed	
Topics	**Skill Quests**
Nets of convex polyhedrons	Matching nets of convex polyhedrons to objects

5.G.B9 Solids. 9. Tests Euler's theorem on convex polyhedrons	
Course Topics	**Activities**
Geometry	Euler's Formula
Topics	**Skill Quests**
Teacher directed	

5.G.C5 Plane figures. 5. Identifies and constructs parallel lines and perpendicular lines	
Course Topics	**Activities**
Teacher directed	
Topics	**Skill Quests**
Identify parallel & perpendicular lines	Identify parallel/perpendicular lines - 2D figures

5.G.C7 Plane figures. 7. Classifies quadrilaterals	
Course Topics	**Activities**
Teacher directed	
Topics	**Skill Quests**
Classify quadrilaterals	Classifying quadrilaterals

5.G.C8 Plane figures. 8. Describes triangles: scalene triangles, right triangles, isosceles triangles, equilateral triangles	
Course Topics	**Activities**
Geometry	Triangle Tasters
Topics	**Skill Quests**
Teacher directed	

5.G.C9 Plane figures. 9. Classifies triangles	
Course Topics	**Activities**
Geometry	Triangle Tasters
Topics	**Skill Quests**
Classify triangles	Classifying triangles

5.G.C10 Plane figures. 10. Describes circles	
Course Topics	**Activities**
Geometry	Labelling Circles
Topics	**Skill Quests**
Describe circles	Describing circles

5.G.D3 Frieze patterns and tessellations. 3. Observes and produces frieze patterns and tessellations a. using reflections. b. using translations	
Course Topics	**Activities**
Geometry	Transformations
Topics	**Skill Quests**
Frieze patterns & tessellations	Recognizing tessellations

3 Measurement

3.1 Measurement

5.M.A4 Lengths. 4. Estimates and measures the dimensions of an object using conventional units c. metre, decimetre, centimetre, millimetre and kilometre	
Course Topics	**Activities**
Teacher directed	
Topics	**Skill Quests**
Measure length (m, cm, mm & km)	Introducing the kilometre
	Selecting appropriate units of length

5.M.A5 Lengths. 5. Establishes relationships between units of measure for length b. metre, decimetre, centimetre, millimetre and kilometre	
Course Topics	**Activities**
Measurement 1	Converting Units of Length
	Metres and Kilometres
Topics	**Skill Quests**
Relationship in length (m, cm, mm & km)	Comparing and ordering lengths

5.M.A6 Lengths. 6. Calculates the perimeter of plane figures	
Course Topics	**Activities**
Teacher directed	
Topics	**Skill Quests**
Calculate perimeter	Calculate perimeter of polygons & composite shapes

5.M.B1 Surface areas. 1. Estimates and measures surface area b. using conventional units	
Course Topics	**Activities**
Measurement 1	Area of Shapes
	Area: Squares and Rectangles
	Area: Triangles
Topics	**Skill Quests**
Estimate & measure area	Using formal units for area - square cm & square m
	Estimating & measuring area of rectangles
	Estimate & compare areas of non-rectilinear shapes

5.M.C1 Volumes. 1. Estimates and measures volumes b. using conventional units	
Course Topics	**Activities**
Measurement 2	Volume: Rectangular Prisms 1
	Volume: Rectangular Prisms 2
Topics	**Skill Quests**
Estimate & measure volume	Estimating & measuring volume

5.M.D1 Angles. 1. Compares angles	
Course Topics	**Activities**
Teacher directed	
Topics	**Skill Quests**
Compare angles	Comparing angles

5.M.D2 Angles. 2. Estimates and determines the degree measurement of angles	
Course Topics	**Activities**
Measurement 1	Measuring Angles
	Estimating Angles
Topics	**Skill Quests**
Estimate & measure angles	Estimating & measuring angles

5.M.E1 Capacities. 1. Estimates and measures capacity using unconventional units	
Course Topics	**Activities**
Teacher directed	
Topics	**Skill Quests**
Teacher directed	

5.M.E2 Capacities. 2. Estimates and measures capacity using conventional units	
Course Topics	**Activities**
Measurement 2	Capacity Word Problems
Topics	**Skill Quests**
Estimate & measure capacity	Estimate & measure capacity - conventional units

5.M.E3 Capacities. 3. Estimates relationships between units of measure	
Course Topics	**Activities**
Measurement 2	Millilitres and Litres
Topics	**Skill Quests**
Relationship between capacity units	Relationships between units to measure capacity

5.M.F1 Masses. 1. Estimates and measures mass using unconventional units	
Course Topics	**Activities**
Teacher directed	
Topics	**Skill Quests**
Teacher directed	

5.M.F2 Masses. 2. Estimates and measures mass using conventional units	
Course Topics	**Activities**
Measurement 2	Mass Word Problems
Topics	**Skill Quests**
Estimate & measure mass	Estimate & measure mass using conventional units

5.M.F3 Masses. 3. Establishes relationships between units of measure	
Course Topics	**Activities**
Measurement 2	Grams and Kilograms
	Converting Units of Mass
Topics	**Skill Quests**
Relationship between mass units	Relationships between units to measure mass

5.M.G1 Time. 1. Estimates and measures time using conventional units	
Course Topics	**Activities**
Teacher directed	
Topics	**Skill Quests**
Estimate & measure time	Estimating & measuring time

