Mathletics

Victorian Mathematics V2.0

Scope & Sequence

Level 5

Mathletics

Scope & Sequence
Victorian Mathematics v2.0 Level 05

Yearly overview
Victoria | Level 5

Mathletics

	Term one	Term two	Term three	Term four
Unit 1	**Number** **Whole number and decimals** • Place value to thousandths • Partitioning • Compare & order • Whole number review	**Number** **Fractions** • Compare and order • Mixed numbers & improper fractions • Equivalent fractions • Add & Subtract fractions: Same or related denominators	**Number** **Fractions, decimals, and percentages** • Connect fraction, decimal and percentage equivalents • Represent remainders as fractions and decimals • Problem solving	**Number** **Algebra** **Number and operations review** Review earlier content
Unit 2	**Number** **Addition and subtraction: Mental** • Round to estimate • Problem solving • Strategy review	**Number** **Algebra** **Multiplication and division: Mental strategies** • Efficient mental strategies • Factorising	**Number** **Multiplication and division: Written strategies and solving problems** • Multiplication algorithm • Contracted division • Problem solving	**Statistics** **Data: Investigation and evaluation** • Misleading diagrams • Evaluate statements about displays • Interpret data displays • Mode
Unit 3	**Number** **Algebra** **Factors, multiples and patterns** • Factors, Multiples • Common multiples • Divisibility tests • Patterns with factors & multiples	**Number** **Algebra** **Algebra** • Create and use algorithms • Inverse operations • Fact families • Find unknown values	**Probability** **Statistics** **Chance and data** • List outcomes • Conduct chance experiments • Record results • Compare outcomes • Estimate likelihoods	**Measurement** **Time and position** • Read and represent 12- & 24-hour time • Convert times • Use timetables • Grid coordinate systems • Directional language
Unit 4	**Measurement** **Number** **Length, area and perimeter** • Kilometres, metres, centimetres & millimetres • Compare & order lengths • Estimate lengths • Calculate perimeter • Calculate area	**Measurement** **Addition and subtraction: Written** • Written strategies	**Space** **Angles and 2D shapes** • Measure angles • Estimate angles • Classify angles • Translations, reflections & rotations • Symmetry	**Measurement** **Measurement applications** • Choose appropriate units • Use measurement in everyday situations • Problem solving • Area and perimeter applications
Unit 5	**Statistics** **Data: Representation and interpretation** • Collect data • Validate data • Represent data	**Space** **2D space and 3D objects** • Connect 2D shapes with 3D objects • Connect & create nets • Sketch 3D objects	**Measurement** **Number** **Capacity and mass** • Kilolitres, litres & millilitres • Tonnes, kilograms & grams • Compare & order • Estimate • Problem solving	**Space** **Space review** • Review transformations • Tessellation patterns • Review Cartesian plane

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Outcome map
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Strand	Outcomes and content descriptions	Located
Number	**VC2M5N01** interpret, compare and order numbers with more than 2 decimal places, including numbers greater than one, using place value understanding; represent these on a number line	T1 U1 T3 U1, U5
	VC2M5N02 express natural numbers as products of their factors, recognise multiples and determine if one number is divisible by another	T1 U3 T2 U2 T3 U2 T4 U1
	VC2M5N03 compare and order common unit fractions with the same and related denominators, including mixed numerals, applying knowledge of factors and multiples; represent these fractions on a number line	T2 U1 T3 U1
	VC2M5N04 recognise that 100% represents the complete whole and use percentages to describe, represent and compare relative size; connect familiar percentages to their decimal and fraction equivalents	T3 U1
	VC2M5N05 solve problems involving addition and subtraction of fractions with the same or related denominators, using different strategies	T2 U1 T4 U1
	VC2M5N06 solve problems involving multiplication of larger numbers by one- or two-digit numbers, choosing efficient mental and written calculation strategies and using digital tools where appropriate; check the reasonableness of answers	T2 U2 T3 U2 T4 U1
	VC2M5N07 solve problems involving division, choosing efficient mental and written strategies and using digital tools where appropriate; interpret any remainder according to the context and express results as a whole number, decimal or fraction	T2 U2 T3 U1, U2 T4 U1
	VC2M5N08 check and explain the reasonableness of solutions to problems, including financial contexts using estimation strategies appropriate to the context	T1 U2, U4 T2 U2
	VC2M5N09 use mathematical modelling to solve practical problems involving additive and multiplicative situations, including simple financial planning contexts; formulate the problems, choosing operations and efficient mental and written calculation strategies, and using digital tools where appropriate; interpret and communicate solutions in terms of the situation	T1 U2 T2 U2, U4 T3 U2 T4 U1
	VC2M5N10 follow a mathematical algorithm involving branching and repetition (iteration); create and use algorithms involving a sequence of steps and decisions and digital tools to experiment with factors, multiples and divisibility; identify, interpret and describe emerging patterns	T1 U3 T2 U3
Algebra	**VC2M5A01** recognise and explain the connection between multiplication and division as inverse operations and use this to develop families of number facts	T1 U3 T2 U3
	VC2M5A02 find unknown values in numerical equations involving multiplication and division using the properties of numbers and operations	T1 U3 T2 U3

