Mathletics
South Africa National Curriculum
Skill Quests

Grades 3-6

February 2023

Mathletics

Mathletics

South Africa Program of Studies

Skill Quests
February 2023

Grade 3

1 Numbers, Operations and Relationships

Topic	Quests	Content
Count objects	Count concrete objects	Counting objects by grouping
Count forwards and backwards	Count in 1s	Counting in 1s up to 1000
	Count in 10s	Counting in 10s up to 1000
	Count in 5s	Counting in 5s up to 50
		Counting in 5s up to 100
		Counting in 5s up to 1000
	Count in 2s	Counting in 2s up to 50
		Counting in 2s up to 100
	Count in 2s, 5s & 10s	Counting in 2s, 5s & 10s up to 50
	Count in 3s	Counting in 3s up to 36
		Counting in 3s up to 100
	Count in 4s	Counting in 4s up to 100
	Count in 20s	Counting in 20s to 200
	Count in 25s	Counting in 25s to 200
	Count in 50s	Counting in 50s to 200
	Count in 100s	Counting in 100s up to 1000
Number symbols and number names	Number symbols & number names	Reading & writing 3-digit numbers
Describe, compare and order numbers	Describe, compare & order numbers	Comparing & ordering numbers up to 1000
		Ordinal numbers
Place value	Place value	Place value up to 200
		Identifying the place value of digits up to 1000
		Partitioning numbers up to 200
		Partitioning numbers to 1000
Addition and subtraction	Addition & subtraction word problems	Solving addition & subtraction word problems
	Problem solving: addition & subtraction	Problem solving with addition & subtraction
		Inverse relationship (add/subtract)
		Solving 2-step word problems
Repeated addition leading to multiplication	Solve multiplication problems	Solving word problems with arrays
Grouping and sharing leading to division	Multiplication & division problems	Solving multiplication & division problems
Techniques (methods or strategies)	Round numbers	Rounding numbers up to 100
		Rounding numbers up to 1000 on a number line
	Doubles & near doubles	Adding using doubles up to 20
		Adding using doubles or near doubles

		Subtracting using doubles
Addition and subtraction	Add & subtract within 100	Adding within 100
		Adding two 2-digit numbers by bridging
		Number pairs to 100
	Add within 1000	Adding up to 3-digit numbers - jump strategy
		Adding up to two 3-digit numbers - split strategy
		Add up to 3-digit numbers rounding & compensating
		Adding up to 3-digit numbers - bridging to 10
		Adding two 3-digit numbers - formal method
	Subtract within 1000	Subtracting 2-digit numbers - models
		Subtracting up to 3-digit numbers - jump strategy
		Subtracting up to 3-digit numbers - split strategy
		Subtracting up to 3-digit numbers - rounding
		Subtracting up to 3-digit numbers - bridging to 10
	Add & subtract within 1000	Add & subtract 2-digit numbers - bridging
		Add & subtract up to 3-digit numbers - jump
		Add & subtract up to 3-digit numbers - split
		Add & subtract up to 3-digit numbers - add to 10
		Add & subtract - rounding & compensating
		Add & subtract - non-standard partitioning
	Add & subtract with multiples	Adding & subtracting multiples of 100
	Efficient strategies to add & subtract	Efficient strategies to add & subtract
	Estimate addition & subtraction	Estimating additions & subtractions
Repeated addition leading to multiplication	Multiplication facts up to 10 x 10	Multiplication facts for 2
		Multiplication facts for 5
		Multiplication facts for 2, 5, 10
		Recalling multiplication facts to 5 x 5
		Multiplication facts for 3
		Multiplication facts for 4
	Multiplication facts for 3 & 4 (12x)	Multiplication facts for 3 (up to 12x)
		Multiplication facts for 4 (up to 12x)

