Mathletics
South Africa National Curriculum
Skill Quests

Grades 7-9

February 2023

Mathletics

Mathletics

South Africa Program of Studies
Skill Quests
February 2023

Grade 7

1 Numbers, Operations and Relationships

Topic	Quests	Content
Whole numbers	Multiplication & division (x12)	Multiplying & dividing by 6 (x12)
		Multiplying & dividing by 7 (x12)
		Multiplying & dividing by 8 (x12)
		Multiplying & dividing by 9 (x12)
		Multiplying & dividing by 11 (x12)
		Multiplying & dividing by 12 (x12)
	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 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
		Rounding numbers of any size
	Prime & composite numbers	Prime & composite numbers
	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
	Add & subtract strategies (mental)	Checking accuracy of calculations
	Add & subtract strategies (written)	Adding numbers of any size (no regrouping)
	Adding numbers of any size (with regrouping)	Adding numbers 3 or more addends

		Subtracting numbers of any size (no exchange)
	4	Subtracting numbers of any size (with exchange)
	Multiplication strategies (mental)	Multiplying up to 4 digits - efficient strategies
	Multiplication strategies (written)	Multiplying - expanded algorithm
		Multiplying - contracted algorithm
	Division strategies (mental)	Division of up to 4 digits - efficient strategies
		Dividing using known facts
		Dividing using factors
	Division strategies (written)	Division - extended method
		Division - contracted method
	Divisibility tests	Divisibility tests for dividing by 2
		Divisibility tests for dividing by 3
		Divisibility tests for dividing by 4
		Divisibility tests for dividing by 5
		Divisibility tests for dividing by 6
		Divisibility tests for dividing by 8
		Divisibility tests for dividing by 9
		Divisibility tests for dividing by 10
	Factors & multiples	Factors
		Multiples
		Multiples
	Ratios	Using simple ratios
		Solving problems involving ratios
Exponents	Square & cube numbers	Square numbers
		Cube numbers
		Comparing square & cube numbers
	Exponential form	Introducing exponents
		Expressions involving exponents
Integers	Integers	Investigating integers
		Comparing & ordering integers
		Adding & subtracting integers
Common fractions	Common fractions	Connecting tenths & hundredths
		Compare & order fractions (same numerator)
		Compare & order fractions (different numerator)

		Equivalent fractions (related denominators)
		Simplifying fractions
	Add & subtract fractions	Adding fractions with same denominator
		Subtracting fractions with same denominator
		Adding fractions with related denominators
		Subtracting fractions with related denominators
		Add & sub fractions (unrelated denominators)
	Add & subtract mixed numbers	Adding mixed numbers (same denominator)
		Subtracting mixed numbers (same denominator)
		Adding mixed numbers: related denominators
		Subtracting mixed numbers: related denominators
		Adding mixed numbers: unrelated denominators
		Subtracting mixed numbers: unrelated denominators
	Multiply fractions	Multiplying fractions using models
		Multiplying proper fractions
		Multiplying improper fractions
		Multiplying mixed numbers
		Multiplying fractions
	Problem solving with fractions	Word problems with fractions & mixed numbers
	Percentages	Calculating simple percentages
		Calculating percentages of amounts
		Calculating simple percentage discounts
		Percentage increase & decrease
	Equivalent fractions review	Equivalent fractions
Decimal fractions	Decimals	Reviewing decimal hundredths
		Decimal thousandths
		Comparing & ordering decimals to thousandths
		Rounding decimals
		Partitioning decimals
	Add with decimals	Adding decimals to hundredths
		Adding decimals up to 3 decimal places

	Subtract with decimals	Subtracting decimals to hundredths	
		Subtracting decimals with 3 decimal places	
		Subtracting decimals in the same place value	
		Subtracting decimals in different place values	
	Multiply decimals	Multiplying decimals by powers of 10	
		Multiplying decimals by powers of 100	
		Introducing multiplying with decimals	
		Multiplying decimals up to 2 places	
		Multiplying decimals up to 3 places	
	Divide decimals	Dividing decimals by 10	
		Dividing decimals by 100	
		Dividing decimals by 1000	
		Dividing decimals (mental)	
		Dividing decimals (written method)	
	Problem solving with decimals	Problem solving with decimals	
	Equivalent fraction forms	Representing fractions as percentages	
		Representing percentages as decimals	
		Equivalence in fractions, decimals & percentages	