Strand	Outcomes and content descriptions	Located
Measurement	**VC2M5M01** choose appropriate metric units when measuring the length, mass and capacity of objects; use smaller units or a combination of units to obtain a more accurate measure	T1 U4 T3 U5 T4 U4
	VC2M5M02 solve practical problems involving the perimeter and area of regular and irregular shapes using appropriate metric units	T1 U4 T4 U4
	VC2M5M03 compare 12- and 24-hour time systems and solve practical problems involving the conversion between them	T4 U3, U4
	VC2M5M04 estimate, construct and measure angles in degrees, using appropriate tools, including a protractor, and relate these measures to angle names	T3 U4
Space	**VC2M5SP01** connect objects to their nets and build objects from their nets using spatial and geometric reasoning	T2 U5
	VC2M5SP02 construct a grid coordinate system that uses coordinates to locate positions within a space; use coordinates and directional language to describe position and movement	T4 U3, U5
	VC2M5SP03 describe and perform translations, reflections and rotations of shapes, using dynamic geometry software where appropriate; recognise what changes and what remains the same, and identify any symmetries	T3 U4 T4 U5
Statistics	**VC2M5ST01** acquire, validate and represent data for nominal and ordinal categorical and discrete numerical variables to address a question of interest or purpose using software including spreadsheets; discuss and report on data distributions in terms of highest frequency (mode) and shape, in the context of the data	T1 U5 T3 U3 T4 U2
	VC2M5ST02 interpret line graphs representing change over time; discuss the relationships that are represented and conclusions that can be made	T1 U5 T4 U2
	VC2M5ST03 plan and conduct statistical investigations by posing questions or identifying a problem and collecting relevant data; choose appropriate displays and interpret the data; communicate findings within the context of the investigation	T1 U5 T3 U3
Probability	**VC2M5P01** list the possible outcomes of chance experiments involving equally likely outcomes and compare to those that are not equally likely	T3 U3
	VC2M5P02 conduct repeated chance experiments, including those with and without equally likely outcomes, and observe and record the results; use frequency to compare outcomes and estimate their likelihoods	T3 U3

