Mathletics Alberta Program of Studies Activities (Courses) and Skill Quests

620

Activities

Skill Quest



Well done 裪



Skill Quests

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Kindergarten

1 Number: Quantity is measured with numbers that enable counting, labelling, comparing, and operating

K.N.Quantity to 10 Children investigate quantity to 10	
Course Topics	Activities
Number: Representing	Count to 5
quantities to 10	Dot Display
	Matching Numbers to 10
	Concept of zero
	How Many?
	More, Less or the Same to 10
	Order Numbers to 10
	Picture Graphs: More or Less

K.N.Compositions within 10 Children interpret compositions of quantities within 10		
Course Topics	Activities	
Number: Addition &	Adding to 5	
Subtraction	Subtracting from 5	
	Adding to Ten	
	All about Ten	
	Subtracting from Ten	
	Model Addition	
	Model Subtraction	
	Adding to make 5 and 10	
	Adding to 10 Word Problems	
	Balance Numbers to 10	
	Doubles and Halves to 10	
	Add and subtract using graphs	

2 Geometry: Shapes are defined and related by geometric attributes

K.G.2D and 3D Children investigate shape	
Course Topics	Activities
Geometry: Shapes	Collect the Shapes
	Collect Simple Shapes
	Same and Different
	Match the Solid 1
	Count Sides and Corners
	Relate Shapes and Solids

3 Measurement: Attributes such as length, area, volume, and angle are quantified by measurement

K.M.Size Children explore size through direct comparison	
Course Topics	Activities
Measurement	Compare Length
	Everyday Length
	Measuring Length with Blocks
	Everyday Mass
	Balancing Act
	How Full?
	Which Holds More?

4 Patterns: Awareness of patterns supports problem solving in various situations

K.P.Patterns		
Children identify and create repeating patterns		
Course Topics	Activities	
Patterns	Complete the Pattern	
	Simple Patterns	
	Missing it!	

5 Time: Duration is described and quantified by time.

K.T.Time	
Children interpret time as a sequence of events	
Course Topics	Activities
Time	Tomorrow and Yesterday (Scaffolded)
	Tomorrow and Yesterday (without scaffold)

Grade 1

1 Number: Quantity is measured with numbers that enable counting, labelling, comparing, and operating.

1.N.Quantity to 100	
Students interpret and explain quantity to 100	
Course Topics	Activities
Number: Representing	How Many?
Quantities	Matching Numbers to 20
	Concept of Zero
Numbers to 100	Going Up
	Counting Backwards
	Counting by Fives
	Counting by Tens
	Counting by Twos
	Going Down
	Balancing Objects
	Balancing Act
	Before, After, and Between to 100
	Compare Numbers to 20
	Compare Numbers to 50
	Compare Numbers to 100
Topics	Skill Quests
Number sequences to 100	Counting by 1s to 100
	Skip counting by 2s to 20
	Skip counting by 10s to 100
Counting strategies	Counting collections to 20
	Counting collections to 50
	Counting collections to 100
Understand the conservation of	Understanding the conservation of number
number	
Numbers more than & less than	Numbers more than & less than
Numbers more than & less than Compare & order sets up to 20	Comparing & ordering sets up to 20
Numbers more than & less than	
Numbers more than & less than Compare & order sets up to 20	Comparing & ordering sets up to 20
Numbers more than & less than Compare & order sets up to 20 Compare & order numbers to	Comparing & ordering sets up to 20 Comparing & ordering numbers to 100

1.N.Add and subtract within 20 Students examine addition and subtraction within 20	
Course Topics	Activities
Number: Addition and	Making Teen Numbers
Subtraction	Making reenverse
Subtraction	Model Subtraction
	Add and Subtract Using Graphs
	Doubles and Near Doubles
	Addition Facts
	Subtraction Facts to 18
	All About 10
	All About 10
	Adding to 10 Word Problems
	Fact Families: Add and Subtract
Topics	Skill Quests
Topics	
Addition & subtraction to 20	Adding to 20
	Adding to 20 by bridging to 10
	Subtracting within 20
	Subtracting within 20 by bridging to 10
	Adding & subtracting using a bar model
	Creating addition & subtraction word problems
	Finding fact families for addition & subtraction
	Adding & subtracting within 20 fluently
Addition combinations	Adding to 5
	Adding to 6
	Adding to 7
	Adding to 8
	Adding to 9
	Adding 0 to a number
Addition & subtraction	Making a 10
strategies	Adding & subtracting to 20
	Adding & subtracting using doubles
	Adding & subtracting 0
Record equalities	Recording equalities
	Solving addition & subtraction equality problems