Division	Division	Dividing by 2
		Dividing by 5
		Dividing by 10
		Dividing by 2, 5, 10
		Dividing by 3
		Dividing by 4
	Division by 3 & 4 up to x12	Dividing by 3 up to 36
		Dividing by 4 up to 48
	Recalling division facts 2, 5, 10, 3, 4	Recalling division facts for 2
		Recalling division facts for 5
		Recalling division facts for 10
		Recalling division facts for 3
		Recalling division facts for 4 up to 40
		Recalling division facts for 4 up to 48
Mental mathematics	Compare & order numbers	Ordering numbers to 1000
		Comparing numbers to 1000
	Addition & subtraction facts	Addition & subtraction facts to 20
		Adding multiples of 10
	Multiplication & division facts	Multiplication facts for 2 (up to 10x)
		Division facts for 2
		Multiplying & dividing by 2
		Multiplying & dividing by 5
		Multiplication facts for 10 (up to 10x)
		Division facts for 10
		Multiplying & dividing by 10
		Multiplying & dividing by 2s, 5s & 10s
		Multiplying & dividing by 3 (up to 36)
		Multiplying & dividing by 4
		Multiplying & dividing by 4 (up to 48)
		Multiply & divide facts within x10
Fractions	Introduce fractions	Understanding the meaning of fraction symbols
		Numerator and denominator
	Introduce halves, quarters & eights	Quarters of objects, sets or shapes
		Finding halves & quarters
		Halves & quarters of linear models or sets
		Counting in halves & quarters
		Comparing halves/quarters using models
		Introducing eighths
	Introduce thirds, sixths & fifths	Introducing thirds
		Counting in thirds

		Introducing sixths
	6	Introducing fifths

2 Patterns, Functions and Algebra

Topic	Quests	Content
Geometric patterns	Geometric patterns	Recognising geometric patterns
		Manipulating geometric patterns
		Creating geometric patterns
Number patterns	Number patterns	Number patterns
		Additive number patterns (3s, 4s, 6s, 7s, 8s, 9s)
		Subtractive number patterns
		Additive & subtractive number patterns

3 Space and Shape (Geometry)

Topic	Quests	Content
Position, orientation and views	Position & views	Describing a path
Position and directions		Interpreting simple maps
		Following a path on a simple map
3-D objects	3-D objects	Introducing 3-D objects
		Introducing spheres
		Introducing cones
		Introducing cubes
		Introducing cylinders
2-D shapes	2-D shapes	Comparing & sorting 2-D shapes
Symmetry	Lines of symmetry	Recognising line symmetry of shapes

4 Measurement

Topic	Quests	Content
Time	Tell the time	Using a calendar
		Telling time to the hour
		Telling time to the half hour
		Telling time to the quarter hour
		Telling the time in minutes
		Telling time to the nearest five minutes
		Recalling relationships between units of time
		Converting between hours, minutes & seconds
		Converting between quarter/half hours & minutes
Length	Lengths: informal units	Comparing & ordering informal measures
Mass	Mass: informal units	Comparing & ordering mass using informal units
	Mass: formal units	Introducing formal units: kilograms
		Introducing formal units: grams
Capacity/volume	Volume & capacity: informal units	Comparing & ordering volumes using blocks
		Comparing & ordering volumes through displacement
	Capacity: formal units	Introducing units for volume & capacity: litres
Perimeter and area	Perimeter & area	Introducing perimeter
		Calculating the perimeters of rectangles

5 Data Handling

Topic	Quests	Content
Collect and organise data	Data: collect & organise	Asking simple questions to gather data
		Grouping simple data
		Introducing tally charts
		Introducing basic tables
		Introducing statistical investigation
Represent data	Represent data	Representing data in a picture graph
		Representing data in a table
Analyse and interpret data	Interpret data	Interpreting data in a bar chart
		Interpreting data in tables, tally & bar charts