5.M.G2 Time. 2. Establishes relationships between units of measure	
Course Topics	**Activities**
Teacher directed	
Topics	**Skill Quests**
Convert between units of time	Converting between units of time

5.M.H1 Temperature. 1. Estimates and measures temperature using conventional units	
Course Topics	**Activities**
Teacher directed	
Topics	**Skill Quests**
Estimate & measure temperature	Estimating & measuring temperature

4 Statistics

4.1 Statistics

5.S.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	

5.S.2 Collects, describes and organizes data (classifies or categorizes) using tables	
Course Topics	**Activities**
Statistics	Interpreting Tables
Topics	**Skill Quests**
Teacher directed	

5.S.3 Interprets data using c. a table, a bar graph, a pictograph, a broken-line graph and a circle graph	
Course Topics	**Activities**
Statistics	Line Graphs: Interpretation
	Sector Graphs
	Divided Bar Graphs
	Pie Chart Calculations
	Step Graphs
	Travel Graphs
	Dot Plots
Topics	**Skill Quests**
Interpret data	Interpreting data using tables
	Interpreting data using bar graphs
	Interpreting data using broken-line graphs
	Interpreting data using circle graphs

5.S.4 Displays data using b. a table, a bar graph, a pictograph and a broken-line graph	
Course Topics	**Activities**
Teacher directed	
Topics	**Skill Quests**
Teacher directed	

5.S.5 Understands and calculates the arithmetic mean	
Course Topics	**Activities**
Statistics	Mean
Topics	**Skill Quests**
Teacher directed	

5 Probability

5.1 Probability

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

5.P.2 When applicable, recognizes equiprobability	
Course Topics	**Activities**
Teacher directed	
Topics	**Skill Quests**
Recognize equiprobability	Recognizing equiprobability

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

5.P.4 Experiments with activities involving chance, using various objects	
Course Topics	**Activities**
Teacher directed	
Topics	**Skill Quests**
Teacher directed	

5.P.5 Predicts qualitatively an outcome or several events using a probability line, among other things. a. certain, possible or impossibe outcome b. more likely, just as likely, less likely event	
Course Topics	**Activities**
Probability	Probability Scale
Topics	**Skill Quests**
Predict an outcome	Predicting an outcome

5.P.6 Distinguishes between prediction and outcome	
Course Topics	**Activities**
Teacher directed	
Topics	**Skill Quests**
Teacher directed	

5.P.7 Uses tables or diagrams to collect and display the outcomes of an experiment	
Course Topics	**Activities**
Probability	How many Combinations?
	Dice and Coins
Topics	**Skill Quests**
Teacher directed	

5.P.8 Enumerates possible outcomes of b. a random experiement, using tables, a tree diagram	
Course Topics	**Activities**
Probability	How many Combinations?
	Dice and Coins
	Counting Techniques 1
Topics	**Skill Quests**
Possible outcomes of random experiment	Listing possible outcomes - tables & tree diagrams

5.P.9 Compares qualitatively the theoretical or experimental probability of events	
Course Topics	**Activities**
Teacher directed	
Topics	**Skill Quests**
Teacher directed	

5.P.10 Recognizes that a probability is always between 0 and 1	
Course Topics	**Activities**
Probability	Complementary Events
Topics	**Skill Quests**
Recognize probability is between 0 & 1	Recognizing probability is between 0 & 1

5.P.11 Uses fractions, decimals or percentages to quantify a probability	
Course Topics	**Activities**
Probability	Simple Probability
	Complementary Events
	Dice and Coins
Topics	**Skill Quests**
Use fractions, decimals or percentages	Using fractions, decimals or percentages

5.P.12 Compares the outcomes of a random experiment with known theoretical probabilities	
Course Topics	**Activities**
Teacher directed	
Topics	**Skill Quests**
Compare outcomes/theoretical probability	Comparing outcomes with theoretical probabilities

5.P.13 Simulates random experiments with or without the use of technology	
Course Topics	**Activities**
Teacher directed	
Topics	**Skill Quests**
Conduct random experiments (technology)	Conducting random experiments using technology

Grade 6

1 Arithmetic

1.1 Understanding and writing numbers

6.A.U.A1 Natural numbers less than 1 000 000. 1. Counts or recites counting rhymes involving natural numbers b. counts forward or backward. c. skip counts (e.g. by twos)	
Course Topics	**Activities**
Counting, Comparing, and Writing Numbers	Skip Counting
Topics	**Skill Quests**
Count numbers to 1 000 000	Counting to 1 000 000

6.A.U.A2 Natural numbers less than 1 000 000. 2. Counts collections (using objects or drawings) c. counts a collection by grouping or regrouping. d. counts a pre-grouped collection	
Course Topics	**Activities**
Teacher directed	
Topics	**Skill Quests**
Teacher directed	

6.A.U.A3 Natural numbers less than 1 000 000. 3. Reads and writes any natural number	
Course Topics	**Activities**
Understanding Natural Numbers	Place Value to Millions
	Understanding Place Value 3
Counting, Comparing, and Writing Numbers	Numbers in Words
	Numbers from Words to Digits 1
	Expanded Notation
	Numbers from Words to Digits 2
	Numbers from Words to Digits 3
Topics	**Skill Quests**
Read & write numbers to 1 000 000	Reading & writing numbers to 1 000 000