1.N.One-half		
Studen	Students examine one-half as a part-whole relationship	
Course Topics	Activities	
Number: Fractions	Is It Half?	
	Halves	
Topics	Skill Quests	
Fraction concepts	Finding halves	

2 Geometry: Shapes are defined and related by geometric attributes

1.G.2D and 3D shape Students interpret shape in two and three dimensions	
Course Topics	Activities
Geometry: Shapes	Collect the Shapes
	Collect the Simple Shapes
	Same or Different
	Match the Solid
Topics	Skill Quests
Sort 2-D shapes & 3-D objects	Sorting 2-D shapes
	Sorting 3-D objects
Replicate composite	Replicating composite 2-D shapes
2-D shapes	
Replicate composite	Replicating composite 3-D objects
3-D objects	
Compare 2-D shapes to 3-D	Comparing 2-D shapes to parts of 3-D objects
objects	
3-D objects	Introducing spheres
	Introducing cones
	Introducing cubes
	Introducing cylinders
	Introducing pyramids
	Introducing prisms
	Identifying 3-D objects
	Identifying attributes of 3-D objects
	Comparing 3-D objects
	Building 3-D structures
2-D shapes	Naming 2-D shapes
	Comparing 2-D shapes

3 Measurement: Attributes such as length, area, volume, and angle are quantified by measurement

1.M.Size	
Students relate length to the understanding of size	
Course Topics	Activities
Measurement	Everyday Length
	Compare Length
	How Full?
	Which Holds More?
	Filling Fast!
	Comparing Volume
	Everyday Mass
Topics	Skill Quests
Measurement	Exploring length
	Exploring volume
	Comparing area

4 Patterns: Awareness of patterns supports problem solving in various situations

1.P.Patterns	
Students examine patterns in cycles	
Course Topics	Activities
Patterns	Simple Patterns
	Pattern Error
	Missing it!
	Complete the Pattern
	Colour Patterns
Topics	Skill Quests
Awareness of patterns	Recognizing repeating patterns
	Reproducing repeating patterns
	Manipulating repeating patterns
	Extending repeating patterns
	Describing & creating repeating patterns
	Relating patterns
Translate repeating patterns	Translating repeating patterns
	Creating & extending repeating patterns
	Identifying repeating patterns
	Numeric patterns

5 Time: Duration is described and quantified by time.

1.T.Time	
Students explain time in relation to cycles	
Course Topics	Activities
Time	Days: After and Before
	Tomorrow and Yesterday (Scaffolded)
	Tomorrow and Yesterday (without scaffold)
	Weekdays and Weekends
	Months After and Before
	Using a calendar
Topics	Skill Quests
Duration – calendars	Using calendars
Seasons	Introducing seasons

6 Statistics: The science of collecting, analyzing, visualizing, and interpreting data can inform understanding and decision making.

1.S.Data	
Students investigate and represent data.	
Course Topics	Activities
Statistics	Sorting Data / Analyzing Data (US)
	Read Graphs
Topics	Skill Quests
Sort objects using 1 attribute	Sorting objects using 1 attribute
Gather & record data	Gathering, sorting & recording data
	Collecting simple data