Grade 4

1 Numbers, Operations and Relationships

Topic	Quests	Content
Whole numbers	Add & subtract with multiples	Adding & subtracting multiples of 10
		Adding & subtracting multiples of 100
	Multiplication facts up to 10 x 10	Multiplication facts for 2 (up to 10x)
		Multiplication facts for 5 (up to 10x)
		Multiplication facts for 2s, 5s, & 10s (up to 10x)
		Multiplication facts for 3 (up to 10x)
		Multiplication facts for 4 (up to 10x)
		Multiplication facts for 6 (up to 10x)
		Multiplication facts for 7 (up to 10x)
		Multiplication facts for 8 (up to 10x)
		Multiplication facts for 9 (up to 10x)
		Recalling multiplication facts (10 x 10)
	Mult/div by multiples of 10, 100 & 1000	Multiplying by multiples of 10
		Multiplying by multiples of 100
		Multiplying by multiples of 1000
	Skip count forwards & backwards	Skip counting by 2s
		Skip counting by 5s
		Skip counting by 3s
		Skip counting by 3 to 30 from any multiple
		Skip counting by 10s, 100s & 1000s
		Skip counting by 50s
		Skip counting by 25s
	Place value to thousands	Reading & writing numbers
		Numbers before & after
		Partitioning (standard)
		Partitioning (non-standard)
		Comparing & ordering numbers to 4 digits
		Rounding to nearest 10, 100 or 1000
	Odd & even numbers	Odd & even numbers

	Addition & subtraction strategies	Add & subtract using place value & number lines
		Add & subtract using jump strategies
		Add & subtract using split strategies
		Add & subtract using a bar model
		Add & subtract using round & compensate strategies
		Add & subtract using efficient strategies
		Using inverse operations for add/sub equations
		Relationship between addition & subtraction
	Multiplication strategies	Multiplying: rounding, compensating & partitioning
		Multiplying: doubling & halving
		Multiplying: split method
		Multiplying: area model
	Division strategies Multiples	Dividing: partitioning
		Dividing: subtracting partial products
		Dividing: area model
		Division problems: 2-digit number by 1-digit number
		Division problems: 3-digit by 1-digit number
		Inverse facts: multiplication & division
		Multiples up to 100
	Properties of whole numbers	Commutative property of multiplication (x10)
		Associative property of multiplication (x10)
		Distributive property of multiplication (x10)
	Addition & subtraction word problems	Addition & subtraction word problems
		Expressing word problems as equations
	Multiplication & division word problems	Expressing equations as word problems
		Solving multiplication & division word problems
Common fractions	Compare & order fractions	Comparing & ordering fractions
	Add common fractions	Adding unit fractions (same denominator)
		Adding proper fractions (same denominator)
	Equivalent fractions	Equivalent fractions up to 1 whole

2 Patterns, Functions and Algebra

Topic	Quests	Content
Numeric patterns	Number patterns	Additive & subtractive number patterns
		Exploring number patterns in tables & charts
		Investigating sequences with multiples
		Exploring number patterns
		Generating add/sub patterns from a rule
		Generating multiplication patterns from a rule
	Function machines	Using a function machine to apply rules to numbers
Geometric patterns	Shape patterns	Finding & generating shape patterns from a rule
Number sentences	Addition & subtraction number sentences	Equivalent number sentences
		Word problems for finding unknown quantities

3 Space and Shape (Geometry)

Topic	Quests	Content
Properties of 2-D shapes	2-D shapes	Representing & describing regular polygons
		Quadrilaterals
		Comparing & describing two-dimensional shapes
Properties of 3-D objects	3-D shapes	Spheres
		Pyramids
		Comparing 3-D shapes
Symmetry	Symmetry	Drawing lines of symmetry
Transformations	Transformations	Creating & drawing symmetrical designs
	Tessellations	Recognising tessellations
Position and movement	Location & directions	Grid-referenced maps
Length	Length	Measuring length (cm & m)
		Estimating length (cm)
		Measuring length (mm)
		Ordering length (mm, cm, m)
		Comparing length (mm, cm, m)
		Appropriate units of measurement (mm, cm, m)