6.A.U.A4 Natural numbers less than 1 000 000. 4. Represents natural numbers in different ways or associates a number with a set of objects or drawings c. emphasis on place value in non-apparent, non-accessible groupings, using materials for which groupings are symbolic	
Course Topics	**Activities**
Understanding Natural Numbers	Place Value to Millions
	Understanding Place Value 3
Counting, Comparing, and Writing Numbers	Expanded Notation
Topics	**Skill Quests**
Represent numbers to 1 000 000	Place value of numbers to 1 000 000

6.A.U.A5 Natural numbers less than 1 000 000. 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 × 50 + 30 − 7, 123 = 2 × 60 + 3)	
Course Topics	**Activities**
Understanding Natural Numbers	Place Value to Millions
	Understanding Place Value 3
Operations-Multiplication and Division	Multiply Multiples of 10
	Remainders by Tables
Counting, Comparing, and Writing Numbers	Expanded Notation
Topics	**Skill Quests**
Compose/decompose numbers to 1 000 000	Composing & decomposing numbers to 1 000 000

6.A.U.A6 Natural numbers less than 1 000 000. 6. Identifies equivalent expressions (e.g. 52 = 40 + 12, 25 + 27 = 40 + 12, 52 = 104 ÷ 2)	
Course Topics	**Activities**
Teacher directed	
Topics	**Skill Quests**
Identify equivalent expressions	Identifying equivalent expressions

6.A.U.A7 Natural numbers less than 1 000 000. 7. Compares natural numbers	
Course Topics	**Activities**
Counting, Comparing, and Writing Numbers	Compare Numbers to 100
Topics	**Skill Quests**
Compare numbers to 1 000 000	Comparing numbers to 1 000 000

6.A.U.A8 Natural numbers less than 1 000 000. 8. Arranges natural numbers in increasing or decreasing order	
Course Topics	**Activities**
Counting, Comparing, and Writing Numbers	Ascending Order
	Descending Order
Topics	**Skill Quests**
Order numbers to 1 000 000	Ordering numbers to 1 000 000

6.A.U.A9 Natural numbers less than 1 000 000. 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**
Understanding Natural Numbers	Multiples
	Pick the Next Number
	Describing Patterns
Topics	**Skill Quests**
Teacher directed	

6.A.U.A10 Natural numbers less than 1 000 000. 10. Locates natural numbers using different visual aids (e.g. hundreds chart, number strip, number line)	
Course Topics	**Activities**
Counting, Comparing, and Writing Numbers	Skip Counting
Topics	**Skill Quests**
Teacher directed	

6.A.U.A11 Natural numbers less than 1 000 000. 11. Identifies properties of natural numbers a. odd or even numbers. b. square, prime or composite numbers	
Course Topics	**Activities**
Teacher directed	
Topics	**Skill Quests**
Teacher directed	

6.A.U.A12 Natural numbers less than 1 000 000. 12. Classifies natural numbers in various ways, based on their properties (e.g. even numbers, composite numbers)	
Course Topics	**Activities**
Understanding Natural Numbers	Prime or Composite?
	Odd and Even Numbers 1
Topics	**Skill Quests**
Classify numbers by properties	Understanding prime & composite numbers

6.A.U.A13 Natural numbers less than 1 000 000. 13. Approximates a collection, using objects or drawings (e.g. estimate, round up/down to a given value)	
Course Topics	**Activities**
Understanding Natural Numbers	Rounding Numbers
	Nearest 1000?
Topics	**Skill Quests**
Approximate a collection to 1 000 000	Rounding numbers to 1 000 000

6.A.U.A14 Natural numbers less than 1 000 000. 14. Represents the power of a natural number	
Course Topics	**Activities**
Understanding Natural Numbers	Exponents
Topics	**Skill Quests**
Teacher directed	

6.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**
Fractions	Fraction Word Problems
Topics	**Skill Quests**
Represent fractions	Representing a fraction in different ways

6.A.U.B4 Fractions (using objects or drawings). 4. Identifies the different meanings of fractions (sharing, division, ratio)	
Course Topics	**Activities**
Fractions	Fraction Word Problems
Topics	**Skill Quests**
Understand meaning of fractions	Identifying fractions as division

6.A.U.B8 Fractions (using objects or drawings). 8. Verifies whether two fractions are equivalent	
Course Topics	**Activities**
Teacher directed	
Topics	**Skill Quests**
Recognize equivalent fractions	Recognizing equivalent fractions

6.A.U.B9 Fractions (using objects or drawings). 9. Matches a decimal or percentage to a fraction	
Course Topics	**Activities**
Teacher directed	
Topics	**Skill Quests**
Matching decimals	Matching decimals & percentages to a fraction

6.A.U.B11 Fractions (using objects or drawings). 11. Orders fractions where one denominator is a multiple of the other(s)	
Course Topics	**Activities**
Fractions	Comparing Fractions 2
Topics	**Skill Quests**
Order fractions: related denominators	Ordering fractions with related denominators

6.A.U.B12 Fractions (using objects or drawings). 12. Orders fractions with the same numerator	
Course Topics	**Activities**
Teacher directed	
Topics	**Skill Quests**
Order fractions: same numerator	Ordering fractions with the same numerator

6.A.U.B13 Fractions (using objects or drawings). 13. Locates fractions on a number line	
Course Topics	**Activities**
Teacher directed	
Topics	**Skill Quests**
Teacher directed	

6.A.U.C1 Decimals up to thousandths. 1. Represents decimals in a variety of ways (using objects or drawings)	
Course Topics	**Activities**
Teacher directed	
Topics	**Skill Quests**
Teacher directed	