Grade 2

1 Number: Quantity is measured with numbers that enable counting, labelling, comparing, and operating.

2.N.Quantity to 1000	
Students analyze quantity to 1000	
Course Topics	Activities
Numbers to 1000	Going Up
	Going Down
	Before, After & Between to 100
	The Number Line
	Place Value to Thousands
	Place Value 2
	Number Line Order
	Model Numbers
	Count by 2s, 5s, and 10s
	Counting by Twos
	Count by Tens
	Counting by Tens
	Everyday Money
	Odd or Even
	Ascending Order
	Descending Order
	Greater Than or Less Than?
	Which is Greater?
	Which is Less?
Topics	Skill Quests
Number sequences to 100	Counting by 2s to 100
	Counting by 10s from multiples of 10
	Counting by 10s to 100 from any number
Even & odd numbers	Counting by 10s to 100 from any number Counting a sum of money to 100¢
Even & odd numbers Equality & inequality	Counting by 10s to 100 from any number Counting a sum of money to 100¢ Even & odd numbers
Equality & inequality	Counting by 10s to 100 from any number Counting a sum of money to 100¢ Even & odd numbers Introducing equality & inequality
	Counting by 10s to 100 from any number Counting a sum of money to 100¢ Even & odd numbers
Equality & inequality Use the equal & not equal	Counting by 10s to 100 from any number Counting a sum of money to 100¢ Even & odd numbers Introducing equality & inequality
Equality & inequality Use the equal & not equal symbol	Counting by 10s to 100 from any number Counting a sum of money to 100¢ Even & odd numbers Introducing equality & inequality Using the equal & not equal symbol
Equality & inequality Use the equal & not equal symbol Skip counting sequences to	Counting by 10s to 100 from any number Counting a sum of money to 100¢ Even & odd numbers Introducing equality & inequality Using the equal & not equal symbol Counting by 5s to 1000, forward & backward
Equality & inequality Use the equal & not equal symbol Skip counting sequences to	Counting by 10s to 100 from any number Counting a sum of money to 100¢ Even & odd numbers Introducing equality & inequality Using the equal & not equal symbol Counting by 5s to 1000, forward & backward Counting by 10s to 1000, forward & backward
Equality & inequality Use the equal & not equal symbol Skip counting sequences to	Counting by 10s to 100 from any numberCounting a sum of money to 100¢Even & odd numbersIntroducing equality & inequalityUsing the equal & not equal symbolCounting by 5s to 1000, forward & backwardCounting by 10s to 1000, forward & backwardCounting by 10s to 1000, forward & backwardCounting by 100s to 1000, forward & backward
Equality & inequality Use the equal & not equal symbol Skip counting sequences to	Counting by 10s to 100 from any numberCounting a sum of money to 100¢Even & odd numbersIntroducing equality & inequalityUsing the equal & not equal symbolCounting by 5s to 1000, forward & backwardCounting by 10s to 1000, forward & backwardCounting by 100s to 1000, forward & backwardCounting by 10s to 1000, forward & backwardCounting by 10s to 1000, forward & backwardCounting by 10s to 1000, forward & backwardCounting by 1s to 1000
Equality & inequality Use the equal & not equal symbol Skip counting sequences to 1000	Counting by 10s to 100 from any numberCounting a sum of money to 100¢Even & odd numbersIntroducing equality & inequalityUsing the equal & not equal symbolCounting by 5s to 1000, forward & backwardCounting by 10s to 1000, forward & backwardCounting by 10s to 1000, forward & backwardCounting by 10s to 1000, forward & backwardCounting by 1s to 1000Counting by 1s to 1000Counting by 2s, 3s & 5s from any number
Equality & inequality Use the equal & not equal symbol Skip counting sequences to 1000 Compare & order numbers to	Counting by 10s to 100 from any numberCounting a sum of money to 100¢Even & odd numbersIntroducing equality & inequalityUsing the equal & not equal symbolCounting by 5s to 1000, forward & backwardCounting by 10s to 1000, forward & backwardCounting by 10s to 1000, forward & backwardCounting by 1s to 1000, forward & backwardCounting by 1s to 1000, forward & backwardCounting by 2s, 3s & 5s from any numberIdentifying numbers before & after within 1000
Equality & inequality Use the equal & not equal symbol Skip counting sequences to 1000 Compare & order numbers to	Counting by 10s to 100 from any numberCounting a sum of money to 100¢Even & odd numbersIntroducing equality & inequalityUsing the equal & not equal symbolCounting by 5s to 1000, forward & backwardCounting by 10s to 1000, forward & backwardCounting by 10s to 1000, forward & backwardCounting by 10s to 1000, forward & backwardCounting by 1s to 1000Counting by 2s, 3s & 5s from any numberIdentifying numbers before & after within 1000Comparing numbers to 1000Ordering numbers to 1000
Equality & inequality Use the equal & not equal symbol Skip counting sequences to 1000 Compare & order numbers to	Counting by 10s to 100 from any numberCounting a sum of money to 100¢Even & odd numbersIntroducing equality & inequalityUsing the equal & not equal symbolCounting by 5s to 1000, forward & backwardCounting by 10s to 1000, forward & backwardCounting by 10s to 1000, forward & backwardCounting by 10s to 1000, forward & backwardCounting by 1s to 1000, forward & backwardCounting by 2s, 3s & 5s from any numberIdentifying numbers before & after within 1000Comparing numbers to 1000