2 Patterns, Functions and Algebra

Topic	Quests	Content
Numeric and geometric patterns	Patterns	Comparing number patterns
		Interpreting & creating a number pattern table
		Representing geometric patterns
Functions and relationships	Algebra functions & relationships	Finding the nth term
Algebraic expressions	Algebra expressions	Representing algebraic expressions
		Creating algebraic expressions
Algebraic equations	Algebra equations	Solving problems with algebra
		Patterns with algebraic symbols
Graphs	Linear graphs	Interpreting linear patterns
		Representing linear patterns
		Predicting linear patterns

3 Space and Shape (Geometry)

Topic	Quests	Content
Geometry of 2-D shapes	2-D shapes	Classifying triangles
		Classifying quadrilaterals
		Parts of a circle
		Similar & congruent 2-D shapes
		Solving geometric problems
Geometry of 3-D objects	3-D shapes	Classifying prisms
		Classifying pyramids
		Connecting 3-D objects with their nets
Geometry of straight lines	Geometry of straight lines	Identifying line segments
		Parallel & perpendicular lines
		Identifying spatial features in 2-D shapes
Transformation geometry	Transformations	Enlarging 2-D shapes using scale factors
		Patterns from rotation
		Patterns from translations
		Identifying line symmetry
		Rotational symmetry
Construction of geometric figures	Angles	Formal units for angles
		Measuring with a protractor
		Classifying angles by size
		Finding the total of angles

4 Measurement

Topic	Quests	Content
Area and perimeter of 2-D shapes	Perimeter	Finding the perimeter of polygons
		Calculating perimeter of composite shapes
		Finding a missing side length given the perimeter
	Area	Area of triangles
		Area of rectangles
		Solving area problems involving rectangles
		Solving area problems involving triangles
Surface area and volume of 3-D objects	Volume & capacity	Applying volume formulas for rectangular prisms
		Solving problems: volume of rectangular prisms
		Volume of composite rectangular prisms
		Converting volume & capacity - whole numbers
		Converting volume & capacity - decimals
		Solving problems involving capacity

5 Data Handling

Topic	Quests	Content
Collect, organize and summarize data	Collect data	Tallies & frequency distribution tables
Represent data	Represent data	Ordered stem-and-leaf plots
		Divided bar graphs
		Pie charts
		Line graphs
Interpret, analyse, and report data	Interpret data	Interpreting a variety of different graphs
Central tendencies	Calculating the mean	Median, mode & range
		Using mean/median/mode to interpret data
	Summarise & report observations	Evaluating statistical questions
		Formulating a summary for numerical data
Probability	Probability	Language of probability
		Understanding basic probability

Grade 8

1 Numbers, Operations and Relationships

Topic	Quests	Content
Whole numbers	Addition & subtraction	Efficient mental strategies for addition
		Word problems using efficient addition strategies
		Efficient mental strategies for subtraction
		Subtracting 3-digit numbers using models
		Subtracting 4-digit numbers using place value
		Word problems - efficient subtraction
	Multiplication	Solving multiplication word problems
		Multiplying 3-digits by 2-digits - extended
		4-digits by 2-digits - expanded algorithm
		Multi-digit numbers - expanded
		Multiplying 3-digits by 1-digit - split method
		Multiplying 4-digits by 1-digit - split method
	Properties of whole numbers	Using the associative law for multiplication
		Using the commutative law for multiplication
	Divisibility rules	Divisibility tests for dividing by 2
		Divisibility tests for dividing by 3
		Divisibility tests for dividing by 4
		Divisibility tests for dividing by 5
		Divisibility tests for dividing by 6
		Divisibility tests for dividing by 8
		Divisibility tests for dividing by 9
		Divisibility tests for dividing by 10
		Testing for divisibility

	Division	Dividing 3-digits by 2-digits - contracted
		Dividing 4-digits by 2-digits - contracted
		Division of up to 4-digits - efficient strategies
	Estimation	Checking accuracy of calculations
		Rounding, compensating & partitioning
	Prime & composite numbers	Prime & composite numbers
	Factors & multiples	Factor pairs
		Multiples
		Solving word problems: factors & multiples
	Order of operations	Applying order of operations (grouping)
		Order of operations (4 operations)
		Order of operations involving grouping
	Ratio & rate	Distance/time graphs
		Graphs & rates extension
		Converting ratios
		Ratios involving more than two parts
		Solving problems involving ratios
		Using rates
	Financial maths	Hire purchase agreements
		Simple interest
		Best buys & discounts
		Percentages of quantities
		Solving problems involving profit & loss
		Increasing & decreasing amounts
		Problem solving involving percentages
		Calculating simple interest
Exponents	Exponents	Investigating exponent laws
		Comparing square & cube numbers
		Square numbers
		Cube numbers
		Scientific notation & standard form
Integers	Integers	Investigating integers
		Compare, order, add & subtract integers
		Applying the four operations to integers