6.A.U.C2 Decimals up to thousandths. 2. Identifies equivalent representations (using objects or drawings)	
Course Topics	**Activities**
Teacher directed	
Topics	**Skill Quests**
Teacher directed	

6.A.U.C3 Decimals up to thousandths. 3. Reads and writes numbers written in decimal notation	
Course Topics	**Activities**
Understanding Decimals	Decimals from Words to Digits 1
	Decimals from Words to Digits 2
Topics	**Skill Quests**
Read & write decimals to thousandths	Reading & writing numbers to thousandths

6.A.U.C5 Decimals up to thousandths. 5. Composes and decomposes a decimal written in decimal notation	
Course Topics	**Activities**
Teacher directed	
Topics	**Skill Quests**
Compose/decompose decimals	Composing & decomposing decimals to thousandths

6.A.U.C6 Decimals up to thousandths. 6. Recognizes equivalent expressions (e.g. 12 tenths is equivalent to 1 unit and 2 tenths; 0.5 is equivalent to 0.50)	
Course Topics	**Activities**
Teacher directed	
Topics	**Skill Quests**
Recognize equivalent expressions	Recognizing equivalent expressions to thousandths

6.A.U.C7 Decimals up to thousandths. 7. Locates decimals on a number line a. between two consecutive natural numbers. b. between two decimals	
Course Topics	**Activities**
Understanding Decimals	Decimals on a Number Line
Topics	**Skill Quests**
Locate decimals on a number line	Locating decimals on a number line

6.A.U.C8 Decimals up to thousandths. 8. Compares two decimals	
Course Topics	**Activities**
Understanding Decimals	Comparing Decimals
	Comparing Decimals 2
Topics	**Skill Quests**
Teacher directed	

6.A.U.C9 Decimals up to thousandths. 9. Approximates (e.g. estimates, rounds to a given value, truncates decimal places)	
Course Topics	**Activities**
Decimals-Estimating and Rounding	Rounding Decimals
	Rounding Decimals 1
Topics	**Skill Quests**
Approximate decimals	Rounding decimals to thousandths

6.A.U.C10 Decimals up to thousandths. 10. Arranges decimals in increasing or decreasing order	
Course Topics	**Activities**
Teacher directed	
Topics	**Skill Quests**
Order decimals to thousandths	Ordering decimals to thousandths

6.A.U.C11 Decimals up to thousandths. 11. Matches a. a fraction to its decimal. b. a fraction or percentage to its decimal	
Course Topics	**Activities**
Understanding Decimals	Percents and Decimals
Topics	**Skill Quests**
Match decimals	Relationship - decimals, fractions & percentages

6.A.U.D1 Integers. 1. Represents integers in a variety of ways (using objects or drawings) (e.g. tokens in two different colours, number line, thermometer, football field, elevator, hot air balloon)	
Course Topics	**Activities**
Teacher directed	
Topics	**Skill Quests**
Represent integers	Representing integers

6.A.U.D2 Integers. 2. Reads and writes integers	
Course Topics	**Activities**
Understanding Integers	Integers on a Number Line
Topics	**Skill Quests**
Read & write integers	Reading & writing integers

6.A.U.D3 Integers. 3. Locates integers on a number line or Cartesian plane	
Course Topics	**Activities**
Understanding Integers	Integers on a Number Line
Topics	**Skill Quests**
Teacher directed	

6.A.U.D4 Integers. 4. Compares integers	
Course Topics	**Activities**
Understanding Integers	Comparing Integers
Topics	**Skill Quests**
Teacher directed	

6.A.U.D5 Integers. 5. Arranges integers in increasing or decreasing order	
Course Topics	**Activities**
Understanding Integers	Ordering Integers
Topics	**Skill Quests**
Teacher directed	

1.2 Meaning of operations involving numbers

6.A.M.A1 Natural number less than 1 000 000. 1. Determines the operation(s) to perform in a given situation	
Course Topics	**Activities**
Teacher directed	
Topics	**Skill Quests**
Determine operations to use	Determining operations to use in a word problem

6.A.M.A2 Natural number less than 1 000 000. 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. b. composition of transformations positive, negative. c. composition of mixed transformations	
Course Topics	**Activities**
Operations-Addition and Subtraction	Problems: Add and Subtract
Topics	**Skill Quests**
Teacher directed	

6.A.M.A3 Natural number less than 1 000 000. 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) b. rectangular arrays, repeated addition, Cartesian product, area, volume, repeated subtraction, sharing, number of times x goes into y, and comparisons (using objects, diagrams or equations)	
Course Topics	**Activities**
Operations-Multiplication and Division	Problems: Times and Divide
Topics	**Skill Quests**
Teacher directed	

6.A.M.A4 Natural number less than 1 000 000. 4. Establishes equality relations between numerical expressions	
Course Topics	**Activities**
Teacher directed	
Topics	**Skill Quests**
Equality between numerical expressions	Establishing equality between expressions

6.A.M.A5 Natural number less than 1 000 000. 5. Determines numerical equivalences using relationships between c. operations (the four operations), the commutative property of addition and multiplication, the associative property and the distributive property of multiplication over addition or subtraction	
Course Topics	**Activities**
Operations-Addition and Subtraction	Addition Properties
Topics	**Skill Quests**
Teacher directed	

6.A.M.A6 Natural number less than 1 000 000. 6. Translates a situation using a series of operations in accordance with the order of operations	
Course Topics	**Activities**
Teacher directed	
Topics	**Skill Quests**
Teacher directed	