	Finding numbers 10 or 100 before/after a 3-digit
Place value of numbers up to	Identifying place value of numbers to 1000
1000	Using place value to partition 3-digit numbers
	Non-standard partitioning, 3-digit numbers
	Solving place value number problems
Estimate quantities less than	Estimating quantities using referents
1000	

2.N.Add and subtract within 100	
	ts investigate addition and subtraction within 100.
Course Topics	Activities
Number: Addition	Adding In Any Order
	Adding to 5
	Adding to 10
	Adding to Make 5 and 10
	Addition
	Addictive Addition
	Adding 3 Single Digit Numbers
	Add 3 Number Using Bonds to 10
	Add 3 Numbers: Bonds to Multiples of 10
	Doubles and Near Doubles
	Column Addition 1
	Commutative Property of Addition
	Adding to 2-digit numbers
Number: Subtraction	Subtract Tens
	Simple Subtraction
	Subtracting from 20
	Fact Families: Add and Subtract
	Magic Mental Subtraction/Mental Subtraction (US)
	Repartition to Subtract/Decompose numbers to subtract
	Subtraction Facts to 18
Topics	Skill Quests
Compare & order numbers to	Adding 2-digit & 1-digit numbers using place value
1000	Adding by bridging to 10 with 2- & 1-digit numbers
	Adding tens to a 2-digit number using models
	Adding two 2-digit numbers using place value
	Adding two 2-digit numbers using a number line
	Adding by compensating
	Adding using compatible numbers
	Using number bonds to 100
	Adjusting addends
Subtraction within 100	Subtracting by bridging to 10
	Subtracting 2- & 1-digit numbers using place value
	Subtracting using mixed strategies
	Subtracting tens from a 2-digit number
	Subtracting two 2-digit numbers using place value
	Subtracting two 2-digit numbers, number line
	Subtracting by compensating
Addition & subtraction	Addition & subtraction to 18

	Adding using doubles
	Subtracting using doubles
	Adding doubles or near doubles
	Finding fact families for addition & subtraction
	Using the commutative property of addition
	Counting on by bridging to 10
	Addition & subtraction facts - word problems

2.N.Unit fractions Students interpret part-whole relationships using unit fractions	
Course Topics	Activities
Fractions	Unit Fractions
	Shade Fractions
	Compare Fractions 1A
	Halves and Quarters
	Thirds and Sixths
	Model Fractions
Topics	Skill Quests
Introducing fractions	Finding halves & fourths
	Counting in halves & fourths
	Recognizing equivalence

2 Geometry: Shapes are defined and related by geometric attributes.

2.G.2D and 3D	
Students analyze and explain geometric attributes of shape	
Course Topics	Activities
Geometry and Measurement	Sort It
	Match the Solid 2
	Relate Shapes and Solids
	Collect the Polygons
	Flip, Slide, Turn
	Transformations
	Comparing Length
	Measuring Length With Blocks
Topics	Skill Quests
2-D objects	Sorting 2-D objects
3-D objects	Sorting 3-D objects
	Making models
	Describing attributes
Single transformations of 2-D	Introducing slides/translations
shapes	Introducing flips/reflections
	Introducing turns/rotations
	One-step translations, reflections & rotations