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Term 1
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Strand & Topic	Outcomes	New Courses	Activities (Courses)	Skill Quests	Challenges	Ebooks
Unit 1 Number **Whole number and decimals** Place value to thousandths Partitioning Compare & order Whole number review	**VC2M5N01** interpret, compare and order numbers with more than 2 decimal places, including numbers greater than one, using place value understanding; represent these on a number line	**Y5 Decimals** • Tenths • Hundredths • Thousandths • Decimals on the number line • Order and compare decimals **Y5 Rounding and Estimation** • Place Value • Comparing and ordering whole numbers	**REVIEW Whole Numbers & Place Value** • Place Value to Millions • Numbers from Words to Digits 1 • Numbers from Words to Digits 2 • Greater Than or Less Than? • Partition and Rename 3 • Expanded Notation • Place Value 2 • Place value 3 • Place Value 1 • Who's got the Money? • Money **Decimals** • Decimals from Words to Digits 1 • Decimals on the Number Line • Decimal Place Value • Nearest Whole Number	**Understand decimals to thousandths** • Introducing decimal thousandths • Partitioning decimals of any size • Comparing & ordering decimals • Interpreting zeros at end of decimals • Decimal & fraction equivalences • Connecting decimals to the metric system	**Number & Algebra: Decimals** LEVEL 4–6 • Code cracker (DOK 2)	(Y6-G) **Fractions, Decimals and Percentages** • Decimal fractions (pp 12–20)
Unit 2 Number **Addition and subtraction: Mental** Round to estimate Problem solving Strategy review	**VC2M5N08** check and explain the reasonableness of solutions to problems ... **VC2M5N09** use mathematical modelling to solve practical problems involving additive and multiplicative situations ...	**Y5 Addition and Subtraction** • Addition strategies • Subtraction strategies **Y5 Rounding and Estimation** • Rounding • Estimation	**Rounding & estimating** • Rounding Numbers • Rounding off Numbers • Estimate Sums • Estimate Differences • Estimate Decimal Sums 2	**Estimation & rounding** • Rounding to estimate addition & subtraction **Add & subtract practical problems** • Addition & subtraction word problems • Expressing word problems as equations add/sub • Solving add & subtract money problems	**Number & Algebra: Decimals** LEVEL 5–7 • Posting parcels (DOK 2) **Number & Algebra: Addition & Subtraction** LEVEL 3–5 • Solve the zig-zog logic fog (DOK 3) • Mental strategies (DOK 3) LEVEL 4–6 • Totally magic grid (DOK 2) LEVEL 5–7 • Add-venn-turous adding (DOK 2)	(Y6-G) **Addition and Subtraction** • Mental strategies (pp 1–10) • Applying strategies (pp 11–19)
Unit 3 Number Algebra **Factors, multiples and patterns** Factors Multiples Common multiples Divisibility tests Patterns with factors & multiples	**VC2M5N02** express natural numbers as products of their factors ... **VC2M5N10** follow a mathematical algorithm involving branching and repetition ... **VC2M5A01** recognise and explain the connection between multiplication and division ... **VC2M5A02** find unknown values in numerical equations involving multiplication and division ...	Coming soon	**Factors & Multiples** • Multiples • Lowest Common Multiple • Factors • Highest Common Factor • Find the Factor • Divisibility Tests (2, 5, 10) • Divisibility Tests (3, 4, 9) • Tests of Divisibility 1	**Multiples & factors** • Finding multiples • Finding factors • Solving problems using factors & multiples **Divisibility tests** • Divisibility tests for 2, 5 & 10 • Divisibility tests for 3, 4, 6, 8 & 9 **Create & use algorithms** • Factors & multiples	**Number & Algebra: Multiplication & Division** LEVEL 3–5 • The greatest triangle! (DOK 2) LEVEL 4–6 • Peculiar patterns with multiples (DOK 2) • Multiple muffins (DOK 2) • Supermarket stock dilemma (DOK 2) • Training in sync (DOK 2) • Factor in our clues (DOK 2) • Tricky factors (DOK 2) • Multiple relationships (DOK 2) • Factor finding (DOK 2) • Fear fact-ors (DOK 2) **Number & Algebra: Addition & Subtraction** LEVEL 3–5 • Scores for a ball game (DOK 3) LEVEL 4–6 • Multiple patterns (DOK 3)	(Y5-F) **Multiplication and Division** • Mental multiplication strategies (pp 9–10) • Mental division strategies (pp 18–19)

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Term 1
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Strand & Topic	Outcomes	New Courses	Activities (Courses)	Skill Quests	Challenges	Ebooks
Unit 4 Measurement Number **Length, area and perimeter** Kilometres, metres, centimetres & millimetres Compare & order lengths Estimate lengths Calculate perimeter Calculate area	**VC2M5M01** choose appropriate metric units when measuring the length, mass and capacity of objects ... **VC2M5M02** solve practical problems involving the perimeter and area of regular and irregular shapes ... **VC2M5N08** check and explain the reasonableness of solutions to problems ...		**Metric conversions** • Kilometre Conversions • Metres and Kilometres **Perimeter & area** • Perimeter: Squares and Rectangles • Area of Shapes • Biggest Shape • Equal Areas • Area: Squares and Rectangles	**Choose appropriate metric units** • Introducing kilometres • Comparing & ordering units of length • Selecting appropriate units - length **Perimeter & area - practical problems** • Calculating perimeter practical problems • Calculating area practical problems	**Measurement: Length** LEVEL 3–5 • Divide and measure with rods (DOK 2) LEVEL 4–6 • Lengthy thinking (DOK 2) **Measurement: Area** LEVEL 3–5 • Make a puppy play area (DOK 2) • Farmer's fences (DOK 3) LEVEL 4–6 • Shade a shape (DOK 3) • Five and ten, squares and units (DOK 3)	(Y5-F) **Length, Perimeter and Area** • Units of length (pp 1–8) • Travelling far (pp 9–16) • Perimeter (pp 17–24) • Area (pp 25–32)
Unit 5 Statistics **Data: Representation & interpretation** Collect data Validate data Represent data	**VC2M5ST01** acquire, validate and represent data for nominal and ordinal categorical and discrete numerical variables to address a question of interest or purpose using software including spreadsheets ... **VC2M5ST02** interpret line graphs representing change over time ...		**Collect, display & interpret data** • Line Graphs: Interpretation • Travel Graphs • Stem and Leaf Plots: -Concept • Dot Plots • Divided Bar Graphs • Tally Charts • Sector Graphs	**Acquire, validate & represent data** • Conducting surveys or statistical investigations	**Statistics & Data** LEVEL 5–7 • New director (DOK 3)	(Y5-F) **Data Representation** • Types of graphs 1 (pp 1–6) • Types of graphs 2 (pp 7–11) • Types of graphs 3 (pp 12–17) • Collecting and analysing data (pp 18–23)