Common fractions	Fraction conversions	Improper fractions to mixed numbers
		Mixed numbers to improper fractions
	Fractions compare, order	Comparing & ordering fractions
		Comparing & ordering fractions (same numerator)
	Fractions simplify, equivalent	Simplifying fractions using factors
		Equivalent fractions (related denominators)
	Fractions add, subtract	Adding & subtracting fractions
		Adding fractions with related denominators
		Subtracting fractions with related denominators
	Fractions multiply, divide	Expressing one quantity as a fraction of another
		Multiplying fractions & finding quantities
		Dividing fractions by fractions & integers
	Percentage basics	Converting common fractions into percentages
		Introducing percentages
		Representing fractions, percentages & decimals
	Calculate percentages	Calculating simple percentages
		Calculating percentages of amounts
		Calculating simple percentage discounts
	Fractions, decimals, percentages	Equivalence in fractions, decimals & percentages
		Percentages as fractions & decimals
		Solving problems relating to equivalence
		Percentages of quantities
	Work with percentages	Solving problems involving profit & loss
		Increasing & decreasing amounts
		Problem solving involving percentages
Decimal fractions	Decimal addition	Adding decimals up to 3 decimal places
		Adding decimals using digital technologies
		Adding decimals using written method

		Decimal subtraction	Subtracting decimals in the same place value
			Subtracting decimals using digital technologies
			Subtracting decimals using mental strategies
			Subtracting decimals using written method
		Decimal complements, rounding	Investigating decimal complements of 1
			Rounding decimals to any place
		Decimal multiplication	Multiplying decimals & whole numbers
			Multiplying decimals up to 3 decimal places
			Multiplying decimals using written method
			Multiplying decimals by powers of 10
			Multiplying decimals by powers of 10, 100, 1000
			Multiplying decimals by powers of 100
			Multiplying decimals by powers of 1000
		Decimal division	Dividing decimals by integers
			Dividing decimals by 10
			Dividing decimals by 10, 100, 1000
			Dividing decimals by 100
			Dividing decimals by 1000
			Dividing decimals by powers of 10
			Dividing decimals by powers of 100
			Dividing decimals by powers of 1000
			Dividing decimals using written method
		Decimal problem solving	Using division to solve problems
			Word problems: multiplying & dividing decimals
		Connect fractions & decimals	Connecting fractions & decimals
			Converting fractions & decimals

2 Patterns, Functions and Algebra

Topic	Quests	Content
Numeric and geometric patterns	Number patterns	Comparing numerical patterns
		Forming expressions
		Interpreting & creating a number pattern table
		Finding a rule - one step
		Number patterns
		Working with linear sequences
Algebraic expressions	Algebraic expressions	Forming equations
		Writing & interpreting expressions
		Identifying equivalent expressions
		Equivalent algebraic expressions
		Simplifying algebraic expressions
		Extending & applying the distributive law
	Algebraic substitution	Creating algebraic expressions
		Evaluating formulae
	Algebraic equations	Equations introduction
		Solving 1-step equations: addition/subtraction
		Solving 1-step equations: division
		Solving 1-step equations: mixed operations
		Solving 1-step equations: multiplication
		Solving 2-step equations: variable in denominator
		Solving 2-step equations: variable in numerator
		Solving equations involving brackets
		Solving equations with variable on both sides
Graphs	Graphs	Using the coordinate system
		Solving linear equations graphically
		Table of values