3 Measurement: Attributes such as length, area, volume, and angle are quantified by measurement.

2.M.Length	
Course Topics	Students communicate length using units Activities
Geometry and Measurement	Sort It
	Match the Solid 2
	Relate Shapes and Solids
	Collect the Polygons
	Flip, Slide, Turn
	Transformations
	Comparing Length
	Measuring Length With Blocks
Topics	Skill Quests
Measure length	Measuring length using non-standard units
	Introducing formal units for length
Compare & order objects	Comparing & ordering objects by length

4 Patterns: Awareness of patterns supports problem solving in various situations

2.P.Patterns Students explain and analyze patterns in a variety of contexts	
Course Topics	Activities
Patterns	Counting on a 100 grid
	Complete the Pattern
Topics	Skill Quests
Explore patterns	Visual patterns
	Patterns with transformations
	Manipulating repeating patterns
	Number patterns

5 Time: Duration is described and quantified by time.

2.T.Time Students relate duration to time	
Course Topics	Activities
Time	Days of the Week
	Days: After and Before
	Weekdays and Weekends
	Tomorrow and Yesterday (Scaffolded)
	Tomorrow and Yesterday (without scaffold)
	Months of the Year
	Months: After and Before
Topics	Skill Quests
Explore the passing of time	Calendars
	Days of the week & months of the year

6 Statistics: The science of collecting, analyzing, visualizing, and interpreting data can inform understanding and decision making.

2.S.Data	
Students relate data to a variety of representations.	
Course Topics	Activities
Data	Sorting Data / Analyzing Data (US)
	Tallies
	Read Graphs
	Picture Graphs: More or Less
	Picture Graphs: single-unit scale
	Picture Graphs: Who Has The Goods/Comparing
Topics	Skill Quests
Gather & record data	Gathering data
	Sorting & recording data
Interpret data	Using basic graphs
	Making a graph
	Using pictographs
	Using a tally chart
	Using line plots
	Using Venn diagrams
	Interpreting data

Grade 3

1 Number: Quantity is measured with numbers that enable counting, labelling, comparing, and operating.

3.N.Place value within 100 000	
Students interpret place value within 100 000.	
Course Topics	Activities
Number: Place Value to	Which Is Greater?
100 000	Which Is Less?
	Put in Order 1
	Partition and Rename2/Understanding Place Value 2
	Nearest Thousand?
	Rounding Numbers 1
	Numbers from Words to Digits 1
Topics	Skill Quests
Number concepts to	Reading & writing numbers to 10 000
10 000	
10 000	Understanding place value,
10 000	Understanding place value, 4-digit numbers
10 000	
10 000	4-digit numbers
Number concepts up to 5 digits	4-digit numbersCounting by tens & hundredsPartitioning 4-digit numbersReading & writing numbers up to 5 digits
	4-digit numbers Counting by tens & hundreds Partitioning 4-digit numbers
Number concepts up to 5 digits	4-digit numbers Counting by tens & hundreds Partitioning 4-digit numbers Reading & writing numbers up to 5 digits Identifying place value up to 5 digits Partitioning 5-digit numbers
	4-digit numbersCounting by tens & hundredsPartitioning 4-digit numbersReading & writing numbers up to 5 digitsIdentifying place value up to 5 digitsPartitioning 5-digit numbersIdentifying numbers before & after to 10 000
Number concepts up to 5 digits	4-digit numbersCounting by tens & hundredsPartitioning 4-digit numbersReading & writing numbers up to 5 digitsIdentifying place value up to 5 digitsPartitioning 5-digit numbers

3.N.Add and subtract within 1000 Students apply strategies for addition and subtraction within 1000	
Course Topics	Activities
Number: Addition and	Adding to 2-digit numbers
Subtraction	Magic Mental Addition/Mental Addition (US)
	Complements to 10, 20, 50
	Add Two 2-Digit Numbers
	Add 3-Digit Numbers
	Add Two 2-Digit Numbers: Regroup
	Add Three 2-Digit Numbers
	Subtract Tens
	Magic Mental Subtraction /Mental Subtraction
	Repartition to Subtract/ Decompose Numbers to Subtract
	Subtract Numbers
	Subtract Numbers: Regroup
	3-Digit Differences
	Column Subtraction
Topics	Skill Quests