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Strand & Topic	Outcomes	New Courses	Activities (Courses)	Skill Quests	Challenges	Ebooks
Unit 1 Number **Fractions** Compare and order Mixed numbers & improper fractions Equivalent fractions Add & Subtract fractions: Same or related denominators	**VC2M5N03** compare and order common unit fractions with the same and related denominators ... **VC2M5N05** solve problems involving addition and subtraction of fractions with the same or related denominators ...	**Y5 Fractions** • Fractions • Equivalence • Compare and order fractions • Improper fractions and mixed numbers • Add fractions • Subtract fractions • Problem solving with fractions	**Compare & order fractions** • Shading Equivalent Fractions • Equivalent Fraction Wall 2 • Equivalent Fractions on a Number Line 1 • Equivalent Fractions • Compare Fractions 1a • Compare Fractions 1b • Identifying Fractions Beyond 1 • Improper to Mixed • Mixed to Improper • Converting Mixed and Improper • Identifying Fractions on a Number Line • Mixed and Improper Fractions on a Number Line **Add & subtract fractions** • Add: Common Denominator • Subtract: Common Denominator • Common Denominator • Add Like Mixed Numbers • Subtract Like Mixed Numbers • One Take Fraction • Add Subtract Fractions 1	**Compare & order fractions** • Comparing & ordering fractions • Comparing & ordering fractions & mixed numbers • Using common factors to simplify proper fractions **Add & subtract fractions** • Add & subtract proper fractions - same denominator • Add & subtract mixed numerals - same denominator • Add & subtract fractions - related denominators • Add & subtract mixed num - related denominators	**Number & Algebra: Fractions** LEVEL 3–5 • Which is closer to 1? (DOK 2) • What fraction is that? (DOK 2) • Drinking equivalent fractions (DOK 3) LEVEL 4–6 • Fractions in uneven partitioned shapes (DOK 2) • Fractional relay races (DOK 2)	(Y5-F) **Fractions, Decimals and Percentages** • Types of fractions (pp 9–16) • Calculating (pp 26–29)
Unit 2 Number Algebra **Multiplication and division: Mental strategies** Efficient mental strategies Factorising	**VC2M5N02** express natural numbers as products of their factors ... **VC2M5N06** solve problems involving multiplication of larger numbers by one- or two-digit numbers ... **VC2M5N07** solve problems involving division ... **VC2M5N08** check and explain the reasonableness of solutions to problems ... **VC2M5N09** use mathematical modelling to solve practical problems involving additive and multiplicative situations ...	**Y5 Multiplication and Division** • Multiplication strategies • Multiples and powers of 10 × • Multiples and powers of 10 ÷ • Division strategies **Y5 Rounding and Estimation** • Rounding • Estimation	**Multiply & divide by 2 digits** • Multiply Multiples of 10 • Multiply More Multiples of 10 • Multiply 2 Digits Area Model • Grid Methods 1 • Double and Halve to Multiply • Mental Methods Multiplication 1 • Dividing by 10, 100, 1000 • Division Facts 1 • Remainders by Arrays • Mental Methods Division 1 • Mental Methods Division **Rounding & estimating** • Estimate Products • Estimate Quotients • Estimation: Multiply and Divide • Estimate Decimal Operations	**Strategies to multiply by 1- or 2-digits** • Multiplication using multiples of 10 • Multiplying: rounding, compensating & partitioning • Multiplying: doubling, halving & thirding • Multiplying using the split method • Multiplying using an area model • Multiplying by factorising **Division strategies incl. remainders** • Dividing by a 1-digit number using partitioning • Dividing by a 2-digit number using partitioning • Dividing by a 1-digit number using factorising • Dividing by a 2-digit number using factorising **Estimation & rounding** • Rounding to estimate multiplication & division • Estimating with money		(Y5-F) **Multiplication and Division** • Mental multiplication strategies (pp 1–10) • Mental division strategies (pp 11–19)