3 Space and Shape (Geometry)

Topic	Quests	Content
Geometry of 2-D shapes	Geometry conventions	Geometry conventions
		Labels & naming conventions
	Triangles	Properties of triangles
		Triangle inequality theorem
		Using properties of triangles & quadrilaterals
	Quadrilaterals	Reasoning, sketching & describing quadrilaterals
		Properties of quadrilaterals
	Triangles & quadrilaterals	Solving sums of interior angles
		Constructing triangles with given conditions
	Congruency	Defining & working with congruence
	Similarity	Introducing similarity
		Identifying & constructing similar triangles
Geometry of 3-D objects	3-D shapes	Classifying prisms
		Classifying pyramids
		Connecting 3-D objects with their nets
		Nets of prisms & pyramids
Geometry of straight lines	Angle relationships	Adjacent angles
		Vertically opposite angles
		Angles at a point
	Parallel lines	Angle relationships on parallel lines
		Parallel & perpendicular line conventions
		Proving parallel lines
	Straight line problem solving	Geometric reasoning using angle properties
Transformation geometry	Transformations	Translation using coordinates
		Reflection with coordinates
		Solving problems in the first quadrant
		Find the distance between 2 points, absolute value
		Graphing coordinates across the x- & y-axis
		Drawing polygons in the coordinate plane
		Introducing the coordinate system
		Locating points on the Cartesian/Coordinate plane
		Solving problems by graphing in the 4 quadrants

		Line & rotational symmetry
	17	Transformations on a set of axes
	Enlargements	Enlarging 2-D shapes using scale factors

4 Measurement

Topic	Quests	Content
Area and perimeter of 2-D shapes	Perimeter	Calculating perimeter (metric & customary units)
		Finding the perimeter of rectangles
		Finding the perimeter of common 2-D shapes
		Finding the perimeter of polygons
		Finding the perimeter of polygons
		Finding a missing side length given the perimeter
	Rectangles - area	Area of rectangles
		Area & perimeter of rectangles
		Area formula (metric)
		Formula for area of rectangles (mixed units)
		Word problems: area of a rectangle (mixed units)
	Triangles - area	Finding the area of a triangle
		Calculating the area of a triangle
	Circles - parts & circumference	Radius, diameter & circumference
		Identifying parts of circles
		Working with circumferences of circles
Surface area and volume of 3-D objects	Volume of rectangular prisms	Volume of rectangular prisms
	Use formula for volume	Applying volume formulas for rectangular prisms
		Solving problems: volume of a rectangular prism
		Volume of composite rectangular prisms
		Calculating & comparing volumes of cubes
	Units of area & volume	Choosing & converting units of volume
		Units of area & volume
	Volume of prisms	Finding the volume of prisms
		Finding the volume of rectangular prisms
		Finding the volume of triangular prisms
		Solving problems involving prisms
	Surface area	Finding surface area problems

The Theorem of Pythagoras	Pythagoras' Theorem	Identifying sides on right-angled triangles
		Finding the hypotenuse using Pythagoras'
		Solving problems involving Pythagoras'
		Finding a shorter side using Pythagoras'
		Solving Pythagoras' Theorem problems: exact

5 Data handling

Topic	Quests	Content
Collect, organize and summarize data	Collect data	Collecting & interpreting data
		Issues with data from primary & secondary sources
		Collecting data
Collect, organize and summarize data	Tables	Reading & interpreting tables
		Two-way tables
Collect, organize and summarize data	Measures of central tendency	Formulating a summary for numerical data
		Calculating the mean
		Median, mode & range
Represent data	Represent data	Divided bar graphs
		Dot plots
		Histograms & polygons
		Histograms & polygons: grouped data
		Line graphs
		Ordered stem-and-leaf plots
		Constructing & interpreting pie charts
		Tallies & frequency distribution tables
Interpret, analyse and report data	Analyse data	Reading & interpreting data in a histogram
		Solving problems with pie charts
		Interpreting a variety of different graphs
Probability	Probability	Probability as a fraction, decimal or percent
		Language of probability
		Understanding basic probability
		Investigating chance experiments
		Fairness in chance experiments
		Frequency in chance experiments

Grade 9

1 Numbers, Operations and Relationships

Topic	Quests	Content
Whole numbers	Irrational numbers	Investigating irrational numbers
		Exploring irrational numbers (surds)
		Exploring terminating & recurring decimals
	Prime & composite numbers	Prime & composite numbers
	Order of operations	Order of operations (4 operations)
		Order of operations involving grouping
		Applying order of operations (grouping)
	Ratio & rate	Solving problems involving ratios
		Ratios involving more than two parts
		Converting ratios
		Using rates
		Distance/time graphs
		Graphs & rates extension
	Graphs & rates extension	Understanding direct proportion
		Investigating indirect/inverse proportion
		Creating direct & inversely proportionate
		Determining the constant of proportionality
		Graphing equations of direct proportion
	Financial maths	Solving problems involving profit & loss
		Calculating simple interest
		Calculating compound interest without a formula
		Calculating compound interest
Exponents	Exponents - square & cube numbers	Square numbers
		Cube numbers
		Comparing square & cube numbers
	Exponents	Exponents
		Investigating exponent laws
		Exponents: multiplication
		Exponents: division