Estimate - two 2-digit number problems	Estimating with two 2-digit number problems
Addition & subtraction to 100	Adding multiple single-digit numbers
	Adding to make 100
Addition & subtraction to 1000	Estimating addition & subtraction
	Adding using split strategy
	Adding using formal algorithm
	Subtracting using split strategy
	Adding & subtracting using expanded form
	Subtracting using formal algorithm
	Adding & subtracting using split strategy
	Add & subtract using non-standard partitioning
	Choosing efficient strategies
	Solving addition & subtraction word problems

3.N.Multipy and divide within 100 Students analyze and apply strategies for multiplication and division within 100	
Course Topics	Activities
Number: Multiplication and	Groups of Two
Division	Groups of Five
	Model Multiplication to 5 × 5
	Grouping in Threes
	Grouping in Fours
	Grouping in Sixes
	Grouping in Sevens
	Grouping in Eights
	Grouping in Nines
	Multiplication Grids
	Frog Jump Multiplication
	Share the Treasure
	Divide Into Equal Groups
	Dividing by Two
	Dividing by Five
	Frog Jump Division
	Fact Families: Multiply and Divide
Topics	Skill Quests
Multiplication facts to	Using repeated addition to multiply
5 x 5	Exploring multiplication by 2
	Skip counting by 3
	Exploring multiplication by 3
	Skip counting by 4
	Exploring multiplication by 4
	Exploring multiplication by 5
	Multiplication facts to 5 x 5
Division facts to 5	Using tools & drawings to divide
	Using repeated subtraction to divide
	Dividing by 2
	Dividing by 3
	Dividing by 4

	Dividing by 5
Multiply & divide by 10	Exploring multiplication by 10
	Exploring division by 10
	Multiply & divide by 10
Multiply by 0 & 1, divide by 1	Multiplying by 1 or 0
	Dividing by 1
Multiplication facts to	Exploring multiplication by 2
9 x 9	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
	Recalling multiplication facts to 7 x 7
Multiplication facts to 10	Recalling multiplication facts 2, 5 & 10
Division facts to 9	Dividing by 2
	Dividing by 5
	Dividing by 2 & 5
	Dividing by 3 & 6
	Dividing by 4 & 8
	Dividing by 9
Division facts to 10	Dividing by 2, 5 & 10
Multiplication & division facts	Using arrays
	Recalling multiplication & division facts
	Understand relationship, multiplication & division
Multiplication & division word problems	Solving multiplication & division word problems

3.N.Fractions and wholes	
Students interpret fractions in relation to one whole	
Course Topics	Activities
Fractions	Compare Fractions 1a
	Fractions of a Collection 1
	Fractions of a Collection 2
	Fraction Fruit Sets 1
	Uneven partitioned shapes 2
	Partition into Equal Parts
Topics	Skill Quests
Compare & order fractions	Comparing & ordering unit fractions with models
	Comparing & ordering common fractions with models
	Comparing fractions with the same numerator
Represent fractions less	Introducing the terms numerator & denominator
than/equal to 1	Understanding fractions
	Representing halves, fourths & eighths
	Representing thirds & sixths
	Representing fifths
	Representing eighths
	Representing tenths

Identify equivalent fractions	Identifying equivalent fractions
Express whole numbers	Expressing whole numbers as fractions

2 Algebra: Equations express relationships between quantities.

3.A.Equality Students illustrate equality with equations	
Course Topics	Activities
Algebra: Equality	Missing Numbers
	Balance Numbers to 10/Composing numbers to 10
	Balance Numbers to 20/Composing Numbers to 20
Topics	Skill Quests
One-step add/sub problems	One-step number problems with unknowns up to 20
with unknowns	One-step number problems with unknowns up to 100
One-step equations using all	Finding missing numbers: add & subtract equations
-	
operations	One-step equations: addition & subtraction
operations	One-step equations: addition & subtraction One-step equations: multiplication & division