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Strand & Topic	Outcomes	New Courses	Activities (Courses)	Skill Quests	Challenges	Ebooks
Unit 3 Number Algebra **Algebra** Create and use algorithms Inverse operations Fact families Find unknown values	**VC2M5N10** follow a mathematical algorithm involving branching and repetition ... **VC2M5A01** recognise and explain the connection between multiplication and division as inverse operations ... **VC2M5A02** find unknown values in numerical equations involving multiplication and division ...	Coming soon	**Family of facts** • Fact Families: Multiply and Divide • Multiplication Turnarounds • Missing Numbers: × and ÷ facts • Times Tables • Multiply 3 single-digit numbers	**Create & use algorithms** • Manipulating numbers using a given rule • Designing flowcharts to solve add/sub of fractions **Connect multiplication & division** • Inverse relationship - multiplication & division **Find unknown values in mult & div** • Finding unknown values - multiplication & division	**Number & Algebra: Whole Number** LEVEL 4–6 • Unknown values in uneven partitioned shapes (DOK 2) **Number & Algebra: Equations & Expressions** LEVEL 4–6 • Shape equations (DOK 2) • Steps to success (DOK 3)	(Y5-F) **Patterns and Algebra** • Patterns and functions (pp 1–12) • Equations and equivalence (pp 13–20) • Using equations (pp 21–28)
Unit 4 Number **Addition and subtraction: Written** Written strategies	**VC2M5N09** use mathematical modelling to solve practical problems involving additive and multiplicative situations ...	**Y5 Addition and Subtraction** • Addition • Subtraction • Money calculations +–	**Solving practical problems** • Columns that Add • Add Two 2-Digit Numbers • Add 3-Digit Numbers • Columns that Subtract • Subtract Numbers			(Y5-F) **Addition and Subtraction** • Written methods (pp 17–25) (Y5-F) **Fractions, Decimals and Percentages** • Calculating (pp 30–33)
Unit 5 Space **2D space and 3D objects** Connect 2D shapes with 3D objects Connect & create nets Sketch 3D objects	**VC2M5SP01** connect objects to their nets and build objects from their nets using spatial and geometric reasoning		**Shapes & solids** • What Pyramid am I? • What Prism am I? • Prisms and Pyramids	**Connect objects to nets** • Connecting prisms & pyramids with their nets • Connecting 3D objects with their nets	**Geometry: 3D Shapes** LEVEL 4–6 • Notty nets (DOK 2) • Looking at faces, edges and vertices (DOK 3)	(Y5-F) **Geometry** • 3D shapes (pp 25–34)