6.A.M.B1 Decimals up to thousandths. 1. Uses objects, diagrams or equations to represent a situation and conversely, describes a situation represented by objects, diagram or equations (use of different meanings of addition and subtraction) a. transformation (adding, taking away), uniting, comparing. b. composition of transformations: positive, negative. c. composition of mixed transformations	
Course Topics	**Activities**
Teacher directed	
Topics	**Skill Quests**
Teacher directed	

6.A.M.B2 Decimals up to thousandths. 2. Uses objects, diagrams or equations to represent a situation and conversely, describes a situation represented by objects, diagrams or equations (use of different meanings of multiplication and division: rectangular arrays, Cartesian product, area, volume, sharing, number of times x goes into y, and comparisons)	
Course Topics	**Activities**
Teacher directed	
Topics	**Skill Quests**
Teacher directed	

6.A.M.B3 Decimals up to thousandths. 3. Determines numerical equivalences using b. relationships between operations (the four operations), the commutative property of addition and multiplication, the associative property and the distributative property of multiplication over addition or subtraction	
Course Topics	**Activities**
Teacher directed	
Topics	**Skill Quests**
Teacher directed	

6.A.M.C1 Fractions. 1. Uses objects, diagrams or equations to represent a situation and conversely, describes a situation represented by objects, diagram or equations (use of different meanings of addition, subtraction and multiplication by a natural number)	
Course Topics	**Activities**
Fractions	Unit Fractions
	Fraction of an Amount
Topics	**Skill Quests**
Teacher directed	

1.3 Operations involving numbers

6.A.O.A1 Natural numbers. 1. Approximates the result of a. an addition or subtraction involving natural numbers. b. any of the four operations involving natural numbers	
Course Topics	**Activities**
Operations-Multiplication and Division	Estimate Products
	Estimate Quotients
Operations-Addition and Subtraction	Estimate Sums
	Estimate Differences
Topics	**Skill Quests**
Approximate results of all operations	Approximating results when adding & subtracting
	Approximating results when multiplying & dividing

6.A.O.A3 Natural numbers. 3. Develops processes for mental computation a. Uses his/her own processes to determine the sum or difference of two natural numbers. b. Uses his/her own processes to determine the product or quotient of two natural numbers	
Course Topics	**Activities**
Operations-Multiplication and Division	Division Facts
	Problems: Times and Divide
	Dividing by 10, 100, 1000
	Multiplying by 10, 100, 1000
	Multiply Multiples of 10
	Remainders by Tables
	Mental Methods Division
	Mental Methods Division 2
	Mental Methods Multiplication
	Mental Methods Multiplication 2
Topics	**Skill Quests**
Mental strategies - add & subtract	Using mental strategies for addition & subtraction
Mental strategies - multiply & divide	Using mental computation strategies to multiply
	Using mental computation strategies to divide

6.A.O.A4 Natural numbers. 4. Develops processes for written computation (addition and subtraction) b. Uses conventional processes to determine the sum of two natural numbers of up to four digits. c. Uses conventional processes to determine the difference between two natural numbers of up to four digits whose result is greater than 0	
Course Topics	**Activities**
Teacher directed	
Topics	**Skill Quests**
Solve word problems - add & subtract	Solving word problems - addition & subtraction

6.A.O.A6 Natural numbers. 6. Builds a repertoire of memorized multiplication and division facts b. Develops various strategies that promote mastery of number facts and relate them to the properties of multiplication. c. Masters all multiplication facts (0 x 0 to 10 x 10) and the corresponding division facts	
Course Topics	**Activities**
Teacher directed	
Topics	**Skill Quests**
Use multiplication facts to 10 x 10	Mastering multiplication facts to 10 x 10

6.A.O.A7 Natural numbers. 7. Develops processes for written computation (multiplication and division) b. Uses conventional processes to determine the product of a three-digit natural number and a two-digit natural number c. Uses conventional processes to determine the quotient of a four-digit natural number and a two-digit natural number, expresses the remainder of a division as a decimal that does not go beyond the second decimal place	
Course Topics	**Activities**
Operations-Multiplication and Division	Long Multiplication
	Long Division
Topics	**Skill Quests**
Use written methods - multiply & divide	Using written methods for multiplication
	Using written methods for division

6.A.O.A8 Natural numbers. 8. Determines the missing term in an equation (relationships between operations): a × b = □, a × □ = c, □ × b = c, a ÷ b = □, a ÷ □ = c, □ ÷ b = c	
Course Topics	**Activities**
Operations-Multiplication and Division	Division Facts
	Problems: Times and Divide
	Dividing by 10, 100, 1000
	Remainders by Tables
	Mental Methods Division
	Mental Methods Division 2
	Mental Methods Multiplication
	Mental Methods Multiplication 2
Understanding Decimals	Missing Values: Decimals
Topics	**Skill Quests**
Determine missing terms in equations	Determining missing terms in 1-step equations

6.A.O.A9 Natural numbers. 9. Decomposes a number into prime factors	
Course Topics	**Activities**
Teacher directed	
Topics	**Skill Quests**
Decompose a number into prime factors	Decomposing a number into prime factors

6.A.O.A10 Natural numbers. 10. Calculates the power of a number	
Course Topics	**Activities**
Understanding Natural Numbers	Square Roots
Topics	**Skill Quests**
Calculate power of a number	Calculating the power of a number