3 Geometry: Shapes are defined and related by geometric attributes

3.G.Geometric properties Students relate geometric properties to shape	
Course Topics	Activities
Geometry	Collect the Polygons
	How Many Faces?
	How many Edges?
	How many Vertices?
	Flip, Slide, Turn
	Transformations
Topics	Skill Quests
Regular & irregular polygons	Understanding regular & irregular polygons
Introduce & explore 3-D shapes	Exploring prisms
	Introducing rectangular prisms
	Comparing 3-D shapes
	Making 3-D shapes
Sort & identify two-dimensional	Sorting 2-D shapes
shapes	Comparing 2-D shapes

4 Measurement: Attributes such as length, area, volume, and angle are quantified by measurement.

3.M.Length Students determine length using standard units	
Course Topics	Activities
Measurement	How Long is That?
	Inches, Feet, Yards
	Ordering Lengths(cm)
Topics	Skill Quests
Understand & measure perimeter	Understanding & calculating perimeter
Understand & measure length	Measuring in standard units: cm & m
(m, cm)	Selecting units of measurement: m, cm, mm
	Ordering & comparing lengths: m, cm
	Converting between m & cm
	Estimating & measuring in cm

3.M.Angles Students interpret angles		
Course Topics	Activities	
Measurement: Angles	Equal Angles	
	Comparing Angles	
	Right Angle Relation	
Topics	Skill Quests	
Identify angles	Introduce angles up to 180°	
	Introducing right angles	
	Identifying right angles in quadrilaterals	
	Comparing angles informally	

5 Patterns: Awareness of patterns supports problem solving in various situations.

3.P.Patterns		
Students analyze patterns in numerical sequences		
Course Topics	Activities	
Patterns	Counting on a 100 grid	
	Count by 2s, 5s and 10s	
	Count Forward Patterns	
	Increasing Patterns	
	Decreasing Patterns	
	Count Backward Patterns	
	Describing Patterns	
	Pick the Next Number	
Topics	Skill Quests	
Increasing patterns	Working with increasing number patterns to 100	
	Working with increasing number patterns to 1000	
Decreasing patterns	Working with decreasing number patterns within 100	
	Working with decreasing number pattern within 1000	
Skip counting patterns	Skip counting by 25s	
Exploring number patterns	Identifying odd & even patterns	
Recognising visual patterns up to 1000	Visual patterns - add, subtract or multiply	
Number patterns to 1000	Add, sub or multiplicative patterns	

6 Time: Duration is described and quantified by time.

3.T.Time Students tell time using clocks		
Course Topics	Activities	
Time	Tell Time to the Hour	
	Half Hour Times	
	Five Minute Times	
	What is the Time?	
	24 Hour Time	
	Quarter To and Quarter Past	
	Time Conversions: Whole Numbers 1	
Topics	Skill Quests	
Understand passage of time	Introducing time in hours, minutes & seconds	
	Recalling relationships between units of time	
Read & record time	Telling time to the hour & half hour	
	Telling time to the quarter hour	
	Telling time to 5 minutes	
	Telling time to the minute	
	Using am & pm notation	
	Comparing & ordering time	

7 Statistics: The science of collecting, analyzing, visualizing, and interpreting data can inform understanding and decision making.

3.S.Data		
Students interpret and explain representations of data		
Course Topics	Activities	
Statistics	Making Picture Graphs: With Scale	
	Picture Graphs: with scale & half symbols	
	Picture Graphs: More or Less/Picture Graphs: More or Fewer (USA)	
	Picture Graphs: Single-Unit Scale	
Topics	Skill Quests	
Graphs using many-to-one	Using graphs with many-to-one correspondence	
correspondence	Using bar graphs with many-to-one correspondence	
	Comparing graphs with different correspondence	
	Interpreting data from tables	
	Interpreting data from a stem & leaf plot	
	Explaining the mode of a data set	



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