4 Measurement

Topic	Quests	Content
Length	Calculations with length	Converting units of length (whole numbers)
Mass	Mass	Investigating mass in packaging
		Measuring mass in whole numbers (g, kg)
		Converting units of mass (g, kg)
		Comparing & ordering mass (g, kg)
		Adding & subtracting mass
		Mass word problems
Capacity/volume	Capacity	Introducing litres
		Introducing millilitres
		Selecting appropriate units to measure capacity
		Reading liquid volume (ml)
		Adding & subtracting (ml, l)
		Converting units of capacity (ml, l)
		Solving volume word problems (ml, l)
Time	Time	Telling time to the minute (analog)
		Telling time to the minute (analog)
		Telling time to the minute (digital)
		Using am & pm notation
		24-hour clock
		Converting time
		Calculating elapsed time
	Calendars, timetables & timelines	Using timetables
		Introducing timelines
		Reading a calendar
Perimeter, surface area and volume	Perimeter	Introducing perimeter
		Perimeter on a grid
		Measuring perimeter
	Area	Measuring & estimating area using square units
		Measuring & comparing regular & irregular shapes
	Volume	Using unit cubes to measure volume

5 Data Handling

Topic	Quests	Content
Representing data	Data presentation	Pictograms/picture graphs
		Picture graphs with scales
		Line graphs
		Column graphs/bar graphs
		Pie chart/sector graph/circle graph
		Solving problems using charts
Probability	Probability	Chance experiments

Grade 5

1 Numbers, Operations and Relationships

Topic	Quests	Content
Whole numbers	Add & subtract with multiples	Adding & subtracting multiples of 100
		Adding & subtracting multiples 100, 1000, 10,000
	Multiplication facts up to 10 x 10	Multiplication facts for 6 (up to 10x)
		Multiplication facts for 7 (up to 10x)
		Multiplication facts for 8 (up to 10x)
		Multiplication facts for 9 (up to 10x)
		Recalling multiplication facts (10 x 10)
	Mult/div by multiples of 10, 100 & 1000	Multiplication using multiples of 10 & 100
		Multiplication using multiples of 1000 & 10 000
	Skip count forwards & backwards	Skip counting by 10s, 100s & 1000s
		Skip counting by 50s
		Skip counting by 25s
	Place value to millions	Place value up to 5-digit numbers
		Partitioning
		Comparing & ordering numbers to 5 digits
		Rounding 5-digit numbers
	Odd & even numbers	Using odd & even numbers
	Add & subtract strategies (mental)	Adding & subtracting using a bar model
		Adding & subtracting using equal adjustments
		Efficient strategies to add & subtract
		Checking accuracy of calculations
		Addition & subtraction as inverse operations
	Add & subtract strategies (algorithm)	Addition up to 3-digit numbers - no regrouping
		Addition up to 3-digit numbers - regrouping
		Addition up to 4-digit numbers - no regrouping

	17	Addition up to 4-digit numbers - regrouping
		Addition up to 5-digit numbers - no regrouping
		Addition up to 5-digit numbers - regrouping
		Formal method to add 3 or more numbers (2-digits)
		Formal method to add 3 or more numbers (3-digits)
		Formal method to add 3 or more numbers (4-digits)
		Formal method to add 3 or more numbers (5-digits)
		Subtraction of up to 2-digit numbers (no exchange)
		Subtraction of up to 3-digit numbers (no exchange)
		Subtraction up to 4-digit numbers (no exchange)
		Subtraction up to 5-digit numbers (no exchange)
		Subtraction up to 2-digits (with decomposing)
		Subtraction up to 3-digits (with decomposing)
		Subtraction up to 4-digits (with decomposing)
		Subtraction up to 5-digits (with decomposing)
	Multiplication strategies (mental)	Multiplying: split method (3 digits by 1 digit)
		Multiplying: split method (4 digits by 1 digit)
		Multiplying: area model (3 digits by 1 digit)
		Multiplying: area model (4 digits by 1 digit)
		Multiplying: area model (2 digits by 2 digits)
		Multiplying: rounding, compensating & partitioning
		Multiplying using factors
		Multiplying: doubling
		Multiplying: doubling & halving
	Multiplication strategies (algorithm)	Contracted multiplication (2 digit by 1 digit)
		Contracted multiplication (3 digits by 1 digit)
		Contracted multiplication (4 digits by 1 digit)
	Division strategies	Dividing: partitioning
		Dividing: partitioning (3 digits by 1 digit)