6.A.O.A11 Natural numbers. 11. Determines the divisibility of a number by 2, 3, 4, 5, 6, 8, 9, 10	
Course Topics	**Activities**
Teacher directed	
Topics	**Skill Quests**
Determine divisibility of a number	Determining the divisibility of the number 2
	Determining the divisibility of the number 3
	Determining the divisibility of the number 4
	Determining the divisibility of the number 5
	Determining the divisibility of the number 6
	Determining the divisibility of the number 8
	Determining the divisibility of the number 9

6.A.O.A12 Natural numbers. 12. Performs a series of operations in accordance with the order of operations	
Course Topics	**Activities**
Operations-Addition and Subtraction	Order of Operations 1
Topics	**Skill Quests**
Order of operations with whole numbers	Order of operations, 4 operations
	Order of operations, grouping symbols
	Applying order of operations to real-life contexts

6.A.O.A13 Natural numbers. 13. Using his/her own words and mathematical language that is at an appropriate level for the cycle, describes a. non-numerical patterns. b. numerical patterns. c. series of numbers and family operations	
Course Topics	**Activities**
Understanding Natural Numbers	Multiples
	Factors
Operations-Multiplication and Division	Problems: Times and Divide
Topics	**Skill Quests**
Teacher directed	

6.A.O.A14 Natural numbers. 14. Adds new terms to a series when the first three terms or more are given	
Course Topics	**Activities**
Understanding Natural Numbers	Pick the Next Number
Topics	**Skill Quests**
Add new terms to a series	Adding new terms when adding & subtracting
	Adding new terms when multiplying & dividing

6.A.O.A15 Natural numbers. 15. Uses a calculator and a. becomes familiar with its basic functions (+, -, =, 0 to 9 number keys, all clear, clear). b. becomes familiar with its x and ÷ functions. c. becomes familiar with memory keys and change to sign keys (+/-)	
Course Topics	**Activities**
Teacher directed	
Topics	**Skill Quests**
Teacher directed	

6.A.O.B1 Fractions (using objects or diagrams). 1. Generates a set of equivalent fractions	
Course Topics	**Activities**
Fractions	Equivalent Fractions
Topics	**Skill Quests**
Generate equivalent fractions	Generating equivalent fractions

6.A.O.B2 Fractions (using objects or diagrams). 2. Reduces a fraction to its simplest form (lowest terms)	
Course Topics	**Activities**
Fractions	Simplifying Fractions
Topics	**Skill Quests**
Reduce fractions to simplest form	Reducing fractions to their simplest form

6.A.O.B3 Fractions (using objects or diagrams). 3. Adds and subtracts fractions when the denominator of one fraction is a multiple of the other fraction(s)	
Course Topics	**Activities**
Fractions	Add: Common Denominator
	Add Like Fractions
	Subtract: Common Denominator
	Subtract Like Fractions
Topics	**Skill Quests**
Work with fractions related denominators	Adding fractions with related denominators
	Subtracting fractions with related denominators
	Add & subtract fractions with related denominators

6.A.O.B4 Fractions (using objects or diagrams). 4. Multiplies a natural number by a fraction	
Course Topics	**Activities**
Fractions	Multiply Fraction by Whole Number
	Fraction Word Problems
	Multiply: Whole Number and Fraction
Topics	**Skill Quests**
Multiply natural numbers by fractions	Multiplying natural numbers by fractions

6.A.O.C1 Decimals. 1. Approximates the result of a. an addition or subtraction. b. a multiplication or division	
Course Topics	**Activities**
Decimals-Estimating and Rounding	Estimate Decimal Differences 1
	Estimate Decimal Sums 1
	Estimate Decimal Differences 2
	Estimate Decimal Sums 2
	Estimate Decimal Operations
Topics	**Skill Quests**
Teacher directed	

6.A.O.C2 Decimals. 2. Develops processes for mental computation a. adds and subtracts decimals. b. perfoms operations involving decimals (multiplication, division by a natural number). c. multiplies and divides by 10, 100, 1000)	
Course Topics	**Activities**
Operations with Decimals	Decimal by Whole Number
	Percent of a Number
	Multiply Decimals: 10, 100, 1000
	Divide Decimals: 10, 100, 1000
	Multiply Decimals and Powers of 10
Topics	**Skill Quests**
Mental strategies with decimals	Adding decimals using mental strategies
	Subtracting decimals using mental strategies
	Multiplying decimals using mental strategies
	Dividing decimals using mental strategies
	Multiplying decimals by 10, 100 & 1000
	Dividing decimals by 10, 100 & 1000

6.A.O.C3 Decimals. 3. Develops processes for written computation a. adds and subtracts decimals whose result does not go beyond the second decimal place. b. multiplies decimals whose product does not go beyond the second decimal place. c. divides a decimal by a natural number less than 11	
Course Topics	**Activities**
Operations with Decimals	Add Decimals 2
	Subtracting Decimals
	Subtract Decimals 2
	Decimal by Whole Number
	Percent of a Number
	Adding and Subtracting Decimals
	Add Decimals: Same Sign
	Add Decimals 1
	Subtract Decimals 1
Topics	**Skill Quests**
Written strategies with decimals	Multiplying decimals – written strategy
	Dividing decimals – written strategy

6.A.O.D1 Using Numbers. 1. Expresses a decimal as a fraction, and vice versa	
Course Topics	**Activities**
Teacher directed	
Topics	**Skill Quests**
Express decimals as fractions	Expressing decimals as fractions