		Exponents: power of a power
	22	Exponents: zero index
		Exponents: mixed ops, coefficient =1
		Exponents: mixed ops, coefficient >1
	Exponents - negative exponents	Exponents: neg index, numerical base
		Exponents: negative index
		Exponents: mixed with negative indices
	Exponential equations	Solving exponential equations
		Solving simple non-linear relationships
	Exponents - scientific notation	Scientific notation & standard form
		Calculating in scientific notation
Integers	Integers	Investigating integers
		Comparing, ordering, adding & subtracting integers
		Applying the four operations to integers
Common fractions	Fractions add, subtract	Adding fractions with related denominators
		Subtracting fractions with related denominators
		Adding & subtracting fractions
	Fractions multiply, divide	Multiplying fractions & finding quantities
		Dividing fractions by fractions & integers
		Expressing one quantity as a fraction of another
	Fractions, decimals, percentages	Percentages as fractions & decimals
		Equivalence in fractions, decimals & percentages
		Solving problems relating to equivalence
Decimal fractions	Decimal addition	Adding decimals up to 3 decimal places
		Adding decimals using written method
		Adding decimals using digital technologies
	Decimal subtraction	Subtracting decimals using mental strategies
		Subtracting decimals using digital technologies
		Subtracting decimals using written method
		Subtracting decimals in the same place value

	Decimal multiplication	Multiplying decimals & whole numbers
		Multiplying decimals up to 3 decimal places
		Multiplying decimals using written method
	Decimal division	Dividing decimals by integers
		Dividing decimals using written method
	Decimal problem solving	Word problems: multiplying & dividing decimals
		Using division to solve problems
	Connect fractions & decimals	Connecting fractions & decimals
		Converting fractions & decimals

2 Patterns, Functions and Algebra

Topic	Quests	Content
Numeric patterns	Number patterns	Number patterns
		Finding a rule - one step
		Comparing numerical patterns
		Interpreting & creating a number pattern table
		Forming expressions
		Working with linear sequences
Algebraic expressions	Algebraic expressions	Identifying equivalent expressions
		Equivalent algebraic expressions
		Writing & interpreting expressions
		Forming equations
		Simplifying algebraic expressions
	Algebraic expressions - distribution	Extending & applying the distributive law
		Applying the distributive law/property
		Distribute law (property): adding like terms
	Expand binomial products	Expanding binomial products
	Algebraic substitution	Evaluating formulae
		Creating algebraic expressions
	Factorisation	Factorising algebraic expressions
		Factorising/factoring
		Factorising (factoring) using difference of 2 sqs
		Factorising (factoring) using grouping
		Factorising (factoring) using perfect squares
		Factorising (factoring) quadratic trinomials
		Factorising (factoring) complex fractions
Algebraic equations	Algebraic equations	Equations introduction
	Algebraic equations - grade 8 revision	Solving 1-step equations: addition/subtraction
		Solving 1-step equations: multiplication
		Solving 1-step equations: division
		Solving 1-step equations: mixed operations

	25	Solving 2-step equations: variable in numerator
		Solving 2-step equations: variable in denominator
		Solving equations with variable on both sides
		Solving equations involving brackets
		Solving linear equations involving brackets
		Solving equations involving algebraic fractions
		Solving simple quadratic equations
		Solving linear inequalities with two steps
		Solving linear inequalities with multiple steps
		Solving simultaneous equations algebraically
Graphs	Graphs	Using the coordinate system
		Table of values
		Solving linear equations graphically
		Finding the gradient without the formula
		Finding the gradient using the formula
		Graphing vertical & horizontal lines
		Writing equations of vertical & horizontal lines
		Finding & using x & y-intercepts
		Graphing using a table of values
		Graphing using the gradient-intercept method