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Term 3
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Strand & Topic	Outcomes	New Courses	Activities (Courses)	Skill Quests	Challenges	Ebooks
Unit 1 Number **Fractions, decimals, and percentages** Connect fraction, decimal and percentage equivalents Represent remainders as fractions and decimals Problem solving	**VC2M5N01** interpret, compare and order numbers with more than 2 decimal places ... **VC2M5N03** compare and order common unit fractions with the same and related denominators ... **VC2M5N04** recognise that 100% represents the complete ... **VC2M5N07** solve problems involving division ...	**Y5 Percentages** • Percentages • Compare percentages • Fractions and percentages • Decimals, fractions and percentages	**Fractions decimals & percentages** • Modelling Percentages • Fractions to Decimals • Percents and Decimals • Common Fractions as Percentages (AU) • Decimal Order • Comparing Decimals	**Fractions, decimals & percentages** • Introducing percentages • Connecting percentages & decimals • Connecting percentages & fractions • Relationship - percentages, decimals & fractions		(Y5-F) **Fractions, Decimals and Percentages** • Fractions, decimals and percentages (pp 17–25)
Unit 2 Number Algebra **Multiplication and division: Written strategies and solving problems** Multiplication algorithm Contracted division Problem solving	**VC2M5N02** express natural numbers as products of their factors ... **VC2M5N06** solve problems involving multiplication of larger numbers ... **VC2M5N07** solve problems involving division ... **VC2M5N09** use mathematical modelling to solve practical problems ...	**Y5 Multiplication and Division** • Multiply by one digit • Multiply by two digits • Division • Exploring remainders • Division with remainders	**Solving practical problems** • Multiply: 1-Digit Number • Multiply: 2-Digit by 1-Digit • Divide: 1-Digit Divisor 1 • Bar model × ÷ • Problems: Times and Divide	**Strategies to multiply by 1- or 2-digits** • Multiplying using expanded algorithm • Multiplying using contracted algorithm • Multiplying using extended form of algorithm **Division strategies incl. remainders** • Extended division - no remainders or zeros • Extended division with remainders • Extended division with & without remainders • Contracted division - no remainders or zeros • Contracted division - no remainders • Contracted division - with & without remainders • Dividing by 2-digit numbers - formal algorithms **Multiply & divide practical problems** • Multiplication & division word problems • Expressing word problems as equations mult/div • Solving mult-step mult/div word problems • Solving mult & div money problems		(Y5-F) **Multiplication and Division** • Written methods (pp 20–28) • Puzzles and investigations (pp 29–32)
Unit 3 Probability Statistics **Chance and data** List outcomes Conduct chance experiments Record results Compare outcomes Estimate likelihoods	**VC2M5P01** list the possible outcomes of chance experiments ... **VC2M5P02** conduct repeated chance experiments ... **VC2M5ST01** acquire, validate and represent data ... **VC2M5ST03** plan and conduct statistical investigations ...		**Probability** • What are the Chances? • Chance Gauge • Introductory probability • Fair Games	**Outcomes of chance experiments** • Investigating equally likely outcomes • Exploring fair & unfair chance experiments	**Chance & Probability** LEVEL 4–6 • Ordering probabilities (DOK 3)	(Y5-F) **Chance and Probability** • Chance and Probability (pp 1–10)

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Strand & Topic	Outcomes	New Courses	Activities (Courses)	Skill Quests	Challenges	Ebooks
Unit 4 Measurement Space **Angles and 2D shape** Measure angles Estimate angles Classify angles Translations, reflections & rotations Symmetry	**VC2M5M04** estimate, construct and measure angles in degrees, using appropriate tools, including a protractor, and relate these measures to angle names **VC2M5SP03** describe and perform translations, reflections and rotations of shapes, using dynamic geometry software where appropriate ...		**Angles** • Classifying Angles • Measuring Angles • Estimating Angles **Transformations** • Flip, Slide, Turn • Transformations • Rotational Symmetry	**Estimate, construct & measure angles** • Identifying, estimating & measuring angles • Classifying & constructing angles **Identify & describe transformations** • Identifying & describing transformations	**Geometry: Angles** LEVEL 3–5 • Estimating angle measures (DOK 3) LEVEL 4–6 • Angle estimation (DOK 3) **Geometry: Symmetry, Transformation & Location** LEVEL 4–6 • Tessellations (DOK 3)	(Y5-F) **Geometry** • Lines and angles (pp 1–6) • 2D shapes (pp 7–15) • Transformation, tessellation and symmetry (pp 16–24)
Unit 5 Measurement Number **Capacity and mass** Kilolitres, litres & millilitres Tonnes, kilograms & grams Compare & order Estimate Problem solving	**VC2M5M01** choose appropriate metric units when measuring the length, mass and capacity of objects; use smaller units or a combination of units to obtain a more accurate measure **VC2M5N01** interpret, compare and order numbers with more than 2 decimal places, including numbers greater than one, using place value understanding; represent these on a number line		**Metric conversions** • Millilitres and Litres • Litre Conversions • Kilogram Conversions • Grams and Kilograms	**Choose appropriate metric units** • Comparing & ordering units of mass • Selecting appropriate units - mass • Selecting appropriate units - capacity	**Measurement: Volume & Capacity** LEVEL 3–5 • Water water everywhere (DOK 3) **Measurement: Mass** LEVEL 4–6 • Maze of masses (DOK 3)	(Y5-F) **Volume, Capacity and Mass** • Volume and capacity (pp 1–2) • Mass (pp 9–16)