6.A.O.D2 Using Numbers. 2. Expresses a decimal as a percentage, and vice versa	
Course Topics	**Activities**
Understanding Decimals	Decimal to Percentage
Topics	**Skill Quests**
Express decimals as percentages	Expressing decimals as percentages

6.A.O.D3 Using Numbers. 3. Expresses a fraction as a percentage, and vice versa	
Course Topics	**Activities**
Fractions	Percents to Fractions
Topics	**Skill Quests**
Express fractions as a percentage	Expressing fractions as percentages

6.A.O.D4 Using Numbers. 4. Chooses an appropriate number form for a given context	
Course Topics	**Activities**
Teacher directed	
Topics	**Skill Quests**
Teacher directed	

2 Geometry

2.1 Geometry

6.G.A3 Space. 3. Locates objects on an axis (based on the types of numbers studied)	
Course Topics	**Activities**
Geometry	Transformations: Coordinate Plane
Topics	**Skill Quests**
Locate objects on an axis	Locating objects on an axis

6.G.A4 Space. 4. Locates points in a Cartesian plane b. in all four quadrants	
Course Topics	**Activities**
Geometry	Ordered Pairs
	Graphing from a Table of Values
	Transformations: Coordinate Plane
Topics	**Skill Quests**
Locate points in a Cartesian plane	Locating points in a Cartesian plane - 4 quadrants

6.G.B5 Solids. 5. Describes prisms and pyramids in terms of faces, vertices and edges	
Course Topics	**Activities**
Teacher directed	
Topics	**Skill Quests**
Investigate properties prisms & pyramids	Investigating properties prisms & pyramids

6.G.B6 Solids. 6. Classifies prisms and pyramids	
Course Topics	**Activities**
Teacher directed	
Topics	**Skill Quests**
Compare & describe prisms & pyramids	Comparing, describing & naming prisms & pyramids

6.G.B7 Solids. 7. Constructs a net of a prism or pyramid	
Course Topics	**Activities**
Teacher directed	
Topics	**Skill Quests**
Connect prisms & pyramids with nets	Connecting prisms & pyramids with nets

6.G.B8 Solids. 8. Matches the net of c. a convex polyhedron to the corresponding convex polyhedron	
Course Topics	**Activities**
Teacher directed	
Topics	**Skill Quests**
Nets of convex polyhedrons	Matching nets of convex polyhedrons to objects

6.G.B9 Solids. 9. Tests Euler's theorem on convex polyhedrons	
Course Topics	**Activities**
Geometry	Euler's Formula
Topics	**Skill Quests**
Teacher directed	

6.G.C5 Plane figures. 5. Identifies and constructs parallel lines and perpendicular lines	
Course Topics	**Activities**
Teacher directed	
Topics	**Skill Quests**
Identify parallel & perpendicular lines	Identifying parallel & perpendicular lines

6.G.C7 Plane figures. 7. Classifies quadrilaterals	
Course Topics	**Activities**
Teacher directed	
Topics	**Skill Quests**
Classify quadrilaterals	Classifying quadrilaterals

6.G.C8 Plane figures. 8. Describes triangles: scalene triangles, right triangles, isosceles triangles, equilateral triangles	
Course Topics	**Activities**
Geometry	Triangle Tasters
Topics	**Skill Quests**
Teacher directed	

6.G.C9 Plane figures. 9. Classifies triangles	
Course Topics	**Activities**
Geometry	Triangle Tasters
Topics	**Skill Quests**
Classify triangles	Classifying triangles

6.G.C10 Plane figures. 10. Describes circles	
Course Topics	**Activities**
Geometry	Labelling Circles
Topics	**Skill Quests**
Describe circles	Describing circles

6.G.D3 Frieze patterns and tessellations. 3. Observes and produces frieze patterns and tessellations a. using reflections. b. using translations	
Course Topics	**Activities**
Geometry	Transformations
Topics	**Skill Quests**
Frieze patterns & tessellations	Recognizing & creating tessellations

3 Measurement

3.1 Measurement

6.M.A4 Lengths. 4. Estimates and measures the dimensions of an object using conventional units c. metre, decimetre, centimetre, millimetre and kilometre	
Course Topics	**Activities**
Teacher directed	
Topics	**Skill Quests**
Measure length (m, cm, mm & km)	Estimating & measuring length
	Recording lengths – mixed units & decimal notation

6.M.A5 Lengths. 5. Establishes relationships between units of measure for length b. metre, decimetre, centimetre, millimetre and kilometre	
Course Topics	**Activities**
Measurement 1	Metres and Kilometres
	Converting Units of Length
Topics	**Skill Quests**
Relationship in length (m, cm, mm & km)	Converting between units of length

6.M.B1 Surface areas. 1. Estimates and measures surface area b. using conventional units	
Course Topics	**Activities**
Measurement 1	Area of Shapes
	Area: Squares and Rectangles
	Area: Triangles
Topics	**Skill Quests**
Work with formula for area	Working with multiplicative formula for area

6.M.C1 Volumes. 1. Estimates and measures volumes b. using conventional units	
Course Topics	**Activities**
Measurement 2	Volume: Rectangular Prisms 1
	Volume: Rectangular Prisms 2
Topics	**Skill Quests**
Estimate & measure volume	Estimating & measuring volume

6.M.D1 Angles. 1. Compares angles	
Course Topics	**Activities**
Teacher directed	
Topics	**Skill Quests**
Compare angles	Comparing angles