		Dividing: subtracting partial products
		Dividing: area model
	Division using multiples	Dividing 2-digit multiples of 10
		Dividing 2-digit multiples of 100
		Dividing with multiples of 1000
	Division problems	Division problems- 2-digits by 1-digit
		Division problems: 3 digits by 1 digit
	Factors & multiples	Factor pairs
		Common factors
		Multiples
		Solving word problems: factors & multiples
	Commutative & associative multiplication	Commutative & associative multiplication
	Addition & subtraction word problems	Addition & subtraction with 2-step problems
	Multiplication word problems	Multiplication word problems
	Division word problems	Division word problems
Common fractions	Count by fractions & mixed numerals	Counting in halves & quarters
		Counting in halves, quarters & eighths
		Counting in thirds
		Counting in tenths
		Counting in simple fractions on a number line
	Compare & order fractions	Comparing & ordering fractions
	Add & subtract fractions	Add & subtract proper fractions - same denominator
		Add & subtract mixed numerals - same denominator
		Add & subtract fraction of a set
	Fraction of a quantity	Finding fraction of a quantity
	Calculate the whole quantity	Calculating the whole using models
	Equivalent fractions	Investigating equivalent fractions less than 1
		Investigating equivalent fractions greater than 1

2 Patterns, Functions and Algebra

Topic	Quests	Content
Numeric patterns	Number patterns: multiplication	Number patterns involving multiples
		Generating multiplication patterns from rules
	Number patterns: addition & subtraction	Generating addition patterns from a given rule
		Generating subtraction patterns from a given rule
		Describing addition & subtraction patterns
Geometric patterns	Shape patterns	Generating shape patterns from a given rule
Number sentences	Number sentences	Equivalent number sentences

3 Space and Shape (Geometry)

Topic	Quests	Content
Properties of 2-D shapes	2-D shapes	Regular & irregular polygons
		Classifying triangles
		Classifying quadrilaterals
		Classifying 2-D figures in a hierarchy
	Angles	Introducing angles
		Classifying angles
Properties of 3-D objects	3-D shapes	Classifying prisms
		Classifying pyramids
		Nets of prisms & pyramids
		Connecting 3-D objects with their nets
Symmetry	Symmetry	Drawing lines of symmetry
Transformations	Rotations, translations, & reflections	Introducing transformations
		One-step transformations
		Exploring tessellations
Exploring tessellations	Location & directions	Introducing cardinal compass directions
		Describing locations & drawing routes
		Introducing intercardinal compass directions

4 Measurement

Topic	Quests	Content
Length	Length	Converting length (km & m)
		Converting length (m & mm)
		Comparing lengths
		Ordering lengths
		Recording length in mixed units
Mass	Mass	Measuring mass in whole numbers (g, kg)
		Converting units of mass (g, kg)
		Comparing & ordering mass (g, kg)
		Adding & subtracting mass
		Mass word problems
Capacity/volume	Volume & capacity	Measuring volume (ml & l)
		Converting volume & capacity
		Estimating capacity (ml & l)
		Measuring with cm^3
Time	Read time	Using 24-hour notation
		Converting units of time
		Calculating elapsed time
Temperature	Temperature	Introducing thermometers
Perimeter, surface area and volume	Perimeter	Measuring perimeter in centimetres
		Finding the perimeter of common 2-D shapes
		Finding the perimeter of polygons
		Calculating the perimeter of composite shapes
		Finding a missing side length given the perimeter
	Area	Area & perimeter of rectangles
		Area of a triangle
		Exploring shapes with the same area

5 Data Handling

Topic	Quests	Content
Representing data	Represent data	Picture graphs with many-to-one correspondence
		Drawing line graphs & solving problems
Analysing, interpreting and reporting data	Analyse & interpret data	Interpreting data in column/bar graphs
		Using line graphs to solve problems
		Using line graphs to solve problems
		Reading & interpreting data in a dot plot
		Pie charts with simple percentages
		Two-way tables
		Reading & interpreting tables
Probability	Probability experiments	Investigating chance experiments