3 Space and Shape (Geometry)

Topic	Quests	Content
Geometry of 2-D shapes	Geometry conventions	Geometry conventions
		Labels & naming conventions
	Triangles	Properties of triangles
		Triangle inequality theorem
		Constructing triangles with given conditions
	Quadrilaterals	Properties of quadrilaterals
		Reasoning, sketching & describing quadrilaterals
	Triangles & quadrilaterals	Using properties of triangles & quadrilaterals
		Solving sums of interior angles
	Congruency	Defining & working with congruence
		Determining congruence in triangles
		Using properties of congruent triangles
	Similarity	Introducing similarity
		Identifying & constructing similar triangles
	Geometry problem solving	Solving problems using geometric reasoning
Geometry of 3-D objects	3-D shapes	Classifying prisms
		Classifying pyramids
		Nets of prisms & pyramids
		Connecting 3-D objects with their nets
Geometry of straight lines	Angle relationships	Adjacent angles
		Vertically opposite angles
		Angles at a point
	Parallel lines	Parallel & perpendicular line conventions
		Angle relationships on parallel lines
		Proving parallel lines
	Straight line problem solving	Geometric reasoning using angle properties
Transformation geometry	Transformations	Solving problems in the first quadrant
		Reflection with coordinates
		Translations with coordinates
		Introducing the coordinate system
		Locating points on the Cartesian plane
		Graphing coordinates across the x- & y-axis

		Solving problems by graphing in the 4 quadrants
	27	Find the distance between 2 points, absolute value
		Transformations on a set of axes
		Line & rotational symmetry
	Enlargements	Enlarging 2-D shapes using scale factors

4 Measurement

Topic	Quests	Content
Area and perimeter of 2-D shapes	Perimeter	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
		Calculating perimeter (metric & customary units)
Area and perimeter of 2-D shapes	Triangles - area	Area of triangles
		Finding the area of a triangle
	Rectangles - area	Area of rectangles
		Area formula (metric)
		Area & perimeter of rectangles
		Formula for area of rectangles (mixed units)
		Word problems: area of a rectangle (mixed units)
	Parallelogram - area	Solving area problems involving parallelograms
	Composite figures- area	Solving area problems: simple composite figures
	Quadrilaterals - area	Solving area problems involving trapeziums
		Solving area problems involving rhombuses
		Solving area problems involving kites
	Circles - parts & circumference	Radius, diameter & circumference
		Identifying parts of circles
		Working with circumferences of circles
Surface area and volume of 3-D objects	Volume of rectangular prisms	Volume of rectangular prisms
	Use formula for volume	Applying volume formulas for rectangular prisms
		Solving problems: volume of a rectangular prism
		Volume of composite rectangular prisms
		Calculating & comparing volumes of cubes
	Units of area & volume	Units of area & volume
		Choosing & converting units of volume

	Volume of prisms	Finding the volume of prisms
		Finding the volume of rectangular prisms
		Finding the volume of triangular prisms
		Solving problems involving prisms
	Volume of cylinders	Solving problems involving cylinders
	Surface area	Finding surface area problems
		Finding surface area of cylinders
		Finding dimensions of objects given surface area
The Theorem of Pythagoras	Pythagoras' Theorem grade 8 revision	Identifying sides on right-angled triangles
		Finding a shorter side using Pythagoras'
		Finding the hypotenuse using Pythagoras'
		Solving problems involving Pythagoras'
		Solving Pythagoras' Theorem problems: exact
	Pythagoras' Theorem	Identifying sides of triangles with right angles
		Exploring Pythagorean Triads
		Using the converse of Pythagoras' Theorem

5 Data Handling

Topic	Quests	Content
Collect, organize and summarize data	Tables	Reading & interpreting tables
		Two-way tables
	Collect data	Issues with data from primary & secondary sources
		Collecting data
		Collecting & interpreting data
		Collecting everyday data
	Measures of central tendency	Calculating the mean
		Median, mode & range
		Formulating a summary for numerical data
Represent data	Represent data	Tallies & frequency distribution tables
		Histograms & polygons
		Histograms & polygons: grouped data
		Dot plots
		Ordered stem-and-leaf plots
		Divided bar graphs
		Constructing & interpreting pie charts
		Line graphs
		Constructing & interpreting data displays
Interpret, analyse and report data	Analyse data	Reading & interpreting data in a histogram
		Interpreting a variety of different graphs
		Reading & interpreting pie charts
		Solving problems with pie charts
		Comparing data displays
Probability	Probability	Investigating chance experiments
		Frequency in chance experiments
		Fairness in chance experiments
		Probability as a fraction, decimal or percent
		Language of probability
		Understanding basic probability
		Complementary events
		Probability language to describe events

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