6.M.D2 Angles. 2. Estimates and determines the degree measurement of angles	
Course Topics	**Activities**
Measurement 1	Measuring Angles
	Estimating Angles
Topics	**Skill Quests**
Estimate & measure angles	Estimating & measuring angles

6.M.E2 Capacities. 2. Estimates and measures capacity using conventional units	
Course Topics	**Activities**
Teacher directed	
Topics	**Skill Quests**
Estimate & measure capacity	Estimate & measure capacity - conventional units

6.M.E3 Capacities. 3. Estimates relationships between units of measure	
Course Topics	**Activities**
Teacher directed	
Topics	**Skill Quests**
Relationship between capacity units	Relationships between units to measure capacity

6.M.F1 Masses. 1. Estimates and measures mass using unconventional units	
Course Topics	**Activities**
Teacher directed	
Topics	**Skill Quests**
Teacher directed	

6.M.F2 Masses. 2. Estimates and measures mass using conventional units	
Course Topics	**Activities**
Measurement 2	Mass Word Problems
Topics	**Skill Quests**
Estimate, measure & understand mass	Estimate & measure mass using conventional units

6.M.F3 Masses. 3. Establishes relationships between units of measure	
Course Topics	**Activities**
Measurement 2	Grams and Kilograms
	Converting Units of Mass
Topics	**Skill Quests**
Relationship between mass units	Relationships between units to measure mass

6.M.G2 Time. 2. Establishes relationships between units of measure	
Course Topics	**Activities**
Teacher directed	
Topics	**Skill Quests**
Convert between units of time	Converting between units of time
	Understanding 24-hour time

6.M.H1 Temperature. 1. Estimates and measures temperature using conventional units	
Course Topics	**Activities**
Teacher directed	
Topics	**Skill Quests**
Estimate & measure temperature	Estimating & measuring temperature

4 Statistics

4.1 Statistics

6.S.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	

6.S.2 Collects, describes and organizes data (classifies or categorizes) using tables	
Course Topics	**Activities**
Statistics	Interpreting Tables
Topics	**Skill Quests**
Teacher directed	

6.S.3c Interprets data using c. a table, a bar graph, a pictograph, a broken-line graph and a circle graph	
Course Topics	**Activities**
Statistics	Line Graphs: Interpretation
	Sector Graphs
	Divided Bar Graphs
	Pie Chart Calculations
	Step Graphs
	Travel Graphs
	Dot Plots
Topics	**Skill Quests**
Interpret data	Interpreting data using tables
	Interpreting data using bar graphs
	Interpreting data using broken-line graphs
	Interpreting data using circle graphs

6.S.4 Displays data using b. a table, a bar graph, a pictograph and a broken-line graph	
Course Topics	**Activities**
Teacher directed	
Topics	**Skill Quests**
Teacher directed	

6.S.5 Understands and calculates the arithmetic mean	
Course Topics	**Activities**
Statistics	Mean
Topics	**Skill Quests**
Calculate arithmetic mean	Calculating arithmetic mean

5 Probability

5.1 Probability

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

6.P.2 When applicable, recognizes equiprobability	
Course Topics	**Activities**
Probability	Fair Games
Topics	**Skill Quests**
Recognize equiprobability	Recognizing equiprobability

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

6.P.4 Experiments with activities involving chance, using various objects	
Course Topics	**Activities**
Teacher directed	
Topics	**Skill Quests**
Teacher directed	

6.P.5 Predicts qualitatively an outcome or several events using a probability line, among other things a. certain, possible or impossibe outcome b. more likely, just as likely, less likely event	
Course Topics	**Activities**
Probability	Probability Scale
Topics	**Skill Quests**
Predict an outcome	Predicting an outcome

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

6.P.7 Uses tables or diagrams to collect and display the outcomes of an experiment	
Course Topics	**Activities**
Probability	How many Combinations?
	Find the Probability
Topics	**Skill Quests**
Teacher directed	

6.P.8 Enumerates possible outcomes of b. a random experiment, using tables, a tree diagram	
Course Topics	**Activities**
Probability	How many Combinations?
Topics	**Skill Quests**
Possible outcomes of random experiment	Listing possible outcomes - tables & tree diagrams

6.P.9 Compares qualitatively the theoretical or experimental probability of events	
Course Topics	**Activities**
Probability	Fair Games
Topics	**Skill Quests**
Teacher directed	

6.P.10 Recognizes that a probability is always between 0 and 1	
Course Topics	**Activities**
Probability	Complementary Events
Topics	**Skill Quests**
Recognize probability is between 0 & 1	Recognizing probability is between 0 & 1

6.P.11 Uses fractions, decimals or percentages to quantify a probability	
Course Topics	**Activities**
Probability	Simple Probability
	Simple Probability 1
	Complementary Events
	Find the Probability
	Fair Games
Topics	**Skill Quests**
Use fractions, decimals or percentages	Using fractions, decimals or percentages

6.P.12 Compares the outcomes of a random experiment with known theoretical probabilities	
Course Topics	**Activities**
Teacher directed	
Topics	**Skill Quests**
Compare outcomes/theoretical probability	Comparing outcomes with theoretical probabilities

6.P.13 Simulates random experiments with or without the use of technology	
Course Topics	**Activities**
Teacher directed	
Topics	**Skill Quests**
Conduct random experiments (technology)	Conducting random experiments using technology

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