Grade 6

1 Numbers, Operations and Relationships

Topic	Quests	Content
Whole numbers	Add & subtract with multiples	Adding multiples of 10
		Adding & subtracting multiples of 1000
	Multiplication facts up to 12 x 12	Multiplication facts for 6 (up to 12x)
		Multiplication facts for 7 (up to 12x)
		Multiplication facts for 8 (up to 12x)
		Multiplication facts for 9 (up to 12x)
		Multiplication facts for 11 (up to 12x)
		Multiplication facts for 12 (up to 12x)
	Mult/div by multiples of 10, 100 & 1000	Multiplying by multiples of 10, 100, 1000
		Dividing by multiples of 10, 100, 1000
	Place value to 9 digits	Reading & writing numbers to 10 million
		Place value of 6-digit numbers
		Place value of numbers of any size
		Comparing numbers of any size
		Ordering numbers of any size
		Partitioning numbers of any size
		Non-standard partitioning 6- & 7-digit numbers
		Using numbers in context
		Using numbers of any size
		Rounding numbers of any size
		Round to estimate
	Prime & composite numbers	Prime & composite numbers
	Add & subtract strategies (mental)	Using a bar model to add & subtract
		Using equal adjustments to subtract
		Efficient strategies to add & subtract
		Checking accuracy of calculations

	Add & subtract strategies (algorithm)	Adding numbers of any size (no regrouping)
		Adding numbers of any size (with regrouping)
		Adding numbers of any size
		Subtracting numbers of any size (no exchange)
		Subtracting numbers of any size (with exchange)
	Multiplication strategies (algorithm)	Multiplying 2 digits by 1 digit - contracted model
		Multiplying 3 digits by 1 digit - contracted model
		Multiplying 4 digits by 1 digit - contracted model
		Multiply 2 digits by 1 digit - expanded algorithm
		Multiply 3 digits by 1 digit - expanded algorithm
		Multiply 4 digits by 1 digit - expanded algorithm
		Multiply 2 digits by 2 digits - extended algorithm
		Multiply 3 digits by 2 digits - extended algorithm
		Multiply 4 digits by 2 digits - expanded algorithm
		Multi-digit numbers - expanded algorithm
	Multiplication strategies (mental)	Multiplying: split method
		Multiplying: area model
		Multiplying: rounding, compensating & partitioning
		Multiplying using factors
		Multiplying; doubling & halving
		Doubling & halving
	Division strategies (algorithm)	Divide 2 digits by 1 digit - contracted algorithm
		Divide 3 digits by 1 digit - contracted algorithm
		Divide 4 digits by 1 digit - contracted algorithm
		Divide 2 digits by 1 digit - extended algorithm
		Divide 3 digits by 1 digit - extended algorithm
		Divide 4 digits by 1 digit - extended algorithm
		Divide 4 digits by 2 digits - extended algorithm
		Divide multi-digit numbers - extended algorithm
		Dividing: partitioning

	Division strategies (mental)	Dividing: subtracting partial products
		Dividing: area model
		Dividing with multiples
	Division problems	Division problems: 2-digits by 1-digit
		Division problems: 3-digits by 1-digit
	Order of operations	Order of operations (add/subtract)
		Order of operations (multiply/divide)
		Order of operations (add/subtract/multiply/divide)
		Order of operations involving grouping symbols
		Applying order of operations (grouping symbols)
	Factors & multiples	Factor pairs
		Common factors
		Multiples
		Solving word problems: factors & multiples
	Properties of whole numbers	Commutative property of multiplication (x10)
		Associative property of multiplication (x10)
		Distributive property of multiplication (x10)
		Commutative property of multiplication (x12)
		Commutative & associative multiplication
	Addition & subtraction word problems	Addition & subtraction word problems
	Multiplication & division word problems	Multiplication & division word problems
Common fractions	Comparing fractions	Comparing unit fractions
		Comparing & ordering proper fractions
		Fractions on a number line
	Add & subtract fractions	Adding proper fractions
		Adding fractions with denominators of 10 & 100
		Adding 3 or more fractions
		Subtracting proper fractions
		Adding & subtracting proper fractions
	Add & subtract mixed numbers	Adding mixed numbers
		Subtracting mixed numbers (same denominator)
		Subtracting mixed numbers (related denominator)