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Term 4
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Strand & Topic	Outcomes	New Courses	Activities (Courses)	Skill Quests	Challenges	Ebooks
Unit 1 Number Algebra **Number and operations review**	**VC2M5N02** express natural numbers ... **VC2M5N05** solve problems involving addition and subtraction ... **VC2M5N06** solve problems involving multiplication ... **VC2M5N07** solve problems involving division ... **VC2M5N09** use mathematical modelling to solve practical problems ...	**Y5 Addition and Subtraction** • Problem-solving with +– **Y5 Multiplication and Division** • Problem solving with ×÷	**Review earlier content**	**All operations practical problems** • Express equations as word problems all operations	**Review earlier content**	**Review earlier content**
Unit 2 Statistics **Data: Investigation and evaluation** Interpreting data displays Data distributions Mode Misleading diagrams Evaluate statements about displays	**VC2M5ST01** acquire, validate and represent data for nominal and ordinal categorical and discrete numerical variables ... **VC2M5ST02** interpret line graphs representing change over time ...		**Collect, display & interpret data** • Mode • Mode from Stem and Leaf Plot • Mode from Frequency Table • Grouping data and modal class	**Interpret line graphs** • Interpreting line graphs **Understand data distributions** • Understanding & calculating the mode • Introducing the shape of data distribution	**Statistics and Data** LEVEL 4–6 • Rugby modal mayhem DOK 2 • Leap to the mode DOK 2 • Discover the digits DOK 2	Y5-F **Data Representation** • Data investigations (pp 24–28)
Unit 3 Measurement **Time and position** Read and represent 12- & 24-hour time Convert times Use timetables Grid coordinate systems Directional language	**VC2M5M03** compare 12- and 24-hour time systems and solve practical problems involving the conversion between them **VC2M5SP02** construct a grid coordinate system that uses coordinates to locate positions within a space; use coordinates and directional language to describe position and movement		**Time conversions & problems** • Time Conversions: Whole Number 1 • Time Conversions: Whole Number 2 • Elapsed Time • 24 Hour Time • Using Timetables **Space & shape** • Map Coordinates • Coordinate Graphs: 1st Quadrant • More Directions!	**Use 24-hour time** • Using 24-hour notation • Using 24-hour time in timetables **Use coordinates in a grid system** • Working with grid referenced maps • Using Cartesian coordinate system - first quadrant • Using landmarks & directional language	**Measurement: Time** LEVEL 3–5 • The mysteries of time DOK 2 • Puppy-sitting DOK 3 LEVEL 4–6 • 24-hour train time DOK 2 • Ordering times DOK 2 • Time to explore 4 DOK 3 **Geometry: Symmetry, Transformation & Location** LEVEL 3–5 • Routes on a map DOK 3 LEVEL 4–6 • A journey back in time DOK 2 • Which way? DOK 3 • Island towns DOK 3	Y5-F **Time** • Measuring time (pp 1–8) • Calculating time (pp 9–14) • Timetables (pp 15–20)

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Term 4
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Strand & Topic	Outcomes	New Courses	Activities (Courses)	Skill Quests	Challenges	Ebooks
Unit 4 Measurement **Measurement applications** Choose appropriate units Use measurement in everyday situations Problem solving Area and perimeter applications	**VC2M5M01** choose appropriate metric units when measuring the length, mass and capacity of objects ... **VC2M5M02** solve practical problems involving the perimeter and area of regular and irregular shapes ... **VC2M5M03** compare 12- and 24-hour time systems and solve practical problems ...		 **Classroom directed**	**Choose appropriate metric units** • Recognising suitable metric units - all	 **Classroom directed**	 **Classroom directed**
Unit 5 Space **Space review** Review transformations Tessellation patterns Review Cartesian plane	**VC2M5SP02** construct a grid coordinate system ... **VC2M5SP03** describe and perform translations, reflections and rotations of shapes, using dynamic geometry software where appropriate ...		 **Review earlier content**	 **Review earlier content**	 **Review earlier content**	 **Review earlier content**

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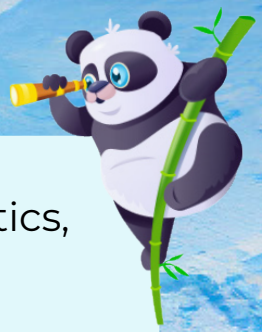

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