	Calculate amounts of fractions	Calculating fractions of a quantity or amount
		Fractions of amounts using bar modelling
		Dividing unit fractions by whole numbers, models
	Word problems with fractions	Word problems: dividing whole numbers by fractions
		Word problems: non unit fractions
		Word problems: proper fractions & mixed numbers
		Fraction problems (no grouping symbols)
		Fraction problems (grouping symbols)
	Percentages	Introducing percentages
		Calculating simple percentages
		Calculating percentages of amounts
	Equivalent fractions	Multiplication & equivalent fractions
Decimal fractions	Decimal place value	Introducing decimal notation
		Tenths as decimals
		Introducing decimal hundredths
		Connecting decimal & fraction tenths
		Connecting decimal & fraction hundredths
		Connecting decimal & fraction tenths & hundredths
		Model decimal fractions to 2 decimal places
	Compare & order decimals	Comparing & ordering decimal tenths
		Comparing & ordering decimal hundredths
	Add & subtract decimals	Adding decimals to hundredths
		Subtracting decimals to hundredths
	Multiply decimals by 10, 100 & 1000	Multiplying decimals by powers of 10
		Multiplying decimals by powers of 100
	Equivalence in fractions & percentages	Converting common fractions into percentages
		Percentages as fractions & decimals
		Equivalence in fractions, decimals & percentages

		Solving problems relating to equivalence

2 Patterns, Functions and Algebra

Topic	Quests	Content
Numeric patterns	Generate numerical patterns	Number patterns: one step rules
		Number patterns; two step rules
		Interpreting & creating table of values
		Decimal addition & subtraction patterns
Geometric patterns	Geometric patterns	Analysing geometric patterns
		Solving problems involving patterns
Number sentences	Number sentences	Equivalent number sentences

3 Space and Shape (Geometry)

Topic	Quests	Content
Properties of 2-D shapes	2-D shapes	Regular & irregular polygons
		Classifying triangles
		Classifying quadrilaterals
		Classifying 2-D figures in a hierarchy
	Angles	Classifying angles
		Calculating angles around a point
		Comparing & ordering angles
Properties of 3-D objects	3-D shapes	Classifying prisms
		Classifying pyramids
		Nets of prisms & pyramids
		Connecting 3-D objects with their nets
Symmetry	Symmetry	Drawing lines of symmetry
Transformations	Transformations	Enlarging 2-D shapes using scale factors
	Patterns from rotation	Patterns from translations
Position and movement	Location & directions	Using cardinal compass directions

4 Measurement

Topic	Quests	Content
Length	Length	Converting metric units of length
		One-step problems involving length
		Two-step problems involving length
Mass	Mass	Decimal representation in mass
		Converting between units of mass
		Solving multi-step problems involving mass
Capacity/volume	Capacity	Converting units of capacity (inc decimals)
Time	Time	Converting units of time
		Understanding elapsed time
Temperature	Temperature	Measuring temperature
Perimeter, surface area and volume	Perimeter	Perimeter on a grid
		Finding the perimeter of rectangles
		Finding the perimeter of common 2-D shapes
		Finding the perimeter of polygons
		Calculating perimeter of composite shapes
		Finding a missing side length given the perimeter
	Area	Area formula
		Area & perimeter of rectangles
		Exploring shapes with the same area
	Volume	Volume of rectangular prisms
		Measuring volume

5 Data Handling

Topic	Quests	Content
Representing data	Analyse & interpret data	Pie charts
		Histograms
		Side-by-side column graphs
Analysing, interpreting and reporting data	Central tendencies	Understanding the median
		Calculating the median
		Understanding the mean
		Calculating the mean
		Comparing measures of centre & variation
	Summarise & report observations	Evaluating statistical questions
		Formulating a summary for numerical data
		Reporting observations in a data display
Probability	Probability experiments	Frequency in chance experiments
		Fairness in chance experiments

Mathletics

For more information about Mathletics,
contact our friendly team.

www.mathletics.com/contact

A 3P Learning Product